Mentorship: The New Master-Apprentice Model in Higher Education

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Renewing our understanding of the relationship between teaching and mentoring can advance our practice as educators and improve student outcomes. As we strengthen connections between the classroom and the workplace, we contextualize students' learning and provide the tools for success both academically and professionally. This article provides a historical and theoretical foundation for mentoring in higher education, accompanied by concrete strategies and suggestions for implementing a mentoring program and encouraging individual faculty members to expand their pedagogical practice by engaging in mentoring through their daily interactions with students.

Keywords: apprentice, apprenticeship, guild, instruction, mentor, mentoring, pedagogy, practice, profession, strategy, success, student-centered

PREFACE

The purpose of this article is to help faculty understand the connection between teaching and mentoring, both of which are deeply rooted in the guild system of the Middle Ages. Centuries ago, the transmission of professional skills and knowledge took place between masters and their apprentices, with the master serving as an instructor, supervisor, evaluator, role model, and – most importantly – mentor. Present-day faculty can learn from this model to support their students' academic and career success.

In this article, we'll explore:

- Connections between the master-apprentice model and our work as educators
- Types and benefits of mentoring
- Suggestions for implementing university-wide expectations for faculty mentoring
- Strategies for effective mentoring

As readers engage with the ideas in the sections that follow, they will begin to understand the connections between teaching and mentoring, to identify the need for both in their students' educational journeys, and to envision how they can apply their new knowledge of mentoring into their professional duties.

Readers have the opportunity to become better-informed, better-equipped members of the faculty who are prepared to improve their practice as educators through the informal mentoring that occurs in daily classroom interactions, and as they serve as formal mentors to students pursuing careers in their fields of professional expertise.

This article is a contribution to ongoing conversations about how we can work towards transformation in higher education, moving beyond our treasured histories and traditions to prepare today's learners for successful, sustainable 21st-century careers and for lives as productive, engaged citizens.

PURPOSE

Faculty and administrators strive to provide their students with an excellent education that imparts the knowledge, skills, and competencies of a given academic discipline while also developing graduates' capacity to lead successful and sustainable lives.

Educators know what we do: we teach our discipline to our students. At the same time, we also serve our colleges, universities, and professional communities, and maintain a scholarly or creative practice. These are the conditions of employment for full-time tenure-track faculty at most institutions of higher learning.

We also know how we do this: we build a syllabus for each course that includes our classroom policies, a schedule for instruction, assignments, and assessments. Then we teach the course, often employing pedagogies similar to those we encountered when we were students ourselves.

Questions of when frequently occur in our teaching, too. When is the assignment due? When is my committee meeting? When is ____ [name of event]? These time-based questions impact our daily lives, as do matters related to location or place related to questions of where.

How often do we consider, though, the reasons why we do these things and for whom we're doing them? This paper will lead faculty on a reflective journey in which we'll explore questions of why, who, what, how, where, and when relating to our work as members of the faculty – an identity that encompasses both teaching and mentoring.

WHY?

The normally hectic pace of our daily lives leaves us little time to contemplate the deep questions that should drive our professional choices. Let's start by examining the "why?" behind our work as members of the faculty. Everything we do has a purpose. For instance, a given course might provide students with a general education requirement, but we should also understand why the requirement exists, why the particular course meets that requirement, and why students should choose that course from among all of the other available options. Not only should we know those answers – we should convey them to our students on the first day of class.

Now let's dig deeper: why have we each chosen to become members of the faculty? Why do we continue to come to work and teach our students? Each of us will likely have a slightly different answer to this question, of course, but many of us might say that we entered teaching because we love our area of scholarship or creative practice and enjoy teaching it.

The more difficult question is this: why do our students need to know what we're teaching them? Here's where we sometimes bog down. Although we know what our students should know and how to teach it to them, we don't often question why they need to know it, and we're even less likely to tell students how they can apply their learning outside the confines of our classrooms. Knowing why our course content is valuable or important not only shapes our attitudes and actions, it directly affects our students' perception of the instruction we provide.

Here's the formula we might think about:

- I teach _____ [what] so that my students can _____ [why].
- Or we might say, I teach _____ [what] because it will help my students to _____ [why].

In other words, we should be able to pair the content of our courses with the underlying reasons this content is crucial either to our students' learning of subsequent material or to their attainment of a career. As two examples:

- I teach Introduction to Philosophy to instill the conceptual foundations of culture and society because these are fundamental to being a well-educated citizen capable of contributing to the community.
- I teach College Algebra so that my students will grow in their skills and competencies as mathematicians and prepare for advanced study in the STEM fields.

There's no question that our course content is worthwhile all on its own, but that's not why students enroll in our colleges and universities. They invest their time and money because they want to pursue a career in a given field of professional engagement. Everything we teach has an intrinsic value, but we should also acknowledge and embrace its instrumental value – building explicit connections between the classroom and the workplace that allow students to internalize their learning, perceive its long-term significance, and apply it in professional settings.

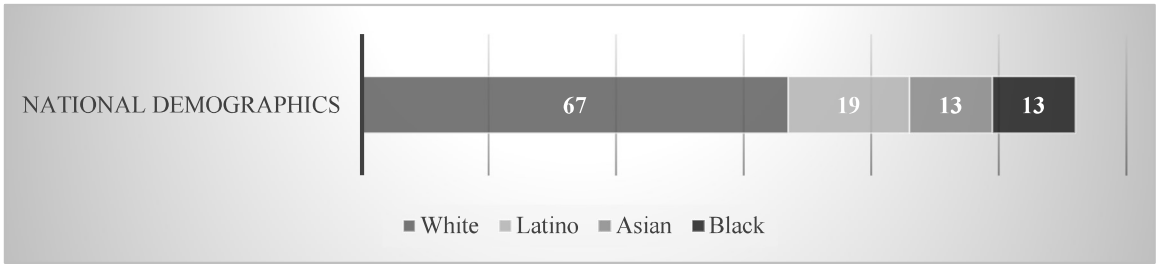
Our knowledge and expertise are essential to this goal. Students rely on their instructors' status as disciplinary experts. Each of us is a primary conduit through which our students connect to professional practice. Each instructor makes their own unique contribution to their students' knowledge. When combined, these varied perspectives help students to construct a more comprehensive worldview. The work we do in our classrooms, studios, and online is important! Instructors powerfully influence their students' comprehension of course content and their entire educational experience, which not only shapes their learning but affects their futures as professionals. In short: our actions as individual instructors *really matter*. We don't just teach our subject – we serve as mentors and role models for our students through our every action, both large and small.

WHO?

We teach to develop our students' skills, competencies, and knowledge towards their achievement of successful careers. But what can we learn about our students? *The Chronicle of Higher Education's Almanac* presented data based on the 2017 Freshman Survey conducted by the University of California at Los Angeles (EAB, 2017). Among the survey's key findings:

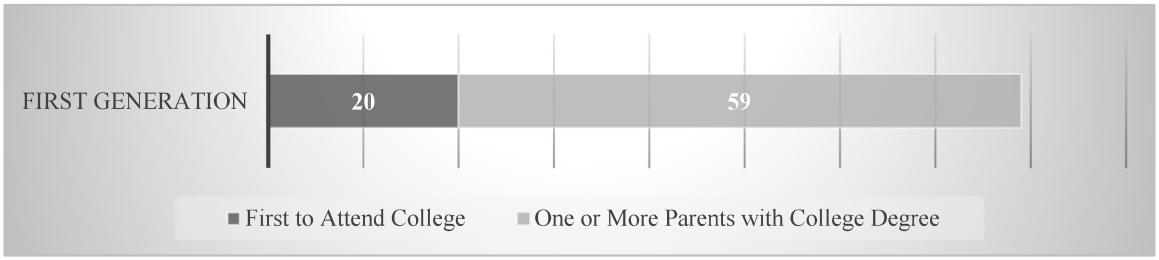
1. 67% of students identify as White, 19% as Latino, 13% as Asian, and 13% as African-American.

FIGURE 1
NATIONAL DEMOGRAPHICS



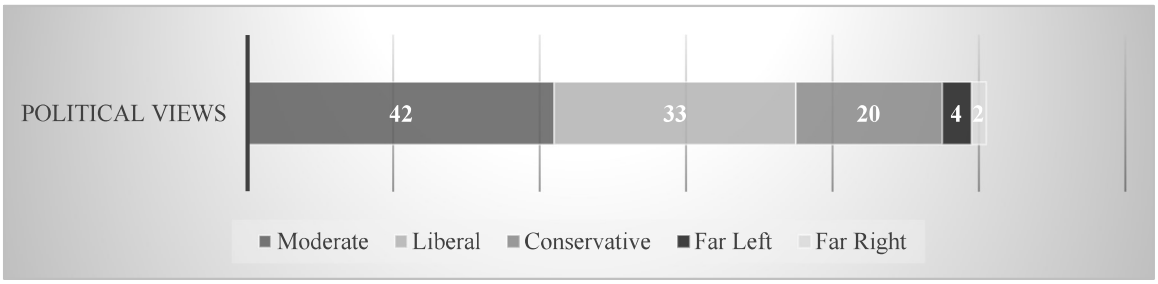
2. 20% of students are the first in their family to attend college; 59% have at least one parent with a college degree.

FIGURE 2
FIRST-GENERATION STATUS



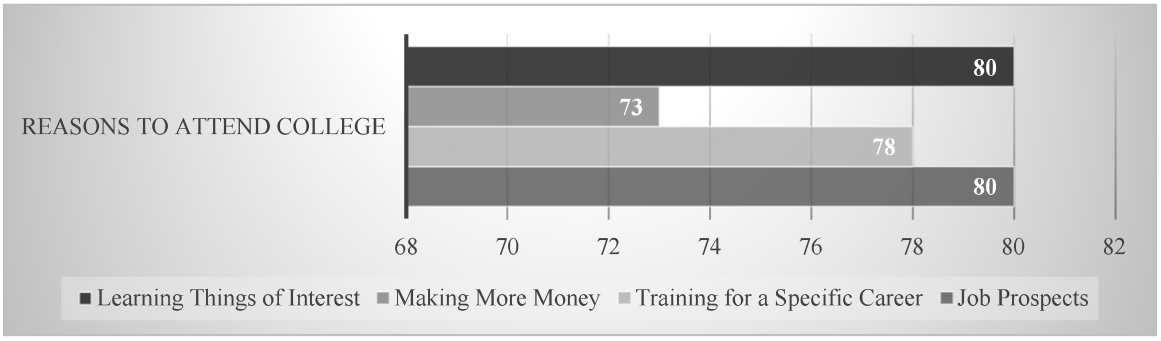
3. 42% of students identify as politically moderate; 33% as liberal; 20% as conservative; 4% as far left; 2% as far right.

FIGURE 3
POLITICAL VIEWS



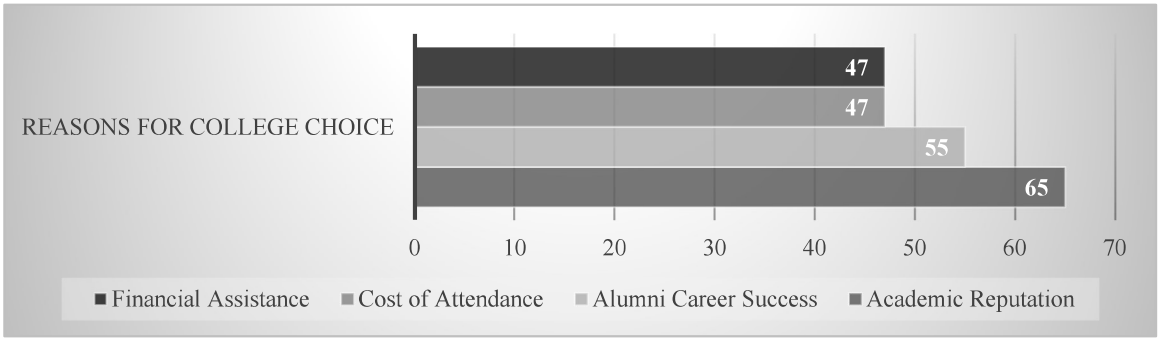
80% of students consider job prospects and learning about things that interest them as very important reasons to attend college. 78% consider training for a specific career as very important. 73% cite making more money as a very important reason to attend college.

