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CO-CREATING EDUCATIONAL FUTURES:
Contradictions between the emerging future and the walled past

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ABSTRACT

Many imagine education as ideally flexible and student-centred. In reality, however, bringing about system change has been far more challenging. The emergence of the COVID-19 pandemic is certainly forcing change. Virtual education has gone from a question that needed to be eventually addressed to an urgent and immediate concern. Yet the scope for implementing innovation is determined by the tensions between the imagined future and the weight of the past. This paper seeks to explore such tensions through insights gained from transformative foresight interventions in several countries. It presents a simple futures thinking intervention process to create alternative strategies, and illustrates the process with examples from foresight workshops in education, and beyond. The common thread that weaves together these diverse experiences is the tension between the walled past and emerging future.

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Education
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USING THE FUTURE AS A TRANSFORMATIVE PROCESS

At a recent national meeting of medical practitioners in Australia, we were at the peak of creativity. Leading doctors imagined the futures of general practice. Numerous futures were developed. These included:

- Star Trek medicine, wherein physicians use handheld devices for all diagnoses and most treatment;
- Multi-door medicine, wherein doctors are the gatekeepers of different evidence-based traditions, with the primary role to listen and direct patients to the appropriate door – whether it be meditation, gene therapy, surgery, dietary changes or other;
- Corporatization, wherein local doctors sell their practices for the safety and regular income of working for a large provider;
- Virtual doctors, where patients are able to send their holograms anywhere in the world to heal.

In each scenario, they discussed not just the economic costs-benefits, but how they would have to transform and re-learn who they are. Sadly though, as the meeting was about to close, instead of relishing in the alternative futures, and using the scenarios to develop strategy and policy by pondering which future to encourage and invest in, to track and monitor, or to avoid, the CEO stood up and berated the entire audience. "You have it wrong. All of you are incorrect," he said. He then proceeded to outline his vision, which was essentially a continuation of the present. At that moment the project died, everyone looked down and alternative futures became the official or institutional future. The present had won, and innovation was dead. Instead of alternative visions of what could be, there was the predictable status-quo.

Standing up on stage as the earlier keynote speaker and the futures facilitator for the day, I was uncertain how I, and colleagues, should respond. He was the CEO who had funded the project. I was lost for words and did not say anything. Later, on reflection, it became clear to me that there were three errors on our part. First, we did not clearly communicate to him that it was not the future, but the alternative futures of health that were most important. Second, we are unable to demonstrate how the future could be used to change today. Third, the project was not about getting the future right per se, the accurate and precise forecast, but about ensuring that doctors continued to expand their education, shifting from technical skills to a learning journey.

Part of that journey was gaining futures literacy (Miller, 2018), understanding how the external world as well as how medicine was changing, and how they could best adapt and create a desired future for their profession. The CEO assumed it was getting the right model for the future. He wanted a concrete answer from the physicians that did not shift directions, not a search for alternatives, and certainly, not a learning journey toward futures literacy. Mindful of this experience, I now ensure that all foresight activities are structured, beginning and ending with seeing and using the future as a transformative process.

> The Causal Layered Analysis process moves futures literacy from what is next to understanding how different worldviews and stakeholders construct reality. It deconstructs and reconstructs the future.

WHAT WORKS IN FORESIGHT AND CAUSAL LAYERED ANALYSIS

While there are many approaches to foresight, generally the futures process has the following critical success factors. (Inayatullah, 2015). First, seeing the process as a learning journey. Second, finding the used future, or the practice that is no longer aligned with the emerging future that is now dysfunctional. Third, understanding the changing environment through the use of emerging issues analysis, exploring disruptions and how they might impact the current system. Fourth, creating alternative futures, or using scenarios to both mitigate risk and find windows of opportunity - where agency, be it personal and collective, is possible. Fifth, focusing on the vision, or on the preferred future, and taking steps to make the vision real. Sixth, and lastly, integrating the various perspectives and the contradictions, and linking the vision with measurable systemic change, to ensure that culture does not eat strategy for breakfast. This is the known as the Causal Layered Analysis (CLA) process (Inayatullah, 2004; Inayatullah and Milojević, 2015). The paper is organized around these critical success factors.

