

A Wellsian Strategy for Scaling Up and Sustaining Educational Justice and Attainment

William H. Graves

The Big Policy Picture: Humanity's Grand Challenge Has Become Increasingly Educational in Its Nature.

1920: "Human history becomes more and more a race between education and catastrophe." ... H. G. Wells

2013: Progressive policy makers around the world are racing to stay ahead of catastrophe by purposefully propagating higher learning to more and more people and societies as a primary means to help meet **humanity's grand challenge to scale up and sustain social, economic, and environmental justice.**

Today's metric for tracking Well's race is **educational attainment**, which, for any adult population demographic, is the proportion of that demographic holding a higher learning credential. For example, the Lumina Foundation's attainment goal is "to increase the proportion of Americans with high-quality college degrees, certificates or other credentials to 60% by 2025." (The current US attainment proportion is approximately 40%. In approximate numbers, the 2025 goal is to increase from 80 million to 120 million the college credentialed among the 200 million adults who are at least 25 years of age.)

Some Fundamental Barriers to Scaling Educational Attainment

- **Economic Demographics.** In most population demographics, educational attainment correlates positively and strongly to household income and wealth – the higher the rungs of the financial ladder, the higher the attainment proportion, and conversely. Many modern countries have large proportions of population on the lower rungs of the economic ladder, even increasing proportions in some countries such as the US. Scaling up attainment accordingly will require enrolling and credentialing an increasing proportion of students who will require financial aid.
- **Educational Injustice:** Though the strong financial/educational correlation does not prove causation, significant pockets of financial need and economic injustice are evidence of educational injustice in countries that "talk the talk" of democracy, but have yet to "walk the talk" of the core democratic principle that all people are born equal. The **educational justice challenge** for such countries is to enroll and credential needs-tested students at a scale sufficient to reduce the proportion of the adult population occupying the lower rungs of the economic ladder. Educational attainment and educational justice thus become codependent pursuits – further confirming the claim that humanity's grand challenge has become increasingly educational in its character and should be recast as follows: **Humanity's grand challenge is to scale up and sustain social, economic, environmental, and educational justice.**
- **Mutual Unaffordability Conundrum:** Economic beneficiaries of the credentialing marketplace include internal investors (educational institutions and their employees) and external investors (student/families, governments, donors, employers, and suppliers). Many of these investor beneficiaries find their investments unaffordable. For example:
 - Needy students, who will have to be financially supported in increasing proportions in the pursuit of educational justice and attainment, often find net-credential and net-tuition costs not only opaquely explained, but also downright unaffordable with or without loans.
 - Many governments and other funding sources cannot keep pace on a per-credential basis with the increasing demand to subsidize colleges and the needy students they serve.

- Colleges find untenable the increasing demand on operating costs to cover needs-tested financial aid and to offset per-credential decreases in financial aid from government and other sources.
- Prevailing Institutional Service and Revenue Models: The mutual unaffordability conundrum is evidence of a structural economic problem in the credentialing marketplace. Most colleges generate revenues today by providing access to educational opportunities, not by helping potential students chart and successfully navigate personalized, affordable paths to credentials, careers, and lives of meaning. The time is right to redesign the underlying economic and delivery models of the credentialing marketplace to resolve the affordability conundrum among its economic beneficiaries, while also pursuing educational justice and attainment at scale. Primary levers for the redesign include:
 - Need-based financial aid emphasizing grants, not loans, and focused on the “economic governance” of the common-good credentialing marketplace.
 - IT-enabled academic and administrative service redesign and innovation focused on scaling up educational justice and attainment – and accounting for the results.
 - Shared services for driving the scale of attainment up and the per-credential costs down.

Hot Policy Topics: Financial Aid and Shared Services as Levers for Restructuring Credentialing

Higher education’s service model and its revenue-dependence on student financial aid (grants, tax credits, and loans) have become hot topics for regional and national education policy makers and, thus, also for programmatic grant funding from Bill & Melinda Gates, Lumina, other foundations, and regional and national departments of education. For example, Inside Higher Ed reported in 2012 on [Completions-Focused Financial Aid](#). The article described the Gates Foundation’s partnership with a research and advisory group, Washington, DC-based [HCM Strategists](#). HCM is organizing and leading several different but related efforts to use financial-aid as a lever for improving credentialing processes and completion rates while serving a greater proportion of low-income students more productively – i.e., more affordably, not only to needy students, but also to the governments and institutions that support them financially as they earn credentials.

- HCM Perspective on Financial Aid as a Lever for Change: With support from the Gates and Lumina foundations, HCM has guided and reported on a number of recent projects. HCM helped to develop (and now maintain) a website on [College Productivity](#) and also provide a newsletter and other resources addressing the productivity agenda. The titles of two HCM reports reveal the thrust of some recent work efforts: 1) [Doing Better for More Students: Putting Student Outcomes at the Center of Federal Financial Aid](#), and 2) [The American Dream 2.0: How FINANCIAL AID can help improve college access, affordability, and completion](#).
- Graves’ Perspective on Needs-Tested Financial Aid and Shared Services: The American Dream 2.0 report was prepared on behalf of an “[American Dream 2.0 Coalition](#).” The coalition’s agenda is strikingly similar to the agenda of the nonprofit, nongovernmental “Education Leadership Commons” (ELC) described in Graves’ 2012 paper, “[Is Education’s Past Its 2050 Prologue?](#)” The paper draws on [Nobel Laureate Elinor Ostrom’s work](#) on the “economic governance of the commons,” as well as his work in a 2010 paper. He describes how needs-tested financial aid could become a lever for restructuring higher education’s service model. The effort would be “economically governed” by the ELC as a means to “consumerize” the common-good credentialing marketplace by relying more and more on the multiplier efficiencies inherent in “shared

services” – a sharable “mash up” of educational data and self-service apps enabled by [IMS interoperability standards](#), along with sharable credentialing processes enabled by such mash ups. Perhaps the best high-tech metaphor for envisioning the credentialing marketplace as a consumer market is the [Education and Career Positioning System](#) that is analogous to the familiar GPS. Graves’ recent blog post, [Flexing Forward towards SOCM](#) (scalable, open, credentialing marketplace) includes a number of possibilities related to shared services, such as:

