An Equity-First Approach to Postsecondary Digital Learning

Every Learner Everywhere
Teaching Strategy Guide Series
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Every Learner Everywhere is a network of twelve partner organizations with expertise in evaluating, implementing, scaling, and measuring the efficacy of education technologies, curriculum and course design strategies, teaching practices, and support services that personalize instruction for students in blended and online learning environments. Our mission is to help institutions use new technology to innovate teaching and learning, with the ultimate goal of improving learning outcomes for Black, Latinx, Indigenous, poverty-affected, and first-generation students. Our collaborative work aims to advance equity in higher education and centers on the transformation of postsecondary teaching and learning. We build capacity in colleges and universities to improve student outcomes with digital learning through direct technical assistance, timely resources and toolkits, and ongoing analysis of institutional practices and market trends. For more information about Every Learner and its collaborative approach to making higher education more equitable through digital learning, visit everylearnereverywhere.org.
Introduction to the Teaching Strategy Guide Series

An Equity-First Approach to Postsecondary Digital Learning is one of a series of teaching strategy guides published by Every Learner Everywhere for the purpose of highlighting how the three facets of our mission, equity in higher education, digital learning, and evidence-based teaching practices, can be applied in higher educational courses. Our target audience is faculty, course directors, course administrators, and faculty support staff. An Equity-First Approach to Evidence-Based Teaching Practices reviews six teaching practices proven to benefit Black, Latinx, Indigenous, poverty-affected, and first-generation students in gateway courses. An Equity-First Approach to Postsecondary Digital Learning outlines seven necessary components to adopting and utilizing digital learning tools equitably. This strategy guide also includes a framework for centering equity in the course design, underlying principles, and pedagogical practice of digital courseware. Equity Principles for Teaching and Learning in Higher Education details our network’s eight equity principles and their application to equitable teaching with the goal of redesigning postsecondary digital learning opportunities to more intentionally center the needs, outcomes, and experiences of Black, Latinx, and Indigenous students, as well as students experiencing poverty.
We support institutions in the adoption, implementation, and scale of high-quality digital learning tools. Grounded in principles of effective teaching and a commitment to equity and racial justice, our approach to digital learning enables institutions to increase gateway course and degree completion, lower the cost of instruction, and facilitate more equitable learning outcomes for Black, Latinx, Indigenous, poverty-affected, and first-generation students. Digital learning can engage faculty as innovators and educators focused on using evidence-based teaching practices, data, courseware, and technology tools to improve learning outcomes and better serve students.

What Is Digital Learning and Why Might I Use It?

Digital learning includes a broad range of content and communication tools, curricular models, design strategies, and services that personalize instruction for students in blended and online learning environments. Digital learning tools can be impactful for student learning in a variety of ways. For instance, research demonstrates that active and adaptive learning, which are often foundational to courseware design, have the potential to improve course outcomes. Additionally, digital solutions lower the cost of course materials, making the course more accessible to poverty-affected students, and Black, Latinx, and Indigenous students. In short, the potential for digital learning to support minoritized students is promising.

Yet, Rodgers reminds us that “tools are only as equity-oriented as the people who design and use them.” The ability of supporting instructors and tech designers to infuse equity into the design and pedagogy of digital learning tools, like courseware, is crucial for transforming the learning experiences and outcomes for Black, Latinx, and Indigenous students, along with students experiencing poverty in gateway courses. This strategy guide highlights key considerations for institutions seeking to leverage digital learning as a tool for racial and economic equity in postsecondary institutions.

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2 Vignare, K. (2020) Foreword: Implementing Adaptive Learning at Scale, Current Issues in Emerging eLearning, 7(1), Article 1. Available at: https://scholarworks.umb.edu/ciee/vol7/iss1/1

Every Learner Everywhere

At Every Learner Everywhere, when we think about strategies to support the impact-driven and equity-minded uptake of digital learning in higher education, seven necessary components come to mind:

1. GROUND THE PEDAGOGY IN EVIDENCE-BASED TEACHING

There are several useful frameworks for effective teaching practices based on research in the field of human cognition and empirical studies of classroom practices. The six evidence-based teaching practices highlighted below are grounded in over five years of feedback from faculty and students at public institutions of higher education who have adopted digital learning in gateway courses with the specific goal of improving outcomes for Black, Latinx, Indigenous, poverty-affected, and first-generation students.

