

Difference between Remedial learning and adaptive learning

Remedial learning is Personalized Learning

Currently, a majority of teaching methods could be classified into the “one to many” model, indicating that one teacher simultaneously instructs many learners. Because the ability and knowledge levels of each learner are different, the academic performance of each learner is also different. Remedial learning strategies target learners with a poorer rate of academic progress. Teachers using remedial learning strategies could use teaching methods that are outside the norm of general classroom techniques. First, teachers must identify the reasons behind the learning difficulties experienced by challenged learners, and then develop specific remedial learning strategies that target these difficulties. Teachers could then use these strategies to help challenged learners reach the regular pace of academic progress.

Although nontraditional learners, as a group, are quite varied, one thing nontraditional students do have in common is that often their characteristics provide obstacles to graduation. Can personalized learning help? The answer, of course, is it depends.

The philosophy of personalized learning is not new to education. Things You Should Know About Personalized Learning provides a useful definition of personalized learning as a starting point.

Personalized learning provides a unique, highly focused learning path for each student. Individual attention from instructors isn’t feasible in traditional educational models with large numbers of students, and personalized learning is intended to use IT systems and tools to tailor learning experiences based on student strengths, weaknesses, and pace of learning. Technologies including analytics, adaptive learning, digital courseware, and others underlie personalized learning, which builds a “profile” of each student and makes continual adjustments to learning paths based on student performance.

Many different approaches exist to personalize learning across diverse higher educational institutions and programs. Using a personalized learning philosophy, technology has the potential to provide learning tools that magnify areas of strength and support areas of weakness, providing actionable information to help instructors target their instruction and resources to individual students. Web-based personal learning platforms also provide paths to equity and access, supporting students who require flexible or self-paced learning schedules.

However, due to a focus on digital tools and other technologies as providers of personalized learning, Feldstein and Hill were obliged to write a column explaining that:

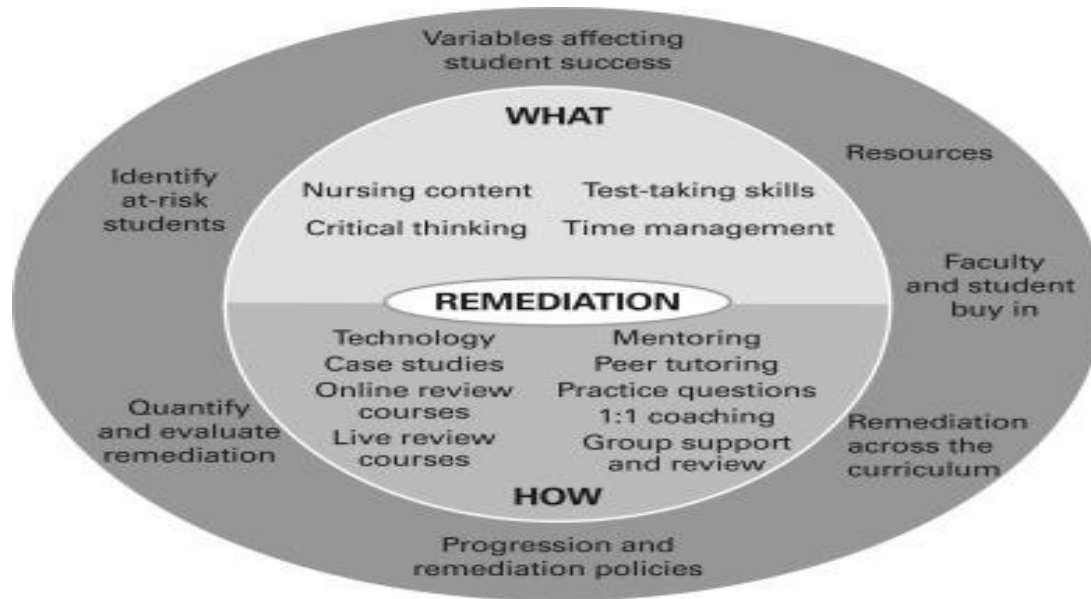
Personalized learning is not a product you can buy. It is a strategy that good teachers can implement. Without good teachers and good strategy, even a great product designed for personalized learning applications has limited value...

