

Education's Priority Challenges

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Education has long been a “private good” to most tertiary educated individuals, and more recently has been confirmed as a public good by every modern nation. Indeed, education has become a *common good* because educating more people to tertiary levels has become critical to sustaining the *universal common good* of humanity's environmental, economic, and civic security. In the U.S., for example, President Obama has called for a 50% increase in the tertiary-educated proportion of U.S. adults by 2020, while the Gates Foundation is working to “double the number of low-income adults who earn a college degree or credential with genuine marketplace value by age 26.” Other policy leaders and major external investors in education everywhere are also voicing similar completion goals. When synthesized, these voices place “completions” at the top of the priority list for education providers *and* education's external investors – students, families, donors, employers, governments, suppliers, and others:

Completions Priority: *Increase the proportion of adult populations holding tertiary degrees or other, advanced workforce credentials (as the primary means for advancing and sustaining environmental, economic, and civic security).*

At the scale of President Obama's challenge, increasing the proportion of completions is systemically problematic, perhaps not even possible within current educational practices and financial models. Program enrollments and resources will have to align with identified economic development goals and critical market demands in the professions and the workforce in every geopolitical context (intra-national, national, and inter-national). Delivery expenses incurred by education providers and delivery charges to education's external investors will have to become *mutually* affordable. Participation *and* completion rates will have to be increased *simultaneously* for tertiary education. Reflecting on these and other systemic challenges will reveal many “devils in the details” of the completions priority.

Systemic Challenges Inherent in the Completions Priority

1. **Leaks in the education pipeline:** In many geopolitical contexts, both secondary and tertiary pipelines are copiously “leaking” drop-outs and failed students. Serious retention and persistence leaks at one educational level are amplified at the next and must be repaired at every level, even as the pipeline expands to increase participation rates (as required to meet the completions priority).
2. **Socioeconomics of the pipeline:** When geopolitical populations are analyzed in terms of ethnic, cultural, linguistic, financial, and other socioeconomic variables, the implication of significantly increasing participation and completion rates is that already leaky education pipelines will have to become increasingly weighted by underprepared, needy students. This dynamic will sorely test both current academic practices and the collective financial capacity of today's sources of need-based aid.
3. **Waning per-student government funding:** Inflation-adjusted per-student government subsidies in the U.S. and many other countries are under severe downward pressure as economies at all geopolitical levels navigate through the “great recession” and the ongoing disruptive vagaries of globalization.
4. **Need for multi-party mutual affordability:** To increase the proportion of tertiary-educated adults, education must be affordable to the students, donors, and governments comprising the primary private and public sources of revenues to education providers to pay their unit “production” expenses (such as annual per-student expenses). Unit revenues must exceed unit expenses, even in education, and that is becoming a structural challenge according to the above indications that many governments and an increasing proportion of students are increasingly unable to afford their respective contributions (public subsidies and net tuitions) to education's revenues.
5. **Wrong financial model:** The completions priority focuses on *completing* degrees (and other advanced programs of study). In contrast, education providers' revenues, in the primary forms of net tuition and government subsidies, are still based largely on *attempting* courses (or credit hours).
6. **Wrong accountability metrics:** Among key regulatory education-provider metrics in the U.S., for example, are expenses per credit hour (or per course) and completion rates as a proportion of entering students who complete a program within a fixed period of time. Neither metric is aligned with

the emphasis on scaling up tertiary-level completions that are affordable to both education providers and education's external investors. Key metrics should be revised to address the productivity crisis.

