

Keynote Paper:
**UNSDGs and Future Quality Management - Social Policy for
Developing Sustainable Development Mindset**

Dr. Shirley Mo-Ching YEUNG

*Director, Centre for Business/ Social Sustainability and Innovations (BSSI)/
Head, School of Business, Associate Professor,
Gratia Chrisitan College, (UNPRME Advanced Signatory Institution), HKSAR*
shirleymc@gmail.com

ABSTRACT

The purpose of this paper is to review different ways of promoting a sustainable development (SD) mindset to engage employees and management to explore, to explain, to elaborate and to evaluate to become future sustainability leaders. After reviewing literature on sustainable development mindsets, sustainable development goals (SDGs), corporate social responsibility (CSR) and analysis of social dimension policy of 10 China-based listed companies (2006 to 2017) in Bloomberg database with members in UN Global Compact (2004 to 2017), it has been found that employee CSR training policy and consumer data protection policy are not common in selected organizations, except two communications related organizations. And, policies on equal opportunities, health & safety, and human rights are mostly in place. Among 10 selected organizations, Petro China and China Mobile Communications are found with these three policies in place in past 11 years (2007 to 2017). It is suggested that individual employee attributes, knowing and being in relation to social policy, need to be strengthened; perception of tasks, implementing CSR and consumer policies with inspirations on sustainability, need to be maintained in the organizational core activities; and value creation, realising the importance of consumer data protection with design thinking and system thinking in product/service innovations, need to be enhanced for sustainable development.

The findings are not only of managerial concerns relevant to sustainable development mindset, but also for fundamental responsible management education for staff training. The ultimate output of the paper is a model for promoting a Sustainable Development Mindset with employee CSR policy / consumer data protection related social policy in quality management (QM) for future sustainable leaders. Therefore, academics, industry practitioners, NGOs and policy makers shall consider these findings when exploring how to best establish a sustainable development mindset in an innovative way.

Keywords: Sustainable Development (SD) Mindset, Sustainable Development Goals (SDGs), CSR, consumer data protection policy.

1. Background

Facilitating organisational change via innovations for sustainable development continues to be one of the major challenges in corporations of different natures. The phrases of sustainability and corporate social responsibility (CSR) have been used interchangeably in the past few years. Organisations of different natures are seeking ways to enhance business growth, for example, designing innovative products and services, re-visiting the operations flow management system, and re-examining outsourced business partners for quality. The United Nations' (UN) Rio+20 outcome document, *The Future We Want*, asserted that people are the centre of sustainable development; and Rio+20 promised to strive for a world that is just, equitable, inclusive and committed to work together to promote sustained and comprehensive economic growth, social development and environmental protection to benefit all. However, it has been found that little research has been done on the best methods for achieving the UN Sustainable Development Goals (SDG), most relevantly, Goal 4: 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'; Goal 8: 'Promote sustained, inclusive and sustainable growth, full and productive employment'; and Goal 17: 'Strengthen the means of implementation and revitalise the global partnership for sustainable development'. In 2009, Wirtenberg uncovered seven qualities for building a sustainable enterprise: management support, centrality to business strategy, values, metrics, stakeholder engagement, systems alignment and organisational integration. From the findings of Wirtenberg, it was found that systems alignment and organisational integration were the weakest dimensions of most enterprises. Hence, it is worthwhile to explore how to integrate professional development into organisational systems with an innovative sustainable development mindset for achieving the SDGs of the UN.

According to Kerul et al. (2016), a Sustainability Mindset is intended to help individuals analyse complex management challenges and generate truly innovative solutions. The Sustainability Mindset breaks away from traditional management disciplinary silos by integrating management ethics, entrepreneurship, environmental studies, systems thinking, self-awareness and spirituality within the dimensional contexts of being (values), thinking (knowledge) and doing (competency). Kerul et al. (2016) highlighted that multi-disciplinary knowledge for developing a sustainability mindset was crucial. Additionally, Kerul et al. (2016) provided a framework for a “Sustainability Mindset” with the elements of:

- 1) How individuals view the world and their role/place in it;
- 2) How individuals’ views link up with their assumptions, beliefs, and values; and
- 3) How individuals incorporate a sustainability mindset systematically to understand the ecosystem of a society.

The definition of Sustainability Mindset put forward by Kerul et al. (2016) involves content areas, dimensions, and components. The purpose of this paper is to build on the Sustainability Mindset Model framework put forth by Kerul et al. through four dimensions: Ecological Worldview, Systems Perspective, Emotional Intelligence and Spiritual Intelligence. These four dimensions will be incorporated into seamless and innovative assessments to help learners build a sustainability mindset with knowledge of the society in which they live, with values (being) that they believe with interconnectedness, and with competency (doing) in identifying feasible and innovative solutions for new problems.

This chapter begins with literature and trends in business and management education, corporate social responsibility (CSR) and innovations for sustainability. The ultimate aim of this chapter is to align with the 2016 Policy Address of the Hong Kong Government in addressing the need for harmony and solidarity in our society (par. 5) and intends to develop innovative use of visual messages (e.g. video/movie) to conserve the inner values of our society, including respect, persistence, harmony, the 17 United Nations Sustainable Development Goals (SDGs), and the six UN Principles for Responsible Management Education (PRME) in local, regional, and international contexts.

