

Professor Tony Bryk

Anthony S. Bryk is the ninth president of the Carnegie Foundation for the Advancement of Teaching, where he is leading work on transforming educational research and development, more closely joining researchers and practitioners to improve teaching and learning. Formerly, he held the Spencer Chair in Organizational Studies in the School of Education and the Graduate School of Business at Stanford University from 2004 until assuming Carnegie's presidency in September 2008. He came to Stanford from the University of Chicago where he was the Marshall Field IV Professor of Urban Education in the sociology department, and where he helped found the Center for Urban School Improvement, which supports reform efforts in the Chicago Public Schools. He also created the Consortium on Chicago School Research, a federation of research groups that have produced a range of studies to advance and assess urban school reform. He is a member of the National Academy of Education and was appointed by President Obama to the National Board for Education Sciences in 2010. In 2011, he was elected as a member of the American Academy of Arts and Sciences. He is one of America's most noted educational researchers. His 1993 book, *Catholic Schools and the Common Good*, is a classic in the sociology of education. His deep interest in bringing scholarship to bear on improving schooling is reflected in his later volume, *Trust in Schools*, and in the most recent book, *Organizing Schools for Improvement: Lessons from Chicago* (Chicago Press, 2009.) Bryk holds a B.S. from Boston College and an Ed.D. from Harvard University.

<http://www.carnegiefoundation.org/improvement-research/approach>



Bryk's contribution to complexity thinking and school reform

Tony Bryk was a leading figure in the Consortium on Chicago School Research (CSSR) (Bryk, 2010). Over twenty years they developed a theoretical and empirical framework which is holistic, participatory and based on understanding that *"schools are complex organisations consisting of multiple interacting sub-systems. Each subsystem involves a mix of human and social factors that shape the activities that occur and the meaning that individuals attribute to these events. These social interactions are bounded by various rules, roles and prevailing practices that, in combination with technical resources, constitute schools as formal organisations. In a simple sense, almost everything interacts with everything else"*. (2010: 45). Bryk et al went on to identify essential school supports - agents, processes and structures - which were characteristic of improving schools, as measured by student engagement in learning and achievement. Each of these supports, stimulated by leadership, focus on dynamic processes of change and learning and need to be implemented tenaciously and attended to as a whole. They provide an explanation of how the organisation and relational dynamics of a school, including parents and community, *interact with work inside its classrooms* to advance student learning.

Getting Ideas into Action: Design Educational Engineering & Development

Tony Bryk is currently focusing on developing a science of improvement research

through Building Networked Improvement Communities in Education. Leading the Carnegie Foundation team, he argues that the social organization of the research enterprise is badly broken and a very different alternative is needed. He instead supports a science of improvement research and introduces the idea of a networked improvement community that creates the purposeful collective action needed to solve complex educational problems. He argues for a more problem-centered approach that joins academic research, clinical practice and commercial expertise in sustained programs of Design-Educational Engineering and Development (DEED). Carnegie have just completed the first phase of effective DEED, beginning with a set of alpha trials where a promising idea is attempted in a small number of places in mathematics teaching in US Community Colleges (Bryk and Gomez 2008; Bryk 2009). Extending this activity are beta investigations where DEED efforts deliberately focus on adapting the innovation so that it might be implemented with efficacy in more diverse settings. This, in turn, leads to gamma-level activity that exploits evidence from large-scale use to continue to improve the innovation.

University of Bristol, Centre for Systems Learning and Leadership Links

- The DEED approach to school improvement has been a focus of the MSC Systems Learning and Leadership at the Graduate School of Education, and is a focus of an EEF Bid 'Becoming Research Teachers' with the Hampshire Teaching Schools Alliances (35 schools). Capacity for this project has been built over 2 years through the HTSA supported by Professor Green and Dr Deakin Crick (Graduate School of Education).
- Castle School in Thornbury have re-organised their professional learning to align with the DEED model.
- The Carnegie Foundation supported the Complexity and Pedagogy Symposium in Shanghai, led by UoB, East China Normal University, Auckland University and Incept Labs.
- The International Centre for Infrastructure Futures project is working with industry partners who are operating in the same complex problem space – seeking to develop new business models for infrastructure projects which create more stakeholder value. The DEED approach to improvement science may well be relevant.

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