

Building capabilities for a complex future: Habits of mind, mindset and youth leadership

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Building capabilities for a complex future: Habits of mind, mindset and youth leadership

Huang Hoon Chng

This is an invited article based on a keynote address to the Higher Education Research and Development Society of Australasia (HERDSA), presented at the 2026 conference held in Singapore, 6–9 July.

Abstract

Is the future we keep preparing our students for already here? In this invited article, I introduce a keynote manuscript, which I presented at the Higher Education Research and Development Society of Australasia's (HERDSA) 2026 conference. Through it, I argue that the capabilities our students need for a volatile, brittle and nonlinear world are not themselves new — what is new is the urgency with which we must build them. I frame that urgency through four accounts of uncertainty, VUCA, TUNA, BANI and RUPT, gathered under the metaphor of the Grey Wolf, the unfamiliar ride we must now learn to take. From Costa and Kallick's sixteen habits of mind I draw out the three I judge most crucial for such a world: systems thinking, empathetic thinking, and a growth mindset marked by persistence and a willingness to keep questioning. I then turn to practice, drawing on three courses — in systems thinking, in empathy, and in everyday leadership — to show how these capabilities can be taught rather than merely urged. Critically, I argue that this work cannot rest with individual instructors: institutional leadership sets what faculty teach and what students get to learn. I conclude by returning to John Maxwell's image of adjusting the sails, to consider what each of us might do to equip our students not only to survive a complex future but to become changemakers in it today.

Keywords

Higher education, 21st century skills, habits of mind, systems thinking, teaching empathy; growth mindset, student leadership

Key contributions

- Argues that the capabilities needed for an uncertain future are not themselves new, but that the urgency of building them is, reframing a familiar 21st century skills debate as a question of timing rather than content.
- Narrows Costa and Kallick's sixteen habits of mind to the three the author judges most worth investing in for a complex future: systems thinking, empathetic thinking, and a growth mindset.
- Offers three worked classroom examples from two Singapore institutions, showing how systems thinking, empathy and everyday leadership are actually taught rather than only advocated.

- Identifies two open problems for research and practice: whether empathy learned as a course skill becomes a durable habit of mind, and how institutional leaders, rather than individual instructors, might embed these capabilities in the curriculum.

Prologue

It's never easy being a newcomer – this is why the warm welcome of a like-minded community feels like a warm blanket on a cold, wintry day (except that here in Singapore, it is hot and humid in July!). Unlike my dear friend, educator and poet Kathryn Sutherland (of Victoria University of Wellington – I benefited from her fantastic leadership on the International Journal of Academic Development [IJAD] editorial team some years ago) who has been to HERDSA 17 times before, my first appearance at a HERDSA conference this year was paved with more than a little trepidation. I would like all of us who have felt such anxiety going into a new domain (like those of you who said you are “new to HERDSA” or were presenting at a major conference for the first time) to always remember to extend a welcoming hand – this is empathy in action and HERDSA 2026 has proven that we have many empathetic people in our community.

HERDSA 2026 is a huge conference with over a thousand delegates, on site and online. It is all too easy to get lost in this crowd. I chose therefore to turn my anxieties away by focusing on others. This is why I made a deliberate decision to “take attendance” and made a number of people visible to the audience by mentioning and connecting with them directly at the opening of my talk. It is also why in my talk, I intentionally alluded to papers I have heard and posters I have viewed – we affirm others when we make them and their work visible. I am a staunch believer in advocacy. I see a core part of leadership work as advocacy work – to create opportunities for others who may need them. Making good work and good people visible is a simple way to advocate for others.

Keynote manuscript (with some editing and author's comments added)

We gathered here in hot and humid Singapore for Higher Education Research and Development Society of Australasia (HERDSA) 2026 in early July. We could complain about the heat and humidity. We could pray that the days will turn cooler. OR, we could devise creative solutions to adapt ourselves to an unforgiving environment. That was what one delegate, Kathryn Oxborrow Vambe, did. I saw her keeping cool with a little hand-held fan at a HERDSA breakfast and I thought to myself: here is a colleague who chose not to complain or to hope for cooler temperatures; instead, she came with a little fan to keep cool – that is what I call “adjusting her sails”!

I want to tell you a story about worms, birds and wolves. But first, let me start with this piece of leadership advice from John C Maxwell (2019), who says:

“The pessimist complains about the wind.

The optimist expects it to change.

The leader adjusts the sails.”

Let’s keep Maxwell’s words in mind throughout this talk.

The HERDSA conference theme got me wondering – what is this re-envisioning that we are asked to do? Leadership guru Simon Sinek (Sinek, 2009) has taught us to always “start with why”, and so I ask, to what purpose does a re-envisioning exercise serve? What is it for? Who is it for? Why do it? Why now?

I’m also fascinated by the reference to “tomorrow’s learners” – are tomorrow’s learners different from today’s learners? What’s new? “What has changed?