7. Productivity crisis: Education is reluctant to confront the concept of productivity, yet the three-way mutual affordability crisis described above is a productivity crisis. Delivery expenses incurred by education providers *and* delivery charges to education's external investors have to become *mutually* affordable, therefore stabilized or reduced on a per-completion basis, even as the completions priority demands that participation *and* completion rates be increased simultaneously. The completions priority should be tracked through metrics that account for productivity at scale
8. Accreditation as collusion: Accreditation's peer reviews can help an education provider formatively improve services and outcomes. However, failure to agree upon and openly report at least a few common, independently assessed, summative peer comparability measures related to completion outcomes and student learning opens some accreditation organizations to external charges of collusion – similar to the charges leveled at Moody's, S&P, and Fitch for their role in the recent sub-prime mortgage scandal.
9. Erosion of trust: Successful pursuit of the completions priority will require mutual trust among education providers and education's external investors. Dissonance prevails, however, and owes in large part to tensions inherent in the challenges outlined above. For example, many students and families find education unaffordable, inflexible, opaque, slow, and unconnected to the digital *cloud* in which young people learn and communicate. Many education providers grumble about weak parental support, underprepared students, and inadequate, unreliable, and intrusive government funding. Many governments find education unaccountable and its "business model" overly costly to students and public coffers. Regulatory impulses accordingly are escalating, reflecting an unstated policy premise that the completions priority is too critical to trust solely to education providers. For example, the latest regulatory discussion in the U.S. focuses retrogressively on the definition of a credit hour and also would micro-manage the policies and operations of for-profit tertiary education providers.
10. Little use of independent assessments of student learning: Education has used independent, normative learning assessments for years. Most assessments have relied heavily on the multiple-choice model, but, equally important, their use has not provided privacy-secured data at the student level for use in longitudinal data analyses that link students, scores, instructors, and institutions. The above reference to the sub-prime mortgage scandal points to the need for a trust factor – the need to assess student learning outcomes *independent of* the institutions students attend and the governments that support those institutions and students financially. This already happens in some professions (such as the law and health-care professions) and in some workforce domains (such as Microsoft and Cisco certifications), and there can't necessarily be an independent outcome assessment for every program. There is at every link in the education pipeline, however, a shared critical goal to improve core human communications fluencies and critical thinking skills. These skills are at the heart of learning readiness at every stage of intellectual maturity and lifelong learning. There are, moreover, extant independent, constructivist assessments of these skills, and these instruments could become the basis for universal periodic, age-based assessments of learning readiness and for the concordance tables and longitudinal research that links students, instructors, and institutions in peer and socioeconomic groupings.
11. Culture trumps productivity: Information technology is a necessary expense in education, but seldom takes on the characteristics of a strategic investment in increased productivity. Education leaders risk their professional currency by leading efforts to tap into IT's proven leverage for increasing productivity. The taxonomy of IT-enabled productivity has three tiers in education. The basic tier satisfies instructors and students within the prevailing culture of education. The two higher tiers are more strategic and require cultural changes that may be disquieting, even disruptive.
 - a. Individual productivity in a culture of satisfaction: Education leaders understand the role of IT in the individual productivity of students, teachers, instructors, staff members, alums, board members, and others. Of course, IT is ever changing and, with it, the nature of the productivity tools available to individual option – such as today's cloud-based tools and information sources. Improving everyday individual productivity, academic and otherwise, has become a well-established IT-enabled goal reflected in baseline application and

