Create for _____?

A Think Piece on the Priorities of Arts Education

Mary Seah

Principal, School of the Arts (SOTA)

In a complex, tech-pervasive and polarised world, how do we help our young minds navigate the future? The Principal of Singapore's only pre-tertiary arts school reflects on their mission, and ponders how creativity will unlock new potential, helping students grow into engaged citizens with fresh perspectives.

At School of the Arts (SOTA), we often ask "What would you create for?"

As Singapore's pre-tertiary arts school, we believe that artistic learners are intentional in their creative acts, and that learning and creating are intimately intertwined. Our students experience learning in diverse ways. They can create origami and other 3D structures to model and test scientific and mathematical solutions. Working in an ensemble, others create a devised play, or find new ways of advancing a tchoukball game. Yet others create to explore, for example, the concept of "monstrosity", in literary and visual forms, so that they might find a way to unravel the complexities of human behavior.

This spirit of creativity seems more critical now than ever. American anthropologist, historian and futurist Jamais Cascio coined the term BANI—Brittle, Anxious, Non-linear and Incomprehensible—in 2018, partly as a counterpoint to Mark Twain's famous saying that "history doesn't repeat itself, it often rhymes". When the world seems to "rhyme" less and less these days, BANI offers a way to help us to make sense of the future. Closer to home in Singapore, the Centre for Strategic Futures (CSF) in 2021 developed a set of 17 driving forces for 2040 to spark conversations and build foresight capabilities. What seems clear is that the world is facing an era of uncertainty and Singapore as a small country will have to figure out how to navigate and adapt to changes.

In such a future, what would we create for? Singaporean artist Tang Da Wu once shared that "artists will be artists, whether or not they went to arts school." What he probably meant was that the creative spirit of artists would not be doused, whether they are taught, supported or opposed. Their spirit of self-expression and original thinking seems innate. I would like to put forth three compelling, but certainly non-exhaustive, reasons for creative education. It is what we, the educators in SOTA, have been considering deeply in our work with students.

Create to Bring New Value

First, artists create to bring new value to the table. They do this through particular ways of perceiving the world, working through complexity, and expression. With these, there is immense potential for artists to bring value to many other fields and invite others into their own.

The *Future of Jobs Report 2023* by the World Economic Forum highlights the significant shift in skills development. The report points out that, against a backdrop of many jobs being displaced and new ones created, creative thinking was rated the most valued skill by 803 companies surveyed across 45 economies. Back home, while the *Skills Demand for the Future Economy Report 2023/2024*, published by SkillsFuture Singapore, consistently outlines the digital, green and care economies as key growth areas, creative thinking features importantly in all of these

Figure 1. A showcase of the works of graduating Literary Arts students and their teachers which seeks to challenge the boundaries of the written word and explores its potential to redefine writing. 2024. Image courtesy of School of the Arts Singapore (SOTA).

fields. Furthermore, the government's Our SG Arts Plan 2023-2027 has indicated a clear commitment to growing the creative economy, powered by excellence, innovation and internationalisation.

While we acknowledge the importance of creative thinking, what concrete steps are we taking to nurture it in our young?

At SOTA, the ground-up initiatives for arts-academic integration in its early years have now evolved into a model for integrative learning. Here, integrative learning refers to "the creative act of drawing on two or more disciplines in order to better engage with and respond to complexity"[1]. This definition rides on the creative character of SOTA learners and their propensity to draw on the arts in concert with other disciplines to navigate complexity. This complexity may take the form of ill-structured problems, multi-faceted questions, paradoxes, tensions and conundrums typical of our times.

Integrative learning in SOTA is broad, traversing multi-, inter- and trans-disciplinary learning, but this traversing needs to be grounded in disciplinary knowledge and skills. The Organisation for Economic Co-operation and Development (OECD) *Future of Education and Skills 2030* report suggests that epistemic knowledge, such as the ability to think like a mathematician or a scientist, are just as invaluable as procedural knowledge.