The CLA process is foundational in Futures thinking, as it moves futures literacy from what is next to understanding how different worldviews and stakeholders construct reality. It deconstructs and reconstructs the future. The process suggests that reality has four layers: (1) the headlines or litany; (2) the system; (3) the worldview; and (4) the myth or metaphor. All four layers are equally important, with the task to create a new metaphor: changing the institutional culture/worldview by

understanding the perspectives of different stakeholders, creating systemic change and ensuring new measurements that accurately reflect the desired vision.

The overall lessons, or what works, are derived from a conceptual model of how to conduct Futures Studies or transformative foresight. This is the Six Pillars conceptual framework (Inayatullah, 2008), wherein each pillar has accompanying methods and tools (See **Figure 1)**.

Figure 1. Methods and tools for exploring the future

Methods or tools		Purpose
The Futures triangle		Mapping the future
Emerging issues analysis and the Futures wheel		Anticipating the future
The Sarkar game		Investigating power and the long term patterns of change
Causal layered anlaysis		Deepening the future
Scenario planning		Exploring alternatives
Visioning and backcasting		Transforming the present and creating future

Source: based on Inayatullah, 2008

This framework has been theorized and hundreds of case studies have been developed elsewhere (Inayatullah, 2007, 2015). As such, this paper focuses instead on demonstrating how policymakers and decision-makers can be equipped with the necessary factors to create futures literacy in the context of the contradictions between the emerging future and the walled past. It uses the Causal Layered Analysis methodology to integrate the diverse perspectives of stakeholders. While we do not make empirical claims in this paper, Rene Rohrbeck argues that the futures/foresight approach dramatically enhances corporate profitability and market-share. This is because the long term is taken into account, innovation is foundational, emerging opportunities and threats are investigated, and scenarios are used. Finally, theory becomes practice (Rohrbeck and Kum, 2018). In this paper, the what works model and the critical success factors are used to understand futures in and of education.

THE LEARNING JOURNEY

AVOIDING UNCERTAINTY AND OPTIMIZING THE PRESENT

This futures literacy learning journey for policy-makers and decision-makers itself has four aspects. First is zero loop learning. This was the learning state of the aforementioned health CEO, who had little interest in rethinking education, merely wishing to avoid uncertainty. Second, is single loop learning. Here learning is instrumental, about using the future to optimize the present, today with marginal improvements. This approach can certainly enhance strategy, however, as change today is dynamic, accelerating, heterogenous, and is anxiety creating for many, it tends to fail. As highlighted in **Box 1** below, one can list many changes leading to a world where Toffler's *Future Shock*[2] is now our current reality. In this context, where common public responses are fear and anxiety, merely planning for the future is not enough. There is much to unlearn and to rethink.

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2 Futurist and author Alvin Toffler defines the term "future shock" (1970) as a certain psychological state of individuals and societies. He explains the term as a personal perception of too much change in a short period of time.

Box 1. Our current realities - too much change in a short period of time

- The rise of digital anyplace, anytime technologies, creating freedom along with surveillance, with forecasts of cascading joblessness in agricultural, industrial, and post-industrial spheres
- Climate change and a likely shift from fossil fuels to renewables
- 3D printing, replacing traditional manufacturing
- Under-population and ageing in many regions of the world, and a youth boom in others
- The shift from meat based cultures to plant based and the move toward protein or cellular agriculture
- The rise of peer to peer platforms and technologies challenging the middleman in almost every area from retailing to taxation to personalized education, and
- Rapid economic growth of China and Asia
- Pandemics such as COVID-19

Source: adapted from Schroeter, 2020

LEARNING TO LEARN

The third part of the learning journey is double loop learning or learning to learn /meta-cognition. This is done in the futures field by challenging core assumptions about how we see the future. Is it linear or cyclical? Is there progress or mere pendulum shifts back and forth? Will students learn from the school or virtually? Is technology the future (The Economist, 2017), or is community and environmental learning equally, if not more important? Double loop learning requires an excavation of assumptions and then a move toward directionality.

> In this context, where common public responses are fear and anxiety, merely planning for the future is not enough. There is much to unlearn and to rethink.

