

# *Academy Matters*

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Engaging every section of the NUS community  
in transforming the educational landscape of the university

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# Teaching Academy Masterclass Speaker Series

The Masterclass Speaker Series is an initiative undertaken by the NUS Teaching Academy to host speakers of international eminence in educational matters in order to:

- facilitate the exchange of ideas, expertise and perspectives on educational, policy matters including pedagogy and innovation with TA fellows, faculty members and the university administration.
- catalyse an internal culture of research-based education and educational research.

Professor Anthony S. Bryk, President of the Carnegie Foundation for the Advancement of Teaching was the Academy's 2<sup>nd</sup> Masterclass Speaker. During his 4-day visit from 7-10 September 2015, Prof Bryk engaged in conversations with members of the Office of Provost, Senior Management from various Faculties, NUS Teaching Academy Fellows and the wider Teaching Community through a public lecture, workshops and open discussions.

This issue of *Academy Matters* presents summaries and reflections on the Masterclass Week 2015.

More information on Prof Bryk and the Masterclass activities can be found on the [Teaching Academy website](#)

# Masterclass Public Lecture

## “Learning to Improve”

### How can educational institutions ‘get better at getting better’?

In what ways can institutions of learning ‘get better at getting better’? Prof Anthony S Bryk, in his Masterclass Lecture delivered on 8 September 2015 at the National University of Singapore, offered some valuable insights into how this important question can be answered. In the previous decade, educational institutions focused on a number of strategies to improve themselves. Chief among these strategies were (a) the use of ‘accountability’ to manage performance and drive change in the education sector, (b) reliance on evidence-based practice movements and (c) fostering communities of practice in schools and colleges. Bryk suggested that in order to learn how to improve, we cannot keep doing things in the same old ways. To improve the teaching-learning process, he proposed the following guidelines:

- ▶ Be problem-focused and user-centred
- ▶ Attend to variability
- ▶ See the system
- ▶ Embrace measurement
- ▶ Learn through disciplined inquiry
- ▶ Organise in networks of practical, scientific communities

The key issue to address, according to Bryk, is not what works – the response to which often descends into rhetoric – but how one attends to the confusing variety of teaching-learning environments. How can educational institutions push more students towards the high end of the distribution graph? Once a framework has been shown to encourage improvement,

attention has to be given to its reliability across disparate locales. Due importance must also be accorded to understanding the system in which we work. Even though this ought to be obvious, in our efforts to improve the system, we frequently neglect to understand how the system functions. This is a necessary first step.

These efforts, according to Bryk, are impossible to pursue without embracing measurement. Being effective in our goal to refine our processes of teaching and learning demands that we quantify the multiple factors that affect these processes. Moreover, established techniques of disciplined learning will have to be employed. Inquiries will have to be conducted into how far each strategy is applicable in related contexts; coupled with creating a pool of expert knowledge on matters concerning the efficacy of materials and infrastructural practices. And finally, we would do well to establish structured networks that allow for safe environments for participants to share, serve as an enormous source of innovation for educators, and help us discern patterns in situations which otherwise look idiosyncratic. Pursued together, these principles hold the promise of a radically improved educational system.

Bryk developed the key ideas of his lecture by illustrating them with an array of examples, drawn from real world situations. Voices of educators talking about their practice helped the audience – most of whom are educators themselves – relate to the ideas that were discussed, and encouraged Singaporean teachers and education policymakers to think about the usefulness of these ideas in an Asian learning context.



**by Romit Chowdhury**  
**PhD Student**  
**Faculty of Arts and Social Sciences**







Prof Bryan E Penprase, Yale-NUS



Dr Stephen Lim Wee Hun, Dept of Psychology



Chair of the NUS Teaching Academy, Prof Kumaralingam Amirthalingam, presenting a token of appreciation to Prof Bryk



# Masterclass Open Discussion

## “Towards a Holistic Educational Experience in the University Today”

By Ho Han Kiat (Department of Pharmacy) & Stephen Lim Wee Hun (Department of Psychology)

As part of the NUS Teaching Academy’s Masterclass Week activities, the Academy, the Faculty of Science (FoS), and the Faculty of Arts and Social Sciences (FASS) jointly organised an open discussion on holistic education. This session was hosted by the FoS, and chaired by Professor Anthony Bryk. During the session, members of the NUS teaching community explored how educators and learners can work collaboratively towards the goal of holistic education.