FIGURE 4
REASON TO ATTEND COLLEGE



4. 65% of students said their college's academic reputation was an important consideration when choosing where to attend college; 55% cited alumni career success; 47% cited the cost of attendance, and another 47% identified financial assistance as important.

FIGURE 5
REASONS FOR COLLEGE CHOICE



Student Profile

Findings about students' reasons to attend college and their choice of institution reinforce the fact that students come to us because they want to prepare for a career where they can earn a higher salary than would be possible without a college degree. The Strada-Gallup poll (2018) supports these findings: "Fully 72% of those with postgraduate educational experiences say getting a good job is their top motivation, as do 60% of those on a technical or vocational educational pathway. Four-year degree holders (55%), two-year degree holders (53%), and non-completing students (50%) are also most likely to identify work and career motivations."

When we link this information to the insights we gained as we considered the "Why?" of our teaching, it clarifies our vision of the role we play in our students' lives. The education we provide is not complete in itself – it's also a means to an end, specifically to establish a successful career.

Author's Note

The Strada-Gallup Poll, the Gallup-Purdue Index, and other data sources are seminal texts that undergird the necessity for change in higher education.

As such, discussions of these sources appears in many of my writings including *High Impact Practices by Design* (2020), *Student-Centered by Design* (2019) and earlier writings such as *The Consensus of Data* (2018) and *Connecting the Dots* (2016).

These sources speak to changing student needs and draw attention to the social, economic, and cultural shifts that we in higher education should understand if we, and the institutions of higher learning for which we teach, are to remain relevant and vital in the 21st century.

Therefore, a certain degree of conceptual overlap or repetition of key facts is necessary when discussing similar topics across separate documents.

Non-Traditional

Today's students frequently demonstrate characteristics contrary to those we'd see in traditional undergraduates. We presume our freshmen are 18 years old, having just graduated from high school. We also presume they're not yet married, childless, still supported by their parents, and are pursuing college full-time, with perhaps just a part-time job on the side. Contrary to these expectations, the National Center for Education Statistics reports (NPR, 2018):

- 1 in 5 undergraduates is at least 30 years old.
- Half are financially independent from their families.
- 1 in 4 is caring for a child.
- 47% go to school part-time, at least at some point.
- 25% take a year off before starting school.
- 2 of 5 attend a 2-year community college.
- 44% have parents who never completed a bachelor's degree.

WHAT?

From the dawn of human history, those who have gained mastery of a skill or body of knowledge have shared their expertise with those who seek to emulate their achievements. This ancient relationship remains the heart of instruction. The pedagogical methods and methodologies in higher education are rooted in the guild system of Medieval Europe, which formalized a contractual arrangement between masters and apprentices.

TABLE 1
COMPARISON OF APPRENTICESHIPS AND HIGHER EDUCATION

	Apprenticeship	Higher Education
Instructor Qualifications	Apprentices studied under the guidance of a master .	Students study under faculty with graduate degrees – proof of mastery of a discipline.
Student Profile	Began training between the ages of 12 and 14; served for 1-8 years.	Enter college at age 18. Bachelor's degree at 22; two or three more years for a Master's degree.
Formal Arrangements	Contract made with parents: master provided food, housing, clothing, and instruction.	Students enroll at a college or university and are accepted into a program. Students may live on campus, where they pay for room and board.
Disciplinary Standards	Local craft unions/guilds set standards for apprenticeships: length of contracts; the number of students a master could train; whether students could switch masters during an apprenticeship or sell works independently.	Disciplinary organizations, accrediting agencies, and institutions of higher learning set standards for instruction.
Proof of Mastery	At the end of the apprenticeship, students created a piece of work the guild could judge, proving the student had mastered their craft.	Students' course of study ends with a demonstration of their mastery of a discipline. This requirement may take many forms, such as a qualifying examination, written thesis or dissertation, exhibition, and more.
Variations	Training varied from one master to another and from one discipline to another.	Programs vary between institutions and disciplines; students receive varied instruction from individual instructors.

In both cases, instructors have proven their mastery of a given discipline, a formal arrangement for study exists between the student and instructor, disciplinary standards are determined externally, students demonstrate their mastery by meeting established standards, and specific training varies between disciplines and individual instructors. Nevertheless, the guild system existed entirely in the workplace – students learned in the master's place of business, and all training aimed to produce new professionals in a given field.

Expanding Our Instructional Repertoire: Who We Were Is Who We Need to Be

The task before us is not so much to change what we do as instructors but to expand and add to it to meet our students' needs more successfully. It's also a shift in mindset more than a transformation of our teaching practice.

The Gallup-Purdue Index report (2015) identified six essential experiences that strongly influenced whether students felt that their colleges prepared them well for life, nicknamed "The Big Six." Just 3% of those surveyed strongly agreed that they had received all six.

- Professors who made them feel excited about learning
- Professors who cared about them as people

- A mentor who encouraged them to pursue their goals and dreams
- The opportunity to work on a long-term project
- Taking part in an internship or job where they could apply what they were learning in the classroom
- Being extremely active in extracurricular activities and organizations during college.

Three of these items relate directly to the practice of mentoring. First, and perhaps most importantly, our students need to know we care about them as individual human beings. Every interaction can have a marked impact on our students, even when it might seem quite insignificant to us. If we're brusque, uncaring, dismissive, or if we simply project an aura of unapproachability, it creates substantial barriers to our students' learning and their success in college.

Mentorship is another area with a powerful positive impact. Students who major in our particular discipline need a faculty member who is a kindred spirit, who understands their hopes and dreams, and who is willing to help achieve them. As we'll discuss later in this paper, mentorship takes us beyond typical faculty expectations and is characterized by actions such as:

- Taking an interest in the student's success.
- Asking what the student plans to do after graduation.
- Working with the student to explore graduate programs, complete grant applications, or write their resume.
- Writing letters of recommendation.
- Celebrating students' successes and helping them through their disappointments.
- Expressing belief in students' potential to succeed.

The more skillful faculty become in building appropriate mentoring relationships with their students, the more likely their students will view their educational experience positively.

Long-term projects often occur in the context of undergraduate research, one of the High Impact Practices examined in *High Impact Practices by Design* (Mackh, 2020). Undergraduate research allows students to work alongside a faculty mentor who introduces them to the discipline and puts them to work as part of their research. These opportunities naturally foster mentoring while also deepening student learning, increasing their engagement, and facilitating the transition to professional settings.

Master-Apprentice: Intentional Mentoring

The guild system of the Middle Ages may have given way to structured academic approaches to education, but it still exists in trade-based training to the present day. In fact, many professions retain a three-tiered system for professional accomplishment.

TABLE 2
LEVELS OF PROFESSIONAL ACCOMPLISHMENT

	Level 1	**Level 2**	**Level 3**
Faculty	Assistant Professor	Associate Professor	Full Professor
Students	Bachelor's Degree	Graduate Degree	Professional
Trades	Apprentice	Journeyman	Master
Food Service	Prep Cook	Sous Chef	Executive Chef
Sports	Rookie	Starter	Veteran
Law	Lawyer	Law Clerk	Judge
Medicine	Intern	Resident	Physician

As this table shows, we can observe a commonality between many fields. Calls to emulate or even to restore the guild system have taken place over the intervening centuries. In 1906, Arthur Penty offered this explanation:

> In the Middle Ages . . . the masons' and carpenters' Guilds were faculties or colleges of education in those arts, and every town was, so to say, a craft university. Corporations of masons, carpenters, and the like, were established in the town; each craft aspired to have a college hall. The universities themselves had been well named by a recent historian 'Scholars' Guilds.' The Guild which recognized all the customs of its trade guaranteed the relations of the apprentice and master craftsman with whom he was placed; but he was really apprenticed to the craft as a whole, and ultimately to the city, whose freedom he engaged to take up. He was, in fact, a graduate of his craft college and wore its robes. At a later stage the apprentice became a companion or a bachelor of his art, or by producing a masterwork, the thesis of his craft, he was admitted a master. Only then was he permitted to become an employer of labor or was admitted as one of the governing body of his college.

We can see that our degree titles reflect the guild system terminology in the progression of our students. Bachelor's-level students work alongside those who have mastered a discipline (professors or graduate instructors). Graduate students studying towards a master's degree may also teach beginning students under the supervision of professors. Like journeymen in the trades, graduate students have proven themselves competent in a given field, but at the conclusion of their studies, they must prove they have mastered their discipline by creating a masterwork such as a doctoral dissertation or MFA exhibition or performance to qualify for faculty positions themselves.

More recently, in *Expanding Apprenticeships* (2010), Robert Lerman described present-day apprenticeship.

> [Apprentices] work with natural adult mentors who can guide them but allow them to make their own mistakes. [They] see themselves judged by the established standards of a discipline, including deadlines and the genuine constraints and unexpected difficulties that arise in the profession. To quote Robert Halpern, "Young people learn through observation, imitation, trial and error, and reiteration; in other words, through force of experience. Though professionalism and care are expected, perfection is not. Adult mentors hold the discipline for the apprentice, sequencing and controlling task demands to keep them on the constructive side of difficulty. They direct apprentices' attention, demonstrate and sometimes collaborate."

The circumstances Lerman and Halpern describe exist in the trades today as well as certain fields in higher education. Aspiring professionals, too, "learn through observation, trial and error, and reiteration" and skillful faculty "sequence and control task demands" to build their students' skills and competencies, keeping students "on the constructive side of difficulty."

Apprenticeship programs are more prevalent in Western Europe than in the U.S., providing job training to 50 – 70% of youth in Switzerland, Austria, and Germany. They are expanding in Ireland, Australia, and the UK. For example, the City of Glasgow College offers scores of job training programs that utilize classroom-based instruction, workplace simulations, and practical experience through partnerships with business and industry. The Faculty of Creative Industry (2020) offers training programs in:

- 3D design
- Acting & Performance
- Broadcasting
- Building Crafts
- Construction
- Digital & Web Technologies
- Digital Media
- Fine Art

- Furniture
- Graphic Arts
- Marketing
- Media
- Photography

Teaching these areas in a tertiary education setting (akin to a community college in the U.S.) supplemented by robust connections to the professional workplace creates career opportunities for students that are very uncommon in U.S. higher educational settings. Like community college students, those who enroll in programs such as those offered at the City of Glasgow College can transfer to an institution of higher learning if they wish to earn a bachelor's degree. However, their Glasgow education sufficiently prepares them for productive careers on its own.

Apprenticeship models of education benefit both the apprentices and their future employers. "Since apprenticeship is driven by employer demand, mismatches between skills taught and supplied and skills demanded in the workplace are less likely to occur than when training is provided in school-based or community-based courses. (City of Glasgow College, 2020).

Workplace Connections

The essential difference between an apprenticeship model and an academic model of education exists in the fact that, from their inception, apprenticeships have taken place in the thick of professional workspaces, driven by the needs and demands of a particular business or field of professional engagement. Present-day apprentice programs place students in both classrooms and workplaces, aligning study to acquire a conceptual foundation with practical application in an authentic setting where the student hopes to work upon graduation.

Centuries ago, masters were not just responsible for training apprentices. They were proprietors of entrepreneurial ventures in which apprentices played a vital role as laborers by completing essential tasks towards the business's success. Little the apprentice did was simply for the sake of practicing a skill. Even the seemingly menial labor of keeping the workspace clean was intentional and meaningful: a clean workspace was vital to a successful operation. Tools must be cared for and stored properly, the shop must be organized to minimize lost time looking for stray items, and so on. By taking part in maintenance activities, apprentices absorbed the values of cleanliness and orderliness, developed diligence and perseverance, and began to envision the type of workplace they'd like to own someday. Every task, no matter how small, clearly fit into a greater whole understood by both the apprentice and the master.

Now contrast this with an academic model of education. Students and instructors are removed from professional contexts and work in spaces dedicated solely to learning, whether classrooms, laboratories, or studios. Instructors assign tasks for students to do, but these occur in isolation from the greater whole of professional practice and often consist of work done strictly to learn a skill and earn a grade rather than possessing intrinsic meaning or value. An apprentice observed the master's business practices as well as receiving the benefit of the master's disciplinary expertise, but when do university students watch their instructors engage in the professional exercise of their skills and knowledge? Generally speaking, never.