NARRATIVE AND METAPHOR

But what action results in progress? This is the fourth aspect of the learning journey. It is focused on narrative and metaphor (Milojević and Inayatullah, 2015). Each person and each organization has a story which they tell themselves that can hinder or hurt the possibility of realizing the new future, the desired future. During a foresight intervention with an African organization focused on helping youth gain employment, the group was able to shift from their core story of youth as "bludgeoned by the present" to the idea of youth as "a flock of eagles." This change in metaphor helped the team to transcend the day-to-day stress of meetings and short-term planning to return to their true purpose. With story and purpose aligned, they now play a national role in the futures of education and jobs.

Narrative means rethinking and relearning the story we tell ourselves (Kelling, 1991). Without this story, information about the future becomes unintelligible. It is information that does not lead to a different future - heard but not acted on. In a changing world, narrative helps focus on what truly needs to be done. It can change strategy and policy (Thibodeau and Borodisky, 2011). Narrative helps navigate the tension between the current reality and the emergent future. See **Box 2** below for an example from the field of education.

Box 2. Example of metaphor/myth shift from education

During a workshop for national government officers in the Philippines focused on redoing the K-12 educational system, there was a desire to shift the metaphor from "walls - too many bricks come between us" to "wrecking ball." Participants asserted that the current system was focused on conformity with walls between technology, nature, and the environment. It focused on conformity, keeping students protected from new ideas, from others - it was isolating. A new system was needed that could embrace creativity and innovation. Only a "wrecking ball" they believed could do that. Marginal change or a reformist agenda would not succeed, given the tensions that exist between the reality of the educational system, and the emerging future.

Source: Author

THE USED FUTURE

The tension between current realities and the emerging future is global and true to most organizations, institutions, and certainly ever present in educational systems. This came to light in a two-day workshop for a progressive and private educational network in Australia. While the conversation between visions was polite, there was no confusion as to difference. There were over sixty participants from Edmund Rice Education Australia, a Catholic schools network and all were progressive, learned, hard workers, and trying to make a difference in the lives of young people and the broader community. The participants included principals, deputy principals, administrators and students.

My task was to create alternative and preferred futures of education with the working groups. We had groups on Catholic identity, educational structure, the visions of youth, pedagogical visions of 2030, and other topics. I had asked them to make the future feel more real and less distant, and to present their deliberations through skits, role-playing and TV interviews.

> The tension between current realities and the emerging future is global and true to most organizations, institutions, and certainly ever present in educational systems..

LETTING GO OF EXCESS BAGGAGE

However, to go on this journey of creating alternative and preferred futures, we need to let go of certain baggage - the weight of history that is preventing us from co-creating the desired future. This is the used future, institutional or personal practices we continue even though such practices are no longer aligned with our desired future or reflect of changed social conditions. For these participants and indeed for futures workshop participants everywhere from the People's Republic of China to the Government of Norway to numerous Southeast Asian nations, it was the rigidity of education. This was defined by learning with a particular age cohort, from Year 1 to Year 12, at a particular place, fixed time periods (e.g. from 09:00 – 15:30), a defined curriculum and a culminating exam. For the most part, students are consumers of knowledge, expected to regurgitate what they have allegedly learned (Milojević, 2005). In this framing, students are not active co-creators. The metaphor provided by participants in this workshop in Australia was that of the factory, with the industrial model of rote learning the core worldview.

CHALLENGING THE COMMON-VIEW

Challenging the education factory is not an easy task. While working for the state level of a national project on the need to create a knowledge revolution, we found resistance to the policy prescription. Fearing it was losing ground to East Asian nations, the Australian federal government had rolled out a national strategy of a computer for every student, hoping they would learn more effectively. Once the computers were distributed, principals resisted. When we worked with these educational leaders to create alternative futures - scenarios of different educational systems - their biggest fear was loss of control. In the industrial factory model of education, they (with their mid-level managers, the teachers) controlled the factory floor, the classroom. In a world where students had access to the world's information reservoir and global experts in real time, students themselves could change the medium and thus control the message.