Similarly, the arts possesses its own epistemology. In arts education, emphasis has been placed, perhaps too narrowly, on honing technical competence. We can do more to help students see the act of creating as a conscious and flexible manipulation of disciplinary elements, methods, processes and forms. Only then can these be fit for use, and applied creatively in new and novel contexts. In 2023, Singapore's Ministry of Education updated its Framework for 21st Century Competencies and Student Outcomes to include adaptive thinking. In this light, it is helpful and illuminating for student

Figure 2. A showcase of original works inspired by the life and works of Zubir Said, the composer of our national anthem. The Artistic Director Sean Tobin, the student and alumni cast, dancers and musicians are pictured here against the backdrop of an audience of primary school students after a post-show talk. 2023. Image courtesy of School of the Arts (SOTA).

artists to seek out the methods, processes and forms of other disciplines, adapting them to their creative process, and thereby enriching and deepening ways of perceiving and inquiring into our non-linear and sometimes incomprehensible world. Anthropological methods, historical investigations, geographical stimuli, mathematical statistics and modelling, and scientific inquiry methods all bear great potential to be borrowed, adapted, and synthesised with artistic and creative processes.

In return, artistic seeing and design thinking offer the STEM and other disciplines much potential for responding to complexity. Singapore's exhibit at the Venice Architecture Biennale 2023—*When is enough, enough?*—shone a spotlight on measurement in building a loveable city. It explored questions like "Does measuring help make better unmeasurables?", "How can we tell if our cities feel well?", "Can we keep half of earth, for earth?", "Can we like caterpillars as much as we like butterflies?", "Can we engineer connection?". This was a thoughtful experiment in codifying our multidisciplinary responses to defining a loveable city, drawing on the arts, design, engineering, mathematics, ecology, sociology and more.

Singapore's tertiary institutions have modelled a strong interest in integrative learning. For instance, the Singapore University of Technology and Design (SUTD) has, since its inception, adopted such an approach to structure its curriculum. The Singapore Management University (SMU) boldly started a College of Integrative Studies in 2022, allowing students to design their own majors, defying traditional disciplinary boundaries, while the new University of the Arts (UAS) Singapore has developed a core IN-depth module to broaden interdisciplinary perspectives and nurture a deeper understanding of today's complex world.

If education is done right, the rest of the world may be persuaded to see that artistic ways of value-adding are invaluable.

Create to Remind Us that We are Human

Artists can find inspiration for their creative endeavours in so many things. Some of these could well stem from an existential crisis! In recent times, some artists create to remind us we are human.

The intersection between art and innovative technology has been a crucible for human progress for centuries. But amid its potential and ability to excite our imagination, there is also controversy. For instance, in 2018, the *Portrait of Edmond de Belamy* made history by being the first work of art generated by artificial intelligence (AI) ever to be auctioned. Created by Generative Adversarial Network (GAN), the work was sold at Christie's for a whopping $432,500! Developed by Obvious, a Paris-based AI collective, this artwork certainly challenged the legitimacy of artists, and artmaking.

Singapore's CSF, in 2021, pointed to "shifting knowledge infrastructures" and prompted us to think more deeply about the "who", "what" and "how" of knowledge creation and utilisation. A year later, ChatGPT-4 made its world debut and, in 2024, ChatGPT-4o was rolled out with the capacity to seem even more human. This has created further disquiet in the creative community and among humanists.

Yet, Sougwen Chung's 2023 performance *Realm of Silk* at the Singapore International Festival of the Arts is a fine example of a collaboration between humans and AI, a collaboration that yields full control to neither. A review in *The Straits Times* described it as "a perspective that defends the human artist without being defensive about human genius".

Generative AI (GAI) will indeed democratise artmaking, making it accessible to many. However, to tap into GAI for high quality creative work, one must not only have a compelling vision of artistic excellence, but also be open to challenging and disrupting it. While the AI-powered robotic arms in *Realms of Silk* were an extension of Chung's augmented self, she had to master computational thinking, train the arms, and respond to them in real time as co-creators for her performance. The human genius continues to triumph, but not without yielding ground to GAI. It will be interesting to study the effects of technological augmentation on an artist's identity, voice, legitimacy and reach. This, to date, is understandably still an under-researched area.

The elephant in the room is undoubtedly the issue of ethics. David Tan, in his *Cultural Connections* essay last year, touched on three important questions—whether AI may be recognised as an author; whether using copyright-protected works for machine learning ("input") and the works created from natural language command ("output") infringe copyright; and whether a fair use defence applies to the above in the context of Singapore's copyright law.

To add to the above, who might step up to develop the frameworks and do the gatekeeping? And who can we trust? Singapore's Infocomm Media Development Authority has published a Model of AI Governance Framework but these are nascent efforts. As we wait for legislation and a model of best practices to emerge, I would like to suggest four things educators could do to prepare students for this technologically transformed future:

1. **Modelling ethical considerations**

    Educators need to embrace GAI in learning and creating, while heightening the need for intellectual honesty. Schools could model an ethically thoughtful stance towards GAI, prioritising respect for the creative work of others, and building credibility through one's honest artistic practice.

