

**International
Institute of
Social Studies**

Erasmus

**Impact of Training Needs Analysis and Inter-Organizational
Coordination on Training Effectiveness: A Study Case in
Indonesian Customs and Excise Training Center**

A Research Paper presented by:

Muhammad Kamal Rezza

(Indonesia)

in partial fulfilment of the requirements for obtaining the degree of
MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

Governance and Development Policy

(GDP)

Specialization:

Public Policy Management

Members of the Examining Committee:

Dr. Sunil Tankha

Dr. Sylvia I. Bergh

The Netherlands
December 2018

Disclaimer:

This document represents part of the author's study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

Postal address:

Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460

Fax: +31 70 426 0799

Dedication Page

For my dearest wife, Ari Wabyuning Udaryanti

*For my adorable little girls, Nabilah Sabla Hikari Arizqa
and Mazaya Aisha Freya Arizqa*

For my role model father, Mochamad Ansori

For my beloved mother, Irabawati

Thanks for everything...

Acknowledgements

Alhamdulillah...

All praises be to Allah for all mercy and endless blessing that made it possible for me to finalize this paper as requirement for accomplishing my master program in the International Institute of Social Studies, The Hague, Erasmus University of Rotterdam.

My sincere gratitude for Mr. Sunil Tankha as my supervisor and Mrs. Sylvia Bergh as my second reader for all valuable comments, feedbacks, and guidance during the writing of this research.

My huge gratefulness for the Ministry of Finance, especially Finance Education and Training Agency for the scholarship that made my dream for studying overseas come true.

My highest appreciation to my colleagues in Customs and Excise Training Center, particularly in Training Evaluation Subdivision for all the data and supports provided for this research.

My special thanks for my fellows FETA 2 – ISS for the unforgettable memory in this campus.

Finally, my infinite thankfulness to my wife, my daughters, and my parents who always encouraged me and gave me the spirit to complete this study.

Once again, Alhamdulillah...

May Allah bless us all...

Amin.. Amin.. Ya robbal alamin...

Contents

Dedication Page	iii
Acknowledgements	iv
<i>List of Tables</i>	<i>vii</i>
<i>List of Figures</i>	<i>vii</i>
<i>List of Appendices</i>	<i>vii</i>
<i>List of Acronyms</i>	<i>viii</i>
<i>Abstract</i>	<i>ix</i>
Chapter 1 Introduction	1
1.1. Research Strategy	2
1.2. Research Questions	3
1.3. Research Background	3
1.4. Methodology and Data Selection	6
1.5. Scope and Limitations of the Research	7
1.6. Risks and Ethical Challenges	7
Chapter 2 Conceptual Framework and Literature Review	9
2.1. Training as Means of Capacity Building towards Learning Organizations	9
2.1.1. Capacity	9
2.1.2. Learning Organizations	10
2.1.3. Education and training as a means for capacity building	11
2.1.4. The Importance of Training	12
2.1.5. Training Needs Analysis	13
2.2. Training Effectiveness and Knowledge and Skills Implementation	14
2.2.1. Effective Training Program	14
2.2.2. Evaluating Training Effectiveness	15
2.2.3. Knowledge and Skills Implementation	16
2.3. Organization Coordination, and Inter-Organizational Coordination	17
2.3.1. Organizational Structure and Coordination Theory	17
2.3.2. Inter-organizational Coordination	18
2.3.3. Determinant Factors Affecting Inter-Organizational Coordination	19
2.4. Analytical Framework	20
Chapter 3 Training Needs Analysis and Inter-Organizational Coordination between CETC and DGCE	21
3.1. Training Planning and Development Stage	21

3.1.1. The DGCE Ideal Training Needs Analysis	21
3.1.2. Training Needs Analysis Verification	23
3.1.3. Training Participants Selection	25
3.1.4. Formulation of Training Materials	26
3.2. Inter-Organizational Coordination Quality between CETC and DGCE	26
Chapter 4 Assessing CETC Training Effectiveness	30
4.1. Stakeholders' Perception of Effective Training	30
4.2. Evaluation Process for Measuring Training Effectiveness	31
4.2.1. Quality of Training Based on Trainees' Perception	31
4.2.2. Learning Evaluation as Initial Step in Measuring KSAs Changes	33
4.2.3. Evaluating Behavior in the Post-Training Environment	33
4.2.4. Challenge in Measuring Performance Improvement	40
4.2.5. Summary of Four-Level Evaluation Process	42
Chapter 5 Analyzing TNA and IOC Impacts on CETC Training Effectiveness	43
5.1. DGCE TNA Impact on CETC Training Effectiveness	43
5.2. IOC Impacts on CETC Training Effectiveness	45
Chapter 6 Conclusion and Recommendations	46
6.1. Conclusion	46
6.2. Recommendations	49
References	51

List of Tables

Table 1. Key Interviewees' Perceptions of Effective Training	30
Table 2. Summary of Training Participants Satisfaction Index	32
Table 3. Summary of Kirkpatrick's Four-Level Evaluation Steps	42

List of Figures

Figure 1. MoF Organizational Structure	3
Figure 2. DGCE Organizational Chart	4
Figure 3. FETA Organizational Chart	4
Figure 4. CETC Organizational Chart	5
Figure 5. The Inter-related Units among DGCE and CETC	6
Figure 6. Kirkpatrick's Four Level Evaluation Model	16
Figure 7. "Five Components of Organizations"	17
Figure 8. Position Assessment and Individual TNA Process in DGCE	22
Figure 9. DGCE TNA Assessment Steps	23
Figure 10. TNA Verification Result 2017-2018	24
Figure 11. Average Training Participants Satisfaction Index	32
Figure 12. The Proportion of Alumni Placement	34
Figure 13. Employee Placement Mechanism in DGCE	36
Figure 14. Training Materials Implementation	36
Figure 15. The Percentage of Transfer Learning	37
Figure 16. The Alumni Placement Comparison Between Post-Training Evaluation and 2018	38
Figure 17. Training Materials Relevance	39
Figure 18. Alumni Competency Improvement Index	40

List of Appendices

Appendix I List of Key Interviewees	60
Appendix II List of Selected Training Organized during 2015-2017	61
Appendix III Training Participants Satisfaction Index	62
Appendix IV The alumni position comparison between Post-Training Evaluation and 2018	63

List of Acronyms

CETC	Customs and Excise Education and Training Center
CSSO	Customs and Excise Service and Supervision Office
DGCE	Directorate General of Customs and Excise
DGT	Directorate General of Taxes
EAD	Employee Administration Division
EDD	Employee Development Division
ED-1S	Employee Development-I Subdivision
EPRD	Evaluation and Performance Reporting Division
ERS	Employee Rotation Subdivision
FETA	Finance Education and Training Center
FTH	Finance Training House
IOC	Inter-organizational Coordination
MoF	Ministry of Finance
OFB	Operation Facilities Base
PDD	Planning and Development Division
PMU	Personnel Management Unit
PSO	Primary Service Office
RO	Regional Office
TC	Training Center
TCS	Training Curriculum Subdivision
TES	Training Evaluation Subdivision
TOD	Training Organizer Division
TO-1S	Training Organizer-I Subdivision
TPS	Training Program Subdivision
TSS	Teaching Staff Subdivision
TNA	Training Needs Analysis

Abstract

Human resource development is essential for improving organizational capacity and competency. In order to thrive as advanced nations, emerging countries should possess the adequate capacity to perform the government's tasks appropriately. One vital area that should be equipped with sufficient capacity is national taxes collection, as it has crucial roles in financing development. In Indonesia, this mandate is delegated to two units under Ministry of Finance (MoF), namely Directorate General of Taxes (DGT) and Directorate General of Customs and Excise (DGCE). Perhaps, the later has more significant contribution as it also possesses reinforcement roles to prevent state loss by combating illegal smuggling. One of MoF's unit established to provide human resource development for DGCE is Customs and Excise Education and Training Center (CETC). To date, education and training are still the most favourable instruments of capacity building in Indonesia public sector. Nevertheless, in order to deliver more targeted human resource development that in line with organizational needs and can contribute to organizational performance improvement, education and training should be organized effectively. Hence, regular evaluation needs to be conducted to measure the effectivity of training programs.

Various elements might affect training effectiveness, especially in the context of CETC and DGCE in which training provider is organized separately from its user. This research focuses on two aspects influencing training effectiveness: Training Needs Analysis (TNA) in the training planning stage and Inter-organizational Coordination (IOC) between CETC and DGCE. In addition, this study measures the current CETC training effectiveness level. Three training indicators are used to measure training effectiveness, namely knowledge and skills utilization, materials relevance, and competency advancement. Based on primary and secondary data analysis derived from interviews and official reports, two primary findings are concluded in this paper. First, although DGCE has been adopting organizational, tasks, and individual analysis in running their TNA, in fact, the last aspect was incomprehensively and ineffectively conducted. Consequently, it was not uncommon that many employees attended unnecessary training, and in the end, training became less effective due to a mismatch between alumni's new competencies and their post-training assignment. Second, in contrast, despite organized separately, it turned out that excellent quality of IOC existed between two units. There was evidence in which this solid IOC has been translated into relevant training materials contributing to competency improvement. In conclusion, to some extent, the CETC training programs have been quite effectively organized as they have been able to supply DGCE officers with relevant training materials that can improve their competency. Nonetheless, there is still a room for improvement, particularly regarding the knowledge and skills utilization in post-training environment.

Relevance to Development Studies

The MoF is a pioneer of bureaucracy reform in Indonesia. Its success in reforming the public services delivery in several sectors such as taxation, customs and excise, state assets management, and state budget and treasury has become a role model for many government organizations in Indonesia. This reform also includes education field. The situation in Customs and Excise Education and Training Center (CETC) is no different. Many other government education organizations often visit CETC in order to learn its business processes, and then, implement it in their own organizations. Therefore, by conducting this research, the author hopes that he can provide inputs for improving the training effectiveness in CETC. As bureaucracy reform implemented by MoF has become a role model for other ministries or government agencies, any improvement made by CETC is also expected to be followed by other government educational organizations in Indonesia.

Keywords

Capacity, Capacity Building, Education, Training, Training Needs Analysis, Training Evaluation, Training Effectiveness, Inter-Organizational Coordination.

Chapter 1

Introduction

Human resources development is essential for improving organizational capacity and competency. In recent decades, this field has been getting more attention, especially in the public sector (see Grindle and Hildebrand 1995; Cohen 1992; Cohen 1993; Morgan 1993). The capacity development is vital, especially for developing countries, where adequate government performance is crucial to promote market-oriented economies, encourage productive populations, and establish democratic political systems (Grindle and Hildebrand 1995).

One area that should be appropriately developed is the finance sector. In Indonesia, all financial matters are organized under the Indonesian Ministry of Finance (MoF). It includes fiscal policy formulation, national income collection, budget planning and spending, state asset management, and national-regional government fiscal transfer. From those various fields, perhaps the revenue collection sector is the most crucial one as it has a responsibility to accumulate resources from taxes and other means for fueling development.

Since the new millennium, the contribution of taxes to Indonesia national budget has dramatically increased from just around 50% in 2000 to more than 85% in 2018 (MoF 2017; 2018). Within MoF, the authority for collecting and managing taxes are delegated to Directorate General of Taxes (DGT) and Directorate General of Customs and Excise (DGCE). According to Minister of Finance Regulation Number 212 Year 2017 regarding Organization and Working Procedure of Ministry of Finance, the major difference between these two units is the type of taxes they collect. DGT is responsible in collecting Income Tax, Value Added Tax, and Property Tax, whereas DGCE is given mandate to accumulate Customs and Excise as well as Export-Import Duties, including Import Income Tax and Import Value Added Tax.

The contribution of DGT and DGCE in securing national income might look equally crucial. However, in fact, DGCE has a more important and unique role than DGT. First, in 2014, although DGT had a bigger contribution towards the total revenues by IDR 788 trillion (USD 58.4 billion) against IDR 358 trillion (USD 26.5 billion) collected by DGCE, the latter unit had much higher tax ratio per employee by IDR 27 billion (USD 2 million) versus IDR 18 billion (USD 1.33 million) (Kompasiana 2015). Second, besides functioning as state revenues institution, DGCE also has preventive and reinforcement roles. It prevents state loss caused by illegal goods smuggling by combating the interlopers, especially in Indonesian border area.

Considering their vital roles, it is essential for DGCE personnel to be equipped with sufficient knowledge and skills. Hence, there is a necessity to provide adequate human resource capacity development for DGCE officers. In MoF, including in DGCE, the capacity development often translated into capacity building, in-house training, and education and training programs. The latter is the most prevalent means for improving MoF's employee competency.

Generally, the responsibility to provide education and training for MoF employees is carried out by the Finance Education and Training Center (FETA). As echelon I organization, FETA has several subordinate units. One of them is Customs and Excise Education and Training Center (CETC) which established specifically for supporting human resource development in customs and excise area. In other words, CETC is the primary source of capacity development for DGCE. However, in a narrower context, training can be considered effective if its alumni can contribute well to the organization by applying skills and knowledge derived from training. Several factors contribute in determining training effectiveness, among others are the training planning and development including training needs analysis, the coordination between related stakeholders, the appropriateness of trainee selection, and the utilization of alumni's competencies. Measuring training effectiveness is essential for obtaining inputs to deliver future improvement.

To date, many literatures have discussed about training effectiveness evaluation. Nevertheless, it seems none of them has related Training Needs Analysis (TNA) and Inter-organizational Coordination (IOC) as specific influencing factors for training effectiveness. Hence, this paper intends to provide insight into how TNA and IOC were impacting the effectivity of training. This research outcome is expected to be able to contribute for enhancing the current training effectiveness level, in the context of CETC and DGCE in particular, and in the Indonesian public sector in general. The more effective the training, the more significant the benefit for the organization and ultimately, the better impact for public service provision.

1.1. Research Strategy

This research concerns three inter-related parts. First, it scrutinizes the process of training planning and development, including the Training Needs Analysis (TNA) as well as its possible hindrances. Second, this research examines the inter-organizational coordination (IOC) quality between CETC and DGCE and its possible effect on the training provision. Third, this research measures the effectiveness of the training programs in developing DGCE human resources capacity. In addition, in the last part of this research, the author analyzes the effects of TNA and IOC toward the current training effectiveness level.

1.2. Research Questions

This research focuses on the central research question:

“How do Training Needs Analysis and Inter-organizational Coordination between CETC and DGCE impacting current training effectiveness level?”

This primary research question will be elaborated further in the following sub-questions:

1. How is the training program planned?
2. How is the DGCE and CETC coordinated?
3. How do the training stakeholders perceive effective training?
4. How effective is the existing training programs?

1.3. Research Background

As the only ministry carrying out the whole country financial management, the MoF possesses massive bureaucratic structure.

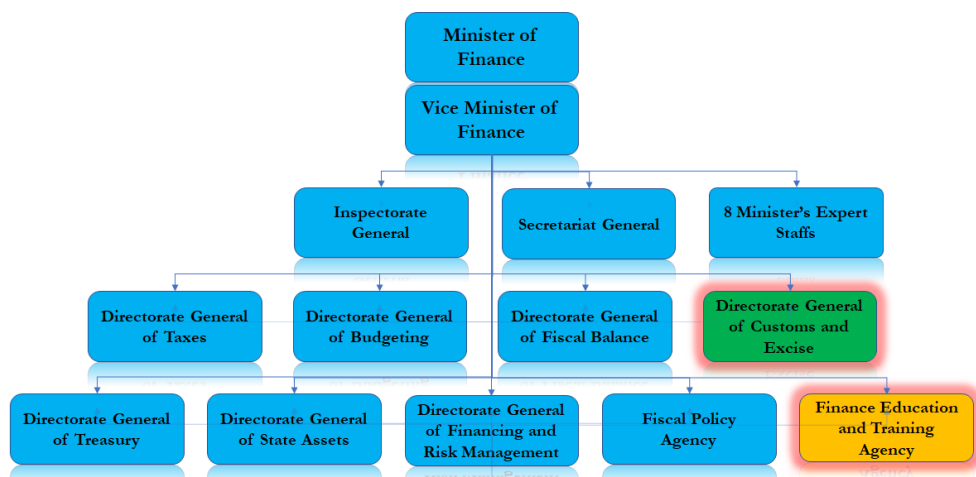


Figure 1. MoF Organizational Structure

Source: Own construction

Together with DGT, DGCE is the spearhead of national revenues collection. In terms of the number of personnel, DGCE ranks second (15,499 officers) after DGT (42,325 officers) (MoF 2018). Those huge number of employees are spread into ten directorates, a DGCE secretariat, a Goods Testing and Identification Center, five Operation Facilities Bases (OFBs), three Primary Service Offices (PSOs), 16 Regional Offices (ROs), and 117 Customs and Excise Supervision and Service Offices (CSSOs) throughout Indonesia.

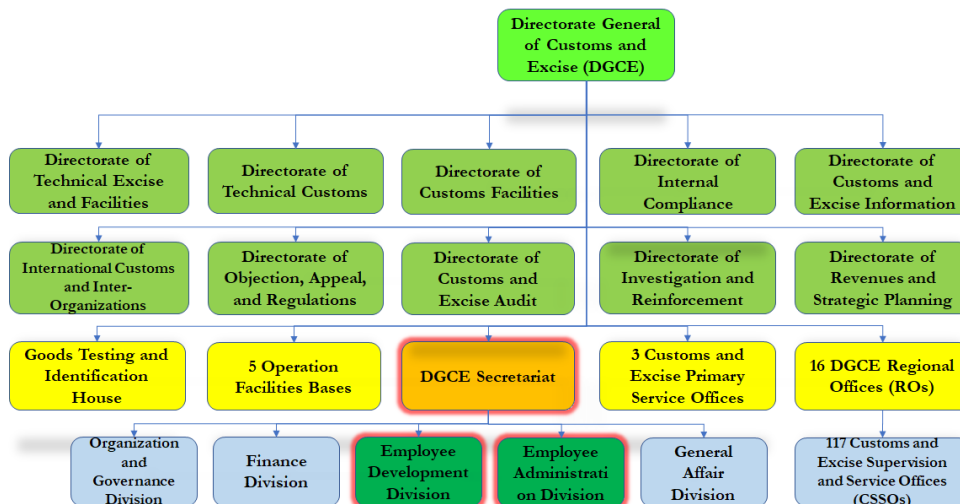


Figure 2. DGCE Organizational Chart
Source: Own construction

One of the most important units is DGCE Secretariat which has roles to manage the organizational strategic planning, budget formulation, capacity development, and employee administration. Later in this paper, the discussion emphasizes on the two divisions associated with DGCE human resource management, namely the Employee Development Division (EDD) and Employee Administration Division (EAD).

Generally speaking, the process of MoF human resource capacity building is under the responsibility of Finance Education and Training Agency (FETA). FETA delegates its mandate to six specialized Training Centers (TCs) or echelon II units. In addition, FETA has 11 Finance Training Houses (FTHs) or echelon III units that function as additional capacity for organizing training. The main difference between TCs and FTHs is their authority to formulate and design training programs.