My short answer is, the TYPE of learners we need to have today or tomorrow or in the future is not new. The so-called 21st century capabilities required are not new in themselves – we have seen the list many times before. You will notice that the title of my talk alludes to the trinity of habits, mindset and leadership. There is nothing new here either.

This talk is not about sounding alarm bells — it is an urgent call for action, for us as educators to intentionally reflect on this reality, and to actively invest in our students’ development beyond the academic. What’s new, for me at least, is the URGENCY that calls for our learners to pay even closer attention and to develop specific habits of mind, mindset and leadership skills. What’s new are the UNCERTAINTIES that are coming our way. Which then begs the question: what capabilities should we as educators and students invest in?

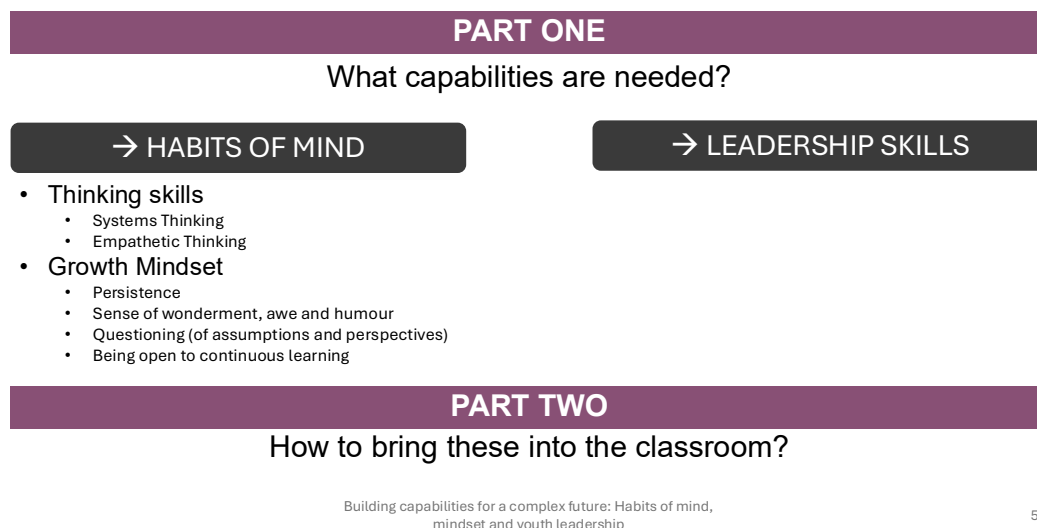
Structure of talk

This talk is in two parts, as Figure 1 sets out.

Figure 1

The two parts of the talk: capabilities and classroom practice

Building Capabilities for a Complex Future: Habits of Mind, Mindset and Youth Leadership



The first part is conceptual and focuses on the capabilities that I think are most crucial for a complex future. In the second part on practice, I suggest WHAT we as educators and institutional leaders CAN and MUST do to empower our students with these capabilities.

Part one: What capabilities are needed?

The wolf metaphor

Let's begin.

First, I want to frame the uncertainties and exciting adventures ahead by introducing the metaphor of the Grey Wolf.

My colleague Adrian Kuah, Director of the NUS Futures Office at the National University of Singapore, once posted on LinkedIn about a Russian tale featuring the Grey Wolf that confronted and devoured Ivan's horse (Kuah, 2026). We must remember — this is a Russian tale — the hero has to be someone named Ivan! The result was that Ivan found himself without a horse and was forced to accept a ride on the Grey Wolf through what Adrian characterised as "strange and unfamiliar paths", filled with the often-dark adventures of these fairy tales. Adrian went on to say:

"We live in the Time of the Wolf. Our previous ride was too domesticated. Too safe."

Given that this is the time of the wolf, my colleague Lynette Tan asked in her LinkedIn post, “how do we not merely survive, but thrive?” (Tan, 2026). I like this framing — we and our learners must find new ways to thrive, not just cope with this threat.

Adrian’s interpretation of the wolf tale both fascinated me and spoke immediately to me as I prepared for this HERDSA talk. You may say the wolf came to me at exactly the right time.

Riding on the Grey Wolf metaphor, I believe the re-envisioning of higher education is motivated by the fact that we no longer stand on familiar grounds – what we think we know has changed.

We and our learners must now leave the comfort of what felt like certainty and ride with the Grey Wolf into the Great Unknown. This then is the contextual challenge that requires our urgent attention to specific capabilities that may constitute a response to a complex, uncertain and even dangerous future.

Mary Wright, who gave another of the HERDSA 2026 keynotes, asked in her – what does pedagogical leadership look like in an unknown future? I leave her and you to wrestle with that difficult and important question. Here, I want to show you the four ways of making sense of the undomesticated future that is confronting us; four similar yet slightly different menacing shades of Wolf-grey.

VUCA, TUNA, BANI, RUPT

First, many of us have heard of VUCA, a term well used in the 1980s and 1990s to describe the challenges of the future. VUCA stands for Volatile, Uncertain, Complex and Ambiguous. The focus is on the speed of change and a call for future leaders to learn to live with surprises and complexities; to be adaptive.