REACTION

The response of principals and deputy principals in a content rich world was to control the medium. . One principal told me he just locked up the personal computers in the closet. iPhones and iPads have only worsened this situation for them. Our strategy was to empower the principals to use new technologies and to slowly but surely shift the narrative from "I am in charge" to "we are all learners." Some told me, all this makes sense, but they would prefer to retire. They could not see themselves having a role in this new future. It was all too difficult.

> The weight of history is preventing us from co-creating the desired future.

As for teachers, the more pedagogical sensitive ones suggested we should not believe that technology was the silver bullet, teachers and teaching was the answer to the knowledge revolution. We needed to not just purchase new technologies, but to create a new digital pedagogy. The teachers needed to be given "the key to the store", which was the antidote to their "silver bullet of technology."

This was, for us - the change agents - not an either-or debate. We need new technologies, to honor the best teachers and to ensure principals felt empowered in this new space. We also worked on changing the physical space from the classroom-factory toward a safe playground. The room went from desks in rows to a place of varied colours, of different meeting and

learning points - an ecology of place instead of a surveillance-centred space. Gaming was now embraced as part of the learning adventure instead of an activity where one received demerit points. Students in this new environment became creators of knowledge, learning from teachers, each others and the "world brain" (Wells, 1938).

DID WE GO TOO FAR?

When the deputy director of the State education system walked into this new peer-to-peer technology friendly learning space, he was confused about what was happening. The vision of the future made real was a step too far for him. It was not intelligible. While teachers, principals, and students had gone through a futures literacy process, he had not, and thus found the results overly disruptive and confrontational to his worldview. **Table 1** below explores the different views of educational futures from the industrial to the ecological at four levels using the Causal Layered Analysis model.

Table 1. Educational futures at four levels using the Causal Layered Analysis model

	Used future	**Understanding the changing environment**	**Creating alternative futures**	**Vision and preferred future**
Litany	Rules are being broken	A computer for every child leads to the knowledge revolution	New technologies designed into the curriculum	Technologies plus pedagogy plus the social
Systemic problems and solutions	Control the use of new technologies	Funding for computers, but not for support or pedagogy	Workshops for teachers on new technologies and learning	Technology as pedagogical experiments
Worldviews that define the policy	Industrial and parental	Technocratic	Humanistic	An ecology of learning
Metaphors	I'm in change	Technology is the silver bullet	Teachers make the difference	We are all learners

Source: Inayatullah, 2015

Thus the resistance. Attempts to create visions of new futures for education are immediately challenged not just by principals, but also by parents and the media (Jandric, 2017). The future for those outside the system is their memory of when they were students. Where are the desks? Where is the hard work? What if they are playing around instead of studying? How do we monitor online learning?

This is in tension with the emerging vision of the future - a far more flexible, fluid, space-time-person free imagination of education. Even the innovators find themselves pushed back by those outside the system. See **Box 3** below for an illustration of how narrative transformation is crucial to move to a different future.

Box 3. The role of narrative transformation to attain a different future

At one ministerial level workshop in Australia, educational leaders described their reality as that of a castle surrounded by hungry wolves. Within the castle, there was collegiality. They sat with each other at a round table, as fellow knights. But, outside were the wolves of parents, teachers and the media. Any futures initiative went against the memories of the stakeholders.

When I suggested that the participants rethink this foundational metaphor, they generally responded in four ways:

- First, to make the castle more transparent, use glass instead of rock, lower the drawbridge, invite the wolves in for dinner, and enquire as to their needs in this communicative process.
- Second, to transform the castle to an ecological playground. Make education about understanding the pressing problems of sustainability and ensure the process for students is fun.
- Third, to find the leaders of the wolf-pack and eliminate them.
- Fourth, to change the wolves into huskies and lead all to a new future - that is, ensure direction and purpose. In this re-script, the anger of the wolves is redirected toward a common purpose.

This process helped participants understand that they may live in a used future and that narrative transformation is crucial to move toward a different future.