- Competency-Based Credentialing: Once the Department of Education completes its new process of mapping competency-based learning to financial aid, the entire educational process will be further decoupled and disaggregated (atomized) – one student / multiple institutions / multiple independent, competency evaluations / multiple independent, fine-grain credentials / a student record that is not a traditional transcript or record / “consumerization” of the credentialing marketplace! What is decoupled will have to be recoupled (integrated), certainly from the student-experience perspective and the student-record perspective. The Education and Career Positioning System, whatever its competitive success, is an early and solid metaphor for this major shift towards disaggregation and “consumerization.”
- Flex Redesign Strategy: Optimize a blend of flexible high-tech self-service and personalized high-touch expert assistance in order to:
 - Reduce annual institutional per-credential operating expenses by scaling up a common set of online (asynchronous) academic and administrative self-services to all institutional stakeholders (with a design focus on post-traditional learners) and, where possible, by sharing the common set of self-services inter-institutionally with partner institutions.
 - Provide timely, personalized expert assistance, as needed by the individual (to overcome the limitations of self-service). Ensure that annual per-credential costs of such personalized high-touch services do not erode per-credential cost offsets from the shared self-services (above).
- More about the Flex Strategy:
 - Too often overlooked in the flex redesign process is the critical role that educational interoperability standards can play in reducing total costs. The IMS Global Learning Consortium develops and certifies such standards in the world of higher education, and insistence on standards should be part of any redesign strategy.
 - Most learners require help in the learning process, at both the level of content-specific mastery and the integrative level of curriculum purpose and choice. Rather than offering such help primarily through one-size-fits-all classroom activities and limited office advising sessions, the flex strategy seeks to personalize expert assistance, as needed by the individual who is trying to move beyond the limitations of self-service in a timely manner.
 - Online self-service reduces per-credential cost structures, especially when shared in common among multiple academic and administrative units – even among the constituent institutions in a system or other multi-institution consortium created to amplify efficiencies.
 - It is the purposeful attention to cost structures that distinguishes flex learning from blended learning. Both blend traditional and IT-enabled pedagogy, but blended learning does not necessarily seek to reduce per-credential expenses by maximizing online self-service.

- The day is near when all stakeholders will expect academic/administrative resources, transactions, and support services to be available via self-service apps on mobile devices.
 - Online self-service can include analytical and navigational applications that link together institutions, students, instructors, employers, and academic advisors in mutual pursuit of student success. Such applications can support learning analytics and advising (as do [Course Signals](#), [Degree Compass](#), and [Degree Works](#)) and education/career navigation (as does the [Education and Career Positioning System](#)).
 - The high-enrollment course redesign strategy (pioneered by the [National Center for Academic Transformation](#)) can be used in tandem with the flex redesign strategy to improve learning outcomes and further reduce institutional per-credential costs. MOOCs could play a role, not only by scaling enrollments, but also by parsing high-enrollment courses into team-taught modular components, each module linked to an independent evaluation of competencies learned.
 - The external sourcing/partnering redesign strategy popularized as “flattening forces” in Thomas Friedman’s [“flat world” book](#) also can be combined with the flex redesign strategy. Friedman labeled his eight technology-enabled strategies as *out-sourcing*, *in-sourcing*, *open-sourcing*, *in-forming*, *supply-chaining*, *work-flowing*, *off-shoring*, and *steroid-ing*, the latter referring to what today might better be called *mobile-ing*. (The hyphens are inserted to connote “actionable.”) These models, especially when viewed as cloud-based models, can contribute further to the self-service per-credential cost offsets inherent in the flex strategy.
- Shared Services for “First in the World” Attainment Goals: The Department of Education’s Fund for the Improvement of Postsecondary Education (FIPSE) hopes to secure funding for a “First in the World” grant program focused on attainment. The US Senate’s proposed budget allocates \$39 M to FITW, which may or may not be funded. As a member of the National Board for FIPSE, Graves offered public advice about the potential role of shared services in FITW – see [Suggestions for Framing and Conducting a FIPSE “First In the World” Program](#).

Conclusion

A “Wellsian strategy” for meeting humanity’s grand challenges while mitigating the risk of catastrophe is to scale up educational attainment and educational justice in tandem. Neither, after all, can be scaled separate from the other. To execute this common-good strategy is to use the leverage of both financial aid and IT (especially IT-enabled shared services) to redesign the credentialing marketplace for greater scalability and flexibility and also for mutual affordability and accountability, all on behalf of its common-good economic investor beneficiaries. To optimize this approach is to insist on conformance to the technical interoperability standards of the IMS Global Learning Consortium. These standards for learning applications and the resulting data they generate have a multiplier effect by reducing the time and expense of technical integration and, therefore, shifting the focus to the high-touch educational advising and mentoring that are central to the human learning process. In the final analysis, we owe it to ourselves and our children to optimize the credentialing productivity enabled by technology, while reducing educational injustice by re-focusing public support for financial aid on the lower rungs of the economic ladder.