

Assessment, Teaching, and Learning

The Gordon Commission on the Future of Assessment in Education

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Privacy and Assessment: A Conversation

In our inquiry concerning assessment, teaching, and learning in the 21st century, there is a variety of considerations to be made relative to the Gordon Commission's target — to inform and improve teaching and learning. We are exploring the implications of several related issues and possible developments in education and its assessment. One of the most exciting developments concerns the electronic technological advances in education and its assessment and the ubiquitous availability and exchange of digitalized information. In this issue of *Assessment, Teaching, and Learning*, we share an exchange of comments from several members of the Gordon Commission concerning the implications of the rapidly developing capabilities of digitally driven electronic technologies for assessment in education, and, more specifically, for issues related to access to personal information and the problems associated with the privacy of such information. The Gordon Commission has not taken a definitive stance on matters of privacy of information and assessment data. The realities of modern electronic technology and the rapidity of its changes make it difficult to attach ourselves to absolute positions concerning privacy as it relates to these technologies. Think for a moment of the contrasts between the access we have to the open spaces of the Internet and the once-held views concerning the privacy of personal information that we now offer so freely on a daily basis in social networking. Even more paradoxical are these traditional notions of privacy and capacities of emerging technologies to support 1) assessments that are embedded in teaching and learning transactions; 2) data mining; 3) relational analysis and management of learner, program and teacher

information; or 4) the distillation of assessment information from the data of electronic games. Thus it is that the members of the Gordon Commission are in dialogue concerning matters of privacy in the future of assessment in education.

Below is a synthesized thread of communication between Commission members and Professor Edmund Gordon that we present as an introduction to considerations of privacy in assessment, teaching, and learning. We hope that you read and offer comments at contact@gordoncommission.org that will help to advance our understanding of how privacy should be treated in assessment, teaching, and learning in the future.

Assessment, Teaching, and Learning is a bi-monthly bulletin that is the primary instrument of communication from the Chairperson of the Gordon Commission on the Future of Assessment in Education to a broad audience of readers who are concerned with the relationships between psychometrics and education. The intent is to use this bulletin to stimulate conversation and debate concerning the multiple purposes of assessment in education; the possibilities for the improvement of teaching and learning processes and outcomes through the more creative use of measurement in education; visions of future change in the nature and practice of education; and the need for change in the capacity of the educational measurement enterprise necessary to the needs implicit in those visions. *Assessment, Teaching, and Learning* is available, without cost to the reader, electronically and in print.

Commissioner 1: The issue of privacy is an important one. The idea that students might be assessed ubiquitously and surreptitiously — “stealth assessment” — violates common notions of privacy that most Americans value and expect. The school is a functionary of local government. A state assessment, for which such data could presumably be used, then is also a functionary of the state. Such use would be perceived by many as a serious privacy intrusion.

Commissioner 2: Agreed, and the term “stealth assessment” is creepy. And considerations of privacy relative to assessment are far beyond the consequences of an errant appearance on YouTube®, for example, especially when performance will matter or this evidence of behavior will be for high stakes.

EWG: The privacy issue is complex, particularly if we begin to consider that privacy could disappear as communication technologies become more powerful, as population density increases, and as the social nature and necessities of human groupings and their survival become more obvious and compelling. I have long ago given up trying to protect my privacy. Almost anything anyone wants to know about me can be easily revealed without my permission.

On a more practical level, if assessment, teaching, and learning do become symbiotic components of pedagogy, it will be impossible and possibly unwise to make assessment necessarily explicit or private. As with some medical interventions that also produce information concerning the functioning of the patient, it is in the best interest of the patient that the information be widely available. As probes are made part of teaching and learning in cooperative learning situations, privacy goes out the window. Given the problems of security in cyberspace and the widely spreading use of electronic games as teaching, learning, and potentially assessment devices, how will traditional notions of privacy fare? Is privacy an idea that has outlived the possible?

Commissioner 2: But should that be the way — the future of assessment? Just because we can, should we? For example, do you mind if the information about you is full of errors? Is that part of

the social compact over? It is likely not in the best interest of the patients to have their personal data widely available, particularly in light of the varied methodologies used to treat individuals. So the Health Insurance Portability and Accountability Act of 1996 is gone, too? There are options, of course, other than embracing everything communal. Some data of particular kids have severe interactions with their future options. Bye-bye to multiple chances.

