EDUCATIONAL CHALLENGES OF THE POST 2015 WHAT DOES A VISION FOR THE NEAR FUTURE TELSS US THE CASE OF MALAYSIA

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INTRODUCTION

20 years ago, global governments, education professionals and stakeholders saw a Disruptive, but Innovative, Wild Card taking shape around them. This Wild card's name was Internet. These shapers of education, who were at the heart of education systems around the world, looked at the Internet and neither could not nor would not take that step to look at it with a critical, scientific mind and with necessary foresight, to see how it would forever transform the world and how it would revolutionize educational systems, educators and learners and educational delivery and research systems.

Today, the exact same thing is happening, and the same cohort of players still refuse to acknowledge that the Internet is again transforming learner's demands and how the very concept of what constitutes knowledge is changing, and what the new definition of curriculum should be.

The standard demands on a student from two decades ago were to be TAUGHT and to have knowledge, and this evolved in the classroom starting with low order Knowledge to eventually reaching somewhat higher order Knowledge. In today's world however, this so called higher order knowledge is no longer sufficient to create Innovation through calculated risk taking, arising from Disruptive thinking.

So, what should classroom learning and instruction encompass? I would be assuming too much at this juncture if I were to start talking about a global education system, so allow me to focus on a case study encompassing Malaysia only. What are the issues at stake? A broad and deep overview might cover the following:

1) What is the definition of the new Curriculum of the future?
2) What is the new classroom of the future?
3) Who are the new Learner and new Educator of the future – what are their attributes?
4) What will sustain Malaysian classrooms to evolve naturally to meet the demands of new market places, new careers and new global communities of the future?

What are the key issues surrounding these questions, that have to be answered so that Malaysia is ready to face 2015 and beyond, where it is expected that a sudden surge in innovations and the convergence of NBIC - Nano, Bio, Info and Cogno Technologies - will create rapid transformations and place new pressures on education systems both at the schooling and higher education levels?

KEY ISSUES

In considering the following, it is crucial to consider the importance and relevance of each of them and think about the solutions. Problems cannot and must not be solved with the same, tired ways of thinking. Disruptive thinking is needed to create innovations and take calculated risks, possibly resulting in mistakes, but it will be mistakes made early, quickly and cheaply. The underlying considerations are what the Global Education scene is like currently and then, what it ought to be, to meet global and future relevance; and finally, how Malaysian education needs to transform to meet these requirements. I would like to briefly cover the following topics:

1. Professional Will to spur Political Will

2. Future National Curriculum & Nationhood
3. New Roles for New Educators and New Learners
4. Future Learning Spaces in Future Classrooms
5. Technology and Education
6. Evaluations and Standards for Self, School & Nation: Developing Learners and Educators to meet new market places
7. Structures and Timelines for future Learning
8. Convergence of new teachers and its implications for new subject areas

1. Professional Will to spur Political Will

Contemporary politics is often about political expediency and convenience. Politicians normally lack the political will to do what is right for the long term needs of communities and nations.

Governments in developing countries tend to propagate popular policies when they know these policies are not beneficial to the nation, but still do so to stay in power. It is now left to the educationist to advance the necessary professional will that will advocate the right thing to do, and to ensure that politicians will now stand accountable for their actions.

Professionals possess a large body of specialized knowledge and skills and they normally engage in professional development and use and give independent judgment when providing services to the public. These professionals represent organizations with established standards and ethical guidelines for them to carry out their duties and responsibilities. Integrity is a central and defining element of professionalism. Any decisions affecting their field of specialized knowledge and skills should be referred to them and to them only. The professionals in turn, need to be inclusive, collaborative and conduct ourselves with humility, by involving all stakeholders, to keep the curriculum fluid and dynamic and always ready to respond to change and new demands of future market places.

The educationist themselves must have impeccable records. We must bear in mind that policies cost money and time. One wrongly placed advice, though with the best of intentions, taken by the authorities will result in wasted resources and tax payers monies that will take inordinate amounts of time to rectify.

