

THE TESTING AND LEARNING REVOLUTION

The Future of Assessment in Education

EDMUND W. GORDON AND KAVITHA RAJAGOPALAN



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To Kurt Landgraf, who supported the idea of the Gordon Commission on the Future of Assessment in Education, and to the thoughtful scholars who taught me and enabled me to lead it.

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ACKNOWLEDGMENTS

In my conceptual memoir, *Pedagogical Imagination* (Third World Press, 2014), I candidly admit that in my unordinary long career, I have been intellectively parasitic. I have generated woefully few, if any, original ideas. I have freely borrowed, expanded upon, and/or transformed the ideas of others. With respect to perspective, I have been particularly docile, as I have observed carefully, listened intently, and lived spongelike in intellectually rich and stimulating environments. Like Tennessee Williams's Blanche DuBois, "I have always depended on the kindness of [others]."

In none of my work has my docility been more obvious than in my leadership of the Gordon Commission on the Future of Assessment in Education. Under the leadership of Kurt Landgraf, the Education Testing Service (ETS) created and provided the financial support for the work of the commission. ETS then loaned to me consultative guidance from four of the holders of its five endowed chairs—Randy Bennett, Michael Kane, Robert Mislevy, and Michael Nettles. ETS supported the position of the executive officer of the commission, Paola C. Heincke, and a senior research associate, Rochelle Michel; in addition, I was allowed free access to counsel from Ida Lawrence, Joanna Gorin, Alina von Davier, Pascal Forgione, and L. Scott Nelson. I have no awareness of any other institution that has invited an independent group of scholars, funded them to critique, and made available as resources some of its most senior scholars. Even more foolhardy, Machiavellian, or plain courageous was the institution's decision to place the use of all of these resources at the discretion of a critical friend, known for his absence of expertise in measurement and very well known for his independence of thought. I am indebted to ETS for this opportunity, support, and trust. It is that generosity that has made

the work of the Gordon Commission possible and has enabled the writing of *The Testing and Learning Revolution: The Future of Assessment in Education* (Palgrave Macmillan, 2015), which is my interpretation of that work.

I learned so much in the course of my leadership of the Gordon Commission. I will go to my grave still offering my thanks to the members of the Gordon Commission who served as much as my tutors as they served as my colleagues. The ideas captured here are my interpretation of what I learned from my interactions with my cochair Jim Pellegrino; executive councilmembers Eva Baker, Randy Bennett, Louis Gomez, Robert Mislevy, Lauren Resnick, and Lorrie Shepard; commissioners J. Lawrence Aber, Bruce Alberts, John Bailey, John Behrens, Ana Mari Cauce, Linda Darling-Hammond, Ezekiel Dixon-Román, James Paul Gee, Kenji Hakuta, Frederick Hess, Andrew Ho, Michael Martinez (dec.), Rodolfo Mendoza-Denton, Shael Polakow-Suransky, Diane Ravitch, Charlene Rivera, Lee Shulman, Elena Silva, Claude Steele, Ross Wiener, Robert Wise, and Constance Yowell; consultants to the chair Carl Kaestle, Lucius Outlaw, Sharon Lynn Kagan, and Kenneth Gergen; and consultants to the commission Jamal Abedi, Russell Almond, Eleanor Armour-Thomas, Lloyd Bond, A. Wade Boykin, John Bransford, Henry Braun, Tony Bryk, Li Cai, Robert Calfee (dec.), Madhabi Chatterji, Greg Chung, Dennis Culhane, Carol Dweck, Howard Everson, John Fantuzzo, Roy Freedle, Angela Glover-Blackwell, James Greeno, Kris Gutiérrez, Edward Haertel, David T. Hansen, Norris Haynes, Jeffery Henig, Cliff Hill, Stafford Hood, Gerunda Hughes, Daniel Koretz, Zeus Leonardo, Alan Lesgold, Charlie Lewis, Robert Lin, Robert McClintock, Raymond McDermott, Fayneese Miller, Luis C. Moll, Michelle Moody-Adams, Aaron Pallas, Thomas Payzant, David Pearson, Douglass Ready, Judith Singer, Mary Kay Stein, Donald Stewart, Hervé Varenne, Ernest Washington, Dylan Wiliam, John Willett, Mark Wilson, and Dennie Palmer Wolf.

"To Assess, to Teach, to Learn: A Vision for the Future of Assessment," the Gordon Commission's technical report, of which this book is a summative comment, is essentially a statement of some of what I learned from these thoughtful friends. I acknowledge

with deep gratitude the assistance of Kavitha Rajagopalan, my editorial associate, in getting this message written in prose that can be widely understood. As she gained in her understanding of the measurement science and how it has been used in educational assessment, Kavitha was able to help me explain its limits and potential to a broader audience than currently concern themselves with these questions. Sarah Nathan, our editor at Palgrave Macmillan, has supported the publication of this work since her initial encounter with the material.