EWG: Certainly there is concern should false personal information spread. The problem is that there is little one can do to protect, and society is rapidly moving to a place where it is fruitless to expect that government or even cultural mores will do so. The developing technology is making such protection impossible. Emerging cultural forms, everyday practices, make privacy more difficult to protect. And finally, individual rights, including the right to privacy, became a privileged value at a particular point in human history. There was a time when the rights of the collective were considered more important than the rights of individuals, just as there was a time when the conditions of human existence made it impossible to keep personal information secret. Growing up in a small, segregated Black community in rural North Carolina, all members of that community knew just about everything there was to know about every other member of that community and nobody worried about privacy. This is not an isolated example.

My reading of the future suggests that the advent of cyberspace, metropolitanization, modern communications, and now the combination of digitalization and globalization combine to make the world a global village and to force more attention to collective or social rights than to individual rights. Just look at what happens in the name of homeland security and/or public health.

I cherish my privacy and yours as much as you do, but I have decided to worry about things that I still believe I can do something about. To repeat, I think that my worry about my privacy is wasted effort. I no longer believe that I can protect it. And in psychological defense, I have just about persuaded myself that I do not need to. Let them gossip, if they find something to gossip about. I prefer to worry

about living my life in a way that I want to live it and in a manner that I will not regret tomorrow. If I can live a pro-social life, I can afford to ignore those who find details that they do not like. With such a life, I do not need the protection of privacy. I hope that I will have the protection of the respect of friends. If I do not have that, what good will worry about my privacy do, anyway?

Commissioner 1: There are vigorous attempts to protect privacy in the digital age, especially (but not only) when government entities are involved. State assessment is carried out on behalf of a government entity. There is concern that constantly collecting information from students for consequential purposes (“stealth assessment”) would constitute such a violation because everything the student does in the learning environment is observed. Separate from the privacy issue is concern that observing students constantly for consequential purposes could negatively affect teaching and learning practices.

Commissioner 3: Privacy is and has always been a matter of commerce between design and cultural convention. Consider when humans first designed doors. Doors provide a kind of privacy, but cultural

conventions about their use had to develop. In a similar way, as the ability to collect data in unobtrusive ways becomes more and more a part of everyday life, cultural conventions — many of which we are fighting through today with Google® and other companies — have to similarly be negotiated. Therefore, as we think, design, and act our way into the future, it should be open for debate and discussion.

My guess is that policymakers and others would find it valuable for the Commission to place this topic in sharper relief as we careen into the future of assessment and data. For sure, we can’t guarantee that privacy will be preserved. In fact, we can’t even imagine what the preservation of privacy will (should) look like. Just like in the world, before doors, it was probably very hard for people to understand a world of privacy that included doors. The world of privacy, in a data-everywhere world, is yet to be imagined. But we can fruitfully point out how the design decisions engage privacy and assessment. The comments from the Commissioners here are the sort of reasoning that I think will help policymakers and the public think about privacy and assessment in new ways.

Outlines of a Commission Paper

Outlines of a Commission Paper provides a glimpse into Gordon Commission work in real time with themes that are being developed within a collection of more than two dozen Gordon Commission Papers in progress. The present summary of *Developing an Internationally Comparable Balanced Assessment System that Supports High-Quality Learning* by our friends Linda Darling-Hammond and Raymond Pecheone is not a commissioned paper, but it helps to bridge *Changing Paradigms for Education* (Gordon et al.) from our last issue with Eva Baker’s commissioned *The Future of Testing in a Globalized World*. Each of these pieces places emphasis on understanding and developing broader epistemological understandings of assessment and its place across social structures inclusive of individual, community, government, and global

community. These considerations are imperative as we situate the value and applicability of intellectual competence within a changing world.

Part 1: An Assessment System that Promotes High-Quality Learning

The effort to create a set of Common Core Standards in the United States is grounded in a desire to create internationally competitive expectations. On the 2006 Programme for International Student Assessment (PISA), the United States saw a decline in both raw scores and ranking, consistently scoring the lowest on problem-solving items and showing a wider achievement gap than highly ranked competitors. The

Common Core Standards aim for standards that are fewer, higher, and deeper.

This paper also calls for an examination of *how* standards are taught and assessed. European and Asian nations that have steeply improved student learning have curricula explicitly focused on teaching central concepts in an organized way as well as explicitly developing higher-order cognitive skills. Examinations in those countries use primarily open-ended items that require extensive analysis and writing. School-based tasks and projects predominate and influence the day-to-day work of teaching and learning, focusing it on the use of knowledge to solve problems. There is a broad

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consensus among the examination authorities of those countries, policy networks such as Achieve in the United States, and the Obama administration that the abilities to apply knowledge, make more arguments, and conduct research are both essential and poorly assessed on a paper-and-pencil test.

