Keynote Paper:
Linking ISO 10015 Training Guidelines with Six Sigma-based DLDDC Model for Sustainable Development (SD)

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ABSTRACT

The purpose of this paper is to explore the key elements of ISO 10015 training guidelines with DLDDC model (Determine, Link, Define, Design and Communicate) (Yeung, 2014) to achieve United Nations Sustainable Development Goals (UNSDGs). It is proposed to extend the idea of Design of Six Sigma (DFSS) into the use of DLDDC – determine and link the mission of a case centre in Hong Kong with UNSDGs with defined scope to co-create innovative training/ activities with partners, and communicate to stakeholders for relevant skill development and for consistency. This is a two-stage qualitative study with stage 1 on identifying the key elements of ISO 10015 and stage II on linking the key elements with DLDDC for training effectiveness, relevant skill development and moving towards achieving UNSDG4. The first finding is the incorporation of ISO 10015 training guidelines with the mission of the case centre and UN initiatives for developing relevant skill sets for sustainable development leaders. The second is the activities of the case centre outcomes to meet the requirements of ISO 10015 and UNSDG4.4. Examples of parameters are: human development and training in the workplace, employment creation and skills development, decision-making processes and structures, community engagement, and impact assessments for communities. Compared with traditional training design process, educators in higher education and trainers in executive training are encouraged to study ISO 10015, DLDDC Model and UN initiatives, for cross-disciplinary or multi-disciplinary training/ activities for sustainable development.

Keywords: Six Sigma, DLDDC, UNSDGs

1.   Introduction

"Sustainability is a confusing concept that has evolved steadily over the last decades according to Faber et al. , 2005" (Bolis et al., 2014, p. 7). In past years, there are different definitions on sustainability and sustainable development covering different disciplines and perspectives of ecology, economics, sociology, biology, etc. Bolis et al. (2014) mentioned that "the concept of sustainability means many things to different people, and this diversity of meaning tends to increase." According to the definition of 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." The basic element of sustainability is the economic aspect to support the business in short term. For business survival and expansion, issues relating to the customers, suppliers, organizations, and the community must be considered in strategic planning, strategy implementation, performance measurement and process review. Environmental considerations in the core and supporting processes may also definitely contribute to sustainable business.

During the 17th conference of UNESCO in Teaching and Learning, 2014, though educators realized that the future teaching mindset and pedagogy needed to be changed to match the needs of the community, the issues were the implementation of appropriate institutionalized policy to increase the relevancy of continual professional development of scholars, teachers, industry practitioners to understand the linkage between sustainability development and supply chain management in various kinds of industries. As a result, UNESCO, APEID co-organised with a tertiary institution in Hong Kong for the 1st forum in Sustainability Development in Higher Education on 21st July, 2015 to cover Programme Design; Module Assessment, and Learning Environments.

Besides, the study of Louw (2013, p. 56) mentioned that UNESCO called for educational sustainable development in the coming 10 years with the four main goals identified in relation to education, that is, rethinking and revising education from nursery school to university to include a clear focus of current and future societies on the development of knowledge, skills, perspectives and values related to sustainability. In 2010, Ryan et al. uncovered that many initiatives were offered in the Asia-Pacific region

about Education for Sustainable Development (ESD) to increase the understanding the different dimensions of sustainability. They also highlighted that there was a global trend in requesting more works on "promoting systemic change in educational arenas, particularly in terms of strategic integration within HE institutions. The Asia-Pacific contributions to this collection demonstrate the need to harness national policy, to develop local and regional initiatives and to work effectively towards more profound change in HE curricula and through collaboration with external communities and stakeholders."

From the above, more works are required to close the gap between policy and practices on education for sustainable development and innovation for corporate competitiveness. In order to fulfill the needs of UNESCO in improving the understanding of SD and increase the innovative capacity of organizations, it is time to explore the sustainability and quality related literature in past years to identify the concerned areas for improving learning outcomes and skill development to achieve economic, social and environmental impacts.