- **Transparency** in teaching involves sharing with students how your course is designed (overviews of learning outcomes, instructional approaches, and rationale for each assignment) and your expectations for mastery of learning outcomes (grading rubrics, model assignments, and resources for help).

- **Active Learning** is a way of engaging students in "learning by doing." The activity can be individual, small-group based, or involve the entire class. Best practices involve a mix of active learning strategies so students have multiple opportunities and methods for learning and practicing course skills.

- **Formative Practice** is opportunities for students to practice skills in ways that provide timely and targeted feedback to nudge them toward mastery.

- **Data Analytics** from courseware and LMS dashboards can inform teaching and ongoing course improvements to optimize student success. Data analytics can uncover patterns in how students are engaging with the content and where barriers might exist to student mastery.

- **Metacognition**, self-regulation, and agency incorporate practices that help students learn to be better learners and take control of the learning process.

- Creating a **sense of belonging** and an inclusive learning environment requires intentionally using practices that enable all students to feel that they, with their unique background, have a place in the classroom and in the discipline.

To learn more about how to take up these evidence-based teaching practices in your department or classroom, please check out our openly licensed strategy guide.
2. PROVIDE INSTRUCTORS WITH ENGAGING, NO-COST PROFESSIONAL LEARNING OPPORTUNITIES

Postsecondary institutions should ensure that opportunities for faculty users of courseware - particularly adjuncts who often take on the responsibility of teaching gateway courses - are frequent and cost-free. These measures will make it easier for faculty to shift to using more evidence-based practices in gateway courses. Remember, practices effective for student learning are also effective for faculty professional learning.

- Faculty should have access to quality professional learning opportunities in order to (1) improve their teaching and support their use of evidence-based teaching strategies, (2) increase adoption of, and effective use of, digital learning tools, and (3) evaluate their courses by equity principles as a means of continuous improvement for student success, with particular attention on minoritized and historically excluded students.

- Professional learning opportunities should be offered in-person and virtually, as well as synchronously and asynchronously, to maximize faculty’s accessibility to these experiences.

- Professional learning opportunities should be offered in diverse configurations including one-to-one support, discipline-based learning communities, campus-wide workshops, and external professional learning at conferences, through professional organizations, and through advocacy organizations specializing in evidence-based teaching practices, digital learning, and racial equity in education.

- Research demonstrates that faculty prefer to learn or improve professional skills from peer faculty - ideally those who teach in the same, or in a similar, discipline.\(^4\)

- Face-to-face and online teaching employ different methods of course design, student engagement strategies, and community-building. Professional learning opportunities should reflect these differences.

- Institutions and departments seeking to make professional learning both a possibility and priority for their faculty must allocate resources to this effort. Whether it be through providing comp time, course releases, credentials, financial compensation, or other incentives, instructors’ efforts to learn and grow toward becoming better teachers should be structurally incentivized by their institution.

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3. TAKE AN ECOLOGICAL APPROACH AND LEVERAGE SUPPORT SERVICES

Institution-wide adoption of digital learning tools, inclusive instruction, and evidence-based teaching practices should be led by a central unit or team. This team is ideally supported by the technical assistance of experienced practitioners so that the resulting institutional incentives, policies, and programs are scaled, sustained, and continuously improved.

- Technical assistance can take the form of hiring instructional designers and/or external consultants, putting together an advisory board of administrators and faculty with experience in the institution’s new initiative, or training a core team of early adopters to lead the initiative following a period of testing and improvement of the new initiative in pilot courses. To learn more about equity-minded approaches to recruiting technical assistance for your team, check out these resources: Equity-centered approaches to hiring and onboarding and An Equitable Workplace Starts With Equitable Hiring.

- Support service members should be knowledgeable and/or continuously trained to assess digital learning tools for bias and functionalities that may harm students.

- Support services should be guided by an advisory group that includes a diverse selection of students, faculty, staff with teaching responsibilities, and department leaders.