Second, originating from Oxford University’s Business School came TUNA, which stands for Turbulent, Uncertain, Novel and Ambiguous. TUNA draws attention to new and unprecedented interactional dynamics that will require creative leadership.

Beyond these two came a third perspective, BANI, from anthropologist and futurist Jamais Cascio. Cascio saw the new world as one that “rejects structure”, that is chaotic (Cascio, 2020). BANI denotes Brittle, Anxious, Nonlinear and Incomprehensible, a perspective that urges us to attend to the geopolitical and environmental stresses that bear down on the way we work and live.

Finally, there is RUPT – Rapid, Unpredictable, Paradoxical and Tangled. RUPT exhorts leaders to practise learning agility; to collaborate and build community in what is called a

“true lasting interdependence”; and to leverage on polarities to manage the paradoxical (Center for Creative Leadership, 2019).

These are the four variants of Grey Wolves, all threatening in their own ways. This VUCA/BANI reality is no longer something we have the luxury of preparing for — it is here.

What capabilities would you say our students need to negotiate such unsafe terrains?

If we Google for the capabilities needed in the 21st century world, we get familiar lists of important skills that include cross-cultural literacy, self-directed learning, and social and emotional skills.

In her HERDSA 2026 paper presentation, Himani Chugh of the University of New South Wales alluded to a skills taxonomy of nine enduring human skills – quite similar to any list you may have encountered. I won’t be addressing these per se. What I do want to do is to direct our attention to two key skills clusters that are reflected in the title of my talk – habits of mind and mindset.

Habits of mind

California State University Emeritus Professor Arthur Costa and consultant Bena Kallick defined “habits of mind” as “having a disposition toward behaving intelligently when confronted with problems to which we do not immediately know the answers” (Costa & Kallick, 2018, para. 2). Such habits of mind consist of “a composite of many skills, attitudes, cues, past experiences, and proclivities.” By ‘habits’, “[i]t means that we value one pattern of thinking over another, and ... choice making about which pattern should be [activated]. It includes sensitivity to the contextual cues [in making this decision]” (Costa & Kallick, 2018, para. 3). Essentially, it means having at our disposal a set of thinking and decision-making skills and a certain mindset that allows us to appropriately navigate different situations. Among the 16 habits that were identified by Costa and Kallick, I have gathered a smaller subset under two themes. One is *thinking skills*” and the other is *growth mindset*”.

Theme 1: Thinking Skills

- a) Thinking and communicating with clarity and precision
- b) Thinking flexibly and thinking interdependently
- c) Thinking about thinking (metacognition)

First, on thinking in relation to effective communication, Costa and Kallick (2018, para. 26) noted that “Language and thinking are ... two sides of a coin, they are inseparable. Fuzzy language is a reflection of fuzzy thinking”, and that language refinement plays “a critical role in enhancing a person’s cognitive maps and their ability to think critically”. Thinking and

communicating with clarity and precision therefore help to untangle the complexities and render complex issues more comprehensible.

Second, apart from thinking clearly, one also must think flexibly and interdependently, able to switch between a macro-centric, bird's-eye view and a micro-centric, worm's eye perspective. Thinking interdependently allows us to “draw energy from one another and seek reciprocity ... to think in concert with others and to find ourselves increasingly more interdependent and sensitive to the needs of others.” Problem solving has become so complex that no one person can go it alone” (Costa and Kallick, 2018, para. 34-35). This is a skill that I will come back to again later.

And third, to turn thinking on to itself – going meta, to question our own thinking. Metacognition is our ability “to be conscious of our own steps and strategies during the act of problem solving, and to reflect on and evaluate the productiveness of our own thinking”, and it “means becoming increasingly aware of one's actions and the effect of those actions on others and on the environment ... It involves being conscious of the need for midcourse correction if the plan is not meeting expectations” (Costa & Kallick, 2018, paras. 16–17).

Clear, precise, flexible and metacognitive thinking skills are what we develop in all our courses when we teach effective communication skills and critical analysis. I want to move us along to focus our attention on the skill of “thinking interdependently”, to offer a connection to two other forms of thinking that I feel are important.

(a) Systems thinking

The first is systems thinking. The National Research Council (2010, pp. 63–64, as cited in Gilissen et al., 2020) defined systems thinking as “the ability to understand how an entire system works, how an action, change, or malfunction in one part of the system affects the rest of the system ... It includes judgment and decision-making; system analysis and ... evaluation as well as abstract reasoning about how the different elements of a work process interact”. In short, systems thinking is about understanding contexts and the dynamic interactions between interdependent subsystems. It is a holistic and strategic approach that “enables leaders to anticipate unintended outcomes and identify smart leverage points on which their organizations can focus resources” (Johnstone-Louis, 2025, para. 3).