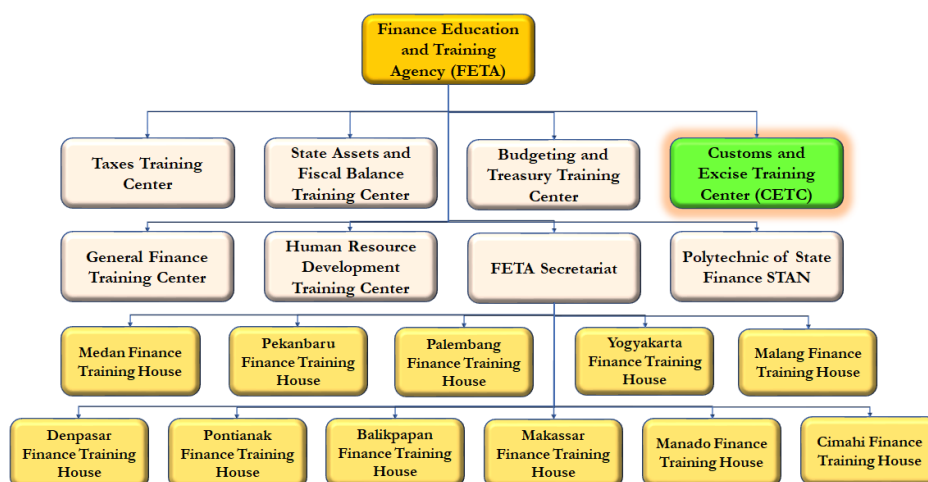


Figure 3. FETA Organizational Chart
Source: Own construction

One of FETA's unit is the Customs and Excise Training Center (CETC) which functions to develop and organize education and training in the customs and excise sector. CETC runs three core business processes. The Planning and Development Division (PDD) designs the training curriculum and selects the training lecturers. The Training Organizer Division (TOD) responsible for delivering the training. The Evaluation and Performance Reporting Division (EPRD) evaluates training and generates CETC performance reports. Lastly, The General Affair Division provides support for the other three divisions.

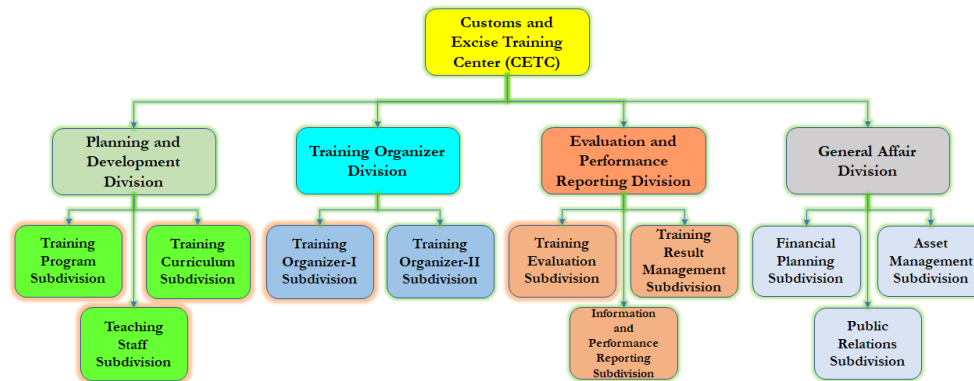


Figure 4. CETC Organizational Chart
Source: Own construction

As DGCE is the only government body mandated to manage customs and excise issues, then it becomes the primary user of CETC. CETC and DGCE are connected by unique structures inside MoF. Borrowing Mintzberg's (1979) terminology, CETC can be considered as a supporting unit, whereas DGCE acts as operating core. Although DGCE as an echelon I organization has its own supporting unit in DGCE Secretariat, the responsibility to provide capacity building for their officers is mandated to CETC, which in fact, organized under different echelon I unit.

The CETC's primary duty is to deliver training compatible with the DGCE organizational needs. Therefore, coordination between both units is crucial. Their collaboration can be seen in the training formulation, training delivery, and evaluation stages. In order to make continuous improvement, regular evaluation is needed. This task is carried out by the EPRD, which include learning outcomes evaluation, lecturer evaluation, and training delivery evaluation. Learning outcomes evaluation is undertaken to assess whether the trainees have mastered the required training skills. It can take in the forms of invigilated, practice, and simulation exams. Lecturer evaluation and training delivery evaluation are done to acquire inputs from trainees as intakes for future improvement.

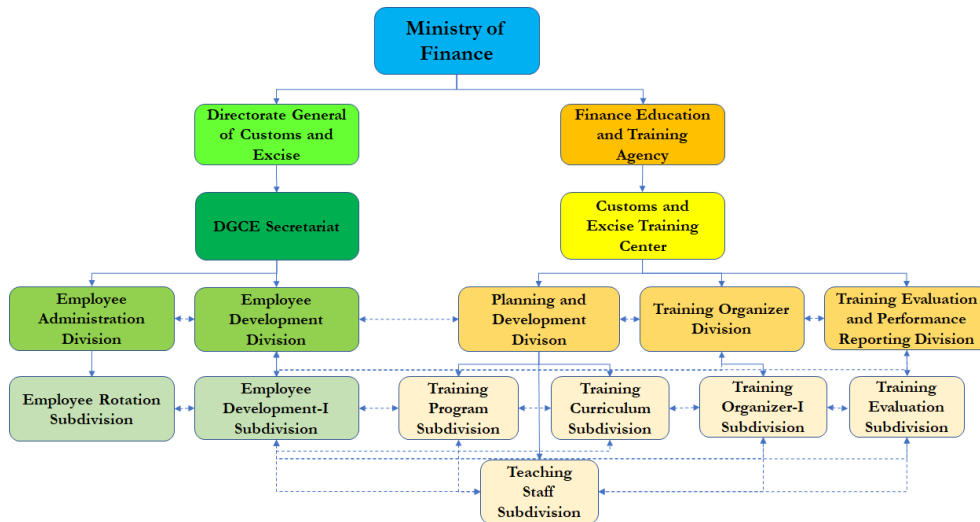


Figure 5. The Inter-related Units among DGCE and CETC
Source: Own's Construction

In the context of CETC, education and training are perceived as one whole package that cannot be separated from each other. Every program organized by CETC is called '*Diklat*', which stands for '*Pendidikan dan Pelatihan*', or education and training. However, in most program, the portion of skills and ability learning are usually bigger than the knowledge teaching. Therefore, in this research, the author simplifies the terminology by only using '**Training**' to represent both education and training in CETC.

Averagely, from 2015 to 2017, CETC organized more than 60 programs which cover approximately 2,500 to 3,000 trainees annually. The annual training budget is around IDR 25 to 35 billion (USD 1.9 to 2.7 million). A broad range of the topics is provided, from the basic programs to the most specialized ones. A batch of training usually consists of one class, but several programs can cover three to four classes. Commonly, a class comprises 30 participants. The duration of the training also varies, from five days up to two months. The learning style also different for each training, from the one-side classroom, interactive discussion to full practical simulation.

1.4. Methodology and Data Selection

In this research, the author uses both primary and secondary data. The primary data were derived from interviews while the secondary data came from CETC and DGCE official documents. The author conducted this research from the Netherlands, whereas all respondents' location is in Indonesia, and therefore all interviews were done via *Skype* and *WhatsApp* video call.

In order to answer the first three sub-questions, the semi-structured interviews have been done with six CETC officers and two DGCE officers. Each

interview lasted for approximately 30 minutes. The key interviewees were chosen based on their position in the organization. Then, to answer the fourth sub-question, the author used descriptive statistics to analyze Post-training Evaluation Reports data from 21 programs conducted during 2015–2017. These training were selected based on data availability. In addition, the author has conducted structured interviews with 26 training alumni, 22 direct supervisors, and 23 alumni's colleagues to obtain some additional information regarding their current jobs. The alumni were randomly chosen from the training alumni database, and the interviews with their bosses and peers were meant to clarify whether the information given by the alumni are valid or not. However, in order to protect their confidentiality, their names are not displayed in this research. These structured interviews were relatively short and only lasted around 10 minutes for each. The author received all interviewees' contacts after sending official letters to both CETC and DGCE.

Finally, by combining answers from those four sub-questions, the author analyzed the impact of Training Needs Analysis and Inter-organizational Coordination between DGCE and CETC toward current training effectiveness level. In the final section of this research, the author concluded and generated some recommendations for future improvement.

1.5. Scope and Limitations of the Research

The scope of this research is the training provided by CETC for DGCE. It covers 21 programs conducted during 2015-2017. However, as this research was fully conducting in the Netherlands, the author faced some limitations in conducting interviews. Hence, the interviews with all respondents were done by using the technological advances (i.e., video call). Although video call conversations might be less natural than doing face-to-face chats, the author has tried his best to create the interview atmosphere as convenient as possible for the respondents to obtain more in-depth and comprehensive answers. In addition, regarding CETC official documents, the researcher asked help from his colleagues there to provide him with the documents and data required via email.

1.6. Risks and Ethical Challenges

The author has been working in CETC for eight years. Currently, he served as a senior staff in the CETC Training Evaluation Subdivision. His experience in planning, organizing, and evaluating training programs as well as in interacting directly with the DGCE employees apparently became valuable assets in doing this research. However, it is undeniable that there will be a subjective bias. Nevertheless, the author has tried to be as objective as possible by positioning himself as a researcher. The data derived from official reports and interviews

were combined as a triangulation technique to reduce his bias. By doing so, he hoped that he could make a comprehensive analysis based on the data collected.

In addition, as a CETC employee, the researcher might seem like an outsider for DGCE, and therefore, he had difficulties in getting access to the required data, or to the officers he would like to interview. Hence, to anticipate this problem, besides using formal means, he also used personal approaches with the DGCE key interviewees. By doing so, he could obtain DGCE Training Needs Analysis data and also interviewed the Head of DGCE Employee Development-I Subdivision and the Head of DGCE Employee Rotation Subdivision. Moreover, the author has managed to obtain alumni contacts from the DGCE employee database.

In doing interviews, the author introduced himself as a CETC employee who is currently studying the post-graduate program in the International Institute of Social Studies. He also did not forget to ask permissions from all key respondents to record the conversation as well as to display their name later on this research. Fortunately, all key interviewees did not have a problem with that. The author acknowledges that his position as a CETC employee has helped him in convincing them to do so. However, regarding alumni, supervisor, and colleagues interviews, the researcher chose to protect their anonymity by not revealing their identities. Lastly, in order to keep the interviewees giving objective answers, there were no money, or other incentives offered to all respondents.

Chapter 2

Conceptual Framework and Literature Review

This chapter discusses several concepts from previous studies related to this research's framework. Three primary notions construct this paper are **(i) capacity, education and training including training needs analysis; (ii) training effectiveness evaluation; and (iii) inter-organizational coordination.**

It is undeniable that capacity is vital to achieving development. In order to catch up the advanced nations, the emerging countries should have adequate capacity, especially in their public-sector organization. However, capacity building might only play a relatively insignificant role in enhancing government performance. Several factors such as organizational cultures, solid management practices, and effective coordination within organizations have more significant contributions to public sector performance improvement (Grindle and Hildebrand 1995: 461). Therefore, in order to pursue a higher pace of capacity enhancement, it seems that there is a necessity to advance towards learning organizations. In Indonesia, education and training still become favourable means for building capacity. Hence, if they are organized effectively, it is not impossible for education and training to become powerful means towards organizational learning shift.

Various factors might contribute to training effectiveness. The training development including training needs analysis is essential in determining the success of programs. In addition, in the context of CETC, the organizational structure that separate CETC as the training organizer and DGCE as the training user might cause issues. Furthermore, the use of alumni's knowledge and skills in the post-training stage should also be taken into account. Hence, training evaluation should be conducted to measure the current effectiveness level. In this paper, the author analyzed the existing training effectiveness level and those various factors influencing it.

2.1. Training as Means of Capacity Building towards Learning Organizations

2.1.1. Capacity

The term 'capacity' has incredibly broad meanings. In the broader sense, it can be defined as "the ability of people, organizations, and society as a whole to manage their affairs successfully (OECD 2006: 12). Meanwhile, in the narrower context, capacity can be perceived as "the ability to carry out stated objectives" (Goodman et al., as cited in LaFond and Brown 2003: 7). One of the most prom-

inent definitions is proposed by Grindle and Hildebrand (1995: 445) who delineate capacity as “the ability to perform appropriate tasks effectively, efficiently, and sustainably”.

In the public sector context, the capacity development process is widely recognized as *‘capacity building’*. This term possesses broad perspectives, ranging from the broadest one, which is capacity for development, to the narrowest one, which connects capacity to the human resources training (Cohen 1992; Cohen 1993; Morgan 1993). It can also be defined as ability enhancement in government organizations which done by themselves, or by cooperating with other organizations, in order to fulfil their duties adequately (Grindle and Hildebrand 1995: 445). Meanwhile, LaFond and Brown (2003: 7) outline capacity building as a procedure for enhancing the ability of an individual, group of people, institution, or system so that they can accomplish their tasks or be able to function more appropriately.

2.1.2. Learning Organizations

In recent decades, the needs of qualified human resources that can satisfactorily engage with their jobs are highly increasing. Hence, in order to achieve that, the capacity building and learning process should focus on both individuals and organizations. This new notion has resulted in the emerging of a new term called learning organizations. Senge (1990: 3) defines learning organizations as “organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together”.

Meanwhile, Garvin (1993: 3) points out that “a learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights”. In addition, learning organizations are those who go “beyond the notion of individual-level learning to encompass group and team learning, noting that combining information from multiple sources leads to both new information and new understanding” (Huber, as cited in Salas et al. 2012).

Garvin (1993) outlines five propositions to intensify learning organization practices. First, solving problems systematically by formulating a hypothesis, collecting and cultivating data to examine the hypothesis, and drawing a conclusion based on the test (ibid). Second, experimenting to find out new knowledge that can be used to deliver incremental improvement (ibid). Third, regularly learning from experience and document it to a tangible instrument (ibid). Fourth, learning from others to develop a fresh idea to make an advancement (ibid). Finally, transferring knowledge all over the organization to spread the wisdom to other parts of organizations (ibid). This last step can be done efficiently by regularly rotating staff across units or divisions (ibid).

Bennet and O'Brien (1994) design 12 building blocks of the learning organization, which consists of "strategy/vision, executive practices, managerial practices, climate, organization/job structure, information flow, individual and team practices, work processes, performance goals/feedback, training/education, individual/team development, and rewards/recognition". Those 12 factors have the same importance and should be exercised together by the organization as they complement each other. However, in this research, the author would like to emphasize the significance of education and training as one of the essential aspects of learning organizations.

Indeed, in learning organizations, employees often learn from their experience while performing their jobs (Bennet and O'Brien 1994: 46). However, through education and training, people can learn not only new knowledge but also experience from the experts within organizations (Bennet and O'Brien 1994: 46). The benefit of training can be boosted if it is designed comprehensively by combining interactive training methods such as team training and mentoring with the technological advancements such as e-learning as proven in Corning, Xerox, and Motorola companies (ibid). In summary, it is evident that education and training are still one of the most integral factors needed to build both individual and organizational capacity (ibid).

2.1.3. Education and training as a means for capacity building

Education and training are the most prevalent efforts in developing human resources capacity, especially to advance people's intellectual ability and attitude. In order to derive a maximum result, education and training programs need to be designed in line with the organization, position requirements, and individuals' needs. Moreover, as previously mentioned, education and training are included as one of the integral building blocks towards learning organizations (Bennet and O'Brien 1994).

Nasution (1995) defines education as a process, technical, and teaching-learning method with the intention of transferring knowledge from someone to others by predefined standards. Education can also be defined as a learning process to prepare individuals by increasing their knowledge to help them identify their tasks accurately (Nadler and Nadler 2012). Meanwhile, Pont (2003) outlines training as a capacity enhancement process to develop people's capability.

Ahwood and Dimmoel (1999: 32) distinguish the definition between education and training clearly: education is more theoretical in the context of general and social knowledge and has a purpose to fulfil individual needs; whereas training is a process for developing employees' skills and attitude to perform ongoing as well as future given tasks. In a narrower context, training emphasizes on learning process related to specific ongoing duties; a means to design technical skills in order to maintain and improve the effectiveness of individuals and groups' performance within organizations (Mondy et al. 1984).

2.1.4. The Importance of Training

Training is crucial for both organizations and individuals' capacity development. As briefly mentioned in the prior subsection, training can be said as the most common practice used by organizations to equip their personnel with adequate knowledge and skills needed to perform jobs.

It is evident that many companies in Germany perceived training as an investment, and therefore, they willingly provide training for job seekers (Acemoglu and Pischke 1998). In addition, the trainees also gain benefit as their skills have been improving, they become more competitive and obtain opportunities to get better career path (ibid). Sabitha (2018) corroborates the previous claim by demonstrating that training has successfully shaped discipline for employees in HDFC Standard Life Insurance. In addition, the majority of personnel in the company concur that training programs are benefitting both organization and individuals in accomplishing their goals (ibid).

The importance of training is also proven in the United States. Accumulatively, organizations in this superpower country spend at least USD 126 billion per year for training and development (Paradise, as cited in Karabakkal 2015). Similar to what happens in Germany, organizations in the U.S. consider training as a root of employees' skills and abilities (Karabakkal 2015). On the other hand, the employee presumes training as opportunities to obtain new skills, develop and prosper (ibid). Lubis (2008) shows that training in PT. Perkebunan Nusantara IV Medan, Indonesia can provide a significant impact on employee performance if complemented with motivation from the organization leader. Moreover, the combination of training and work discipline is proven to give a positive effect on employee performance in PT. Angkasa Pura I Surabaya, Indonesia (Erma 2013).

Slightly different than in the business world, training in public sector aims to improve organizational performance and service delivery for the society. Particularly for the public servants, besides as means for capacity building, training also often used as a requirement to occupy certain positions. Moses (2012) points out that if training contained relevant materials and delivered in proper time, it could boost employees' achievement in Cooperative and Small-Medium Enterprises Department in Papua, Indonesia. Furthermore, training is evident to be one of the essential variables influencing personnel's performance quality in Customs and Excise Supervision and Service Office Bandar Lampung, Indonesia (Roesdi 2008).

In summary, either in private or public sectors, training is still considered as integral tools for improving individuals' productivity and organizational performance. However, in order to do so, training should be appropriately designed and effectively organized. In the training development phase, the formulation of programs should encompass organizational and individual needs. In addition,

training programs should also be regularly evaluated to adjust it to the most recent situation. Conducting comprehensive training needs analysis might be the essential step to deliver effective training.

2.1.5. Training Needs Analysis

It cannot be denied that Training Needs Analysis (TNA) is a crucial factor in delivering effective training. TNA is the earliest phase in a series of training stages in which the type of training, as well as the training participant candidates, are decided (Salas and Cannon-Bowers 2001: 475). In addition, TNA can also be used to determine which part of an organization that requires training (Goldstein and Ford 2002). By conducting a thorough TNA, an organization can derive specific learning objectives to develop the training design and delivery, including its development criteria (Salas and Cannon-Bowers 2001: 475). In line with Tannenbaum and Yukl (1992: 401-3), Salas and Cannon-Bowers (2001: 475-7) also argue that TNA mainly consists of three elements, namely “**organizational analysis, job or task analysis, and individual or person analysis.**”

The organizational analysis’ functions for acquiring information regarding where and when an organization requires training (McGehee and Thayer 1961). In addition, it can also be used to assess training programs ability to change the alumni behaviour in the post-training environment (Goldstein and Ford 2002). Furthermore, in order to align training with organizational goals, its’ contents should be arranged based on organizational strategic direction (Tannenbaum and Yukl 1992: 401). In short, organizational analysis can function as an essential bridge between strategic organizational needs and training program delivery.