- infrastructure investments and added-value professional development services and student-satisfaction services.
- b. Information productivity as a culture of evidence: Education leaders recognize the need to improve access to and the accuracy of enterprise information as a key to creating a culture of evidence and accountability. Cultural resistance, however, typically stymies the effective use of new reporting and analytics systems. Only sporadically have leaders been able to synchronize culture with business-intelligence tools to analyze and redesign the educational models and processes that affect productivity and the completions priority.
 - c. Learning productivity as a culture of performance: Accounting for performance is not the same as improving performance. Too few leaders synthesize and connect the evidence of performance with actionable plans for tapping IT's enabling role in increasing productivity, especially in terms of the core learning mission – “learning productivity.”
12. Education fails Globalization 101: “Globalization” translates for many education leaders as increases in foreign-student enrollments and the opening of branch campuses in other countries. Globalization, however, is a broader process of IT-enabled innovation and service process redesign that has increased productivity and competitiveness in most other sectors of the economy. To pursue the completions priority and its attendant challenges will require significant increases in mission productivity (learning productivity) and, thus, also the strategic use of IT as a productivity tool in education as outlined immediately above. Yet, today's three primary IT-enabled learning productivity strategies are too often ignored in education, even though they have been proven to improve student access and success while also stabilizing or reducing per-student expenses and, thus, improving mutual affordability to education providers and education's external investors. These three overlapping IT-enabled strategies are:
- a. The external sourcing and partnering strategy: As described in Thomas Friedman's “flat world” book, IT-enabled partnering and external sourcing can improve quality and reduce costs in non-core service functions – in the case of education, these functions could be IT leadership and management, marketing and recruiting, academic program development, retention, grants management, institutional research, enrollment management, advancement management, performance management, and so on.
 - b. The flex program and service redesign strategy: Optimize for the convenience and efficiencies of online asynchronous self-service options in all academic and administrative service functions, while also responding in a timely manner to requests for individualized assistance (using toll-free call centers, walk-in support centers, real-time appointments with instructors and tutors online or in-office, and so on). (Most students need help in learning.)
 - c. The course redesign strategy: Redesign high-enrollment core or foundational courses for measurably improved learning outcomes and reduced per-enrollment expenses (as pioneered by the National Center for Academic Transformation).
13. Lack of interoperability of educational processes and data: The global education marketplace is a patchwork of “gated” completion opportunities. Each opportunity is accessible under unique gating factors for admission and completion. Each opportunity results in records and credentials that are difficult to compare and transfer across educational and governmental boundaries in order to make education as seamlessly portable and affordably accessible as possible to the underprepared, needy students who will increasingly weight the expanding pipeline. Critical data elements, such as privacy-secured student and instructor identifiers, do not persist across institutional and other boundaries, and thus weaken the longitudinal analyses and development of the peer-group profiles needed to improve educational research and to open up the education marketplace. In a more transparent marketplace, learners could more readily identify optional pathways through a life of learning, and learning would become a portable, trusted currency valued by both learners and their employers and governments.
14. Risky economic governance: As a means to sustain a natural resource of significant common-good economic value, collaboration among all beneficiaries is a better bet than either private control or governmental control/regulation. The body of research justifying that advice made Elinor Ostrom a 2009 Nobel Laureate in Economics. If heeded, her advice might have prevented the recent BP oil

spill. Ostrom’s work is being adapted successfully, if unknowingly, to other resources of common-good economic value. For example, the Internet and the World Wide Web are each economically governed through a broadly representative collaboration – respectively, the Internet Engineering Task Force and the World Wide Web Consortium. Now that education is a common good of significant environmental, economic, and civic value, it deserves, but does not have, economic-governance collaboration among education providers and education’s external investors to help restore trust among the parties while advancing the completions priority. A formal collaboration mechanism on a global scale, no doubt, would have to be an aggregation of peer-group collaborations based on geopolitical and educational boundaries and reasonably standardized membership protocols.

Systemically Addressing the Completions Priority: What Would Elinor Ostrom Do?

The interdependencies among the above challenges increase the complexity of pursuing the completions priority. Efforts to resolve some, but not all of the challenges are accordingly unlikely to prove sufficient, even in micro educational and geopolitical contexts, let alone at macro levels. In other words, thinking globally about the completions priority while acting locally on some of its attendant challenges is likely to leave many critical stones unturned. Local actions will have to be coordinated to achieve success at aggregate regional and national levels.

Even an Ostrom-like collaboration would be initially mired in the prevailing dissonance among education providers and education’s external investors (see item 9 above). Launched by a financial lever designed to motivate both education providers and education’s key external investors, however, open economic governance collaboration could become a vehicle for scaling up equitably affordable, completion-probable educational opportunities. For example, governments could catalyze open, inclusive collaboration by using the lever of public funding to rebalance financial rights and responsibilities among education providers, assessment providers, governments, and students/parents. Imagine, for instance, that primary Federal financial support for tertiary undergraduate education in the U.S. were to flow directly to students through promissory need-based grants that ultimately have to be “earned.” Open collaboration protocols for economic governance under such a Federal funding lever could include the ones below that balance rights and responsibilities among four of the major collaborating parties.