Learners need to think in systems to confront the nonlinear novelty of a TUNA world where there is structural turbulence and no ready-made playbook to guide them. Being able to zoom in and zoom out, from worm's eye to bird's eye, are capabilities that I think will be of absolute importance, because understanding system dynamics helps to generate clear and precise leverage points. I therefore believe that effective future leaders need to be systems thinkers; to learn to command what has been called the balcony and the floor, to negotiate the dynamics of the interdependencies in an ecosystem.

(b) Empathetic thinking

The second is empathetic thinking, much needed for managing the collective anxieties presented by a BANI world. Empathy has been variedly defined by various practitioners – the definition that resonated most for me speaks to an “emotional generosity, sensitivity, and attention” (Stebletsova & Torubarova, 2017, as cited in Numanee et al., 2020) towards others. Empathy is a form of consideration that creates a person-to-person connection that bridges the different segments in a community. It enables us to create and strengthen human relationships through these interdependencies, to build up the community assets, to ease our anxiety level. Empathetic thinking is perspective-taking. It includes being able to actively listen and appreciate alternative viewpoints. What empathetic thinking does then is to provide the community bonds to help to enhance individual resilience.

Both these forms of thinking – thinking in systems and thinking empathetically – are what I consider to be crucial habits of mind that we do well to pay attention to when faced with a challenging future.

Theme 2: Growth Mindset

Now, let’s turn to another crucial habit of mind – the growth mindset.

Many of us are familiar with Carol Dweck’s (2006) work on fixed and growth mindset – let me highlight key features of a growth mindset that constitute the capabilities needed for an uncertain world. These are:

- a) Persisting and remaining open to continuous learning AND
- b) Posing questions and responding with wonderment and awe

“Efficacious people [are said to] stick to a task until it is completed. They don’t give up easily.... [Being able] to sustain a problem-solving process over time, they are comfortable with ambiguous situations” (Costa & Kallick, 2018, para. 7) – this characterises the persistence that contributes to a growth mindset that humbly accepts that we don’t always know or that we know very little. This spurs us to want to keep on learning, and to be comfortable with the uncomfortable. Equipped with this mindset, the ride on the Grey Wolf is no longer a ride into danger but a ride towards new discoveries.

“Efficacious people [are also known for their] ‘I can’” attitude (Costa & Kallick, 2018, para. 30). They respond with wonderment and awe when confronted with challenges. They rejoice in asking questions, which enables a healthy curiosity and sense of adventure in the face of change. It is through asking questions that we arrive at responses that can shatter the outdated assumptions and brittleness which are creating so much anxiety in our community.

This then, is how we can confront an unprecedented challenge, by persisting and asking questions that will lead us to untangle a problem and possibly to discover fresh ways of seeing and knowing.

Though the world may be complex and filled with uncertainties, I believe that if they are equipped with a growth mindset characterised by a spirit of persistent and continuous learning, our students will not only be successful *tomorrow's learners* — they can also be capable changemakers in our community today.

This marks the end of this first segment on the capabilities needed for a complex future.

If you agree with me that systems and empathetic thinking and leadership skills are the capabilities urgently needed for a complex future, then let's ask, what can we as educators and institutional leaders do to help our learners to develop these capabilities? As Natalie White-Wall (2026) of Western Sydney University asked in her post-conference LinkedIn post, how could we “embed [all these] in [our] teaching”?

I will share three quick stories about how these skills have been brought into the classroom.

Part two: How do we bring these into the classroom?

Story 1: Thinking in systems

In their paper “Bringing systems thinking into the classroom”, Gilissen et al. (2020) noted that “systems thinking has been included in many curriculums internationally” since the early 1990s (p. 1253), across fields ranging from earth science and geography to chemistry and biology (p. 1254). Here at the National University of Singapore, the Residential College 4 (RC4) curriculum at University Town requires all our RC4 first-year students to access courses that are taught using a systems thinking frame. For example, my colleague Naviyn teaches a course called “Thinking in Systems: Diseases and Healthcare” as a part of a bigger slate of junior seminars that introduce systems thinking and system dynamics as a signature theme in the college curriculum.

Through the focus on disease outbreaks and the healthcare response system, Naviyn explicitly inculcates systems thinking skills step by step:

- a) First, Naviyn teaches students the language of systems thinking – his students are taught a vocabulary that includes concepts like *components*, *hierarchy*, *boundary*, *interactions*, and *feedback loops*.
- b) Second, this new vocabulary helps to develop a mental model that enables students to talk and think systemically and systematically – to grasp the components of a

system and their interactions, thus paving the way for students to grapple with a complex health situation as a system that is analysable into components, factorial interactions and feedback loops.

I had the opportunity to learn from a student project that Naviyn recently supervised.