Job or task analysis serves as a means for identifying the information required in structuring learning objectives (Goldstein and Ford 2002). Specifically, its primary purpose is to figure out what kind of particular knowledge, skills, and abilities needed for accomplishing specific tasks (Tannenbaum and Yukl 1992: 402). In addition, Salas and Cannon-Bowers (2001: 476) also point out that task analysis outcomes are not only detailed job description but also the picture of conditions required in which specific jobs can be executed. In recent decades, due to rapid technological change, the contents of the training should always accommodate task analysis in order to keep it up to date with the most recent situation (Tannenbaum and Yukl 1992).

Lastly, person analysis emphasizes on identifying the type of training required by an individual as well as who needs that training (Tannenbaum and Yukl 1992: 403). Its purpose is to recognize individuals’ strengths and weaknesses and therefore generate a proposition for targeting which kind of improvement or what kind of training needed by a person (Salas and Cannon-Bowers 2001: 477). Several factors such as job levels, age, and experience play a role in determining the right training for a person (ibid). Feldman (1989) shows that organizations often insufficiently assess their employees’ strengths and weaknesses, which resulting in delivering ineffective training. Incomprehensive and

insufficient individual analysis can lead to a training program being followed by the wrong people or them who do not really need it (Tannenbaum and Yukl 1992: 403). If this situation happens, there would be resources waste which might cause a loss for an organization.

Ineffective trainee selection might also cause a mismatch between individuals and position within organizations (Royster 2018). In this case, organizations are more likely to bear substantial financial loss (ibid). In order to overcome this issue, ensuring the compatibility between personnel's skills and their tasks in the post-training environment is vital for increasing organizational performance (ibid). In summary, TNA is a critical factor for organizing effective training. It sets up fundamental guidance to align training delivery with organizational goals. Without effective TNA, training could become a pointless effort for an organization in improving their human resources' competency.

2.2. Training Effectiveness and Knowledge and Skills Implementation

2.2.1. Effective Training Program

Capacity building, including education and training, is indeed expensive. Therefore, it should be done effectively so that there will not be any wasted resources. Dayal (2001) points out that training is effective if its alumni can benefit the organization as intended. Furthermore, he argues that an effective program should bear three aspects, namely: **(i) relevant training materials that in line with trainees' jobs, (ii) applicable knowledge and skills that can be implemented on the workplaces, and (iii) competency improvement, including work attitudes, values, and individual attributes** (Dayal 2001).

Wagonhurst (2002) contends that training can be regarded effective if it is initiated by conducting a thorough needs assessment, transmitted by using proper methods and complemented by considering external factors influencing the training materials implementation in daily tasks. A comprehensive needs assessment should involve multiple layers, from the employees at the lowest level to the upper-middle levels managers (Wagonhurst 2002: 79). Appropriate training approaches should emphasize on trainee skills development and should be delivered by combining various methods such as lectures, assignments, discussion, problem-solving exercises, role play, and simulation (Wagonhurst 2002: 80). Lastly, extrinsic factors affecting training materials implementation in daily jobs such as motivational problems, inadequate resources and facilities, and poor working conditions should be taken into account in designing the training (ibid).

Various elements can influence the effectivity of training. Noe (1986) shows that motivation and environmental factors are integral in determining the quality of learning. Low level of trainees' motivation might cause training provision be-

comes less effective (Noe 1986: 745). In addition, inadequate supervisor's support, insufficient resources, and scarce opportunity to exercise new skills also can hinder the training effectiveness level (Noe 1986: 746). The selection of training methods is also vital in determining the success of the learning process (Read and Kleiner 1996). In order to choose the best method, several favourite channels such as lectures, role plays, simulation, audio-visual means, and e-learning should be adjusted with training materials types, size of the class, duration, trainee's background and absorptive capacity, available facilities, and training outcome target (ibid). Furthermore, the last step to take is measuring the delivery of the program by evaluating post-training behaviour to yield inputs for future improvement (ibid).

2.2.2. Evaluating Training Effectiveness

Kirkpatrick and Kirkpatrick (2006) outline that the combination of planning, implementation, and evaluation play significant roles in ascertaining training effectiveness.

“each of the following factors should be carefully considered when planning and implementing training program: determining needs, setting objectives, determining subject content, selecting participants, determining the best schedule, selecting appropriate facilities, selecting appropriate instructors, selecting and preparing audio-visual aids, coordinating the program, and evaluating the program” (Kirkpatrick and Kirkpatrick 2006: 3).

Furthermore, they emphasize the importance of training evaluation: (i) to show that the resources used for training can contribute well to the organizational needs, (ii) to determine whether training programs should be continued or terminated, and (iii) to seek inputs for improvement for the future training programs (Kirkpatrick and Kirkpatrick 2006: 17).

In addition, Kirkpatrick and Kirkpatrick (2006) propose the Four-Level Evaluation Steps to determine the training effectiveness. The first level, ***evaluating reaction***, measures the trainees' reaction to the program, i.e., how satisfied they are regarding the training delivery (Kirkpatrick and Kirkpatrick 2006: 21). In order to do so, Kirkpatrick and Kirkpatrick (2006: 32) designed a tool called 'Reaction Sheet' to obtain feedback for evaluating the current program (Kirkpatrick and Kirkpatrick 2006: 27). In addition, these trainees' input can also provide quantitative information regarding which training aspect that still has to be particularly improved (ibid). Finally, it also helps the organization to set a performance benchmark for future improvement (ibid). The next level, ***evaluating learning***, measures to what extent the improvement of knowledge and skills as well as the changes in attitudes of the training participants (Kirkpatrick and Kirkpatrick 2006: 22).

The third level, ***evaluating behaviour***, focuses on the changes in alumni's knowledge, skills, and attitudes related to training materials in the post-training environment (Kirkpatrick and Kirkpatrick 2006: 23). In this step, there are five

important things to notice. First, the evaluation should be done before and after the training program (Kirkpatrick and Kirkpatrick 2006: 54). Second, buy some time for behaviour change to occur (ibid). Third, conduct a survey and/or interview with the alumni and people who know alumni's behaviour before and after training (ibid). Fourth, reiterate the evaluation at a certain time in the future (ibid). Fifth, take account of the costs and benefits of the evaluation (ibid). Finally, the last level, *evaluating results*, intends to understand the impact of alumni's behavioural changes towards organizational performance, for instance, increased in productivity and quality, or decreased in inefficiency (Kirkpatrick and Kirkpatrick 2006: 25).

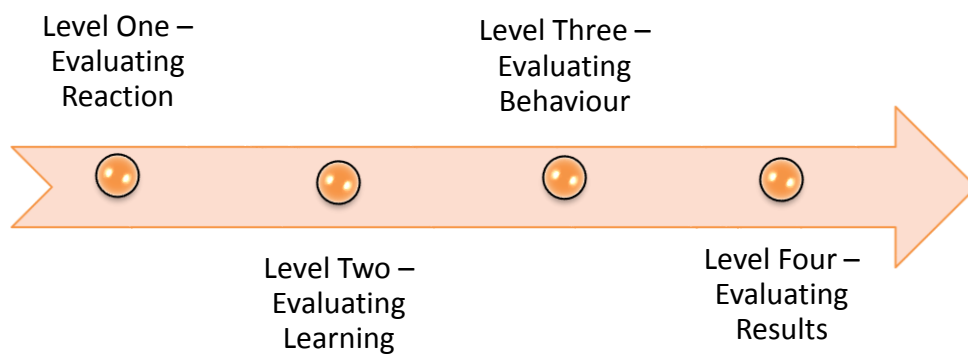


Figure 6. Kirkpatrick's Four Level Evaluation Model
Source: Own Construction, based on Kirkpatrick and Kirkpatrick (2006)

Swanson and Sleezer (1987) propose slightly similar means to evaluate training effectiveness, namely satisfaction, learning, and performance. Bramley and Kitson (1994) show that the training effectiveness often measured from the reaction and learning levels only. In contrast, Tan et al. (2003) indicate that training participants' reactions toward training programs are not significant in determining the training effectiveness. However, all four levels are essential and should be conducted sequentially in order to get the best understanding regarding the program effectiveness (Kirkpatrick and Kirkpatrick 2006: 26). In addition to Kirkpatrick's Four-Level Evaluation model, Chmielewski and Philips (2002) develop the fifth level to measure the return on training investment (ROTI). This method allows organization to analyze the cost-benefit of training programs (ibid). In addition, the ROTI model was developed to encourage organizations to perceive training as an investment rather than as expenses (ibid).

2.2.3. Knowledge and Skills Implementation

Prien (as cited in Goldstein and Ford 2002: 62), defines **'knowledge'** as "the foundation on which abilities and skills are built". Whereas **'skills'** means "the capability to perform job operations with ease and precision" (ibid). These two elements are often associated with **'ability'** which refers to "cognitive capabilities necessary to perform a job function" (ibid). The combination of these

three factors, or abbreviated as KSAs, is undoubtedly required in order to perform tasks effectively (ibid).

As suggested by Dayal (2001), the implementation of knowledge and skills derived from training can be used as indicators to measure training effectiveness level. Furthermore, the translation of knowledge and skills into real action in the workplaces is tightly related to alumni behavioural change (Kirkpatrick and Kirkpatrick 2006). Ideally, after attending training, employees should have mastered new knowledge and skills, and then apply them to improve their performance.

However, a considerable effort is needed to achieve that ideal condition. Various studies show that the implementation of KSAs is not only depended on the alumni itself. Various factors can inhibit employees from doing so. For instance, inadequate infrastructure has caused a gap between KSAs learning and ACCM/PALS septic shock implementation practice in India (Santhanam et al. 2009). In addition, many other factors such as inappropriate training contents, corrupted political environment, insufficient financial incentives, poor organization practice, media influence, and customer's preference are proven can hinder the implementation of KSAs in the health sector in several developing countries reaching the satisfactorily level (Haines et al. 2004).

2.3. Organization Coordination, and Inter-Organizational Coordination

2.3.1. Organizational Structure and Coordination Theory

Mintzberg (1979) defines five basic parts of an organization: “the strategic apex, middle line, operating core, technostructure, and support staff”. The first three mentioned are directly related to the organization's core business process. In contrast, technostructure and support staff are indirectly influencing operating core, middle line management, and sometimes, strategic apex (ibid).

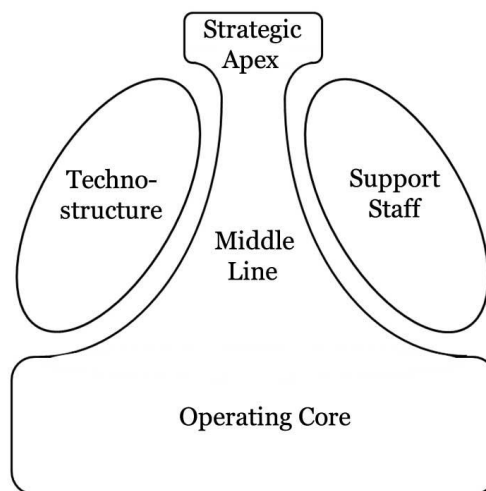


Figure 7. “Five Components of Organizations”
Source: Mintzberg (1979)

Egeberg (2007) explains the impact of horizontal and vertical specialization within the organization. Horizontal specialization occurs when different issues and policy areas are linked together or de-coupled from each other (ibid). In contrast, vertical specialization often comes along with horizontal one in a hierarchy system (ibid).

Coordination is a crucial aspect which determines the organization performance. Malone and Crowston (1990: 5) outline coordination as “the act of managing interdependencies between activities performed to achieve a goal”. Furthermore, coordination is closely related to interdependence (ibid). Various coordination mechanisms such as “mutual adjustment, direct supervision, standardization of work processes, outputs, and skills are required for managing those interdependencies” (Mintzberg 1979: 35). Mutual adjustment involves ongoing communication and alignment between actors and groups, while direct supervision allows actors to lead and manage interdependencies between their subordinates. Standardization relies on rules and procedures which govern every single activity. Lastly, to relate organizational structure and the importance of the coordination mechanism, the balance between hierarchy, specialization, and division of labour is crucial to optimize coordination process (Dan 2013: 5).

2.3.2. Inter-organizational Coordination

Planning is a critical step to achieve the organization’s goals. Planning can become more significant when multiple actors or organizations interact to accomplish their goals. Inter-organizational coordination (IOC) can be considered a form of planning (Alexander 1993: 328). Hence, organizations, as well as inter-organizational systems, need to coordinate their activities when they become more complex and cannot be handled by simple hierarchical mechanism control. In summary, IOC is a vital aspect in the planning stage (Alexander 1993: 329).

Rogers and Mulford (1982: 12) delineate IOC as “the process whereby two or more organizations create and use existing decision rules that have been established to deal collectively with their task environment”. IOC can also be simply defined as a relationship between organizations (Hall et al. 1977). In addition, Kaufmann et al. (1986: 790) explain that coordination occurs as distinct events of multiple actors merge to shape chains of activities.

Alexander (1993) argues that the IOC theory involves several interrelated dimensions. First, inter-organizational fields and networks display the inter-organizational systems related to coordination structures (ibid). On the one side, in the absence of IOC, organizations within networks only communicate by using more abstract informal means (ibid). On the other side, with several points of IOC, they can be adjusted and hierarchically managed (ibid). Second, coordination strategies show a variety type of coordination from the abstract mechanism such as cooperation, to the specific ones such as contract signing (ibid). Third, coordination structures shape linking mechanisms which convert uncoordinated or less coordinated inter-organizational system into more coordinated

ones (ibid). Fourth, coordination tools represent the particular aspects of organizational activity, behaviour, and inter-relationship which enable IOC (ibid). It is ranging from informal means such as meeting and phone calls to the formal ones such as contracts signing (ibid).

2.3.3. Determinant Factors Affecting Inter-Organizational Coordination

Various elements might influence the IOC quality. Williams (2005) points out the importance of networks structures on coordination and collaboration. Appropriate decision-making process and the capability to formulate liberal relations between related organizations also possess crucial roles (Whetten and Leung 1979). Organizational and environmental factors do have essential aftermath on the effectiveness of IOC (Schumacher 2002: 392). Fried et al. (2005) delineate three key aspects influencing IOC quality level: “organizational factors, environmental factors, and characteristics of top executives in organizations.”

More practically, Aghajani et al. (2014: pp. 297-8) point out six variables influencing IOC quality, namely “mutual trust, goal orientation, collective thinking, shared interests, consistent organizational cultures, and ease of communications”. From those factors, the first-mentioned possesses the most significant direct impact on IOC (ibid). In contrast, the rest five variables have an indirect effect on IOC (ibid).

Einbinder et al. (2000) propose four preconditions for collaboration that can deliver positive impact in improving IOC effectiveness: **“incentive, willingness, ability, and coordination capacity”**. Firstly, the most common incentive to collaborate is mandate, that requires organizations for cooperating (Oliver, as cited in Einbinder 2000: 121). In addition, interdependence and mutual interests can act as additional incentives for organizations (Gricar 1981; Logsdon 1991).

Secondly, many organizations failed to cooperate with their counterparts as they have inadequate goodwill to do so (Einbinder et al. 2000: 123). To address this problem, organizations should show respects, commitment, and trust to their partners (ibid). Those factors can yield a willingness to collaborate between organizations (ibid).

Thirdly, employees’ knowledge and skills to coordinate play critical roles in organizations’ ability to collaborate (Einbinder et al. 2000: 125). In addition, organizations should have “ability to work together on a common task” (Alter and Hage 1993: 86). Furthermore, these staffs should be given authority to decide within the coordination process (Meyers 1993). Moreover, adequate resources should support employees to run the coordination process better (Cummings 1984).

Lastly, capacity to collaborate is related to the presence of organizations' coordination mechanisms (Einbinder et al. 2000: 126). Logically, the more channel used to coordinate; the better the coordination level will be (ibid). One of the most common means is by establishing the inter-organizational working group, task force, or coordinating council (Schopler 1987; Lawless and Moore 1989). In addition, reliable communication means for sharing information can enhance the coordination capacity (Lawless and Moore 1989). Moreover, a concrete agreement such as contract signing or establishment of standard operating procedures between organizations can perfect their coordination quality (Van de Ven 1976; Lawless and Moore 1989; Ring and Van de Ven 1994).

2.4. Analytical Framework

Although several previously mentioned literatures have talked about TNA, IOC, and training effectiveness in general, it seems that there is no study discussed the impact of those two factors towards training effectiveness level. Based on literatures above, training is still the most favourable capacity building means, particularly in Indonesia, and thus it should be organized effectively in order to propel organizational shifting, from the conventional ones to learning organizations. Measuring training effectiveness is crucial to delivering continuous improvement. Hence, to relate those diverse concepts, the author focuses on several aspects in this research.

First, the author examines the CETC training planning and development process. It includes assessing whether DGCE TNA has covered ideal TNA concept (see Tannenbaum and Yukl 1992; Salas and Cannon-Bowers 2001; Goldstein and Ford 2002) or not. Second, in order to assess the IOC quality between DGCE and CETC, the author analyzed the presence of four preconditions (**i.e., incentive, willingness, ability, and coordination capacity**) concept by Einbinder et al. (2000) between both organizations. Third, by using Kirkpatrick's Four-Level Evaluation Steps (**i.e., reaction, learning, behaviour, results**) (Kirkpatrick and Kirkpatrick 2006), the author measured the degree of training effectiveness based on the stakeholder's perspective. In addition, three effective training criteria introduced by Dayal (2001), namely **training materials relevance, competency improvement, and knowledge and skills implementation**, were integrated to the third level of evaluation (i.e., evaluating behaviour). Finally, from those three aspects, the author concluded the impacts of TNA and IOC on current training effectiveness level. Lastly, by conducting this research paper, the author hoped that he could contribute by providing a piece of literature that can be viewed as a part of the bigger puzzle.

Chapter 3

Training Needs Analysis and Inter-Organizational Coordination between CETC and DGCE

This chapter discusses two factors that might play roles in determining CETC training effectiveness. The first part of this section analyzes the process of training planning and development, including the training contents to answer the first sub-question. Subsequently, the second subsection would be answered in the second subsection by examining the inter-organizational coordination between CETC and DGCE.

3.1. Training Planning and Development Stage

The training delivery in CETC is indeed a unique business process where a training organizer is separated from its primary user. As happened in general, the first and might be the most crucial step of the whole process is planning and designing training programs. This process involves two units from different organizations, which are the CETC Planning and Development Division (PDD) and DGCE Employee Development Division (EDD), specifically the Employee Development-I Subdivision (ED-1S). In conducting this research, the author managed to interview four officers from the CETC PDD and one officer from the DGCE EDD who handle the training planning and development stage. All interviewees are upper-middle level managers who hold the positions as the leader of their respective units. In terms of planning, this process is regularly done on annual basis. The process is started approximately a year before the training is held.

