

## Arts Research on Teachers and Students 2 (ARTS2): Pedagogies and Practices

Tan Liang See, Letchmi Devi Ponnusamy, Rhoda Myra Bacsal and Lum Chee Hoo

**THIS STUDY INVESTIGATED** the nature of the interactions among curricula, pedagogies and practices at the School of the Arts (SOTA) and their effects on student learning experiences, motivation, engagement, accomplishments and outcomes. It is important for Singapore—and Asia—to examine how the next generation of artists, arts educators and arts leadership can be nurtured. This is a compelling opportunity to propel and lend energy to the vision of Singapore as a Global Arts City and contribute to the 21st century arts renaissance in Southeast Asia.

### INTRODUCTION

As the only pre-tertiary specialized arts school in Singapore for youths aged 13 to 18 years, the rationale for the foundation of the School of the Arts (SOTA) can be traced back to the *Renaissance City Plans I, II and III* (Ministry of Information, Communications and the Arts, 2000, 2005, 2008) and a ministerial committee feasibility report on the setting up of a specialized arts school (2004). The school was expected to offer “a completely new paradigm of education in Singapore” through the arts to nurture “the next generation of artists, creative professionals and individuals who are passionate for and committed to the arts in a multi-cultural society” (School of the Arts, 2013).

The school aims to identify and nurture the artistic and creative talents of young Singaporeans by providing a learning environment where their artistic and academic potential can be best realized. It is hoped that SOTA graduates will be better positioned to pursue higher education in the arts or arts-related fields, or apply their artistic and creative capabilities in other fields. Students in this school are artistically inclined and have chosen to attend the school by audition and talent identification procedures. Hence, while there

### KEY IMPLICATIONS

- Development and implementation of an arts-anchored curriculum create opportunities for innovations that engage individuals to be “non-routine” problem solvers, an important aspiration of educational systems for the 21st century.
- Curriculum innovation provides opportunities for teachers to expand on their professional expertise. It should focus on the process rather than the product of curriculum innovation solely.
- Teachers need to be given the licence to infuse both fixed and fluid curriculum to generate learning experiences. This will activate teacher agency and greater teacher expertise.

are opportunities for experiencing art making, this specialized school is also interested in fostering creative effort. This has indeed led to the school's vision of viewing itself as a lab for creativity through "exploration, experimentation and discovery".

This project investigated how this specialized school dedicated to an arts-anchored learning environment was able to tap on its unique curricula, instructions and social network to foster student growth and attainment. It explored the efforts of the multiple actors involved in the planning, creation and implementation of the arts-anchored curricula, pedagogy and practices, and how this contributes to students learning outcomes, engagement and development.

## RESEARCH DESIGN

This case study involved school leaders, teachers and students from Years 1 to 6 progressively since 2009. They were recruited on a voluntary basis. Qualitative data included open-ended and semi-structured interviews, focus group discussions, classroom observations, artefacts, and case studies. Data collected from multiple stakeholders was validated, analysed and triangulated using a blend of Strauss and Corbin's (1990) systematic approach in the qualitative framework as well as Glaser's (1965) emergent theory approach. To supplement the qualitative data, substantial fine-grained quantitative data were collected via surveys from student body to yield appreciable benefits. While the quantitative findings provide empirical findings on student outcomes, the qualitative findings explain the derivation of these student outcomes.

## KEY FINDINGS

### *The Overall Case of SOTA*

In SOTA, complex reciprocal interactions as highlighted by Bronfenbrenner (1979) between the macrosystem, exosystem and chronosystem were highly visible. This involved interactions between an active evolving bio-physiological human organism and persons, objects, and symbols of its immediate environment.

At these systemic levels, SOTA played a significant role in ensuring that their learners are sufficiently immersed in the arts by meeting the challenges of their future commitments and aspirations. At the same time, important changes in the belief systems, opportunity structures, bodies of knowledge and material resources happened in Singapore at the national policy level. This has led to a growing role of the arts for the future growth and maturing of Singapore as a nation and a society.

At the mesosystem and microsystem levels, the school emphasizes both learning in the arts and academics which is catalysed by a strong focus on the exposure to different cultures. To generate creative culture, the school recruited a diverse pool of qualified and experienced practising artist-teachers and academic teachers from Singapore and overseas. The curriculum leaders and teachers identified with the creative culture and have appropriated the vision of an arts-anchored curriculum. This has enabled teachers to channel teaching practices so that the curriculum fosters "exploration, experimentation and discovery" to meet the needs of artistically inclined learners.