2.   From Corporate Social Responsibility (CSR) to United Nations Sustainable Development Goals (UNSDGs)

The Corporate Social Responsibility (CSR) guidelines of ISO 26000 highlight that a socially responsible organization needs to be aware of seven dimensions in their operations of business: labor practices, consumer issues, fair operating practices, human rights, organizational governance, community involvement and development and the environment. The priority of the seven dimensions is subject to the strategic planning of the management and the expectations of their stakeholders. For example, the management of a banking organization may need to understand the expectations of their customers when designing and launching different kinds of financial products and services, may need to identify not only their responsibility but also that of their business partners in the supply chain, may need to think about the environmental issues affecting their operations, their customers and their suppliers, and may need to consider ethical issues in their decision-making process so as to balance the economic, social and environmental impacts of sustainability; and the seven dimensions of CSR. The ISO Working Group on Social Responsibility (WG SR) has a high level of consensus in considering the needs of stakeholders in the guidelines of ISO 26000 for the benefit of the community.

According to Cajazeira (2008), the major principles for ISO 26000 are: accountability, transparency, ethical behavior, consideration for the stakeholders, legality, international standards, and human rights. It is the responsibility of organizations to consider the needs of the stakeholders in these seven aspects when designing work processes or executing business-related activities. In fact, ISO standard 26000 conveys a message that non-economic inputs and soft side of outcomes are the trend of quality management system (QMS).

Building quality into products and services for continuous improvement has been mentioned for scholars in total quality management in the past. Today, people started to explore integrating CSR and sustainability related elements into organizational strategy for sustainable business. Deep (2007) mentioned that there was a growing number proponents of the 'stakeholder' or 'social responsibility' model of corporate governance holding that business was accountable to a broader populace who have a direct or indirect stake in the enterprise's activities. Although there is a lack of comprehensive evidence that CSR and sustainability lead to improving financial performance, awareness to environmental and social concerns from different stakeholders is needed for the progress of organizations.

United Nations Sustainable Development Goals (UNSDGs) were endorsed by world leaders in September 2015. The 17 UNSDGs, a continuation of the Millennium Development Goals in 2000, provide a holistic framework for countries to promote good governance with peace for social impact, to protect the land, water, air for environmental impact, and to promote inclusive, equitable and lifelong quality education for social, economic and environmental impacts. However, the applicability and feasibility of 17 UNSDGs have become a hot topic recently. Among the 17 SDGs, Goal 4 quality of education with target 4.4 on substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship in 2030 is hardly to achieve without a framework to follow. This paper is to explore the ways, for example, ISO 10015 training guidelines and DLDDC model (Yeung 2014) to ensure quality of education and training related activities for developing relevant skill sets for employment.

3.   Embedding Quality, Process Management, ISO 10015 into UNSDGs

"Quality" and "Continual improvement" have been discussed in different kinds of industries, especially for value-added industries as supply chain management. Among the four main functions of management – planning, organising, motivating and controlling, each process of management is supposed to add value in the supply chain to fulfil and excel customer needs. Lo et al. (2005) brought forward the concept of customer-perceived values that integrates customer expectations into the designing of supply chain strategies. They mentioned that value of customer perceptions has to be considered carefully during the development stage of supply chain strategies. The insightful contributions of them are to simplify the complex internal operations system into seven categories. They are: strategic planning process (often referred to as the plan supply chain), three operational planning processes (also often referred to as plan source, plan make, and plan deliver) and three operational processes of source, make and deliver. The importance of perceived customer values is clearly demonstrated in the management strategic process; and embedded into operational performance.

The systematic concept of "Plan, Do, Check, Act" of ISO 9000 standards can help organizations to make improvement. ISO standards are stepping stone for reaching the ultimate aim of UNSDG 4 quality of education in skill development. When applying the concepts of ISO in training design, vision, mission and strategic goals of an organization are very important for delivering quality training services and improving skill development of staff members. ISO 10015:1999 training guidelines can be considered as a holistic framework to cover all the core activities – availability of training materials, training aid and equipment, knowledgeable and accountable trainers, innovative training strategy and a user-friendly and caring training environment for students. As the quality management training guidelines ISO 10015 was born in 1999, the DLDDC (Yeung, 2014) was used to provide a new perspective to ensure training relevancy to achieve UNSDG4.4 with the consideration of the context of the case centre in this paper.