TABLE 3
STAGES OF LEARNING

	Origination	Instruction	Production	Evaluation	Completion
Apprenticeship Model	Client request	Master provides instruction in the necessary process to fulfill the	Observe the master and assist with the task or complete the task under	The master first judges the work to ensure quality. The work is then presented to	The client purchases the item produced in the master's workshop.

		client's request.	the master's supervision.	the client for approval.	
Academic Model	Course assignment	The instructor provides teaching in a given skill.	Student completes a task, sometimes with assistance from the instructor.	The instructor evaluates the student's work and assigns a grade.	-----

In both higher education and apprenticeships, instruction takes place, students/apprentices practice a skill, and instructors evaluate their work. But in an academic model, this is where the process ends. We don't generally close the loop by considering what happens next in a professional context or even making overt connections between assignments and professional practice.

Mentoring

Masters served in many capacities: instructor, supervisor, role model, and mentor. Mentoring describes any relationship in which "one person shares their knowledge, skills, and experience to assist others to progress in their own lives and careers" (University of Cambridge, 2019). Teaching can be a form of mentoring, as can coaching or tutoring. Nevertheless, when we use the word "mentoring," we're generally talking about associations between faculty and students that go beyond typical classroom engagement.

Today, mentors facilitate students' personal and professional growth by performing several roles (West Texas A&M, 2020).

- Teacher –sharing disciplinary knowledge and experiences
- Problem Solver – helping the mentee solve problems, often through referrals to resources or support services
- Motivator – encouraging the mentee when they face challenges and hardships
- Coach – helping the mentee through performance difficulties through positive and constructive feedback
- Guide – assisting the mentee in setting realistic and achievable goals and working to reach them
- Role Model – serving as an example of professional achievement and facilitating the mentee's acquisition of the skills, knowledge, and competencies necessary for their entry into the profession

Daniel Chambliss and Christopher Takacs (2014) conducted a 10-year longitudinal study of students at a small college, funded by the Andrew W. Mellon Foundation. The authors discovered:

> . . . personal relationships with both peers and faculty members, starting from direct contact, were fundamentally important to undergraduate success and could readily be facilitated by institutions. The influence of friends, teachers, and mentors on students' careers can be truly pervasive, running from start to finish. Especially for traditional-age students at residential colleges, research has shown that . . . peer and professor connections are the central daily motivators for exploring, discussing, studying, and learning, and that relationships of all kinds are often tied to a major positive result.

Most of us can recall faculty members who served this function for us in our own student days. They offered advice and guidance, treated us with kindness, respected our goals and aspirations, and provided support to help us achieve success as students or as professionals. We knew that these faculty members genuinely cared about us as people. They were clearly interested in our success as students and wanted to help us get off to a good start in our careers.

Decades of research have thoroughly established the effectiveness and value of faculty mentoring.

- Mentoring by college faculty had a positive impact on students' persistence and academic achievement (Crisp and Cruz, 2009) and increased success in their professional careers (Scholsser, Knox, Moskovitz, and Hill, 2003).
- Diverse college students who received mentoring were twice as likely to persist as non-mentored students and earn higher grade point averages (Crisp and Cruz, 2009).
- Undergraduates who received faculty mentoring demonstrated higher academic achievement, and mentored first-year students were more likely to return to college for a second year (Terenzini, Pascarella, Blimling, 1996).
- After one year of faculty mentoring, students had higher grade point averages and were more likely to stay in college than students who did not have mentors (Campbell and Campbell, 1997).

These citations offer but a small sample of a vast body of literature. The question we will explore is not, "Is mentoring worthwhile?" Rather, we'll turn our attention to the more pertinent matter of how we can ensure that all students receive the known benefits associated with working closely with a faculty mentor.

Our very degree titles remind us of our guild system roots, and we retain some of the essence of that history in our pedagogies. Mentors, masters, and faculty share many common traits, especially in the direct transmission of skills and knowledge through observation, trial-and-error, and structured accomplishment. Both teaching and mentoring emphasize building relationships between learners and educators that can have a powerfully positive impact on students' experience in higher education and their subsequent professional achievement.

All of this leads us to the conclusion: who we *were* is who we need to be. Re-claiming our heritage from the guild system can teach us much about connecting our students with meaningful educational experiences and opportunities to establish productive careers.

HOW?

The next step is identifying how to put this knowledge into practice to improve the educational experience we afford our students through mentoring as well as in our classrooms and studios. Drawing inspiration from the master-apprentice system, we can implement a model of mentorship to all students through strategies for optimizing teaching and learning that mirror the concepts we've examined in the previous sections of this article.

For example, the Trenfy Innovative Instruction Center (Trenfy I^2 Center, 2020), in collaboration with a task force formed by the Faculty Senate at the Colorado School of Mines, conducted a study of the characteristics of effective teaching. The research team drew from information published by institutions, including the University of Oregon, the University of Southern California, the University of Michigan, Carnegie Mellon University, Pennsylvania State University, and the University of Tennessee at Chattanooga. When we combine these observations with data gleaned from additional research, a clear set of strategies emerges.

Effective instruction demonstrates four dynamic and interactive characteristics, connecting to key questions and key concepts.

1. Student-focused:
    a. Key question: Whom do we serve?
    b. Key concepts: Human-centric, empathetic, diverse, respectful, positive
2. Learning-centric:
    a. Key question: Why do we do what we do?
    b. Key concepts: Purposeful, brain-based, outcome-aware
3. Deliberately planned:
    a. Key questions: What will we do, how and when will we do it, and how will it allow us to achieve our purpose?

    b. Key concepts: Mindful of both process and product; beginning with the end in mind: student acquisition of crucial disciplinary content
4. Deeply thoughtful:
    a. Key questions: Were we successful? If so, how? If not, why not? How can we improve what we do?
    b. Key concepts: Informed by data gathered about prior iterations, re-created in a cycle of continuous improvement. All data is considered formative – used to make decisions about instruction.

Next, let's consider each of those characteristics of effective instruction at greater depth.

Student-Focused

Effective instruction occurs within an environment where students are valued as individuals and as learners (Cornelius-White, 2007). Supportive learning communities encourage students to ask for help when needed (Ishiyama and Hartlaub, 2002) and persist even when tasks are difficult (Cohen, Steel, and Ross, 1999). Encouragement and support are central to mentoring.

- Instructors' policies are written in positive terms rather than stating the punitive measures that will apply if students fail to meet expectations.
- Course content encompasses inclusive examples, approaches issues from a variety of perspectives, and ensures all materials are accessible to all learners (ex: closed captioning).
- Instructors communicate care for students as learners. They practice physical and verbal immediacy, they are fully present when interacting with students in class and during office hours, and they teach students that mistakes are part of learning.
- Instructors also communicate that they care for students as people. They use students' names, act as mentors, demonstrate compassion when students have personal problems, and take a professional interest in students' lives outside of the classroom.
- Effective instructors also communicate structures for collaboration and community-building within their classrooms.

Learning-Centric

High-quality teaching focuses on students' <u>learning</u> of disciplinary content instead of on the content itself. Instructors understand that students' experiences shape their ability to learn, they are familiar with research about how the brain learns best, and they structure their course content to make connections to their students' future careers and the quality of their lives after graduation (Ambrose, Bridges, DiPietro, Lovett, Norman, and Meyer, 2010). Likewise, a mentoring approach to instruction continuously links classroom learning to professional application.

- Skillful educators state the purpose for learning, deliberately activate their students' prior knowledge, and make overt connections between what students already know and what they ask their students to learn.
- Effective instructors develop their students' disciplinary thinking by modeling their own thought processes and allowing students to practice new skills through authentic tasks.
- Maintaining a focus on learning involves communicating the value of the course content, emphasizing learning over grades, making expectations clear, and setting an appropriate level of challenge.
- Student learning is enhanced through multiple opportunities to practice new skills, accompanied by high-quality feedback tied to course outcomes. Instructors provide clear instructions for all assignments that meet the following criteria (Transparency in Teaching and Learning Network, 2020).
    - State the purpose of the task.
    - List the skills and knowledge the student will develop through the assignment.
    - Explain in detail what the student should do and how to do it.

    - Provide clear grading criteria in the form of checklists or rubrics.
    - Offer multiple examples of successful student work.
- Effective instructors create classrooms that are safe, respectful, and open learning communities.
- A focus on learning helps students acquire the ability to monitor, assess, and adjust their own learning.

Deliberately Planned

Neither effective instruction nor high-quality mentoring happens organically. These actions begin with intentional and thoughtful design that supports students' learning, provides motivation, leverages the strategies identified in the previous section (Focused on Learning), and ensures a reasonable student workload. This strategy aligns with the mentoring philosophy of sequencing and controlling task demands to build students' skills and competencies, "keeping students on the constructive side of difficulty" (Halpern, 2009). It also upholds the model of maintaining a focus on career preparation.

- Faculty should frequently remind students of the course's purpose and its relevance to their lives and future careers.
- Clear, relevant, measurable student learning outcomes tie into instruction, assignments, assessment, practice, and feedback. Each aspect of the course fits together seamlessly. Students are always aware of why they must do something; they know what to do through clear directions, and they understand how the instructor will evaluate their work before beginning a learning task. Mentoring, too, should occur within clear expectations spelled out between the mentor and mentee.
- Course assessments are both formative and summative. They measure students' learning in progress, and the instructor shapes subsequent instruction in the course based on this knowledge, tailoring their efforts to the students' demonstrated needs.
- All learning activities that provide developmental skills and knowledge receive high-quality feedback regarding the student's progress and current level of mastery.

Deeply Thoughtful

Skillful educators reflect on their teaching and mobilize these insights within their classrooms, moving beyond the typical changes most instructors make to their courses from one semester to the next. When instructors approach their teaching as a "reflective practitioner" (Schön, 1983) who engages in "the intellectual work of teaching" (Bernstein, Burnett, Goodburn, and Savory, 2006) or "scholarly teaching," (Glassick, Huber, and Maeroff, 1997) the impact on students' learning is considerable. Mentorship, too, benefits from a thoughtful and reflective approach, considering what's best for mentees' present and future wellbeing.

- Faculty take the time to examine and contemplate evidence of student learning and motivation.
- Faculty strive to become better teachers and mentors, engaging in professional development specifically to improve their practice as educators.
- Faculty share their knowledge with their colleagues in a supportive and collegial culture of mutual responsibility for students' learning and future success. They willingly serve as mentors to peers and students.

These characteristics of effective teaching and mentoring may seem rather daunting, but they grow from the core idea of maintaining a student-centered mindset that places learning at the forefront of all we do as educators. Virtually every college or university will have a center for teaching and learning or similar entity where faculty can turn for help if they want to improve their practice as educators.

Creativity, Action Research, and Effective Teaching

Many fields of human engagement share a pattern of activity known as a heuristic cycle. (1) We plan a project. (2) We begin the project. (3) We observe the work in progress, monitoring the effectiveness of our actions as we go. (4) We pause to reflect on the project to decide if it aligns with our original vision. At this

point, we might seek feedback from others, or we might investigate processes or materials that could improve the project. Then we make a new plan for changes to the project, beginning the cycle again (and again) until the work reaches completion. This cycle has parallels in action research, design, and the practice of effective teaching (Mackh, 2017).

TABLE 4
THE HEURISTIC CYCLE

Step	Heuristic Cycle	Action Research	Design Process	Effective Teaching
Plan	Determine the action to take in order to create an artistic product or performance.	Determine the action to take in order to achieve the desired result.	Understand the needs of the target audience through empathetic observation to define the problem to be solved.	Understand students' identities and needs as learners and as people.
Act	Engage in the creative process, leading to an artistic product or performance.	Engage in the activity under study (teaching, marketing, healthcare…).	Envision a solution to the problem and create one or more prototypes to apply the solution.	Employ best practices in teaching to deliver relevant course content supportive of students' successive learning and career attainment.
Observe	Contemplate the work in progress, determining its current level of overall effectiveness.	Note the results of the previous action and assess its effectiveness.	Employ the prototype solution and collect data about the results.	Employ assessment mechanisms to measure students' achievement of course outcomes.
Reflect	Determine which aspects of the work, or which creative actions, were successful.	Determine whether the desired results have been achieved.	Evaluate the observed results and consider how the prototype could be improved or how another solution might be employed.	Evaluate the assessment data to decide what aspects of the curricula and instruction were most and least successful in helping students achieve the course outcomes.
Revise	Make changes to the work based on reflection.	Set a new direction for the research.	Refine the prototype solution and re-apply it to the problem.	Make changes to the curricula and instructional methods to better serve students' educational needs.

