Over 90 years have passed since H.G. Wells warned that, “Human history becomes more and more a race between education and catastrophe.” He implied that education would be the key to preventing or successfully resolving the environmental, economic, and other human crises that, indeed, have since ensued and more than once led us to ask education institutions to prepare citizens who can lead us through such challenges. Educating ever more people to higher levels has become the most promising strategy for meeting today’s escalating challenge to advance and sustain environmental, economic, and social justice. Completions (accredited postsecondary degrees and certificates) have become a priority common good of significant economic and human value to all vested parties in many nations. In the U.S., for example, President Obama’s 10-year goal is to increase the proportion of “completers” from 40% to 60%. To do so requires the proportion of completers to compound annually at an average rate of approximately 4.5%. That’s a tall order – especially when that proportion has idled near the 40% level for several decades now! A change leadership structure and willing leaders will be needed, whether based on the adaptive leadership practices cited in the title or on other models.

Challenge: The Completions Priority

Once again we are asking education institutions to help propel new economic and social capital, but success will require more completions, not just more enrollments. Scaling up completions at a realistic, but exponential rate over the next 10-20 years is the primary goal of today’s completions priority. Such an aggressive goal is subject to failure under the influence of its many codependent “moving parts.” Economic demographic trends, for example, make the completions priority at scale dependent on increasing the proportion of needy students in the education pipeline. Completion processes accordingly will have to become mutually affordable to the operating budgets of all of the governments and families that support needy students and to the institutions that enroll and credential them. Mutual affordability is unlikely, in light of three among many conflicting perspectives:

- Too many students and families find higher education unaffordable, inflexible, opaque, slow, and unconnected to the digital cloud in which people increasingly learn and communicate.
- Too many education providers grumble not only about inadequate, unreliable, and intrusively regulated government funding, but also about unprepared students and weak parental support.

“Adaptive Leadership” is a trademark of Cambridge Leadership Associates, a leadership consulting practice provided by Ronald Heifetz and colleagues from the Harvard Kennedy School and its Center for Public Leadership. Their analysis would categorize the “completions priority” described herein as an adaptive leadership issue.

I thank Felice Nudelman for contributing to this commentary, which draws on two recent EDUCAUSE papers: 1) Facing Education’s Mounting Challenges with Collaboration and IT, ECAR Research Bulletin 5, 2011, and 2) Waste Not the Learning Productivity Crisis: Transforming Educational Opportunity into Educational Assurance, EDUCAUSE Review 45, no. 1 (January/February 2010), Web Bonus.
Too many governments judge education to be too costly to public coffers, too expensive to too many students and families, overly reliant on a revenue model based on credit hours attempted (rather than on credentials completed), unaccountable, and underperforming in other ways.

Each perspective highlights a specific aspect of “mutual affordability” – affordability of net tuition to needy students and families, affordability of the operating costs incurred by education providers offering a traditional “quality” education, and affordability to governments and other funding sources that are investing in making education more affordable to needy students and families. This paper examines a new possibility for redesigning the compact between education providers and education’s external investors to the mutual economic benefit of all parties – while also scaling and sustaining an education enterprise that is critical to advancing social, economic, and environmental justice.

Another currently intractable problem that cries out for adaptive leadership is that “thinking globally while acting locally” will be necessary, but far from sufficient for scaling up completions. Any meaningful scale up will require integrating local results across a vast three-dimensional matrix of geopolitical, education-sector, and education-provider boundaries. Taken together, this micro/macro collaboration conundrum and the above three points of perceived intractability and loss call for new leadership structures that make it possible to break down the “silos” and “gated communities” that limit our external vistas from the inside. We need leadership practices and adaptive collaboration models for meeting the completions priority when there are neither scalable incremental improvements nor “interdenominational” collaborations that bring together education providers and education’s external investors for the common good of the completions marketplace.

In short, the completions priority is almost certain not to be met by well intended, but incremental improvements from within education. The completions marketplace should be redesigned to improve overall scalability, measurable impact, mutual affordability, and sustainability. To do so while avoiding intrusive government regulation and retaining local autonomy will require voluntarily confirmed “rules of the road” that enable effective completions practices at autonomous micro levels to be rolled up collectively into mutually affordable common-good macro solutions. Macro productivity thus raises the issue of “economic governance.”