4.   Integrating Six Sigma into Training Design

As training design activities are situational and contextual based, the needs and wants, requirements and expectations of stakeholders need to be considered. Using systematic thinking for building inter-relationship of components in training design is very important. Metcalfe (2006) mentioned that human behavior is very situational.

> *"Much of what we do is because of the situation we are in and who*
> *we are with."(Metcalfe, 2006)*

Przekop (2006) mentioned that a fundamental driving principle behind Intuit's Six Sigma efforts is to incorporate three stakeholders into outcomes of improvement. The three stakeholders are: employees, customers and shareholders.

> *"...looking at the organization's three core processes : creating the*
> *products, acquiring customers and expanding relationship, and*
> *servicing and fulfilling customer requests."*
> *(Przekop, 2006)*

"Sigma" is a symbol meaning how much deviation exists in a set of data. It is used to identify the number of defects within the production process. For service industries or social service organizations in relation to organization culture, it can be interpreted as defects in working relationship and communication that affect organizational performance. The aim of this paper is to make use of the extended version of DLDDC (Determine/ Link/ Define/ Design/ Communicate of DFSS (Design for Six Sigma) with ISO 10015: 1999 for achieving UNSDG4.4.

In order to maximize the quality of learning outcomes, Meyers & Nulty (2009) mentioned that courses needed to provide students with teaching and learning materials, tasks and experiences that are authentic, real world and relevant.
Based on the above 5 principles of curriculum design put forward by Meyers & Nulty (2009) and the concept of DFSS, the errors may be found in the curriculum design process are outdated curriculum, irrelevant learning outcomes, unmotivated students, and irrelevancy to employers.

In order to minimize the variations, DFSS needs to be explored to identify other elements that need to be considered in the design process to reduce variations. Based on the above possible errors, it is predicted that determining a direction, linking the directions with the requirements, defining a boundary for the curriculum, designing relevant materials, activities and assessments, and communicating the key considerations to stakeholders are the elements that need to be added into the curriculum design process for the benefit of the students, the prospective employers and the institution.

Based on DLDDC model (Yeung, 2014), the preparation works, for example, determining mission and defining scope of training design to match the mission statement of an organization are important.

5.   Methodology – Case Study

5.1   Background - Higher Education in Hong Kong

According to the 2015 Policy Address of the Hong Kong government, the issue of manpower is one of quantity and quality. Education has been the one of the key driving forces of Hong Kong's economic growth, providing impetus to growth of other sectors and creating employment.   In the Policy Address of Hong Kong government (2016), the role of vocational education in developing young people's interest and potential has been mentioned. "The Government has accepted all the recommendations of the Task Force on Promotion of Vocational Education and will actively consider how to implement them" (Policy Address HK, 2016, para 196).   One of the key areas in secondary education is applied learning courses. The importance of improving implementation skills in secondary education, vocational education and professional training has been highlighted.

Besides, the Report on Manpower Projection to 2018, Hong Kong also mentioned that the education system had to be more relevant in preparing young people for the world of work. According to the Manpower Project Report (2018), the top three economic sectors anticipated to grow the fastest in terms of manpower requirements during the period from 2010 to 2018 are *Financial services* (at an average annual rate of 2.5%), *Construction* (1.9%) and *Information and communications* (1.9%). The manpower requirements of the six industries - education services, medical services, testing and certification services, environmental industries, innovation and technology; and cultural and creative industries- was expected to grow between 1.6 to 4.4%.

Based on the report on educational services, training to business firms and continuing education for enhancing the competency of staff and the productivity are likely to gain in importance. There was a need for developing awareness of educators, policy-makers and industry practitioners about the importance of sustainable development and the need for its inclusion in secondary education, in higher education and professional training for business sustainability.

During the First Forum on Sustainable Development in Higher Education, Hong Kong, 2015, Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) mentioned that ensuring high quality education required (a) partnerships and quality assurance; (b) modification of the programmes to equip students with the values, knowledge and skills for sustainable development; (c) use of real life situations as case studies, service learning and social engagement to help students learn ways of tackling new problems. There was need to review course relevance, course structures, and appropriateness to local culture. This paper describes the role played by the case centre of a private tertiary education institution in Hong Kong (referred to as "parent institution") in responding to the concern for sustainable development and accomplishing the vision, mission and strategic goals of the parent institution with applying ISO 10015 training guidelines and DLDDC Model.