If we consider teaching as an essentially creative activity, we can identify areas of commonality across everything we do as members of the faculty. Indeed, the cycle of plan, act, observe, reflect, revise is pervasive in human life. We decide what to do, we do it, we observe the effect of our actions, we consider whether our actions were successful, and we determine what to change when we undertake the task again.

It's not a giant leap to apply this process to our practice as effective educators. The key lies in treating all student work as formative rather than summative. Most educators view assignments and assessments as summative: we give an exam or assignment, we evaluate the students' work and record their grades, and we move on to the next item on the syllabus. This method doesn't allow instructors to use the data they collected to improve either their students' learning or their instruction. In contrast, formative assessment provides evidence of students' learning in-progress. Courses in writing, art, or other creative fields reflexively employ formative assessment. For example, when we teach a new skill to our students, we provide an opportunity to practice. If we evaluate their results and notice that many students are making the same error, we'll then re-teach the process to correct the problem.

Summative assessment has an important place in higher education because instructors are required to assign grades. Final exams, for instance, are always summative for the student – the grade they receive sums up their learning in the course. However, the instructor can choose to treat the results of a final exam as formative for their practice as an educator, noting students' areas of difficulty and making changes to future instruction to mitigate the problems they observed.

Maintaining a focus on our students, keeping their learning at the center of what we do, engaging in deliberate planning of our actions as educators, and reflecting deeply on our practice as instructors and mentors are the frameworks within which effective education occurs. By making overt connections to the workplace and adopting an attitude of mentoring towards our students, we become force-multipliers in their journey through higher education. This action cannot help but improve their outcomes as alumni.

WHERE?

The question of "where?" usually enters into our thinking as educators in a purely utilitarian sense. We ask, "Where will my class be held?" or "Where is my ____ [name of any given object that's missing]?" We also think of "where" in terms of the physical environment of the campus and the facilities in which we work. The quality of these spaces has a decided impact on our teaching, research, and creative practice. Aging facilities, insufficient space, or malfunctioning equipment will hamper our efforts and produce a detrimental impact on our daily lives.

Few of those considerations are under the control of faculty, though. Furthermore, outstanding instruction can occur in sub-standard facilities or under oppressively difficult conditions, while exceptionally poor instruction can occur in gleaming, state-of-the-art buildings. Far more than the quality of our surroundings, the question of where is a matter of the internal environment, or culture, of the department in which we work.

The real key is to establish a culture of care within the institution that contradicts longstanding norms. In some departments or institutions, collegial relationships can be more competitive than collaborative, or faculty may place a priority on strict adherence to their classroom policies above extending empathy and compassion to their students. A culture of care changes these dynamics by promoting a student-centered philosophy of teaching under which we do whatever it takes to facilitate our students' success. We let our students know we value them as unique human beings, are invested in their academic achievement, and are concerned with their wellbeing. We also care for our colleagues, for our institution, and for ourselves. It's within an environment such as this that mentoring flourishes.

Mentoring – Definitions and Clarifications

The master-apprentice model of instruction helps us understand the historical origins of mentoring, and a culture of care places it within the context of the kind of environment we'd like to create in our universities. Mentoring can occur between all faculty and students as a regular part of their interactions in instructional settings. It can also become a larger idea, taking us beyond everyday exchanges to institutional systems designed to support students through formalized mentoring programs.

What Mentoring Is Not

Before we get into the heart of what mentoring *is*, it might help to explore what it is *not*.

- Mentors are neither counselors nor therapists, although they may refer mentees to those services where needed and appropriate.
- Mentors differ from advisors. In a university setting, advising tends to relate to course selection or degree planning, but it does not depend on establishing a relationship between advisor and advisee. Mentors, on the other hand, can offer advice but also provide career guidance, role modeling, and encouragement. Advisors and mentors should work together as part of a student's support team since each has different strengths and areas of expertise.
- Mentors do not attempt to re-make the mentee in their own image. Instead, they support the mentee's academic and career success.
- Although subsequent discussions in this paper will focus on formalized mentoring within an institutional structure, mentoring also occurs informally or organically. Many effective mentor-mentee relationships evolve naturally, with or without prior intent by either party. Furthermore, anyone can be a mentor: peers, staff, faculty, administrators, alumni, community members, and more.
- Mentoring is not a lifetime commitment. The mentor and mentee may choose to maintain long-term contact; one or the other may choose to discontinue their association; or it may reach a natural endpoint upon the student's graduation, the professor's retirement, or other milestones.

What Mentoring Is: Types and Benefits

Although mentoring is common across many fields of human endeavor, our focus here remains on approaches to mentoring between faculty and students. Each partnership will be unique, characterized by individual circumstances, area of study, and career goals, and is shaped by the mentor's academic discipline, experience, knowledge, and university policies. In general, we can recognize two basic types of mentorship – formal and informal.

Formal. Many institutions establish formalized mentoring programs matching students with faculty who serve in this capacity. The degree to which the institution manages this arrangement varies. In some cases, all full-time faculty mentor a given number of students majoring in their discipline as a regular part of their professional duties. At other institutions, mentoring might be a voluntary program in which both students and faculty participate, or it might be part of undergraduate research programs. And, of course, countless other variations occur as well.

Formalized mentoring generally follows institutional standards and expectations for both the mentor and mentee, such as the number of times they will meet each term, the type and frequency of communication, and the topics they should discuss in their meetings. The institution may provide training for mentors to help them perform this task according to institutional expectations. Institutions sometimes hold events for the group of mentor-mentee pairs, such as a kick-off breakfast or a luncheon at the end of the academic year.

Informal. Informal mentoring is more difficult to define since it can take so many forms. Normal classroom interactions between faculty and students can be a type of informal mentoring. This is why discussions of effective instruction are inextricable from conversations about mentoring since informal mentoring can be a natural outgrowth of the instructional environment.

Beyond the classroom, either the mentor or mentee can choose to initiate informal mentoring, or it might evolve naturally. For example, students may decide to cultivate a relationship with someone who possesses expertise in a particular academic major or field of professional interest. Likewise, faculty, staff, or administrators may offer to serve as a mentor for a student whom they feel shows promise or demonstrates interest in their scholarship, creative practice, or other professional activities. Informal or temporary mentoring can also grow spontaneously from casual interactions. A student's request for assistance with an assignment or an instructor's recommendation of an internship that might be beneficial to a student could broaden into mentoring. Informal mentoring can be of nearly any duration, from a single meaningful encounter to a years-long association. Like the idea of "teachable moments," such informal mentoring opportunities occur frequently and can be quite impactful. Chambliss (2014) said,

> While conducting research for our book, *How College Works*, we saw how a single meeting with a professor to work through a paper could have a decisive effect on a student's writing, and how just a single visit to a faculty member's home could significantly shift a student's entire vision of the college experience. Time and again, finding the right person, at the right moment, seemed to have an outsize impact on a student's success.

Mentoring can yield benefits for both the mentor and the mentee, including but not limited to, the following:

TABLE 5
BENEFITS OF MENTORING

Benefits to the Mentee	Benefits to the Mentor
• Advice and counsel • Recommendations for scholarships, internships, job opportunities • Introduction to professionals in the field the mentee wishes to pursue • Letters of recommendation • Encouragement and support • The ability to achieve one's goals more effectively than working alone	• Personal skills development and expanding one's own knowledge • Evidence of professionalism towards future career advancement • Personal satisfaction when seeing the mentee achieve success and knowing that we were instrumental in this process • Knowing that one's efforts will be of benefit to the profession by adding a competent member to its ranks

If both the mentor and mentee stand to gain, and if even small yet positive interactions between faculty and students can produce lasting impact, there seems to be little to lose and much to gain by exploring this issue further.

How to Be a Mentor

In many cases, becoming a mentor is similar to the initial stages of any human relationship: one party will initiate an interaction, then the other party responds. If the experience is positive, the two seek out additional opportunities to interact. They contact one another, choose to spend time together, and help each other with tasks or problems.

Mentoring differs in the relative inequality between participants. Friends are usually equals, but there is an inherent imbalance between a faculty member and a student. Both parties should keep this inequality in mind because it shapes the character of their interactions and sets limits on what one party can reasonably ask of the other. A faculty mentor should never ask a student to repair the fence in their backyard or help them move to a new home, for example. In this same light, a mentee can ask a mentor for advice about choosing a graduate school but should not ask the mentor to babysit their children on Friday night. These types of requests aren't unusual among friends who are equals, but it's best to maintain a certain professional distance between mentors and mentees.

Student-Initiated

The would-be mentee might initiate many mentoring relationships. Students may strategically reach out to a potential mentor whom they feel would be able to help them with a task or a problem. They might also seek the advice of someone they see as a role model, especially if that person works in the field they hope to pursue professionally. Our response to these requests determines whether mentoring will ensue or not. If we only provide the minimum of information, we can't categorize this as mentoring in the most beneficial sense. Nevertheless, each time a student asks for assistance with a problem, seeks counsel about their professional aspirations, or expresses sincere interest in our research or creative practice, we encounter

an opportunity either to act as a mentor or to refer the student to someone who can fulfill this role. Let's consider a few possibilities.

- A student emails a professor saying that they're considering attending graduate school, asking for advice about choosing a suitable program. The professor replies with an outline of various possibilities based on the student's interests and later explores websites for several programs the professor knows could be a good fit. In subsequent interactions, the professor offers feedback on the student's application materials, writes letters of recommendation required for several applications, and offers the student encouragement through the anxious weeks spent waiting for an acceptance letter. When the student receives word they have been accepted into the program, the professor expresses hearty congratulations and reiterates their belief in the student's ability to succeed in the graduate program.
- A student initiates a conversation about a professor's research, saying they were impressed by the paper the professor just published. The student asks what the professor is presently working on, and they speak for several more minutes about this topic, with the professor finally inviting the student to join their current project as an undergraduate research assistant. Through this collaboration, the professor encounters several opportunities to help the student define their career path and to identify potential employers in the field. The professor works with the student to prepare a resume and cover letters as well as writing a letter of recommendation and making a phone call to an acquaintance at one of the potential places of employment.

Faculty-Initiated

Faculty may decide to take the lead in establishing a mentoring relationship. Students might not always make the first move even though they clearly need help. "First-generation and nontraditional students, often hesitant to approach any authority figure, needed their professors to take the initiative in getting to know and understand them. In turn, professors' caring attitude was vital in helping students meet the challenges of college" (From Rebecca Cox's "Fear Factor: How Students and Professors Misunderstand One Another," in Chambliss, 2014).

When we see students who need help, empathy and compassion should prompt us to respond whether or not the student has asked for our assistance. Instructors rightfully prioritize academic achievement in their classrooms, and many resist the idea that they should be expected to "hold their students' hands" (figuratively speaking) or to smooth the path for those who struggle. Traditionalist attitudes fade but slowly, and many educators believe that "setting the table" for learning is all they need to do. It's true that "in the real world," we frequently run into people or situations that are unforgiving, heartless, or even cruel. Nevertheless, we should ask ourselves if it's really necessary to visit those negative experiences on our students. When we see someone drowning, shouldn't we throw them a lifeline?

Besides mentoring initiated by students' needs, it might also begin when we notice students who are particularly driven, talented, insightful, or verbalize their intentions for graduate study or professional engagement after graduation. When we recognize this kind of potential, we have a valuable opportunity to step forward to offer our input and assistance as mentors. Let's consider two examples.

- A writing professor notices that a student who is a particularly good writer also happens to be a talented artist and compliments the student on a recent project where the student added illustrations to their story. The student replies that they are considering a career as an author-illustrator of children's books but doesn't know how to begin to achieve this aspiration. Although the writing professor doesn't possess this information either, she tells the student she'll look into the matter. The professor then engages in some preliminary research and invites the student to meet with her to discuss her findings, including a competition for student authors. She encourages the student to enter the competition and identifies a way for the student to modify a previous class project for the contest submission.
- A professor is a member of a professional organization that offers discounted memberships to students. He approaches several students who major in his discipline, encouraging them to join

the organization because of the networking and professional development possibilities the organization provides. When he learns that the organization's national conference will be held at a nearby university, he arranges for the students to attend with him, funded by an internal grant for which he helped them apply. At the conference, he makes an effort to introduce the students to individuals whom he knows, broadening their professional network, and thereby enhancing their potential for career success.