2. National Curriculum & Nationhood

A national curriculum is normally defined as a school curriculum scheme which is mandated by the government of a sovereign state for schools within its jurisdiction. A formal curriculum is the set of courses, and their content, offered at a school or university. It is prescriptive in nature and specifies what topics must be understood and what levels of achievements must be achieved at a particular grade or standard.

Developing nations with multi racial, multi ethnic and multi religious populations are at higher risk to badly developed policies for educational systems and reforms as political will usually stamp out professional will in the fight to sustain power bases by political factions championing education systems on ethnic grounds. This causes the development of fragile racial tolerances, as opposed to a complete acceptance of diversity and the celebration of it. Ruling elites use this as a flimsy excuse to develop different school systems for different races, a strategy of ruling by dividing and conquering made famous by Julius Caesar. This of course, takes no account of what would constitute the best in education systems, rather, it only considers how best to maintain power.

A national curriculum should be a national curriculum – meaning it should be in a single school system where children of all races come together to learn and discover the world of knowledge. Children must be and grow together in one type of school, doing the same thing together and not have to grow up to use that terrible word called tolerance,

which implies dislike, but not being able to do anything due to external forces.

3. New Roles for New Educators and New Learners

Gone were the days where the teachers were the ‘walking knowledge giver’. In the Changing World of Education, the teacher of the future will need to be, not only a highly trained professional, but must also possess skills in counseling and mediation, and have a strong understanding of the social supports available to families and young people. Educators of the future too will be a learning broker, a knowledge systems expert and a learning strategist. This means a range of skills and competencies that may seem daunting to most current teachers. Therefore it is important to find ways to help teachers effectively navigate their individual paths in the reinvention of their role.

Teachers should know that a great deal of their students' learning takes place without their intervention, or sometimes even despite it! What special contribution they make to learning, and to what extent it might be replicated or even surpassed by current or future technology, will correlate directly to the educator’s belief in the new, emancipatory roles of learners. This new learning is based on independent decision making processes and the ability to take control of personal learning.

4. Future Learning Spaces in Future Classrooms

Believe it or not, our classroom physical design has been intact for more than 100 years. We have rows of pupils’ desk facing one teacher’s desk and that is also how interaction takes place in the class. Each classroom is an entity by itself. So Teachers must design classrooms that are conducive to new teaching styles. Designing an effective classroom allows students the maximum opportunity to learn. In designing a classroom, a teacher must consider the most important factor, the students. A successfully designed classroom will make the teacher more efficient.

This is because space, whether physical or virtual, can have a significant impact on learning. Learning Spaces focuses on how learner expectations influence such spaces, the principles and activities that facilitate learning, and the role of technology from the perspective of those who create learning environments. Information technology has brought unique changes to learning spaces. The world is moving away from teacher and lecturer centered classrooms to student centered learning spaces. The term classroom will in effect be changed to learning space and students will have a choice in the way of learning (multiple intelligences) they most prefer and will immerse themselves into their preferred style of learning to develop skills in enquiry and research.

This is the age of personalised learning for every learner in a learner centered space, and classrooms designs must change completely to accommodate this new space and concept for learning spaces.

5. Technology and Education

All knowledge is everywhere and every time – with mobile technology becoming cheaper and more accessible every day. Just-in-time delivery will no longer apply to the manufacturing industry alone. Just-in-time knowledge and learning will be the standard for retooling individuals for just-in-time expertise. Employers will hire primarily based on talents and relevant skills, not expertise based on areas of knowledge. Schooling systems will have to prepare students for these new career requirements and adapt curriculums accordingly.

Learning Technology or Educational Technology is the practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources. It involves and covers systems and processes of developing human capability. It often includes software, hardware, as well as Internet applications and activities.