### *Curriculum and Pedagogies*

Given the importance of the teacher's active role in educational reform efforts, our study found that there is consistent teacher involvement in the differentiation of the arts-anchored curriculum to meet the needs of the learners. There is evidence of several unique units of instruction that were not taught in a top-down manner. Instead, ideas for the units and activities were mined from the teachers' collective experiences.

For the curriculum innovation process to progress and grow, the study has found that there is a need for teachers to be responsive and agile in making curriculum decisions. Using the Actor-Network Theory (Law, 1999, 2004; Fenwick & Edwards, 2010) as an analytic lens, the study found that there are iterative interactions between the human (artist-teachers, academic subject teachers, curriculum leaders, learners) and non-human elements (the Renaissance reports, the vision of the connected curriculum, the knowledge work that takes place in the art forms and academic subjects, etc.) in the curriculum innovation process. Teachers therefore have to constantly adjust the curricular elements of content, process and product spontaneously during the planning and implementation stages due to a combination of opportunities and limitations within the context. Such professional deliberations call on greater teacher expertise (Berliner, 1992) and agency (Priestly et al., 2012).

The school seems to have appropriated the pedagogy of disciplined improvisation (Sawyer, 2004, 2006), and the nurturance and simultaneous use of the fixed (codified standards of knowledge) and fluid (personalized and cultural aspects of knowledge) curriculum (Beghetto & Kaufman, 2011). The interplay of the fixed and fluid curriculum allows teachers and learners to achieve creative expression and experimentation, even as they develop a deeper appreciation and understanding

of conventionalized disciplinary knowledge and processes. This results in knowledge construction and the development of creativity in teachers. As the fixed and fluid aspects of curriculum interact simultaneously, they support both deep learning and creative expression. What results is a growth in learning that is both connected and generative, dispelling the fragmented nature of knowledge so that education moves away from training memories to educating minds (Perkins, 1993).

One of the outcomes of fluidity in the curriculum innovation process is that teachers felt free to take risks in their inquiry process in which teachers become resilient professionals. This fluidity therefore becomes the vehicle that empowers teachers to exercise personal choice in investing either formal or informal curriculum time or resources and create alternative educational experiences, rather than conventional high-stakes exam-oriented pedagogies. This fluidity also results in teachers being motivated to take risks in generating curriculum ideas and try out the unit of instruction together with their colleagues.

### *Student Learning Outcomes—Motivation, Engagement and Creative Experiences*

Scholars often justify for Arts Education by making associations with positive impact on student performance. The findings showed a nuance understanding of the ways Arts Education might influence aspirations and educational expectation. On the one hand, the results showed that prior experiences in the arts are an important predictor of aspirations. On the other hand, the findings also highlighted that arts qualification and specialization do not predict aspiration and educational expectations. SOTA appears to have provided extensive experiences and opportunities through an arts-anchored curriculum even for artistically talented learners without a formal arts background to aspire and set higher goals in the arts and in the academics.

In terms of engaging artistically inclined learners, the study has found that there is great heterogeneity amongst the students. Statistical significant findings emerged in studies of metacognitive patterns across art forms (Music, Dance, Visual Art and Theatre). When learning Math, Music, Visual Arts and Dance, students are reported to have similar patterns in organization and criticality whereas in learning Arts and Visual Arts, students are reported to have lower scores in organization, elaboration and rehearsal of ideas.

With that in mind, we investigated opportunities that the school provides to foster a creative mind-set,

dispositions and actions (Nolan, 2004). The results from the Year 6 students point to a higher score in proactivity and creative ability compared to their Year 1 counterparts. Moreover, Year 6 students also scored higher in creative actions, such as being methodical, which acts as a tool for creative growth. Year 6 students reported higher scores in supportive leadership, consistencies, social interaction and social factors which catalyses the creative mind-set.

Finally, the school reported the stellar performance of its first cohort of students in the 2012 International Baccalaureate Exam, and this clearly shows that despite the diversity of its student intake, the arts-anchored learning experience has added, rather than dampened the academic achievement of its students.

## **IMPLICATIONS**

### *For Policy*

The findings from the characterization of the school's different systems using Bronfenbrenners' ecological framework (1979) has several implications for the way policy needs to move in order to ensure the success of schools that aspire to be innovative.

Firstly, the role of the leaders in defining and articulating a curriculum vision that is simple and powerful is highly important to generate innovative practices. Secondly, leaders who are interested in developing innovative teaching and learning such as an arts-anchored curriculum or even legitimizing the arts in curriculum should be mindful to foster links between the human and non-human elements that allow the school to function as an "ecosystem". Thirdly, policymakers need to be alert to the linkages that occur between these different elements and appropriate the diverse networks in the organization. Such networks create order and disorder and therefore sustain a micro-climate across the macro-, meso-, chrono- and microsystems in the school.

