

**CASE STUDY** 

# **COMPETENCY-BASED TRAINING AND ASSESSMENT STRATEGIES IN LOGISTICS (VIETNAM)**

## **TRIAL RESULTS OF COMPETENCY-BASED TRAINING DELIVERY**



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## PURPOSE

This case study provides an analytical picture of a competency-based training and assessment (CBTA) trials as part of an Aus4Skills initiative, the Informal Learning Opportunities (ILO) in Competency-based Training and Assessment (CBTA) Strategies in Logistics in Vietnam as delivered by Strategix Training Group (Strategix)<sup>1</sup> in collaboration with the Queensland University of Technology (QUT)<sup>2</sup>. It also outlines lessons learned, key outputs and outcomes, and recommendations to further support CBTA strategies in vocational education and training (VET) for Logistics in Vietnam.

### BRIEF DESCRIPTION

Through the CBTA initiative, a specialist Core Team designed and delivered activities to support improvements in the quality of skills training for the Logistics industry in Vietnam which included:

- a)** Training vocational teachers, trainers and human resource managers in developing learning outcomes that are aligned to industry standards.
- b)** Training teachers/trainers/assessors to design programs under the competency-model.
- c)** Designing and facilitating up to two trials of training delivery for one occupational standard/ occupational skills standards (OS/OSS) with logistics enterprises and partner colleges.

Conducted from April to June 2019, the competency-based model trials focussed on ensuring high quality training and assessment against the standards (OS/OSS).<sup>3</sup>

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**(1)** *Strategix is a highly respected Australian registered training organisation specialising in Transport and Logistics.*

**(2)** *QUT is a major Australian university well known as 'a university for the real world' because of its close links with industry and for its relevant teaching and applied research.*

**(3)** *The CBTA model referred to in this paper is focused on alignment with the APEC occupational skills and occupational skills standards (OS/OSS) specific to key Logistics occupations.*

## Summary of Key Findings

The following is a summary key findings that highlight the need to further develop a demand-driven and industry-led vocational education and training model to support workforce skills development in the Logistics industry in Vietnam:

1. Effective planning positively impacts on quality delivery in a CBTA model.
2. Management commitment and support from the institutions are critical to success.
3. Coaching and mentoring can assist in building the capacity of CBTA teachers/trainers/assessors.
4. Availability of CBTA learning materials is an important element to quality delivery.
5. Access to relevant training equipment and facilities are extremely necessary.
6. Institute engagement with partner enterprises ensures relevance of training.
7. Effective student engagement creates better learners and produces positive outcomes.

## Key Recommendations:

### *TVET stakeholders*

1. Further conduct capacity building initiatives and practical learning opportunities to assist the VET Workforce (teachers/trainers/assessors) to develop skills in competency-based training design and planning including on:

- o Unpacking of OS/OSS
- o Development of learning outcomes
- o Preparation of learning and assessment materials
- o Contemporary teaching/training strategies and student engagement techniques
- o Engagement with industry enterprise

2. Showcase innovative approaches focusing on management commitment and support from VET institutions as demonstrated by TDC and HCE and highlighting the trial outcomes that demonstrate the opportunity to develop short courses aligned with OS/OSS, demand-driven and industry-led.

3. Foster a culture of coaching and mentoring among VET colleges to assist a critical mass of the VET workforce in developing technical and soft skills in CBTA development (e.g. creativity, collaboration, adaptability, time management, systems and design thinking, problem-solving).

4. Develop a central repository of contemporary CBTA learning and teaching materials appropriate to the identified Logistics occupations and make these available to VET providers.
5. Assist VET institutions in identifying and accessing resources to develop relevant and appropriate training equipment and facilities that will enable the implementation of the competency-based model.
6. Promote engagement activities among VET institutions and industry enterprises that encourage practical partnerships and collaboration to ensure training quality and relevance, including on the direct role of enterprises in competency-based assessment validation. Encourage and support industry enterprise engagement at operational level.
7. Stimulate and support effective student engagement strategies that build motivation, learning career pathways, and outcomes that promote retention, completion and skills utilisation.

*For Industry Stakeholders:*

1. Promote an understanding of the CBTA model among industry enterprises and the key role of VET providers in the process.
2. Showcase innovative approaches focusing on industry's role in supporting training quality as demonstrated by participating enterprises in the trials and highlighting the development of competency-based short courses aligned with OS/OSS, demand-driven and industry-led.
3. Promote engagement activities among industry enterprises and VET providers that encourage practical partnerships and collaboration to ensure training quality and relevance, including on the direct role of enterprises in competency-based assessment validation. Encourage and support VET provider engagement at operational level.
4. Encourage industry enterprises to support VET providers by providing access to industry facilities through site visits an/or use of relevant equipment where appropriate to ensure quality training delivery.
5. Conduct events and activities that profile the industry and raise awareness about occupations and career pathways, especially among young people.

# APPROACH AND METHODOLOGY





## OPERATIONAL DEFINITION

- Competency-based training<sup>4</sup> (CBT) is an approach to VET that places emphasis on what a person can do in the workplace as a result of completing a training program. The aim of CBT is to ensure that VET programs better meet the needs of industries and enterprises. The training could be for a specific task or set of tasks, a specific skill, or a set of skills required in the workplace.
- Competency-based Assessment<sup>5</sup> (CBA) is the gathering and judging of evidence in order to decide whether a person has achieved a standard of competence. The purpose of assessment is to confirm that an individual can perform the standard expected in the workplace, as expressed in the relevant endorsed industry or enterprise competency standards, in this case, the relevant OS/OSS.
- Competency based training and assessment (CBTA) is not about competition. Students are not expected to perform tasks better than others; rather they are expected to perform the task to a standard determined by the training unit or OSS.

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(4) Source: [http://www.unevoc.unesco.org/tvetipedia.html?tx\\_drwiki\\_pi1\[keyword\]=glossary](http://www.unevoc.unesco.org/tvetipedia.html?tx_drwiki_pi1[keyword]=glossary)

(5) Source: <https://www.voced.edu.au/content/glossary-term-competency-based-assessment>

### Framework, Consultation and Technical Resources

- Four separate, but inter-related activities, were designed and delivered based on a Design and Delivery Framework (as per diagram below).
- The four activities were:

**Activity 1:** A five-day instructional workshop on how to develop Vietnamese national learning outcomes to meet the OS/OSS of logistics administrator and material handling operator.

**Activity 2:** A two-week course in Vietnam on competency-based training and assessment strategies for VET teachers and industry trainers.

**Activity 3:** Up to two trials of training delivery for one OS/OSS with logistics enterprises and partner colleges.

**Activity 4:** A case study on how to ensure high quality training and assessment against OS/OSS for presentation to logistics enterprises and the LIRC and an approach to case study dissemination.

### DESIGN AND DELIVERY FRAMEWORK ©LOU DC. MYLES FOR STRATEGIX TRAINING GROUP & QUT

**VALUE ADDED**

- Specialist design and delivery
- Customised Action Learning Facilitation, Mentoring and Coaching
- Stakeholder and Industry Engagement
- Participant Engagement and Learning Management Strategy

**OUTPUTS/OUTCOMES**

- CBTA Skills/Strategies
- Action Plans
- Performance Baseline Data
- Evidence for Policy Advocacy
- Case Study
- Community of Practice

### MONITORING & EVALUATION



**ENABLERS**

- Program Management
- Administrative and Logistical Support
- Contextualised Training & Information Materials
- Language Support

- All activities were part of a coherent whole integrating a series consultation meetings with and advice from the Australian Industry Standards (AIS) – the service skills organisation for the Transport and Logistics Industry in Australia -- to ensure consistency with relevant initiatives with Logistics Industry Reference Council



(LIRC) and the Aus4Skills Program. At certain points, the Core Team also engaged with LIRC members and Aus4Skills Program Lead through meetings and events convened during the period. These included specific meetings with AIS, attendance at the DOLISA-HCMC meeting and at AIS professional development activity; VLA-VICC event, among others.

- The consultation conducted with AIS before and during the trials provided clarity and understanding of the APEC OS/OSS, its origins, and the role of AIS in supporting the LIRC. Specific information about the use of contextual language in the development of training programs/modules were also gathered. Available literature and materials about the framework of APEC OS/OSS, including current discussions in Vietnam, also informed the development of the CBTA activities.

- A wholistic technical approach ensured high quality delivery as well as a consistent, logical and cohesive intervention for all activities. As much as practicable, the use of available and relevant international, regional, Australian, and Vietnamese resource materials informed the design and delivery of all activities.

- As well, Strategix provided operational technical training materials that assisted in the development and delivery of the training modules within the trials, particularly in forklift training and in pick and process order units of competency. These materials provided the basis foundation for the trial training teams in designing and developing their own training materials for the specific OS/OSS and in the context of Vietnam.

- The use of bilingual professional language translating/interpreting services supported the activities including engagement with participants and stakeholders.





### **Value Adders and Enablers**

- The value-adding formula in this approach included: a specialist design and delivery team; customised Action Learning facilitation approaches, Appreciative mentoring and coaching; a dynamic stakeholder and industry engagement, and a robust participant engagement and effective learning management strategy.
- Enabling elements such as program management, logistical and administrative support, contextualised training and information materials, and language support also contributed in the development of outputs and achievement of outcomes.

### **Intended Outputs and Outcomes**

- The whole CBTA initiative intended to create, develop and enhance CBTA strategies in the context of participants and stakeholders. Action Plans developed in Activity 2 and refined in Activity 3 aimed to provide a contextualised version of the CBTA model specific to OS/OSS and offer baseline data.
- The trial aimed to provide a picture of how CBTA can be used in ensuring quality training delivery and respond appropriately to industry skills demands. It was also expected that all participants and stakeholders add value and contribute to a community of practice in TVET and in the Logistics industry.



- As well, the resultant information from the trials will assist the LIRC in advocating on the benefits of a demand-driven, industry-led model through CBTA programs aligned to OS/OSS.

## Monitoring and Evaluation

- The initiative applied a results-based monitoring and evaluation framework linked to the learning management strategy, particularly in Activity 1 & Activity 2. Facilitated activities integrated feedback loops and continuous improvement strategies to monitor outputs and outcomes. These included participants' presentations and submissions, summative and activity-based assessment, learning circle/groupwork outputs, digital recording, coaching and feedback, and a simple evaluation survey instrument conducted at the end of these activities.
- For Activity 3 (Trials), a specific monitoring and evaluation framework was developed to assist in:
  - Measuring the level of effectiveness of the implementation of a CBTA model.
  - Identifying key challenges and opportunities.
  - Identifying success factors and improvement elements.

*(see Annex 1: Monitoring and Evaluation Framework)*

- A sessional data gathering staff provided support in setting up formal and informal interviews with key stakeholders (primarily partner enterprises), trial teachers/trainers/assessors, and in conducting required surveys with trial students.

## Action Research

- An Action Research approach<sup>6</sup> allowed for the identification and prioritisation of issues to inform participant-led action plans [initially developed in Activity 2] and refined during the trials. Action research seeks transformative change through the simultaneous process of taking action and doing research, which are linked together by critical reflection.

*(see Annex 2: Action Research – A Brief Introduction)*

- The Core Team and the trial participants identified the issues and their resolutions by drawing practical support from each other, their respective organisations, utilising available appreciative coaching and mentoring, gathering data/evidence, and shaping problem-solving approaches, including on identifying relevant resources and practical support on real-time.

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**(6)** Action research consists of a family of research methodologies which pursue action and research outcomes at the same time. It therefore has some components which resemble consultancy or change agency, and some which resemble field research.' Bob Dick bd@uq.net.au





### Coaching and Mentoring

- The Core Team (Ms Lou De Castro Myles from QUT and Mr Wayne Striplin from Strategix) offered technical knowledge and expertise throughout the CBTA initiative activities. As established practitioners and professional mentors, they used Appreciative Coaching and Mentoring <sup>7</sup> in the development of the trial that guided the refinement and implementation of agreed action plans.
- The primary mode of coaching and mentoring was through face-to-face activities over three blocks of 5-day sessions during the trial period (April – June 2019). These were supported with on-line mode using telephone/voice applications, video/skype teleconferencing, email and other relevant digital platforms
- The significant assistance of our Vietnam Coordinator (Ms Đỗ Thị Kim Thanh) facilitated understanding of issues and the development of responses to those issues in a timely manner.