In the 2015 Policy Address of the Hong Kong Government, it was stated that Hong Kong’s cultural and creative industries have grown at a rate faster than the overall economy in recent years. According to the address, the value added rate of the cultural and creative industries increased rapidly at an average annual rate of 9.4 from 2005 to 2012. Given the proliferation of creative industries in Hong Kong, we believe video/movie is one possible channel for promoting personal values and UN SDGs and UN PRME which are welcomed by our App Generation. In fact, the innovative use of video/movie to promote inner values and UNSDGs and UN PRME can help to create decent entrepreneurial job opportunities, connecting directly to UN Sustainable Development Goal (SDG) 8.3:

“Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.”

Objectives of this study:

- To explore commitment of social policy for selected China-based listed organizations with UN Global Compact membership; and
- To identify areas needed to be improved for total commitment on the Corporate Social Responsibility (CSR).

2. Introduction

In line with the UN Decade 2005-2014 on sustainability, many research papers have been written on sustainable development (SD) in the higher education sector. Different institutions have their own interpretations of sustainable development. In general, sustainable development is related to the economic, social and environmental impacts of global growth, promoting responsible decision making to allocate the resources necessary to meet the present and future needs of a society. This connects to how management defines and interprets sustainability when setting and implementing their short- and long-term strategic goals with total involvement of academic and administrative staff. Buying into the concept

of sustainable development is the first and the most significant step in implementing sustainability-related actions in an institution, as the perception of staff on SD relates directly to their understanding of and exposure to sustainability ideals.

According to the definition of the Brundtland Commission (1992) of the United Nations, “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Basic economic sustainability requires that the current activity of businesses be supported in the short term, and that new products, services, processes and people are supported in the long term. In the global initiatives of the “United Nations (UN) Decade of Education for Sustainable Development” (DESD) 2005-2015, the mission of the DESD outlined by the United Nations Educational, Scientific, Cultural Organization (UNESCO) is to meet the needs of the present without compromising those of future generations. Hence, the ESD is relevant to all nations and all higher education institutions. Management in higher education institutions need to keep practising the rationale of ESD beyond 2015 through integrating ESD into their institutional operational level in setting strategic goals and performance indicators; and school/programme levels in re-visiting the curriculum for the benefit of learners and the community.

As mentioned by the UNDESD, quantitative and qualitative ESD indicators need to be incorporated into different aspects of education for regular monitoring and reviewing purposes. This paper is going to analyze the six principles of UNPRME and 17 UN SDGs, along with the CSR guidelines of ISO 26000, to present the capacity of a video production project to build learners’ creativity, team spirit, and communication skills, as well as enhance teachers’ ability to be innovative in assessing a learner’s competency to become a future leader with a sustainable development mindset.

3. From Sustainable Development (SD) to a Sustainable Development / Sustainability Mindset

In recent years, the higher education sector has started to address the issues of sustainable development in their operations and curriculum design. This has created a dramatic need for educators, especially curriculum designers, with a mindset of sustainability and social responsibility (SR) and who possess the skills to write sustainability-related reports to communicate with stakeholders for accountability and transparency. This led to a need for further study of the elements of sustainable development and a sustainability mindset to align with the UN PRME principles and UN SDGs to help developing learners become future leaders who possess an SD mindset for economic, social and environmental impacts.

The purpose of this paper is to explore the application of the Sustainability Mindset Model of Kerul et al. (2016) with the seven dimensions of ISO 26000 Corporate Social Responsibility (CSR). Guidelines will identify the steps involved in designing relevant sustainability-related activities to assess employees’ knowledge (thinking), values (being) and competency (doing) in the dimensions of ecological worldview, systems perspective, emotional and spiritual intelligence to fill the gaps between academics and industries in terms of developing talents with relevant knowledge, skills, attitudes and values for the future.

According to the information released on the HK government website, the concept of sustainable development is adopted from the World Commission on Environment and Development, stating that sustainable development is that which “meets the needs of the present without compromising the ability of future generations to meet their own needs.” [“Our Common Future”, 1987] Based on information from the HK government website, it seems the government’s focus is more on UN SDG 11 Sustainable Cities, SDG3 Good Health and Well Being, SDG 6 Clean Water, SDG7 Clean Energy and SDG13 Climate Action, stating that “Building Hong Kong into a world-class city and making Hong Kong a clean, comfortable and pleasant home would require a fundamental change of mindset” to make progress in the following three main areas:

- finding ways to increase prosperity and improve the quality of life while reducing overall pollution and waste;
- meeting our own needs and aspirations without doing damage to the prospects of future generations; and

- reducing the environmental burden we put on our neighbours and helping to preserve common resources. ("1999 Policy Address")

Though the actions taken by the Hong Kong government are noble, they will not be enough to make significant progress towards these goals. More efforts are needed in the private sector to engage employees and management build a SD mindset to achieve results in the above three main areas.

4. Sustainable Development and a Knowledge-based Economy

The concepts of sustainable development have been highly debated subjects and are of great importance for the future, especially in the higher education sector where students are educated to be prepared to face the world's impending challenges and where they are expected to develop themselves personally and professionally in a sustainable manner. Szitar (2014) argues that community development is related to sustainability which needs to have stakeholder collaboration, linking up changes with sustainability, adopting interdisciplinary and multidisciplinary approaches in teaching in architectural education Pinho et al. (2015) also stated that university education not only enables professional growth, but also promotes development on a personal level (p. 162). Additionally, they highlighted that contextualisation is crucial in university education, including creating a variety of contexts for students to learn how to perceive the world, how to handle adverse situations, how to develop belonging to the syllabus, how to experience practical content, and how to create professional networks via extracurricular activities complementary to their studies.