Pragmatically, policymakers and leaders should exploit the interactions in the different systems of the ecology in the school to enable social and cultural capacity building amongst the staff and its students. Capitalizing on the interactions in the ecosystem may give rise to a sense of belonging, a greater regard for higher cognitive knowledge and processes and therefore a more rooted, knowledge-centric society.

### *For Practice*

The specific findings from all the areas of this study point to multiple implications for practice. Firstly, the curriculum innovation processes provided opportunities for professional problem-solving, and led to a deeper understanding of the nature of

curriculum that supports the guided construction of knowledge by both teachers and students. Secondly, whilst curriculum space is provided, teachers need to be given the licence to toggle between both fixed and fluid curriculum to generate learning experiences. Such teaching and learning innovations in the curriculum space activate teacher agency and greater teacher expertise. Thirdly, teacher agency will develop a sense of belonging and collaboration amongst the curriculum leaders, teachers and students—a phenomenon that is rarely seen in schools in general.

### For Professional Development

These implications should be exploited for professional learning courses that involve leaders and middle managers within the school. Highlighting the potential of curriculum innovation processes in NIE leadership programmes enables school leaders to catalyse teacher learning and growth in schools.

## REFERENCES

- Beghetto, R. A., & Kaufman, J. C. (2011). Teaching for Creativity with Disciplined Improvisation. In R. K. Sawyer (Ed.), *Structure and improvisation in creative teaching* (pp. 94–109). Cambridge, UK: Cambridge University Press.
- Berliner, D. (1992). The nature of expertise in teaching. In F. Oser, A. Dick & J-L. Patry (Eds.), *Effective and responsible teaching: The new synthesis* (pp. 227–248). San Francisco, CA: Jossey-Bass.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Fenwick, T. J., & Edwards, R. (2010). *Actor-network theory in education*. New York & London: Routledge.
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), pp. 436–445.
- Law, J. (1999). After ANT: Topology, naming and complexity. In J. Law & J. Hassard (Eds.), *Actor network theory and after* (pp. 1–14). Oxford, UK: Blackwell.
- Law, J. (2004). *After method: Mess in Social Science research*. Abingdon & New York: Routledge.
- Ministry of Information, Communications and the Arts. (2000). *Renaissance City Plan I: Culture and arts in Renaissance Singapore* (pp. 59). Singapore: Ministry of Information and the Arts, Singapore.
- Ministry of Information and the Arts. (2005). *Renaissance City Report II: City 2.0*. Retrieved from [http://www.nac.gov.sg/docs/resources/erc\\_svs\\_cre\\_chapter2.pdf](http://www.nac.gov.sg/docs/resources/erc_svs_cre_chapter2.pdf)
- Ministry of Information, Communications and the Arts. (2008). *Renaissance City Plan III: Heritage development plan*. Singapore: National Heritage Board.
- Ministry of Information, Communications and the Arts. (2004). *Report of the committee on specialised arts school*. Singapore: Author.
- Nolan, V. (2004). Creativity: The antidote to the argument culture. In M. Fryer (Ed.), *Creativity and cultural diversity* (pp. 45–51). Leeds, UK: The Creativity Centre Educational Trust.
- Perkins, D. N. (1993). Person-plus: A distributed view of thinking and learning. In G. Salomon (Ed.), *Distributed cognitions* (pp. 88–110). New York, NY: Cambridge University Press.
- Priestley, M., Edwards, R., Priestley, A., & Miller, K. (2012). Teacher agency in curriculum making: Agents of change and spaces for manoeuvre. *Curriculum Inquiry*, 42(2), 191–214. doi: 10.1111/j.1467-873X.2012.00588.x
- Sawyer, R. K. (2004). Creative teaching: Collaborative discussion as disciplined improvisation. *Educational Researcher*, 33(2), 12–20.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Sawyer, R. K. (2006). Educating for innovation. *Thinking skills and creativity*, 1, 41–48.
- School of the Arts. (2013). *About SOTA, 2013*. Retrieved from <http://www.sota.edu.sg/TheSchool/AboutSOTA/tabid/70/Default.aspx>

## ABOUT THE AUTHORS

TAN Liang See, Letchmi Devi d/o PONNUSAMY, Rhoda Myra Garces BACSAL, LUM Chee Hoo are with the National Institute of Education, Nanyang Technological University, Singapore.

Contact Liang See at [liangsee.tan@nie.edu.sg](mailto:liangsee.tan@nie.edu.sg) for more information about the project.

>> More information about NIE's research centres and publications can be found at [www.nie.edu.sg](http://www.nie.edu.sg)