

Student-Centered by Design

A Companion to

Higher Education by Design: Best Practices in Curricular Planning and Instruction

by Bruce M. Mackh, PhD

Moving towards a student-centered philosophy of higher education represents a considerable departure from traditional faculty-centered approaches, but this transformation is increasingly necessary in response to changing social attitudes linking an institution's quality to its students' success.

Histories, traditions, and philosophies shape our institutions of higher learning and the educational activities occurring within them. Teaching and learning have focused both literally and figuratively on the instructor, whose status as a disciplinary expert imparts a high degree of autonomy over the pedagogies and curricula they choose to employ in their classrooms. Furthermore, faculty have long upheld the ideal of "college-readiness," believing that students should be prepared to meet the challenges of higher learning independently. Generations of students, faculty, and administrators have accepted these norms without question.

To bridge the gap between faculty-centered and student-centered models of education, we'll address four key questions:

- What does it mean to be student-centered?
- Why should we adopt a student-centered mindset?
- How can we transform our practice as educators?
- What can we achieve by becoming student-centered educators?

As we search for answers, we'll utilize the methods of design thinking, identifying barriers to transformation and taking positive action that will help us achieve the goal of becoming student-centered educators.

Faculty-Centered Teaching

Higher education usually takes place within an institution that provides structure for the activities of faculty and students as well as ensuring the smooth operation and sustainability of the institution as a whole. Teaching and learning occurring within the institution tends towards one of two poles: prioritizing faculty teaching on the one hand or student learning on the other.

A faculty-centered model of education is most evident at the point of instructional delivery, where faculty exert the greatest degree of authority over their students' learning and educational experience in their classrooms. Pedagogies and curricula are driven by instructors' explicit or implicit philosophy of teaching. In Chapter 2 of *Higher Education by Design*, I presented a brief overview of educational philosophy, including the following (emphasis added):

Traditional approaches to education might be termed "instructivism," rooted in John Locke's Essay Concerning Human Understanding (1689) in which Locke proposes that the human mind is a blank slate at birth, filled by accumulated experience. Education has, therefore, historically been predicated on the belief that students' minds are empty until filled by the instructor, who

*carefully plans and organizes a program of study on behalf of the learner. Learners must first become literate and gain a measure of self-discipline in order to pay attention to the information presented by the instructor and to remember concepts they do not understand, including rote memorization of information.¹ Clearly, this is an **instructor-centered*** model of learning, with the student remaining a passive recipient of transmitted knowledge.*

The Glossary of Educational Reform defines this as “teacher-centered learning.”

Teacher-centered typically refers to learning situations in which the teacher asserts control over the material that students study and the ways in which they study it—i.e., when, where, how, and at what pace they learn it. In classes that would be considered teacher-centered, the teacher tends to be the most active person in the room and do most of the talking (e.g., by lecturing, demonstrating concepts, reading aloud, or issuing instructions), while students spend most of their time sitting in desks, listening, taking notes, giving brief answers to questions that the teacher asks, or completing assignments and tests. In addition, in teacher-centered classrooms, teachers may also decide to teach students in ways that are easy, familiar, or personally preferred, but that might not work well for some students or use instructional techniques shown to be most effective for improving learning.

These descriptions probably sound very familiar. They reflect the way most of us were taught when we were students; and for many of us, they define our preferred pedagogical approaches.

It’s logical that most faculty adopt an instructor-centered approach to their teaching. After all, the primary credential for a faculty position is an earned terminal degree in a particular academic discipline, which certifies the candidate as an expert in that field. Our job as educators is to transmit our disciplinary skills and knowledge to students, so we focus on teaching our *subject*. We don’t always devote as much attention to best practices in teaching our *students* that facilitate their *learning* of our course content. Perhaps this isn’t surprising, since most graduate programs do not include specific in-depth training in the art and science of teaching. We are prepared to be experts in our fields, not specialists in education.

Student-Centered Learning

As the phrase implies, “student-centered” shifts the focus of a classroom onto student learning rather than faculty expertise in a given discipline. Student-centered learning can encompass “a wide variety of educational programs, learning experiences, instructional approaches, and academic-support strategies intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of

* The terms faculty, instructor, educator, and teacher should be considered synonymous in this document, indicating any person employed to teach students, without regard to that person’s rank, contractual status, tenure, or the level of students taught.

individual students and groups of students” (Glossary of Educational Reform). Student-centered learning is based on the constructivist theory of Jerome Bruner (1960),² who proposed that learning is an active process through which students build new knowledge upon prior learning. Constructivism is consistent with discoveries in cognitive neuroscience, explaining how the human brain learns.³ We cannot retain new content unless we have an existing schema, or mental model, upon which to build.