Technology is already revolutionizing learning in communities all around the world. We need to unleash the

power of technological innovation to create an education system worthy of our children's capacity and imaginations. If we were to continue without regards of the current world trends we will limit learning. We need to ask; "How far technology can go to advance our children's achievement? Technology should guide us to new ways of learning and could individualize learning itself. It will make it harder for adult to block the reforms that are right for our children. If used rightly it could reverse the decades of failures in education.

6. Evaluations and Standards for Self, School & Nation: Developing Learners and Educators to meet new market places

The present assessment system of pupils is a burden on many teachers who are already overworked and an added, zero-benefit pressure for children and their parents. Due to the growing need for more personalised learning that provides meaning and purpose in the lives of learners, pupil assessment must change. Effective assessment should raise educational achievement which in turn, improves learners' motivations to learn.

For example e-Assessments makes it easier for teachers and schools to carry out targeted pupil testing right through the learning process and the ensuing data can assist to shape future planning to ensure lessons meet the needs of every child. It would reduce workloads and saves time for teachers as scores are instantly available for analysis. This helps ensure the most suitable learning goals are put in place rapidly to encourage greater achievement.

Knowledge is growing exponentially, and has reached singularity – where the knowledge you have today will no longer be the most current tomorrow. This makes memorizing knowledge and exams meaningless as they will only test current levels of learning, which might be obsolete even after just one day. Assessments and evaluations must be geared towards checking skills levels and abilities of learners to adapt to problems and ask the right questions in the real world.

With the advent of personalized learning and simulations, new "real world testing" must be set-up to test actual learning and expertise achieved in various fields. These testing processes will act as a facilitating mechanism to match talent and resource. Graduation degrees will not count for much; instead performances in real-world testing will determine hiring patterns and more importantly, provide new meaning and purpose to the need for evaluations, and in turn, providing inspiration and motivation to learners.

7. Structures and Timelines for future Learning

Advancements in technology and the Neurosciences will build curriculums based on Neuroeducation and these will be capable of empirically calculating the effectiveness of teaching/learning/testing models and the environments of learning space. This will cause many traditional learning models to be abandoned and new personalized methodologies will replace them. Online feedback software and testing will determine the best way to present learning modules and these will be evaluated and used by independent learners making choices and decisions to retool for on-time time expertise, careers and needs.

Formal schooling (primary/secondary) no longer serves the function of gathering knowledge; it should be focused on developing enquiry and research skills. it no longer needs to cover a span of time as in traditional schooling systems. Students will finish formal schooling at 15 with necessary skills in enquiry based learning, skills and research driven learning spaces with foresight and futures methodologies, soft skills and communications expertise. Critical self-reflection of present levels of expertise will form the motivation for further involvement in life-long learning.

With education becoming accessible from any point of the world to all other points with students never needing to leave their homes, accelerated developments of virtual worlds will occur, which will be the new learning spaces of the future. Social networks will also evolve to become collaborative networks where learners will evaluate and choose their preferred facilitators of learning in their preferred learning spaces, in the real or virtual words. Social networks will also

form the foundations of learning groups and collaborations that no longer encompass professional lecturers and teachers only.

Home schooling and online courses, even in formal schooling, will grow exponentially on this foundation. Parents and learners will gain confidence through these networks to "stay at home and be home schooled" so this movement will grow stronger over time. This phenomena is clearly seen in developed countries where home schooling support structures are very well developed and easily accessible.

Based on the premise that learning occurs fastest from making and overcoming mistakes, virtual worlds will provide learners avenues to make every mistake they can and create new scenarios through experimentation in every way possible. Future chemists, biologists, physicists, educationists, psychologist, engineers and doctors in school will have access to all equipment and all environments through virtual worlds. Schools will no longer be limited by budgets and expertise in using lab equipment. Instant online feedback and confirmation or correction of thoughts and knowledge will shape new knowledge, learning and skills.

Only one question remains – how should timelines for formal schooling change to accommodate these new systems of learning?