In fact, Gedzune (2013), Gedzune and Gedzune (2012) and Pohl et al. (2010) also argue that teacher training and engagement through reflection, active research and co-production of sustainability-related research were needed to understand the importance of a broader and interrelated perspective on issues surrounding sustainable development for the future. As early as 2005, Kitagawa pointed out that the role of universities in a knowledgeable society was examined in light of the emergence of new research and learning systems, conditioned by forces of both globalisation and regionalisation with the impacts of these new relationships perceived in four principal dimensions: economy, human resources, governance and community. Based on UN SDG 4, Quality Education, it is expected that the supply of qualified teachers will increase, including through international cooperation for teacher training in developing countries. Hence, the objective of this chapter is not only to empower our young people to use technology to convey stories of personal values and UNSDGs and UNPRME, but also to share the best practices of video production for inner values in different industries working towards UN sustainable development goals. This chapter will also strive to identify the potential use of the completed video/movie in seamless teaching and learning practices, as well as in building a platform of knowledge exchange for developed and developing countries.

As we know, the economic development of most countries is now turning from manufacturing into service production, creating a need for a workforce with professional knowledge, skills, attitudes and values. Kivunja (2015) argues that economies have been increasingly globalised with digital technologies assuming the ubiquitous presence and functional utility of these technologies in peoples' lives outside educational contexts. He states that educators need to prepare learners for the Digital Economy, requiring the teaching of new skills rather than the traditional core subjects. Kivunja (2015) called this realisation a New Learning Paradigm, focused on teaching students the skills most demanded in the 21st century. He put forward the 4Cs as super skills: critical thinking, communication, collaboration and creativity. If learners are taught these four crucial skills with the sustainability-related content and community development mentioned by Szitar (2014), and the contexts for development mentioned by Pinho et al. (2015), the community will be a better one under a knowledge-based economy within a digital technology environment.

5. Sustainable Development and Corporate Social Responsibility (CSR) in Higher Education

Under keen competition for resources and facing unexpected risks from natural and human-made disasters, people are aware of the importance of sustainability in education. In fact, the concept of sustainability can be traced back to the thirteenth century, though the idea became much more widespread in environmental literature beginning in the 1870s. (Kamara et al., 2006 quoted in Jones et al., 2011). Jones et al (2011) suggested that sustainability was about human survival and the avoidance of ecological disasters with complex and technical meaning from a professional perspective. They argued that sustainability could be seen as the goal or endpoint of a process called sustainable development. They also mentioned that a number of attempts had been made by sustainability scholars to create theoretical frameworks that connect nature and society, as these were needed to demonstrate that social and economic development could not be viewed in isolation from the natural environment. (Amsler, 2009, p.123 quoted in Jones et al. p.258)

In 2011, Djordevic and Cotton realised that there had been a growing awareness in national and international policies about the importance of integrating sustainability into both business and educational arenas. They emphasised that education for sustainability development (ESD) was an issue of increasing importance in higher education, including the campus, curriculum, community and culture of institutions. They quoted the ideas of UNESCO, which stated that ESD was “A process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities”. From an institutional perspective, policy and strategy related to sustainable development in higher educational institutions must be driven by the management teams within those organizations, including curriculum design and development policy, teaching and learning policy, research policy, campus design and maintenance policy. Two years later, Ryan and Tilbury (2013, p.272) argued that though the need to embed Education for Sustainable Development (ESD) into the higher education curriculum was well recognized in international sustainable development dialogues, substantial obstacles were encountered which called for systemic education change. They discovered that educators needed to re-think the purpose of education to extend learning opportunities for learners who could contribute more for the future. They concluded a deeper reflection on teaching and learning was needed to make ESD a viable education proposition for transferring sustainability-related skills. They also put forward that engaging learners with experiences on sustainable development was significant, as this would lead learners to further develop their critical thinking skills and their ability to ask provocative questions, in addition to helping them devise new ways of sustainable living.

Additionally, Yeung (2014) highlighted that responsible corporations needed to adopt the seven dimensions of the Corporate Social Responsibility (CSR) guidelines of ISO 26000 in their operations: labour practices, consumer issues, fair operating practices, human rights, organisational governance, community involvement, and development and the environment. She mentioned that the priority of the seven dimensions was subject to the strategic planning of the management and the expectations of their stakeholders. According to Cajazeira (2008, quoted in Yeung, 2014), the major principles for ISO 26000 are: accountability, transparency, ethical behaviour, consideration for the stakeholders, legality, international standards, and human rights. It is the responsibility of organisations to consider the needs of stakeholders through these seven lenses when designing work processes or executing business-related activities. In fact, the ISO 26000 CSR guidelines convey the message that non-economic inputs and the soft side of outcomes are the prevailing trend in quality management systems (QMS).

In order to fulfill the needs of UNESCO and the gaps uncovered by scholars, this paper focuses on exploring ways to link institutional vision and strategic goals with social reporting principles and ISO 26000 CSR guidelines to define steps of engaging stakeholders, identifying possible risks and setting sustainability- and CSR-related goals for making institutions more sustainable. Yeung (2014) argued that building quality into products and services was not sufficient for continual improvement. She called for new ways of integrating sustainability and CSR into organisational strategies for sustainable business. In fact, Mootee (2013, p. 59) brought up a similar viewpoint to Yeung (2014), stating that “more than 80 percent of our management tools, systems, and techniques are for value-capture efforts, not for value creation; this includes techniques such as total quality management (TQM), enterprise resource planning (ERP), Six Sigma, Lean Startup, and Agile Systems. These tools are valuable for keeping an enterprise running smoothly. But we should be focusing on value creation rather than value capture alone. This is where design thinking comes into play. Companies such as Apple, Amazon.com, Netflix, Samsung,

Burberry, and BMW are winning by design and the thinking behind that design.” He mentioned that solving problems needs to have a multi-functional and multi-perspective approach influenced by many of the principles inherent in design thinking, including core values, identities, expectations, and views of the world. He emphasized that ‘responsibility to shape the future’ was critical and actions had to be humanised, meaningful and connective. When applying the concepts of design thinking to setting sustainability-related goals for educational institutions, embedding the principles of empathy, an approach to collective problem solving, and a framework to balance needs and feasibility are needed.