The project seeks to understand the factors that can influence the optimal operational level of intensive care units (ICU) in Singapore. Applying both a data-informed stock-and-flow model and a system dynamics simulation technique to Singapore's COVID-19 admission data, the student was able to show that the longer a patient waits to be admitted to ICU, the longer the ICU stay for them is likely to be; and this interaction of delayed admission and length of stay in ICU is what contributes to system stress. Wait time is thus identified as the point signal for active intervention to anticipate ICU overload. This form of 'thinking in systems' is made visible and comprehensible to learners when instructors like Naviyn teach about systems flow and causal loop interactions, and guide students to map, model and simulate the details of system dynamics.

Figures 2 and 3 below were developed by Naviyn's student, Aditya Jayaraj and Pang Wan Leek respectively as part of their project course (reproduced with permission from the authors and supervisor).

Figure 2

Stock-and-flow diagram of the coupled ICU–ward model. Diagram by Aditya Jayaraj for the student project Regime Behaviour in a Finite-Capacity ICU System. For illustration only

5 Dynamic Hypothesis

The model aggregates ICU beds into a single stock and all non-ICU beds into a ward stock, as the focus is system behaviour rather than bed-level detail. The stock-and-flow structure is shown in Figure 3.

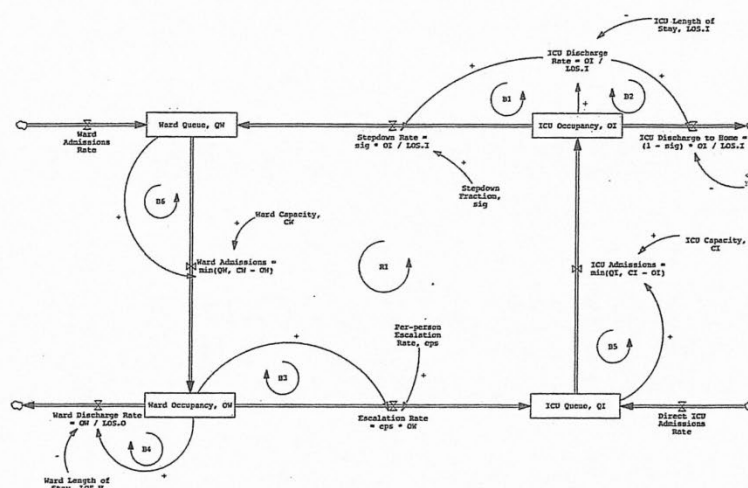
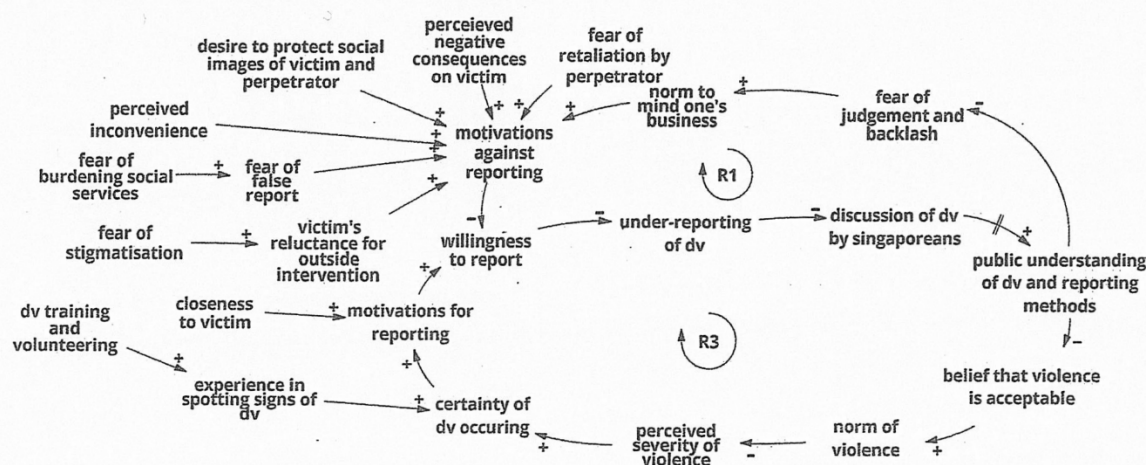


Figure 3

Causal loop diagram from Pang Wan Leek's 2026 student project, Silence Against Violence: To What Extent Will Singaporeans Report Domestic Violence? For illustration only

3.2.3 R3: Complexity of Domestic Violence



The power of acquiring these systems thinking skills is tremendous, and it is the first step to inculcate an invaluable habit of mind for the learner, to be able to zoom in and zoom out – to confront a complex phenomenon using both a worm’s eye view and a bird’s eye perspective.