Mentoring for Career Outcomes

Mentor-mentee pairs are generally purpose-driven, forming when the mentee has a need that the mentor can fulfill. The University of Cambridge (2019) identifies three basic types of mentoring.

Induction Mentoring provides new members of an organization with a mentor familiar with the organization who helps the newcomer navigate its policies and procedures, identify sources of help and information and support, or find and operate equipment or systems. The mentor serves as an impartial confidante for the mentee's concerns and helps work through problems strategically. Generally, the mentor is not in direct authority over the mentee but holds a related position.

Peer Mentoring exists between students or colleagues, focused either on a particular purpose such as academic skill development or improvement of an aspect of professional practice. A more experienced student might mentor another student as they complete challenging coursework together. One faculty member might mentor another to improve their teaching, observing one another in the classroom, offering feedback and encouragement, and holding each other accountable for achieving their goals.

Developmental Mentoring "is about the synergy that two (or more) people can create between them to generate solutions, strategies, and action plans, to build on success" (University of Cambridge, *Types of Mentoring*, 2019). This type of mentoring provides role models, information about career development, builds the mentee's support network, and develops the mentee's self-confidence. The mentor assists the mentee in identifying strengths, providing motivation, and clarifying the mentee's values, aspirations, priorities, and changing needs. The mentor helps plan the mentee's professional development and supports the mentee through the next steps.

Faculty-student mentoring tends to follow the developmental model. Here we can identify four key ways that faculty mentors can support students' career preparation (Mentoring.org, n.d.).

1. *Goal-setting*: Students often enter college without a clear idea of what will happen after they graduate. Mentors assist students in clarifying their expectations, setting goals, and working with students to achieve their aspirations.
2. *Networking:* Our lives exist within social networks. When we know someone who possesses particular expertise, we seek them out, just as others seek us out for our knowledge and experience. Connecting students to members of professional communities can help them secure internships, find mentors in the professional sector, and even land their first job. We might joke about phrases like, "I know a guy…" but networking is a natural aspect of adult life that we all use to our advantage. Students lack these networks, and it's an important part of mentoring to assist them in the first steps of building relationships with those who can prove helpful to their career success.
3. *Broaden the Scope of Knowledge:* As competent educators and professionals, we possess far more knowledge than we can include in our regularly-scheduled lectures and discussions. Mentoring allows us to share more of these resources with students who can best benefit from our experience and expertise. It provides a means to point students in new directions that might not align with course content but which could be of value to them nevertheless.
4. *Job-Seeking Skills:* The prospect of finding a job after graduation can be overwhelming for students, who might not have the foggiest idea of how to begin looking for a suitable position or establish a professional practice. Not all degree programs require coursework in professional tasks such as creating a resume or CV, writing a cover letter tailored to jobs in a particular field, applying for grants, entering one's works in exhibitions, auditioning, interviewing, submitting

articles to professional journals, establishing relationships with clients, launching an entrepreneurial venture, and so forth. Mentors can fill this crucial gap.

Finding Solutions

None of us has immediate solutions for all of our students' career-related problems, nor do we have the answer to their every question. Our students might be venturing into territory we've never traversed ourselves, and we draw a blank when asked questions that are beyond the scope of our knowledge and experience. When successful mentors encounter questions or problems like these, they don't simply say, "I'm sorry, but I don't know." Instead, they seek the needed information and direct their students to appropriate resources and support. Our students will venture far beyond the territories with which we, ourselves, are familiar. Perhaps we can't say, "Yes, I've been there before, and I can help you find your way." Nevertheless, we can say, "I haven't been there yet, either. Let's find out what you should do to get from here to there."

Our overarching goal when mentoring students should be to support their academic and career achievement. Therefore, relative to their academic and professional field, every faculty member should prepare themselves to answer questions such as these:

- Who are the most notable individuals working in this field at present? What are they doing? How are they doing it?
- Which industries, firms, organizations, or companies have emerged as desirable workplaces for new grads in this field?
- How do new grads overcome the problem that so many job listings in their field of interest seem to require a minimum of two years of experience?
- Where are there internship opportunities that can give new grads the experience necessary for professional-level jobs?
- What options beyond traditional employment are available in your field?
    - Teaching
    - Consulting
    - Entrepreneurship
    - Interdisciplinary workplaces or teams
- How can students prepare to engage in these alternatives to traditional employment?

Even the most experienced, most knowledgeable, most professionally prolific faculty members have gaps that will be revealed by student's questions. Nevertheless, we each possess the ability to *find* the answers to those questions when we're asked, or at least to work alongside our students as we search for the answers together.

Sample Mentoring Program Structure and Recommendations

Universities increasingly recognize the power of mentoring and some universities have begun to incorporate mentoring into the regular duties of their faculty members, although many other approaches exist. Again, no single approach will work best at all institutions. In this discussion, we'll consider a hypothetical formalized mentoring program under development at a mid-sized regional university. This example presumes that the university has instituted a new policy for Faculty Mentoring built upon three core principles.

1. All employees who hold a full-time faculty appointment, whether as faculty or administrators, will serve as mentors. Arizona State University's President, Michael Crow, has often spoken about ASU's expectation that all individuals who hold a faculty appointment, regardless of their status as administrators (including himself), teach at least one course per year. Extending the responsibility for mentoring across all persons with faculty appointments builds on this model.
2. All students will be assigned to a faculty mentor.

    a. Students who have declared a major will be assigned a faculty mentor within the major department.
    b. Undeclared students will be assigned a faculty mentor who teaches general education courses in the College of Arts & Sciences, with the understanding that they will be assigned to a new mentor upon choosing a major.
3. Because significant differences between academic disciplines exist, departments will bear primary responsibility for aligning university expectations for mentoring with the norms, practices, ontologies, epistemologies, and methodologies of their areas of expertise.
    a. Each department will divide its students equitably among faculty members, subject to provostial approval of their chosen process, policy, and practices.
    b. Peer-mentoring, academic advising, and similar activities can and should continue, but these shall not take the place of faculty mentoring.

Department Considerations

In this hypothetical example, the university's expectations for mentoring are quite simple – all students will have a mentor, and every individual with a faculty appointment will serve as a mentor. Implementation of these two principles rests with each department. Among the department's first considerations will be how best to distribute students among potential mentors. This process might involve a simple mathematical calculation, dividing the number of majors by the number of available mentors. Alternatively, the department may choose to adjust or prorate the distribution of students to reflect the percentage of time each potential mentor regularly spends in contact with students. Someone with no regular student contact such as a dean, director of a research center, or another upper administrator could take on a minimal mentoring load of, say, five students. Consequently, someone with more student contact would take on a larger number of mentees.

For the hypothetical illustration we'll use throughout the remainder of this article, let's presume the following conditions exist.

- The department houses 350 majors.
- The department has 17 full-time faculty, including the chair. Four administrators elsewhere in the university hold faculty appointments in the department, increasing the number of available mentors to 21.
- Using simple division, distributing 350 students among 21 mentors means that each mentor would be responsible for 17 mentees.
- If the department decides to prorate the distribution of students, then the chair and four other administrators could each mentor five students. The remaining 325 students would be divided equally among the faculty, resulting in 20 students per mentor.

Procedures for matching mentors to mentees can be arbitrary, random, or even alphabetical, but this is far from ideal. Some institutions solve the problem of matching mentors with mentees by allowing students to self-select their mentor, but this generally fails to produce an equitable result since faculty whom students perceive to be more approachable are deluged with requests, while those who seem more formidable are left out (McCormick and Chow, 2016). It may be better to take a more structured and strategic approach to the task of assigning students to mentors.

Among the first factors to consider in the matching process is that faculty members necessarily possess individual strengths and weaknesses that render them better suited to mentor certain types of students. Some faculty enjoy working with first and second-year students, helping them to get a good start in the department. Other faculty have greater strengths in working with students who are well established in the major and are actively engaged in preparing for their careers. Some faculty demonstrate caring and sensitivity towards students who struggle academically, whereas others are best at inspiring high-achieving students to strive for even greater accomplishments. We cannot overlook the importance of faculty and student identities, either. Students respond best to faculty who share their demographic characteristics (Nadworny, 2018), but since our faculty demographics tend to be less diverse than our students, matching

mentors and mentees by identity factors may not be fully possible. Nevertheless, we should take care to pair our more vulnerable or sensitive students with a mentor from the same demographic group insofar as is feasible.

Because mentoring involves helping students prepare for a career, we should make every effort to match students with a mentor whose professional practice is in the area the student hopes to pursue after graduation. A professor of marine biology might not be an ideal mentor for a student who wants to pursue a career in microbiology, for example.

Students' current academic standing represents the third area of consideration. First-year students may require more attention from their mentors than sophomores or juniors since they lack basic knowledge of how to be successful in college. Seniors may also place greater demands on their mentors as they explore graduate schools, seek career advice, ask for letters of recommendation, or use their mentor as a professional reference for job applications. Therefore, assigning each mentor a blend of students at varying levels might ease the burden. This action is also advantageous as time passes because most students will remain with their mentor long-term. In each subsequent year of mentoring, only part of the mentee caseload will include new students, making for a less intensive adjustment period than in the first year of the program.

Considering all of these factors, the actual mix of students and mentors might not work out to a simple algorithm that distributes students equally. How can we decide such a complicated proposition? It might be a good idea to borrow a few strategies from Design Thinking (Mackh, 2020) as in this suggested process.

1. Write all faculty names and their primary discipline on separate poster boards or large sheets of chart paper and place them on the walls of the conference room. (Ideally, <u>all</u> mentors, regardless of their job title, will participate actively in this process.)
2. Write each student's name and major on a color-coded Post-it note, with the colors representing their year in school (ex: yellow for first-year students, pink for sophomores, blue for juniors, green for seniors). The Post-it should also include any crucial facts about the student if known. To save space, this could be done by code. As a few examples:
   1 = struggles academically
   2 = high-achiever
   3 = demographic considerations (sub-categories could be established with a letter system: 3H could indicate Hispanic; 3AA for African American, etc.)
   4 = special needs
   5 = first-generation
   6 = low-income
   7 = extenuating life circumstances (married, commutes to campus, is a parent, etc.)

Write the codes on the faculty posters, such as placing a 1 on the poster of a faculty member who has an affinity for struggling students, a 2 for faculty members with a talent for accelerating high-achieving students, and so on.

3. First Sort: Place the student Post-it notes on the posters of the professors who teach in their major or area of specialization. If more than one faculty member teaches in the same field, initial placement can be somewhat arbitrary. Pay no attention to the number of Post-it notes accumulating on a given poster until all Post-it notes are distributed. Step back and view the results of these initial placements. Consider which faculty have few Post-it notes and which have many.
4. Second Sort: Now look at the colors and codes on the Post-it notes to re-distribute certain students from the faculty members who ended up with more than their fair share, considering the best alternative placement for that student. At this point in the process, faculty can advocate for including certain students on their list, such as seniors with whom they already have a mentoring relationship or students who participate in undergraduate research with them. Continue moving Post-it notes until each faculty member has an appropriate blend and reasonable number of mentees. If certain faculty members are best suited to mentor more than their mathematical share of students, the department may decide to adjust their teaching responsibilities to accommodate a higher mentoring load. Likewise, faculty who are not as

comfortable with a large mentee caseload could take on additional teaching responsibilities in exchange for a reduced mentoring assignment.

5. Third Sort: Next, each mentor should evaluate the collection of student names on their poster. Consider factors such as the number of students who have similar codes on their Post-its. No faculty member should be overloaded with high-needs students. Move Post-it notes as necessary to redistribute the students equitably.
6. When no further sorting can take place, record the results. The department chair will then provide each mentor with a database of their mentees' names and information, including their biographical data, contact information, academic record, and any other pertinent facts available.

A concrete and collaborative process like this helps create a sense of shared ownership of student distribution and assures participants that the process was fair, strategic, and equitable. It's very unlikely that every faculty mentor will serve precisely the same number of students. Still, as long as we reach a common understanding of how distribution occurs, it might mitigate feelings that some individuals have been unfairly expected to bear more of a burden than others.