**Solution: Economic Governance for the Completions Marketplace**

The economic governance of the commons can be understood as a governance mechanism designed to decrease the economic risk of a “tragedy of the commons,” a phrase connoting the intentional or unintentional abuse of a shared resource by a participating individual or entity to the detriment of the resource and all of its economic beneficiaries. Consider, for example, a grazing land shared by multiple cattle ranchers, each having unconstrained grazing rights to the land. In the absence of some form of voluntary governance protocols – rules of the road – the shared grazing land might be totally depleted when only a few ranchers expand their herds of cattle to their own economic benefit.

Elinor Ostrom became a 2009 Nobel Laureate in Economics by studying the “economic governance of the commons.” Her findings favor an economic governance model having representation from each economic beneficiary group in evolving rules of the road designed to advance and sustain common-good
natural resources – a strategy begging for adaptive leadership. Ostrom’s work refutes the popular belief that economic governance should be left either to government (through regulation and legislation) or to entrenched non-governmental organizations. Common-good resources are typically both a private and a public good but need not be natural resources. For example, the Internet, the Web, and Wikipedia are common-good resources that have recently become foundations for exponential growth in economic and/or social wealth – just what we want the completions marketplace to become.

The nonprofit, non-governmental Internet Society, for example, does not own or control the Internet. Indeed, the Internet is not wholly owned or controlled, but instead is an openly accessible common-good resource under the principle that all people and organizations are free to send and receive Internet traffic and can trust the Internet to treat all traffic equally. These rules of the road are the technical interoperability standards and protocols known as TCP/IP and are openly governed by the Internet Society and its working groups, other subgroups, and affiliates. Standing working groups, for example, include the Internet Engineering Task Force and the Internet Architecture Board, which are open and help engender trust, which virally attracts investments in innovative digital infrastructure and applications, which in turn create new economic and social wealth in the global knowledge economy. The completions priority asserts that the completions marketplace is a common good critical to economic and social progress.

**The Education Leadership Commons**

Unlike the Internet and other examples cited above, the completions marketplace is historically entrenched and change resistant. The wisdom of a crowd willing to inform and support adaptive change leadership might help create common ground in a nonprofit, non-governmental global *Education Leadership Commons* (ELC) formed for the purpose of developing and evolving open interoperability of common educational services, processes, and accountability metrics, all at a minimally intrusive, trusted level of economic governance.

Modeled along the lines of the Internet Society’s so-far successful governance mechanisms, the ELC could be operationalized through standing working groups, their advisory or governance committees, and other nested and loosely-coupled, efforts to advance and sustain educational attainment within and across the three dimensions of the completions marketplace. For example, two of many possible ELC standing working groups might provide starting points for addressing the three points of conflict and loss listed above.

1. Establish a standing “**Completions Productivity Task Force**” under the ELC to develop and maintain accountability processes and metrics for monitoring productivity in the completions market in ways that can be trusted by all of its economic beneficiaries, yet also support local autonomy. A starting point for such an agenda could be to:
   a. Publish summary-level education-provider productivity metrics formulated both to be universally transparent and to be meaningful benchmarks – the latter only when compared within peer groupings. Such metrics, for example, might be as simple as the annualized ratios of:
      - Completions granted to unduplicated student headcount
• Operating expenses to completions granted
  (Operating expenses might be refined, for example, to be “Education and Related” expenses as defined from IPEDS data by the Delta Cost Project in the U.S.)

b. Assess learning readiness independent of learning providers and governments and in the longitudinal aggregate to profile various population demographics and student bodies of peer-grouped education providers. This could be accomplished, for example, via the data from periodic, age-based, independent, constructivist assessments of students’ critical thinking and basic communication skills. (Such assessments are already available from various sources, even at the global level via the work of OECD’s AHELO project.)

c. Agree on some subgroups of the adult population for which the proportion of accredited postsecondary completions should and could be tracked in the aggregate and within most geopolitical boundaries. (The OECD and the NCES already report such metrics.)

d. Develop guidelines for mapping completions production to professional and workforce needs.

The simple metrics in 1.a are applicable in a macro context. Within micro peer groupings defined in consideration of various geopolitical and education-sector boundaries, however, ever more detailed metrics and cohort-based approaches could be formulated to drill down into those in 1.a, which have the characteristics of completions productivity metrics at a macro level of throughput.