5.2   Background of Case Institution

The case organization has 5 Schools (Business, Communication, Decision Sciences, Humanities and Social Science, and Translation) with 14 business-related undergraduate programmes, for example, business administration, corporate governance, financial analysis, management, journalism and communication together with its first master's degree programme in translation.

The vision of the case institution is to be a leading private university, recognised for excellence in teaching, leearning and research, especially in the ares of business and management. The case institution desires to contribute positively to the economic, social and environmental condition of the community and to the quality of life to its staff, their families as well as the local community and society at large. It aims to achieve this by providing quality business and management related programmes to students to meet the job market needs with social responsibility and an ehtical mindset.

5.3   Turning Vision of Case Institution into Sustainability/ CSR Vision

The case institution created a Centre on Corporate Sustainability and Innovations in March, 2015 to lead the self-financed higher educational institutions and industries in building a platform for dialogue on social responsibility, sustainability and innovations.

The case institution believes in the transformative power of liberal arts education, especially in advocating the dynamic stakeholder theory, leadership values and responsible management education. Adopting the unique "Liberal + Professional" education model, our academic collaborations and activities are highly geared with the Six Principles of Responsible Management Education (PRME) of the United Nations (UN) – Purpose, Values, Method, Research, Partnership and Dialogue. These strategic initiatives address the UN's Sustainable Development Goals (SDGs) which came into force in January 2016. The case institution gives full supports to the 7th PRME Asia Forum and the PRME Colloquium which not only bring in innovations in responsible management education, but also visualize a mindset of sustainability of being, thinking and acting.

The aim of the case centre was to align the strategic plan of the parent institution with emergent international and national trends - the Six Principles of PRME, the principles of UN Global Compact, the Report on Manpower Projection to 2018, the Government of Hong Kong SAR- on sustainable development. It aimed to increase awareness of educators, industry practitioners, the government and NGOs about sustainable development (SD) and corporate social responsibility (CSR) through a variety of programmes conducted in partnership with other international and national agencies.

5.4   Vision of the Centre

To co-create a platform for services / products/ activities related to social responsibility (SR), sustainability and innovation.

5.5   Mission Statement of the Centre

To seek ways to engage stakeholders in the good practice in SR, sustainability and innovation to the community of academic, business, and NGOs.

5.6   Objectives of the Centre are to:

1. Provide governments, industries, NGOs, executives and students with the knowledge, skills, attitudes, values, perspectives and a new mindset of sustainable development with the concepts of SR, sustainability, innovation;
2. Provide governments, industries, NGOs, executives and students with opportunities to appreciate and apply knowledge of SR, sustainability and innovation to different scenarios for a better world; and
3. Align the values of PRME, UN Global Compact through conducting and reporting activities /projects related to responsible management education.

5.7   Research Objectives (ROs):

Previous research has found that UNSDG4 quality of education in sustainable development has not been comprehensively explored. This research explores the linkage of ISO 10015 training guidelines and DLDDC Model (Yeung, 2015) with the vision, mission and objectives of the Case Centre for demonstrate consistency and relevancy of training to achieve UNSDG4.

Research Objectives (RQs):
1) Identifying the key elements in ISO 10015 training guidelines related to DLDDC Model (Yeung, 2014); and
2) Outlining the activities (2015/16) of the case centre related to ISO 10015 major clauses and DLDDC Model to fulfill the above key elements identified in item 1).

Step I

RQ 1) The Key Elements in ISO 10015:1999 are:

1. **Define Training Needs**
   4.2.1 General
   The case centre defines the competence of personnel needed for involved tasks affecting quality of **learning modules/ programmes/ training/ events/ activities designed to achieve the expected outcomes**
   For example,
   Evaluate the competency of trainer, the present and expected needs of the case centre, defining the gaps between existing and required competence
   These can be found from trainer's background, minutes, and evaluation of survey.