### Trial Participants, Students and Partner Enterprises

- Participating trial institutions were drawn primarily from CBTA Strategies in Logistics' Activity 1 and Activity 2 participants. They were selected based on the following factors:
  - Strong support and commitment of senior leaders/managers.
  - Established relationship with Logistics industry enterprises.
  - Availability of teachers/trainers/assessors and their willingness to work with the core delivery team during the trial period.
  - Availability of student cohort to participate in the trial.
  - Participation at Activity 2 with required outputs (draft training program and action plan).

(7) A collaborative Action Learning model of inquiry, dialogue and reflection that enables people to integrate the best of their values, strengths and visions.

VET INSTITUTIONS AND THEIR PARTNER ENTERPRISES	OS: WAREHOUSE OPERATOR OSS/CBTA PROGRAM/MODULE	COHORT OF STUDENTS
<p><i>Thu Duc College of Technology (TDC) and Enterprise partners</i></p> <ul style="list-style-type: none"> <li>• General Partner (GP) Group</li> <li>• U &amp; I Logistics</li> <li>• Delta International</li> <li>• Delta Company</li> <li>• Tan Cang STC</li> </ul>	<p><i>Warehouse operator</i> Operate a forklift (60 hours)</p>	<p>15 students (9 males, 6 females)</p> <p>Logistics and Automotive Engineering Level: Advance Diploma (3-year)</p>
<p><i>Ho Chi Minh College of Economics (HCE)</i></p> <ul style="list-style-type: none"> <li>• Transimex Corporation</li> <li>• Seaborne and Partners Logistics</li> <li>• Lita Express</li> <li>• Tan Cang STC</li> </ul>	<p><i>Warehouse operator</i> Pick and process order (60 hours)</p>	<p>18 Students (9 males, 9 females)</p> <p>Llogistics Level: Diploma (2-year) and Advance Diploma (3-year)</p>

- Using a training team approach, six (6) teachers/trainers/assessors (three from each college) supported by other college faculty members primarily designed and delivered the training programs. A fourth team member for HCE was also engaged in the trials making a total of seven (7) teachers.
- Both colleges designed and delivered under the OS for Warehouse Operator. TDC designed and delivered a training program based on the OSS - Operate a Forklift. HCE designed and delivered a training program based on the OSS - Pick and Process Order for eighteen (18) students.
- The cohort of thirty-three (33) students comprised mostly of existing Logistics and Automobile Engineering students from the colleges: fifteen (15) students from TDC (9 males; 6 females) and eighteen (18) from HCE (9 males; 9 females).
- Logistics industry enterprise engagement and involvement was a key element of the trials. Partner enterprises (as outlined in the above diagram) were identified by the trial institutions. They comprised representatives of eight (8) diverse logistics service providers operating from Ho Chi Minh City. These enterprises are either members of Vietnam IVICC or have key people completing an Aus4Skills short course or activity in TVET and Logistics over the last 18 months.

## Trial Timeframe

- The trial was conducted over three months (April to June 2019) inclusive of training program design refinement; development of assessment tools; actual training delivery; assessment; and validation processes.
- A coaching and mentoring strategy implemented over the trial period involved the Core Delivery Team providing over 25 days of coaching and mentoring to the trainers. The primary mode of coaching and mentoring was through face-to-face activities over three blocks of 5-day sessions

during the period April to June 2019. These were supported with on-line mode using telephone/voice applications, video/skype teleconferencing, email and other relevant digital platforms.

- Teachers/trainers/assessors spent at least 100 hours each or collectively 600 hours in the development, design of training materials and delivery of the modules (including attendance at face-to-face coaching and mentoring which some hours conducted successively with the training delivery). Each training module was delivered for 60 hours.

### Baseline Information

- During consultations and meetings with Aus4Skills partner colleges, the Core Team gathered information about existing CBTA programs they are currently conducting or know of. There was no information available to pinpoint a CBTA program existing in any of the partner TVET colleges.
- Baseline information were also drawn from the learning survey conducted at the beginning of Activity 2 and on information provided by the trial participants. Activity 2 participants were asked on whether CBTA programs exists in their organisations or whether they know of any CBTA programs being conducted in VET in Vietnam. There was a synonymous nil response from all respondents. Some respondents knew about CBTA but do not necessarily have familiarity on how it happens and what is involved.
- This was also validated by trial participants during the first face-to-face coaching and mentoring session. Any similar competency-based training are not necessarily competency-based as they do not necessary align with specific industry standards like the OS/OSS.
- For example, the dual-sector training program being piloted at Thu Duc College primarily involved an industry enterprise covering a specific ratio of training that averages 30:70 time ration (theory vs practical) although this may not be considered a CBTA model based on our operational definition primarily in relation to the OS/OSS.
- Based on information available, the dual-sector training activity in Vietnam is based on a German model of VET. It is a combination of practical training in companies and theoretical training at a vocational insitution. This combination of theory and practice, and this type of vocational training is a specific feature of the German education system. The TDC activity is being implemented with the support of DOLISA- Ho Chi Minh DOLISA after a study program to Germany. The activity is yet to identify in-company training standards, in-company trainer and examiner required in a 'dual-sector' model. Dual VET has a long tradition in the European countries - Germany, Liechtenstein, Austria and Switzerland.<sup>8</sup>

*(see Annex 3: Dual Sector Training – German model)*

(8) For further information refer to: <https://www.dcdualvet.org/en/topics-experiences/dual-vocational-education-and-training/>

- As well, it must be noted that the two CBTA training programs/modules referred to in this case study may not necessarily constitute a 'short course' unless they are packaged or further developed as such . Plans are underway to do this post the trial.





# DISCUSSION OF FINDINGS





- The following findings on the level of effectiveness of the CBTA trial implementation were based on resultant information and data gathered from interviews, group observations, participants' feedback, and small survey during the trial. Key result areas expected and captured include:

- Level of acceptance of the model from partner enterprises.

- Level of acceptance of the model from Institute trainers/trainers/teachers/assessors.

- Level of acceptance of the model from cohort of students.

- Unlike traditional training design, the competency model places emphasis on what a person can do in the workplace after completing a training program. Therefore, this trial should be viewed from the perspective firstly of the partner enterprises, who will (potentially) hire the students. The second dimension is from the perspective of the trainers/trainers/teachers and assessors who will be responsible for the training and assessment delivery. Finally, from the perspective of the cohort of students who will be the primary beneficiaries of the CBTA model.

### **Effective planning positively impacts on quality delivery in a CBTA model**

- According to participants and in discussions with key stakeholders at the time of this CBTA initiative, there were no available information about any specific training program in Vietnam that are designed and/or aligned with the OS and OSS. This baseline information was also confirmed by the trial institutions. Although some people may have heard of CBTA but not necessarily familiar with how it is implemented.

- As well, the concept of OS/OSS may not be well-known except for LIRC and Aus4Skills partner colleges. According to Aus4Skills, OS/OSS was introduced and validated in March 2018 for the partner colleges. Since that time, Aus4Skills has been providing teacher training on how to unpack OS/



OSS integrate in the delivery Vietnamese training programs and qualifications for key Logistics occupations (i.e. Logistics Administrative, Warehouse Operator, etc).

- The trial provided an opportunity for everyone involved to develop and establish an understanding of the competency model aligned with the Asia Pacific Cooperative (APEC) and validated OS/OSS currently in discussion. The key goal was to ensure the quality of skills training delivered responds to industry standards.
- The base strategy established a method of training that focuses on a learner's ability to receive, respond to and process information in order to achieve competency. It was geared towards the attainment and demonstration of skills to meet industry-defined standards, rather than to a learner's achievement relative to that of others.
- Each trial training team identified key elements of the CBTA design that are aligned with the selected OS/OSS. The choice of the specific OS/OSS was primarily dependent on their capacity and ability to unpack the OS/OSS, develop learning outcomes, design assessment criteria and tools, identify the volume of training as appropriate to those outcomes; and, develop learning guides and appropriate assessment strategies and tools.
- The team approach provided an efficient value-adding strategy and complementarity of skills with each other within a very short period of time. With a high personal and professional commitment to be involved in something new, they further developed their confidence to deliver as well engage with students and partner enterprises as the trial progressed.
- Within the parameters of identified Logistics occupations, they analysed available information and pursued their focus in the context of their institutions to commence planning and training design. Identifying learning outcomes, developing assessment matrix, and lesson planning all ensured quality delivery as applied during the trial.

*(See Annex 4: Summary of Interviews With Trial Teachers/Trainers/Assessors)*

### **Management commitment and support from the institutions are critical to success**

- Management commitment, support and resources provided by the trial institutions (both tangible and intangible) ensured that the trials are conducted as priority activities.
- To ensure appropriate administrative requirements are met, the institutions waved enrolment

fees for student participants and provided access to relevant training facilities to support the trials. As well, they released the teachers/trainers/assessors from their usual roles to focus on the activity and also provided additional faculty support.

### **Coaching, mentoring and access to ongoing learning opportunities can assist in building the capacity of CBTA teachers/trainers/assessors**

- The primary mode of coaching and mentoring was through face-to-face activities over three blocks of 5-day sessions during the period April to June 2019. These were supported with on-line mode using telephone/voice applications, video/skype teleconferencing, email and other relevant digital platforms.
- Trial institutions and their partner enterprises provided relevant information to the Core Team that enabled the development and implementation of coaching/mentoring strategies for the trials in real time.
- The trial teachers/trainers/assessors highly valued the coaching and mentoring element of the trials as this facilitated in building capacity and in developing critical thinking skills that allowed for the resolution of problems and issues that surfaced during the trials.
- During the face-to-face coaching and mentoring sessions with the trial trainers, the Core Team also provided additional learning sessions about contemporary teaching approaches and student engagement to assist student retention and completion in the trial. This were highly appreciated despite additional hours of work and learning for the training team.

### **Availability of CBTA learning materials is an important element to quality delivery**

- The two trial training teams refined their draft training programs and further developed learning and assessment tools. As they noted, they have had nil to minimal exposure to CBTA in Logistics aligned to industry standards other than what they experienced in the CBTA initiative. This was both a challenge and an opportunity. Coaching people to do something new requires a lot of commitment from all parties and offers a wonderful opportunity to be trailblazers in a complex space and time as well as discover resolutions in the midst.
- Everyone acknowledged that the way to address the situation was either: 1) develop new materials and tools or, 2) use exemplar materials from an Australian registered training organisation (RTO), recast and recontextualise them to suit the trial training program and in the context of Vietnam. The latter was the most suitable given the context (Australian VET is system is industry-led and competency-based) and constraints of time and capacity of the trial trainers.
- Strategix Training Group provided some of the exemplar materials and the trial teams used these as the basis for the development of their own materials in the context of Vietnam and the specific OS/OSS. Guided by the Core Team, the trial teams also asked partner enterprises to provide input in refining refined materials and assessment tools.
- Resultant guides and materials were used and became important elements in the delivery of the trial

training programs. These have been branded by both colleges as their own with acknowledgement of Aus4Skills, Strategix and QUT.