6. Design Thinking for Sustainable Institution

Problems that we come across in the future will likely be different from those faced in the past. Hence, a new perspective for problem-solving is needed for sustainable development. Mootee (2013, p.39) put forward the idea of design thinking, a natural and inherent thinking, which was an approach to inquiry and expression that complemented and enhanced existing skills, behaviours, and techniques. He mentioned that design thinking was a data-driven type of analytical thinking with its own mode of analysis – one that focused on forms, relationships, behaviour, and real human interactions and emotions. He recommended that design thinking could be applied in the following ways, all of which are relevant for sustainable development in higher education:

- 1) How a product, service, system, or business currently lives in an ecosystem;
- 2) How people interact with the above and the nature, frequency, and attributes of that interaction;
- 3) How the different elements in the ecosystem relate to one another and if any systems - level impact exists;
- 4) What other ecosystems exist adjacent to your ecosystem;
- 5) How new insights may be gained by looking broadly at communicative events within these ecosystems and how they fit together from a systems perspective;
- 6) What the key characteristics and patterns of behaviour of new relationships are when viewed from a system level; and
- 7) What the patterns of people’s information behaviours are and how to map them visually to make sense of them (Mootee, 2013, p. 39)

From the above, it is clear that design thinking can empower organisations and individuals to better understand their competitive and operational environment for perceiving and solving problems with realisation of behavioural patterns, values attached to systems-level and processes of meeting challenges.

Apart from a system level, a process of levels in programme/module design with sustainable development and social responsibility also need to be addressed. At the 17th International Conference on Teaching and Learning organised by UNESCO-APEID, Bajunid (2014) argued that any radical turning points in professional policy shifts required mind-set changes in teachers with respect to their beliefs, assumptions, outside-the-box thinking, time management, creativity, edupreneurship and wethanschaaung. “The emerging of basic literacies and new literacies demand continuous learning by teacher as perennial learner.” Bajunid (2014) also quoted the code of practice for quality assurance in public universities in Malaysia developed by the QA Department of the Malaysian Ministry of Higher Education (2008), which stated that the key foci of programme quality were: conceptual framework, knowledge, skills, content knowledge, pedagogical content knowledge, pedagogical and professional knowledge and skills, professional disposition and assumption system with evaluation, field experience and clinical practice, diversity, faculty qualifications, performance and development, unit governance and resources (p.6). Moreover, he highlighted that all programme objectives should align with the following learning outcomes:

- 1) Knowledge;
- 2) Practical Skills;
- 3) Social Skills and Responsibilities;
- 4) Communication, Leadership and Team Skills;
- 5) Problem-solving and Scientific Skills;
- 6) Information Management and Life-long Learning Skills; and
- 7) Management and Entrepreneurship Skills.

Yeung (2014) echoed the ideas of Bajunid (2014) in stating that the following four characteristics were desirable for a socially-responsible teacher in the digital age. Teachers need to develop techniques to cater to a diversified group of students through traditional and non-traditional classroom settings, for example, blending in-person learning and virtual learning environments to motivate students as co-producers in the creation of meaningful and relevant curricula. The four characteristics are:

- 1) Knowledge and Intellectual Skills – Multi-disciplinary knowledge and multi-thinking with a mindset of change
- 2) Processes – Value creation and waste reduction via curriculum review and revision
- 3) Autonomy, Accountability and Application - Acceptance of professional responsibility with people, respect and continual improvement
- 4) IT, Numeracy and Communication - Using technology in information consolidation for environmental friendliness

In 2010, Fisher argued that corporate sustainability/social responsibility was of utmost importance for the survival of organisations and their future generations of employees: “Organisations’ product/service offerings and vendor networks are interconnected globally and are being recognised on a global scale” (P. 29). If educators can visualise the sustainable development goals of UNESCO, crystallise the manpower projection into curriculum design, and realise the ways of implementing the 4Cs into designing community development-related programmes, the institution can work towards becoming a sustainable organisation for the benefit of learners, the industries, and the community as they can develop awareness of sustainability and social responsibility among their peers and influence students to learn in a sustainable way. Based on the literature enumerated above, a model of sustainable institutions is recommended(see Figure 1.0).

7. Methodology

This paper selects 10 listed organizations representing the East to analyse for social responsibility performance. The companies chosen from China are signatory members of UN Global Compact namely in Table 1 . Little research has explored UN Global Compact (UNCG) members’ commitment in CSR for sustainable development. The present research adopted a quantitative trending approach to explore the key elements committed in social policy performance of these chosen companies.

7.1 Research Objectives (RQs)

- To explore commitment of social policy for selected China-based listed organizations with UN Global Compact membership; and
- To identify areas needed to be improved for total commitment on the Corporate Social Responsibility (CSR).

After reviewing literature on sustainable development mindsets, sustainable development goals (SDGs), corporate social responsibility (CSR) and analysis of social dimension policy of 10 China-based listed companies (2006 to 2017) in Bloomberg database with members in UN Global Compact (2004 to 2017), it has been found that employee CSR training policy and consumer data protection policy are not common in selected organizations, except two communications related organizations. And, policies on equal opportunities, health & safety, and human rights are mostly in place.