3.1.1. *The DGCE Ideal Training Needs Analysis*

The initial step of the planning process occurs in DGCE as the training user. Fortunately, DGCE has adopted TNA as a planning tool to determine what kind of training required by the organization. This set of a process is handled by the DGCE EDD, particularly the ED-1S, as a part of the DGCE Secretariat.

According to the DGCE TNA Technical Guidance 2018, the process began when the DGCE EDD sets up strategic organizational needs. This initial procedure can be considered as an organizational analysis process that establishes the foundation for the next stages, which are a job or task analysis and individual analysis (Tannenbaum and Yukl 1992; Salas and Cannon-Bowers 2001). After defining organizational strategic goals, the EDD continues the process by doing organizational position assessment and employee individual TNA. The EDD conducts position assessment to determine the types of competency required by

certain positions influencing working unit's performance, as well as enhancing both individual and working unit's competency. In doing position assessment, the EDD is aligning the type of competency needed to fill certain positions along with the number of personnel projected for filling those posts. In addition, individual TNA is a representation of person analysis.

In the formulation of position assessment and individual TNA, the EDD involves all working units by offering training quota to all DGCE Regional Offices (ROs) and Customs and Excise Service and Supervision Offices (CSSOs) throughout Indonesia. Their involvement is vital as they are perceived to have the best understanding regarding the number of positions needed and the employee competency required for those posts.

After receiving training quota from the EDD, each working unit forward these offering to their employees and command them to submit their preference. In this phase, employees are offered various trainings and required to choose two types of programs based on their desires. Besides those two optional training, each employee is also obliged to attend at least two mandatory programs which have been determined based on position assessment result.

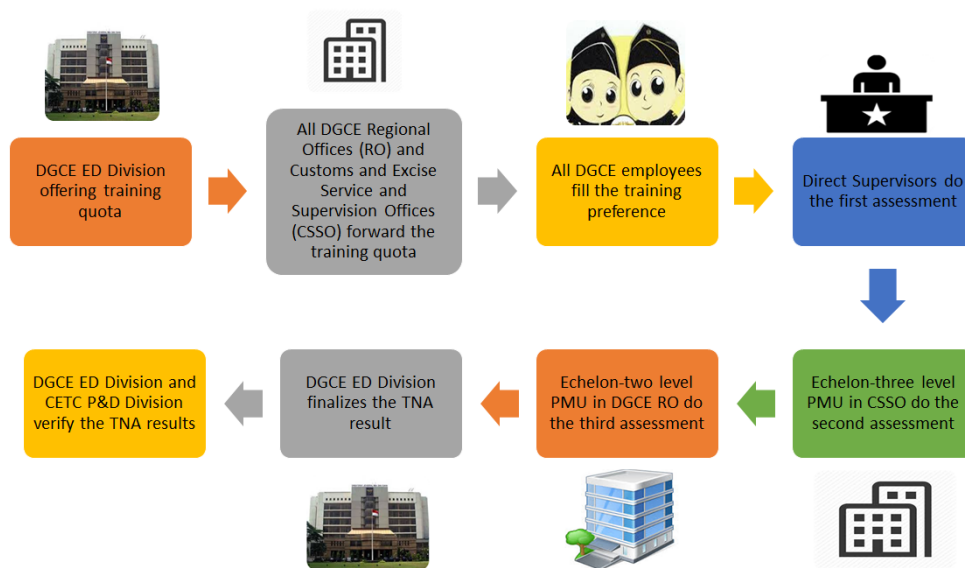


Figure 8. Position Assessment and Individual TNA Process in DGCE
Source: Modified from DGCE TNA Technical Guidance 2018

In the next stage, the direct supervisors are responsible for checking the individual TNA results. These echelon-four level officers have authority for deciding who will join what training and who will not. Hence, they need to have sufficient understanding regarding the competency gap in their units. The individual TNA process continues when the direct supervisors pass on their assessment results to the echelon-three-level Personnel Management Unit (PMU) above them. This CSSO's PMU acts as the second filter which re-examines the individual TNA result from the direct supervisors and then continues submitting the individual and position assessment results to the echelon-two-level PMU in ROs. In RO's PMU, the assessment results are assessed once more before being

submitted to EDD in the DGCE Headquarters. Finally, after all ROs submit their TNA results, the EDD will step on to the next phase, which is TNA verification. Figure 9 displays the assessment matrix in DGCE.

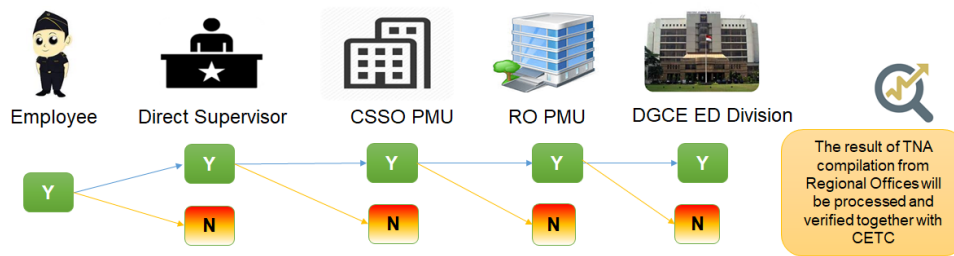


Figure 9. DGCE TNA Assessment Steps
Source: Modified from DGCE TNA Technical Guidance 2018

3.1.2. Training Needs Analysis Verification

According to Minister Regulation Number 37 Year 2014 Regarding Guidelines for Training Needs Analysis, after TNA has been done, the verification process follows. This procedure involves both DGCE as the training user and CETC as the training organizer. As both units are not managed under the same echelon-one level organization, information boundaries might occur between them. For instance, regarding the CETC budget, it is funded by FETA, not from DGCE. Hence, to compose a successful training planning, good coordination between two units is highly required. As argued by Alexander (1993), coordination has a significant role in achieving successful inter-organizational planning activities.

The primary purpose of TNA result verification is to synchronize DGCE training needs and CETC's capacity to deliver training. As a developing country, the Government of Indonesia has not been able to escape from budget constraint. The situation in the Ministry of Finance generally, and CETC specifically, is no different. Due to its limited funding, CETC is always overwhelmed to fulfil DGCE competency improvement needs every year. For example, in the last two years, the total number of DGCE employees who need training keeps surpassing CETC's training capacity. Although it got additional capacity from 11 Finance Training Houses (FTH) throughout Indonesia, CETC still failed to fulfil all DGCE training needs. However, to simplify this research, the training capacity of those FTHs will be considered as a part of CETC capacity. Figure 10 shows the gap between potential participants and the CETC training capacity.

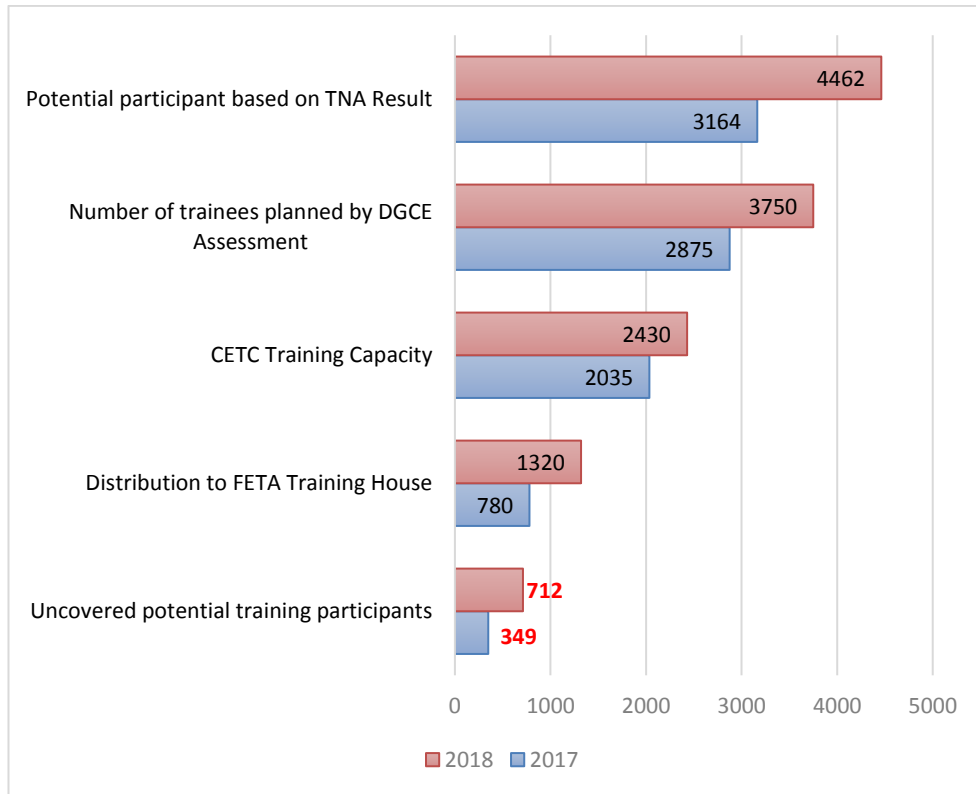


Figure 10. TNA Verification Result 2017-2018
Source: Own Construction

In order to tackle this training capacity problem, several strategies have been implemented. From interviews with four CETC PDD officers, various approaches have been compiled. First, CETC and DGCE need to set a priority list in their training schedule.¹ The mandatory training such as *DTU Kesamaptaan* and Customs and Excise Basic Training is set on the top of the list since there are hundreds of recruits obliged to follow those basic training every year. Then, training that in line with strategic organizational needs and position requirement needs are put in the next list. For instance, specific training such as Import Goods Inspection, Tactical Intelligence, and Document Investigator Officer, never been absent in the training calendar in the past few years. Then, the last place in the list are filled by training and workshops to enrich individual competence, such as Use of Cabin Cargo Scanner Training, Counselling and Information Services Workshop, and so on.

Second, to accommodate more training participants with less cost, CETC has started implementing e-learning, especially blended learning since 2015.² Driscoll (2002) points out that blended learning is comprehensive training which fuses conventional face-to-face training and internet-based training. Within blended learning, trainees are given materials to learn via the internet during a certain amount of period before attending the classical training in CETC. By using this method, CETC has saved a significant amount of budget regarding

¹ Interview with the Head of CETC Training Program Subdivision (TPS).

² Interview with the Head of CETC Training Curriculum Subdivision (TCS).

training accommodation and then shift it to deliver other programs. Nevertheless, based on the CETC Training Calendar 2018, the implementation of this method is still very low as only six out of 68 training adopt this system.

Third, training which perceived not urgent but still has many potential participants would be postponed and put on the waiting list.³ However, those programs could still be held in the same year if there is a remaining budget after all top-priority training have been completed in the first place, or if there is additional funding from DGCE.⁴ In the latter option, DGCE would bear partial costs of training. Unfortunately, although several strategies have been taken, there were still some potential trainees who failed to join the desired training as depicted in Figure 10.

Finally, the output of TNA verification activity is the training calendar. In this document, the number and type of programs, as well as its participants, have been decided. However, it is not impossible to revise the training calendar due to several factors. The change of organizational needs, the budget cuts, the use of training optimization funds can shift the training calendar contents. When it happens, CETC and DGCE would always need to coordinate to synchronize their perception regarding which training must continue, postponed, or even cancelled.

3.1.3. Training Participants Selection

There are two different mechanisms used for determining the training participants.⁵ First, for the training that is closely related to fulfilling organizational competency needs and position requirement needs, such as Documents Investigator Functional Training, Customs and Excise Enforcement Training, and Dog Handler Training, the participants are taken from outside those units or from they who have not been assigned in those positions. In this kind of training, besides administrative selection, there are also other tests such as physical test and psychological test. Then, after completing and passing the training, alumni are given certificates as a requirement for getting promoted or being assigned to specific posts.

Second, for the training intended to improve individual competency such as Expert Level Document Investigator Training, Post Clearance Audit Training, and Advance Excise Training, the trainee selection is prioritized for employees who have been placed in those related units since before participating in training. However, it is also possible for employees from other units to participate if they have submitted their preference in individual TNA and obviously have obtained permission from their supervisors. Nevertheless, if the number of

³ Interview with the Head of CETC TPS

⁴ Interview with the Head of CETC Planning and Development Division (PDD)

⁵ Interview with the Head of DGCE Employee Development-I Subdivision (ED-1S)

potential trainees surpasses the training quota, the EDD has the discretion to determine employees who will attend that training.

3.1.4. Formulation of Training Materials

In terms of training materials, the CETC PDD involves DGCE either in formulating new curriculum or updating the existing materials. This process is conducted regularly by using three primary sources, which are Training Evaluation Reports, Post-training Evaluation Reports, and inputs from lecturers.⁶ Based on those inputs, the PDD assess whether major or minor updating is required. For the minor one, the new materials are directly inserted into the existing curriculum. In contrast, if significant updating is needed, CETC forms Curriculum Formulation Team consists of the PDD staffs, lecturers and DGCE experts to design new curriculum or even new training. The presence of these experts is critical as they are the ones who directly involved in the daily jobs.

In addition, the curriculum formulation process always refers to Technical Competency Standards and Tasks Competency Standards set by DGCE. By doing so, the designed training programs would not only improve individual competence but also in line with organizational needs. So far, the curriculum updating process has been effective. It was evident from the number of training participants complaints regarding the training materials that are very few. Out of more than 30 training in the first semester of 2018, there were only two minor complaints regarding the training materials.⁷ In the next chapter, this claim would be examined more based on CETC Training Evaluation Reports and alumni interviews.

3.2. Inter-Organizational Coordination Quality between CETC and DGCE

Coordination is an essential factor affecting organizational performance. Being on different echelon-one level organizations, it is obvious that CETC and DGCE need to establish strong coordination for designing, organizing, and evaluating training programs. In order to understand IOC quality between CETC and DGCE, the author has conducted interviews with eight officers from both units. The main questions asked are regarding the existence of four effective IOC preconditions (Einbinder et al. 2000), namely “**incentives, willingness, ability, and coordination capacity**” as well as the underlying factor behind them.

In terms of incentive, if the mandate is considered as the strongest incentive (Oliver, as cited in Einbinder 2000: 121), then it is obvious that CETC and

⁶ Interview with the Head of CETC TCS

⁷ Interview with the Head of CETC Training Evaluation Subdivision (TES)

DGCE receive a mandate to collaborate from the Minister of Finance. This delegation is clearly stated on the Minister of Finance Regulation Number 212 Year 2017 regarding Organization and Working Procedure in Ministry of Finance. Based on this rule, on the one hand, “DGCE has duties to organize policy formulation and implementation, supervision, law enforcement, service, and optimization of state revenues related to customs and excise” (MoF 2017). On the other hand, “CETC has tasks to provide and develop education, training, and certification in the field of customs and excise” (MoF 2017). Hence, based on that regulation, it is evident that DGCE and CETC are mandated to team up in supplying competence DGCE officers that possess adequate knowledge and skills to support their duties.

Besides mandate, common interest and interdependence also provide strong incentives (Gricar 1981; Logsdon 1991). Although possessing different function and interests, CETC and DGCE share a common goal as parts of the MoF, which is to improve the customs and excise public service quality.⁸ In addition, there is a tight interdependence among CETC and DGCE.⁹ While CETC is the only organization in Indonesia that provide customs and excise training, DGCE is also the only primary user of CETC. Thus, it might be said that if there were no DGCE, then CETC would not be needed. In contrast, if there were no CETC, then DGCE would have difficulties in developing their human capital resource.

The second precondition is willingness between organizations to coordinate (Einbinder et al. 2000: 123). In this factor, both units claimed to have strong desires to maintain their coordination at an excellent level. The leadership factor plays an essential role in this aspect. It comes from the organizational culture that requires the position of Director of CETC and the CETC PDD officers to be filled by former DGCE officials, and therefore they have vigorous will to build good cooperation with their former unit.¹⁰ On the contrary, the General Director of DGCE has high awareness regarding the importance of human resource development by always commanding his subordinates to maintain good relationships with CETC.

In addition, good leadership also brings mutual trust between both organizations (Fried et al. 2005). Since officers from both units have known each other for a relatively long time, mutual trust has never been an issue between CETC and DGCE. From mutual trust, considerable respect and strong commitment have grown, and ultimately, it establishes solid communication and coordination among them. An interviewee even claimed,

⁸ Interview with the Head of CETC PDD

⁹ Interview with the Head of DGCE ED-1S

¹⁰ Interview with the Head of CETC PDD and the Head of DGCE ED-1S

“when DGCE has to make training needs adjustment, I just need to chat Mrs. Hendar Supriyati (Head of CETC Training Program Subdivision) via Whatsapp, and usually she has understood my intentions even before the formal coordination meeting is held.” (Subiaksono 2018)

The benefits of mutual trust do not stop there as it brings up other IOC variables such as collective thinking and ease of communications (Aghajani et al. 2014: 298). In this context, collective thinking is constantly exercised by both units in the forms of TNA verification process, curriculum updating, trainer selection, post-training evaluation samples selection, and the distribution of training cost-sharing.¹¹ In addition, ease of communication occurs from high respect and commitment based on mutual trust among both units. In summary, the leadership factor is highly influential in developing mutual trust between CETC and DGCE as it has been amplifying willingness to cooperate and triggering the emergence of collective thinking and ease of communication.

The third ingredient for setting up effective IOC is the ability to work together in common tasks (Alter and Hage 1993; Einbinder et al. 2000). Among DGCE and CETC, the existence of this factor is unquestionable. As described above, collective thinking between two units is regularly conducted, and commonly, it takes in the form of working group, for instance, TNA Verification Team, Curriculum Formulation Team, and Post-Training Evaluation Team.¹² The member of the team consists of experts from both units. Furthermore, those teams are given sufficient decision-making authority. This authority is essential to make the team operates and coordinate effectively (Meyers 1993).

However, the coordination ability cannot be separated from the resource availability supporting the coordination process (Cummings 1984). Regarding human resources, it seems that CETC and DGCE have no issue as they have many experts inside the coordinating working groups. The problems occur in terms of financial resources. As the training provider, although they have a limited budget, CETC has a responsibility to funding all the working group's activities. Unfortunately, due to this resource constraint, only experts from DGCE who enjoy financial incentives for being parts of the working groups. In contrast, the group members from CETC are taking part in the team without earning additional honorarium.¹³ Fortunately, until today, it seems that this situation does not affect the working group's performance, although financial incentive might boost their achievement.

¹¹ Interview with the Head of CETC Teaching Staff Subdivision (TSS), the Head of CETC TCS, the Head of CETC TPS, the Head of CETC TES, and the Head of DGCE ED-1S.

¹² Interview with the Head of DGCE ED1S, the Head of CETC TPS, the Head of CETC TCS, and the Head of CETC TES.

¹³ Interview with the Head of CETC TCS.

