# DESCUM approach in redesigning core abilities (CA) standards for competency-based training system implementation

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ABSTRACT— Core Abilities (CA) are vital workplace abilities that enable workers to enhance competencies in their work environment. This paper aims to examine the redesigning process of a new CA framework and evaluating feedback from accredited centres in implementing them to their respective NOSS's. Brainstorming workshops by industry experts were held to determine the new CA framework in 2014, while focus group discussions (FGD) comprising 2,060 accredited centre representatives were held in 12 sessions. The results show that the previous CA Standard has been enhanced through the DESCUM process. More than 95% of FGD participants strongly agree with the CA implementation in NOSS training.

## 1. INTRODUCTION

Core Abilities (CA) are vital workplace skills that enable workers to perform competencies in their work environment [1]. In general, CA are very broad and common abilities that students must possess to be prepared for the work environment. These CA revolve around the issue of how the graduates will face the work environment and prepare themselves to be accepted as competent employees, and improve employability skills [2]. CA may be stated or defined differently according to geographic location and a nation's needs, thus the number of Abilities also varies.

Thus, there is no specific standard of CA that can be utilized worldwide. For example, in Australia, CA are called Key Competencies, while in Canada they are called Employability Skills; all of which are interpreted in the meanings and processes of the local work environment. They have in common communication skills, problem solving skills and interpersonal skills which are the main thrust of CA in the working world [3] but are these sufficient as core skills in the workplace? According to [4][5], the requirement for CA is of the utmost importance, however, these are not included at the course level and therefore not prearranged into the existing curriculum.

The implementation of CA is of paramount importance as these complement successful student development, enhance student marketability, create a highly skilled workforce, and will help the nation become a sustainable developed nation by the year 2020, thereby creating valuable citizens [6][7]. Thus, this paper aims to examine the redesigning process of a new CA framework by the

Department of Skills Development, as well as examining the feedback from the accredited centres in implementing them in their respective NOSSs.

## 2. METHODOLOGY

The methodology of the study is based on a qualitative perspective, i.e. through brainstorming and interviews. In order to develop the new CA framework, in late 2014, a multi-disciplinary team consisting of eight to 12 industrial experts was gathered in a five-day brainstorming workshop for six sessions. The workshop applied the DESCUM method and followed a checklist, guided by a well-trained DESCUM facilitator. In the brainstorming event, the facilitator debated some major CA references from various sources from developed countries including Scotland, Australia, the UK and the USA. The findings have been approved by the Ministry of Human Resources and were formally incorporated into NOSS's new curriculum in 2015. In July-November 2016, about 2,060 representatives from accredited centres were gathered in 12 separated groups nationwide, designed as focus group discussions (FGDs) in accordance with semi-structured guidelines developed to deal with the feedback concerning CA implementation in their NOSS's.

## 3. RESULT AND DISCUSSION

The brainstorming result displays CA Standards comprising 30 Core Abilities (CA) titles and 120 ability statements spanning 5 levels of learning, beginning from Level 1 up till Level 5, which are identified from the DESCUM process. The 30 Core Abilities titles identified can furthermore be grouped into eight Group Core Abilities (GCA) (Fig. 1).

Based on the eight Groups Core Abilities (GCA), four GCAs (Communication, Interpersonal Skills, Work Ethics&Safety, Health and Environment) are identified at every level of learning beginning from Level 1 up to Level 5, while two GCAs (Using Technology & Management Skills) are identified at three levels of learning, beginning from Level 3, and the remaining GCAs (Change Management & Strategic Thinking) are identified at two levels of learning beginning from Level 4.

CORE ABILITIES STRUCTURE FOR LEVEL 1 TO LEVEL 5					
GROUP OF	MALAYSIAN CORE ABILITIES BASED ON LEVELS				
CORE ABILITIES	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
(GCA)	CA Title	CA Title	CA Title	CA Title	CA Title
COMMUNICATION	Basic Working Communication	Communication Application	Effective Communication	Effective Communication Collaboration	Commmunication Management Skills
INTERPERSONAL SKILLS	Personnel Berhaviour Skills	Interpersonel Behaviour	Leadership Skills	Organisation Behaviour Awareness	Organisational Management Skill
ETHICS MANAGEMENT	Work Place Ethics Awareness	Work Place Culture Behaviour	Work Place Ethics	Ethics Practices	Ethics Management Skills
HEALTH, SAFETY & ENVIRONMENT	Health, Safety & Environment Awareness	Health, Safety & Environment Adoption	Health, Safety & Environment Consciousness	Health, Safety & Environment Monitoring	Health, Safety & Environment Cognition
USING TECHNOLOGY			Information Technology Awareness	Information Technology Application	Information Technology Management
MANAGEMENT SKILLS			Admintrative Skill	Relationship Management Capability	Networking Skills
CHANGE MANAGEMENT				Change Management Awareness	Change Management Implementation
STRATEGIC THINKING				Strategic Thinking Skills	Strategic Resolution

Fig 1. CA structure from the DESCUM process

The redesigning process has resulted in 24 new CAs at various tiers (Level 1 to Level 5). The DESCUM workshop resulted in 76 new abilities for Level 4 and 5, compared to only seven abilities in the 2006 DACUM version. In addition, 30 Curricula of Core Abilities and 109 teaching slides were provided through the session.

The discussion in these 12 FGD sessions found that almost all of the accredited centre representatives agreed with the implementation of CA modules in NOSS. They are satisfied and confident in teaching as well as delivering the content to students. The majority of them (95%) revealed that the new CA teaching material is more systematic and comprehensive compared to the older version.

## 4. CONCLUSION

Every level of worker/student needs to acquire all Group Core Abilities (GCA) skills at every level of work or learning. Employees who are open to learning and willing to change will be more successful than those who are resistant to this in an organization. Most jobs involve changes in management, and employers usually seek employees who are adaptable, flexible, patient and think positively about change. It is recommended that the Department of Skills Development should investigate further through a comprehensive 'impact study' on the implementation of the modules, in order to gauge the effectiveness in developing multi-skill competent employees.

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