Similarly, the learning readiness assessments referenced in 1.b are meant, not to be one centralized series of assessments, but to be drawn from a pool of learning readiness assessments that are independent of governments and education providers while admitting to age-based concordance among instruments of common purpose that address preparation for a lifetime of learning. Any number of other assessments could be utilized by governments and education providers to track learning outcomes at various levels of content and geopolitical and education-sector peer groupings. The intent is not to stifle these micro activities, but to encourage them to roll up into a macro population that is as ready as possible for lifetime learning.

2. Establish a standing “Economic Governance Council” tasked with making the completions marketplace mutually affordable and economically beneficial to education providers and education’s external investors while fostering the trusted accountability processes and metrics developed and maintained by the Completions Productivity Task Force described above. One such possibility for transitioning to mutual affordability is to consider how needs-tested grants (and loans and tax breaks based on educational expenses) might become the lever for rebalancing rights and responsibilities among the key parties involved – education providers, students/families, and external funding sources. If such funding had to be earned by both the student and any education provider choosing to admit the student, then funding sources might be more inclined to stabilize and sustain their support. An earned right carries a responsibility and might be funded with greater unanimity than a pure right in the form of an entitlement.
Funding Sources for the Leverage of Earned, Needs-Tested Aid

That governments could shift their financial support for education to promissory grants that eventually flow directly to needs-tested students who earn them is an old idea that deserves renewed attention, even if it would be resisted in many geopolitical contexts. Where government funding for completions is declining and/or becoming more erratic, however, it might be possible to attract stabilizing funding from a “we-the-people” micro contribution infrastructure designed in collaboration with the ELC Economic Governance Council on the basis of the needs-tested, earned grant (or loan or tax break) concept.

According to recent public surveys, after all, most people value education as an individual good, even though it may appear unaffordable and opaquely unaccountable to many. The phrase “we the people,” moreover, has again become a call for populist action on critical common-good problems in the United States and elsewhere. For example, Starbucks CEO Howard Schultz and his leadership team recently came up with a workable idea for creating new job opportunities while government funding and bank loans remain frozen. They have found a way to encourage and enable citizens to loan money to small businesses having plans to pursue job-creating growth opportunities.

From some combination of government and other external sources, a governance matrix of rights and responsibilities in the completions marketplace might then be based on responsibilities incurred by the financially supported student, responsibilities incurred by the educational institution that accepts revenues from that student, and rights earned by the funding source(s) for financially supporting that student. Below is one possible matrix of rights and responsibilities. Notice that the student is asked to submit periodically to the independent learning readiness assessment process described above (1.b) in order to be eligible for a needs-tested promissory government grant, loan, or tax break. The value of the grant is estimated at birth from tax data and thereafter updated annually.
## Governance Matrix of Rights and Responsibilities in the Completions Marketplace

<table>
<thead>
<tr>
<th>Economic Beneficiaries</th>
<th>Responsibilities</th>
<th>Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>Submit to periodic, independent, age-based, constructivist assessments of learning readiness starting no later than, say, age 15 and persisting for as long as the student wishes to qualify for a means-tested grant or a tax break.</td>
<td>Defray the costs of services provided by participating assessment and education providers from a promissory individual grant account having needs-tested value estimated annually from tax data, starting at birth – or from a tax break.</td>
</tr>
<tr>
<td>Assessment Provider</td>
<td>Remain transparently 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.</td>
<td>Bill a participating student or the student’s grant account to help defray assessment fees incurred by the student.</td>
</tr>
<tr>
<td>Education Provider</td>
<td>Track and openly report the shared accountability metrics maintained for peer-group analysis by the Completions Productivity Task Force. Permit privacy-secured extraction in the aggregate of student and instructor data in support of longitudinal research by funding sources.</td>
<td>Bill a participating student or the student’s grant account to help defray the cost of learning services provided to the student.</td>
</tr>
<tr>
<td>Government or Other Funding Source</td>
<td>Commit to promissory need-based grant accounts and/or tax breaks to help students pay the costs of completing learning-readiness assessments and academic programs (from participating assessment and education providers).</td>
<td>Extract privacy-secured data (from participating assessment and education providers) for longitudinal research into learning readiness, completions, and their costs to the economic beneficiaries of completions.</td>
</tr>
</tbody>
</table>

The above matrix is based on the leverage of earned, needs-tested promissory grants. There are other possible leverage points or hooks for establishing trusted relationships among education providers and their external investors by rebalancing the economic benefits of completions among the parties involved. To be sure, there will be devils lurking in the details of how to integrate economic governance across various geopolitical and educational boundaries. The potential outcomes of the above approach, however, may clarify the value of such rebalancing efforts.