Story 2: Teaching empathy

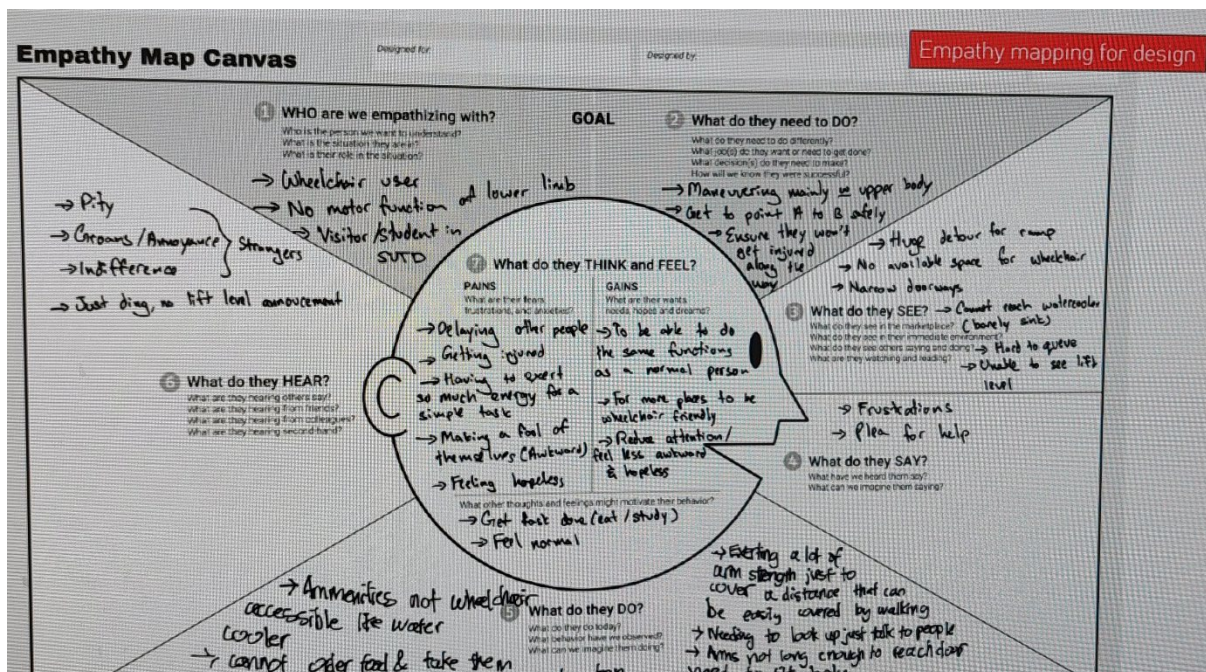
What about empathy – how can we teach empathy?

Dr Evelyn Chew, from the Singapore University of Technology and Design (SUTD), teaches an undergraduate course on empathy. In line with her university’s overall design thinking approach, Evelyn challenges her students with real-world scenarios and gets them to interact directly with stakeholders, to put themselves in the shoes of someone not like them. Students have to first identify the challenge, conduct conversations with relevant stakeholders, draw up an empathy map based on their ethnographic fieldwork, ideate, and through multiple iterations, arrive at a feasible solution.

The empathy map in Figure 4 below is an example from Evelyn’s students’ work (reproduced with permission from Evelyn).

Figure 4

Empathy map produced by students in an SUTD design course, illustrating the breadth of insights that can emerge from the groundwork. For illustration only



By getting students to talk directly to key stakeholders about their pain points, and to draw up an empathy map after posing questions like “what is a challenge for you”; “what do you need

to make your job easier”, students learn about perspective-taking and review the assumptions they would often hastily make as solution-focused engineering students. By developing this intentional focus on other people and their needs, students learn what it means to be in a world that’s different from the one they inhabit and learn to be curious, to question, rather than to assume they know.

The following is what Evelyn’s students have said about a project involving alleviating one homemaker’s burden:

“We spent much of our early discussions trying to rationalize and convince each other of why our individual ideas were better, rather than deepening our understanding of the user’s life and considering it from the user’s point of view instead ... We had to step out of the ‘design office’ and back into the user’s world. We decided to touch base again with [Ms X] to re-evaluate her perspective....

We realized that we had to remove our mindsets of focusing on the rational and technical features and start being sensitive to her context of a working mother in a busy household with young kids. We were able to use our increased understanding to fine-tune and select the most appropriate solution, to truly fit her situation and needs”.

These are heartening words, but as educators, how do we know if our students have truly fulfilled the course learning outcomes beyond what they do within the course? How does one assess students’ level of empathy, pre- and post-course, if such an assessment is even possible? Some are trying. At this conference, Javanmard et al. (2026) reported on the use of high-fidelity simulation to develop empathy in nursing and midwifery students, with what appears to be considerable success.’

I believe it is possible to teach empathy as a skill – Evelyn’s course has shown us how. But nurturing empathy as an attitudinal stance, as a muscle that needs regular strengthening, will take much longer. The crux of the matter is that students can meet all our course learning outcomes and get an A on the course but that is only the first act. Until we see them in action, how they continue to behave towards others in the long term, my view is, unfortunately, instructors like Evelyn may never really know if their students have indeed embraced empathy as a habit of mind, beyond successfully learning it as a concept, a skill.

But, as my colleague Lynette Tan wisely said to me, “[i]t is nevertheless through learning empathy as a skill that it becomes available for practice and the likelihood of empathy being applied in future situations may become significantly higher.” Lynette is right: courses like Evelyn’s ARE important first steps to inculcating empathy and should be in everyone’s curriculum.