### **Access to relevant industry standard Logistics training equipment and facilities are extremely necessary**

- It was initially assumed that the required facilities and equipment available at the partner enterprises would be easily accessible during the trials. This proved challenging for various reasons and in diverse contexts, including likely distractions to business operations. While some partner enterprises were able to host brief site visits for the students, the learning needs of the cohort and the diverse safety policies of the partner enterprises required time to integrate into the training program. Some safety policies are very specific to certain enterprises.
- The trial teams then opted to integrate only the minimum workplace health and safety standards in the training program as referred to in the OS/OSS. As we progressed through the trials, we advised participant trainers to refer to these standards before starting and finishing training sessions with students.
- Applying workplace health and safety, and wearing personal protective equipment (PPE) needed to be developed as trainers' habits as they are part of standard operating procedures (SOP) for the Logistics industry and its workforce. Partners enterprises also provided additional specific information to the students as required (for example during site visits).
- Similarly, partner enterprises wanted to ensure that there was ample time for students to understand and practice on required material handling equipment [in both OSS] outside the enterprises. These required a lot of discussions and clarification as the trial progressed. It was agreed that relevant training equipment and facilities needed to be made available in the institutes' premises to support student engagement and the training delivery.
- Both colleges provided training sites and rooms over the trial period. The trial teams also developed a priority training equipment list. Supported by Aus4Skills through the CBTA initiative, trial teams rented a forklift truck and procured simulated distribution centre/warehouse items.
- Guided by the Core Team, the trial teams worked together and built a simulated distribution centre (DC) using industry standards in warehouse design at HCE. Turning one of the HCE classrooms into a simulated distribution centre. They also designed and developed a simulated open warehouse with standard loads and shelves, and created a forklift training circuit at TDC.
- Both the simulated distribution centre and the simulated open warehouse forklift training circuit proved to be very effective strategies that supported student and enterprise engagement.

*(see Annex 5: HCE Simulated Distribution Centre; Annex 6: Training Module Summary- Pick and Process Order;*

*Annex 7: TDC Simulated Warehouse /Forklift Training Circuit; Annex 8: Training Module Summary – Operate a Forklift)*

## **Institute engagement with partner enterprises ensures the relevance of training**

- Engagement with partner enterprises occurred throughout period which included clarifying the enterprises' role in the trials. This assisted in further refining the training tools and delivery approaches ensuring further relevance to industry requirements.
- Representatives of partner enterprises also provided feedback on the learning materials and methodologies which highlighted the diversity of their contexts and their different levels of understanding about the concepts of CBTA. It was however acknowledged that their core business is in logistics services and not in VET.
- They generously gave their time and highly appreciated their role in the validation of student assessment activities against the learning outcomes as identified for the relevant OSS. Validation activities were conducted at the training institutions' sites and the enterprises embraced their role with total commitment to ensure quality delivery.
- As highlighted in the interviews, partner enterprises were mostly focused on ensuring that the training produce skilled people with the right attitude and the right skills – competent people. In their engagement with the students, all were convinced that the selection of the cohort impacted on this and were remarkably impressed with students' performance during the assessment validation process. A specific enterprise even offered to provide jobs to the students right on the assessment day!

*(see Annex 9: Summary of Interviews with Partner Enterprises)*

## **Effective student engagement create better learners and produce positive outcomes for all stakeholders**

- Generally, student engagement is predicated on the belief that learning improves when students are inquisitive, interested, or inspired.
- Student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their training. Engaging students to enrol in one training program/module can be challenging. The engagement of existing students made it easy to achieve the target number of cohort required to conduct the trials.
- The gender breakdown of the student cohort presents a notable data: 15 females and 18 males. For the forklift female students, these could highly likely the only female students in forklift operation in Vietnam.
- In a survey of the 33 student cohort participants, their motivation to participate in the trials are based on the following reasons:



- They understand that one module may not be enough to get a job but can provide a new or innovative learning experience and an opportunity to gain new knowledge or skill. Identifying their job seeking strategies was not part of our scope of the CBTA initiative.

- Based on our conversations and interactions with the students] like any young people hoping to join the workforce they are in continuous search of knowledge/information that will assist their job futures. Graduating students from HCE who participated in the trial may have gained some knowledge and this may assist their future job seeking strategies.

- During the trial period and in impromptu forums, the Core Team met with the student cohort and shared knowledge and expertise on learning and career pathways about the Logistics and its allied industries. The students were raising questions such as: what are the trends in the industry, what are entry-level jobs, what skills are needed to move

up the Logistics enterprise, what are the other occupations and careers available in the industry, can women be managers in a warehouse, where do you go to find out about these things?

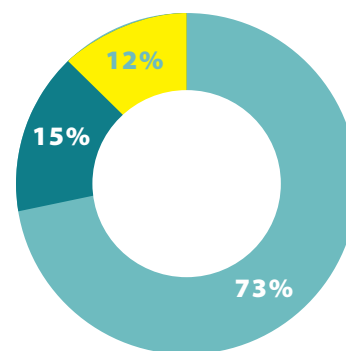
- There was great enthusiasm among the students to be part of a Logistics supply chain future that values careers not just jobs. This enthusiasm needs to be harnessed further by industry stakeholders through better profiling and showcasing of occupations and careers. Teachers/trainers also need to understand these industry trends and issues so they can be able to assist in turning that enthusiasm that will support real career outcomes.

Gain new knowledge or skill, **73%**

Interest to assist the trial, **15%**

Better chance of getting a job, **12%**.

#### MOTIVATION

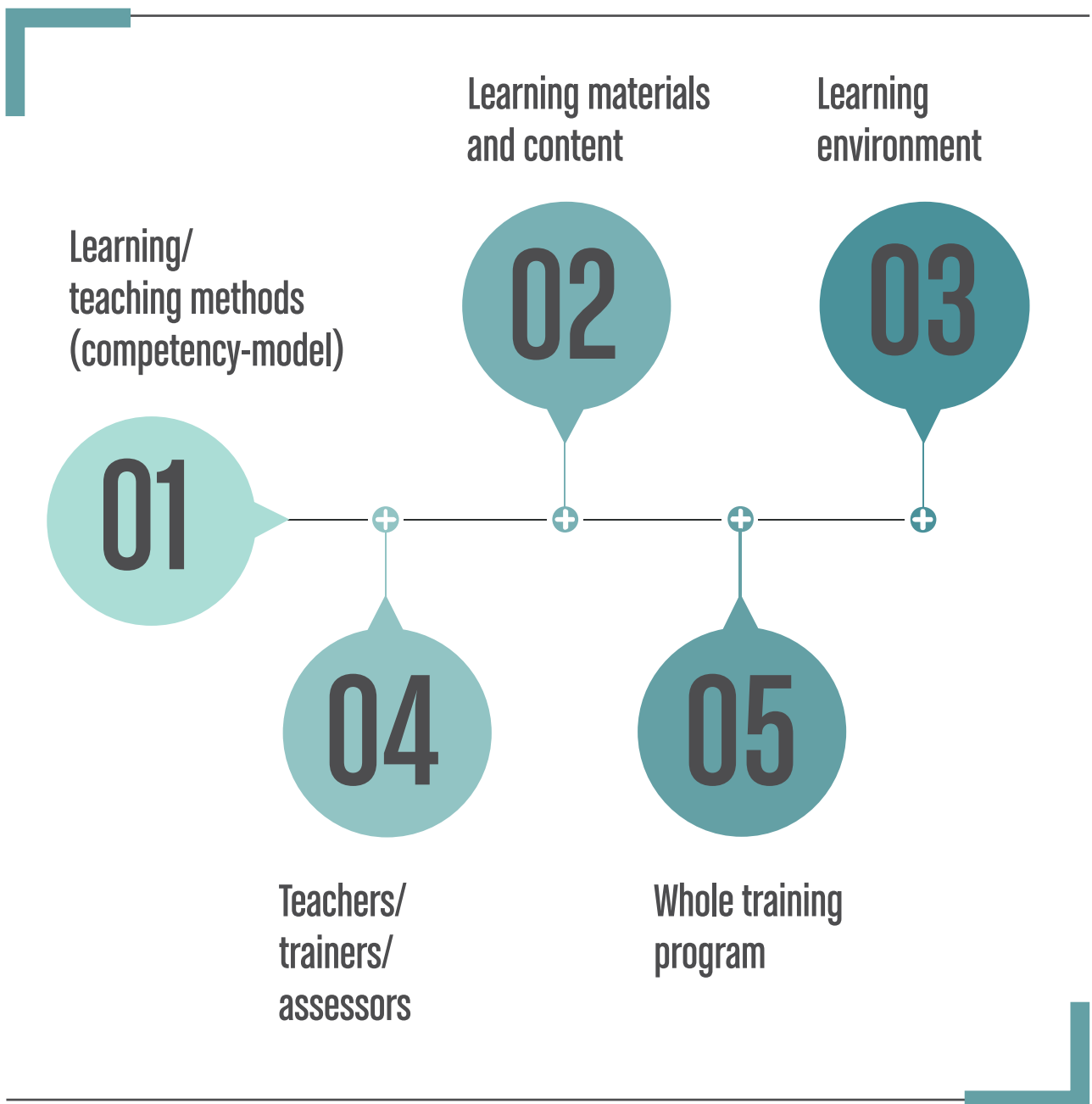


Gain new knowledge or skill

Interest to assist the trial

Better chance of getting a job

- The students also considered that the best parts of the training were primarily the following elements (in order of their response):



# CONCLUSION AND RECOMMENDATIONS



- A showcase day conducted at the completion of the trial period on 14 June 2019 highlighted participants' outputs and outcomes. The showcase featured a snapshot of competency skills gained by the student cohort for the two training programs. It was well-attended by representatives from government, industry, trial participants and their communities, and the media.

- The trials highlighted the need to continually promote Logistics as an industry of choice for women and men as well as a need to showcase and highlight career pathways in the industry. With a better knowledge and understanding of Logistics occupations and careers, the student cohort can act as ambassadors in raising awareness about available career pathways. The level of enthusiasm from the students to embrace the competency-based concept through the trial has been highly encouraging.

- The aim and purpose of the trial was achieved, met participants expectations, and provided relevant learning opportunities for stakeholders as agreed. Every opportunity that informed participants of any processes and content developed as the trial progressed provided a common understanding of the competency model and the approach used.

- The support of senior management from trial institutes and their partner enterprises has been a significant factor in the whole process. The high level of commitment of the trial teachers/trainers/ assessors have translated into successful outcomes for their student cohorts and created increased interest for young people to undertake Logistics training or seriously looking at their job and career aspirations.

- The trial produced key outputs and outcomes including the following:

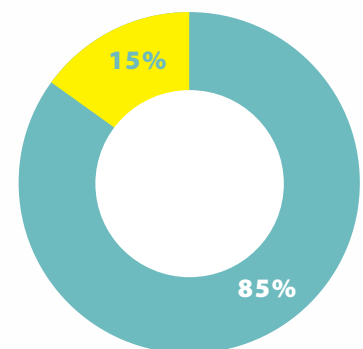
- o Development of two competency-based training modules/programs aligned to OS/OSS.

- o Production of a training video on forklift operation available to other VET institutions.

- o Increased capacity for participating teachers/trainers/assessors in the design and delivery of a competency-based model training program.

- o Establishment of a simulated warehouse/distribution centre complying with

### SATISFACTION



- Very satisfied
  - Satisfied

industry standards.

- o Establishment of forklift circuit for training forklift operators complying with industry standards.
- o Stronger partnerships and relationships between the VET institutions and the enterprises.
- o Engagement with thirty-three (33) VET students (Male/Female:18/15) who successfully received the level of competency required for the relevant OS/OSS.
- Since the trial, TDC has planned to offer the Forklift Operator as a short course and HCE is exploring the integration of the Pick and Process Order as part of a skills set in a Logistics short course. These can be good exemplars for the development of short courses that are aligned to industry standards in response to current industry demands.
- The following key recommendations address and connect with the above discussions:

### TVET stakeholders

1. Further conduct capacity building initiatives and practical learning opportunities to assist the VET Workforce (teachers/trainers/assessors) to develop skills in competency-based training design and planning including on:
  - o Unpacking of OS/OSS
  - o Development of learning outcomes
  - o Preparation of learning and assessment materials
  - o Contemporary teaching/training strategies and student engagement techniques
  - o Engagement with industry enterprise
2. Showcase innovative approaches focusing on management commitment and support from VET institutions as demonstrated by TDC and HCE and highlighting the trial outcomes that demonstrate the opportunity to develop short courses aligned with OS/OSS, demand-driven and industry-led.
3. Foster a culture of coaching and mentoring among VET colleges to assist a critical mass of the VET workforce in developing technical and soft skills in CBTA development (e.g. creativity, collaboration, adaptability, time management, systems and design thinking, problem-solving).
4. Develop a central repository of contemporary CBTA learning and teaching materials appropriate to the identified Logistics occupations and make these available to VET providers.
5. Assist VET institutions in identifying and accessing resources to develop relevant and appropriate training equipment and facilities that will enable the implementation of the competency-based model.
6. Promote engagement activities among VET institutions and industry enterprises that encourage practical partnerships and collaboration to ensure training quality and relevance, including on the direct role of enterprises in competency-based assessment validation. Encourage and support industry enterprise engagement at operational level.



