Rigor and College Credit
**Introduction:**

Why we need a better understanding of rigor.

The past year has shown both what’s possible—and what is in desperate need of change—in postsecondary education.

The pandemic made online learning the norm overnight, and there’s every indication that colleges and universities won’t just go back to operating how they were before. Hybrid and online programs are here to stay in a much bigger way: OPMs and online course platforms are seeing massive growth, as are homegrown online programs. Six in ten Americans now say they would prefer fully online or hybrid higher education even if the pandemic weren’t a factor. Beyond that, hosts of new providers have entered the market looking to meet the growing demand for short-term, work-relevant credentials.

All of this is happening at the same time as massive disruptions occur for both students and workers. The economic upheaval wrought by COVID-19 is leading Americans in large numbers to rethink the role work plays in their lives, and the kind of education they need to build the careers they want.

**The opportunity.** Taken together, these shifts are remaking higher education. Postsecondary education is no longer synonymous with fully-accredited, brick-and-mortar colleges, as traditional enrollments decline and alternative markets see most of the growth. The past year’s disruption to education and work have also shifted how we think about time—both the time spent in the “classroom” and the time it takes for learners to move through education and into work. There’s a new sense of urgency and opportunity around breaking out of our traditional, time-bound models of higher education.

**The risks.** This opens up new possibilities for how students move into and through higher education—but it also risks affecting the quality of education if proper standards aren’t in place. Even setting aside alternative providers, there’s mounting evidence that many traditional institutions don’t deliver a reasonable ROI or promote economic advancement.

**The role of rigor.** We need a more informed way of understanding academic rigor and its connection to outcomes. This is especially true as we look to build new models that focus on what learners really know and can do, rather than the time they’ve spent on their education. StraighterLine has spent more than a dozen years refining its understanding of rigor, as it designs foundational courses that can serve a wide range of institutions and learners. We’re also at the forefront of the push to design new models for how learners move through education and into work.

This brief is designed to share that unique insight, and to provide a useful framework for a larger discussion about the role of academic rigor in learning, and ultimately, career and life outcomes. That conversation is urgently needed.
Defining Rigor: How rigor has traditionally been defined.

Academic rigor in higher education is widely acknowledged as an essential element of quality instruction. Yet, it is rarely defined, much less systematically implemented.

For many, rigor is an inherent part of any college course and is simply assumed. Faculty members often say that they “know it when they see it” but are not able to define rigor further (Draeger, Hill, Hunter, & Mahler, 2013). When pressed for definitions, different stakeholders—namely faculty and students—often have widely different concepts of rigor.

- **For faculty, it’s all about brain work.** They tend to see rigor as the interaction between critical thinking, active learning, high expectations, and meaningful content (Graham & Essex, 2001; Draeger et al., 2013).

- **For students, on the other hand, rigor is all about the syllabus and the support.** They tend to focus on “how much” they’re asked to do and the help they get in doing it—citing things like workload, grading difficulty, clarity of instruction, and level of support (Schnee, 2008; Draeger et al. 2015; Wyse and Soneral, 2018).

Non-traditional students, who often are taking classes online, balancing life and education, and entering college with diverse backgrounds, may have a different understanding of rigor altogether (Schnee, 2008; Campbell 2018). The key for higher education is to marry these various perspectives and focus on what elements are most critical for setting up students for long-term success. In that way, we can begin to define what makes a course rigorous for the modern adult learner.

Role of Student Support Services in Rigor

Working backward from student success as the goal, the research supports the idea that rigor is a balance between course challenge, learning support, and design (Graham and Essex, 2001).

**Course challenge** combines aspects of student and faculty definitions of rigor and includes critical thinking, workload, expectations, and assessment methodology. No one aspect can make up for the lack of the others. A surfeit of assignments or tough grading, for example, can’t compensate for a lack of critical thinking built into the curriculum. The blend of elements is important.

**Learning support** includes tutoring, guidance, coaching, and advising from faculty, staff, or web-based tools. All three sources are important, but faculty support—or engagement with students—may be the most critical in the eyes of students. In one analysis, student perceptions of rigor or difficulty in lower division classes primarily were influenced by the level of support students received from faculty (Wyse and Soneral, 2013). Low support, in turn, can lead students to feel
“devalued, unwelcomed, and incapable of success” (Bowman and Culver, 2018).

**Design** refers to instructional design, and in the case of online courses, user experience design. Each aspect of rigor interacts with and impacts the other two (Figure 1). For example, improving the design of a lesson can reduce the need for tutoring outside of class, thus reducing the overall workload a student experiences.

The goal with this framework for rigor is to find an appropriate balance of course challenge, support and design. With this balance, students can tackle complex material, overcome challenges, and successfully achieve learning outcomes.

**Student Success and Learning**

**Rigor/Course Challenge**
- Content
- Assessment
- Methodology
- Critical Thinking
- Time/Workload
- Course

**Learning Support**
- Tutoring
- Coaching
- Advising
- Guidance

**Design**
- UX/UI Features
- Course and Lesson Structure
- Delivery
- Feedback and Metacognition

**Rigor in Online Learning**

The online environment adds a layer of complexity for students and demands more thoughtful learning design to arrive at an appropriate level of rigor.