7.2 Research Findings

Among 10 selected organizations, Petro China and China Mobile Communications are found with these three policies in place in past 11 years (2007 to 2017). It is suggested that individual employee attributes, knowing and being in relation to social policy, need to be strengthened; perception of tasks, implementing CSR and consumer policies with inspirations on sustainability, need to be maintained in the organizational core activities; and value creation, realising the importance of consumer data protection with design thinking and system thinking in product/ service innovations, need to be enhanced for sustainable development.

Table 1 – China-based Organizations listed as UN Global Compact Members and Bloomberg Database

Name	Type	Sector	Country	Joined On
1. Inner Mongolia Yili Industrial Group Co., Ltd.	Company	Food Producers	China	11/27/2017
2. Orient Overseas (International) Limited	Company	Industrial Transportation	China	9/5/2017
3. China Minsheng Banking Corp., Ltd.	Company	Banks	China	6/17/2014
4. Link Asset Management Limited	Company	Real Estate Investment Trusts	China	9/26/2012
5. Industrial and Commercial Bank of China Limited	Company	Banks	China	5/16/2012
6. PetroChina Company Limited	Company	Oil & Gas Producers	China	8/1/2007
7. China Mobile Communications Corporation	Company	Mobile Telecommunications	China	7/16/2007
8. China United Network Communications Group Co. Ltd. ("China Unicom")	Company	Mobile Telecommunications	China	11/9/2004
9. Baosteel Group Corporation	Company	Industrial Metals & Mining	China	6/10/2004
10. China Petroleum and Chemical Corporation – Sinopec	Company	Oil & Gas Producers	China	5/22/2004

Table 2 Summary on Policy against Employee CSR Training (CSR) – top and Consumer Protection Policy (CPP) – bottom

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
1. Inner Mongolia (600887 CH)	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No
2. Orient Overseas (316 HK)	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No Yes /
3. China Minsheng Banking (600016 CH)	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ Yes	No/ Yes	NA
4. Link asset Mangt. (823 HK)	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No
5. ICBC (601398 CH)	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No
6. PetroChina Co. Ltd. (857 HK)	No/ No	No/ No	No/ No	No/ No	No/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No
7. China Mobile (941 HK)	No/ No	No/ Yes	No/ Yes	No/ Yes	No/ Yes	No/ Yes	No/ Yes	Yes/ Yes	Yes/ Yes
8. China United Network Comm.(600050 CH)	No/ No	No/ No	No/ No	No/ No	No/ Yes	No/ Yes	No/ Yes	Yes/ Yes	Yes/ Yes
9. Baosteel Group (600019 CH)	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No
10. China Petroleum and Chemical (386 HK)	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No	No/ No

With the exception of China Mobile Communications, all the others did not have a mature policy on employee CSR training and consumer data protection. Commitment to establish and maintain CSR policy should be in place in all its forms.

Table 3 - Summary on Policy against Equal Opportunity (EO) - top/ Health & Safety (ES) – middle/ Human Rights (HR) – bottom

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
3. Inner Mongolia (600887 CH)	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	No/ No/ Yes	No/ No/ Yes	No/ No/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes
4. Orient Overseas (316 HK)	Yes/ Yes/ No	Yes/ Yes/ No	Yes/ Yes/ No	Yes/ Yes/ No	Yes/ Yes/ No	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes
3. China Minsheng Banking (600016 CH)	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ No/ Yes	No/ No/ Yes	No/ No/ Yes	No/ No/ Yes	No/ No/ Yes
4. Link asset Mangt. (823 HK)	No/ Yes/ No	No/ Yes/ No	Yes/ Yes/ No	Yes/ Yes/ No	No/ Yes/ Yes	No/ Yes/ Yes	No/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes
5. ICBC (601398 CH)	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ Yes	Yes/ Yes/ No	Yes/ Yes/ No	Yes/ Yes/ No
6. PetroChina Co. Ltd. (857 HK)	Yes/ Yes/ Yes								
7. China Mobile (941 HK)	Yes/ Yes/ Yes								
8. China United Network Comm.(600050 CH)	No/ Yes/ Yes	No/ Yes/ Yes	Yes/ Yes/ Yes						
9. Baosteel Group (600019 CH)									
10. China Petroleum and Chemical (386 HK)									

7.3 Overall Findings

Research Questions:

- 1) What steps are required to help learners build a sustainable development (SD)/sustainability mindset with the four dimensions of Kerul et al. (2016)?

The followings are the steps required to help students build an SD mindset with the four key dimensions of Kerul et al. (2016):

Step 1) Setting up an SD with the Innovations Working Group:

- Engaging management and employees from different departments to discuss ways of establishing employee CSR training policy and consumer data protection policy for sustainable development .

Step 2) Arranging Awareness Training for Involved Stakeholders:

- Providing on-going (e.g. quarterly) training on sustainable development mindset, innovations, and consistent implementation strategies on equal opportunities; health & safety ; and human rights for CSR practices in core business
- Inviting external parties to comment on potential improvements in SD mindset and innovations.
- Engaging the community as a whole to increase the awareness of SD mindset with innovations in developed and developing countries.

Research Question 2)

How can management assess their employees' understanding of CSR ?

Step 3) Using Sustainability Related Principles to Engage Stakeholders

Identify relevant sustainability issues based on the six principles of the UNPRME and 17 UNSDGs to create action plans to increase awareness of these issues and/or to solve these problems using innovations in order to assess the level of responsibility and SD mindset of learners and their ability to foster positive economic, social and environmental impacts.