I wish that I could have written a scholarly treatise descriptive of what is to be done to better enable the sciences that inform assessment to best serve the needs and development of effective learning persons and those who teach them. Rather, what we have written is largely speculative and borders on wishful thinking. It has been observed that much of our thinking is more visionary—more a star to guide by than a blueprint. That may be because the field of measurement has dominated the field of assessment with a focus on the measurement of the status of learners' developed abilities. Our society has seen greater value in looking backward to see what we have done and who has achieved or not—in other words, knowing what students know—than it has been concerned with learning how to create ability—or, enabling learning and effective teaching. We believe that appropriate assessment for teaching and learning can inform and improve pedagogical processes and outcomes. Assessment can be analytic of process and can be educative.

We do not yet know how to do that well. But we acknowledge that we hear and see weak signals that the visions in the minds and works of a growing number of us are achievable. Guiding stars today, the blueprints are coming! We are grateful for the vision of what we believe is possible and the challenge to try.

EDMUND W. GORDON

THE GORDON COMMISSION AND A VISION FOR THE FUTURE OF ASSESSMENT IN EDUCATION

Conceptions of what it means to educate and to be an educated person are changing. The practice of the teaching and learning enterprise is broadening and expanding—as is what we demand of it. For many decades, we have focused our efforts at education reform and assessment on increasing accountability throughout the system of education—which has at the very least forced this dynamic and eclectic enterprise to constrict. Indeed, we may even have compromised the quality and capability of US education in the interest of meeting certain accountability criteria. At the same time, educational assessment has failed to incorporate or even respond to the many new developments in epistemology, the cognitive and learning sciences, as well as in pedagogical technologies. These realities are narrowing—possibly even stifling—creativity and flexibility in how we teach and learn. It was our growing concern about the long-term impact of this narrowing—and how it may limit us as a society from responding both to our democratic ideals as well as the very real challenges of the twenty-first-century marketplace—that led us to create the Gordon Commission on the Future of Assessment in Education at the generous invitation of then president and CEO of the Educational Testing Service, Kurt Landgraf. We convened in 2011, and as we began our inquiry, we also quickly came to the consensus that changing conceptions of-and practices in-educational assessment are making many of the capabilities of traditional conceptions and practices in educational assessment obsolete. The work of the commission rests

on the assumption that assessment in education can, and indeed should, inform and improve teaching and learning processes and outcomes.

Over the two years it was active, the commission sought to distill and connect the transformative ideas of leading and creative minds from a number of disciplines and emerged with a set of core issues and ideas. Those notions were never interwoven into a single text that might be communicated to a broader audience of stakeholders in the education enterprise—not just scholars of pedagogy and measurement science. This book is the attempt to interpret the concerns of the Gordon Commission to the very diverse community of stakeholders in the education enterprise and educational testing.

The education of our children concerns every person in the United States—they are our greatest resource and our strongest buttress against the torrential changes heading our way in the twenty-first century, such as changes in how the United States interacts in the global community, changes in how we live and work, changes in how we respond to growing mobility and diversity, and changes in the availability of data and how it affects our lives. And yet, the prevailing tone in the debate around education reform is rife with blame and accusation—the stuff of short-term politics. With this book and the work of the commission that informed it, we wish to move the debate around education reform away from this unproductive line and toward a conversation in which we apply the wealth of scholarship on how people think and learn toward enabling all learners in the United States. to become the most intellectively developed they can be. We believe that, with a simple shift in perception, we can begin to reenvision assessment not just as a tool for measuring students and sorting them along a hierarchy for the purposes of holding students, teachers, and even entire school systems accountable, but instead as a tool to help us understand the processes of teaching and learning and to improve the quality of our educational interventions—so that we may enable all students to develop to the full extent of their native-born ability. We believe that all students—regardless of race, linguistic background, socioeconomic status, family life, whether they live in a city or country or

suburb, whether they are well-fed or hungry, or any other way we choose to divide our learner population—are capable of learning and achieving what I call full "intellective competence" (a concept I discuss in detail in chapter 4, which generally refers to a capacity and disposition to adapt to, appreciate, know, and understand the phenomena of human experience to make sense of the world). The challenge for our education system is not to determine whether or even why a student has failed to achieve but rather to enable that student to learn and develop as fully as she is able, so that she may navigate the world around her, live a full life, and yes, contribute as fully as she is able to her society. So, although this book and its contents are the business of every single person who is invested in the education of our children, in the interest of effecting the most rapid and wide-ranging transformation, we are speaking here to you, the people who are capable of influencing and transforming how we view, use, construct, and practice assessment in education today.

The primary objective of the book is to convey how we may employ existing and emerging technologies, ideas, and theories toward responding to the pedagogical and assessment challenges of the twenty-first century, and how we may incorporate long-accepted ideas from the behavioral sciences into the practice of educational assessment. While many of these ideas—such as the importance of context and perspective—are beginning to be accepted and practiced in the behavioral sciences, they are relatively new to the field of measurement sciences, which historically has actively sought to remove both the test taker and the task being tested from any reallife context. This is one of the most radical and significant contributions of this work: it challenges education policy makers and practitioners to allow assessment to benefit from a broader range of well-developed epistemological scholarship, as well as from relevant emerging technologies, in order to address long-standing flaws in our educational assessment and to more effectively meet the needs of learning and teaching in the twenty-first century. The Gordon Commission on the Future of Assessment in Education has attempted to synthesize emerging scholarship in the many disciplines and practices that have meaningful guidance for the field of assessment and to initiate a society-wide dialogue on how we

may begin to shift from assessment *of* education (where we have been and what we have achieved) to assessment *for* education (how teaching and learning function and can be improved).