8. Convergence of new teachers and its implications for new subject areas

Collective consciousness databases will evolve out of current collective intelligences such as internet search engines and collaborative databases. CC databases will have access to all knowledge like regular search engines but will also be intuitive and provide feedback to users as to whether correct questions are being asked and provide different points of perspectives for consideration. This in effect will provide instant feedback to mistakes and will enable "evaluating" to be built into research and enquiry skills development.

Learners will evolve to become knowledge generators rather than knowledge consumers. Scientific skills will create points of reference and a collective intelligence to provide new truths, where traditionally religion, culture and family environments have provided old truths. With everyone thinking to be experts with all knowledge at their fingertips, official institutions of learning will find it impossible to deliver in-time knowledge and must so reinvent curriculums, pedagogies and andragogies to provide skills to access and understand this knowledge.

These convergences and many more, will necessitate the development of entirely new subject areas and skills, starting with preschool levels. The important question we should all be asking ourselves is – what should these new subjects be?

CONCLUSION

In conclusion, the only remaining issue we need to confront, and confront with all our professional will and alacrity is, "Are we ready to transform!?" We should also remember always that in the transformation process, we cannot forsake values and moral considerations.

The world will only function optimally and peacefully with no threats of war, terrorism, poverty and hunger. The gap between countries with access to education and countries with no access is widening, and this will have serious consequences on global peace and advancements. In order to coexist and gain a multicultural and ethical perspective on global communities, and to take ownership, responsibility and accountability for global problems, learners will have to learn in an environment that has built in values, ethics and moral systems.

JAPAN EDUCATION FORUM VII

COLLABORATION TOWARDS GREATER AUTONOMY IN EDUCATIONAL DEVELOPMENT

KONNICHIWA

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INTRODUCTION

- 20 years ago, global governments, education professionals and stakeholders saw a disruptive, but innovative, wild card taking shape around them. This Wild card's name is Internet.
- These shapers of education, who were at the heart of education systems around the world, looked at the Internet and neither could not nor would not take that step to look at it with a critical, scientific mind and with necessary foresight.
- Some fail to see how it would forever transform the world and how it would revolutionize educational systems, educators and learners and educational delivery and research systems.
- As such we need to relook at:

KEY ISSUES BEYOUND 2015

- What are the key issues surrounding these questions, that have to be answered so that Malaysia and nations like her are ready to face 2015 and beyond.
- It is expected that a sudden surge in innovations and the convergence of NBIC - nano, bio, info and cogno technologies - will create rapid transformations.
- This will place new pressures on education systems at:

CHALLENGES WE FACE...

- Problems cannot and must not be solved with the same, tired ways of thinking.
- Disruptive thinking is needed to create innovations and take calculated risks, possibly resulting in mistakes, but it will be mistakes made early, quickly and cheaply.
- The underlying considerations are what the Global Education scene is like currently and then, what it ought to be, to meet global and future relevance;
- and finally, how Malaysian education needs to transform to meet these requirements. :

- Professional Will to spur Political Will
- Future National Curriculum & Nationhood
- New Roles for New Educators and New Learners
- Future Learning Spaces in Future Classrooms
- Technology and Education
- Evaluations and Standards
- Structures and Timelines for future Learning
- Convergence of new teachers and new subject areas

CONCLUSION

- In conclusion, the only remaining issue we need to confront, and confront with all our professional will and with much eagerness and enthusiasm is, "Are we ready to transform!?"
- However, we must also remember that in the transformation process, we cannot forsake values and moral considerations.
- It is important that we do this right because:

- The world need to function optimally and peacefully
- The gap in access to education between nations
- Coexisting and gain in multicultural and ethical perspective s
- Nations need to take ownership, responsibility and accountability
- Learners learning in new environment
- Built in values, ethics and moral systems

THANK YOU
SO MUCH
FOR THE CHANCE
TO VIEW MY OPINION
ARIGATOU QOZAIMASU