The final piece to perfect the IOC quality is the capacity to cooperate, which is often related to coordination mechanisms (Einbinder et al. 2000: 126). In designing training program, or deciding which training should be evaluated further, CETC and DGCE use various mechanisms to communicate, from the informal means such as phone calls, text, and *WhatsApp* chats to the formal ones such as working groups. In fact, the presence of the CETC PDD officers who have experienced working at DGCE helps in keeping good coordination as they have a lot of connection in the DGCE Headquarters, and therefore, they often use those informal means to contact their counterparts in the DGCE EDD. These casual ways are proven very helpful for coordinating as it is much quicker than using the formal letter. The invitation to a coordination meeting often delivered through *WhatsApp*, before the official letter follows in the next day.¹⁴

Lastly, in addition to those informal means, the CETC location which is within walking distance from the DGCE Headquarters significantly boost the coordination quality. This location factor allows both units to coordinate faster and easier. For example, if there is an invitation for a coordination meeting, it often can be done on the same day.¹⁵ As a comparison, other training centers (i.e., Tax TC, Budget and Treasury TC, and so on) are located around one-hour driving from their stakeholders' headquarters, and therefore, they often face difficulties in synchronizing training needs with their users, something that was never experienced by CETC.

¹⁴ Interview with the Head of DGCE ED-1S.

¹⁵ Interview with the Head of CETC TSS.

Chapter 4

Assessing CETC Training Effectiveness

This chapter encompasses two subsections. The first part presents stakeholder's perception towards training effectiveness. Interview results from the key respondents are used as primary sources to compose the answer for the third sub-question.

Then, in the second subchapter, the current training effectiveness is assessed in order to answer the fourth sub-question. The author uses **Kirkpatrick Four-Level Evaluation** method (Kirkpatrick and Kirkpatrick 2006) for measuring how effective the programs were delivered. In addition, the researcher integrates Dayal's three effective training criteria (2001: 340) in the third level of evaluation (*i.e.*, **evaluating behaviour**).

4.1. Stakeholders' Perception of Effective Training

As an introduction, the author briefly presents the stakeholders' perception regarding effective training. Various answers were derived from seven in-depth interviews with the CETC PDD and DGCE EDD officers. The interview results are summarized below:

Table 1. Key Interviewees' Perceptions of Effective Training

No.	Name	Effective Training Description
1.	Aziz Syamsu Arifin	"A training that produces alumni who have increased their competence and can utilize their knowledge in the jobs, as well as give impact whether direct or indirect to their working units."
2.	Hendar Supriyati	"A training that in line with organizational needs and contains technical competency as well as task competency standards."
3.	M. Yuli Akbar Daulay	"A training that generates alumni who 'ready-to-use' and can be directly deployed to certain fields that are appropriate to their competence."
4.	Arfiansyah Darwin	"A training which its alumni can implement their new knowledge in their workplaces."
5.	Sisprian Subiaksono	"A training that can provide real technical competence improvement in the field."
6.	Chairul Denyl Setyawan	"A training which its learning purpose has been achieved."
7.	Rakhmi Khalidya	"A training which its alumni can exercise their knowledge, or even can improve their performance."

Table 1 shows that most answers encompass congruence between training materials with organizational needs, competency and performance improvement, and knowledge and skills utilization. Hence, it can be concluded that all officers from both CETC and DGCE understand the importance of effective training as pointed out by Dayal (2001). Moreover, both the Head of DGCE ED-1S and CETC TPS have explicitly mentioned that effective training should cover certain skills for advancing both individuals and organizational performance, as stated by Mondy (1984) in which effective training should encompass technical skills for performance improvement.

4.2. Evaluation Process for Measuring Training Effectiveness

4.2.1. *Quality of Training Based on Trainees' Perception*

The first level of Kirkpatrick's evaluation method is **evaluating reaction**. According to Kirkpatrick and Kirkpatrick (2006: 27), "evaluating reaction is the same thing as measuring customer satisfaction." If it is related to the training effectiveness concept, the trainees' satisfaction is essential in accomplishing effective training (Kirkpatrick and Kirkpatrick 2006: 27). If they feel delighted, trainees would have a higher motivation to learn, and therefore, they can absorb the training materials better.

In CETC, trainees' satisfaction is measured during the program by requiring participants to fill training evaluation sheet, which designed based on Kirkpatrick's reaction sheet model. It consists of four primary parts: training materials relevance and competency improvement, training committee services, training evaluation services, and training facilities. The sheet uses one to five scales illustrating trainee satisfaction rate regarding specific parts of training. The average score of all participants represents overall trainees' satisfaction level. The CETC Training Evaluation Subdivision (TES) defines the score above 4.2 as "**Excellent**", 3.41 to 4.2 as "**Good**", 2.61 to 3.4 as "**Sufficient**", 1.81 to 2.6 as "**Poor**" and below 1.8 as "**Bad**". Table 2 shows the summary of evaluation score of 21 observed programs.

Surprisingly, the trainees' satisfaction rate in all selected training was fantastic. Out of 21 training, 17 programs acquired "Excellent" score and the rest obtained "Good" one. In addition, Figure 11 portrays the trainee satisfaction index graphic from 2015 to 2017. Overall, there was a slight improvement in all factors from 2015 to 2016. However, in the following year, all factors experienced a slight decline, although they were still in "Excellent" category, except the training evaluation aspect that only managed to get a "Good" score. In summary, viewing from both Table 2 and Figure 11, it might be concluded that the quality of training programs delivered by CETC during 2015 – 2017 has already met the training participants expectation, and therefore, they should have the motivation to learn better as argued by Kirkpatrick and Kirkpatrick (2006).

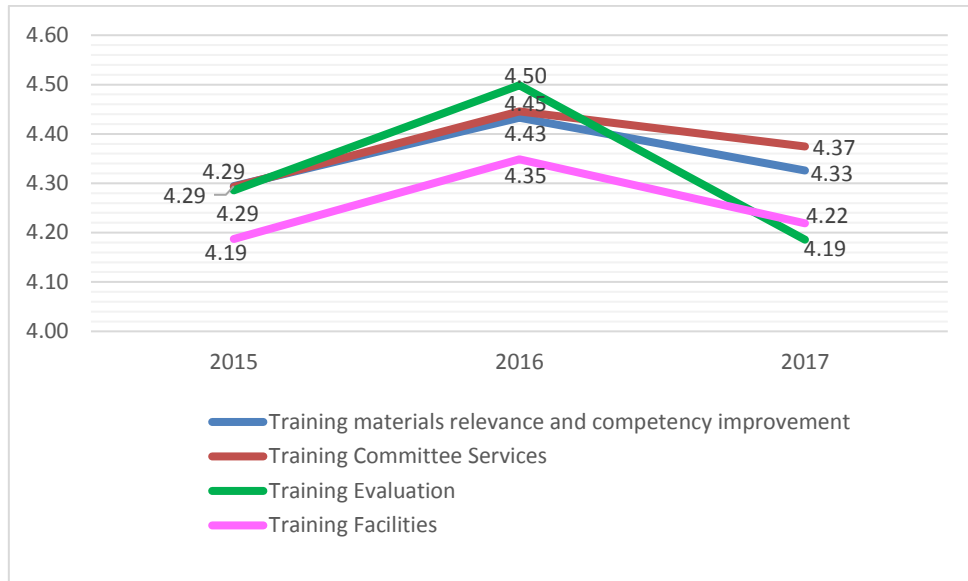


Figure 11. Average Training Participants Satisfaction Index
Source: Own Construction, based on CETC Post-Training Evaluation Reports 2015-2017

Table 2. Summary of Training Participants Satisfaction Index
Source: Own Construction, based on CETC Post-Training Evaluation Reports 2015-2017

No.	Name of Training	Average Score	Description
1	Tactical Intelligence	4.45	Excellent
2	Information Service-Contact Center	4.13	Good
3	Export Goods Inspection	4.15	Good
4	Import Goods Inspection (2015)	4.31	Excellent
5	Dangerous Goods Supervision and Handling	4.27	Excellent
6	Frontliner Indonesian Airport Customs	4.30	Excellent
7	Monitoring Room Analyst	4.26	Excellent
8	Analyst Intelligence	4.53	Excellent
9	Customs and Excise Bailiff	4.52	Excellent
10	Air Carrier Inspection	4.37	Excellent
11	Sea Carrier Patrol and Inspection	4.35	Excellent
12	Manifest Administration Service	4.42	Excellent
13	Internal Compliance	4.36	Excellent
14	Use of Cabin and Cargo Scanner	4.48	Excellent
15	Chief of Auditor	4.11	Good
16	Head of Hangar	4.37	Excellent
17	Expert Level Document Investigator	4.34	Excellent
18	Import Goods Inspection (2017)	4.46	Excellent
19	TPB & KITE Facilities	4.30	Excellent
20	Counselling and Information Services	4.22	Excellent
21	Passenger Intelligence	4.14	Good
Average		4.32	Excellent

4.2.2. Learning Evaluation as Initial Step in Measuring KSAs Changes

The second evaluation step, **learning evaluation**, functions to assess changes in trainees' knowledge, skills, and attitudes (Kirkpatrick and Kirkpatrick 2006: 42). There are two formats of the learning process in CETC, namely training and workshop, which have different evaluation processes. In training, two types of evaluation are used. First, the invigilated exam is mostly used to test whether the trainees have reached a certain level of knowledge or not. Second, the practice exam or simulation test is used to examine the participants' skills improvement and attitude changes. On the contrary, in the workshop, the learning process is evaluated by using pre-test and post-test. This different treatment is due to the nature of the workshop, which functions more as a means knowledge sharing and updating.

In this research, the author briefly discusses the learning evaluation process in CETC as the trainees passing rate in the 21 selected programs reached 100% (CETC 2015; 2016; 2017). It means that no single trainee failed during the training. However, one thing that should become a concern is the way how they pass training. In order to graduate from a program, trainees have to pass all courses. In an ideal learning environment, students who failed to pass the first exam will be given a proper time to learn more before following the remedy test (Moses 2012). In addition, the re-exam questions should be different from the first one.

Nevertheless, the situation in CETC is quite different. Trainees who failed in the first test would be given the remedy test right shortly one or two days after their first chance. Furthermore, the remedy exam often contains precisely the same questions as the first one. On the one hand, this situation offers an advantage for trainees to easily pass training. However, on the other hand, the quality of alumni should be questioned regarding whether they have already fully mastered the training materials or not. In summary, in all CETC training programs, it seems like some of the trainees were gently forced to pass the training without really paying attention to their knowledge, skills, and attitudes changes. Nonetheless, fortunately, the training evaluation process was not ended here, as CETC also performs the third-level of the evaluation process which discussed in the next subchapter.

4.2.3. Evaluating Behavior in the Post-Training Environment

The process of training effectiveness evaluation should not stop when the training has finished. It is essential to examine the alumni's knowledge, skills, and attitudes changes in their workplaces (Kirkpatrick and Kirkpatrick 2006: 52). Hence, the third-level of Kirkpatrick's evaluation process, i.e., **evaluating behaviour**, should be done.

The post-training evaluation process in CETC is an embodiment of behaviour evaluation. This activity can be a handy tool for measuring how effective the training was, as it encompasses three training effectiveness aspects brought by Dayal (2001: 340), and thus, it can adequately describe the alumni

behaviour change. In order to measure training effectiveness further, the following subchapters discuss some essential parts related to the implementation of the knowledge, skills, and attitude of the alumni.

4.2.3.1. The Proportion of Post-Training Placement

According to Dayal (2001), one way to measure how effective a training program is by knowing the proportion of alumni implementing training materials in daily jobs. Employee rotation is a routine process in DGCE which happen every year. Therefore, alumni who have not been assigned in a suitable position according to their training would always have a chance to be placed in a new post suitable for their new skills.

CETC Post-Training Evaluation is conducted approximately three to six months after the training is over. As argued by Kirkpatrick and Kirkpatrick (2006), this time interval is intended to buy time for alumni to be assigned in the suitable place, or to exercise their new knowledge and skills in daily routines. The first section of the post-training evaluation questionnaire is asking whether the alumni are assigned in the position that matches with the training they joined or not. Figure 12 displays the proportion of alumni placement from 21 observed programs during three to six months after training.

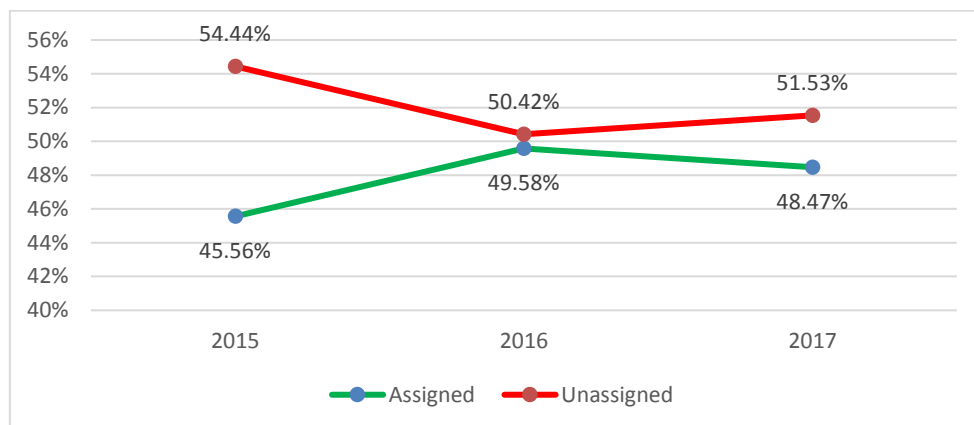


Figure 12. The Proportion of Alumni Placement

Source: Own Construction, based on CETC Post-Training Evaluation Reports 2015-2017

Based on Figure 12, it can be seen that the average percentage of alumni who are assigned in line with their training is lower than the unassigned one. Considering that Indonesia is still a developing country with limited resources, this situation is such an irony. Furthermore, to some extent, training is still perceived as a privilege that not all employees can access it. While on the one hand, many personnel are queuing to join programs on the waiting list due to CETC limited budget, the alumni, on the other hand, cannot apply their knowledge and skills as they are not given sufficient opportunities. Hence, the root problem of this inappropriate placement process needs to be investigated to tackle this issue.

In order to get a more comprehensive grasp regarding the post-training placement, the author has interviewed the Head of DGCE Employee Rotation

Subdivision (ERS). According to Minister of Finance Regulation Number 212 Year 2017, this unit's main duty is to formulate employee placement, promotion, and other personnel transfer affairs. In addition, interview results with the Head of DGCE ED-1S and the Head of CETC PDD complement the finding.

Based on those interviews, the three main causes of the low percentage of appropriate placement are revealed. First, it is related to the individual TNA process. The lack of direct supervisors' involvement in their subordinates training assessment is the initial cause of why many employees join the unnecessary training.¹⁶ For instance, say, there is an employee who in charge as an analyst in Objection and Appeal Unit, but he chose to follow the Import Goods Inspection Training, and then it was agreed by his supervisor. When he finished training, but there is an adequate number of import goods inspectors in his office, then it is very likely for him to stay in his current unit for a while, and not being assigned as a goods inspector. In most cases, these alumni have to wait maybe one or two years before he is being transferred to the compatible unit.

The second reason is still related to the individual TNA process. In this case, some unit leaders (i.e., Head of CSSOs, Head of DGCE ROs, or direct supervisors) tend to make 'backup employees' that are prepared to fill certain positions.¹⁷ Even though there are sufficient number officers in those posts, it is not impossible for them to be transferred any time, and therefore, the unit leaders thought that they should prepare the replacement by sending these 'reserves employees' to attend specific training. In some cases, these 'backup employees' got lucky being assigned in the appropriate post for replacing the previous employees who are retired or moved to another unit. However, it is also not uncommon that in the end, these 'reserves employees' competencies are not being used at all. In summary, this ineffective individual TNA has been proven causing training being attended by wrong people in the beginning, as well as the mismatch between alumni's competency and their jobs in the end (Tannenbaum and Yukl 1992: 403; Royster 2018).

The last antecedent is because of the inappropriate employee placement process itself. It is true that the DGCE ERS has duties in managing personnel transfer from one to another office. However, it turned out that their jurisdiction is very limited. After employees being transferred to DGCE RO or CSSO, the authority to utilize these personnel is entirely in the unit leader in DGCE RO or CSSO.¹⁸ Moreover, a DGCE RO also has authority to transfer an employee from one CSSO to another CSSO below its supervision. Hence, although some employees, in the beginning, are intended to be assigned in a certain position compatible with their skills by the DGCE Headquarters, this placement still can be

¹⁶ Interview with the Head of DGCE ED-1S.

¹⁷ Interview with the Head of CETC PDD.

¹⁸ Interview with the Head of DGCE Employee Rotation Subdivision (ERS).

changed by both DGCE RO and CSSO. In other words, the presence of overlapping authority between the DGCE ERS and ROs/CSSOs has caused some alumni to get inappropriate placement.

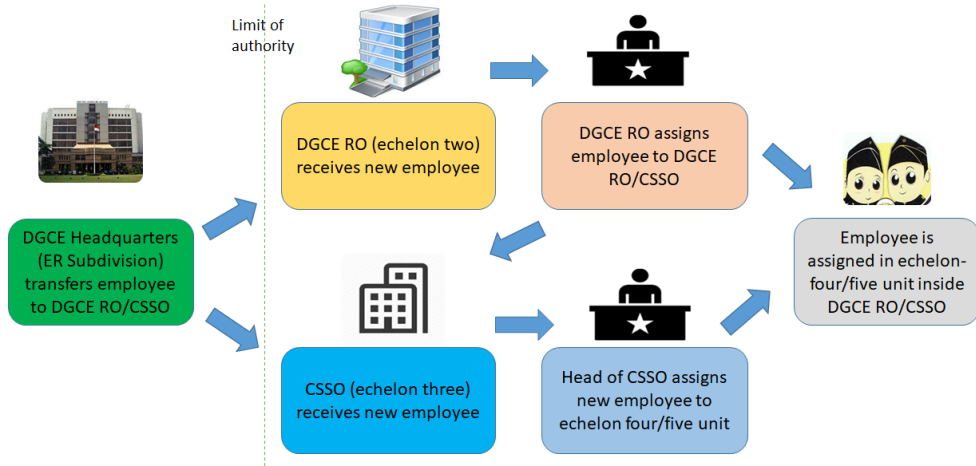


Figure 13. Employee Placement Mechanism in DGCE
Source: Own Construction

However, although the proportion of appropriate placement is not entirely satisfying, there are at least two positive things brought by alumni from training. First, despite not being placed in the preferable units, it turned out that they could partially implement the training materials in daily jobs. For instance, there are alumni from Import Goods Inspector Unit who attend Dangerous Goods Supervision and Handling Training. Even though they have not been transferred to the Dangerous Goods Handling Unit, they still can use that knowledge and skills in their current units. When they encounter suspicious import goods that might be hazardous, they manage to handle those items immediately without having to wait for personnel from the Dangerous Goods Handling Unit to arrive. Fortunately, there are many cases when this kind of situation happened as depicted in Figure 14. Based on this figure, it seems that although the alumni have not been appropriately placed, the knowledge and skills they got from the training still helped them performing better in their current units.