**Rigor vs. Difficulty**

In the online environment, the distinction between being rigorous versus merely difficult becomes even more important. Students can often be “challenged” by unclear expectations and a burdensome workload without experiencing all the aspects of a truly rigorous learning experience. This quote from an online graduate student underscores the distinction:

“The online part was difficult and challenging because there was no clarity of expectations; everything changed all the time. The course was rigorous because it consumed so much time trying to find out what we were meant to be doing. I spent more time on this course than any other and still am unsure of what it was about.”
Indeed, a national survey—Time for Class: The Impact of 2020 on Introductory Faculty and Their Students—found that faculty members struggled to engage students and to provide additional support this past fall, a time when nine out of ten faculty members reported teaching fully online or in hybrid format. Keeping students engaged was their top challenge, with 7 in 10 saying it was a struggle that fall. And more than a third also found it hard to provide additional support to their students. In follow-up interviews, numerous faculty members talked about challenges with explaining course expectations and with students’ time management.

This, of course, reflects the experience of many online and hybrid courses that were only temporarily in that format and maybe using a curriculum that wasn’t designed to be taught virtually. Research outside of the pandemic period has found that non-traditional and online students generally perceive a higher level of challenge in postsecondary courses than do their in-person counterparts (Barrett, 2015).

**Design + Support**
This makes the design of online courses particularly critical. Course expectations must be clear from the outset, the curriculum should be designed with clarity in mind, and the organization and navigation functions in the course should be intuitive. The goal is to reduce the perceived workload on the part of students, without impacting important aspects of rigor. In fact, “course clarity and organization” are prerequisites for an appropriately rigorous online course (Duncan et al., 2013).

Learning support, which is critical in all courses, also needs to be more intentionally-designed in online programs. There are far fewer opportunities for casual observation of a students’ work and whether they are struggling with a concept. Therefore, regular check-ins, low-stakes assessments, and easy access or quick referral to tutoring, academic counseling, and other support systems need to be built into online courses.
Bringing it Together

Rigor for today’s learners
For today’s learners, it’s clear that rigor is reflected in a combination of course challenge, learning support, and design. The variables within each area can be turned up or down, but each must be present and they need to move in relation to one another.

For example, if a course challenge is set at a particularly high level, the quality of design and level of learning support need to be at a maximum as well. Otherwise, a course may be at a level of rigor that precludes success even for many well-prepared students.

Or, for example, if the design of the course is at a mid-level, the workload aspect of the course challenge may need to be reduced to account for the extra effort of tracking assignments and navigating the material. Ideally, this is done without impacting the critical thinking aspects of the course challenge — but in reality, there might be tradeoffs involved there.

Courses at StraighterLine are designed to maintain the balance among these three elements, while paying particular attention to the student experience. For example, the 100-level courses, such as Algebra I, are challenging from both a brain work and workload perspective, but also provide 24/7 tutoring and advising seven days per week as additional support. One cornerstone to ensure a rigorous balance is the design — navigation is intuitive.

Path forward
As higher education explores ways to provide more flexible and responsive pathways to learners, we must increasingly move away from time-based measures of learning. To do so, we will need a more informed way of understanding academic rigor and its connection to outcomes. Based on a review of the literature and a wide range of course offerings from Straighterline and other providers, this paper presents a clear framework for rigor that we hope will serve as a jumping off point for those conversations. It’s clear that course challenge must be married with both design and learning support — but within that, there is ample room for experimentation and debate.
About the Author

Dr. Amy Smith, Chief Learning Officer of StraighterLine, leads SL Labs, the research and design arm of the organization. In her role, Smith and team focus on researching, designing, and building best-in-class product and services offerings that provide optimal value for StraighterLine’s students and clients.

Before joining StraighterLine, Smith served as Associate Provost of Colorado State University Online, where she was responsible for significantly increasing access and educational opportunity to students by offering graduate degree, undergraduate degree, and certificate programs online. Prior to CSU Online, Smith served as dean of the School of Education for Capella University, where she was responsible for innovation and optimization of 38 graduate education programs, including master’s and doctoral degree programs in P-12 education and leadership, adult education, corporate education, higher-education leadership, and instructional design and online learning.

Smith has a Ph.D. in Educational Leadership: Curriculum and Instruction from the University of Denver, a M.Ed. in Public Administration and Supervision from National-Louis University, a M.A. in Secondary Education/English Education from the University of Akron and a B.A. in English from the University of Colorado, Boulder.

About StraighterLine

StraighterLine partners with more than 150 U.S. colleges and universities to provide and operate low-risk online pathway programs, expanding access for students with missing gen ed courses, financial constraints, work-life balance issues, academic criteria challenges or lack confidence after a long academic hiatus. Built and managed by educators, StraighterLine offers solutions for colleges and universities to enroll better-prepared students and attract, retain, and graduate more students. StraighterLine programs are available to schools at no cost, allowing schools to allocate their resources where they’re needed most. Visit partners.straighterline.com to learn more.
Sources:

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Schnee, E. (2008). “In the real world no one drops their standards for you”: Academic Rigor in A College Worker Education Program