Story 3: Teaching leadership

So finally, what form of leadership is needed in a complex world?

Eleven years ago, I gave an International Society for the Scholarship of Teaching and Learning (ISSOTL) keynote at RMIT University, Melbourne, together with the brilliant scholar and wonderful critical friend, Katarina Mårtensson from Lund University, Sweden. I recall Katarina deploying the sandwich metaphor when she spoke about how academic developers are squeezed between university leadership and faculty members. My keynote on institutional scholarship of teaching and learning (SoTL) leadership followed Katarina's and I made the point that as an Associate Provost at that time, I was neither crust nor meat but that I saw myself as a broker, navigating the in-between spaces of the institution, translating policy into ground practice.

In the 25 years that I have spent as an academic leader, I have always seen myself as a broker and an advocate. I learnt to move between spaces and to actively advocate for those who bear the impact of policy. Not only do I need to translate policy and serve my institution, perhaps even more crucial, I am conscious of the fact that I must be that voice in the room that speaks for faculty and students who are on the receiving ends of change management.

These experiences have shaped what I teach in my leadership class in the residential colleges here at University Town. I teach students about everyday leadership, that they must learn to find a level, no matter how modest, where they can start leading from. Here, I call to mind what Mary Wright said in her keynote, that we need to provide resources and community support to enable our peers to exercise pedagogical leadership. I also teach students about this sense of agency, to have the confidence to step up and lead. I share with them scenarios involving how leaders navigate the tensions in decision-making. I show them examples of persistent, adaptive and courageous leadership. And most of all, I teach them to advocate with humility, integrity and empathy.

I am not alone in doing all this – I go into the community to find people who are leading in different domains to demonstrate their craft. Over the past eight semesters that I have taught leadership, I have brought in 24 individuals, either emerging or senior leaders at different stages in their careers, to dialogue with my students about how they work with the key stakeholders in their community to make a difference in people's lives. They often share about the messiness and failures they have experienced. But they also demonstrate the kind of societal impact and sense of optimism Sarah Maddison spoke about in another of the conference keynotes, even when faced with unforeseen environmental changes along the way. As many colleagues have taught me, we should not encourage a form of cynicism in our youths no matter how dire the global situation is. To be a (community) leader requires persistence, courage and agility, and the belief that we can make things better in our community. Leaders, as it has been said, are dealers of hope.

I hope that in speaking about these habits of mind, highlighting systems and empathetic thinking skills and a growth mindset – that I have fundamentally also reinforced the kind of adaptive and courageous leadership needed in this new environment. My hope is that in so doing, we can turn what is brittle into resilience; what is anxious into confidence; transform the nonlinear and unstructured into connecting systems; and reframe the incomprehensible into something we can understand and respond to.

While the three courses featured here have focused on instructor-level inculcation of important capabilities like systems thinking, empathy and leadership, it is even more crucial that institutional leaders like Programme Directors, Deans and Provosts also actively require such capabilities to be integrated within the university curriculum. As with all matters, institutional leadership sets the tone for what faculty do and what students will get to learn. In order that our students can learn to adjust their sails, this calls for both local instructor-level leadership, Mary Wright's call for pedagogical leadership, and Sarah Maddison's keynote on more global institutional leadership and societal impact as an outcome – all these ask that we fulfil our responsibility and promise as educators and leaders to journey with our students and our community as we all face an uncertain and complex future.

Epilogue

The conceptual segment of my talk is, in essence, an invitation to review and rethink where we have been in our curriculum and for us to ask ourselves if we still have the right stuff in our bag of resources that can strengthen our learners to take on a complex future. I am not saying that the emphasis I have placed on specific capabilities is exclusive of other capabilities or are foolproof - we know by now that nothing is complete or foolproof in an unpredictable future. But when faced with the Grey Wolf, we may well find answers within us and in our community. So, I ask that we help to support one another and future generations of changemakers to learn to look inward, to uncover our/their own resilience and empathy; and to look outward, towards systems and community, to think in systems and to lead with courage. Let's be the worm and grasp the necessary details from the ground. Be the bird that commands an expansive view from up high. Most of all, be the wolf and embrace the unknown with a sense of adventure and awe, holding on to our thirst for learning. This is a call to all educators that we contribute to building capabilities in our youths, to inculcate relevant habits of mind, and to infuse a mindset that can shape a community that is agile, adaptable, and resilient.

I started out with the quote from leadership expert John C. Maxwell (n.d.) about expecting change and adjusting our sails. Maxwell further urges us to, "Change from growth with a timeline to growth without a finish line." These are also my two key pieces of advice for all changemakers – to adjust their sails and to adopt a growth mindset when confronted with uncertainties in a complex future. I am optimistic that this can be realised if all of us, as educators and institutions, focus on and invest in building capabilities in our student body.