As previously mentioned, most students will remain with the same mentor throughout their educational journey. Therefore, the distribution of students will be somewhat easier in subsequent years, since only incoming first-year students, transfers, or students who change their major will need to be placed with a mentor. Changes may also take place when one of the following events occurs.

1. The student leaves school, changes their major to a different field within the department, or decides to major in a different department
2. The mentor retires, resigns, goes on sabbatical, or is otherwise absent from campus for an extended time (ex: on medical leave)
3. The student requests a change of mentor
4. The mentor requests that the student be placed with a different mentor

Successful mentoring depends on building productive, positive relationships with students. If either party is uncomfortable or unhappy, the department chair should facilitate a change with sensitivity and compassion, even in the midst of the academic year. The chair may try to help the student and mentor overcome interpersonal incompatibilities or resolve conflicts, but in the end, neither the student nor the mentor should ever feel trapped.

Establish Expectations for Mentoring

As we've discussed, mentoring will be decidedly different depending on the characteristics of the department in which it occurs. Nevertheless, we can identify some baseline expectations across all disciplines (Tedesco and Ryan, 2015).

TABLE 6
EXPECTATIONS FOR MENTORING

Mentor Expectations	Student Expectations
• Mentors will take the initiative to reach out to students individually and as a group at regular intervals throughout the school year. • Mentors will respond promptly to students' phone calls, email, or other messaging. • Mentors will alert appropriate student service personnel when they know or suspect that the student is experiencing difficulties. • Mentors will establish parameters for communication with students, including frequency	• Students will attend activities or events held by the mentor. • Students will attend meetings or appointments with their mentor and will demonstrate respectful behavior (ex: being punctual, using respectful communication) • Students will respond promptly to their mentor's phone calls, email, or other messaging.

of meetings, preferred communication methods, and timeframes for requested actions (ex: looking over the draft of a research paper, writing a letter of recommendation, etc.)	• Students will discuss their long-term and short-term goals with their mentors.

What might this look like in practice? Again, this will depend on the norms of the department. Simply as an illustration, let's return to the previous scenario of a department with 350 majors and 21 mentors, in which each faculty mentor serves approximately 20 students. To introduce the mentoring initiative, the department decides to hold a kick-off event at the beginning of the school year, during which mentors meet their mentees for the first time over a catered BBQ dinner. Mentor-mentee groups eat together, then go to a classroom where the mentor leads a few icebreaker activities and explains their expectations for the year.

The old cliché is true – there's no second chance to make a first impression, making this first meeting essential to establishing a good relationship. Mentors are freer to be themselves with their mentees than they are in the classroom because they do not have to enforce discipline or assign grades. The first meeting is an excellent opportunity to set the tone by demonstrating enthusiasm, warmth, and even humor – all strategies for building rapport. For instance, the mentor could message students ahead of the kick-off event saying, "I'll meet you by the fountain in the Quad at 6 p.m. You'll recognize me because I'll be wearing a tie-dye lab coat" or "I'll be the professor carrying a fishing pole." Any small touch that lets students know something about you – a hobby, your school spirit, or your passion for your discipline – is welcome and will help you get off on the right foot with your new mentees. This is particularly true for administrators who will be serving as mentors. Students might be intimidated to have a mentor who's a university executive, for example, so it's even more important to show them your human side, demonstrating that you're warm, approachable, and concerned about their wellbeing. Once you've begun to establish a rapport, these students might feel special to have been lucky enough to get the dean, provost, or president as their mentor.

Whether or not the department chooses to facilitate first meetings through an event like the BBQ we've described here, mentors in our model program are responsible for:

- Holding a meeting with all of their mentees at the start of the school year, followed by 10-15 minute meetings with individual students to occur within two weeks.
- Emailing or messaging their mentees weekly.
- Meeting with each mentee in person, speaking by phone, or communicating via video conference for a minimum of 15 minutes at least once or twice per month.

These are minimal baseline expectations. We know that professors who care about their students as people have an outsized impact on the way students view their educational experiences and perceive the quality of their lives after graduation. Therefore, the more energy the mentor devotes to building relationships with their mentees, the better. The university can facilitate this process by giving each mentor a meal card for the university's food service to encourage them to eat with students. They could also provide a small budget for things like birthday cards, buying a student an occasional cup of coffee, or inviting all their mentees for a pizza dinner during finals week. Steps like this also tie into High Impact Practices and the Big Six.

Mentoring should be strategic and deliberate, not haphazard. It's important to bear in mind that the mentor, not the student, is responsible for initiating and maintaining the relationship. Mentors should never settle for telling students, "Here's my contact information. Call me if you need me." Instead, we should go beyond aloof passivity, making an effort to reach out to every student every few weeks. When students don't respond to our efforts, we should persist until we've made contact and determined how the student is doing. It may be wise for mentors to create a schedule of which mentees they will email on which days, keeping a running record of which mentees they've emailed, spoken to, or met with each week. With 20 mentees, spending an average of 15 minutes on each person will take a total of 5 hours, but spread over two weeks, this works out to about 30 minutes per day, which isn't an onerous task. Faculty logs of student contact should be available for the department chair and dean of the college to examine, providing proof of

the faculty member's mentoring activities. This record also supports mentoring activities with regard to consideration towards retention, promotion, and tenure.

As we consider how to approach our duties as mentors, we might borrow from the concept of Interaction Design. This aspect of User Experience Design rests on core principles that govern the interaction between human beings and the digital products they use (Mackh, 2019). Considering that mentoring is a process of interaction, we might adapt some of these principles to shape our relationship with students (Tognazzini, 2014; Gibbs, 2014).

Aesthetics: The words we choose in our written and verbal communications, along with our facial expressions and body language, create an impression of how open, accessible, and warm we are towards our mentees.

Anticipation: Mentors should anticipate students' needs and give them all of the information and tools required for engaged participation in the mentoring process.

Autonomy: Students should have some control within the mentoring relationship. Scheduled meeting times should accommodate both the student and the mentor. Students should be free to say, I'd like to meet with you more often" or "I don't think we need to meet more than once a month." However, the mentor remains the leader and can insist upon a minimal schedule for contact or set limits on how often the student wants to interact with them.

Color: In Interaction Design, color indicates the visual language and symbolism used within an electronic device. As applied to human interaction, we can interpret the principles of color as to how our various mentees will perceive us through our interactions with them. One approach may work wonderfully with some of our students, whereas others will find it to be intrusive or overbearing, and still others will find it to be insufficient for their needs. We should adjust and adapt our approaches, within reason, to meet the varying expectations of our mentees.

Consistency: Product users want to know what to expect as they interact with technologies. Just so, our students want to know what they can expect from us. The overall look and feel of our communications with them should be uniformly positive, supportive, and encouraging. Certain situations may necessitate that we diverge from this norm, such as a case where the student is in crisis or has committed a serious violation of university policy. However, consistency should characterize the majority of our interactions with mentees.

Perceivability: Students should understand that your role as a mentor is to help them be successful in their studies and to get started in their eventual career. This message is paramount to all of your mutual interactions.

Feedback: We want our mentees to receive our feedback and advice thoughtfully and act upon it accordingly. We should also consider the messages our mentees send to us, both in their overt written and verbal communications and in their implied critiques, such as their posture and facial expression during meetings, the frequency and quality of their communications with us, and the timeliness of their responses to our attempts to reach out to them.

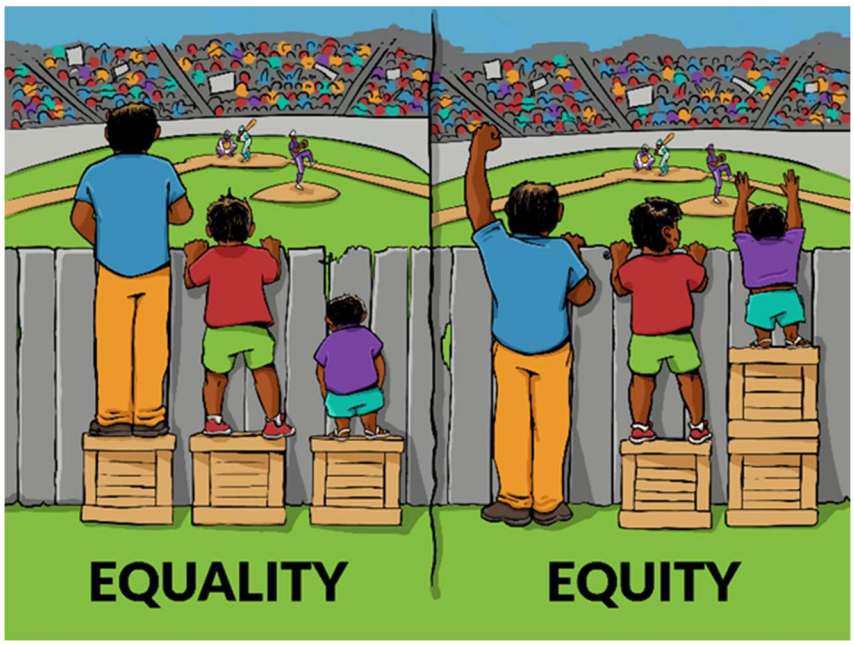
Part of caring for students involves keeping our eyes open for opportunities or resources that might be of interest to our mentees and bringing these to the students' attention. If we know that one of our mentees has a talent for computer coding, we might forward the announcement for the university's hack-a-thon along with a brief encouraging message like, "Hey, Jayden – I thought of you when I saw this. You'd rock at this event!" Likewise, mentors can support their mentees by attending events or performances that the student is involved in, like a play, concert, or sporting event. This advice might cause some readers to bristle, thinking, "There's no way I'm spending my personal time going to a student's event." However, think of how meaningful it would be to your mentee when you approach them after the event to shake their hand and tell them how well they did. The fact that you took time to be there for them will be far more motivational than just an email, and it will build the relationship more effectively than everyday contacts occurring during normal business hours. Faculty should document these activities, as well.

The actual amount of time we spend with each mentee will never be equal. Some students will reach out to us frequently, while others will fade into the background unless we make a deliberate effort to promote conversation and contact. Some students will have few problems and sail through their degree

programs, but others will need a great deal of attention from their mentor just to keep their heads above water.

Instructors may believe that treating their students as though they were all the same demonstrates fairness. However, in both teaching and mentoring, this is a false assumption. Instead, when we treat students equitably (not equally), we give them what they need to achieve the same goal.

FIGURE 7
EQUALITY VS. EQUITY



(Angus Maguire, 2016)

In teaching, we often justify the notion that sameness equals fairness because we deliver the same course content to all of our students – we give everybody the same sized box, as on the left side of the image above. But is it the course *content* that matters? Or is our real goal the *learning* we want students to achieve? The box is irrelevant except as a means to lift students up so they can see the game. Just so, presenting course content is not the end, in itself. What we want is for students to *learn* the content, which is a very different thing indeed. Some students need more than one box to make this happen.

The translation to mentoring should be clear. We share the same long-term goal for all of our mentees: to see them through to graduation and into a successful, sustainable life. Some of our students will achieve this goal with minimal intervention. Others will need a great deal of help. It's not enough to give everybody 15 minutes twice a month. We have to meet their needs where they are.

Strategies for Mentoring

Knowing that mentoring isn't a one-size-fits-all proposition, let's consider common expectations for mentors, strategies for building rapport, and specific strategies for mentoring students with factors of identity that impact their academic achievement.

Expectations for Mentors

Mentoring generally follows some basic expectations that set it apart from both teaching and advising, although it can incorporate aspects of both of those activities.

- Establish shared expectations with the mentee, including the frequency of contact, the types of communication, preferred contact methods. Reach an understanding about boundaries to

communication such as telling students they can send you text messages between the hours of 7 a.m. and 9 p.m. but that you will not respond to messages overnight or on the weekends unless it is a dire emergency.

- Communicate with mentees about their goals and dreams. Help them plan pathways towards achieving their aspirations. (A sample goal-setting form is included at the end of this article.)
- Maintain a regular schedule of communication with all mentees. For example:
    - Send all mentees an email each week.
    - Meet with each mentee at least once per month in person, by phone, or in a live online format such as Skype or Zoom.
    - Host occasional events or activities for all mentees each semester.
- Monitor the academic progress and wellbeing of all mentees. Reach out the mentee when you learn that they're experiencing difficulties. Be persistent in efforts to contact unresponsive mentees.
- Maintain standards of professionalism in all interactions with students.
- Share your enthusiasm for your professional discipline and involve students in your work as much as is feasible. Where direct student involvement is not possible, share information about your research or creative activity and introduce students to other practitioners and their work.
- Respect confidentiality and adhere to all applicable university policies governing faculty-student interactions.

