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Questioning the Two-Hour Rule for Studying

By: Lolita Paff, PhD

FACULTY OFTEN TELL students to study two hours for every credit hour. Where and when did this rule of thumb originate? I've been unable to track down its genesis. I suspect it started around 1909, when the Carnegie Unit (CU) was accepted as the standard measure of class time. [See Heffernan (1973) and Shedd (2003) for thorough histories of the credit hour.] The U.S. Department of Education defines the credit hour as "One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester..." The expectation was the norm when I was in college in the 1980s and more seasoned professors indicate it was expected in the 1970s too.

Is the two-hour rule relevant today? Why two hours? Why not one? Or three? Study resources and tools have changed dramatically in the past century. Typing papers, researching, and collaborating required a lot more time in prior decades. Personal computers, mobile devices, and the Internet have dramatically changed what goes on in and out of class, yet the two-hour rule persists.

What should be done during study time? Of bigger concern than the emphasis on time is the lack of direction about what to do during those hours. Some schools (Binghamton University, is one) require that course syllabi state what students might do outside of class, "completing assigned readings, studying for tests and examinations, participating in lab sessions, preparing written assignments, and other course-related tasks." That's a start, but it's not enough.

Before we blame students by saying they should already know what to do, let's consider an example. I studied classical piano for a dozen years. Each week the teacher would instruct on notation, technique, and interpretation. Lessons always included detailed descriptions and a discussion of what I was to do during practice. How long I was to practice was only an estimate. The emphasis was on what needed to be done, not how long it would take. Practice time consisted of warm-up exercises, scales, and work on compositions. I didn't always

practice diligently (sorry, Mrs. Farr), but I consistently knew what I should be doing during practice to improve as a pianist.

Can most students say the same? A statement on the syllabus, particularly one that emphasizes policies, probably doesn't get much attention from students during study time. Likewise, a teacher's admonition to "study X hours per week" is easily forgotten or ignored. In addition, we lose credibility with our students if we tell them to "study two hours per credit" for no other reason than that's the way it's always been done. We should be more concerned with outcomes than time.

Shift focus from time to task. I recognize that telling students to study doesn't mean it will happen. I'm also not suggesting everything students do outside of class should be graded. But instead of telling students how long to study, emphasize mastery. Provide examples of active learning strategies so they can use their time more effectively. In addition to active reading assignments and graded homework, the following activities promote engagement and go beyond students' typical study strategies, such as creating note cards or "looking over" their notes.

- **Practice Problems:** Provide extra, ungraded problems. Suggest they mix different types of problems to simulate an exam. Ask them to solve problems they've created. Provide additional problems and hold back the solutions to allow students some time to work without the answers. Consider incorporating a couple of these questions on exams to motivate practice.

- **Rewrite Notes in Your Own Words:** Rewrites are an opportunity to "replay" what was said and done in class. Be intentional about asking students if they have questions about what they've written in their notes. Occasionally set aside a couple of minutes in class for students to compare notes and seek clarification.

- **Concept Maps:** Students can use note cards to accomplish deep understanding if they try to connect single pieces of information on each card to other concepts through

a concept map. These can be drawn by hand or created with software. Emphasize substance over form. The purpose is to make connections and see the content from different perspectives (Berry & Chew, 2008).

- **Respond to Learning Reflection Prompts:** How is X related to Y? What other information would you want to find? What was the most challenging topic in the chapter? How does this material connect to what you learned before? Reflection prompts promote connections across topics, helping students see content more holistically. Incorporate reflection in graded work as appropriate. Reflection assignments can be independent and ungraded or incorporated in class or online.

- **Quiz to Learn:** Provide sample questions or ask students to create multiple-choice questions as part of their study activities. Occasionally use one or two student-created questions on exams, or reward exceptional examples with extra credit.

- **Crib Sheets:** Even if they're not allowed

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Higher Education Seeks Answers to Leaner Years

Jon Marcus

WITH AN IMPORTANT SOURCE of revenue down and the flow of customers flattening out, one of the biggest businesses in Georgia — its public university system — is turning to a strategy of consolidations and mergers to improve efficiency and cut costs.

The system has shrunk from 35 campuses to 28, helping compensate for a nearly 20 percent cut in state funding from 2008 to 2016 and an enrollment that this spring rose only two-tenths of a percent over last year's spring semester. More consolidations are underway, reducing four of the remaining campuses to two.

The universities are putting some of the resulting \$24 million in savings into efforts to reduce the number of dropouts. That beefs up the bottom line, too: It's cheaper to help a student stay in school than to recruit a new one.