Source: Author

THE CHANGING ENVIRONMENT AND DISRUPTIONS

Once we have settled on the baggage we must abandon - whether practice or narrative – we turn to focusing on emerging disruptions. Graham Molitor's S-curve is an excellent way to understand three different horizons (Molitor, 2003). The first is the current horizon of policymaking where there are weekly headlines of education in crisis. The second horizon is that of quantifiable trends in education, for example, the use of new technologies in the classroom, the rise of curriculum on sustainability, or the focus on the teacher to student ratio in classrooms. The third represents longer term major disruptions such as education as a global marketplace, the end of the classroom, direct information download, and meditation as a core learning technology. The specific disruptions we use to nudge educators to examine alternatives include:

- **The peer-to-peer revolution:** the shift from Encyclopedia Britannica to Wikipedia, allowing students to become co-creators of knowledge

- **The rise of artificial intelligence:** the possibility of using holograms, with the teacher moving from the classical lecture and lectern to the facilitator and knowledge navigator

- **The changing classroom:** the possible breakdown of national jurisdictional boundaries of what can be taught, and who teaches, creating a global classroom (Inayatullah and Na, 2018)

- **The end of the curriculum vitae:** the changing nature of the market leading to a world where the skills learned in high school are not relevant to the market

We use these and other emerging disruptions to articulate first and second order implications of events. For example, if meditation (Waters et al., 2015) is a common practice in most schools and universities, how might that impact productivity, health and well-being, health costs or focus? What are the positive scenarios that result in greater health and focus, and what are negative scenarios that could lead to escapism?

ALTERNATIVE FUTURES

From disruption, we then pursue alternative futures - different trajectories of where education could go (Hutchinson, 1996). The model I use moves participants from a no change future, to a marginal change future, to an adaptive change future, to a radical change future. This approach both identifies how the external world is changing and the institutional responses to change (Inayatullah, 2017).

FROM NO CHANGE TO RADICAL CHANGE FUTURES

With Edmund Rice Education Australia, in the first scenario, the no change future was that schools teach and train for the 1950s, for jobs that no longer exist (Brown, 2015). Students graduate, but then are ill-prepared for the world of work in front of them (Bhattacharjee and Siyahirah, 2018). Knowledge is neither useful nor adaptive. Students do not have the emotional and intellectual skills required.

In the marginal change scenario, school leaders do not try to change too much given the expected resistance from parents, teachers and the media. They retain the factory model, but teach coding, bio-informatics, and use new platforms for peer-to-peer interaction. Yet, testing and curriculum design are conducted by the educational hierarchy and confined by national boundaries. The best students gain leeway to experiment with classes from around the world, but must do so on their own time.

In the adaptive change future, workshop participants imagined a future where all schools would be combined to make one national school. This would allow fluid mobility between schools for teachers, students and principals. Everyone could "move" physically or virtually.

In the radical change future, these school leaders imagined students no longer being bound by age, time or space. They could learn from wherever, whenever, and whomever. The school system would then accredit their learnings through negotiated outcome, or they would develop national and global boards of accreditation. Furthermore, the forced marriage between the state or local authorities would be terminated, and education could then become a partnership between the school system and large information technology corporations giants. See **Box 4** below, for an example of moving participants through various futures scenarios.

Box 4. Imagining a future community of learners

A Southeast Asian national government imagined the following four futures scenarios for community learning or alternative learning systems:

No change future: Community learning is not respected, certainly least valued with low demand. It is not accredited.

Marginal change future: Community learning has more course offerings, particularly in areas such as agriculture, which can help sustain a livelihood.

Adaptive change future: Community learning expands with courses for those working overseas (the diaspora), courses on-demand, courses for stay at home mothers, courses for prisoners, and even courses for rebels and insurgents (to help them integrate back into mainstream society).

Radical change future: Community learning uses brain learning implants and bio-chip learning based on a menu of desired competencies.

Source: Author

Scenarios help us understand different futures, different trajectories. They help us manage information and make wiser decisions. For example, our research on COVID-19 scenarios suggests four possible scenarios.

The first scenario is titled, "Zombie Apocalpyse". This is how the future feels to many. A severe and long term recession, if not depression is likely to occur. Supply chains, education, travel, conference are all disrupted for years on end. Only the health sector grows, the rest suffers. Attempts to move toward virtual learning are stymied as the network cannot handle so many users. Collapse everywhere.

The second scenario is "The Needed Pause". Attempts to flatten the curve are generally successful. By 2021, there is a vaccine. 2020 is spent resting, healing, and slowing down. But few of the lessons learned from 2020 are used when business as usual returns. We slowed down in order to speed up. Educational systems go back to how they were before.