Building Rapport

Rapport is a state of connection, harmony, or understanding between groups or individuals. It's important in every relationship, so it's not surprising that building rapport with our mentees is essential to the success of mentoring as well (Hall, 2016).

- Prepare for each meeting by looking over the student's file or the notes you've kept about them.
- Greet the student warmly every time you see them, not just during scheduled meetings.
- Begin conversations with safe or non-threatening topics. Ask open-ended questions the student can't answer with one word. Students tend to respond to questions like, "How are you doing?" with "Fine" or other monosyllabic answers. Asking, "Which of your classes are you enjoying the most this semester?" encourages students to share their thoughts and feelings, especially if we ask follow-up questions to elicit further detail.
- Try to inject an element of humor where appropriate. Even telling a corny "dad joke" can help break the ice. Sharing a laugh is a great way to establish rapport.
- Remain conscious of your non-verbal communication such as body language, facial expression, or unconscious behaviors like checking your watch or phone. The student should feel that they have their mentor's full attention, and we should also gently insist that they give us the same respect.
- Demonstrate empathy and listen without judgment. The student may not share your values. You may feel that their concerns are trivial. However, it's important to set aside your biases and really listen, trying to see things from their perspective.
- Use disclosure, but with caution. Sharing our own experiences can foster authentic rapport, but we also need to keep the power dynamic of the relationship in mind and maintain professional boundaries. The student is not your friend nor your peer, so be judicious in choosing which stories you tell about your life and experiences.
- Be honest about your limitations. It might seem like we have to present an all-knowing face to our students, but it's okay if we don't have answers to all of their questions or solutions to all of their problems. When your mentee presents you with a difficult question, don't hesitate to say, "I don't have the answer, but let's find out together."

Mentoring Students With Disabilities

About 20% of the general population has a disability of some kind (National Service and Inclusion Index, 2020; National Center for Education Statistics, 2017). The best resource for mentoring students with disabilities will be your university's Office of Disability Services or a similar entity. Even if students come to college with an existing IEP from high school, they may still be uncomfortable making a connection to this office or availing themselves of their rightful accommodations. Therefore, we should establish a connection with a contact person in that office so that we can facilitate students' access more easily. Mentors should encourage their mentees to tell them about any identified disabilities and familiarize themselves with these students' accommodations.

It's important to remember that a disability does not define the student – it is just one facet of their life. When working with disabled students, we should use person-first language ("person who uses a wheelchair," not "wheelchair-bound,"; "person who is deaf," not "deaf person." We should also avoid stereotypes and general assumptions. Each student is a unique individual regardless of their disability and equally deserving of an education. Because disabled individuals are a federally protected class, it's crucial that we maintain the student's confidentiality at all times. Rock Valley College's Office of Disabilities Services (2019) offers some valuable advice.

- Strategies for Working with Learning Disabled Students
    - Encourage the mentee to discuss the modifications or accommodations they have or that they feel they need.
    - Exercise patience, maintain positivity, and employ frequent praise and encouragement.
    - Help the student foster good study habits.
    - Help the student break down tasks into smaller increments.
    - Use concrete examples when giving feedback.
    - Use multiple modalities for explaining information (visual, hands-on).
    - Simplify directions and communicate in clear and simple language.
    - Help the student visualize what you're saying: draw charts, diagrams, illustrations, or graphs.
- Strategies for Working with Physically Disabled Students
    - Visually Impaired
        - Say your name when meeting. (Hello, Courtney, it's Professor Green, how are you today?")
        - Watch the student's hand and body movements – facial expression is a poor signal of a visually impaired student's emotion.
        - Use assistive technologies where possible.
        - If the student has a service dog, don't interact with it or pet it without asking the student first.
        - Keep the physical environment of your office or classroom clear and uncluttered.
    - Hearing Impaired
        - Get the student's attention before speaking.
        - Look at the student when you speak.
        - Use facial expressions, gestures, and body language as you speak.
        - Use visual aids whenever possible.
        - Avoid sitting or standing in front of a light source (like a sunny window) when speaking to the student.
    - Mobility Impaired
        - Do not touch the student's wheelchair unless asked – it's a violation of their personal space.
        - Conduct conversations at the student's eye level (sit down to talk).
        - Ensure that your office or classroom is physically accessible.
        - Use assistive tech when possible.

- Psychological Disability
    - Remain positive and optimistic in conversations with the student.
    - Listen to the student's concerns without casting judgment.
    - Ask the student to repeat things back to you – verbalizing assists memory and confirms understanding.
    - Encourage good study habits.
    - Break down tasks and information into smaller increments; present them sequentially and in writing.

Mentoring Diverse Students

The best mentors for diverse students are often those who share that student's demographic profile. However, our universities are not equipped for that level of compatibility. Most of our institutions have many more students who are Black or Hispanic, for example, than we have Black or Hispanic faculty members. Given that we will necessarily have White faculty mentoring students of color, and given that race is a very sensitive topic across society, mentors should bear the following considerations in mind as they interact with their diverse students (Biswas, 2019).

- Students of color may feel invisible and inaudible. For example, professors unconsciously call on white male students more frequently and steer discussions to male-normed topics like "international security."
- At the same time, students of color may feel hyper-visible, especially when they're viewed as representatives of their culture or race. They may be subjected to greater suspicion, such as being asked to show an ID when white students are not.
- Mentors should treat diverse students' concerns as valid critiques that require an individual, departmental, or institutional response. Don't placate students or use empty platitudes of inclusivity. Students need to feel that they are valued and valuable members of the campus.
- Don't just commiserate with students. Offer practical tips on how to navigate sensitive topics. If they tell you about objectionable comments or events in their classes, teach them how to write a respectful email to the professor and show them how to file a formal complaint in case of harassment. Explain the structure of institutional accountability on campus, so they know which supervisor to contact for a particular circumstance.
- Consider how best to advocate for these students. Raise the issue as an institutional problem that requires awareness and attention, not as the complaint of one dissatisfied student.
- Remember that not all diverse students are alike. For example, the racism confronting African American students is different from prejudicial stereotypes attached to students from third-world countries.
- Help the student find and join a supportive community on campus where they can associate with others like themselves (Carleton College, 2020).
- If you are a person of color, be open about your own vulnerabilities. Students flock to mentors whom they perceive to be approachable, especially if the mentor is from the same demographic group. Sharing your own story is a powerful strategy. Remember, too, that you are a role model, so your mentees pay a great deal of attention to your attitudes and comportments.
- If you are not a person of color, be very careful to avoid saying, "Some of my best friends are ____" (name of the demographic group) as a way of trying to show you understand their perspective. Having a friend of color is not the same as lived experience and is likely to be offensive (Eligon, 2019).

Mentoring Non-Traditional Students

Our undergraduate students increasingly diverge from the profile of being 18-22 years old and still dependent on their parents for support. When we mentor students who are older than 22, who live independently, or who juggle responsibilities uncommon among typical undergraduates such as having a

family to care for, a full-time or part-time job, or who are military veterans (among other identities), we cannot necessarily treat them the same as our average undergrads (Pierce and Hawthorne, 2011).

- Students who have been out of the classroom for several years may need the mentor's help in re-acclimating to the norms and structures of higher education.
- Older students may identify more with their professors than with their fellow students. Maintaining professional boundaries is more difficult when the student we're mentoring sees us as their peer.
- Non-traditional students may be unaware of the resources available to them on campus. Mentors can perform a valuable service by facilitating connections to these offices or organizations.
- Students with demanding schedules and complex lives may need the mentor's assistance to map out a schedule for the semester and to review skills such as how to monitor their progress, set concrete goals, and manage their time wisely.
- Mentors should be prepared to help non-traditional students who may have experienced learning loss due to an extended time out of the classroom. Skills we don't use are easily forgotten, so students may need to be directed to resources that can refresh prior learning.
- The non-traditional designation may also apply to students pursuing a field in which they are a minority, such as male nursing students or female computer programming students. These students might need to discuss their frustrations or their experience as the recipients of discriminatory behavior and thoughtless stereotyping and may need support from their mentors if action by the university is warranted.
- Students who have responsibilities beyond their schoolwork may struggle with issues such as childcare, transportation, or housing. They may find it difficult to carve out time for their assignments or lack an appropriately quiet place to study. Problem-solving with these students becomes an essential task for their mentors, who should be equipped with lists of available resources and supports, including community resources like food pantries or subsidized daycare.

Mentoring First Generation College Students

First-generation college students must navigate through unfamiliar territory without the benefit of assistance or advice from parents who have earned a degree. Their families usually lack familiarity with the systems of higher education and do not know where to turn when problems arise or even what questions to ask. These students may be particularly challenging for mentors who have become deeply habituated to the norms of higher education – our familiarity with these systems can blind us to the anxiety and sense of helplessness our first-generation students might experience. Some strategies for mentoring first-generation students include the following (Pierce College, 2020).

- Even when the university offers a First-Year Experience seminar or similar program, mentors should assist students in learning about available support services and adjusting to the rigors of academic life.
- Encourage students to come to you with any questions, large or small, and provide them with useful information about resources, helping them connect with the people or offices they need. The more we can walk them through these issues, the better. It's acceptable to say, "The financial aid office can help you with that," but it's even better to say, "Let's call the financial aid office right now and see if we can get you an appointment this afternoon."
- Parents of first-generation students may contact you to ask how their child is doing. The mentor should gently inform parents about the duty for confidentiality and legal issues regarding releasing information to a third party (the parent) without the student's written consent.
- Mentors should make an extra effort to help first-generation students connect with co-curricular organizations such as student clubs, sports teams, performing arts groups, and so on. We may also need to educate their parents about the benefits of co-curricular participation. Many

families insist that their children spend all of their time studying to earn good grades, but we know that research by George Kuh (2008) and other scholars convincingly demonstrates the positive impact of co-curricular participation. The mentor may even need to email the parents and direct them to some of these articles to make a case for supporting the student's participation in these groups.

Mentoring First-Year and Transfer Students

First-year and transfer students have different needs than those who have been on campus for a while. When everything is new and confusing, students need someone they can trust to give them reliable information, encouragement, and good advice.

- The mentor's first task beyond building a relationship is to ensure that these students become familiar with the campus, its amenities, and student support services. Mentors might want to take advantage of this opportunity to share tips that can make the student's life easier, like telling them the quickest route to the university's bookstore or recommending a favorite local ice cream shop within walking distance of the campus.
- First-year and transfer students will need assistance connecting with peers, finding co-curricular groups to join, and may struggle with issues such as homesickness. Mentors who serve a group of first-year or transfer students have a unique opportunity to build community by hosting events or organizing outings that bring these students together, where they can foster dialog and facilitate quality interactions between the students.
- Mentors should be alert to behaviors such as skipping appointments, not responding to messages, and so forth. They should also monitor the student in the university's Early Alert system (or the equivalent thereof). A caring mentor will make a persistent effort to contact the student, not stopping until they receive a response, even if they need to elicit help from the student's resident advisor to conduct a wellbeing check.
- Inexperienced students can suffer from extremely high stress levels at times. They may become overwhelmed by their workload, take on too many commitments, or simply feel like they can't cope with the responsibilities of adult life. Mentors need to demonstrate empathy for these students rather than maintaining a brusque demeanor. Criticism should be balanced by positive reinforcement as the mentor helps students learn how to be resilient and how to cope with failure (Pita, Ramirez, Joacia, Prentice, and Clarke, 2013).

Mentoring LGBTQ Students

Most 18-22-year-old undergraduates are still developing a sense of self and how they fit into the world. Students who identify as LGBTQ face a more difficult challenge because they are in the midst of developing their self-concept as an LGBTQ person, how this will affect their other identities, and what their place in the LGBTQ community might be (Carleton College, 2020).

- Remain mindful of your language: know the meaning of relevant terminology within this community and employ it appropriately.
- Use inclusive language with all students, not just with those who are LGBTQ.
- Learn about the history, issues, and community of LGBTQ people to increase your understanding.
- Help students brainstorm solutions to the challenges they face in class, outside of class, and related to their future careers.
- Teach students how to advocate for themselves.
- Speak up for your students, challenging decisions or actions that target LGBTQ students.
- Advocate for equal treatment of LGBTQ students and treat them equally yourself.
- Familiarize yourself with resources available to LGBTQ students in need.
- Support LGBTQ student groups at your university.