4. USE HIGH-QUALITY COURSEWARE

Institutions should use high-quality and culturally responsive courseware with field-developed and -validated learning outcomes for target courses. We recommend courseware that meets or exceeds the following baselines:

- Accessibility compliance with ADA guidelines
- Protocols to ensure student privacy and prevent surveillance
- Technical design and course content developed using an equity first framework
- Low- or no-cost and high value to students
- Usable across multiple platforms including iOS, Android, etc.
- Highly rated user experience from both faculty and students
- Backed up by efficacy research
5. USE OPEN EDUCATIONAL RESOURCES

Open educational resources (often referred to as OERs) are teaching and learning materials that are licensed to be publicly available, to be used by students and instructors. You can learn more about OER resources at Creative Commons. Materials used as OERs often have five characteristics:

- **Retain** – resources you are allowed to download, duplicate, store, and manage.
- **Reuse** – resources you can use in class, share publicly, and post online.
- **Revise** – resources you can edit, adapt, and modify for use in your course.
- **Remix** – resources you can mix with other resources to create something new.
- **Redistribute** – resources you can share in their original, revised, and remixed formats and versions.

There are several ways OER can support equity in higher education:

- **Ease of revision**: While traditional textbooks are updated by publishing companies at great cost, OERs can be updated in real time by faculty or by students and cost nothing to do so outside the time spent. Moreover, faculty can easily customize content to be more culturally relevant and representative of minoritized peoples.
6. LEVERAGE COURSEWARE ADOPTION AND DECISION-MAKING RESOURCES

Choosing the right courseware product for your campus can be a daunting task. There are many resources available to help faculty discover, compare, select, and implement best-in-class courseware. We recommend Course Gateway - a resource that aims to expand the use of high-quality, affordable courseware for gateway courses, maximizing students’ learning and increasing completion rates in essential, introductory studies. CourseGateway covers twelve disciplines associated with the twenty highest-enrollment introductory-level undergraduate courses in the United States. Products are reviewed using a rigorous methodology, with product attributes rated across the following categories: equity, efficacy, functionality, and system capabilities.

7. GATHER QUALITATIVE AND QUANTITATIVE USER DATA

The data from this research can strengthen case-making for evidence-based teaching practices as an intervention and refinement of the field’s understanding of courseware implementation/best practices. More importantly, the data can be used to determine the impact of digital learning tools on equitable access and outcomes.

- **Cost savings for students:** Students save money when they are not paying exorbitant costs to access the materials they use in class or sections of a textbook that are not used in class but are included in a publication. These savings can be repurposed for taking additional credits in the term or to support students’ basic needs.

- **Early Access:** OERs are available from day one of the term, thus students are not losing time accessing course materials because of bookstore back-orders, financial aid processing time, or time spent searching the internet for less expensive options.

The data from this research can strengthen case-making for evidence-based teaching practices as an intervention and refinement of the field’s understanding of courseware implementation/best practices.

- **User experience data** can be gathered from digital learning tool dashboards and from vendor tracking tools. It can inform faculty how long students are spending on modules or on individual assessment questions, how often certain features of the digital learning tool are utilized by students, and which features of the digital learning tool lead to improved outcomes for students. This information can also be gathered through student surveys and focus groups.

- **Conduct data analysis** on assessment outcomes and, in partnership with your Institutional Research team, conduct data analysis on student outcomes to determine to what extent digital learning tools are meeting the goals of their implementation.
An Equity-First Framework for Digital Courseware

Fundamentally, we at Every Learner Everywhere believe that equity cannot be orthogonal to digital learning efforts. Too often, equity gets treated as an add-on. We encourage institutions to more explicitly outline how racial and economic equity will serve as the underlying philosophy that drives the conceptualization and implementation of their digital learning agenda. To truly pursue equity in educational technology, we must deeply interrogate the design and function of the curricula, instructional tasks, and evaluation strategies embedded into the structure of digital courseware. And because instructor pedagogy (i.e., how curricula are taught) matters just as much as the curricula (i.e., what is taught) itself, we must also take stock of which pedagogical moves and instructional practices are best positioned to support the equity-minded implementation of digital courseware.

Guided by an extensive literature review, Rodgers developed the Equity-First Framework for Digital Courseware, a set of six considerations that courseware designers and instructors can use to audit whether and how they are integrating equity-first practices into their work. The six considerations, as well as associated reflection questions, are detailed in the table below.