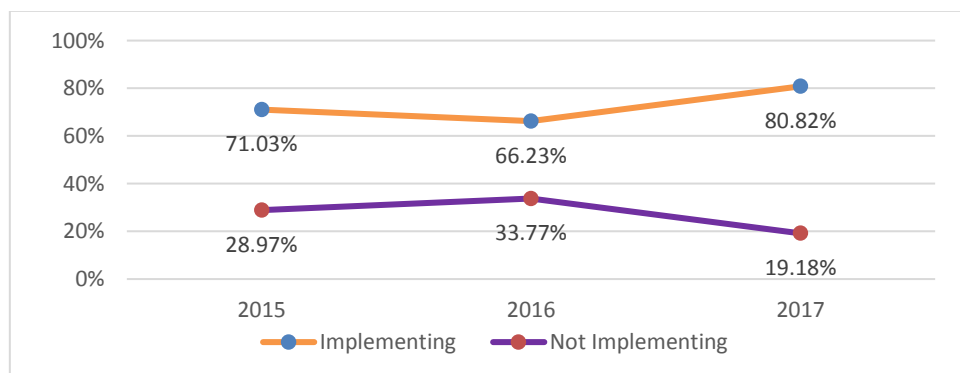


Figure 14. Training Materials Implementation
Source: Own Construction, based on CETC Post-Training Evaluation Reports 2015-2017

Another positive contribution from the alumni to their units is the transfer learning practices. It is prevalent in DGCE that alumni who just back from training to share their knowledge and skills with their colleagues, whether in the same or different unit. The transfer learning between DGCE officers can take in many forms, from the formal one such as In-House Training to the informal one such as morning discussion while having a cup of coffee.

Although it seems trivial, transfer learning culture is a powerful means to propel the shifting towards learning organization. Transfer learning habit can help the organization to distribute the knowledge more equally to all its elements, and therefore encouraging the learning organization to shift faster (Garvin 1993). By using knowledge sharing, many employees who have no opportunities to attend training still can obtain lots of new things from their colleagues, and therefore, the learning process can be spread evenly throughout the organization. Figure 15 displays the average percentage of alumni who share their knowledge and skills from 21 selected training.

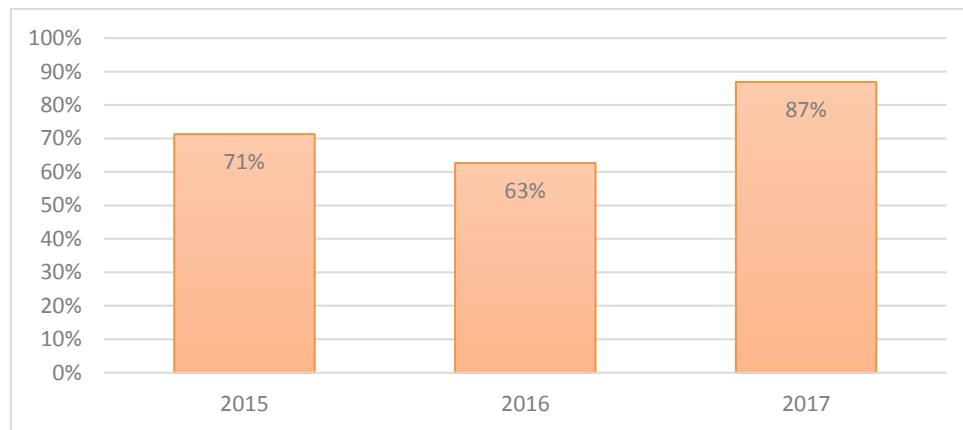


Figure 15. The Percentage of Transfer Learning

Source: Own Construction, based on CETC Post-Training Evaluation Reports 2015-2017

Nevertheless, there is an exciting finding based on interviews with 26 alumni who attend training during 2015–2017. For this research, the author managed to do short-interviews with them, and the result is quite surprising. Previously, in the Post-Training Evaluation which conducted three to six months after the training is over, 14 alumni stated that their current positions are relevance with the training they attended, whereas the rest said the opposite.

Then, after one to three years, 19 people have been transferred to new units while the rest remained in the same units. However, although there was a mixed rotation between those alumni, the proportion of alumni placement based on their evaluated training does not change much. Currently, 12 alumni stated that their current positions are in line with the evaluated training, while 13 people stated otherwise. The rest one alumnus has been retired. The comparison between alumni’s previous and current placement can be seen in Figure 16.

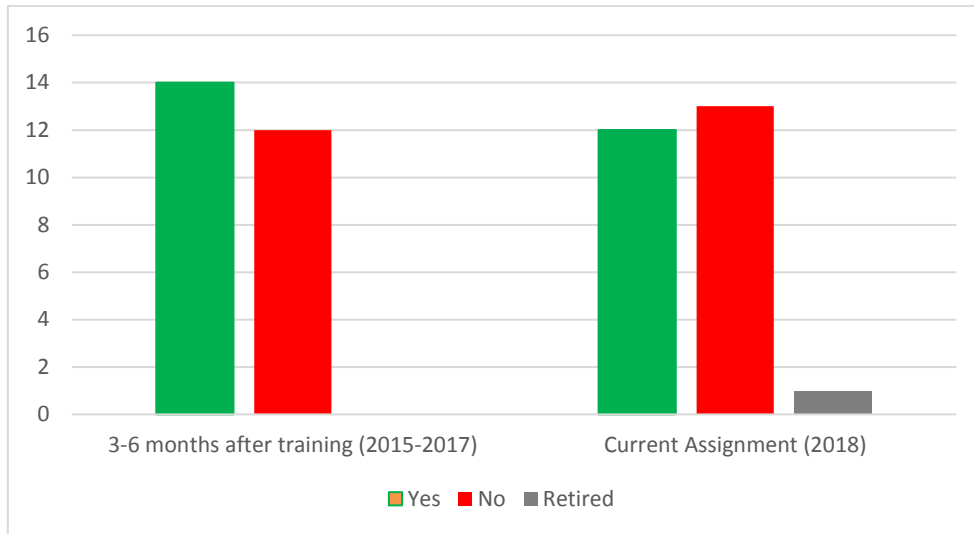


Figure 16. The Alumni Placement Comparison Between Post-Training Evaluation and 2018

Source: Own Construction, based on Alumni Interviews

Based on figure above, although most alumni have been transferred to other units, however, the composition between assigned and unassigned alumni does not change much. Hence, it might be concluded that over the last-three years, the number of personnel required to fill specific posts has not changed much, and therefore, the proportion between the assigned and unassigned alumni are relatively stagnant.

Nevertheless, based on the alumni interviews, despite having been transferred to other units, eight of 26 interviewed alumni still have placements that are incompatible with their previous training. Realizing this fact, more attention should be given to the individual TNA process, especially in identifying the number of employees prepared for certain positions. Comprehensive and effective trainee selection can help the organization to optimize the use of alumni (Tannenbaum and Yukl 1992; Wagonhurst 2002; Royster 2018). The intention to create 'back-up employees' is not wrong. However, it should be done effectively so that they could contribute more to the organization. Although there is still a possibility for them to be placed in the appropriate positions in the future, at that time, the knowledge and skills they got from training might have been eroded by time.

4.2.3.2. Training Materials Relevance towards Daily Works

The next phase to measure training effectiveness is by examining the contribution of training materials in supporting alumni's daily routines (Dayal 2001). Compatibility between training contents and daily works is vital in improving both individual and organizational performance. Without relevant materials, training is pointless. Moreover, the time and resources spent on training would be futile. Figure 17 depicts the percentage of training material relevance according to alumni in the 21 selected programs.

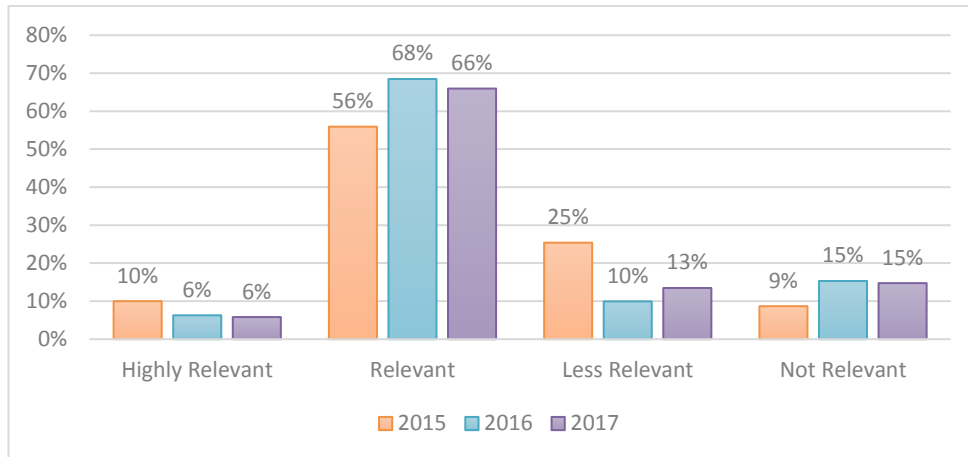


Figure 17. Training Materials Relevance

Source: Own Construction, based on CETC Post-Training Evaluation Reports 2015-2017

Based on Figure 17, there were only a few numbers of alumni who felt that the knowledge and skills they got from training are not related to their jobs at all. It seems that this groups of alumni mostly belong to they who are not assigned in line with their competency. Nonetheless, overall, it might be concluded that in this effectiveness criterion CETC managed to get a satisfactory score since during the last three years, most alumni constantly perceived that the training materials were relevant toward their daily tasks.

4.2.3.3. Alumni Competency Improvement Perception

Finally, the last barometer to find out how effective training according to Dayal (2001), is by scrutinizing the alumni capacity enhancement. In order to do so, CETC launched a survey toward the alumni to ask their perception regarding their behaviour change after the following training. In addition, the questionnaires are also sent to alumni's supervisors and colleagues. By asking alumni's relatives, it is expected that the evaluator can obtain undistorted answers that relatively free from bias (Kirkpatrick and Kirkpatrick (2006).

The survey contains several questions regarding their perception of employee's knowledge, skills, and attitudes changes after training. The survey uses scale 1–10 as a measurement, and the positive gap between alumni's capacity prior and post-training is considered as alumni's capacity improvement. Figure 18 shows the average index of alumni knowledge, skill, and attitude change from 21 observed programs.

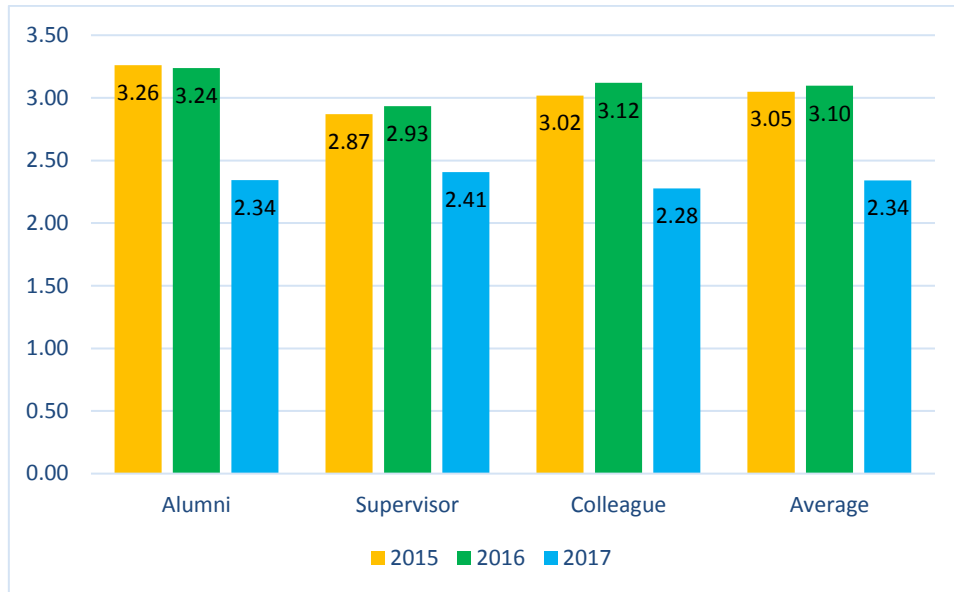


Figure 18. Alumni Competency Improvement Index

Source: Own Construction, based on CETC Post-Training Evaluation Reports 2015-2017

Based on Figure 18, it can be seen that there were positive results in alumni's competencies improvement, either according to the alumni themselves, or their supervisors and colleagues. In order to strengthen the claim, all quantitative data in all training have been statistically tested by using Normality Test, Paired T-Test, and Wilcoxon Sign Rank Test (CETC 2015; 2016; 2017). These multiple-step tests are used to find out whether those data represent significant competency improvement or not. In addition, all tests are carried out by using SPSS software.

Fortunately, in all training, the results of the statistical tests were satisfying. In 21 selected training, all tests showed significant alumni competency improvement. Hence, it can be concluded that CETC training has been quite effective in improving trainees' capacity. These results show that delivered programs have met both education and training purposes, which encompass knowledge teaching as well as skills and attitudes development (Ahwood and Dimmoel 1992).

4.2.4. Challenge in Measuring Performance Improvement

The final part of the evaluation series is **evaluating results** (Kirkpatrick and Kirkpatrick 2006: 63). In CETC, it can be interpreted by measuring alumni performance improvement after attending training. Indeed, it is the most critical, albeit the most challenging part of the evaluation process (Kirkpatrick and Kirkpatrick 2006: 63). Many evaluation processes ended in level-three as the evaluators have difficulties in measuring the intangible results and how to compare them with the money spent on training (Kirkpatrick and Kirkpatrick 2006: 64). Moreover, it is often that there is no clear proof that performance improvement is the results of training, as many factors can play roles in the workplaces (ibid).

Unfortunately, the same situation occurs in the CETC Post-Training Evaluation process. It stops at behaviour evaluation. In order to find out why results evaluation has not been done, the author has conducted interviews with the Head of CETC Training Evaluation Subdivision (TES) and Head of DGCE ED-1S. From the interviews, there was almost similar perception regarding what extent the evaluation should be performed. In the separated interviews, both officers agreed that it is crucial to conduct results evaluation. However, it also possesses incredible challenges for each unit.

On the one side, CETC has inadequate resources and access for evaluating results.¹⁹ First, regarding personnel, the TES has only six staffs who have primary tasks for preparing reaction and learning evaluation, including preparing and supervising invigilated and practical exam for more than 60 training programs per year. Second, regarding budget, the TES only possesses limited funding that only enough to perform six to eight Post-Training Evaluation annually. Third, in terms of access, the TES also do not have access to alumni's Key Performance Indicator data which actually can be used as a measurement for evaluating training results. Hence, due to those factors, over the last three years, CETC could not measure the alumni performance improvement.

On the other hand, the DGCE as training user also has a considerable challenge in evaluating training results. In most cases, the employee performance does not depend on their own capacity.²⁰

“Regardless how well-trained an employee, it will be pointless if there is insufficient support from his or her boss, or inadequate resource, or favourable situation that allow them to utilize their skills.” (Subiaksono 2018)

As stated by a key interviewee, many factors such as unit leader's support, cost, facilities, and political situation challenges in different regions are undeniably influencing alumni's performance. Indeed, many external factors can disrupt the translation of knowledge, skills, and attitudes improvement into real action, and therefore, it should be taken into account in the training development stage (Wagonhurst 2002; Haines et al. 2004). Hence, at this rate, evaluating results still cannot be done by the ED-1S itself since it needs a huge effort and support from the whole organization.

¹⁹ Interview with the Head of CETC TES.

²⁰ Interview with the Head of DGCE ED-1S.

4.2.5. Summary of Four-Level Evaluation Process

Overall, the summary CETC evaluation process is displayed below.

Table 3. Summary of Kirkpatrick's Four-Level Evaluation Steps
Source: Own construction

Steps	Indicators	Results	Description
Evaluating Reaction (Step 1)	Training Materials Relevance Index	4.35 out of 5	Excellent
	Training Committee Services Index	4.37 out of 5	Excellent
	Training Evaluation Services Index	4.32 out of 5	Excellent
	Training Facilities Quality Index	4.32 out of 5	Excellent
Evaluating Learning (Step 2)	Percentage of graduated trainees	100% graduation	Excellent
Evaluating Behaviour (Step 3)	Percentage of alumni assigned in suitable positions	47.87% alumni assigned in suitable position	Not really good
	Percentage of training materials relevance in supporting daily works	- 7.33% highly relevant - 63.33% relevant - 16% less relevant - 13% not relevant	Mostly relevant
	Alumni competencies improvement index	- 3.05 out of 10 (according to alumni) - 3.1 out of 10 (according to supervisors) - 2.34 out of 10 (according to colleagues)	Significant improvement
Evaluating Results (Step 4)	Improvement in key performance indicator index	Not available	N/A

Based on Table 3, it can be concluded that to some extent, the CETC training programs had been sufficiently effective as they had fulfilled participants' expectations, yielded 100% graduates, and provided relevant training materials as well as competencies improvement (Dayal 2001; Kirkpatrick and Kirkpatrick 2006). However, there is a room for improvement regarding post-training placement as it was only less than half of the alumni who get placed in compatible posts. Lastly, in the long run, the results evaluation should be done in order to deliver a more comprehensive evaluation picture and ultimately, better improvement.

Chapter 5

Analyzing TNA and IOC Impacts on CETC Training Effectiveness

This chapter provides analysis for answering the central research question. The discussion regarding TNA and IOC in the last-two chapters are analyzed further here. Each subsection in this chapter represents each factor impacting CETC training effectiveness.

5.1. DGCE TNA Impact on CETC Training Effectiveness

If it is connected to the popular TNA concept (Tannenbaum and Yukl 1992; Salas and Cannon-Bowers 2001; Goldstein and Ford 2002), the DGCE TNA process looks quite ideal. The three TNA vital elements (**i.e., organizational analysis, task analysis, and individual analysis**) have been explicitly mentioned in the DGCE TNA Standard Operating Procedures and Technical Guidance. However, its implementation is different from what it should be. In order to deliver effective training that positively contributes to organizational performance, three analysis should be done thoroughly (Tannenbaum and Yukl 1992; Salas and Cannon-Bowers 2001; Goldstein and Ford 2002). However, it seems that DGCE individual analysis has been conducted ineffectively.

This finding is derived from interviews with key respondents and 22 direct supervisors. According to the Head of DGCE ED-1S, direct supervisors are responsible for assessing their subordinates' individual TNA. Nevertheless, many of them inadequately recognized their personnel's capacity, and therefore, failed to understand their units' competency gap. Based on interviews with 22 direct supervisors, eight of them stated that they do not know their subordinates' competency well either before or after training.²¹

The dynamic rotation in DGCE might be considered as the culprit behind it. The DGCE Headquarters regularly rotate their personnel twice a year. Although employee rotation might have a positive effect in transferring knowledge to other divisions within the organization (Garvin 1993), it should be done in the appropriate time. In DGCE context where personnel transfers are relatively frequent, there are possibilities that it is done when the individual TNA is still ongoing. It caused situations where some direct supervisors or employees are still new in their current post, and therefore, the bosses have insufficient time to recognize their subordinates' ability. Consequently, these direct supervisors tended to act indifferently toward their underlings' individual TNA and

²¹ Interviews with 22 direct supervisors (echelon-four level officers in CSSOs and ROs).

inadequately assess it. As a result, many individual preferences pass to the next stage, though in fact, those preferences are not compatible with the organizational needs.