In a student-centered classroom, instructors provide students with opportunities to participate actively in their own learning, in contrast to the passivity typical of lecture hall experiences. Students might design their own projects, explore topics of interest, and work collaboratively with peers. Student-centered classrooms frequently arrange the furniture to accommodate group discussions and projects. Students might also participate in self-guided learning experiences or activities occurring outside the classroom, such as internships, apprenticeships, independent research, study abroad, service-learning or community engagement, and more.⁴

Although student-centered learning has no universal definition and can encompass a broad array of approaches and strategies, a few common characteristics usually exist:

1. Instruction in a given content area or discipline accommodates learners’ goals, needs, interests, aspirations, or cultural backgrounds.
2. Assessment is based on students’ acquisition of the knowledge, skills, and competencies specified in the course outcomes and objectives.
3. Instruction is responsive to student voice and choice: students have the ability to determine how, what, where, and when they will learn, within parameters determined by the instructor and the institution.

This is not to say that students control every aspect of a student-centered learning environment. The instructor remains a subject-area expert and establishes the expectations for learning within the classroom. However, student-centered learning seldom casts students as passive recipients of transmitted knowledge. The instructor sets the purpose for learning and provides background information sufficient to empower students in their journey of discovery. Students work on tasks designed by the instructor but driven by student interest, engaged active learning, and the construction of knowledge and skill within a discipline.

Synthesis and Comparison

The following table compares faculty-centered and student-centered models of education.⁵

(continued on next page)

| | Faculty-Centered | Student-Centered |
|--|---|---|
| What is the priority? | What's best for individual faculty | What's best for student learning |
| How are decisions made? | By faculty | Students choose from among available options determined by faculty or the institution |
| What is the primary role of faculty? | To design and teach curricula over which they have complete control | To guide and facilitate student learning |
| What shapes instruction? | Individual faculty preferences | Students' interests and goals |
| How are students taught? | Primary reliance on lecture; faculty teach as they were taught; one-size-fits-all approach (no personalization of instruction) | Engaged learning, cooperative problem-solving; students pursue own interests within a framework created by the instructor |
| How is curriculum selected and presented? | Faculty select curricular materials; presentation generally covers a large quantity of material and emphasizes memorization of facts and information | Instructor provides a framework of foundational knowledge to facilitate students' independent learning. Students discover knowledge through interest-based inquiry. |
| What is the role of the student? | To passively receive information transmitted by faculty. | To actively engage in the learning process. |
| What is the role of the instructor? | To plan instruction, create instructional materials, deliver instruction, and assess students' mastery of course content | To facilitate student learning through a combination of methods and approaches designed to promote students' discovery of knowledge and its application to settings outside of the learning environment |
| How is learning assessed? | Formal exams, usually multiple choice, measure students' memorization of material presented during lectures and in required readings. | Student self-assessment; peer assessment/critique; instructor analysis of student learning through observation, critique/evaluation. Assessment measures student achievement of stated outcomes and objectives. |
| What is the philosophy regarding student success? | Faculty present material that students must learn; it is up to students to learn it or not. Individual students' success is not a priority for faculty. | Faculty demonstrate concern for the wellbeing and success of all students; instructional materials are adapted to meet individual students' needs |
| What types of learning are assessed? | Memorized facts; reflection of instructor's attitudes and beliefs as communicated through lectures | Fundamental knowledge, critical thinking, collaboration, communication, creativity, skills and competencies, ability to apply knowledge to practical situations or settings |
| What characterizes graduates? | They have completed their studies and have been exposed to a body of knowledge within a discipline. | They understand what they have learned and can apply it to solve problems, communicate in real-world settings, and maintain the ability to be self-motivated lifelong learners. |

Student-Centered and Student-Ready

Becoming a student-centered educator goes hand-in-hand with changing our preconceptions about our students, beginning to see them as they are, not as we think they ought to be. Historically, faculty have supported the view that students must be "college-ready," possessing a certain level of prior skill and knowledge preparing them for the rigors of higher education. Students who demonstrate the highest degree of college-readiness have usually graduated from high schools located in relatively affluent neighborhoods, come from financially secure families, have at least one parent who graduated from

college, and are more likely than not to be White. Conversely, those who attended comparatively weaker high schools also tend to be from lower-income households in which parents are less likely to have graduated from college, are more likely to be among racial or ethnic minorities, and are statistically less likely to exhibit the “college-ready” qualities some faculty prefer. In other words, our perception of college-readiness is based on an implicit bias towards students who fit a particular profile.