Step 4) Communicating with Stakeholders about SD Mindset and Innovations to Promote Opportunities for Engagement and Partnership

According to Kerul et al. (2016), a Sustainability Mindset is intended to help individuals analyse complex management challenges and generate truly innovative solutions. The Sustainability Mindset breaks away from traditional management disciplinary silos by integrating management ethics, entrepreneurship, environmental studies, systems thinking, self-awareness and spirituality within the dimensional contexts of being (values), thinking (knowledge) and doing (competency). Kerul et al. (2016) highlighted that multi-disciplinary knowledge for developing a sustainability mindset was crucial. Additionally, Kerul et al. (2016) provided a framework for a "Sustainability Mindset" that includes these elements:

- 1) How individuals view the world and their role/place in it;
- 2) How individuals views connect with their assumptions, beliefs, and values; and
- 3) How individuals incorporate the sustainability mindset systematically to understand the ecosystem of a society.

The definition of Sustainability Mindset put forward by Kerul et al. (2016) involves content areas, dimensions, and components. The goal of this paper is to build on the framework of Kerul et al's Sustainability Mindset Model through four dimensions: Ecological Worldview, Systems Perspective, Emotional Intelligence and Spiritual Intelligence. These four dimensions will be incorporated into seamless and innovative assessments designed to help learners build a sustainability mindset with knowledge of the society in which they live, with values (being) that they believe with competency (doing) in identifying feasible and innovative solutions for new problems.

With the goal of applying an inquiry-action learning approach to nurture management and employees le to use technology to convey stories of personal values with a deep understanding of UNPRME and UNSDGs, this paper proposes a model for a Sustainable Development Mindset with Innovations (appendix I) to highlight the key areas of learning through innovative assessments for building the CSR capabilities of management and employees . They are:

- 1) A framework of sustainable development mindset with innovations (Diagram 1) needs to promote CSR- oriented social policy to management and employees via enhancing their understanding of global initiatives like UNPMRE and UNSDGs to instill worldview and system perspectives in them;
- 2) A framework of sustainable development mindset with innovations needs to build upon on multi-disciplinary knowledge to support management and employees' deeper understanding of local issues and encourage them to exercise self-awareness in ways of seeing things, creativity in ways of solving problems via ethical thinking, system thinking, and entrepreneurial spirit in emotional intelligence development;
- 3) A framework of sustainable development mindset with innovations needs to incorporate a critical self-evaluation process that promotes management and employees to reflect and engage stakeholders in emotional intelligence development; and
- 4) A framework of sustainable development mindset with innovations needs to apply design thinking and innovations for integrating different perspectives for developing transferable skills to help management and employees become future sustainability leaders and enable them to bridge the gap between developed and developing countries.

8. Conclusion and Discussion

Based on the UN PRME principles, UN SDGs and ISO 26000 CSR guidelines, supporting the growth of sustainable development mindset with innovations through the use of sustainable development mindset with innovations model in local contexts can help an organisation achieve the objective of building a sustainable development mindset, to convey personal values, to facilitate management and employees to use technology to convey stories of CSR policy and consumer data protection policy with UNSDGs

Moreover, steps 1 – 4 have been used to illustrate how to foster a sustainable development mindset with innovations, a learning process involving applying the 4Cs of Kivunja (2015) - critical thinking skill, communication skill, collaboration skill and creative skill – to matters of sustainability, in addition to the design thinking concept of Moore (2013).

Building a sustainable development mindset by promoting the growth of management and employees intelligence in understanding their business through economic, social and environmental lenses is a challenge in responsible management education. Hence, it is recommended that CSR social policy should be built on the model of sustainable development mindset with innovations going forward (Figure-1).