> Scenarios help us understand different futures, different trajectories. They help us manage information and make wiser decsions..

The third scenarios is the "Great Health and Learning Awakening." Community networks, learning organizations, glo-calization, and artificial intelligence explode. Innovation leads to innovation. Students learn how to work virtually. Educational systems find numerous positives from the year of rest; for example, understanding when face to face is needed and when virtual education is best. E-facilitation becomes a field in itself. The lessons learned from COVID-19 are applied to poverty and climate change.

The fourth and final scenario is "The Great Malaise." This is not an apocalypse, not a depression. There is no real educational or technological innovation. Instead, the virus mutates, no real vaccine emerges. We return to the Middle Ages. Walls everywhere. We are not in this together, instead all live apart.

Which future will happen, we do not know, but the alternatives help us develop educational - teaching and learning - strategy today for the future.

THE PREFERRED FUTURE

Once we have mapped out the alternative futures, it is critical to move toward the preferred future, to create a shared direction and strategy. In the community learning example earlier, participants imagined a different future by 2033. The litany or the visible outcome would be measured by problems solved, a flexible system anchored on real problems, a worldview or culture focused on outcomes with the core metaphor or narrative that of the knowledge and community outcomes.

Table 2. The current and transformed reality of community learning

Community learning	Current reality in 2019	Transformed in 2033
Litany	Inequality	Inclusive
	Not valued or having low importance	Complementing traditional learning Niche for meaningful learning
	Measured by completion rate	Measured by problems solved
System	Seen as generalist education	Flexible learning Contextual and anchored on real problems
Worldviews	Imitating	Outcome based
Metaphor	Assembly line	The new knowledge and community commons

Source: Author

TENSIONS

The community learning scenario process was based on expert involvement. However, when the foresight process includes a number of different stakeholders, then tensions can arise. In the Edmund Rice Education case study, once we shifted to preferred futures, the visions we truly wish for, the consequences to the principals of the far more flexible model became apparent. The students created a "Tinder of Education": Swipe right and they reject the teacher. Swipe left, they accept. Swipe right, they reject the principal. Swipe left and they welcome. In this future, the students wished for increased control over their educational journey. Teachers and principals would remain as navigators, co-creating and co-curating the educational experience: what was taught, what was learned, and what was tested.

Many principals, however, objected to being rejected, and to having to compete with other principals. They felt anxious and unsure of their authority. One commented, "this is nothing but neo-liberal capitalist ideology". Market competition has replaced cooperation. What happened to the role of traditional structures of hierarchy and respect, or to the role of expertise?

> When the foresight process includes a number of different stakeholders, then tensions can arise.

This became the contradiction:

- In a world of endless choices and possibilities, what happens to traditional structures and models of pedagogy?

- In a world where artificial intelligence applications can anticipate the needs of students, can ensure best matching to current and emergent jobs, to learning styles, and ways of knowing (Inayatullah, Bussey, and Milojević, 2006), what happens to the holders of traditional power?

- How do school leaders transform their psychic sunk costs into new assets (Olivola, 2018)? Can foresight processes help in this transition or are we doomed to the pendulum of history, where tradition (the used future) and innovation (processes and inventions that better meet our changing needs) trudge back and forth wasting intellectual and emotional capital?

INTEGRATING PERSPECTIVES THROUGH CAUSAL LAYERED ANALYSIS

The last part of the foresight intervention is exploration of how to integrate different perspectives, so that participants have a clear and shared map of the future, with areas of strategic intervention required. The Causal Layered Analysis model is crucial in this phase as it links the story to strategy. It integrates the varied perspectives. The integration ideally can help move the organization to an adaptive future or co-create a novel solution to the contradictions between past and emerging future. This integration occurs where the worldviews and deep narratives of different stakeholders are heard and a win-win transformed narrative with an aligned system is created.

At Edmund Rice Education, students and principals worked toward an integrative approach. In the negotiated future - that served the interests of all parties - learning was envisioned as on-line using artificial intelligence applications, but there would be social hubs for face-to-face emotional and sport interaction. However, the spiritual purpose of life, as service to those less fortunate, would not be lost sight of. Students would co-design courses with teachers and principals, while schools would reduce their allegiance to the national curriculum and bring in global partners.