Priorities for Assessment

- Assessments are grounded in a standards-based curriculum and are managed as part of an integrated system of standards, curriculum, assessment, instruction, and teacher development.
 - Curriculum guidance should be lean but clear and focused on what students should be able to *do*.
 - Curriculum and assessments must be organized around a set of learning progressions that guide instructional decisions.
 - Teachers and other curriculum experts must be involved in an ongoing curriculum development process that aligns what filters down to schools and teachers.
- Assessments include evidence of *actual student performance* on challenging tasks that evaluate 21st-century skills.
 - Assessments must examine a broad array of cross-disciplinary skills including problem solving, collaboration, analysis, synthesis, and critical thinking.
 - Priority should be given to open-ended performance tasks and school-based, curriculum-embedded assessments.
- Teachers are *integrally involved in the development of curriculum and assessments*.
 - Teacher involvement in the moderated scoring process undertaken by states is a significant professional development opportunity and should be explicitly designed to increase the capacity of teachers to prepare students.

- Assessments are structured to *continuously improve teaching and learning*
 - Assessment of, as, and for learning is designed to develop students' understanding of what high-quality work looks like.
 - The use of school-based, curriculum-embedded assessments provides teachers with models of good curriculum and assessment practice.
 - Close examination of student work and moderated teacher scoring of examinations are sources of ongoing professional development for teachers.
- Assessment systems emphasize the *validity and quality* of external assessment
 - The systems use multiple measures to evaluate students and schools. Instead of reliance on a single student achievement test, curriculum challenge, school progress, graduation rates, and other indicators are used in reporting systems.
 - Assessment and accountability systems are used primarily for information and improvement. Lower-stakes assessments can be of higher quality, because students strive for high standards measured along an extended curriculum instead of high performance measured at a single cut point.

A Conception of Powerful Learning and How to Get There

The emphasis on the role of curriculum as the lever for translating learning goals into meaningful assessment and instructional guidance is based on the idea of a curriculum that expresses the kinds of learning and performance that are being sought. Twenty-first-century skills require the development of robust, *transferable* knowledge organized around big ideas. Research has demonstrated that “usable knowledge” is not a list of disconnected facts: experts' knowledge is interconnected and organized around important concepts.

Learning that supports knowledge transfer involves organizing facts around general principles, understanding why things happen as they do, and explicitly evaluating the distinctions and commonalities amongst ideas. Assessments should seek contextualized demonstrations of the application of knowledge to complex problems.

Careful curriculum development also provides guidance that allows teachers to choose among a number of paths to get to their destination. Curriculum and assessments should be organized around a well-defined set of learning progressions within a subject area. Those progressions should be empirically validated descriptions of how learning typically unfolds within an area of knowledge/skill. An understanding of learning progressions is important for teachers to be able to properly identify gaps in student understanding and scaffold/target instruction and assessment.

Theory of Action

The proposed system includes:

- *Summative tests* that assess student progress and mastery of core concepts and critical transferable skills using a range of formats
- *Formative assessment tools* shaped around curriculum guidance that includes learning progressions
- *Professional development* around curriculum and lesson development as well as scoring and examination of student work
- *Reporting systems* that provide firsthand evidence of student performance beyond single scores

Governmental Roles

A systematic approach is needed to apply this model in the United States.

The federal government would:

- Refine the National Assessment of Educational Progress (NAEP) using the blueprints already established

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In March 2012, The Council on Foreign Relations released the report *U.S. Education Reform and National Security* (download full report here: <http://www.cfr.org/united-states/us-education-reform-national-security/p27618>). In it, the Independent Task Force chaired by Joel I. Kline and Condoleezza Rice proposes three overarching policy recommendations:

- *Implement educational expectations and assessments in subjects vital to protecting national security.* “With the support of the federal government and industry partners, states should expand the Common Core State Standards, ensuring that students are mastering the skills and knowledge necessary to safeguard the country’s national security.”
- *Make structural changes to provide students with good choices.* “Enhanced choice and competition, in an environment of equitable resource allocation, will fuel the innovation necessary to transform results.”
- *Launch a “national security readiness audit” to hold schools and policymakers accountable for results and to raise public awareness.* “There should be a coordinated, national effort to assess whether students are learning the skills and knowledge necessary to safeguard America’s future security and prosperity. The results should be publicized to engage the American people in addressing problems and building on successes.”