### Principles of an Equity-First Framework for Digital Courseware

<table>
<thead>
<tr>
<th>COURSEWARE DESIGN</th>
<th>PRINCIPLES</th>
<th>PEDAGOGICAL PRAXIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the courseware allow for students to interact with each other and with their instructor? Through which mediums?</td>
<td>Interactivity &amp; Relationality</td>
<td>Is the faculty skilled at facilitating (a)synchronous virtual interactions between students?</td>
</tr>
<tr>
<td>Does the courseware provide opportunities for differentiation and individualization of learning goals and objectives? How adaptive are these processes?</td>
<td>Individuality &amp; Differentiation</td>
<td>Does the faculty member appropriately individualize and differentiate course instruction to meet the diverse needs of their students?</td>
</tr>
</tbody>
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5 Adapted from “Teaching for Equity Online: A Review of Equity-Oriented Teaching & Learning Literature in Postsecondary Education”, Aireale J. Rodgers, Ph.D. Candidate in Urban Education Policy, Rossier School of Education, University of Southern California
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<tr>
<td>Are the curricula used in the courseware attuned to issues of power and privilege?</td>
<td><strong>Increasing Critical Consciousness</strong></td>
<td>Are the faculty's pedagogical practices responsive to issues of power and privilege?</td>
</tr>
<tr>
<td>Are the curricula used in the courseware representative of the languages and cultural practices of the students they seek to serve? Are the curricula used in the courseware centered around student experience?</td>
<td><strong>Culturally Responsive and Student-Centered Pedagogy</strong></td>
<td>Are the faculty's pedagogical practices both relevant and responsive to the languages and cultural practices of the students they seek to serve? Do they supplement the courseware's curriculum when the courseware does not appropriately reflect their students' cultures?</td>
</tr>
<tr>
<td>Does the courseware support the routine and systematic collection of course data (including grades and attendance)? Is this data transportable?</td>
<td><strong>Data-Driven Decision-Making</strong></td>
<td>Do faculty use disaggregated qualitative and quantitative data to identify equity gaps in their courses? Are data disaggregated by race, ethnicity, and gender?</td>
</tr>
<tr>
<td>Do the courseware's curricula promote multiple pathways for access and full participation in the course? Does the courseware come standardized with accessibility features such as text-to-audio, audio-transcription, and alt text for photos?</td>
<td><strong>Ensuring Accessibility and Full Participation</strong></td>
<td>Is the faculty member aware of and prepared to engage extant resources to support students' ability to access digital courseware (i.e., disability services, financial and technological resources)?</td>
</tr>
</tbody>
</table>
Additional Resources from the Every Learner Everywhere Resource Library

Below is a selection of resources on equity-centered digital learning produced by Every Learner Everywhere in collaboration with its network partners.

- **What Our Best College Instructors Do: Reflections by students about meaningful learning experiences** outlines best practices for inclusive and effective teaching from the students’ perspective.

- **Adaptive Courseware Implementation Guide** shares lessons from course instructors with experience centering around racial and socioeconomic equity and student voice in the adoption and implementation of adaptive courseware.

- **Caring for Students Playbook: Six Recommendations** suggests equity-focused strategies that put student care into practice by acknowledging student challenges while identifying student assets.

- **Equity Review Tool: A Process Guide for Equity-centered Educational Materials** poses critical questions that illuminate privilege, bias, exclusion, and misrepresentation and that promote equity-minded language.

- **Getting Started with Equity: A Guide for Academic Department Leaders** is a resource for deans and other institutional leaders to start conversations in academic departments about advancing equity and justice in curricula and teaching.

- **Improving Departmental Equity Using the IMPACT Framework** includes worksheets for anticipating, acknowledging, and redressing racism perpetuated by academic departmental policies and practices.

- **Learning Analytics Strategy Toolkit** helps the reader assess campus readiness to use learning analytics and provides the tools to start.

- **Strategies for Implementing Digital Learning Infrastructure to Support Equitable Outcomes: A Case-based Guidebook for Instructional Leaders** focuses on building infrastructure for high-quality digital learning and outlines specific recommendations and examples.

- The **Every Learner Everywhere YouTube channel** includes a growing archive of conference and webinar presentations featuring experts in equity-centered, evidence-based digital learning.