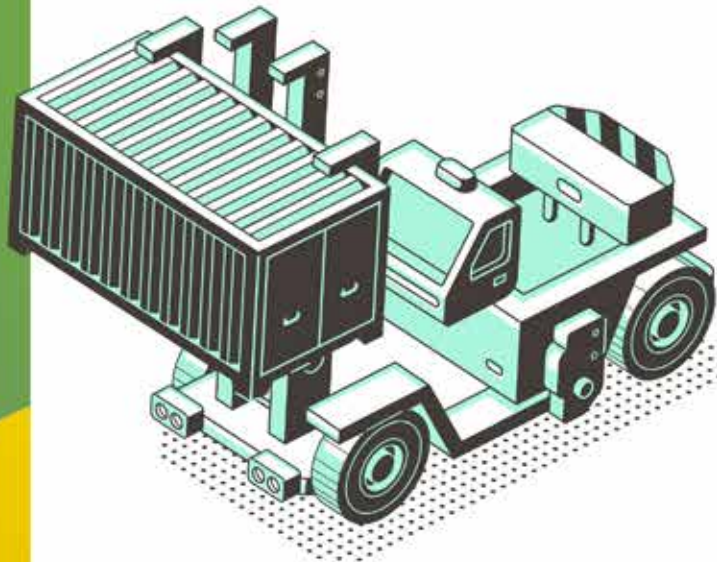
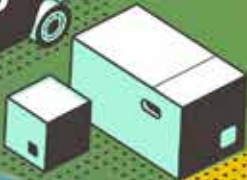
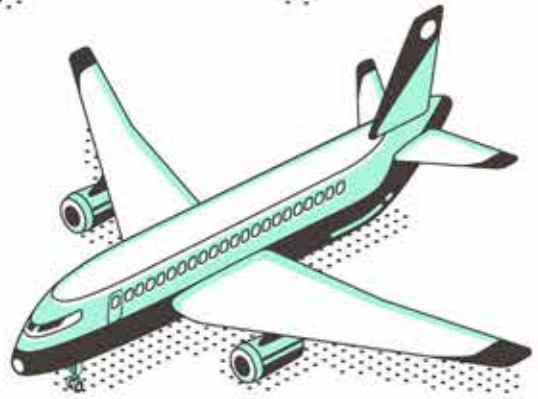
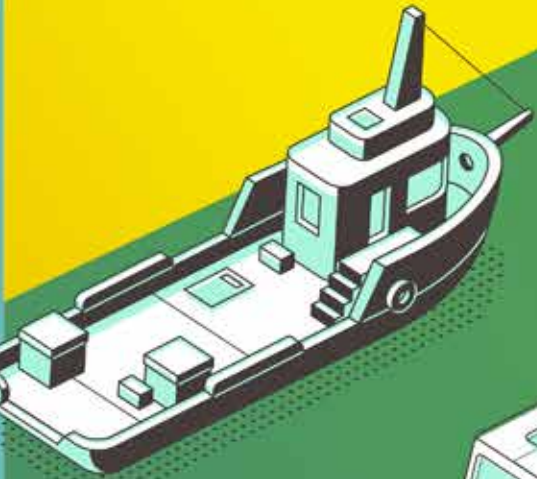
**7.** Stimulate and support effective student engagement strategies that build motivation, learning career pathways, and outcomes that promote retention, completion and skills utilisation

### **For Industry Stakeholders:**

- 1.** Promote an understanding of the CBTA model among industry enterprises and the key role of VET providers in the process.
- 2.** Showcase innovative approaches focusing on industry's role in supporting training quality as demonstrated by participating enterprises in the trials and highlighting the development of competency-based short courses aligned with OS/OSS, demand-driven and industry-led.
- 3.** Promote engagement activities among industry enterprises and VET providers that encourage practical partnerships and collaboration to ensure training quality and relevance, including on the direct role of enterprises in competency-based assessment validation. Encourage and support VET provider engagement at operational level.
- 4.** Encourage industry enterprises to support VET providers by providing access to industry facilities through site visits and/or use of relevant equipment where appropriate to ensure quality training delivery.
- 5.** Conduct events and activities that profile the industry and raise awareness about occupations and career pathways, especially among young people.

# ANNEXES





## **Annex 1: Monitoring and Evaluation Framework - Activity 3 (Trials)**

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**Date: 15 April to 15 June 2019**

**Location: in participating colleges and their partner enterprises, Ho Chi Minh City, Vietnam**

### **Framework**

The trial will use a Monitoring and Evaluation framework aimed to:

- Support the trial development and implementation
- Measure the level of effectiveness of the implementation of a CBTA model
- Identify key challenges and opportunities
- Identify success factors and improvement elements
- Inform the case study

During the trial, the Team will collect data and gather evidence focussed on the following dimensions:

- Level of acceptance of the model from partner enterprises
- Level of acceptance of the model from Institute trainers/trainers/teachers/assessors
- Level of acceptance of the model from cohort of students

Unlike traditional training design, the competency model places emphasis on what a person can do in the workplace after completing a training program. Therefore, this trial should be viewed from the perspective firstly of the partner enterprises, who will (potentially) hire the students.

The second dimension is from perspective of the trainers/trainers and assessors who will be responsible for the training and assessment delivery. Finally, from the perspective of the cohort of students who will be the primary beneficiaries of the CBTA model.

## Process and Approach

An Action Research (AR) approach will be used in the monitoring and evaluation process that integrates both qualitative and quantitative data and evidence gathering. AR provides a platform for all participants and stakeholders to connect with the issue and develop reflective techniques in understanding and dealing with those issues. This also allows for the Core Team to be active players in providing guidance and assistance in resolving those issues as they conduct the trial.

Quantitative data will mostly be collected through direct and secondary source, i.e. trial participants, partner enterprises and relevant stakeholders. The evaluation adopts a mixed method in collecting qualitative data including structured and unstructured interviews and observation using a question bank as outlined in this document. A small survey of cohort students will also be conducted.

Baseline information will be drawn from the learning survey conducted in the beginning of Activity 2 and on information provided by the trial participants. This will be validated at the first face-to-face session.

Evaluation matrix	Giảng viên/Đánh giá viên	Doanh nghiệp đối tác	Học viên
Indicators	Trainers/Assessors	Partner Enterprise	Students
Management Support	Level of support from institution management	Level of support from partner enterprise management	
Delivery Capacity	Level of capacity to deliver the CBTA training program	Level of capacity to engage and involve in the CBTA training program	Level of satisfaction in the CBTA training program
Stakeholder engagement	Level of effectiveness of the stakeholder engagement	Level of effectiveness of the stakeholder engagement	Level of effectiveness of the stakeholder engagement

Monitoring and evaluation will be conducted throughout the trial period.





## Data and Evidence Gathering

Primarily, the Core Team will gather the data and evidence and will use the following tools:

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### 1. Structured/unstructured interviews (individual and group) and observation: Question Bank

#### a) Management support (Institution and Partner Enterprise)

- How committed are you to the trial?
- What direct resources would you/did you provide to the trial? (human resources, facilities, financial, equipment, goodwill etc)
- How does your institution/enterprise allocate these resources?
- How do you feel about your participation in the trial?
- What are the challenges and opportunities for your institution/enterprise in participating in the trial?

#### b) Delivery Capacity

- How confident are you in implementing the trial?
- What knowledge or skills do you have to effectively implement the trial?
- What support did you receive from your institution?
- What support did you receive from your partner enterprise?
- What support did you receive from the CBTA Coaching and Mentoring Team?
- What other knowledge, skills or support do you need to effectively implement the trial?

### **c) Stakeholder engagement**

- To what extent do students engage in the trial?
- How can students engage more effectively?
- To what extent do partner enterprises engage in the trial?
- How can they engage more effectively?
- To what extent do other stakeholders engage in the trial?
- How can they engage more effectively?

---

## **2. Observation Checklist**

### **a) Trial Delivery Trainers/Assessors**

- Interest, support and commitment from the participating institution management
- Interest/commitment of the trial delivery teachers/trainers/assessors
- Level of confidence of the teachers/trainers/assessors during the trial
- Level of engagement of the teachers/trainers/assessor in the coaching and mentoring sessions

### **b) Enterprise Partners**

- Interest of the partner enterprise management
- The level of interest of the employers
- The level of confidence of the employers in delivering the trial

### 3. Small survey with students (Question Bank)

#### a) General information

Gender:	Age
Residential Address	
Course in college	Year at the college
Ethnic group	
Learning assistance requirement (if any):	

#### b) Satisfaction with the training (Multiple choice questions)

How did you know about this trial training program?				
Referred by family or friend	Media, (including social media)	Leaflet or brochure	Direct invitation from the institution	Others (please specify)

What motivated you to participate in the trial training program?			
Gain new knowledge or skill	Better chance of getting a job	Interested to assist the trial	Others (please specify)

Overall, how satisfied are you with the training?				
Very satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied

What are the best parts of the training?				
Trainer Assessor	Learning Environment	Learning Methods	Learning Materials Content	Others (please specify)

To what degree has the training increased your knowledge and skills?				
Very much	A little	Neutral	Not much	Not at all

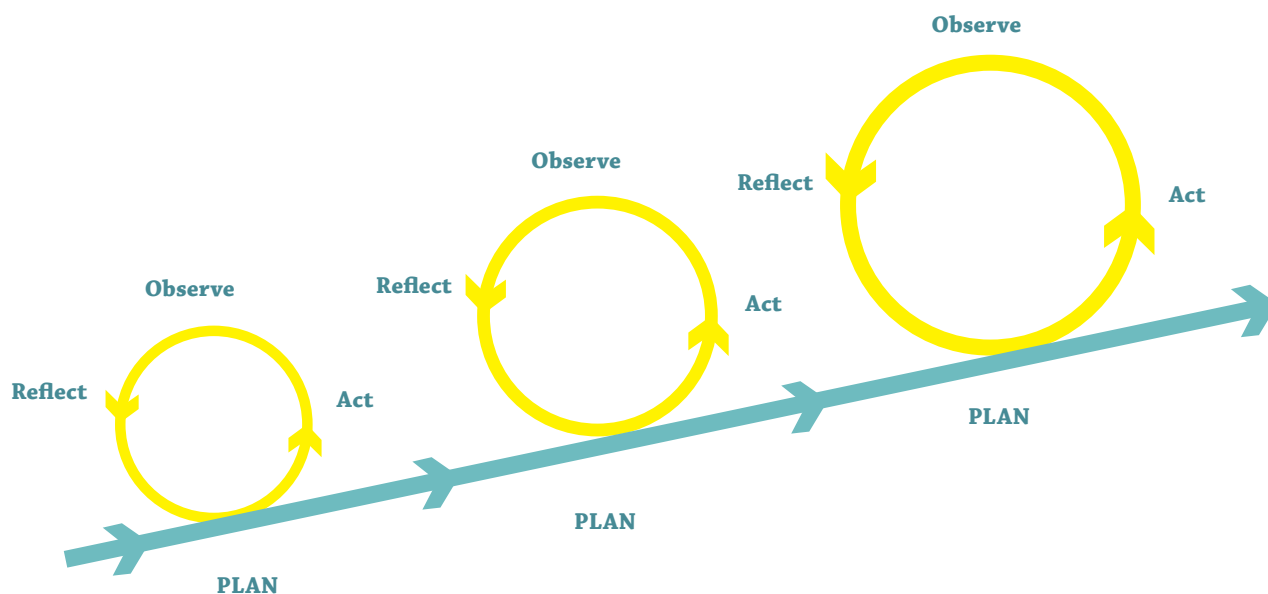
If the training is to be conducted again, would you recommend this to others?				
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

---

#### 4. Other data gathering tools

As appropriate, image-based methods will be used as data sources which may include photographs and videos which will provide powerful extensions of the observation.