Dramatic changes like these are essential, Chancellor Steve Wrigley told his Board of Regents in April. "We inherited a system largely conceived in the 1960s," Mr. Wrigley said. "But times, society and students have all changed dramatically."

That is not only true in Georgia. Other colleges and universities across the country are also responding (albeit sometimes slowly) to challenges threatening their traditional role in society if not their survival.

Because of a dip in the number of 18- to 24-year-olds, among other reasons, for example, enrollment has been dropping for five years, meaning that there are about 300,000 fewer undergraduates to divvy up among America's campuses than there used to be.

Changes to immigration policies, and resulting resentments, threaten the crucial supply of international students, which the consulting firm DrEducation predicts could cost universities in the United States a quarter of a billion dollars in the coming academic year.

To fill seats, colleges are engaged in an arms race of discounts that they increasingly cannot afford — discounts so deep that, while their sticker prices appear to be rising ahead of the inflation rate, the schools are actually seeing their net tuition revenue decline. Many small, private nonprofit colleges are giving away a record 51 percent of their tuition income in the form of discounts, according to new figures from the National Association of College and University Business Officers.

While public funding for higher education is rising again in some states, it is still an inflation-adjusted \$9 billion behind where it was before deep cuts were imposed during

the last recession, the Center on Budget and Policy Priorities reported.

One reason is that many states face large pension obligations for public employees, including those who work at universities; for some universities, the impact is becoming more immediate, as states shift this burden directly onto them. More than half of the \$4.1 billion allocated for state universities and colleges in Illinois, for instance, now goes not to teaching or research, but to pay retirement costs, the Illinois Policy Institute says.

"There's always been a kind of a wishful thinking that when the economy gets back to normal, things will get better. And that is not happening anymore," said James A. Hyatt, associate director of the Center for Studies in Higher Education and former vice chancellor for budget and finance at the University of California, Berkeley.

On top of that, public universities face political pressure to keep tuition flat. And the Moody's bond-rating agency calculates that long-term returns from private university endowments are falling far short of what they need. A Department of Education list of financially troubled institutions now has more than 500 universities and colleges.

All of these pressures mean something has to give, and that includes upkeep. Colleges and universities face a combined shortfall of \$30 billion for needed repairs and renovations, according to the APPA, formerly the Association of Physical Plant Administrators.

But in another bid to attract students, they keep building more, spending \$11.6 billion last year on new construction, the private firm Dodge Data and Analytics says. That is adding not only more space the universities will have to maintain, but billions of dollars in debt on which someone will have to pay the interest.

Meanwhile, universities' monopoly on credentials is being threatened by alternative forms of education like software coding academies. Some employers are rethinking whether going to college is even necessary: 14 percent of hires at Google have no college degree, according to the company's senior human-resources officer. Nearly half of Americans surveyed last year by Public Agenda — a nonpartisan policy organization that focuses on education and other topics — said a higher education is no longer necessarily a good investment. And about the same proportion of graduates in a Gallup poll released last year said they were less than certain their degrees were worth the

money.

"There's a fundamental lack of understanding about the strains that higher education is under," said Susan Fitzgerald, who tracks them as a senior vice president at Moody's.

James Soto Antony, a professor at the Harvard Graduate School of Education who focuses on education leadership, said that people imagine that all universities look like the one where he works. "They see this \$36 billion endowment and the manicured lawns and they impute that onto all colleges and universities," Mr. Antony said. "And most of them are not like that. They are dramatically struggling for enrollment."

Fifty-eight percent of colleges and universities surveyed by the business officers association said their number of students has declined. The problem is worst for small private, nonprofit and second-tier public institutions in the Midwest and Northeast, where the college-age population has fallen fastest. The slide is projected by the Western Interstate Commission for Higher Education to continue through at least 2023.

This has sped up the practice of offering discounts to fill seats. "I don't think universities have a choice not to," said Luke Behaunek, dean of students at Simpson College in Indianola, Iowa. He presented a sobering paper about the trend in April at the American Educational Research Association's annual meeting. "The discount rate is a symptom of the larger things they're facing," Mr. Behaunek said. "The margins these institutions are operating at are much thinner than the public understands."

Here's how thin: Thanks to rising discounts, small colleges reported an average revenue increase per freshman of just two-tenths of a percent last year, which means they lost ground when inflation is accounted for.

Ken Redd, director of research and policy analysis at the business officers association, said: "Are there enough students out there? Is there enough money out there in a time of declining enrollment to support all of those schools. Based on what we see now, you'd have to say the answer is no."