The purpose of education would be the co-teaching and training for emerging jobs and careers. Principals expected that students would not have a one job-career but seventeen or so jobs and multiple portfolio careers (Inayatullah, 2017). In this future, the school system would be designed for flexibility and creativity. Exams may remain, but they would be minor markers on a longer and deeper learning path. Teachers would work with students to develop their lifelong learning pathways - becoming not factory bosses, but life gurus, making the transition from "the lecturer" to the "knowledge facilitator." Principals would ensure that all progressed, none were left behind, and for those students who needed far more structure, they would design for that. They would negotiate with global education providers for the best possible outcomes given funding.

Table 3. Summary of perspectives on futures of learning from Edmund Rice Education Australia

Edmund Rice	Students	Principal	Integrated 2030
Litany	Students know their needs	Traditional teaching and learning is best	Holistic teaching and learning
System	Students design their education Fluid and Flexible	Principals and teachers design education for a changing world	Social hubs anchor virtual learning Teachers as navigators and life gurus
Worldviews	Student-led artificial intelligence enhanced education	Tradition-led education with some reforms	Technology plus place plus spiritual learning
Metaphor	Tinder of education	The authority	Life as learning: life as service

Source: Author

CONTRADICTION BETWEEN PAST AND FUTURE

The contradiction between past and future is more than an Australian or a private educational issue. In a series of interventions in Malaysia over a number of years (Inayatullah and Ithnin, 2018), this tension was expressed as a shift from the view of the lecturer, "the regiment", to the conflicting perspectives of the student, "the tug of war", to the whole of system solution of the "orchestra in harmony".

> Futures thinking suggests that we need to change the core metaphor - the story - and then connect it to a new preferred system and the new measurement system. Depending on the context, this can result in marginal change - educational reform - or adaptive and even radical change.

THE CASE OF MALAYSIA

The current system was not working, essentially it force-fed information to students. It was top down, data-centred and rule-heavy with no relevance to the world of work. Students wanted more curriculum democracy, that is, more say in what they learned, how they learned it, when they learned it and with whom. Yet, they were in a tug of war between their desired future and the conservative nature of other stakeholders, mainly their teachers and parents. They wished for a world where they had full access to knowledge and were examined for outcomes, not end of semester tests. The conceptual solution was a negotiated process where the new emergent system and the traditional system were integrated through the metaphor of the orchestra. University professors, vice-chancellors, deans and Ministry representatives understood that the current model was not working. The mismatch between learning and the market was too great. Merely teaching online or marginal change while necessary would not help Malaysia become a developed nation. They would always be playing catch-up. The adaptive change required getting ahead of the curve and understanding the changing needs of students and the changing context. This required a true partnership of stakeholders. While many education leaders preferred a more radical shift, creating one

national university or each professor becoming a university into his or herself, they understood that this was conceptually too far for most. They first needed to move away from the traditional colonial model.

Table 4. Malaysian education 2030

Malaysia	Student	Current reality	Transformed 2030
Litany	Students know their needs	Traditional teaching and learning is best	Holistic teaching and learning
System	Learning outcome should not be pre-determined by the traditional system	Rigid, one way learning. Face to face and virtual	Multiple pathways. Self-assessment and benchmarking plus peer to peer learning. Experts and peers
Worldviews	Democratic teaching and learning	Lecturer dominates teaching and learning	Creative partnerships between independent human beings
Metaphor	Tug-of-war between stakeholders	One man show: lecturer knows best	The orchestra (in sync and harmony)

Source: Athor

THE CASE OF NORWAY

Policy advisors at the Ministry of Education in Norway also suggested that the orchestra - the jazz orchestra specifically - could integrate and provide a way forward. For them, this metaphor was transformative for the following reasons:

- It is individual excellence based;
- It requires peer to peer connections at emotional and intellectual levels - that is to say, "everyone enjoys the virtuous performances of everyone else, and everyone gets a chance to showcase their skills" (Hall, 2010);
- Leadership is based on expertise not strict hierarchy; and
- It adapts to stakeholders, i.e. it is emergent.