<i>Parties Represented</i>	<i>Responsibilities Incurred</i>	<i>Rights Earned</i>
Students	Submit to periodic, age-based, independent, constructivist assessments of learning readiness starting no later than, say, age 15 and persisting no longer than a first baccalaureate-level degree.	Defray the costs of services (provided by participating assessment and tertiary education providers) from a promissory individual grant account having need-based value estimated annually from IRS data, starting at birth.
Assessment Providers	Remain independent from government and education providers while privacy-securing and maintaining assessment data and concordance tables for age-based learning-readiness assessments of like purpose.	Bill a participating student’s grant account to help defray assessment fees incurred by the student.
Education Providers	Track and report a few minimally intrusive, shared accountability metrics for peer-group analysis. Maintain student, instructor, and other privacy-secured identifiers for data extraction in support of longitudinal research.	Bill a participating student’s grant account to help defray the price of learning services provided to the student.
Governments	Commit to promissory need-based grant accounts to help students pay the costs of completing learning-readiness assessments and academic programs (from participating assessment and tertiary-education providers).	Extract privacy-secured data (from participating assessment and tertiary-education providers) for longitudinal research into learning readiness and academic program completions and their costs.

Possible benefits of an Ostrom-like open collaboration partially based on the above membership protocols include the following:

- Focus and stabilize Federal support for tertiary education on need-based aid that is earned in support of the completions priority and the principle of equal opportunity.
- Encourage families to make education a major, achievable life goal for their children from birth.
- Maintain and promote a trusted national “*learning productivity agenda*” governed by the collaboration and, perhaps, initially defined to:
 - Increase the tertiary-educated proportion of the adult population.
 - Publish summary-level education-provider productivity metrics formulated to be universally transparent but compared only within peer groupings. Such metrics, for example, might be as simple as the annualized ratios of:
 - Degrees granted to unduplicated student headcount.
 - “Education and Related” expenses to degrees granted.
(E&R expenses have been defined from IPEDS data by the Delta Cost Project.)
 - Track individual learning and workforce readiness longitudinally via periodic, age-based, independent, constructivist assessments of students’ learning readiness, and use the data for
 - demographic studies of learning readiness in the population, and
 - describing the learning readiness of the student bodies of peer-grouped education providers.
- Encourage education providers to compete in learner- and learning-centric terms.
- Unbundle the education marketplace through open compliance with non-technical (and technical) interoperability protocols for the mobility of student records and academic credits and credentials.
- Use the unbundled “*learning cloud*” to promote education to families and students by providing, free of fee and as conveniently and flexibly as possible, informal online asynchronous self-service learning opportunities and resources.
- Remove the already blurred distinctions between nonprofit public, nonprofit private, and for-profit private education by extending the Federal “earned-grants-to-students” strategy to state models for funding education.
- Preserve accreditation’s formative peer-review process for institutional improvement by *a priori* requiring adherence to the above minimally invasive external accountability protocols.

Conclusion

The leverage of promissory, but earned and need-based Federal grants could catalyze the creation of a new economic governance model among education providers and education’s external investors. The Ostrom-like collaboration outlined above could not only dampen the prevailing dissonance among the major collaborators, but also fuel a revitalization of the ideal that all people are created equal. The completions priority, after all, represents a practical path to equal opportunity – and an affordable path for those willing to assume self-responsibility for periodic assessments of their learning readiness as their secondary educational experiences begin, in return for any government assistance needed to complete a tertiary program as prelude to a lifetime of learning.

Is this model affordable? Probably so, but certainly so, were Federal tax offsets for dependent children eliminated and the Federal savings redirected to promissory earned grants to needy students whose families committed from day one to education as the means to bequeath a brighter future to their children, their children’s children, and the common environmental, economic, and civic good.