[Students are] either college ready or [they're] not, we reasoned. And if you're not, don't blame us. The fact that those who did not make it were disproportionately less economically privileged and more likely to be a racial or ethnic minority was simply the way it was. . . . Colleges and universities, for the most part, have been equipped to serve one fairly narrow population of students, which institutions have conveniently defined as college ready. Meanwhile, for decades, higher education has passively accepted the conventional wisdom that minority, low-income and first-generation students disproportionately underperform [in comparison to] other students because they are the unfortunate casualties of inadequate systems – low-achieving public school systems, poor neighborhoods, unsophisticated households -- that leave them woefully unprepared for college success.⁶

Educators who hold a rigid set of expectations for college-readiness can become frustrated when their students lack the core competencies necessary to the achievement of their courses' learning outcomes. We often criticize the students' high schools for their poor preparation. We condemn the students for being lazy, unmotivated, or even unintelligent. But how often do we consider what *our* role in the problem might be?

Let's look at this matter more deeply. First, regardless of whether or not we think our students are ready for college, we must recognize they're already *in* college. Even institutions with open-enrollment policies maintain a minimum set of standards, such as being a high school graduate, so our students necessarily met existing admissions criteria before they registered for our courses. Furthermore, current enrollment data and national demographic trends point to a decline in the number of traditional students available to enroll in our institutions, whereas non-traditional, minority, low-income, and first-generation students are on the rise. To put it bluntly, we're never going back to the “good-old-days” when the majority of our students purportedly met our expectations for college-readiness.

We clearly cannot change our students, their families, their communities, or the K-12 systems from which they graduated. They are here with us now, possessing a unique blend of identities, backgrounds, and personal histories. The heart of the matter is no longer whether our students are ready for college – it's whether we are ready for our students.

Faculty-centered models of education fail to meet this challenge. For decades, we've reasoned that if students were ready for college, they would achieve passing grades in our courses and make it through to graduation on their own. We've believed that students were wholly responsible for their learning – faculty need only concern themselves with presenting required information. It's impossible to ignore

the fact that these attitudes do not support student success. True, at selective institutions that accept less than 25% of applicants, the 6-year graduation rate for first-time full-time undergraduates is 87%. However, only 31% of first-time full-time undergraduates graduated within 6 years from institutions with open admissions policies.⁷ Most of our institutions proclaim their support for diversity, equity, and inclusion, yet what does it tell us about our traditional models of education when the very institutions that provide the greatest access to higher education for all learners fail to fulfil their promise to more than two-thirds of their students?

Student-Centered Institutions

Most institutions have begun to recognize that traditional approaches to higher education have not yielded positive outcomes for the majority of their students. Some colleges and universities have undertaken systemic changes to serve incoming students at all levels of ability more effectively, establishing new requirements for credit hour loads or creating credit-bearing courses which provide built-in support for struggling students. Some institutions discovered that requiring students to complete non-credit remedial courses far too frequently caused students to discontinue their studies altogether, so they restructured these courses with a focus on student success. Institutions have also begun to re-examine general education requirements, instructional delivery systems, and more.

Student-centered colleges and universities share a few common traits. First, they express a sincere belief in all students' ability to learn. This conviction characterizes the entire institution, shaping its values, ethos, and identity – upholding a core in all students' capability for academic and professional success. Student-centered institutions embrace a culture of full inclusion and share an appreciation for the diverse perspectives brought by all stakeholders whether faculty, staff, or students. They prioritize excellence across teaching, learning, student development, institutional functions, and engagement with local and global communities. All of these efforts involve the entire campus community in ongoing conversations about how best to support students' success.⁸

Nevertheless, even the most visionary and progressive institutions cannot establish a student-centered model without the support of their faculty. Educators who are accustomed to having a great deal of autonomy within their departments and classrooms may balk at the notion that they should no longer operate from a position of “what's best for us” to “what's best for our students,” since this contradicts longstanding faculty-centric norms and practices.

Understanding is the key to motivation – we need to know why we should do something before we want to take action. So why should we choose to adopt a student-centered mindset? Let's look at this at two levels. First, as faculty members, we should be invested in the success of our institutions as well as attending to everyday matters within our department. As such, we should remember that every institution, no matter how large its endowment or how much funding it attracts through research and development, is tuition-dependent. The supply of future students is predicted to diminish over the coming decades, and prospective students have many options for where they'll choose to study. Given these realities, it's clearly in our best interest to establish an attractive departmental culture that

prioritizes student success. Positive reviews, favorable retention and graduation statistics, and robust alumni outcome data flow from a culture of student success. Graduates who are satisfied with the educational experience they received, who formed positive associations with their alma mater, and who have achieved a measure of career success help the institution form strong networks and increase its base of prospective donors. Their success fuels our capacity to continue our work. Therefore, adopting a student-centered philosophy isn't only good for our students – it's good for everyone in the institution, both now and into the future.