They argue that we should conceptualize personalized learning as a practice. As a complement to the practice of personalized learning, digital courseware technologies provide one method to support students based on their unique learning needs. As a practice, personalized learning solutions can be designed to align with the learning goals of different disciplines, degrees, institutions, and missions.

In addition to educational technologies, the comprehensive practice of personalized learning can be designed to include many other complementary educational practices. For example, in an effort to create a more comprehensive approach to learning, some institutions are implementing 21st century classroom redesigns, competency-based education, micro- and other credentialing options, Universal Design for Learning (UDL), “flipped” learning, and other student-centric practices that can be supported by digital courseware.

Used in isolation, each of these personalized learning solutions may have little benefit (and may lead to squandered resources and time); however, when these practices are integrated and aligned with effective student advising and career guidance; curriculum and instructional design; institutional policies and planning; and faculty and staff professional development, the potential advantages of personalized learning may even be successfully scaled to benefit a large number of students. If the benefits of a program or department’s comprehensive personalized learning plan can be scaled at the institutional level, then it follows that the support for students’ pathways to completion and graduation may be strengthened.

It is impossible to redesign students to fit into a system, but we can re-design a system for students. This can be the difference between success or failure for our students that need the promise of higher education the most.



Adaptive Learning:

Adaptive learning is one of many possible approaches to personalized, highly targeted education to large numbers of learners through various technology systems and tools.

ELI also provides 7 Things You Should Know About Adaptive Learning, which includes a definition for comparison to the concept of personalized learning:

Adaptive learning is one technique for providing personalized learning, which aims to provide efficient, effective, and customized learning paths to engage each student. Adaptive learning systems use a data-driven—and, in some cases, nonlinear—approach to instruction and remediation. They dynamically adjust to student interactions and performance levels, delivering the types of content in an appropriate sequence that individual learners need at specific points in time to make progress. These systems employ algorithms, assessments, student feedback, instructor adjustments/interventions, and various media to deliver new learning material to students who have achieved mastery and remediation to those who have not.

Adaptive learning technologies support three general systems, which vary by factors related to time to implementation, control of configuration, and customization and sequencing of content. Within the adaptive learning system, learning modules are designed so that the content, sequencing of concepts, and assessments are aligned with the learning objectives for the course.

Another thing that many non-traditional students also have in common is a shortage of time. Because we know that 62% of undergraduate students work either full- or part-time, one main benefit of adaptive learning systems is their potential to improve the efficiency of learning, and thereby instruction. Additionally, these learning technologies are especially helpful in delivering adaptive, targeted remediation for students who need additional academic preparation in order to succeed in subsequent college-level courses.

A Complementary Approach

Technology — when used appropriately — can enable educators to provide opportunities for both personalized and adaptive learning. Both adaptive and personalized learning approaches were designated as Design Principles for a Student-Centered Higher Education Ecosystem as proposed by the U.S. Department of Education's Office of Educational Technology in the recently published Supplement to the National Educational Technology Plan.

Digital learning has the potential to support the wild diversity of background knowledge and experiences, academic preparation, and learning schedules of today's "new normal" college student learners. But not in isolation. Adaptive learning strategies must be integrated into a comprehensive personalized learning system that is supported institutionally by faculty and staff training and designated resources.

As Feldstein and Hill, co-publishers of the e-Literate blog, recently wrote about MOOC hype: After the furor dies down, hopefully there will be relatively little debating over the definition of the terms. Indeed, hopefully there will be much more focus upon how the approaches collected under the 'personalized learning' banner can best serve different educational goals and objectives.

Regardless of the definitions you adopt, the goal is to improve learning. As yet, there is no silver bullet to design a personalized learning approach that is adaptive to all students' individual learning needs. As educators, we must be nimble and adapt to the new student-centered higher education ecosystem to ensure that learners receive the unique learning experiences and support they need, and in a form most accessible to each learner.