   4.2.2 Defining Needs of Case Centre
   The case centre provides rationale of designing and allocating resources for the scope of certification in, reflecting the recent foundation skills, language skills, academic and vocational skills needed in UN Global Compact, UN Principles for Responsible Management Education (PRME), UNESCO, OCED, Policy Address of the Hong Kong Government, 2017, for example, Sustainable Development Mindset and Entrepreneurial Spirit.

   4.2.4 to 4.2.7 Review Competence, Define Competence, Identify Solutions to Close Competence Gap
               and Defining the Specifications for Needs Identified
   For example, the above are mentioned in annual report of the case centre, 2015 and 2016.

2. **Design and plan training**
   4.3.2 Defining Constraints
   The case centre formally and informally will communicate the constraints in resources for the scope of certification, for example, budgeting issues, timing and scheduling issues and other factors related to the scope of certification

   4.3.3 Training Methods and Criteria for Selection
   Potential methods related to the scope will be mentioned through on-going communication among internal and external stakeholders of the case centre, e.g. contents, delivery mode, partners, cost, and facilities.

3. **Provide the Training**
   4.4.1 General
   The case centre will carry out all the activities related to the scope of assessment with provision of resources, including trainer, trainee, and effectiveness of interaction among trainers, trainees and members of the case centre.

4. **Evaluate training Outcomes**
   4.5.1   General

The case centre will have a mechanism to ensure the scope has been achieved with data support, for example, specification of training needs, evaluation of criteria, methods of delivery, analysis of data collected, reviewing cost structure and recommendations for improvement.

5. Monitor item 1 to 4 of the above

5.1 General
The case centre will monitor the process of the scope with its defined mechanism based on the model of DLDDC (Yeung 2014) .

Based on the above, it is found that the key elements of ISO 10015: 1999 are training needs/ plan/ design (inputs), review/ monitor/ stakeholder communication (processes), and data analysis/ training effectiveness/ recommendations for continual improvement (outputs).

Step II

RQ 2) Outlining the activities (2015/16) of a case centre related to ISO 10015 major clauses and DLDDC Model for fulfilling the above key elements identified in item 1).

Initiatives and Outcomes of the Case Centre
The Centre has helped integrate the United Nations Sustainable Development Goals (UNSDGs) into the module of Operations Management (OM) for undergraduate and post-graduate students studying at the parent institution. The module of "Operations Management" offered to undergraduate students of business and supply chain management programmes will include a discussion on contemporary issues, for example, the need to factor in r**esponsible consumption and production** in new product development and supplier selection. The module outline, assignments, assessment rubrics and teaching materials will be updated to reflect the importance of the UNSDGs.

The module will address the following issues in the discussion of design: (a) Understand **Global Compact and PRME principles**; (b) Focus potential and target community to be served; (c) Maximize both economic and social values in the partnership; (d) Expand social actions through better understanding of demographic change and the new products / services required to meet their needs; (e) Accelerate the change process with supportive technological, political, legal changes through capacity building, corporate governance; (f) Partner with downstream and upstream organizations to improve the quality of new products/ services/ processes, and the quality of life for stakeholders.

The overall process of n**ew product design and development** in operations management is recommended to be: buying-into the six steps of design, defining strategy, organizing resources, including social capital, generating new products and services that address UNSDGs, involving stakeholders like suppliers in the formulation of a humanistic marketing plan and in the creation and promotion of new products/ services in a sustainable way.

Through **partnership** with UN agencies, the case centre also conducted a series of international conferences & training programmes and initiated research on the issue of sustainability. For example, with the support of UNOSSC, the case centre and Harvard University conducted the Harvard HPAIR Career Fair on 22 August 2016 in Hong Kong Science Park. The Harvard HPAIR Career Fair is a pivotal event for professional networking between the student delegates and the corporate world. It aims to provide a platform for delegates to explore their career prospects through engagement with corporations of various industries. Twenty to thirty world-renowned companies were invited to interact with 550 delegates of a wide range of disciplines at the event. During the fair, the concept of "Sustainable Development Mindset for Human-centred Operations" was shared with participants. The three hour event on Sustainable Development mindset attracted enthusiastic responses from the audience. The delegates recognized the goals of the case centre and expressed their interests in the future activities of the case centre. The Career Fair provided a precious platform for delegates from over 60 countries to (a) understand more about United Nations Sustainable Development Goals (UNSDG), UN Principles for Responsible Management Education (PRME), (b) to understand humanism in operations management (c) broaden their perspective on issues relating to sustainable enterprises (d) discuss career challenges and trends across the international landscape. This activity created a valuable exchange platform and awareness about the need for leaders with a Sustainable Development mindset for meeting challenges in the future. With the support of United Nations Office for South-South Cooperation (UNOSSC), The case centre also organized "Sustainability