Student-Centered Educators

Next, why should faculty choose to alter their preferred approaches to teaching and adopt a student-centered model of instruction? To answer this question, we have to take a step back and consider the big picture of what it means to be an educator. Teaching is a service-oriented profession, comparable to other fields such as medicine or law. We serve our students by providing them with an education. We serve the institution by meeting our contractual obligations for service, such as participation on committees. We also serve our professional field by training the next generation of scholars and by continuing to contribute through our research or creative practice.

All service professionals must remain cognizant of the fact that the relationship between the provider and the recipient of the provider's services – be it patient, client, or student – is crucial to the profession. When we're injured or unhealthy, we want to see doctors who are medical experts, but we also want our doctors to treat us with respect and care about us as people. If we need a legal service such as drawing up a will, we want a lawyer who's skillful in writing sound contracts but who also considers our needs as individual human beings and keeps our best interests in mind throughout the transaction. We hope that doctors care whether we live or die. We hope that lawyers care that the legal services they perform are effective. Just so, it's reasonable to hope that faculty members care whether or not their students learn.

Becoming a student-centered educator means growing beyond the natural human tendency to serve our own interests. Caring about our students and their learning requires us to shift our focus from what's best for us personally to what's best for our students. This does not mean saying "yes" to every student request, diluting academic rigor, or catering to students' whims. But it does mean prioritizing students' wellbeing over personal convenience or our preference for strict adherence to the policies we've established in our classrooms. It means setting aside our implicit expectations of where we think students *should* be (college-ready) and meeting them where they *are* (student-ready).

The critical question then is: what will it take for you to become a student-centered educator?

By Design

Applying the philosophy of design thinking to higher education allows us to take an informed, intentional approach to our work as educators by considering our students' needs as learners. The five

steps in the design thinking process are typically described as empathize, define, ideate, prototype, and test.⁹ We might also call this user-centric or human-centric design, which are closely related to something known as User Experience Design (UX) – the process of enhancing user satisfaction with a product by improving its usability or accessibility to provide a positive interaction with the product.¹⁰ In other words, design thinking is about placing the user’s needs first in order to make sure that their experience is the best it can be. Here, we’ll adapt the five principles of design thinking to accommodate differences between commercial and educational settings.

1. **Identify (Empathize and Define):** A student-centered philosophy of education requires that we base the decisions we make as educators on empathy for and understanding of our students, which then inform and shape our pedagogical and curricular choices.
2. **Ideate:** The ideation stage of design involves seeking ways to meet the needs we’ve identified. Higher education employs ideation in the processes of curricular development, pedagogical innovation, course design, program planning, and finding solutions to emerging or perennial problems.
3. **Implement (Prototype and Test):** Once we develop a possible solution, we implement it in our classrooms and observe its results. What worked well? What didn’t work? What should we do differently when we try again?
4. **Iterate:** Design is a cyclical process. Each time we teach a course, we have an opportunity to begin again, to revisit the design process and to make refinements and improvements that will further support student learning.

Next, we’ll consider each of these steps and their role in helping us to become student-centered educators.

Identify

The first and most crucial step is to identify the problem, empathize with the user, and define the user’s needs. However, to develop empathy for our students, we need to begin by reflecting on our role as educators.

Recognize Underlying Bias

We can’t solve any problem until we recognize that there’s a problem in the first place. One of the impediments to becoming a student-centered educator can be found in our hidden biases. Human beings are especially good at making generalizations about others, an ability shaped by our natural brain processes and our personal experiences. Attitudes towards other people generally exist below the level of consciousness, so we remain unaware of their existence or influence.¹¹ Harvard University’s Project Implicit measures individuals’ levels of bias through various online tests, revealing attitudes and

assumptions most of us fail to recognize in ourselves.¹² Available tests include attitudes about race, gender, sexual orientation, mental health, substance abuse, and more. There's no specific Project Implicit test for bias about faculty perceptions of their students, but hopefully, we're beginning to understand the impact of biases based on our students' culture, race, or socioeconomic status on our perceptions of students' potential for success in our courses.

Recognizing that our attitudes towards our students might stem from preconceptions of which we've been unaware heretofore enables us to open our minds and more effectively serve our students. Best practice as educators means we are willing to meet our students' needs as they arise. When we make the shift from exasperation, "I can't believe they don't know this!" to empathy, "I see you don't know this. Please let me help you learn it," we begin to become better educators.