## Annex 2: Action Research - A Brief Introduction



Kurt Lewin, then a professor at MIT, first coined the term “action research” in 1944. In his 1946 paper “Action Research and Minority Problems” he described action research as “a comparative research on the conditions and effects of various forms of social action and research leading to social action” that uses “a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of the action”.

Action research practitioners reflect upon the consequences of their own questions, beliefs, assumptions, and practices with the goal of understanding, developing, and improving social practices.

This action is designed to create three levels of change: (1) self-change as the only subject of action research is the person who conducting the research. This person is seeking to be better understand the effects of their action in social settings and to engage in a process of living his or hers values. The second level is a collective process of understanding change in a classroom, office, community, organization or institution.

Action research enlists others and works to create a democratic sharing of voice to achieve deeper understanding of collective actions. It is a process of sharing finding with the community of researchers. This can be done in many ways, in journals, on websites, in books, in videos or at conferences. The Social Publishers Foundation provides support for this process.

Action research involves actively participating in a change situation, often via an existing organization, whilst simultaneously conducting research. It can also be undertaken by larger organizations or institutions, assisted or guided by professional researchers, with the aim of improving their strategies, practices and knowledge of the environments within which they



practice. As designers and stakeholders, researchers work with others to propose a new course of action to help their community improve its work practices. Depending upon the nature of the people involved in the action research as well as the person(s) organizing it, there are different ways of describing action research.

- Collaborative Action Research
- Participatory Action Research
- Community-Based Action Research
- Youth Action Research
- Action Research and Action Learning
- Participatory Action Learning and Action Research
- Collective Action Research
- Action Science
- Living Theory Action Research

## **THE BENEFITS ASSOCIATED WITH ACTION RESEARCH IN EDUCATION**

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Action research in education is of great importance because it allows the teachers improve on their teaching while the students improve their reading as well as their studies in general due to the improved teaching skills of teachers. This form of research is meant to solve progressive problems or immediate problems which are meant for community improvement or individual benefits in education field. The action research is most of the time conducted by professional researchers to make the process as successful as possible. There are so many benefits that are associated with action research in education. Some of them are discussed in this article in details below:

### **Action research helps teachers understand the culture of schools they teach**

During the action research, most teachers are able to learn how to know and cope up with the culture of schools they teach. This is very important because it helps them to avoid conflict with the students as well as the school management. This in return allows the teachers build better relationships even with the students and other staffs.

### **Action research helps teachers gain confidence in their teaching**

Action research is of great importance to the teachers because by carrying out this research,

they are able to gain great confidence needed for their work which requires a lot of patience and understanding of different characters from the student groups. This confidence is important while teaching so that student doesn't doubt what they are taught as well as encouraging them to work hard and be confident as well.

### **Action research helps to challenge the teachers to understand what the students know and how they learn**

By taking action research, the teachers are challenged to get to understand their students better, what they know and how they learn. This also benefits the students especially the slow learners because the teacher will be able to know how they can help them improve their studies. This is a good thing because it will also build a better relationship with the students and encourage them to do better.

### **Action research help to sharpen teachers reasoning capabilities**

The teachers are able to have their reasoning capabilities sharpen by taking the action research. This helps them give their students the best teaching and thus allowing they become better thinkers in future. Having better reasoning capabilities also help in the development of disposition and to self-monitor their teaching practices to make it more professional.

### **Action research help to increase problem solving skills of the teachers**

By undertaking this action research, the teachers become more armed with problem solving skills which they can apply to solve conflicts among the students or fellow teachers. This is also important in their families allowing them to be better problem solvers in their own families. There are so many other benefits of action research and those discussed in this article are just among the many benefits. Most schools are encouraged to allow the teachers undertake the action research as often as possible to improve the quality of education of the students.

## REFERENCES



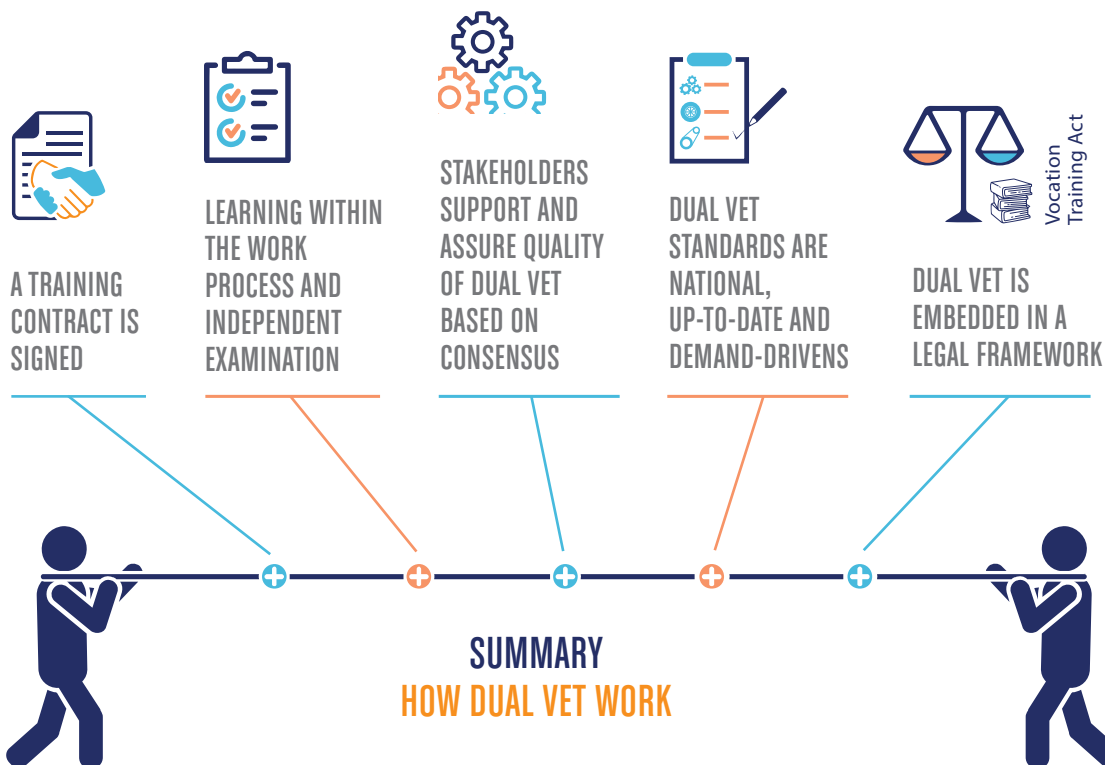
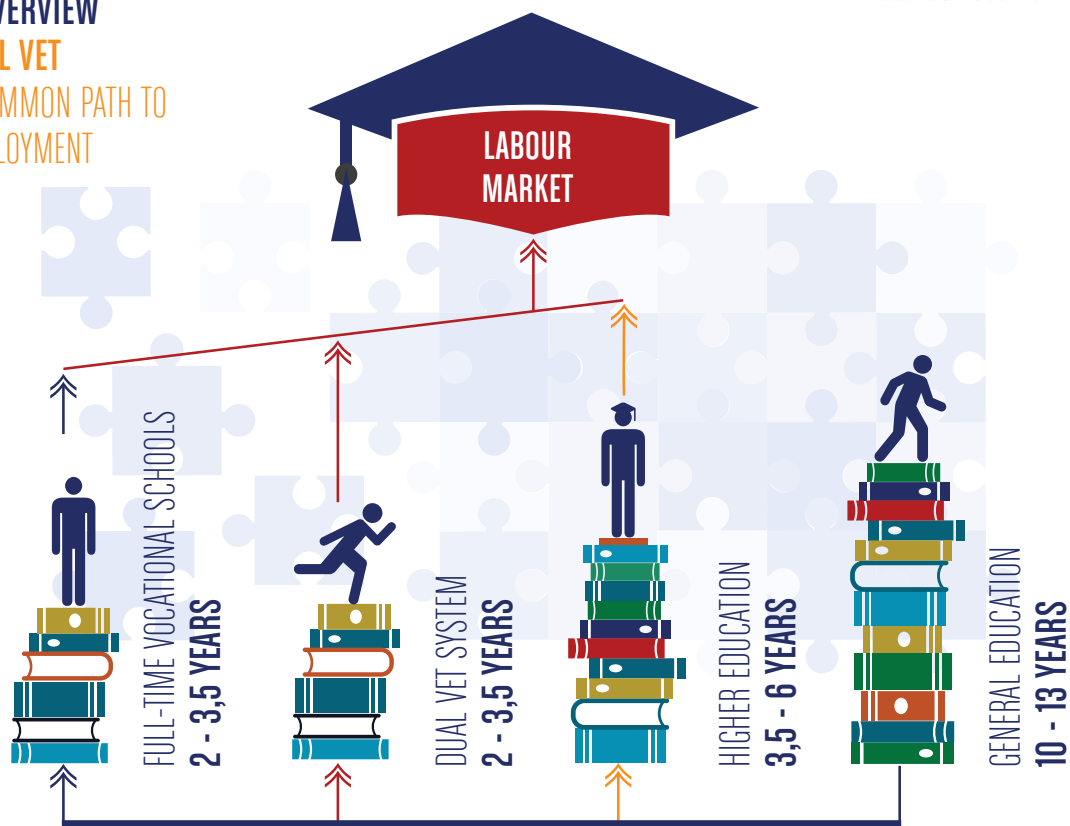
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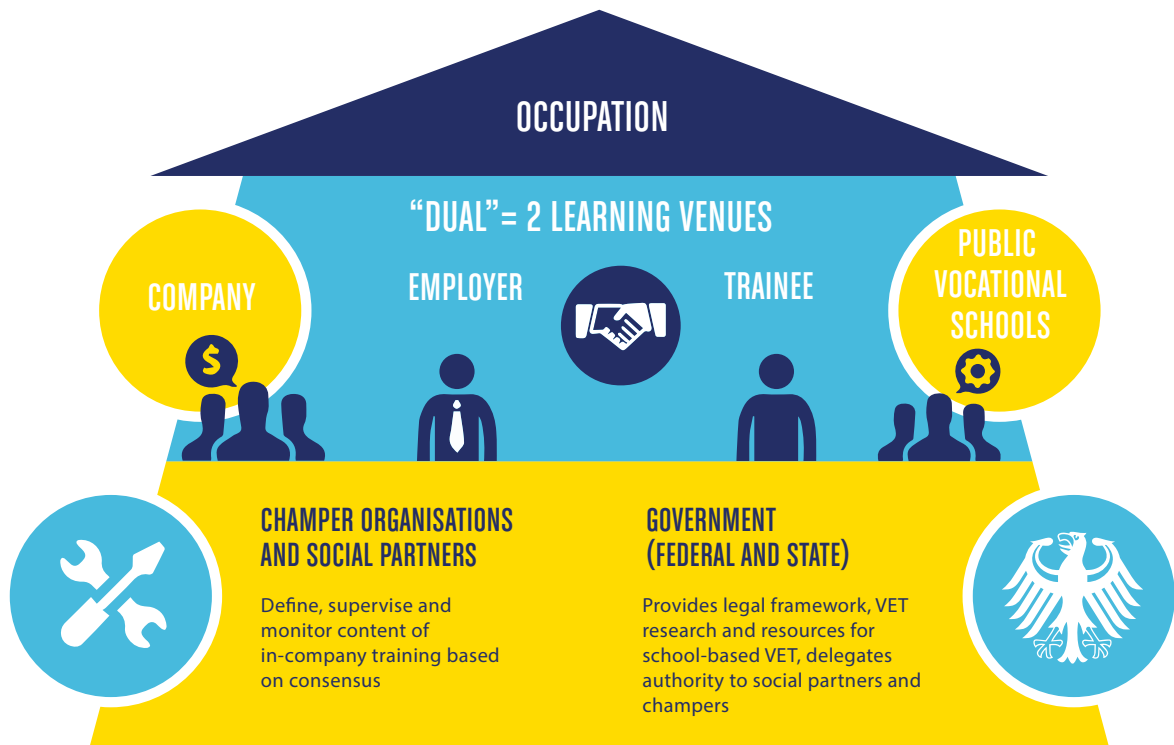
# Annex 3: Dual Sector Training – German Model