Unfortunately, multiple-step filtration in echelon-three and echelon-two level PMUs also fruitless. The CSSOs and/or ROs PMU often lack employee competency data. Their jobs finally only limited to prevent too many employees exceeding the training quota without really knowing which people are more entitled to join the program. Moreover, in TNA verification process, its focus is only to determine what type and how many training should be conducted based on available budget. The selection process of training participants is entirely done by DGCE, only by looking at the individual TNA result. In other words, the selection of potential trainees are not really based on their existing competencies, and therefore, it is not uncommon if many employees attend unnecessary training.

Consequently, in the post-training period, many alumni face difficulties in utilizing the training results as they do not have opportunities to do so. The Post-Training Evaluation Reports of 21 observed programs show that there are only 72% of alumni who can implement their new knowledge and skills during three to six months after the programs finished. In addition, it is evident that eight of 26 interviewed alumni have never been assigned to proper positions even after one to three years since attending the programs. Looking into those numbers, it means that in terms of training materials implementation, the current training effectiveness level is still relatively far from the maximum results.

Hence, based on those findings, it might be concluded that inappropriate person analysis during TNA has adverse implication in the current training effectiveness level. Although DGCE has explicitly stated the importance of organizational, tasks, and individual analysis (Tannenbaum and Yukl 1992; Salas and Cannon-Bowers 2001; Goldstein and Ford 2002) in its TNA Guidance, more attention should be given to person analysis. At this rate, it seems that DGCE still inadequately assess their employee's competencies through ineffective individual TNA, which can negatively affect the training delivery (Feldman 1989). In addition, similar to other previous literature, insufficient individual analysis has been proven causing many employees to join unnecessary training as well as incompatible skills and competency requirements within organizations (Tannenbaum and Yukl 1992; Wagonhurst 2002; Royster 2018).

5.2. IOC Impacts on CETC Training Effectiveness

Based on the discussion in the Subsection 3.2., it seems that there is no significant coordination impediment between CETC and DGCE. The interdependencies between both units have led to excellent coordination. Various coordination mechanisms such as mutual adjustment and standardization of work processes, outputs, and skills (Mintzberg 1979: 35) are exercised among the two units. The formulation of training curriculum and TNA results verification are concrete examples among those mechanisms. In addition, various coordination strategies also evident, from the more abstract ones such as coordinating via phone or chats to the most concrete one such as the signing of MoU regarding training cost sharing (Alexander 1993).

Indeed, the interview results from most DGCE and CETC officers might seem bias as they only stated positive things about their IOC. However, the results of the reaction, learning, and behaviour evaluation in the prior chapter supports their claim. For instance, regarding the training satisfaction index, all evaluation factors managed to get mostly excellent scores. If there were no good coordination, it would be unlikely for CETC to organize appropriate programs that can fulfil trainees' expectations.

Another supporting evidence comes from the finding related to training materials relevance. Without good coordination in the Curriculum Formulation Team which encompasses members from both units, it would be challenging to design training that always up to date with the latest situation. Moreover, it is also evident that in the first semester of 2018, there were only a very few minor complaints regarding the training contents.

Lastly, in terms of competency improvement index, it is evident that training provided by CETC has been successfully enhancing alumni's competencies. In addition, those knowledge, skills, and attitudes learning have been translated into real action in the workplaces. This satisfactory aftermath is very likely coming from solid coordination between CETC PDD and DGCE EDD in formulating and designing felicitous programs that meet DGCE employee competency improvement needs.

In summary, this positive IOC quality is obviously affecting the training effectiveness, particularly regarding training material relevance and alumni competency improvement. It is true that vertical specialization within ministries does matter (Egeberg 2007). However, excellent IOC in the planning stage can help organizations accomplishing their goals (Alexander 1993). As happened between CETC and DGCE, solid IOC in training planning stage has allowed both units to synchronize their goals, and therefore, aiming the same objective, in this case, delivering effective training that can contribute towards human capital resource advancement.

Chapter 6

Conclusion and Recommendations

6.1. Conclusion

In this globalization era, human resource development has become increasingly important. In the context of Indonesian public sector, capacity building process often translated into education and training programs. It is aligned with Bennet and O'Brien (1994) who point out that training and education play a vital role as one of the learning organizations building blocks. However, in order to attain fruitful results and avoid resource waste, training should be delivered effectively. Hence, the training evaluation should be properly and regularly conducted to measure how effective training programs can improve the employee competencies.

This paper examines the training effectiveness of 21 selected programs during 2015-2017 and two possible influencing factors, namely TNA and IOC. The evaluation process is done by using Kirkpatrick's Four-Level Evaluation method (Kirkpatrick and Kirkpatrick 2006). In addition, three effective training indicators introduced by Dayal (2001) is inserted in the third evaluation stage.

This research exercises two methods. First, qualitative in-depth interviews are used as primary data sources to answer the first three sub-questions. Second, secondary data analysis based on Post-Training Evaluation Reports are combined with in-depth interviews and short interviews in order to answer the forth sub-question. Lastly, a comprehensive analysis is drawn to provide an answer for the central research question.

Sub-question 1: How is the training program planned?

The training planning stage involves both the CETC PDD and the DGCE EDD. It mainly encompasses the Training Needs Analysis (TNA) process, including determining training contents and formulating training materials. The TNA process is conducted annually by the EDD, by involving DGCE ROs and CSSOs throughout Indonesia. In the next phase, TNA result is verified together by the PDD and the EDD. Its purpose is to synchronize the actual DGCE training needs with the CETC's training capacity. Through this collective thinking process, the type and the number of training, as well as the number of prospective trainees, are finalized in the training calendar.

Regarding training materials formulation, CETC regularly reviews their existing curriculum. The Training Evaluation Reports, the Post-Training Evaluation Reports, and training lecturers' intakes are used as inputs for determining whether the curriculum needs to be updated or not. If required, Curriculum Formulation Team consists of experts from both units is formed to adjust the existing materials with the latest situation. By doing this regular process, in the last

three years, CETC manages to provide relevant training compatible with the latest situation for DGCE officers.

Sub-question 2: How is the DGCE and CETC coordinated?

Although organized under the same ministry, DGCE and CETC are separately coordinated under different echelon I units. Therefore, adequate IOC is required to deliver effective training. Based on the interviewees with key respondents from both units, it can be concluded that the IOC quality between DGCE and CETC is excellent.

All four effective IOC preconditions, namely incentives, willingness, ability, and coordination capacity (Einbinder et al. 2000) exist among two units. It is thanks to various elements underlying those preconditions, namely mandate (Oliver, as cited in Einbinder 2000: 121), common interest and interdependence (Gricar 1981; Logsdon 1991), firm leadership (Fried et al. 2005), solid mutual trust (Aghajani et al. 2014), frequent collecting thinking (Schopler 1987; Lawles and Moore 1989; Alter and Hage 1993; Einbinder et al. 2000; Aghajani et al. 2014), adequate resources (Lawless and Moore 1989) and organizational cultures (Schumacher 2002; Aghajani et al. 2014).

Sub-question 3: How do the training stakeholders perceive effective training?

The interviews results with seven CETC and DGCE officers show that both units have a comprehensive understanding regarding the importance of effective training. Their perceptions of effective training are proven in line with Dayal (2001) definition, which cover relevant training materials, applicable knowledge and skills, and competency improvement. This understanding is essential as the foundation of their efforts to formulate and organize effective training.

Sub-question 4: How effective is the existing training programs?

After assessing several elements in training effectiveness evaluation, it can be concluded that to some extent, the CETC training has been effectively organized. Although the fourth evaluation level (i.e., results) has not been conducted yet, the first-three evaluation steps (i.e., reaction, learning, and behaviour) yield quite satisfactorily results.

The reaction evaluation shows that most trainees were pleased with the training they attended. In addition, the learning evaluation displays delightful results as no single trainees failed to pass the programs. However, some problems emerged in the behaviour evaluation. From three indicators, only two of them can be considered satisfying.

First, regarding training materials, most alumni perceived that those materials are relevant in supporting their daily works. There was only a small number of alumni who felt that the contents are irrelevant, and it was very likely because

their positions were incompatible with their training. In the next variable, the CETC training has been proven successfully improving DGCE personnel's competencies. Furthermore, this claim seems trustworthy as it has been clarified to alumni's supervisors and colleagues.

Nevertheless, knowledge and skills implementation aspect should become a concern. Although most alumni claimed that they could implement training materials in their daily jobs, it seems that it still can be optimized. Furthermore, if it is looked from the post-training alumni placement, the number of alumni assigned in the appropriate positions based on their previous training were fewer than they who were not being appointed. Based on those two facts, it means that although several alumni could partly exercise the training materials, their knowledge and skills implementation seem have not reached the maximum level yet due to their inappropriate placement.

Central research question: "How do Training Needs Analysis and Inter-organizational Coordination between CETC and DGCE impacting current training effectiveness level?"

Considering those evidence, it can be concluded that the TNA process is the first factor that heavily affects the training effectiveness. Although DGCE TNA has encompassed organizational, jobs, and person analysis (Tannenbaum and Yukl 1992; Salas and Cannon-Bowers 2001; Goldstein and Ford 2002), the last factor was ineffectively conducted. This situation has brought adverse impact in both trainee selection and alumni utilization. If individual TNA comprehensively conducted, the trainee selection would be better, and therefore, the training would be more targeted (Tannenbaum and Yukl 1992; Wagonhurst 2002; Royster 2018). Consequently, the alumni would have no difficulties in implementing their knowledge and skills, and therefore, training can be considered more effective.

Then, the second influential training effectiveness factor is the IOC quality between CETC and DGCE. In this aspect, despite being separated under different echelon-one level organizations, both units surprisingly manage to have stupendous IOC level. Four IOC preconditions (i.e., incentive, willingness, ability, and coordination capacity) (Einbinder et al. 2000) are proven between both organizations. The presence of legal mandate, common interest and interdependence, strong leadership, solid mutual trust, collective thinking, adequate resources, and favorable organizational cultures serve as supporting factor for those IOC preconditions (Gricar 1981; Schopler 1987; Lawless and Moore 1989; Logsdon 1991; Alter and Hage 1993; Einbinder et al. 2000; Schumacher 2002; Fried et al. 2005; Aghajani et al. 2014).

In addition, the location factor and the use of formal and informal communication channels provide a significant contribution in enhancing the coordination capacity among the two units. In summary, the combination of those two factors and the four preconditions including the underlying factors behind them

have been proven significantly help CETC and DGCE maintain their solid coordination.

To put it in a nutshell, TNA and IOC do have impacts on the CETC training effectiveness. On the one hand, lack of understanding regarding the importance of individual analysis has made DGCE TNA adversely impacting training effectiveness by allowing employees to join unnecessary training, which ultimately leads them for having difficulties in utilizing their knowledge and skills in the post-training environment. On the other hand, solid IOC among CETC and DGCE has helped both units in formulating appropriate training design which encompasses relevant training materials and significant competency improvement.

Finally, if it is viewed from the larger context, at this rate, the CETC education and training programs are still the most favourable capacity building means for DGCE officers. The knowledge, skills, and attitudes taught during training are still highly essential in developing human resource capacity as well as propelling the shift towards learning organization (Garvin 1993; Bennet and O'Brien 1994). Knowing that it has been quite effectively organized, the current level of education and training provisions should be well-maintained and incrementally improved in order to achieve better future improvement.

6.2. Recommendations

Two primary recommendations are proposed in this paper. First, intensifying the internal coordination between the DGCE Headquarters with DGCE ROs and CSSOs in regions might give a positive impact on TNA formulation and post-training placement. Regarding TNA process, the DGCE EDD should emphasize the importance of TNA to all unit leaders, especially to direct supervisors who have responsibilities as the first assessor. Furthermore, the regular employee rotation should not be done close to the time when TNA is carried out. In addition, employee competency data should be regularly updated and distributed to DGCE ROs and CSSOs who serve as the next filters in the TNA process. By doing so, the DGCE TNA process is expected to be formulated more effectively.

Then, in terms of post-training placement, the DGCE should eradicate the overlapping authority between the DGCE ERS and ROs/CSSOs regarding personnel transfers. In addition, updated employee competency data should be used as the basis of rotation and promotion. In summary, the synthesis between effective TNA formulation and proper post-training placement might become the right formula in boosting the knowledge and skills implementation, and ultimately the training effectiveness level.

Second, considering several factors at the current situation, it seems that the first-three level of evaluation is sufficient for measuring CETC training effectiveness. Nevertheless, it does not rule out the possibility that the final step of

the evaluation process can be exercised in the future. Establishing a special post-training evaluation unit or division with adequate personnel, funding, and authority can be a good start. If this new unit can be materialized, its initial tasks should focus on conducting 'behaviour evaluation' for all training and also 'results evaluation' for several programs as pilot projects. Finally, if this Post-Training Evaluation Unit has been settled, it is not impossible for all programs to be fully evaluated up to the fourth level to get the best understanding on how effective those training in improving DGCE individual and organizational performance.

References

- Acemoglu, D. and J. Pischke (1998) 'Why do Firms Train? Theory and Evidence', *The Quarterly Journal of Economics* 113(1): 79-119.
- Aghajani, H., F. Amin and M. Abasgholipour (2014) 'Empirical Study on Interorganizational Coordination (Evidence Case: Organizations of Job and Employment in Iran)', *Iranian Journal of Management Studies* 7(2): 271.
- Ahwood, M. and S. Dimmoel (1999) '*Manajemen Personalia (Personnel Management)*', ITB Bandung.
- Alter, C. and J. Hage (1993) *Organizations Working Together*. Vol. 191. Sage Publications, Inc.
- Bennett, J.K. and M.J. O'Brien (1994) 'The Building Blocks of the Learning Organization.', *Training* 31(6): 41.
- Bramley, P. and B. Kitson (1994) 'Evaluating Training Against Business Criteria', *Journal of European Industrial Training* 18(1): 10-14.
- Chmielewski, T.L. and J.J. Phillips (2002) 'Measuring Return-on-Investment in Government: Issues and Procedures', *Public Personnel Management* 31(2): 225-237.
- Cohen, J.M. (1992) 'Foreign Advisors and Capacity Building: The Case of Kenya', *Public Administration and Development* 12(5): 493-510.
- Cohen, J.M. (1993) '*Building Sustainable Public Sector Managerial, Professional, and Technical Capacity: A Framework for Analysis and Intervention*', Harvard Institute for International Development.
- Cohen, J.M. (1995) 'Capacity Building in the Public Sector: A Focused Framework for Analysis and Action', *International Review of Administrative Sciences* 61(3): 407-422.
- Cummings, T.G. (1984) '*Transorganizational Development*', *Research in Organizational Behavior* 6: 367-422.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Laporan Evaluasi Pascadiklat DTSS Intelijen Taktis (Post-Training Evaluation Report for Tactical Intelligence Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Laporan Evaluasi Pascadiklat DTSS Layanan Informasi Contact Center (Post-Training Evaluation Report for Information Service-Contact Center Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Laporan Evaluasi Pascadiklat DTSS Pemeriksaan Barang Ekspor (Post-Training Evaluation Report for Exported Goods Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Laporan Evaluasi Pascadiklat DTSS Pemeriksaan Barang Impor (Post-Training Evaluation Report for Imported Goods Inspection Training)'.

- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Laporan Evaluasi Pascadiklat DTSS Pengawasan dan Penanganan Barang Berbahaya (Post-Training Evaluation Report for Dangerous Goods Supervision and Handling Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Laporan Evaluasi Pascadiklat Workshop Frontliner Indonesian Airport Customs (Post-Training Evaluation Report for Frontliner Indonesian Airport Customs Workshop)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Laporan Evaluasi Pascadiklat Workshop Monitoring Room Analis (Post-Training Evaluation Report for Monitoring Room Analyst Workshop)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Intelijen Taktis (Analysis of Training Organization Evaluation for Tactical Intelligence Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Layanan Informasi Contact Center (Analysis of Training Organization Evaluation for Information Service-Contact Center Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Pemeriksaan Barang Ekspor (Analysis of Training Organization Evaluation for Exported Goods Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Pemeriksaan Barang Impor (Analysis of Training Organization Evaluation for Imported Goods Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Pengawasan dan Penanganan Barang Berbahaya (Analysis of Training Organization Evaluation for Dangerous Goods Supervision and Handling Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat Workshop Frontliner Indonesian Airport Customs (Analysis of Training Organization Evaluation for Frontliner Indonesian Airport Customs Workshop)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2015) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat Workshop Monitoring Room Analis (Analysis of Training Organization Evaluation for Monitoring Room Analyst Workshop)'.

- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Laporan Evaluasi Pascadiklat DTSS Intelijen Analis (Post-Training Evaluation Report for Analyst Intelligence Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Laporan Evaluasi Pascadiklat DTSS Juru Sita Kepabeanan dan Cukai (Post-Training Evaluation Report for Customs and Excise Bailiff Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Laporan Evaluasi Pascadiklat DTSS Kepatuhan Internal (Post-Training Evaluation Report for Internal Compliance Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Laporan Evaluasi Pascadiklat DTSS Patroli dan Pemeriksaan Sarana Pengangkut Laut (Post-Training Evaluation Report for Sea Carrier Patrol and Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Laporan Evaluasi Pascadiklat DTSS Pelayanan Administrasi Manifes (Post-Training Evaluation Report for Manifest Administration Service Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Laporan Evaluasi Pascadiklat DTSS Pemeriksaan Sarana Pengangkut Udara (Post-Training Evaluation Report for Air Carrier Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Laporan Evaluasi Pascadiklat DTSS Penggunaan Pemindai Kabin dan Kargo (Post-Training Evaluation Report for The Use of Cabin and Cargo Scanner Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Intelijen Analis (Analysis of Training Organization Evaluation for Analyst Intelligence Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Juru Sita Kepabeanan dan Cukai (Analysis of Training Organization Evaluation for Customs and Excise Bailiff Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Kepatuhan Internal (Analysis of Training Organization Evaluation for Internal Compliance Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Patroli dan Pemeriksaan Sarana Pengangkut Laut (Analysis of Training Organization Evaluation for Sea Carrier Patrol and Inspection Training)'.

- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Pelayanan Administrasi Manifes (Analysis of Training Organization Evaluation for Manifest Administration Service Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Pemeriksaan Sarana Pengangkut Udara (Analysis of Training Organization Evaluation for Air Carrier Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2016) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Penggunaan Pemindai Kabin dan Kargo (Analysis of Training Organization Evaluation for The Use of Cabin and Cargo Scanner Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Laporan Evaluasi Pascadiklat DF Peneliti Dokumen Tingkat Ahli (Post-Training Evaluation Report for Expert Level Document Investigator Functional Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Laporan Evaluasi Pascadiklat DF Ketua Auditor (Post-Training Evaluation Report for Chief of Auditor Functional Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Laporan Evaluasi Pascadiklat DTSS Fasilitas Tempat Penimbunan Berikat dan Kemudahan Impor Tujuan Ekspor (Post-Training Evaluation Report for Bonded Stockpiling and the Ease of Importing for Export Purpose Facilities Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Laporan Evaluasi Pascadiklat DTSS Kepala Hanggar (Post-Training Evaluation Report for Head of Hangar Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Laporan Evaluasi Pascadiklat DTSS Pemeriksaan Barang Impor (Post-Training Evaluation Report for Imported Goods Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Laporan Evaluasi Pascadiklat Lokakarya Penyuluhan dan Layanan Informasi (Post-Training Evaluation Report for Counseling and Information Services Workshop)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Laporan Evaluasi Pascadiklat Lokakarya Intelijen Penumpang (Post-Training Evaluation Report for Passenger Intelligence Workshop)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DF Peneliti Dokumen Tingkat Ahli (Analysis of Training Organization Evaluation for Expert Level Document Investigator Functional Training)'.

- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DF Ketua Auditor (Analysis of Training Organization Evaluation for Chief of Auditor Functional Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Fasilitas Tempat Penimbunan Berikat dan Kemudahan Impor Tujuan Ekspor (Analysis of Training Organization Evaluation for Bonded Stockpiling and the Ease of Importing for Export Purpose Facilities Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Kepala Hanggar (Analysis of Training Organization Evaluation for Head of Hangar Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat DTSS Pemeriksaan Barang Impor (Analysis of Training Organization Evaluation for Imported Goods Inspection Training)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat Lokakarya Penyuluhan dan Layanan Informasi (Analysis of Training Organization Evaluation for Counselling and Information Services Workshop)'.
- Customs and Excise Training Center, The Ministry of Finance of Republic of Indonesia (2017) 'Hasil Analisis Evaluasi Penyelenggaraan Diklat Lokakarya Intelijen Penumpang (Analysis of Training Organization Evaluation Report for Passenger Intelligence Workshop)'.
- Dan, S. (2013) *'Theorizing Coordination: Towards a Novel Theoretical Framework'*. Paper prepared for EGPA Permanent Study Group VI, Governance of Public Sector Organization, Edinburgh. KU Leuven Public Management Institute.
- Dayal, I. (2001) 'Measuring Training Effectiveness', *Indian Journal of Industrial Relations* 36(3): 339-344.
- Directorate General of Customs and Excise (2018) 'Bimbingan Teknis Identifikasi Kebutuhan Diklat Tahun 2019 (Training Needs Analysis Technical Guidance)'.
- Driscoll, M., (2002) 'Blended learning: Let's get beyond the hype', *E-learning*, 1(4), pp.1-4.
- Einbinder, S.D., P.J. Robertson, A. Garcia, G. Vuckovic and R.J. Patti (2000) 'Interorganizational Collaboration in Social Service Organizations: A Study of the Prerequisites to Success', *Journal of Children and Poverty* 6(2): 119-140.
- Egeberg, M. (2007) 'How Bureaucratic Structure Matters: An Organizational Perspective', *Tradition and Public Administration. Basingstoke: Palgrave-MacMillan*: 77-87.

- Feldman, D.C. (1989) '*Socialization, Resocialization, and Training: Reframing the Research Agenda*.'
- Fried, B.J., C. Worthington, S.B. Gelmon, P. Leatt and R. Cockerill (1990) 'Determinants of Interorganizational Relationships among Canadian Acute Care Hospitals.', *Academy of Management Proceedings*, Academy of Management Briarcliff Manor, NY 10510 pp80-84.
- Garvin, D.A. (1993) Building a Learning Organization. Vol. 71. Harvard Business Review July-August.
- Goldstein, I.L. and J.K. Ford (2002) '*Training in Organizations: Needs Assessment, Development, and Evaluation*'. Wadsworth/Thomson Learning.
- Gricar, B. (1981) 'Fostering Collaboration among Organizations', *Making organizations humane and productive*: 403-420.
- Grindle, M.S. and M.E. Hilderbrand (1995) 'Building Sustainable Capacity in the Public Sector: What can be done?', *Public Administration and Development* 15(5): 441-463.
- Haines, A., S. Kuruvilla and M. Borchert (2004) 'Bridging the Implementation Gap between Knowledge and Action for Health', *Bulletin of the World Health Organization* 82: 724-731.
- Hall, R.H., J.P. Clark, P.C. Giordano, P.V. Johnson and M. Van Roekel (1977) 'Patterns of Interorganizational Relationships', *Administrative Science Quarterly*: 457-474.
- Kaufmann, F., G. Majone and V. Ostrom (1986) 'Experience, Theory and Design', *Guidance, control, and evaluation in the public sector. The Bielefeld Interdisciplinary Project*.
- Karabakkal, H. (2015) '*Needs Assessment in Training & Development*'.
- Kirkpatrick, D.L. and J.D. Kirkpatrick (2006) '*Evaluating Training Programs: The Four Levels* (Ed. III)', San Francisco: Berrett-Koehler Publishers.
- Kompasiana (2015) '*Siapa Pahlawan APBN Sebenarnya? Benarkah Orang Pajak?* (Who is the Real National Budget Hero? Is It Really the Taxman?), Kompasiana. Accessed 3 November 2018.
<https://www.kompasiana.com/sangpengamatapbn/siapa-pahlawan-apbn-sebenarnya-benarkah-orang-pajak_555470ba6523bd221e4aefac>
- LaFond, A., L. Brown (2003) 'A Guide to Monitoring and Evaluation of Capacity-Building Interventions in the Health Sector in Developing Countries', *Measures evaluation Manual Series* (7)
- Lawless, M.W. and R.A. Moore (1989) 'Interorganizational Systems in Public Service Delivery: A New Application of the Dynamic Network Framework', *Human Relations* 42(12): 1167-1184.
- Logsdon, J.M. (1991) 'Interests and Interdependence in the Formation of Social Problem-Solving Collaborations', *The Journal of applied behavioral science* 27(1): 23-37.
- Lubis, K.A. (2008) '*Pengaruh Pelatihan dan Motivasi Kerja Terhadap Kinerja Karyawan PT. Perkebunan Nusantara IV Medan* (Training and Working Motivation Effect towards Employee Performance in National Plantation IV Ltd. Medan)', *Master Thesis*. Medan: Universitas Sumatra Utara (North Sumatra University).

- Malone, T.W. and K. Crowston (1990) 'What is coordination theory and how can it help design cooperative work systems?', Proceedings of the 1990 ACM conference on Computer-supported cooperative work, ACM pp357-370.
- McGehee, W. and P.W. Thayer (1961) '*Training in Business and Industry*'.
- Meyers, M.K. (1993) 'Organizational Factors in the Integration of Services for Children', *Social Service Review* 67(4): 547-575.
- Ministry of Finance (2014) 'Peraturan Menteri Keuangan Republik Indonesia Nomor 37/PMK.012/2014 Tentang Pedoman Identifikasi Kebutuhan Pendidikan dan Pelatihan Non Gelar di Lingkungan Kementerian Keuangan (Minister Regulation Number 37/PMK.012/2014 Regarding Guidelines for Training Needs Analysis and Non-Degree Training in the Ministry of Finance)'.
- Ministry of Finance (2017) 'Peraturan Menteri Keuangan Republik Indonesia Nomor 212/PMK.01/2017 Tentang Perubahan Atas Peraturan Menteri Keuangan Nomor 234/PMK.01/2017 Tentang Organisasi dan Tata Kerja Kementerian Keuangan (Minister Regulation Number 212/PMK.01/2017 Regarding Changes of Minister Regulation Number 234/PMK.01/2015 Regarding Organization and Working Procedure of Ministry of Finance)'.
- Ministry of Finance (2017) '*Ringkasan APBN 2000 – 2017 (National Budget Summary 2000–2017)*', Accessed 3 November 2018.
<<http://www.data-apbn.kemenkeu.go.id/Dataset/Details/1011>>
- Ministry of Finance (2018) '*APBN 2018 (National Budget 2018)*', Accessed 3 November.
<<https://www.kemenkeu.go.id/apbn2018?>>
- Ministry of Finance Secretariat General Human Resources Bureau (2018) 'Komposisi Pegawai Kementerian Keuangan (Ministry of Finance Employee Composition)'. Accessed 1 November 2018.
<<http://www.sdm.kemenkeu.go.id/>>
- Ministry of Finance (2018) 'Struktur Organisasi Kementerian Keuangan (Ministry Organizational Structure)'. Accessed 1 November 2018.
<<https://www.kemenkeu.go.id/profil/struktur-organisasi-kementerian-keuangan/>>
- Mintzberg, H. (1979) '*The Structuring of Organizations*', Englewood Cliffs, NJ: Prentice Hall.
- Mondy, R.W., R.M. Noe, H.N. Mills and A. Sharplin (1984) '*Personnel, the Management of Human Resources*', Allyn & Bacon.
- Morgan, P. (1993) '*Capacity Building: An Overview*', Ottawa: CIDA.
- Moses, M. (2012) '*Pengaruh Pendidikan dan Pelatihan Penjurangan Terhadap Prestasi Kerja Pegawai Pada Dinas Koperasi dan UKM Kota Jayapura (The Impact of Education and Training towards Employees Achievement in Cooperative and Small-Medium Enterprises Department in Jayapura)*', *Prosiding Seminar dan Konferensi Nasional Manajemen Bisnis (Paper for National Business Management Seminar and Conference)*: 172-182.
- Nadler, Z. and L. Nadler (2012) '*Designing Training Programs*', Routledge.
- Nasution, S. (1995) '*Didaktik Asas-Asas Mengajar (Teaching Principles)*'. Bumi Aksara.

- Noe, R.A. (1986) 'Trainees' Attributes and Attitudes: Neglected Influences on Training Effectiveness', *Academy of management review* 11(4): 736-749.
- Organisation for Economic Co-operation and Development (OECD) (2006) *The Challenge of Capacity Development: Working Towards Good Practice*, Paris: Organisation for Economic Co-operation and Development.
- Pont, T. (2003) *Developing Effective Training Skills*. CIPD Publishing.
- Read, C.W. and B.H. Kleiner (1996) 'Which Training Methods are Effective?', *Management Development Review* 9(2): 24-29.
- Ring, P.S. and Van de Ven, A.H. (1994) 'Developmental Processes of Cooperative Interorganizational Relationships', *Academy of Management Review* 19(1): 90-118.
- Rogers, D.L. and C.L. Mulford (1982) 'The Historical Development', *Interorganization coordination: Theory, research, and implementation*: 32-53.
- Roesdi, R. (2008) *Pengaruh Pendidikan dan Pelatihan Dalam Meningkatkan Kualitas Kinerja SDM Pada Kantor Bea Cukai Bandar Lampung* (The Impact of Education and Training in Improving Human Resources Performance Quality in Customs and Excise Office Bandar Lampung), *Jurnal Bisnis dan Manajemen (Business and Management Journal)* 4(3): 295-313.
- Royster, R.M. (2018) 'Strategies for Selecting and Individualizing Training for Employee Positioning'.
- Sabitha, G. (2018) 'A Study of Training and Development and Its Impact on Employee Performance in HDFC Standard Life Insurance', *Journal for Studies in Management and Planning* 4(3): 269-285
- Salas, E. and J.A. Cannon-Bowers (2001) 'The Science of Training: A Decade of Progress', *Annual Review of Psychology* 52(1): 471-499.
- Salas, E., S.J. Weaver and M.L. Shuffler (2012) 'Learning, Training, and Development in Organizations', *The Oxford handbook of Organizational Psychology* 1: 330-372.
- Santhanam, I., N. Kisson, S.R. Kamath, S. Ranjit, J. Ramesh and J. Shankar (2009) 'GAP between Knowledge and Skills for the Implementation of the ACCM/PALS Septic Shock Guidelines in India: Is the Bridge Too Far?', *Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care Medicine* 13(2): 54-58.
- Schopler, J.H. (1987) 'Interorganizational Groups: Origins, Structure, and Outcomes', *Academy of Management Review* 12(4): 702-718.
- Senge, P. (1990) *The Fifth Discipline: The Art and Practice of Organizational Learning*, New York.
- Swanson, R.A. and C.M. Slezzer (1987) 'Training Effectiveness Evaluation', *Journal of European Industrial Training* 11(4): 7-16.
- Tan, J.A., R.J. Hall and C. Boyce (2003) 'The Role of Employee Reactions in Predicting Training Effectiveness', *Human Resource Development Quarterly* 14(4): 397-411.
- Tannenbaum, S.I. and G. Yukl (1992) 'Training and Development in Work Organizations', *Annual Review of Psychology* 43(1): 399-441.
- Van de Ven, A.H. (1976) 'On the Nature, Formation, and Maintenance of Relations among Organizations', *Academy of Management Review* 1(4): 24-36.
- Wagonhurst, C. (2002) 'Developing Effective Training Programs', *Journal of Research Administration* 33(2): 77.

- Whetten, D.A. and T.K. Leung (1979) 'The Instrumental Value of Interorganizational Relations: Antecedents and Consequences of Linkage Formation', *Academy of Management Journal* 22(2): 325-344.
- Williams, T. (2005) 'Cooperation by Design: Structure and Cooperation in Interorganizational Networks', *Journal of Business Research* 58(2): 223-231.

Appendix I

List of Key Interviewees

No.	Name	Position	Unit	Date of Interview
1.	Aziz Syamsu Arifin	Head of CETC Planning and Development Division and former Head of DGCE Employee Administration Division	CETC	7 September 2018
2.	Hendar Supriyati	Head of Training Program Subdivision	CETC	31 August 2018
3.	M. Yuli Akbar Daulay	Head of Training Curriculum Subdivision	CETC	16 August 2018
4.	Arfiansyah Darwin	Head of Teaching Staff Subdivision	CETC	9 August 2018
5.	Sisprian Subiaksono	Head of Employees Development-I Subdivision	DGCE	6 September 2018
6.	Muhammad Budy Hermanto	Head of Employees Rotation Subdivision	DGCE	24 September 2018
7.	Chairul Denyl Setyawan	Head of Training Organizer-I Subdivision	CETC	30 August 2018
8.	Rakhmi Khalidya	Head of Training Evaluation Subdivision	CETC	2 August 2018

Appendix II

List of Selected Training Organized during 2015-2017

No.	Training	Year	Duration	Learning Method	Trainees	Inter-viewed Alumni
1.	Tactical Intelligence	2015	19 days	Classroom & Simulation	30	1
2.	Information Service-Contact Center	2015	25 days	Classroom & Simulation	27	1
3.	Export Goods Inspection	2015	17 days	Classroom & Simulation	30	1
4.	Import Goods Inspection	2015	26 days	Classroom & Simulation	30	1
5.	Dangerous Goods Supervision and Handling	2015	15 days	Classroom & Simulation	30	2
6.	Frontliner Indonesian Airport Customs	2015	5 days	Interactive Classroom	29	1
7.	Monitoring Room Analyst	2015	5 days	Interactive Classroom	30	1
8.	Analyst Intelligence	2016	19 days	Frontal Classroom	30	2
9.	Customs and Excise Bailiff	2016	16 days	Frontal Classroom	30	1
10.	Air Carrier Inspection	2016	11 days	Classroom & Simulation	30	1
11.	Sea Carrier Patrol and Inspection	2016	25 days	Classroom & Simulation	30	1
12.	Manifest Administration Service	2016	11 days	Frontal Classroom	29	1
13.	Internal Compliance	2016	25 days	Frontal Classroom	24	1
14.	Use of Cabin and Cargo Scanner	2016	12 days	Classroom & Simulation	30	1
15.	Chief of Auditor	2017	5 days	Frontal Classroom	30	1
16.	Head of Hangar	2017	25 days	Frontal Classroom	30	1
17.	Expert Level Document Investigator	2017	22 days	Frontal Classroom	60 (2 batches)	2
18.	Import Goods Inspection	2017	26 days	Classroom & Simulation	59 (2 batches)	2
19.	TPB & KITE Facilities	2017	9 days	Classroom & Simulation	60 (2 batches)	2
20.	Counselling and Information Services	2017	5 days	Interactive Classroom	29	1
21.	Passenger Intelligence	2017	5 days	Interactive Classroom	30	1

Appendix III

Training Participants Satisfaction Index

No.	Name of Training	Materials	Committee Services	Evaluation	Facilities	Average	Description
1	Tactical Intelligence	4.46	4.44	4.59	4.31	4.45	Excellent
2	Information Service-Contact Center	4.14	4.14	4.2	4.02	4.13	Good
3	Export Goods Inspection	4.01	4.11	4.24	4.22	4.15	Good
4	Import Goods Inspection (2015)	4.32	4.48	4.11	4.32	4.31	Excellent
5	Dangerous Goods Supervision and Handling	4.34	4.23	4.32	4.17	4.27	Excellent
6	Frontliner Indonesian Airport Customs	4.5	4.34	4.27	4.1	4.30	Excellent
7	Monitoring Room Analyst	4.29	4.31	4.27	4.17	4.26	Excellent
8	Analyst Intelligence	4.52	4.53	4.53	4.54	4.53	Excellent
9	Customs and Excise Bailiff	4.5	4.58	4.55	4.44	4.52	Excellent
10	Air Carrier Inspection	4.44	4.43	4.43	4.18	4.37	Excellent
11	Sea Carrier Patrol and Inspection	4.3	4.33	4.43	4.32	4.35	Excellent
12	Manifest Administration Service	4.34	4.47	4.57	4.31	4.42	Excellent
13	Internal Compliance	4.42	4.31	4.4	4.3	4.36	Excellent
14	Use of Cabin and Cargo Scanner	4.51	4.47	4.58	4.35	4.48	Excellent
15	Chief of Auditor	4.19	4.27	3.85	4.13	4.11	Good
16	Head of Hangar	4.24	4.48	4.4	4.34	4.37	Excellent
17	Expert Level Document Investigator	4.39	4.35	4.38	4.23	4.34	Excellent
18	Import Goods Inspection (2017)	4.52	4.51	4.48	4.33	4.46	Excellent
19	TPB & KITE Facilities	4.4	4.35	4.19	4.27	4.30	Excellent
20	Counselling and Information Services	4.38	4.38	4	4.11	4.22	Excellent
21	Passenger Intelligence	4.16	4.28	4	4.12	4.14	Good
	Average	4.35	4.37	4.32	4.25	4.32	Excellent

Appendix IV

The alumni position comparison between Post-Training Evaluation and 2018

Alumni	Suitability between assignment and attended training after 3-6 months since training is over (2015 - 2017)	Transferred to other Units	Suitability between current assignment and previously attended training (2018)
No. 1	No	Yes	Yes
No. 2	Yes	Yes	Yes
No. 3	Yes	Yes	Yes
No. 4	No	Yes	No
No. 5	Yes	Yes	No
No. 6	No	Yes	No
No. 7	Yes	Yes	No
No. 8	No	Yes	No
No. 9	Yes	Yes	No
No. 10	Yes	Yes	No
No. 11	No	Yes	Yes
No. 12	Yes	Retired	Retired
No. 13	Yes	Yes	No
No. 14	No	Yes	No
No. 15	Yes	No	Yes
No. 16	No	Yes	Yes
No. 17	No	Yes	No
No. 18	No	Yes	No
No. 19	Yes	No	Yes
No. 20	No	Yes	No
No. 21	No	Yes	No
No. 22	No	Yes	Yes
No. 23	Yes	No	Yes
No. 24	Yes	No	Yes
No. 25	Yes	No	Yes
No. 26	Yes	No	Yes