Identify Problem Areas

After bringing our preconceived notions into the light of day, our next task is to examine the content of the courses we teach. Where have your students struggled? Where do they appear to be unprepared for tasks we consider fundamental to the acquisition of skills and knowledge in our disciplines? Where have you encountered gaps in your students' pre-existing skills or knowledge impacting their ability to do what you want them to do in your courses?

Now look closely at these gaps and consider how they might intersect with your underlying assumptions. For instance, we generally believe high school graduates can read, write, speak, and perform mathematical calculations at the college level, so it's disconcerting to discover their functional levels don't match this expectation. Faculty frequently lament, "How did these students graduate high school if they can't do basic academic tasks?" The fact of the matter is students *could* do these things in high school, but their former teachers' definitions for success in reading, writing, speaking, or mathematical proficiency may well be different from yours.

Furthermore, students don't always apply their learning in one context to another. Writing done in English 101 doesn't necessarily transfer to writing in a history course, for example. Instructor's expectations vary disciplinarily, and we err when we think our students will automatically employ knowledge or skill from other courses to contexts they may perceive as completely alien.

As with the previous step, the gap we must bridge here is one of mind rather than practice – to identify the discrepancies between what we *expect* our students to know before starting our course and what they *actually* know.

Analyze Disciplinary Assumptions

Many spheres of human activity have characteristic insider languages, modes of thinking, and shared practices. This is particularly evident in higher education, where each academic field has a distinctive set of disciplinary norms regarding scholarship, including written communication. Those of us who attain

high levels of expertise in a given academic area have usually absorbed these disciplinary norms and practices so completely they've become second nature to us. The deeper our scholarship, the more thoroughly we internalize our discipline's ontologies, epistemologies, and languages.

Disciplinary cultures aren't a problem in and of themselves, but variations even within a single college or school create invisible barriers between faculty and students as well as making interdisciplinary collaboration more challenging.

How do the problems you've identified reveal disciplinary assumptions that may be affecting your students' abilities to be successful in the courses you teach? Common trouble spots include:

- Disciplinary vocabulary
- Norms for written communication within the discipline, particularly in professional settings
- Epistemology (the philosophical questions of why we know what we know and how we know it)
- Ontology (the philosophical questions surrounding identity and the nature of being – what does it mean to be an artist, a philosopher, a chemist, a journalist, or a designer?)
- Reading fluency required to comprehend disciplinary texts
- Typical research methods and methodologies
- Prerequisite mathematical proficiencies

We can facilitate this process by considering how a colleague from another discipline would react if we decided to engage in interdisciplinary collaboration, asking ourselves questions such as: "Would a colleague from the mathematics department know what I'm saying? Would someone who worked in computer programming or physics?" If you couldn't realistically expect this colleague to comprehend your methodologies, ontologies, and epistemologies, it should come as no surprise that your students struggle to meet your expectations. Providing equal access to an outstanding education requires that we set aside our insistence that students meet our preconceived standards and provide supplementary instruction when they lack foundational knowledge or skill.

Form Accurate Perceptions

Meeting our students where they are depends on our willingness to exercise empathy, recognizing they come to us hoping to learn what we have to teach. Empathy goes hand-in-hand with humility. Just as we must possess enough humility to realize that we might be part of the problem, we can also set aside our status as experts to allow ourselves to recognize where our students have something of value to contribute in our classrooms.

The variety of experiences and identities students bring to our classrooms can be a source of enrichment instead of a hindrance. Resetting our expectations includes perceiving students' proficiencies and capabilities as well as the deficits we've identified. For example, the degree to which international students are fluent in written and spoken English can create problems in communication, which affects

our perception of their abilities as scholars and masks their true potential. When I taught in the field of arts and cultural management, several students from China exhibited communication challenges, yet they shared fascinating examples of professional practices much different than those we were studying. The students' stories enhanced their fellow students' learning and broadened my knowledge of how people around the world interact with art and culture.

Furthermore, our students might be highly proficient in areas where we're comparatively less skillful, such as the use of technologies or knowledge of social media. Instead of criticizing the skills they don't possess, it's far more productive to utilize those in which they have existing expertise. It takes courage to shift our worldview to allow students room to surprise us with knowledge or skill beyond our expectations. However, it's highly rewarding to step out of the driver's seat sometimes and empower students to take the lead. Tapping into our students' expertise and adapting our instructional methods to work with their strengths instead of being frustrated by their weaknesses is a far more effective approach to teaching.