## I. OVERVIEW

### DUAL VET

A COMMON PATH TO  
 EMPLOYMENT





**SUMMARY**

**DUAL VET: TWO WORLDS UNDER ONE ROOF**

## Annex 4: Summary Of Interviews With Trial Teachers/ Trainers/Assessors

<b>Date of Interview</b>	Ist Interview 22 Apr 2019	2nd Interview 15-16 May 2019	<b>Interviewers</b>	Lou De Castro Myles Le Anh Trang
<b>Mode of Interview</b>	Face-to-Face in Vietnam			
<b>Total Respondents</b>	7		<b>Category</b>	Teachers/Trainers/Assessors

### 1. How confident are you in the trial?

First Interview

Not confident	Somewhat confident 5	Totally confident 2
---------------	-------------------------	------------------------

Second Interview

Not confident	Somewhat confident 1	Totally confident 6
---------------	-------------------------	------------------------

### 2. What knowledge or skills do you have to effectively implement the trial?

First Interview	Second Interview
Knowledge of Competency model OS/OSS unpacking Learning Outcomes development Action planning Teaching /Lecturing	Competency based training and assessment Linking OS/OSS to actual training delivery Better Training program design Learning guide development Assessment tools development Ability to identify training materials Designing a simulated distribution centre/warehouse and forklift circuit Facilitation and training skills Good relationship with enterprises Familiarity with Material handling including Forklift Student engagement and enterprise engagement

### 3. What support did you receive from your institution?



Time release to focus on the trial Access to Materials Other faculty and administrative support Logistics required	Access to facilities Senior management support Assistance in student engagement Assistance in enterprise engagement
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#### 4. What support did you receive from your partner enterprise?

Input to training materials/training facility Access for site visit	Input to assessment Lots of goodwill
--	---

#### 5. What support did you receive from the CBTA Coaching and Mentoring Team?

Knowledge and expertise Specific Materials relevant to the OS/OSS trial Encouragement and inspiration	Critical feedback Guidance and assistance in design and delivery of the training program
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#### 6. What other knowledge, skills or support do you need to effectively implement the trial?

Time to focus Better understanding of the CBTA approach	Understanding of real situations in Warehouses
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## Annex 5: HCE Simulated Distribution Centre

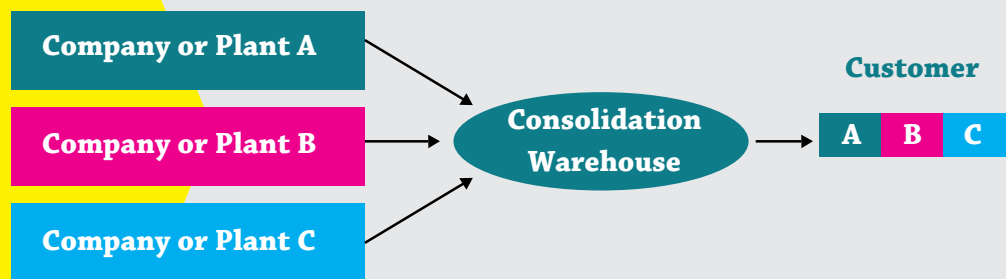
# A. BACKGROUND

## Types of Distribution Centres

There are four basic types of DCs that serve different purposes:

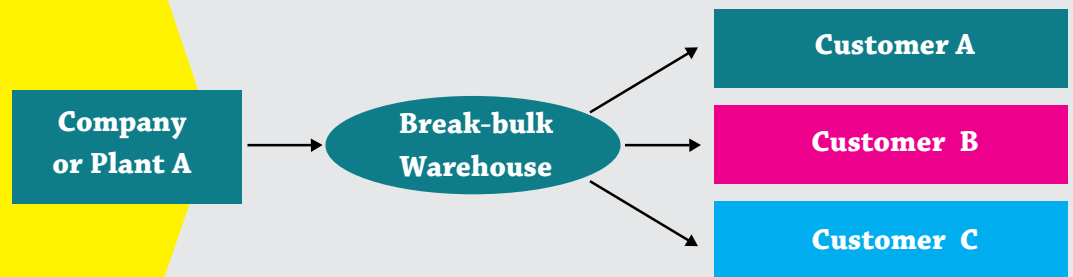
### 1. Consolidation

Takes in various products from various suppliers and creates consolidated shipments to its customers.



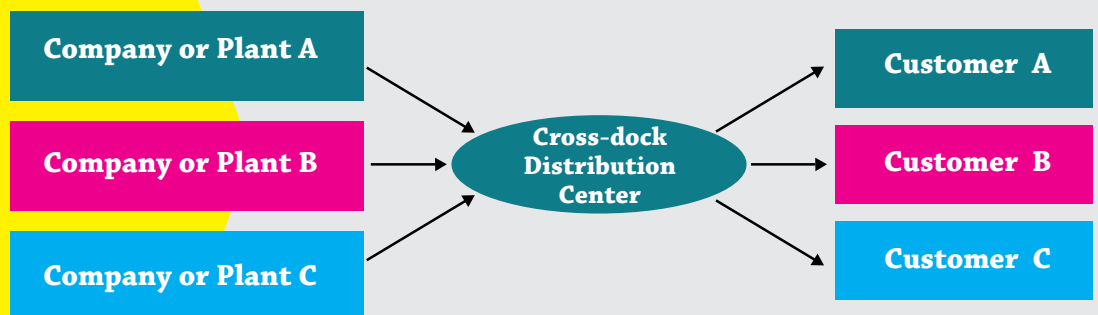
### 2. Break-bulk

Takes large quantities of a few products and redistributes them in part to various customers.



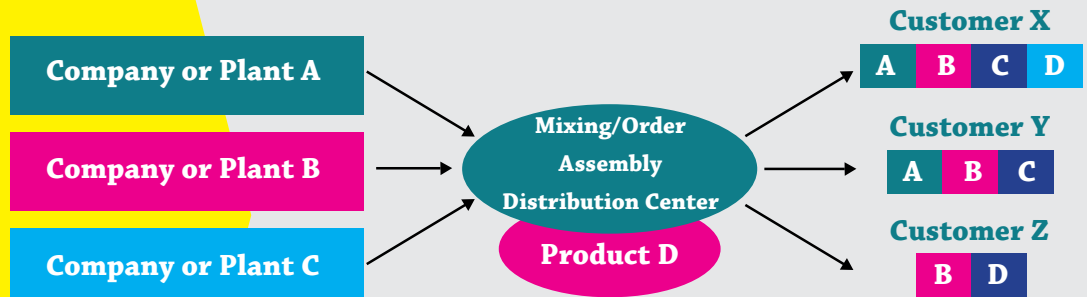
### 3. Cross-dock

A distribution centre that holds little to no inventory, but merely redistributes the product it receives.



#### 4. Mixing or Order Assembly

May do some or all the other three. It is what people typically think of when they consider the term “distribution centre”.



#### Inside a Distribution Centre

Within a distribution centre, there are two basic functions – inbound and outbound.

##### Inbound

Comprised of receiving and storage, the inbound function begins when material is delivered to the warehouse. The Receiving function involves all activities required to bring materials into the warehouse, including unpacking, inspection, and preparation for put-away into storage. Receiving is usually about 10% of total warehouse operating costs.

Put-away is the act of placing merchandise to storage and includes determining the actual storage location(s) that will be used, transportation to that location, and confirmation that the putaway was done completely. It is about 15% of total warehouse operating costs. Storage can be into reserve locations for later use or directly into forward picking locations.

##### Outbound

Comprised of order fulfillment and shipping, the outbound processes begin when an order is placed by a customer and enters the warehouse processing systems. Processing orders in a warehouse is typically done by the warehouse management system, or WMS, which will first check if the requested items are available to ship. It will dictate all events that are required to fulfill orders including initiating replenishment, coordinating any automation systems, and scheduling picking and shipping activities.

Order-picking is an especially labor-intensive part of order fulfillment, which can account for between 50-60% of total warehousing costs. Of that, half or more of the costs are attributed to pickers travelling from location to location to gather the materials necessary for fulfillment. A lot of effort in the warehouse design process goes into minimizing picker travel time since it can

significantly affect overall efficiency.

Once orders are picked, they are often checked for accuracy. This step can be included in the packing activity or done as a separate process. Packing includes all the activities required to ensure the product will arrive safely and in good condition. It also includes adding any shipping documentation and labels to the packages.

The shipping process includes everything needed to consolidate packages to the order or shipment, preparing shipment level documents, and loading the carrier's truck.

There are other outbound processes that are sometimes performed, depending on the specific needs of the operation. Some of these include handling of returns, performing value-added-services (like price stickering or gift wrapping), doing assembly work, etc.