2. **Developing the concept of artistic excellence**

    Arts educators could do more to distil the qualities of excellence with their students. They should do this across historical periods and cultures, considering the technologies available in contexts. Student artists need to develop a vision of artistic excellence for themselves in order not to succumb to the convenient standards normalised by GAI.

3. **Expanding disciplinary foundations; developing technological literacies**

    Artists' toolboxes can potentially be expanded by GAI if artists master computational thinking and machine learning sufficiently for these to be added to their disciplinary foundations. Schools may not be fully equipped to teach these now, but they should encourage exposure to and collaborations with industry experts.

4. **Cultivating a unique voice**

    Lastly, in consideration of the three priorities above, we should encourage our students to cultivate a unique artistic voice for themselves, knowing what GAI can help them with, while guarding what it should never replace.

Create to Inspire Deeper Insight and Greater Empathy

At its 10th year anniversary in 2018, SOTA presented a refreshed vision—"Creative Citizens for the Future". In striving toward this vision, the school has attempted to define the concept of cultural leadership for its young students.

Cultural leadership is the act of inspiring others to think, feel, and encounter the world with deeper insight and greater empathy. It is practised not just by leaders; it can be demonstrated in and outside of organisations, by people with and without appointment, rank, position or title.

We have also defined cultural leadership as distinct from traditional notions of leadership in other fields; it holds the capacity to engage with dissonance and uncertainty, and to express and hold on to ambivalence longer, so that a wider range of solutions might be explored.

CSF's compilation of driving forces foresees more tribalisation enabled by technology as weapons of mass disorientation. The government's Forward Singapore conversations (2022-2023) underscore the importance of a new social compact for Singapore amid this turbulence. How do we teach our young to have a view, but to also hold space for dissonance and be patient in engaging with complexities typical of these times? How might we encourage them to draw on the arts to characterise the ambivalent and

Figure 3. Drawing inspiration from the question "What lies beyond?", this piece is a graduation piece choreographed by SOTA Dance teacher Ms Nah Jieying for the 2024 dance cohort. 2024. Photo by Bernie Ng. Image courtesy of School of the Arts Singapore (SOTA).

define the ambiguous? And how can we guide them to be provocative in their artmaking, yet gentle in drawing people out of their echo chambers?

Thinking about the larger cultural sector, we can be thankful that Singapore's Our SG Arts Plan has outlined a connected society as one of its three strategic thrusts with clear aspirations for what the arts can do for our new social compact. Meanwhile, the Our SG Heritage Plan has also elaborated on how heritage could be a powerful unifying tool.

We will need to instill in our young the responsibility of stewarding Singapore's multicultural and multiracial society towards greater resilience. A singular narrative often makes for a brittle society, while a pluralistic tapestry creates enduring strength. If we are able to inculcate in our young a sound disposition toward cultural leadership, we can be confident that the next generation will be able to continue weaving multiple narratives into a rich tapestry.

Conclusion

There is a place for the multi-hyphenated artists of tomorrow, and they are in our schools today. They could be artists, community builders, heritage stewards, creatives and much more. What might they create for? What vision of community, nation and world do we want them to contribute to and shape?

While not all artists may go to arts schools, I firmly believe that they will be more adaptable, more ethically thoughtful, and more likely to make a positive contribution to humanity if they did. Meanwhile, schools like SOTA will continue to create conditions for our students in the arts to flourish as creative citizens.

As for us-policy makers, educators, and arts and cultural leaders, it is useful to take an occasional step back and reflect on the bigger picture: what might we be creating for? □

About the Author

Mary Seah is an educational leader and a passionate advocate for the arts. Trained in music, and having taught it in the early part of her career, she is particularly interested in the potential for the arts in shaping learning and leading in the 21st century. As a curricular leader, Seah has led numerous inquiry teams, most notably in defining the concepts of integrative learning and cultural leadership for her students at School of the Arts, Singapore (SOTA).

Notes

1. This is SOTA's definition of integrative learning. Integrative learning at SOTA is undergirded by three principles. It a) is grounded in deep disciplinarity; b) traverses multi, inter-, and trans-disciplinarity; c) cultivates learner dispositions. Developed in 2023, this model comprises three frames- the conceptual, teaching, and learning frames.

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