Ideate, Implement, and Iterate

Without a doubt, the biggest challenge in moving from a faculty-centered to a student-centered approach to instruction is overcoming the barriers in our own minds. After we've made this leap, the next task is to adjust our preferred pedagogical practices to better serve our students' learning. How might you create supplementary resources to help bridge the gaps you've recognized or areas in your course content proven to be troublesome to students? These might include:

- Glossaries of disciplinary vocabulary
- Student writing guides
- Links to relevant tutorials, instructions, and instructional websites
- Overviews of research methods
- Instructor-created step-by-step tutorials of basic processes

As an example, the first online courses I taught were geared for entry-level students, many of whom were older than typical college freshmen. Some of them lacked knowledge of basic tasks such as creating a screenshot, inserting an image into a Word doc, or converting a Word doc to a PDF. Each time I discovered a problem, I created brief, simple PowerPoint tutorials for the missing skill so students could complete their assignments successfully. This practice provided me with an instructional opportunity (a teachable moment) for the students who were experiencing the problem, and it also afforded the chance to share the resources I created with the entire class, clarify instructions, and facilitate a better learning experience for all students.

Modifying course content to include direct instruction in foundational skills and knowledge that students may not have acquired might feel excessively elementary, but we still need to remember that our students are novices to our disciplines, no matter how basic our course content may seem to us.

Let's use an example from mathematics to illustrate this point: When an instructor writes an algebraic equation on the whiteboard, she may see it as being as basic as $2 + 2 = 4$. For some of her students, however, the equation may as well have been written in Egyptian hieroglyphics. Recognizing these knowledge gaps can provide opportunities for supplemental instruction or the creation of helpful resources.

Finally, we should take a thoughtful look at our preferred teaching methods. Just because something has been around for a very long time doesn't mean it's the best choice. After all, not many of us still use a corded rotary-dial landline telephone, since better options are available. Just so, our reliance on lecture as the primary mode of instructional delivery is open to serious question, especially because research has shown this to be among the least effective pedagogical practices. A study conducted by the University of Missouri found participants initially heard, understood, and retained 50% of what was said in a 10-minute oral presentation, but 48 hours later, participants remembered only half of this knowledge – just one-fourth of the original presentation. Nevertheless, college students continue to acquire 85% of their learning by listening to lectures.¹³ We lecture because it's familiar. It's the way we were taught. It's how faculty have taught for centuries. It's the archetypical faculty-centered pedagogical practice. When I was a brand-new instructor, I genuinely believed I was *required* to lecture for the entire 90-minute class period. I even didn't know other options were possible, let alone permissible. (They are!) If lecture isn't the best option to facilitate student learning, we should ask ourselves why we're still standing behind a lectern explaining our PowerPoint slides.

Engaged learning strategies counteract the discrepancy between our knowledge of best educational practices and traditional approaches to pedagogy. We can make our courses more engaging by implementing practices such as small discussion groups, collaborative learning, project-based or problem-based learning, service-learning or civic engagement, or practical experiences such as internships, apprenticeships, or other options for study outside the classroom.¹⁴ The more we engage our students and the better we anticipate and accommodate their needs as learners, the higher the likelihood of success in our courses.

As we implement new pedagogies or curricular materials, we participate in the cycle of iteration because teaching is, itself, an iterative process. Reflective educators naturally consider what worked well, what didn't work, and how to do things differently the next time we teach a course. Each group of students exits our classrooms at the end of the term, but a fresh group of hopeful faces shows up on the next first day of class, providing us with renewed motivation to continuously improve our practice as educators.

Objections

Each step we've considered will help educators make the cognitive leap to a student-centered mindset. Nevertheless, this philosophical shift stands in opposition to many faculty members' deeply-held beliefs. The following chart presents some common objections, along with a response for each.

| Objection | Response |
|---|--|
| Students should be responsible for their own learning. We provide the opportunity, but it's up to them to take advantage of it. | Students share responsibility for their education, but the institution and the instructor are also responsible for meeting their students' learning needs. Instructors are the primary interface between knowledge and students and, therefore, have the greatest responsibility to ensure student learning. |
| All we're doing is dumbing down the curriculum. Students are adults and shouldn't expect us to hold their little hands. | We can maintain high expectations and academic rigor while we also provide our students with the tools and instruction they need for success. If our students demonstrate a lack of knowledge crucial to success in our courses, we're negligent if we don't provide them with the means to acquire this knowledge. |
| Students are lazy. They skip class, don't do their work, and don't study for exams. It's no wonder they're failing our courses. | Many of our students come from non-traditional backgrounds and face issues and challenges once thought to be atypical among college-age students. They may miss class because their childcare provider was sick, or because their car broke down and they don't have the money for repairs. They might never have been taught appropriate study skills, or they may lack skills in time management. Dismissively judging them as lazy is an excuse for washing our hands of responsibility to find out why the student is struggling and how we can better help them to meet the course requirements. |
| The public school system is doing a bad job. They ought to be held responsible for producing graduates who can read, comprehend what they read, develop a complete sentence in a complete paragraph, and perform simple mathematics without the assistance of an electronic device. | Whether or not the public schools perform up to our expectations, we must still teach the students who enroll in our courses where they <i>are</i> , not where we think they <i>ought</i> to be. The same is true of students who experience financial hardship, face challenges in their mental or physical health, and undergo interpersonal upheavals such as a breakup with a significant other or parental divorce, among a long list of personal problems. None of these things is under our control. We can only accept students as they are and do our level best to meet their needs accordingly. |