## B. LIST OF EQUIPMENT FOR THE SIMULATED HCE DISTRIBUTION CENTRE

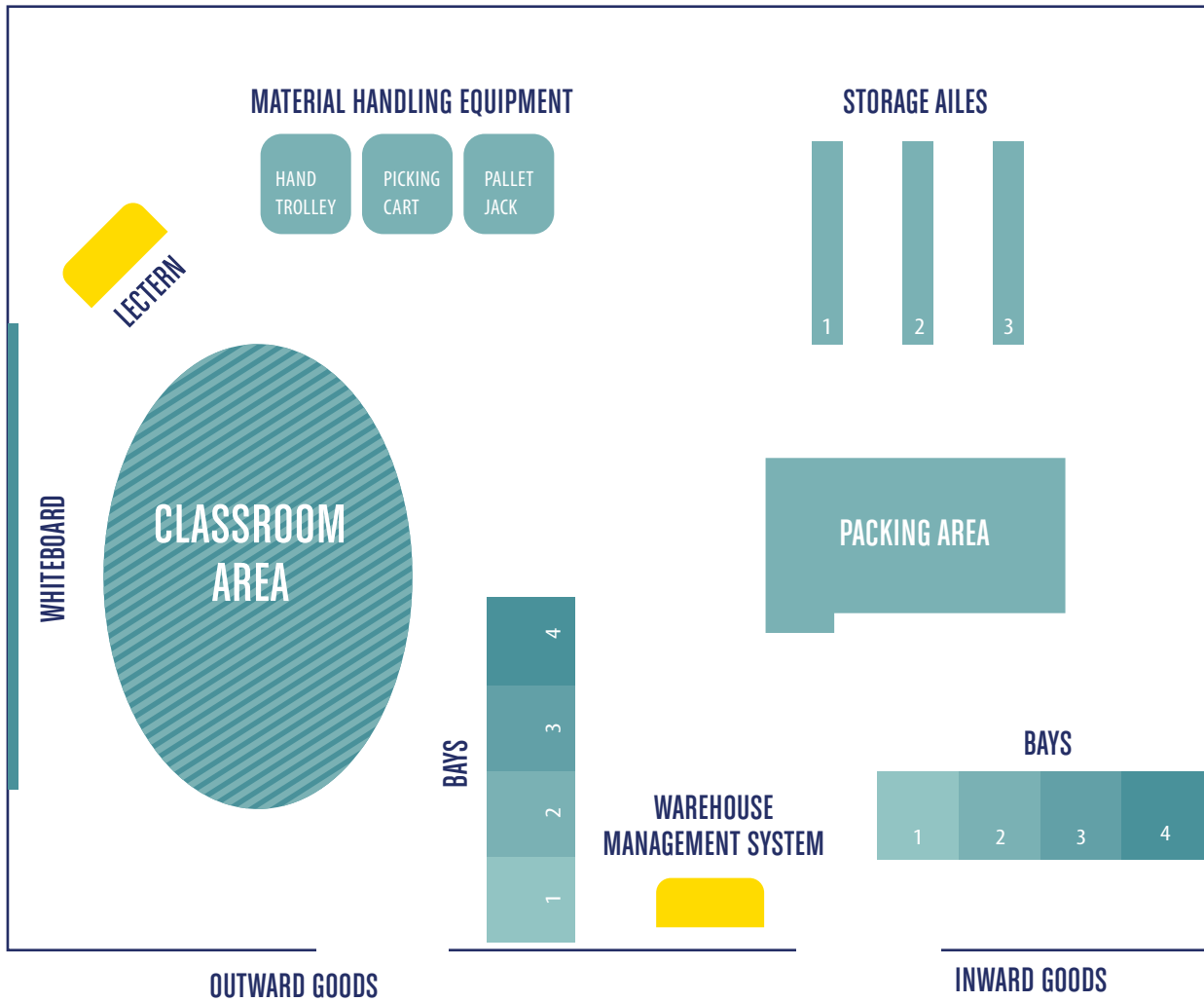
<b>OSS - Pick and process order</b>	
<b>1</b>	Industrial warehouse racks (VND8M x 3)
<b>2</b>	Personal Safety Equipment (PPE)
<b>3</b>	Hand Truck Trolley
<b>4</b>	Pallet Jack
<b>5</b>	Warehouse Trolley cart (x20)
<b>6</b>	Warehouse Bins -set of 100 - all sizes
<b>7</b>	Label maker/machine (x2)
<b>8</b>	Loads/products
<b>9</b>	Tape (Secure)
<b>10</b>	Shrink wrap and wrap
<b>11</b>	Packing boxes
<b>12</b>	Pallets (2)
<b>13</b>	Portable Fire extinguisher 3LTR foam
<b>14</b>	Warning Signs
<b>15</b>	Student enrolment and tuition fees (waived - lot: 18 trial students)
<b>16</b>	Learning Materials (Trial Students - 18 students@1M VND each)
<b>17</b>	Training and Assessment Tools - 18 students @1M VND each)
<b>Total</b>	

### C. PHOTOGRAPHS OF THE SIMULATED HCE DISTRIBUTION CENTRE





# HCE DISTRIBUTION CENTER



## **Annex 6: Training Module Summary - Pick And Process Order**

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### **HO CHI MINH COLLEGE OF ECONOMICS**

#### **Unit 1. Overview of products and processes “Pick and process order”**

##### **1.1. Products**

- Picking and processing order
- Identifying characteristics of a product
- Packaging

##### **1.2. Processes “Pick and process order”**

- Labeling and special handling requirements
- Gathering information
- Identifying products
- Documentation

#### **Unit 2. Systematic Approach**

- Policies and procedures
- Order picking
- Selecting and gathering products
- Packaging products
- Final labelling
- Workplace documentation

#### **Unit 3. Legislation**

- Workplace Health and Safety (WHS)
- Housekeeping tasks
- International Marine Dangerous Goods Code

- The Vietnamese Dangerous Goods Code
- Environmental Protection Authority (EPA)

#### **Unit 4. Inventory systems**

- Labelling and cataloguing
- Estimates and calculations
- Selecting and using communication technology
- Selecting manual handling equipment
- Using pallets
- Using different equipments in warehouse

#### **Unit 5: Picking and processing order**

- Receiving information about the products need to select (picklist).
- Locating the products in warehouse
- Selecting and using equipments in warehouse
- Selecting and gathering products
- Packaging
- Final labeling

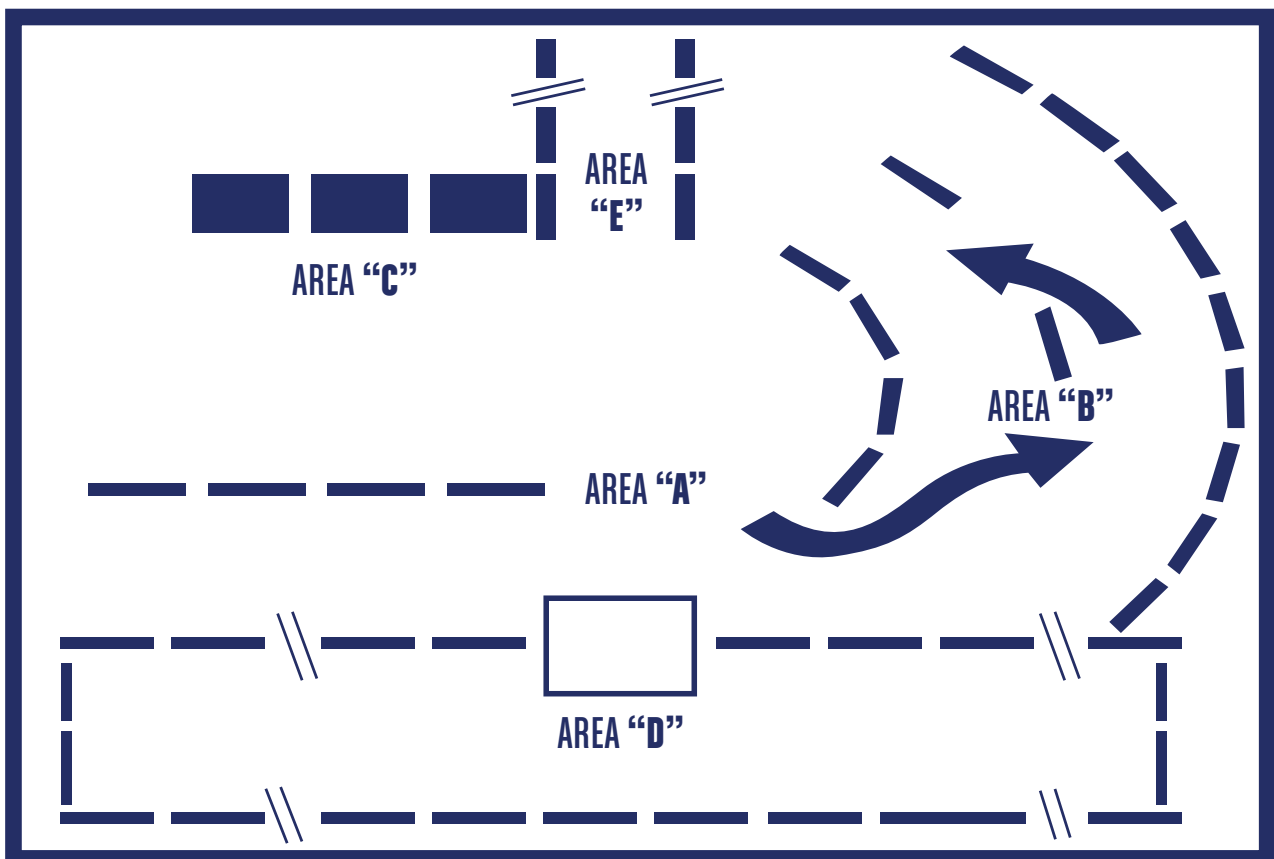
#### **Unit 6. Monitoring picking and processing**

- Recording of stock level
- Inspecting the products in accordance with workplace quality assurances
- Handling damaged products (unsuitable items)

#### **Unit 7: Keeping records and documents**

- Types of records, documents
- Regulations on keeping records and documents
- Keeping records and documents as requested

## Annex 7: Tdc Simulated Warehouse And Forklift Training Circuit



# Forklift Driver Performance Test

Operators name: \_\_\_\_\_ Date: \_\_\_\_\_

Evaluator's name: \_\_\_\_\_

<b>Operators ability to perform check-sheet inspection for safe operation of truck</b>	Use check-sheet satisfactorily, checking all items	
	Clutch operation	
	Inching control (auto transmission)	
<b>Proper use of controls (understands proper technique and proper direction of movement of control to get desired direction of movement)</b>	Tilt control	
	Lift control	
	Attachment controls	
	Steering techniques for type of machine being used by operator	
<b>Proper positioning of all controls, switches, parking brakes when leaving machine unattended</b>	Service brake	
	Parking brake	
<b>Selecting loads</b>	Proper capacity for truck used	
	Proper size load for visibility and safe handling	
	Load tilted back against back rest	
	Carries load low (just high enough to clear floor obstacles)	
<b>Driving with load</b>	Smooth starting and stopping	
	Proper speed	
	Sounds horn at intersections and corners	
	Keeps to the right in aisles used for two-way traffic	
	Travels at least three lengths behind other vehicles	
	Handles load in manner to prevent product damage	
<b>Stacking</b>	Approaches loads squarely	
	Stacks straight and squarely	
	Does not tier to high	
	Deposit load safely; does not use excessive tilt action	
	When selecting top load for pickup, uses proper form spread for load	
	Removes load and lowers to safe level before making turn to proceed in direction of desired travel	
<b>Dock Safety</b>	Check bridge plates (and dock boards) before crossing	
	Check trailers for proper wheel chocking before entering and proper jack installation of trailers where required	
	Check rail freight cars for proper positioning and safe loading conditions	
<b>Maneuvering skills</b>	Smooth starting and stopping	
	Sharp turns forward and reverse <ul style="list-style-type: none"> <li>• Proper speed</li> <li>• Looks in direction of travel</li> <li>• Carries forks low</li> <li>• Clear obstacles by safe distance</li> </ul>	



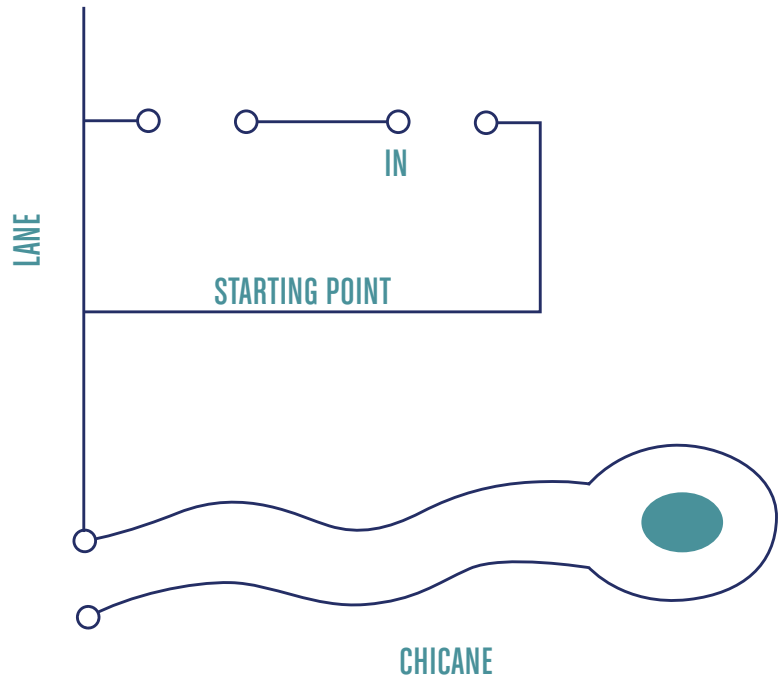
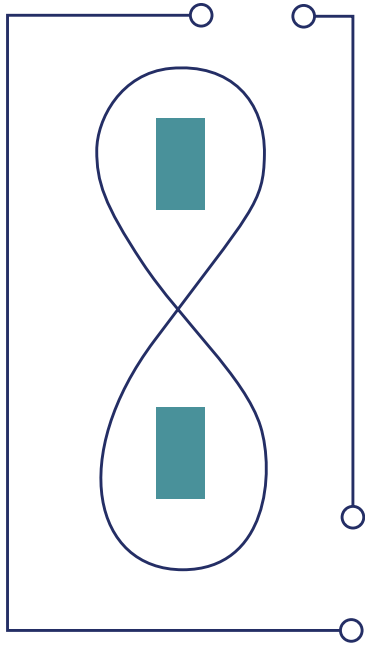