The conversation has begun. In the two years since the commission concluded, its message has been disseminated far and wide in scholarly circles. Its papers have been abstracted, excerpted, republished, and expanded upon in some of the country's leading journals in education and pedagogy, and there is some initial discussion underway of creating a permanent, standing committee on the future of assessment for education at the National Academy of Education. At the same time, the ideas encapsulated in the Gordon Commission's body of work, which are generated, supported, and endorsed by leading thinkers in the field of education, will require a great effort to adopt into practice. With the adoption and rollout of the Common Core State Standards in the humanities and the forthcoming standards in science, we have both the public's attention and sense of urgency focused on educational assessment. While we on the commission applaud the Common Core's focus on the development of so-called higher-order thinking and twenty-firstcentury competencies, we maintain that efforts to assess whether these competencies have been developed will still fall far short of assessment's potential to help enable the development of these competencies. Recent high-profile cheating scandals and resistance to standardized testing of these new standards serve as poignant evidence that there is society-wide resistance to assessing as we have been doing, even if we change the targets of these assessments. This resistance invites us to approach assessment with new eyes, so that we see assessment not just as it is but as it could be. It is to this end that we offer this book—a conversation piece, an inspiration, a motivation, a north star by which we, the stakeholders in the education enterprise and influencers of education policy can, in the words of M. K. Gandhi, be the change we wish to see in the world.

AN INTRODUCTION TO THE GORDON COMMISSION

The Gordon Commission was created with the mission to study the best of educational assessment policy, practice, and technology; consider the best estimates of what education will become and what will be needed from educational measurement during the twenty-first century; and to generate recommendations on educational assessment design and application that meet and/or exceed the demands and needs of education—present and predicted. In brief, the goals of the Gordon Commission were as follows:

- Inform the field and the public about the need and possibilities for change in education, as well as change in the functions, practices, and roles of assessment in education
- Increase public awareness and knowledge about assessment as an integral component of education and the possibilities for change in assessment practice
- Encourage the field of educational assessment to strengthen its capacity to factor into measurement practice attention to the influence of human attributes, social contexts, and personal identities on human performance
- Balance emphasis on prediction, selection, and accountability with equal concern for informing and improving teaching and learning processes and outcomes
- Inform long-term planning and product development in the field of psychometrics

The Gordon Commission consisted of 30 members: 2 chairpersons, 6 executive council members, and 22 commissioners. Over the course of our 2 years of active inquiry, we engaged 4 consultants from the fields of history, philosophy, policy, and psychology to advise the chairpersons, 51 consultants to the entire commission, and 10 staffers to help us organize, manage, and produce the many projects, publications, and activities of the commission. The scholars, policy makers, and practitioners who comprised the commission identified critical issues concerning educational assessment, investigated those issues, and developed position and review papers that informed the commission's recommendations for policy and practice in educational assessment. An overview of the how the commission brought these various persons together to over its two-year period, as well as the many projects, papers, and initiatives it generated, can be found in the commission's technical report (see Gordon et al., 2013).

FROM MY PERSPECTIVE ON ASSESSMENT AND TOWARD A NEW VISION FOR ASSESSMENT IN EDUCATION

My own perspective on assessment in education became the starting point for the commission's inquiries and critiques and is summarized in brief below:

- Traditional approaches to testing overemphasize the status of a narrow range of cognitive functions in learners and neglect to consider what psychologists refer to as the affective and situative domains of human performance and the processes by which these functions and domains are engaged.
- Current assessment instruments and procedures tend to neglect the diverse contexts and perspective born of different cultural experiences and cultural identities and the influence of these contexts, perspectives, and identities on human performance. While some important features of intellective competence may require than the expression of competence be demonstrated independent of such contexts, perspectives, and identities, other components and features are very much associated with these conditional correlates.
- Traditionally, testing has privileged—in its purposes—accountability, prediction, and selection to the neglect of diagnosis, prescription, and the informing and improving of teaching and learning processes and outcomes. I believe that the most important functions and purposes of measurement in education concern informing, as well as improving, teaching and learning processes and outcomes.
- Traditional approaches to assessment have emphasized relative position and competition to the neglect of criterion-based judgments of competence. The meritocratic ideology that dominates in testing may be dysfunctional to developmental democratization, particularly when developmental opportunities are distributed on the basis of prior developmental achievements and when level of prior development may be, in part, a function of the maldistribution of the opportunity to develop, learn, or excel.
- Traditional approaches to assessment privilege knowing, knowing how to, and mastery of knowledge that is held to objectively