Counterpoint

Our approach to teaching should be characterized by our strong desire to help students learn. No matter where students begin their journey, effective educators are willing to offer whatever support is necessary to achieve their course objectives, thereby ensuring students earn their degrees.

Many traditionally-minded faculty are fond of saying, "I set the table. It's up to the students to decide whether or not to eat." Let's extend this metaphor. If we "set the table" are we considering the quality of the food we're serving or whether we've provided our guests with everything they'll need to enjoy the meal? Presenting course material students cannot understand is something like serving a steak dinner with no forks or steak knives. If it's not fair to presume your dinner guests will bring a set of

cutlery to the meal, it's equally unreasonable to expect students to possess skills and knowledge you haven't specified they must acquire before walking into your classroom.

Now let's take the metaphor a step further: what if the guests invited to your dinner party have cultural or personal prohibitions against eating beef? A caring host would modify the menu so the guests could eat the food on the table. Should we expect less of instructors who "set the table" but consider it beneath their dignity to make accommodations for their students' varied needs?

As we've learned, a college-ready mindset masks implicit biases, so becoming a student-centered educator is no less than a social justice issue. Our students will increasingly come from diverse racial and ethnic groups, from low-income families in which they're the first to enroll in college, or from high schools that did not offer a stellar college-preparatory experience. We will also admit more adult learners who struggle to manage full-time jobs, family responsibilities, and personal hardships, all of which tend to create obstacles to learning in programs geared towards 18-22-year-old undergraduates. It's unreasonable to believe we can treat non-traditional learners the same as our ideal "college-ready" students, nor is it helpful to shrug off our responsibility as educators by complaining about our present students' perceived deficits. Non-traditional learners are not deficient – they're different. It's up to us to find solutions to the challenges we face as their instructors. Society has changed, and higher education must change along with it regardless of anyone's deep longing to maintain the status quo. There's no going back.

Ronald G. Ehrenberg, the Irving M. Ives Professor of Industrial and Labor Relations and Economics at Cornell University, participated in a webcast about the present state of higher education and its future.

In a world where we have a knowledge-based economy, a higher-educated public is absolutely essential for us to raise our standard of living. The basic problem we face is that there are these large inequities across racial/ethnic groups and across socio-economic groups. The groups in the population that are growing most rapidly are the groups that have been historically underrepresented in higher education. So if you're concerned about economic growth, or if you're increasingly concerned as we are about income inequality, it's absolutely essential to increase the college-going behavior of these underrepresented groups, and more importantly to raise the college completion rates of these groups.¹⁵

According to Ehrenberg, then, providing an excellent education to all students isn't just the right thing to do, nor is it only a matter of social justice. It's a crucial step towards ensuring our nation's future economic growth and stability, and a beginning attempt to address the problem of income inequality. Students who seem the least ready for college are precisely those who need higher education the most. Attaining a college degree gives graduates the opportunity to raise their families' standard of living, improving the quality of their lives as they also contribute to the economic prosperity of the nation. **We are no less than their only hope for a better future.**

Reflection

I sincerely hope this conversation will soon become irrelevant. As faculty grow accustomed to the influx of non-traditional students we now serve, maintaining a student-centered approach to teaching will become second nature. I believe we're capable of casting off our college-ready biases and outdated faculty-centered pedagogies just as we've outgrown other harmful social norms.

In *Becoming a Student-Ready College: a New Culture of Leadership for Student Success* (2016), the authors summarize the matter well. Becoming student-centered and student-ready

...starts with an individual educator and moves on to the collective action of all educators to influence and change the institutional environment to make excellence inclusive by supporting the success of all students. As important as it is to know who your students are, it is just as important for you to understand who you are as an educator and what limitations may hinder your ability to fully educate all students, especially those who are different from you. We have an individual and shared responsibility to engage in self-reflection and to hold each other accountable for our actions. We must learn to be empathetic educators and to focus on students' assets, not their deficits. [We should] define success by the learning outcomes students must achieve, and ... provide high-quality educational experiences to help students achieve at levels that prepare them for lifelong success. A student-ready college prioritizes learning over efficiency, even when external pressures call for a different course of action. The success of students comes first.¹⁶

Every student can earn a degree with the right support. All students are talented, intelligent, and capable of success, without exception. Our job as educators is to identify and nurture their talents, develop their intelligence, and foster their achievement. We are their hope for a better future. We don't just teach our subjects – we exert considerable power over our students' very dreams. What higher calling could there be than to rise with this challenge and ensure our students' academic achievement by implementing a student-centered model of instruction?