Youth Leadership Camp", to promote and implement sustainable development mindset and increase international exposure for youth-participants in November, 2016.

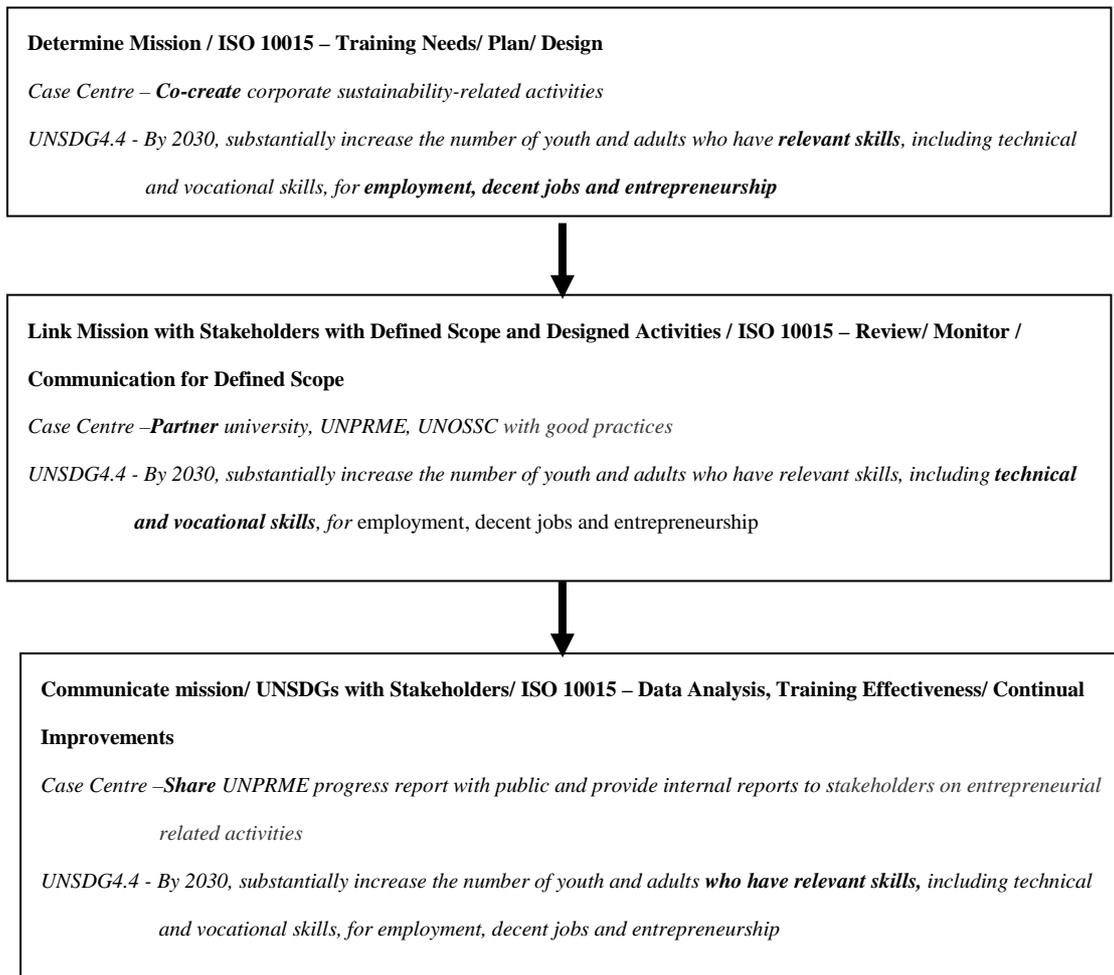**Managing partnerships: Challenges and Opportunities**

In the past years, the case centre has identified opportunities to work with local, regional and global partners to co-create a series of activities related to social responsibilities, sustainable development and innovations for the community and the society at large. The impacts of these activities can be demonstrated from the positive feedback of participants and social media coverage of the case centre's affiliates, UNPRME and UNOSSC. Strategic partners and social networks have strengthened the vision, mission statement and objectives of the case centre with diffusion of innovations in sustainable development mindset.