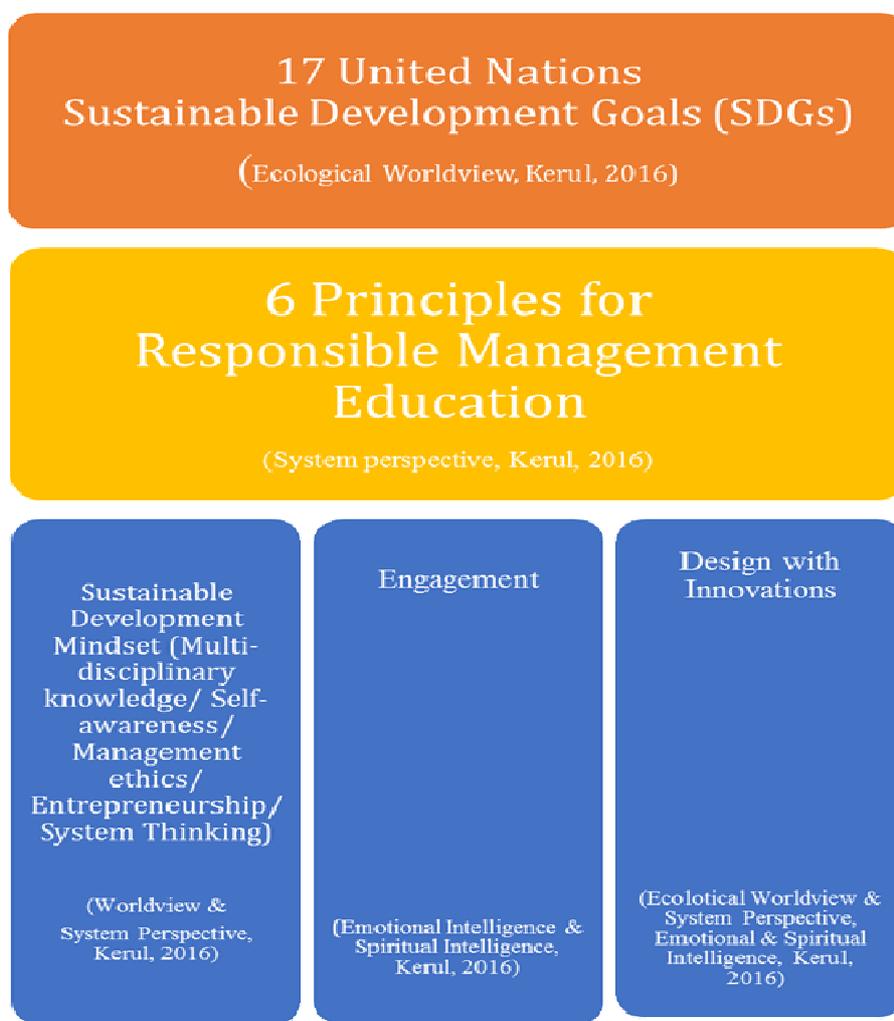


Figure-1 – Sustainable Development Mindset with Innovations

References

- Al-Hakim, Latif and Jin, Chen (2014) *Quality Innovation – Knowledge, Theory and Practices*, IGI Global. A volume in the Advances in Information Quality and Management (AIQM) Book Series, PA.
- Djordjevic A. and Cotton, D.R.E. (2011) “Communicating the sustainability message in higher education institutions”, *International Journal of Sustainability in Higher Education*, Vol.12 No.4, pp. 381-394.
- Fisanick, Christina (2008) *Eco-Architecture*, Cengage Learning, MI, U.S.
- Fisher, Donald (2010) “Stewardship & Sustainability – Acting responsibly with a focus on the future”, *The Journal for Quality & Participation*, January.
- Fraenkel, Jack R. & Wallen, Norman E. (2003) *How to Design and Evaluate Research in Education*. McGraw-Hill Companies, Inc., New York.
- Freeman, Donald (1970) *Boston Architecture*. MIT Press. New England.
- Gardner, Howard and Davis, Katie (2014) *The App Generation*, Yale University Press, New Haven and London.
- Gedzune, Ginta and Gedzune, Inga (2012) “Making sense of inclusion and exclusion through educational action research for sustainability in teacher education”, *WCES, Procedia – Social and Behavioral Sciences* 46, 3097-3101.
- Gedzune, Inga (2014) “Making sense of inclusion in teacher education for sustainability : Transformative power of action research”, 5th World Conference on Educational Sciences – *WCES 2013, Procedia – Social and Behavioral Sciences* 116, 1428-1432.
- Jencks, Charles (1980) *Skyscrapers-skyprickers-skycities*. Rizzoli International Publications, Inc., New York.
- Jones, Peter, Comfort, Daphne and Hillier, David (2011) “Sustainability in the global shop window”, *International Journal of Retail & Distribution Management*, Vol. 39 No. 4, pp. 256-271.
- Kassel, K., Rimanoczy, I., Mitchell, S. (2016) The Sustainable Mindset: Connecting Being, Thinking, and Doing in Management Education. Conference paper: Academy of Management Conference, Anaheim, California, August 2016.
- Kelly, Scott and Nahser, Ron (2014) “Developing Sustainable Strategies: Foundations, Method, and Pedagogy”, *Journal of Business Ethics* 123:631-633.
- Kitagawa, Furni (2005) “Constructing Advantage in the Knowledge Society – Roles if Universities Reconsidered: The case of Japan”, *Higher Education management and Policy*, Volume 17, No. 1, pp. 1-18.
- Kivunja, Charles (2015) “Exploring the Pedagogical Meaning and Implications of the 4Cs ‘Super Skills’ for the 21st Century through Bruner’s 5E Lenses of Knowledge Construction to Improve Pedagogies of the New Learning Paradigm”, *Creative Education*, 6, 224-239.
- Liddy, Mags, Tormey, Roland, McCloat, Amanda and Maguire, Helen (2008) ‘Working in the action/research nexus for education for sustainable development’, *International Journal of Sustainability in Higher Education*, Vol. 9, No.4, pp. 428-440.
- Lo, V.H.Y., Sculli, D., Yeung, A.H.W. and Yeung, A.C.L. (2005) “Integrating customer expectations into the development of business strategies in a supply chain environment”, *International Journal of Logistics : Research and Applications*, Vol., 8, No. 1, March 2005, 37-50.
- Mavroudi, Elizabeth & Jons, Heike (2011) “Video Documentaries in the Assessment of Human Geography Field Courses”, *Journal of Geography in Higher Education*, Vol. 35, No.4, 579-598, November.
- Matthews, Dona and Foster, Joanne (2014), *Beyond Intelligence*, House of Anansi Press Inc., Toronto.
- Milutinovic, Slobodan and Nikolic, Vesna (2014) “Rethinking higher education for sustainable development in Serbia: as assessment of Copernicus charter principles in current higher education practices”, *Journal of Cleaner Production*, 62 , 107-113.
- OECD (1995) Performance Standards in Education – In Search of Quality, *Head of Publications Service*, OECD, France.
- O’Dell, Carla and Hubert, Cindy (2011) *The New Edge in Knowledge, American Productivity & Quality Centre(APQC)*, John Wiley & Sons, Inc. New Jersey.
- Mootee, Idris (2013) *Design Thinking for Strategic Innovation*, New Jersey, Canada.
- Pinho, Ana Paula Moreno, Bastos, Antonio Virgilio Bittencourt, Almeida de Jesus, Angra Valesca, Martins, Rebecca Aurelio and Dourado, Lais Carvalho (2015) “Perception of Growth Conditions in the University from the Perspective of Freshman Students”, *Creative Education*, 6, 154-163.