(continued on next page)

| Design Connection | |
|---|---|
| Identify | Ideate |
| Why should you consider changing your philosophy of education to become a student-centered educator? Just as medical professionals provide service to patients or lawyers serve their client’s needs, as educators we serve our students. Their needs should come first, supported by our institution and its faculty. | How will we begin to become student-centered educators? By examining our preconceptions and biases, analyzing our curricular and pedagogical practices, and developing new strategies for providing an outstanding education to our students. |
| Iterate | Implement |
| Each course we teach offers a fresh start towards becoming a better educator. Becoming a student-centered educator won’t happen overnight – with each resource you develop, each new teaching strategy you try, each layer of student engagement you add to your courses, you work towards excellence and better serve your students. | What will we achieve by becoming student-centered educators? We will not only deliver a better educational experience to our students, but also surpass customary expectations for the teaching component of our faculty evaluations, supporting our professional aspirations and strengthening the institutions for which we work. |

Remember:

WHY: *when faculty, administrators, and institutions adopt a student-centered mindset, amazing things can happen. Students are more successful academically, our institutions rise in prestige, and we enjoy the rewards of student success in our classrooms as we see our students learn more and achieve more under our guidance.*

HOW: *by empathizing with our students, identifying our underlying biases, analyzing our courses to discover problem areas, and designing strategies to address those problems as we keep student success at the forefront of all we do.*

WHAT: *we will improve our pedagogical practice, facilitate our students’ success, and strengthen our institutions.*

-
- ¹ Hase and Kenyon, 2001. From Andragogy to Heutagogy. <http://www.psy.gla.ac.uk/~steve/pr/Heutagogy.html>
- ² Bruner, J. (1966). *Toward a Theory of Instruction*. Cambridge, MA: Harvard University Press.
- ³ Jang, Chang Sung; Lim, Doo Hun; Yoo, Jieun; and Yim, Jeong-ha (2019). "An Analysis of Research Trends in Brain-based Learning in Adult Education and HRD Fields: The Content Analysis and Network Text Analysis," *Adult Education Research Conference*. <https://newprairiepress.org/aerc/2019/papers/33>
- ⁴ Glossary of educational reform
- ⁵ Information is drawn from Phyllis Blumberg's "Beginning Journey Toward a Culture of Learning-Centered Teaching" in the *Journal of Student Centered Learning* (2004) Vol. 2 No. 1, pp. 69-80, from *Higher Education by Design* (Mackh, 2018) and from personal experience.
- ⁶ White, B. (March 21, 2016). The Myth of the College-Ready Student. InsideHigherEd.com <https://www.insidehighered.com/views/2016/03/21/instead-focusing-college-ready-students-institutions-should-become-more-student>
- ⁷ U.S. Department of Education, National Center for Education Statistics. (2019). The Condition of Education 2019 (NCES 2019-144), [Undergraduate Retention and Graduation Rates](https://nces.ed.gov/ipeds/data/undergraduate-retention-and-graduation-rates/).
- ⁸ McNair, Albertine, Cooper, McDonald, and Major. (2016). *Becoming a Student-Ready College: a New Culture of Leadership for Student Success*. Jossey-Bass/AACU
- ⁹ <https://dschool.stanford.edu/executive-education/dbootcamp>
- ¹⁰ Interaction Design Foundation. (January 2018). The 7 Factors that Influence User Experience. <https://www.interaction-design.org/literature/article/the-7-factors-that-influence-user-experience>
- ¹¹ Mackh, B. (2018). *Higher Education by Design: Best Practices for Curricular Planning and Instruction*. Routledge.
- ¹² Harvard University. Project Implicit. <https://implicit.harvard.edu/implicit/>
- ¹³ Lee, D. (1993). *Listening: Our Most Used Communication Skill*. University of Missouri Extension. <https://mospace.umsystem.edu/xmlui/handle/10355/50293>
- ¹⁴ For more information about this topic, see *Higher Education by Design*, Chapter 7: Incorporating Engaged Learning.
- ¹⁵ Ehernberg, R. (2015). Cornell University. Insight, Issues & Research: the state and future of higher education, Cornell ILR. Nov. 19, 2015. https://www.youtube.com/watch?v=Zt_-9d3WA-4&feature=youtu.be
- ¹⁶ McNair, et.al