According to the Education 2030 Framework of Action, the Incheon Declaration in May, 2015, policy formulation to ensure accountability is crucial. The challenges that CCSI has to face will be **facilitating dialogue with existing and potential partners on policy making, knowledge sharing and setting a mutual agreed standards for monitoring progress towards the targets** mentioned in the United Nations Sustainable Development Goals (UNSDGs), especially the sustainable development goal 4 "Quality of Education" target 4.4 – by 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills , for employment , decent jobs and entrepreneurship and 4.7 – by 2030, ensure all learners acquire the knowledge and skills needed to promote sustainable development.

Table 1 – Key Elements of ISO 10015:1999 Training Guidelines

Inputs of ISO 10015 Training Needs/ Plan/ Design	Processes of ISO 10015 Review/ Monitoring/ Stakeholder Communicat	Outputs of ISO 10015 Data Analysis/ Training Effectiveness/ Recommendations for Continual Impro
Vision/ Mission/ Goals of case centre	Considerations of Inputs for initiating activities UNSDG 4 Quality of relevant skill – relevant ski UNPRME Values/ Partners ISO 10015 Training Guide	Records to support decision made
Concept Note / Policy/ Meeting Minutes	Supporting documents	Records to support requirements/ directions/ competence/ knowledge
Organizational vision/ mission/ Policy/ Objectives	Same as above	Same as above
Organizational Resources	Same as above	Same as above
Organizational regulations/ Standards with reviews for improvement	Same as above	Actions, solutions, specifications Records to support actions, solutions, Specifications …etc.
Stakeholder engagement, e.g. requirements, inputs of tasks specifications	Same as above	Same as above
Competence regulations/ standards/ gaps identification/ results of previous activities, corrective and preventive actions, if available	Same as above	Same as above

Chart 1 - Linking DLDDC Model with ISO 10015 Training Guidelines for UNSDG4.4

Determine Mission / ISO 10015 – Training Needs/ Plan/ Design

*Case Centre – **Co-create** corporate sustainability-related activities*

*UNSDG4.4 - By 2030, substantially increase the number of youth and adults who have **relevant skills**, including technical and vocational skills, for **employment, decent jobs and entrepreneurship***

Link Mission with Stakeholders with Defined Scope and Designed Activities / ISO 10015 – Review/ Monitor / Communication for Defined Scope

*Case Centre –**Partner** university, UNPRME, UNOSSC with good practices*

*UNSDG4.4 - By 2030, substantially increase the number of youth and adults who have relevant skills, including **technical and vocational skills**, for employment, decent jobs and entrepreneurship*

Communicate mission/ UNSDGs with Stakeholders/ ISO 10015 – Data Analysis, Training Effectiveness/ Continual Improvements

*Case Centre –**Share** UNPRME progress report with public and provide internal reports to stakeholders on entrepreneurial related activities*

*UNSDG4.4 - By 2030, substantially increase the number of youth and adults **who have relevant skills,** including technical and vocational skills, for employment, decent jobs and entrepreneurship*

6.   Conclusion

Based on the activities described of a case centre related to ISO 10015 and DLDDC Model, it is found that incorporation of ISO 10015 training guidelines with the mission of the case centre and UN initiatives can help focus the relevant skill sets required by the stakeholders of the case centre for sustainable development leaders. Besides, only applying ISO 10015 in achieving training effectiveness is not enough, contemporary initiatives and model need to be integrated with ISO 10015 for visualising UNSDG4.4. The case centre has illustrated with local, regional and global partnership with data and communication are important in human development and training in the workplace, employment creation and skills development, decision-making processes and structures, community engagement, and impact assessments for communities.

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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.*