**Possible Outcomes Enabled by an Education Leadership Commons**

1. Unbundle and virally expand the education marketplace through open, voluntary compliance with technical (IMS) and non-technical (ELC) interoperability standards and protocols for extracting and transferring, by mutual consent, core data about educational outcomes and costs into a distributed longitudinal data system in which:
   a. Each participating education provider and independent assessment provider has the right to capture selective privacy-secured data about its participating students and instructors as part of the contract among the parties involved.
b. Each individual (for example, student or instructor) controls a privacy-secured record and portfolio of personal educational accomplishments to share selectively with sources of funding, education, and employment – again as part of a trusted relationship of potential mutual benefit to the parties involved. (See the Educational Positioning System in the next section.)

2. Encourage parents and, eventually, each of their children, to make postsecondary completion a shared life goal. We now know, after all, that early exposure to education (pre-K in U.S. terms) is especially effective for improving educational readiness and attainment among needy children. Such encouragement is a corollary of using annual tax data, starting at a child’s birth, to estimate and annually update the value of a needs-tested promissory grant or a tax break that can be earned as long as the child submits periodically to the learning readiness assessment process overseen by the Completions Productivity Task Force.

3. Focus and stabilize government funding for postsecondary education on need-tested aid and tax breaks that have to be earned by individual commitments to learning-readiness assessments on behalf of the completions priority and its attendant principle of equal opportunity.

4. Meet market needs for professional and workforce expertise by encouraging employers to offer completions incentives to supplement the value of grants and tax breaks (according to projected employment needs).

5. Remove the already blurred distinctions between nonprofit public, nonprofit private, and for-profit private education providers that benefit from the needs-tested promissory grant program and tax breaks by encouraging ELC participation at all levels of government and market needs (demand).

6. Support an open, digital learning-cloud to provide gratis access a) to comparative information about education (and all its implications for personal and collective success) and b) also to informal, online, asynchronous learning opportunities and resources, such as free content and learning portfolios for students and instructors. (See the Educational Positioning System in the next section.)

7. Encourage education providers to compete in learning-centric accountability terms that are also learner-centric by providing options for an affordable and flexible learning experience.

8. Preserve accreditation’s formative peer-review process for education provider self-improvement by a priori requiring adherence to the above minimally invasive ELC external accountability protocols.

Conclusion

Mike Mathews (my colleague) has used the now familiar applications based on the “Global Positioning System” (GPS) technology as a metaphor for imagining an “Educational Positioning System” (EPS) enabling a suite of integrated technologies and massively interconnected data that would help deliver many of the benefits listed above. These ideas and possibilities are incentives for creating the Education Leadership Commons from an adaptive economic governance model to make the current completions marketplace more transparent, productive, and mutually affordable and beneficial to education providers and their external investors, especially to students.
Not to engage the economic governance issue for the completions marketplace risks a tragedy of the commons. Only an open economic governance entity can be trusted by, and mutually economically beneficial to, education providers and their external “investors” – students, families, governments, donors, employers, and suppliers. Moving from concept to creation of an ELC, however, will require breaking down the parochial protections that limit many entrenched marketplaces, such as the completions marketplace and its thousands of “gated communities” protected by combinations of geopolitics, education sectors, and education providers. The next step therefore lies in the paradox of organizing the “wisdom of a willing crowd” – the leaders and visionaries who recognize completions as a common good and know that we cannot meet the completions priority from inside the gates. Mathews’ Educational Positioning System is a succinct metaphor for bridging the gates and interconnecting the people, institutions, and data within them. We the people could fill in funding gaps with micro contributions as necessary. All of this would require the trust that the ELC would be created to nurture.

The time is right for the vested beneficiaries of education, including academic visionaries and entrepreneurs, to create “trust-but-verify” economic governance collaborations as a means to accelerate education’s pace in Wells’ race between education and catastrophe. Millions of us want education to win. If government can’t provide the leadership and funding stability required for victory, then we the people should do so through a social networking micro-contribution mechanism, not unlike the micro-loan infrastructure created by Starbucks and its collaborators. We are collectively the wind that could make tilting at the completions windmill not only a priority, but an achievable one.