Chief business officers on campuses agree with him. More than four in 10 don't think their current financing models are sustainable. "Hearing that from the chief business officers is very telling," Mr. Redd said.

One solution they've tried: building or

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ANSWERS

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renovating space in the hope of luring students, especially high-income ones. But many smaller institutions that borrowed money to do this have smaller enrollments now than they did then, meaning more debt and less tuition revenue to pay it back, according to the higher-education construction consulting firm Sightlines. This even as their existing buildings need a collective billions of dollars worth of long-postponed repairs, the company says.

So universities and colleges are getting serious about other kinds of reforms. Some, as in Georgia, are dramatic — and controversial. Several campus mergers there were announced only days before they were voted on by the Board of Regents, without enough notice for the public to sign up to comment. A similar proposal was put on the table in April by the Connecticut State Colleges and Universities (which does not include the University of Connecticut) in the wake of an enrollment drop and state budget cuts, only to be protested by faculty and students.

"Change is not easy, particularly when you've got institutions that have been around for 100 years" said Charlie Sutlive, vice chancellor for communications and governmental affairs at the University System of Georgia.

Some of this change is being pushed from the outside. Several higher education associations, with money from the Bill & Melinda Gates Foundation, have set up a group of 31 colleges, universities and systems called the Frontier Set to exchange ideas that have worked to lower costs and improve success rates — mostly around improving student retention, including through technology, which saves institutions money.

That "is tied as directly as possible to institutional financial health," said George L. Mehaffy, vice president for academic leadership and change at the American Association of State Colleges and Universities, which is involved in the project. "If you increase the number of students you retain and graduate, it dramatically affects your bottom line."

He cites one program pioneered at Georgia State University that gives "microgrants" from a few hundred dollars to \$2,000 to help financially struggling students overcome setbacks that often derail their educations. It costs the university \$2 million, but more than pays for itself by avoiding the even higher price tag of replacing dropouts. (Retention rates nationally have edged up by two percentage points since 2009 as colleges and universities invest more resources in student support.)

"We know what works," said Travis Reindl, senior communications officer at the Gates Foundation, "and we know there is a core set of diverse institutions with pockets of solutions and innovations going on, but they've never been brought together like this."

Another such consortium, the University Innovation Alliance, ties together 11 public research universities that share ways to cut costs and raise productivity.

Other universities and colleges in places where there are a lot of them — Boston's Fenway neighborhood, for instance, and southwest Atlanta — share administrative services, campus security, shuttle buses and even libraries, and are expanding offerings at a lower cost by doing it jointly or allowing cross registration. More such strategic alliances like these are likely in response to the "competitive and financial sustainability challenges" of higher education, a new report from the TIAA-CREF Institute says.

Even the organization that represents boards of trustees, the Association of Governing Boards of Universities and Colleges, has spun off a new division called AGB Institutional Strategies to help colleges come up with new forms of revenue, and The Guardians Initiative to encourage those trustees — often successful private-sector business executives — to bring new ideas into their university boardrooms.

Richard D. Legon, president of the association, said that fixing higher education "requires a collaborative partnership that

STUDY RULE

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during an exam, the process of identifying what to put on a "cheat" sheet and organizing the information promotes thinking about the relative importance and relationships among concepts. Set aside a few minutes of class time for students to compare and contrast their sheets as part of student-led exam review.

I think it's time to retire the two-hour rule. For many students, studying is something only done before an exam and homework is completed because it's graded. If we want to develop self-directed learners, these narrow conceptions of what it means to "study" must change. Teachers broaden and reshape students' perceptions of homework and study by de-emphasizing time and focusing on substance. We can help students see class time, study time, and homework as an integrated system of activities designed to advance learning. We do that by being as specific and intentional about structuring students' out-of-class study activities, graded or otherwise, as we are about what goes on during class.

benefits from some of the creativity and ingenuity board members bring to the table, working with institutional leadership to ensure that students, who are really in a customer mode, want to shop at your place."

Not everyone is doing this work. "There are some colleges that are very realistic about the challenges they're facing," said Ms. Fitzgerald of Moody's. "There are others that still have their heads in the sand and think that things are going to get better."

But the activity that is underway represents "a sea change," Mr. Mehaffy said. "There was an era when institutions sort of just moved on. The funds were relatively good, the students were standing in line. And today's environment is dramatically different. It is a time of enormous strains, but the good news is that it's a moment of growing action."

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