L to R: A/P Ho Han Kiat, Prof Bryk and Dr Stephen Lim Wee Hun

Holistic education has the goal of developing every young person’s potential to the fullest in an ethical and nurturing fashion (Miller, 1992). To functionalize this concept, the open discussion with Bryk was developed with three objectives: (1) contextualizing the purpose of holistic education within NUS; (2) deliberating the responses of educators and methods to implement; and (3) pre-empting the obstacles to overcome.

### What is the purpose of holistic education?

Bryk began by first questioning the problem/s

that educators are trying to solve. The discussion quickly centred on the emerging reality of a volatile, uncertain, complex and ambiguous world (referred to by the managerial acronym - VUCA world). A key survival skill for the next generation to be truly “future ready” is preparedness to deal with not just the known unknowns, but also the unknown unknowns. A holistic approach to learning harnesses and stretches the intellectual, emotional, social, physical, artistic, creative and spiritual potential to nurture graduands with both depth and breadth of skills to engage in complexity, ambiguity, and diversity.

## How should educators be responding?

Educators and mentors can try to anticipate the kinds of problems that the future generation will be facing, and begin preparing them today. We can create a system that enables students to engage in not only “analysis” but also “synthesis”, to take principled approaches in complex problem-solving, so as to deal with problems that cannot be exemplified by classical case studies. This will eventually push us to rethink what and how we teach.

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It is likely that there will eventually be a collective movement towards a different organisation of instruction. Specifically, this can include holistic approaches such as problem-based learning where contextualized problem-solving allows students to discover theories applied in actual practice; flipped classrooms where students acquire domain knowledge before interacting with teachers and peers in classrooms; reinvented virtual or real classrooms which enhance system-to-system interaction and thinking; team-teaching; possibly even formalized internships within the core curriculum, and/or overseas exchange programmes (e.g. NUS Overseas Colleges) to foster cross-cultural thinking and understanding.



Prof Goh Say Song (Vice-Dean, Outreach & Admissions) from the Faculty of Science giving a brief introduction.

## Challenges in pursuing holistic education

Some challenges faced in this shift of educational approach are:

1. **The explosion of knowledge.** How can each field teach students to look for information -

delivering the fundamentals, whilst equipping learners with the skills to acquire and synthesize as yet unknown information?

**2. The right people to teach.** How can we induct new recruits and experienced staff members to new methods of teaching and give them the necessary support to become the right people to deliver holistic education?

**3. Evaluation of good teaching.** How should evaluation of educators evolve in tandem with

these changes in educational approaches, to take into account the appraisal of transformative teaching (e.g. team-based teaching)?

**4. Empowering the learner.** Higher education builds upon the foundation laid by the first formative years of formal education. How can tertiary educators instil more nuanced understandings of holistic education and advocate commitment to higher order learning among students?

## Conclusion

The discussion clearly revealed that holistic education has moved beyond the conceptualization phase to an experimental phase, where practices and complex considerations are now in the foreground. With a conscious understanding of what holistic education entails and ought to produce, perhaps we can hope to better reap the benefits of such educational reform.

## Reference

Miller, R. (1992). Introducing holistic education: The historical and pedagogical context of the 1990 Chicago statement. *Teacher Education Quarterly*, 19(1), 5—13.

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# Masterclass Roundtable Discussion

## “The Place of Educator Tracks in research-intensive universities”



The Masterclass Roundtable Discussion, “The Place of Educator Tracks in Research-Intensive universities” was held on Thursday, 10 Sep 2015 at the Acacia Room, CDTL. The session was led by Dr Adrian Lee, Department of Chemistry. Prof Bryk was present at this session to provide an alternative informed perspective.

Dr Soo Yuen Jien from the School of Computing (left) who attended this session shares his thoughts with us.