For them, this narrative appreciates excellence, individuality and community, adaptation, and new forms of leadership. But to get there, the allegiance to the past - measurements, systems, worldviews, and metaphor - had to change.

THE CASE OF THE PEOPLE'S REPUBLIC OF CHINA

Similar concerns were expressed by public sector leaders of the People's Republic of China at an event sponsored by the Asian Development Bank in partnership with the Ministry of Finance and the National Planning Reform Commission. One delegate described the transition from China as moving from institutionalized and compulsory education to flexible education, with diversified pathways based on assessing the needs and strengths of students. The deep culture of the nation needed to shift from education leading to a good job to education as learning about self, the world, and emergent futures. As a metaphor, they saw education as a dragon confined by the Great Wall. In their preferred future, participants saw the dragon pulling China to global education, beyond the Great Wall.

Table 5. Futures of Education, the People's Republic of China

Malaysia	Student	Transformed 2030
Litany	Institutional school education	Multiple approaches, differing for persons and context
System	Compulsory Passive students	Multiple pathways - flexible and diversified for the right fit
Worldviews	Good education leads to a good job = successful life	Learning tools about self, the world, and the future
Metaphor	The dragon bounded by the great wall	The dragon pulling China to globalized education

Source: Author

Integration of the future as shown above is not just about the views of different stakeholders, but about ensuring that all layers are represented. As mentioned earlier, there are four layers in the futures process. The litany or day to day headlines, the system (society, technology, economy, environment and polity), the worldviews or the deep cultural perspectives, and the narrative or metaphors that underlie the entire superstructure. Futures thinking suggests that we need to change the core metaphor - the story - and then connect it to a new preferred system and the new measurement system. Depending on the context, this can result in marginal change - educational reform - or adaptive and even radical change.

THE RADICAL WORLD AFTER JOBS

> While there is certainly a need to link education with markets, education has always been, and will continue to be, in any scenario, about purpose and inner learning.

While policy leaders challenge the traditional from a castle surrounded by wolves - the narrative of the wall - hoping to be far more relevant to the changing world, to adapt, there are more radical futures to consider. In most national interventions, many ask, what if artificial intelligence and robotics could actually do what most humans currently do? How should schools prepare for a world with only a few jobs or a world after jobs, jobs that we cannot imagine within the lenses of today? What level of flexibility would be required then? What happens to the structure of education and to its relevance?

The answer to this question cannot be merely a technical single loop response. While there is certainly a need to link education with markets, education has always been, and will continue to be, in any scenario, about purpose and inner learning. As the delegate from the People's Republic of China suggested, they needed to move from the narrative of "good education leads a successful job and thus a successful life," to "learning tools about self, the world and the future." For Edmund Rice principals and students, this meant placing the spiritual - the deep inner purpose of how we care for self, others, the planet, and the transcendent - in our daily lives. The South Asian philosopher and mystic Shrii P.R. Sarkar called this neohumanist education. Neohumanism "liberates the intellect." (1987), creating a world where the inner is as important as the outer, where planetary thinking envelopes national and community discourses. A double loop and narrative response is required as we rethink who we are and how we educate. Certainly a burning platform as with COVID-19 forces change. With the pandemic's emergence, jobs and virtual education have gone from a question that we need eventually to address to an urgent and immediate concern. In nations such as Australia, with international students returning home, major financial setbacks will likely force closures of universities (Karp, 2020). Malaysia forecasts that up

> Planning for an adaptive and a radical future is clearly not a luxury - a far away future - but a task for today. Anticipation thus helps not just prepare for the future but emancipates us from our used futures, our one future straight-jacket thinking. It can help create alternatives for today and for our tomorrows.

to 50% of all private universities will go bankrupt (Hunter, 2020). Spain anticipating the long term has just announced that universal basic income would remain even after a vaccine has been found (Zeballos-Roig, 2020). Planning for an adaptive and a radical future is clearly not a luxury - a far away future - but a task for today. Anticipation thus helps not just prepare for the future but emancipates us from our used futures, our one future straight-jacket thinking. It can help create alternatives for today and for our tomorrows.

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