### BAYS - BLOCK STACKING



### RACKING



## Annex 8: Training Module Summary – Operate A Forklift

### TRAINING MODULE SUMMARY: OPERATE A FORKLIFT

#### THU DUC COLLEGE OF TECHNOLOGY

TT	CONTENT	TIME (hour)			
		Total	Theory	Practice	Note
1	SESSION PLAN 1: FORKLIFT INTRODUCTION 1.1. Forklift components 1.2. Forklift attachments	10	5	5	
2	SESSION PLAN 2: GUIDANCE ON REGULATIONS IN FORKLIFT OPERATION 2.1. Workplace processes, standards and policies 2.2. Safety forklift operation 2.3. Classification and characteristics of goods 2.4. Warehouse diagram and warehouse system	10	5	5	
3	SESSION PLAN 3: FORKLIFT OPERATING PROCESS 3.1. Forklift operating process 3.2. Operating forklifts properly 3.3. Forklift maintaining	30	0	30	
4	SESSION PLAN 4: COMPLETING DOCUMENTS AND REPORT PROBLEMS 4.1. Completing documents 4.2. Report problems 4.3. Storage documents	10	5	5	
<b>Total</b>		<b>60</b>	<b>15</b>	<b>45</b>	

*As at 16 June, 2019*

## Annex 9: Summary Of Interviews With Partner Enterprises

<b>Date of Interview</b>	5 May to 13 June 2019	<b>Interviewers</b>	Lou De Castro Myles Le Anh Trang
<b>Mode of Interview</b>	Face-to-Face in Vietnam		
<b>Total Respondents</b>	8	<b>Category</b>	Partner Enterprises

### 1. How committed are you to the trial?

No commitment 0	Some commitment 3	Total commitment 6
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### 2. What direct resources would you/did you provide to the trial? (human resources, facilities, financial, equipment, goodwill etc)

<ul style="list-style-type: none"> <li>Human Resources - right person representative</li> <li>Industry facilities (for site visits)</li> <li>Knowledge and specialist skills in warehouse operation</li> <li>Time (attendance at meetings, briefings and assessment validation)</li> <li>Goodwill – we are doing this together for Vietnam</li> </ul>
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### 3. How does your enterprise allocate these resources?

<ul style="list-style-type: none"> <li>Accommodated as part of involvement in skills development</li> <li>Genuine interest in training quality as a drive to put resources</li> <li>As part of commitment to partner colleges</li> <li>As part of our relationship building with the colleges</li> </ul>
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### 4. How do you feel about your participation in the trial?

<ul style="list-style-type: none"> <li>Happy to be involved</li> <li>Inspired by people who are involved, primarily the CBTA Team Leader (Ms Lou)</li> <li>Great to be part of developing quality training</li> <li>Strong interest in competency-based model</li> <li>Excited to be part of a process that directly involves industry in training</li> <li>Feel committed to ensure young people get the right skills to work in Logistics</li> <li>Curious about a new teaching and learning model (competency model)</li> </ul>
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### 5. What are the challenges and opportunities for your institution/enterprise in participating in the trial?

Challenges	Opportunities
<ul style="list-style-type: none"> <li>OS/OSS not well known</li> <li>Time/resources constraints to participate, especially for small enterprises</li> <li>Teachers/trainers understanding of the Logistics realities</li> <li>Training facilities may not be sufficient</li> </ul>	<ul style="list-style-type: none"> <li>Collaboration with VET colleges</li> <li>Contribution to training quality</li> <li>Increase knowledge of issues in skills development and the competency-model</li> <li>Engagement and interaction with international experts</li> <li>Better understanding of training and assessment methods and how best to support workforce skills development</li> </ul>

## Annex 10: CBTA Strategies In Logistics - Key Activities Schedule

### Face-To- Face Coaching/Mentoring, Data Gathering and Stakeholder Engagement Activities

Days/Dates	AGENDA	Facilitator/Participants
22 Apr	<p>N.B: CBTA Coaching and Mentoring Team arrives in VN at 11 am.</p> <p><b>Briefing and confirmation with trial teams and stakeholders</b></p> <p>Presentations from Trial Teams (TDC &amp; HCE)</p> <p>Refining of Training Program and Learning Tools</p> <p>Confirmation of Enterprise Partners</p> <p>Confirmation of Student Cohort</p> <p>Q and A Forum</p> <p>Summary and next steps</p> <p><b>Data gathering and monitoring</b> – interviews and observation, including image capturing through video and photograph</p>	<p>CBTA Coaching and Mentoring Team</p> <p>+ Support Team including interpreter</p> <p>Trial Teams (Leaders and Trainers/Assessors TDC and HCE)</p> <p>+ Key stakeholders/enterprise partner</p> <p>+ Student cohort (if applicable)</p>
23-24 Apr	<p><b>Face-to-face Coaching and Mentoring sessions</b></p> <ul style="list-style-type: none"> <li>• Training Program validation (OS/OSS)</li> <li>• Delivery and Assessment tools</li> <li>• Training facilities and equipment</li> <li>• Work Health and Safety Checklist</li> <li>• PPE Gear for all participants</li> <li>• Check up on equipment, primarily Forklift and load pallets</li> <li>• Operate a forklift</li> </ul> <p><b>Data gathering and monitoring</b> – interviews and observation, including image capturing through video and photograph</p> <p><b>Reflection and next steps</b></p> <p>Meet student cohort (if applicable)</p>	<p>Venue:</p> <p>Thu Duc College campus and partner enterprise facility (TBC)</p>
25-26 Apr	<p><b>Face-to-face Coaching and Mentoring sessions</b></p> <ul style="list-style-type: none"> <li>• Training Program validation (OS/OSS)</li> <li>• Delivery and Assessment tools</li> <li>• Facilities and equipment</li> <li>• Work Health and Safety Checklist</li> <li>• PPE Gear for all participants               <ul style="list-style-type: none"> <li>o Check up on simulated warehouse - primarily shelves, bins and products</li> <li>o Check up on-site warehouse</li> </ul> </li> <li>• Pick and process orders</li> </ul> <p><b>Data gathering and monitoring</b> – interviews and observation, including image capturing through video and photograph</p> <p><b>Reflection and next steps</b></p> <p>Meet student cohort (if applicable)</p>	<p>CBTA Coaching and Mentoring Team</p> <p>+ Support Team including interpreter</p> <p>Trial Teams (Leaders and Trainers/Assessors TDC and HCE)</p> <p>+ Key stakeholders/enterprise partner</p> <p>+ Student cohort (if applicable)</p> <p>Venue:</p> <p>HCMC College of Economics and/or partner enterprise facility</p>

<b>13-17 May</b>	<b>Midpoint Review and Adjustment</b> Face-to-face coaching and mentoring sessions with trial participants Data gathering and monitoring Stakeholder engagement	CBTA Coaching and Mentoring Team + Support Team including interpreter Trial Teams (Leaders and Trainers/Assessors TDC and HCE) + Key stakeholders/enterprise partner + Student cohort
<b>10-15 Jun</b>	<b>Trial Outputs/Outcomes: Showcase Development</b> Face-to-face coaching and mentoring sessions with trial participants Data gathering and monitoring Stakeholder engagement <b>Showcase Day</b>	CBTA Coaching and Mentoring Team +Support Team including interpreter Trial Teams (Leaders and Trainers/Assessors TDC and HCE) + Key stakeholders/enterprise partner + Student cohort
<b>16 Jun</b>	<b>Debriefing</b>	

## SHOWCASE DAY

**Date: Friday, 14 June 2019 (9:45 AM)**

**Venue: Dong Ho Conference Centre  
195 - 197 Cao Thang, Ward 12, District 10,  
Ho Chi Minh city**

### BRIEF

Design and facilitate two (2) competency-based and industry-led training delivery for one Occupational Standard (OS) and relevant Occupational Skills Standards (OSS) with logistics enterprises and partner colleges:

*Occupational Standard: Warehouse Operator*

*Occupational Skills Standards: 1) Pick and process order, 2) Operate a forklift.*

## SHOWCASE AGENDA

Time	Activity	Facilitator/s
9:45 AM	Registration and guest arrivals <b>Networking Morning Tea</b>	Ms Đỗ Thị Kim Thanh
10:15 AM	Housekeeping Announcements Opening Remarks	Representative of the Australian Government Aus4Skills
10:30 AM	CBTA Strategies in Logistics: Background and Overview	Ms Lou De Castro Myles, Team Leader/Designer and GEDSI Adviser (Coach and Mentor)
10:37 AM	OS/OSS Snapshot Showcase Presentations Operate a forklift  Pick and process order	Mr Duong Quoc Viet, Training Team Leader and Students, Thu Duc College of Technology  Ms Nguyen Thi Truc Phuong, Training Team Leader and Students, Ho Chi Minh College of Technology
10:55 AM	Feedback Responses	Representatives: Logistics Partner Enterprises Thu Duc College of Technology Ho Chi Minh College of Economics
11:00 AM	<b>Launch of CBTA Instructional Training Video: How to Operate a Forklift</b>	Mr Wayne Striplin, International Trainer (Coach and Mentor)
11:15 AM	Students' Demonstration Pick and process order	Ho Chi Minh College of Economics
11:30 AM	<b>Presentation of Certificates to Student Cohort</b>	Aus4Skills, Strategix-QUT
12:00 AM	Group Photos and Acknowledgements	
12:15 AM	<b>Networking Lunch</b>	
1:30 PM	Close of Showcase	CBTA Team Leader/Designer (Coach and Mentor)

### Trial Results of Competency-based Training Delivery

## CASE STUDY PRESENTATION TO LIRC MEMBERS AND OTHER STAKEHOLDERS

### Activity Brief:

Develop a case study on how to ensure high quality training and assessment against OS/OSS for presentation to logistics enterprises and the LIRC, and an approach to case study dissemination.



# AGENDA

**Date: 17 August 2019, Saturday (9:30 AM)**

**Venue: Equatorial Hotel  
242 Tran Binh Trong, District 5, HCMC**

TIME	ACTIVITY	FACILITATOR/PRESENTER
9:45 AM	Registration and Guest Arrivals <b>Networking Morning Tea</b> Housekeeping Announcements	<b>Ms Đỗ Thị Kim Thanh</b>
10:15 AM	<b>Welcome and Opening Remarks</b>	<b>Government Representative</b> <b>Aus4Skills Representative</b> <b>LIRC Representative</b>
10:25 AM	<b>CBTA Strategies in Logistics— Overview and Background</b>	<b>Ms Lou De Castro Myles</b> CBTA Team Leader/Designer and GEDSI Adviser
10:30 AM	<b>OS/OSSTraining Snapshots</b> <ul style="list-style-type: none"> <li>• Operate a forklift</li> <li>• Pick and process order</li> </ul>	<b>Mr Duong Quoc Viet</b> Head of Department - Super Market Manager and Logistics Thu Duc College of Technology  <b>Ba Nguyen Thi Truc Phuong</b> Dean - Faculty of Business Administration Ho Chi Minh College of Economics
10:45 AM	<b>Case Study: Findings and Recommendations</b>	<b>Ms Lou De Castro Myles</b>
11:10 AM	<b>Acknowledgement and Response Q &amp; A</b>	<b>LIRC Representative</b> <b>VLA Representative</b> <b>DOLISA/DVET Representative</b>
11:40 AM	<b>Presentation of Certificates to Trial Trainers/Teachers</b>	
12:00 AM	<b>Closing Remarks</b>	
12:10 AM	<b>Networking Lunch</b>	All Guests

**DISCLAIMER:**

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The views and suggestions expressed in this publication are the authors  
alone and are not necessarily the views of the Australian Government.