Professor Anthony S. Bryk, a world-renowned expert in the areas of education reform and improvement science, could not be a more suitable person to observe and comment on our recently reformed educator track in NUS. His friendly demeanor and insightful replies engendered a lively discussion during the “Masterclass Roundtable discussion for Educator Track” session. I would like to share two of the discussion topics that impressed me the most. The first topic revolved around the recent educator track reform in NUS. With a set of refocused

performance criteria and a better defined career path, colleagues on the track have more support, recognition and potential to further develop teaching and learning in NUS. Bryk commented that, in the US, there is a perception that as universities are increasingly focusing on research output, undergraduate education is receiving less attention. Consequently, there has been a recent trend to push US tertiary institutions for more accountability on the quality of education provided. Although teaching/educator tracks can potentially be a timely measure to emphasize the drive for

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quality education, they are an uncommon career path in US research-intensive universities. How such tracks are integrated and perceived is important.



Dr Adrian Lee leading the discussion

correlation (e.g. teachers who are in (b) are likely to be good teachers in a classroom). However, it is less clear whether this represents hierarchical achievements for a good educator, i.e. should excellent educators be doing (c) to reach the apex of their academic career? Bryk commented that educational research indeed often requires very different skillsets from disciplinary research, and it is good that there is recognition of the multiple pathways through which an educator can excel.

The second discussion topic centred on a question that has been on my mind lately. It seems that there can be three broad categories of good teachers: a) teachers who can teach a course well, b) teachers who are well-versed in SOTL and apply relevant techniques in their teaching and c) teachers who are actively engaging in SOTL and educational research. These categories certainly have

I found the roundtable discussion to be engaging and informative. Having a dedicated educator track engagement session with Bryk allowed for healthy discussion and debate on an issue that can have significant impact on teaching and learning in our institution. I would like to thank the organizers for their time and effort spent facilitating such an interesting programme.



Participants at the roundtable discussion







# The Masterclass Workshop

## Educational Improvement in the Context of Complexity - How We Need to Engage in Educational Research and Development

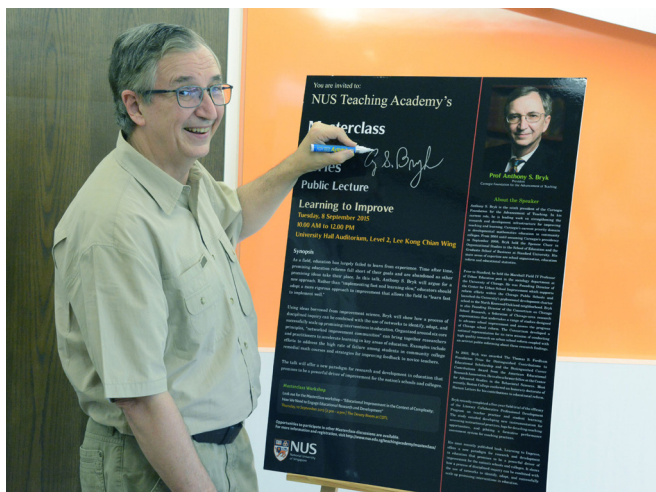
*Introducing Some of the Tools and Methods of Networked Improvement Communities*

The Masterclass Workshop was another opportunity for the NUS teaching community to interact with the Academy's Masterclass Speaker, Professor Anthony Bryk.

Through small group discussions, and a quick social experiment, Bryk illustrated the Six Core Principles of Improvement for advancing quality outcomes reliably at scale. He guided participants through the complexities of an improvement journey; many useful tools were introduced to help clarify focus on the specific problems that need to be addressed. This would help clearly define the scope and leverage points of improvement efforts, and to identify the real indicators of change and success. He also strongly advocated the use of social connections/networks to facilitate “learning exchange”, to test the validity of local knowledge and to accelerate diffusion and replication of successful strategies.

This workshop marked the end of a week of Masterclass events organised by the NUS Teaching Academy to facilitate a wide ranging conversation on education with insights from a speaker of international eminence.





L to R: A/P Chng Huang Hoon, A/P Lakshminarayanan Samavedham, A/P Alice Christudason, A/P Johan Geertsema, Prof Anthony Bryk, Dr Adrian Lee, Prof Kumaralingam Amirthalingam, Dr Seow Teck Keong, Dr Stephen Lim, Vickneswari Savarimuthu and Ng Cheng Cheng

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