Speaker's own post-conference reflection:

I posted this on LinkedIn immediately after HERDSA 2026 (Chng, 2026), adding a call to action I did not explicitly include in my talk though I did allude to this when I spoke about advocacy:

[Gratitude, #HERDSA 2026]

I want to say a heartfelt THANK YOU to the people who have written and spoken to me these past few days to let me know my HERDSA keynote this week has resonated for them. For any presenter, creating resonance and us feeling we are simpatico in our shared vision and purpose are the highest compliments. I appreciate this support very, very much. ❤️

I forgot to say this before closing my talk – let us who feel this resonance identify something concrete, no matter how small a first step that you can do for yourself and for others.

This can be, “As a senior faculty member, I will advocate for others whenever I have the privilege to find myself occupying a seat at the table that counts”. Our junior colleagues and students need our advocacy, to give them the start they may need; OR,

“As a senior leader, I will use my influence to expand the table to give more colleagues a seat at the table” (aka, create opportunities and pathways to nurture future leaders); OR,

“As a junior faculty member or student, I will find an entry level that is open to me to practise everyday leadership” – this can mean extending your personal or professional support for a peer who needs it most.

I also want to say to the excellent question someone (Comment below or DM me if you are OK about identifying yourself) asked about whether we should “ride the wolf” or “be the wolf”, that having reflected further, I think:

The wolf is a vehicle that asks us to face our fears. If we reframe our fears of uncertainties and unknowns, to go into the new terrain waiting for us to explore with curiosity and courage, to learn new things, then once we have experimented with an open mind, I am persuaded that with this new mindset, what is new or fearful will one day become a new normal. This is the remarkable strength we have in us – we are adaptable. This is why I believe that we can aspire to be comfortable with the unknown, make the new adventure a part of our own growth journey – be one with the wolf. Embrace change. We have it in us to achieve such a goal.

Thanks once again for the kindness and generosity of spirit shown through your positive responses. This is the power of community – it motivates us to join hands, heads, and hearts to confront and resolve our challenges. Together.

Hope to meet again one day.

Acknowledgements

I want to thank my NUS colleagues Adrian Kuah, Lee Kooi Cheng, Lynette Tan, Naviyn Prabhu Balakrishnan; and from SUTD – Evelyn Chew – for helping me to think about the issues discussed here today. I appreciate all the posts colleagues have put out on LinkedIn to help to spread the word and ask important questions to trigger further thoughts. Special thanks to my new friend, Alice Brown, whose words at the HERDSA Conference Dinner gave me the boost I needed before the talk.

Heartfelt thanks to the HERDSA 2026 Organising Committee for bringing us together – the sense of community and belonging many delegates have expressed throughout this past week has already achieved a major outcome for anyone to invest in such an event.

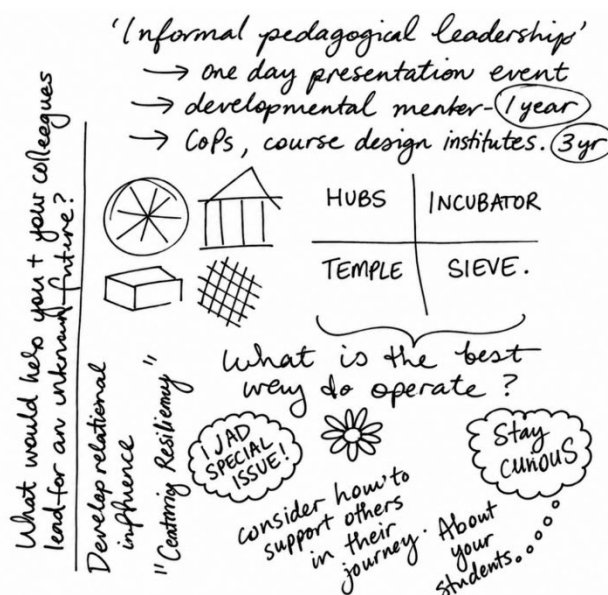
When I told my family that I am giving this talk today, they asked me not to bore you. I hope I have not bored you. Jokes aside, you have been a fabulous audience. Your warm reception to my talk gave me the assurance that we are aligned in our vision and purpose for fulfilling our responsibility as educators. I don't feel alone, all thanks to this very welcoming HERDSA community.

I had planned to say that I hope to have given you something useful you can think about after you leave this conference, but given the uncertainties in today's world, and with variations of the wolf at our door, how about we get Christy Collis to lead us in doing the Bhangra instead?

I leave you with this gift from the talented Lauren Woodlands (Queensland University of Technology) who sketched the brilliant visual summaries of the three keynotes delivered by Mary Wright (University of Sydney), Sarah Maddison (University of New South Wales) and me (National University of Singapore) at HERDSA 2026 held at the National University of Singapore from 6-9 July 2026 (Figure 5).

Figure 5

Visual summaries of the three HERDSA 2026 keynotes by Mary Wright, Sarah Maddison, and Huang Hoon Chng. Illustrations by Lauren Woodlands, reproduced with permission.



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