- Pless, Nicola, M. and Maak, Thomas and Stahl, Gunter, K. (2012) "Promoting Corporate Social Responsibility and Sustainable Development Through Management Development : What Can Be Learned from International Service Learning Programs?" *Human Resource Management*, November – December, Vol. 51, No. 6, Pp. 873-904.
- Pohl, Christian, Rist, Stephan, Zimmermann, Anne, Fry, Patricia, Gurung, Ghana S., Schneider, Flurina, Speranza, Chinwe Ifejika, Kiteme, Boniface, Boillat, Sebastian, Serrano, Elvira, Hadorn, Gertrude Hirsch and Wiesmann, Urs (2010) "Researchers' roles in knowledge co-production: experience from sustainability research in Kenya, Switzerland, Bolivia and Nepal", *Science and Public Policy*, 37 (4), May, pp 267-281.
- Ryan, Alexandra, Tilbury, Daniella, Corcoran, Peter Blaze, Abe, Osamu and Nomura, Ko. (2010) "Sustainability in higher education in the Asia-Pacific: developments, challenges, and prospects", *International Journal of Sustainability in Higher Education*, Vol. 11 No. 2, 2010, pp. 106-119
- Scully-Russ, Ellen (2012) "Human resource development and sustainability: beyond sustainable organizations", *Human Resource Development International*, Vol. 15, No. 4, September. pp. 399-415
- Sibbel, Anne (2009) "Pathways towards sustainability through higher education", *International Journal of Sustainability in Higher Education*, Vol. 10 No. 1, 2009pp. 68-82.
- Szitar, Mirela-Adriana (2014) "Learning about sustainable community development", *The 5th World Conference on Educational Sciences – WCES 2013*, Procedia – Social and Behavioural Sciences 116, 3462-3466.
- Yeung, Shirley M.C. (2014) "Integrating CSR and Lean Teaching for Becoming a Social Responsible Teacher", *17th UNESCO-APEID International Conference*, October, 29-31, Bangkok.
- Yeung, Shirley M.C. & Ho, Sam H.M. (2010). "Country Report on Quality Movement in Hong Kong" *E-Magazine of Middle East Quality Association*, Vol. Issue 3, Dubai. (http://www.meqa.org/mag/q4q/vol1_issue3/pdfs/hongkong_qualitymovement.pdf)
- Yeung, Shirley M.C. (2014) ""From Corporate Social Responsibility (CSR) to Sustainability – Trend of Social Reporting in Banking Organizations", *Corporate Ownership and Control Journal*, Vol. 10, Issue 3.
- Yeung, Shirley M.C. (2014) ""Lessons Learnt from Quality CEO – Creativity Development for Learning Organization with Impacts", *Corporate Ownership and Control Journal*, Volume 12, Issue 1.
- <http://www.unpan1.un.org/intradoc/groups/public/documents/cpsi/unpan026040.pdf>
- http://www.gdrc.org/sustdev/un-desd/intro_un-desd.html
- http://www.unesco.org/new/en/media-services/single-view/news/ministers_reaffirm_education_for_sustainable_development_as_central_to_the_post_2015_agenda/#.VShdDzOJiUk
- <https://www.globalreporting.org/Pages/default.aspx>
- <http://www.unescobkk.org/news/article/17th-apeid-conference-empowering-teachers-for-the-future-we-want/>
- <http://arc.miami.edu/news/the-designintelligence-journal-ranks-um-soa-in-top-20-architecture-and-design/>
- <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/>
- <http://www.unescobkk.org/news/article/17th-apeid-conference-empowering-teachers-for-the-future-we-want/>
- <http://www.hsmc.edu.hk>
- <http://www.enb.gov.hk/en/susdev/sd/index.htm>
- <http://sustainability-now.org/develop-sustainability-mindset-9-steps/>
- <https://sustainabledevelopment.un.org/sdgs>
- <http://www.info.gov.hk/gia/general/201601/13/P201601130349.htm>
- <https://sustainabledevelopment.un.org/index.php?menu=1300>
- <http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=45a1b2f2-575d-4e6b-b129-e585eb248486%40sessionmgr4010&vid=1&hid=4209>

Author's Background**Dr. Shirley Yeung M.C.**

- Director, Centre for Corporate Sustainability and Innovations, Hang Seng Management College, DBA (Asia Int. Open University AIOU, Macau),
- RABQSA ISO 9000 Principal Auditor & IRCA ISO 9000 Auditor,
- AQIP Assessor, USA,
- HKCAAVQ Subject Specialist, HK

Dr. Yeung was awarded the “Outstanding Employee Award” and obtained “Best Teacher Certificate” from Hong Kong Quality Assurance Agency (HKQAA) and Hang Seng School of Commerce (HSSC) in 2006 and 2007 respectively. Dr. Yeung was appointed as a programme assessor for academic accreditation-related bodies in US and HK since 2007. In 2006, Dr. Yeung received Best Paper from CNAB, China and Best Paper from the 11th International Conference on ISO & TQM (ICIT). In 2010, Dr. Yeung also achieved the Highly Commended Award from the TQM Journal. She also published quality-related electronic paper in Dubai on quality movement in Hong Kong in the same year. Her publication covers Quality Management System (QMS), Corporate Social Responsibility (CSR), Management and Marketing.