A response:

Of course, education is not on the agenda of the Gordon Commission as a national security issue. It is being addressed as an epistemological issue. We address changing paradigms; the specifics of shifting epistemologies; what it will mean to be an educated person; and the consideration of knowledge transfer, which addresses questions of the tension between focus on subject matter mastery and command of mental processes,

among other issues. The above listed are foundational to the problem being addressed by the Independent Task Force. We are addressing them from the perspective of what we should test for or the standards by which intellectual competence is being determined.

Education around the world must be viewed from the perspective of education for the masses and the education that a select few experience. Where we are in public education, with a few exceptions, will not make us world-class players. That is true in many places around the world. Even the international assessment program indicators are grounded in 19th- and 20th-century epistemologies. But in several places in the world, some people are being educated for the future. The Gordon Commission is trying to play in that space. It becomes a national security problem if we do not have scholars who can function in that atmosphere. We can afford to downsize our military and even tolerate a weakened economy because the 21st-century competitions will not even be knowledge-based. They will pit the conceptual abilities, the technological capacities, and the relational adjudicative abilities of the people of each nation against one another ... except that the human divisions may no longer be based on national borders. Before the end of the 21st century, the most significant divisions and loyalties may be based on virtual communities of shared ideas, ideologies, perspectives, or relational arbiters.

In such a world, the control of resources, power and privilege will be in the hands of those who share the intellectual competence to navigate and control those waters. A few people are being educated to do so. I fear that the masses of us will be returned to non-agricultural serfdom, and most of the nation states will return to colonial status. That is why national security is becoming a problem of education rather than a problem of military strength.

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- Support research on the design and outcomes of curriculum and assessment
- Encourage and fund the use of performance assessments by the states under ESEA
- Support initiatives to infuse knowledge of assessment into pre- and in-service professional development

Thinking on *The Future of Testing in a Globalized World*

Progressive considerations of educational reform and an influence on assessment are informed by:

- Culture and context (e.g., democracy, distributed versus more-controlled societies)
- Demography
- Influence of economic status
- Size
- Differential goals

Key elements of educational futures that necessitate the rethinking of assessments fit:

- Technological
- Point-to-point rather than institutional
- Multiple ways to “credentialing”
- Lifelong learning for survival
- Existing conceptual limits of assessment for these environments

From an outline provided by Eva Baker

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States — working within consortia — would:

- Create Common Core Standards
- Deploy a curriculum framework that addresses the standards
- Build and manage an assessment system that included both on-demand and curriculum-embedded assessments that evaluate the full range of standards and student progress
- Oversee and audit local management of assessment components
- Implement high-quality professional learning based on examination of student work and moderated scoring

Districts and schools would:

- Evaluate current practice in light of the new standards
- Continually evaluate and revise curricula in light of student learning outcomes
- Incorporate into the curriculum formative assessments that inform teaching and student learning
- Design and engage in professional development
- Review and moderate assessments and student work

How the Assessment System Would Operate

With the goal of implementing selective practices from around the country and world, the state consortia would:

- *Develop curriculum frameworks:* Culling from high-quality curriculum work done by the National Science Foundation and other national organizations as well as other English-speaking nations, the consortia will build curriculum frameworks from which states can organize deeper curriculum development.

- *Create a digital curriculum and assessment library:* The results of the curriculum effort should be made available at an online site that offers materials for curriculum and model syllabus building, as well as examples of formative and summative assessment tasks and instruments following the model of an Assessment Task Bank like the one recently developed in Hong Kong.
- *Develop state and local assessments:* Initially, the consortia would work to create a common reference examination that includes more analytic items than the current tests.

In Sum

It is critical that the system be constructed with the entire teaching and learning process in mind, rather than simply pushing another set of tests into a fragmented system never designed to work as an integrated whole. Decisions should be made on the basis of what schools and teachers need rather than on the need to derive publishable test scores.

In line with Chairman Gordon's thinking, *ATL* is committed to pushing forward innovative and practical considerations from scholars who take seriously the advancement of human capital through the development of strong minds. Perspectives will be anchored in the desire and need to do better in the utilization of assessment, and will be supplemented in future issues with readings, resources, and lists that help to frame the future of assessment in a way that is responsive to 21st-century learners. We look forward to public discourse and trust our readers also will make their perspectives known through contacting us.

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The Gordon Commission was established by ETS to investigate and advise on the nature and use of educational testing in the 21st century. 20195