Mentoring Students in Distress

Students will sometimes come to their mentors with problems that are beyond our ability to solve. We must always maintain safety, security, and confidentiality when we're dealing with a difficult situation, which will shape our decision of how and where to refer the student for help. We cannot take on the role of a mental health professional, nor can we solve other of their problems ourselves. However, the better informed we are about the university's processes, policies, and procedures, the better prepared we are to shepherd students through a crisis. Regardless of what the student may be facing, the mentor's ability to remain calm, demonstrate empathy, respect the student's feelings, and help them frame the crisis as a problem with a solution rather than the world-ending disaster the student perceives it to be will facilitate a positive outcome. When students come to us with serious problems, it might be helpful to begin by asking questions such as the following (Rock Valley College, n.d.).

- What is the problem? Naming and defining the problem can help the student begin to deal with it and lead to greater clarity about how they could proceed.
- How often does it occur? Is this a problem that happens frequently, or is it a one-time issue? These questions can help the student gain perspective.
- Has the student attempted to solve the problem independently? If so, what happened?
- Do others on campus have the same problem? What actions or strategies have been successful for others with this problem? Students might be comforted knowing they're not alone in the problem they're facing, and identifying solutions others have used can help them see that their problem is solvable.
- Who else can help? What resources are available? Mentors usually can't resolve the student's problem alone. Fortunately, our universities are rich in resources and full of caring professionals to whom we can refer a student in distress. Students might come to us first because of the trusting relationship we've developed with them, allowing us to connect them with individuals or organizations that can offer assistance beyond our own abilities.

Potential student crises and mentor actions may take many forms.

- Mental health (depression, suicidal ideation, anxiety): Connect the student to the university's mental health services. *Call 911 if the student states that they are contemplating suicide*. If the problem is less severe, walk with the student to the mental health services office, and do not leave until the student is safely in the care of the professionals there.
- Cultural/ethnic difficulties: Connect the student to the university's center for diversity, preferably with a person who shares their identity.
- Cheating/plagiarism/academic dishonesty: Counsel the student about the ethics of their action. Inform them of the consequences associated with committing this act. Stand by the student as they face these consequences. The student's future with the university will depend on the severity of their dishonest action and university policies, but hopefully, the student will emerge chastened, wiser, and – with your support – prepared to resume their studies.
- Sexual identity: Help the student contact whichever organization on campus works with LGBTQ students. Depending on the student's level of distress or its source, you might also help the student seek help from the university's counseling center.
- Substance abuse or alcoholism: Take the student to the university's health center. Remain with the student while they check in with health center personnel and, if asked, stay with them as they report their problem to a medical professional.
- Sexual harassment or violence: Remain calm, gentle, and supportive. Help the student make a report with the campus police and with local law enforcement. Ensure that the student also seeks medical attention if they have been the victim of an assault. It might be necessary to accompany the student to the healthcare provider, especially if they are traumatized and unable to cope with what has happened (Boston Area Rape Crisis Center, n.d.).
- Personal hygiene issues: Explain to the student that their hygiene has become an impediment to their studies and relationships with others. Refer the student to the health center or the mental

health center, as needed. For example, depressed students often neglect their personal hygiene and may benefit from speaking to a mental health service provider about the problem. If the hygiene issue is simply a matter of individual choice, emphasize that taking care of oneself is a significant aspect of professionalism, and explain the importance of self-care to the student's future career.

- Challenges related to disability: Assist the student in seeking help from the university's disabilities services office if they have not already done so. Self-advocacy is an essential skill for students with disabilities, but they may be anxious about communicating with faculty. If the student's disability is impeding their academic performance in a certain course, help the student make a plan for how they can approach the professor about their disability and ask that the professor implement their accommodations. This plan may include approaching their professors about modifications to assignments, an extension of due dates, a reader for exams, permission to use assistive technologies, and so on, depending on the student's IEP. Encouragement from their mentor and help making a plan for self-advocacy can go a long way towards the successful resolution of their problem.

Regardless of the details of a given student's problems or identities, the principles of good mentoring still apply. We should remain kind, empathetic, and caring while also maintaining professional boundaries, doing our best to help students achieve academic and career success.

Ten Steps to Mentoring

1. Hold a kick-off event with all of your mentees where you introduce yourself, share your expectations, and begin to build rapport. Provide each mentee with a goal-setting form to complete prior to their first meeting with you.
2. Schedule one-on-one meetings with each mentee within the first two weeks of the new school year.
   - Before each meeting, look up the student's file and familiarize yourself with their information.
   - Discuss students' goal-setting sheets, clarify and reinforce your expectations, and listen attentively to the student's concerns.
3. Email every mentee weekly, expressing your support, inviting them to contact you with questions or problems, and reminding them of the time and date of their next meeting with you.
4. Maintain a log of all contacts with your mentees, ensuring that you're communicating with everyone regularly and tracking students' progress.
5. Meet with every mentee at least monthly to check on their academic development and individual wellbeing. Connect mentees with services or programs on campus or in the community, as appropriate to their needs.
6. Maintain standards of professionalism in all communications or interactions with mentees.
7. Employ strategies for building rapport with your mentees and fostering community as a mentee group.
   - Host informal get-togethers, events, and excursions.
   - Choose to have a cup of coffee or share a meal with one or more mentees.
   - Send birthday cards and messages of congratulation when they have achieved something notable.
   - Attend events or performances in which the mentee is participating.
8. Build your mentees' interest in your profession.
   - Share articles from professional journals or other items of interest with your mentees.
   - Invite them to participate in your research or creative practice, if feasible.
   - Encourage them to participate in professional activities such as attending conferences, writing articles, or hosting excursions to places of interest within your profession.
9. Host a wrap-up event at the end of the school year to celebrate the students' successes.
10. Hold a final meeting with each mentee to evaluate their progress towards their goals and set new goals for the coming year.

WHEN?

Without a doubt, our lives are ruled by clocks and calendars. We just never seem to have enough time to meet the expectations placed upon us, not to mention engaging in activities of our own choosing. Our course load and schedule, our duties as instructors, expectations to participate on committees and to engage in research or creative practice – all these and more give structure to our days.

The concept of "when," however, doesn't only indicate questions such as, "When is the committee meeting?" or "When is the first day of the new semester?" It also relates to the matter of cause and effect: when a given event occurs, a corresponding action takes place.

Recap

We've covered a large amount of material together. Let's pause to review before we explore the idea of "when" in greater depth.

Why? We teach disciplinary knowledge, skills, and competencies so that our students can achieve productive careers, which is also the goal of mentoring.

Who? We know our students as learners and as individuals, meeting their needs and facilitating their achievements.

What? We are well-informed about the realities of higher education and draw upon our present strengths and past excellence to engage in continuous improvement of our work as educators and mentors.

How? We maintain a focus on our students' success and wellbeing in classrooms, laboratories, studios, and offices, where we purposefully plan learning and mentoring activities. We engage in deeply thoughtful, reflective teaching to ensure we are highly effective educators and mentors.

Where? Our department is a place where we demonstrate care for ourselves, our students, our colleagues, and our institution. Through our activities as educators and mentors, we facilitate our students' academic and career achievement.

These questions are neither sequential nor hierarchal. Instead, they create a dynamic context within which we maximize our individual efforts as educators under the driving purpose of creating the best possible program and environment in which to facilitate our students' academic and career success. **When** we accomplish this, amazing things can happen!

Starting Now and Beginning With You

Of course, "when" also frames an important question: when should we begin? The answer is: Now! Today, at this very moment, each of us can decide to reach towards becoming a more effective educator and mentor. There's no reason to wait until next semester, or until the next course begins, or until a current project is finished. We do not need our institutions to establish system-wide expectations for mentoring before we can begin to mentor our students. Everything we need is already within us. It costs nothing to be kind to our students and colleagues. It takes no time at all to decide to pursue excellence as educators, mentors, and in our other professional endeavors.

Still not convinced? We've looked at many questions in the preceding pages, but a few more might help identify the factors causing some of us to hesitate.

- **Why** should we make changes to our teaching practice to become skillful mentors?
    - Our proficiency as educators is among the primary criteria by which we're evaluated, tied to considerations of retention, promotion, and tenure.
    - Becoming a more effective instructor will have direct benefits in this regard.
    - Mentoring helps us to train up new professionals in our field, who will someday take our places and continue our work.
- **Where** can we turn for help?
    - The university's Center for Excellence in Teaching and Learning (or similar entity) is a great resource, as are our colleagues and administrators.
    - When we become a team working for the common cause of programmatic and departmental excellence, we can all rely on one another for help.

- **How** can we get started?
    - We can look back at the strategies in this article and decide which we'd like to implement first.
    - It's not necessary to do everything all at the same time. Making one small change can set each of us on the right path.
- **When** can we find the time to make changes to our work as educators?
    - Don't try to tackle a comprehensive revision of everything you do all at once.
    - Time to do anything is always in short supply. Fortunately, most of the changes we need to make are those of heart, mind, and attitude rather than physical or material alterations. In that case, time isn't the problem – it's about having an open mind and a willingness to change.
- **Who** will benefit if we decide to make these changes?
    - We'll receive the benefits of becoming better educators, which will be reflected in our performance evaluations.
    - Our students will benefit from our improved teaching practice and our positive impact as mentors.
    - Our colleagues will benefit as we contribute to the departmental culture of care.
    - The department, college, and the university will benefit from our contributions to excellence and our enhanced professionalism.
- **What** should we expect?
    - We can anticipate a renewed interest in teaching, enhanced engagement by our students, and a more positive climate within our college, departments, and programs as the direct result of our actions.
    - We can look forward to these positive transformations continuing as each of us works towards this common goal.

THE HEART OF MENTORING

No matter how euphemistically we phrase it, no matter how great the potential benefit, change is always hard. Most of us resist it even when the outcome will clearly be desirable because disrupting longstanding habits is so difficult.

At its heart, mentoring is all about demonstrating care for students in a way that surpasses the boundaries of the classroom environment. It's about wanting so much for our students to be successful academically and professionally that we are willing to spend extra time with them to answer their questions, give them the benefit of our experience and advice, monitor their progress, reach out when we notice a problem, cheer for their successes, and lift them up when they experience setbacks. It's providing a human connection when the student feels like a stranger in a strange land.

Becoming a mentor asks more of us than simply meeting the basic requirements outlined in our job descriptions. It's not something for which we're likely to reap a monetary reward, nor receive broad acclaim. But, for many of us, every time we mentor a student or colleague, we feel rewarded by their success.

There's an old (and admittedly somewhat cliché) story about a man walking along a beach littered with starfish stranded by the receding tide. He sees a boy methodically throwing starfish back into the ocean. The man says to the boy, "There are thousands of starfish on the beach. You'll never be able to throw them all back before they die. What difference does it make?" The boy thinks for a moment, then throws another starfish into the surf. "Made a difference to that one," he says (Eisley, 1969).

Faculty members teach thousands of students throughout our careers. We can't reasonably mentor every one of them, nor will we make a difference in every one of their lives, despite our best intentions. And yet, we have the power to make a tangible improvement in the quality of the educational experience of each student we teach or mentor, enhancing the chances they will achieve successful, sustainable careers. All of

us have had mentors, either formally or informally, whether they helped us achieve our eventual careers or influenced us in other areas of our lives. The greatest gift we can provide our students is to pass on the benefits we received from those relationships by becoming mentors ourselves. In turn, we can hope that our students will someday choose to share that gift with others, either as future faculty members or in the professional fields they pursue.

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APPENDIX

Goal Setting Form

The mentor and mentee will complete this form together. Students should pre-fill their goals before the first meeting.

Mentor Name	
Goal 1	
Goal 2	
Goal 3	

Student Name	
Goal 1	
Goal 2	
Goal 3	

Evaluation

In the spaces below, indicate whether the goals were achieved by the end of the academic year. Provide narration or explanation as needed.

Mentor	Goal	Achieved
Goal 1		
Goal 2		
Goal 3		

Student	Goal	Achieved
Goal 1		
Goal 2		
Goal 3		