

The problem of knowledge and experience transfer of Vocational Education in Thailand; In-depth Interview

Sumeena Dangchai¹, Pariyaporn Tungkunan², Boonchan Sisan³

^{1,2,3} Faculty of Industrial Education and Technology

King Mongkut's Institute of Technology Ladkrabang, Bangkok, 10520, THAILAND

*dangchai.su@gmail.com

ABSTRACT

This research aimed to study the problem of knowledge and experience transfer of Vocational Education in Thailand; In-depth Interview. The research instruments were semi-structured interviews and documentary study. Data analysis using content analysis techniques, a group of 20 key informants from educational institutions under the Office of Vocational Education Commission consisting of the school director or the deputy director of academic affairs of 10 people and the head of the department responsible for the course or the supervisor of the transfer of knowledge and experience, totalling 20 people. The results were found the following: 1. Educational personnel consisting of 1) Experience 2) Have knowledge, understanding, system to transfer knowledge and experience 3) Designation of responsible person 4) Personnel development related to the transfer 5) Supervision 6) Teachers 2. Management features consist of 1) Vision and Leadership 2) Focusing on the interests of learners 3) Motivating 3. Networking for educational institutions consisting of 1) Networking with communities 2) Networking with enterprises and industry 3) Create the cooperation with government agencies 4. The competency of educational institutions consisted of 1) rules, regulations and operating procedures 2) educational institutions have a quality assurance system 3) educational institutions are flexible 4) assessment criteria labour skill standards 5) Student manual 6) Educational Institutions should conduct research and development of a transfer calibration system 7) Information system.

Keywords

problem, knowledge and experience transfer, Vocational college in Thailand

Introduction

In the current situation, the world situation is changing rapidly, the Thai education system is imperative to keep up with the economic, social, political and cultural conditions. That changes will bring about the reform of Thai education. As can be seen from the National Education Act 1999 and the amendments (No. 2) BE 2545, the management model in a modified approach to keep pace with the changing of the current world situation. The decentralizing management of both the mission and the authority and responsibility.

The operating unit is responsible for organizing learning activities that are effective and most effective for the learners. Both academic budget, human resource, and democratic administration, which is a structured system that is closer to the people, rather than transparent. There is an opportunity to inspect the general office, which the decentralization of the education management is with the educational guidelines of the National Educational, Scientific and Cultural Organization.

That decentralized education will help education to be effective with the local economic, social and cultural conditions. The college talent and involvement in a decision-making system that leads to ideology rather than a centralized system of power.

The emphasis on policy unity and practice diversity due to the rapid changes in the world economy and modern technology, Thailand has to accelerate the development of the country therefore has a policy to drive the country and society of Thailand. The new economy develop competitiveness an important mechanism in driving the country's goals to achieve its objectives. The production of manpower have the knowledge base In accordance with the 12th National Economic and Social Development Plan [1].

The need for people of the vocational certificate level and the diploma level of the target audience. All are industry groups that are government policies and the private sector, ready to cooperate with the Vocational Education Commission [2] for vocational education as a vocational training. For life and preparing people for survival in society with the goal of producing manpower to have knowledge, ability, skills and positive attitude towards the profession.

The Education plan to develop people throughout their life [3] focus on Thais of all ages to get education and learning including the continuous development of essential skills throughout life that are flexible, diverse, easy to access, especially for the working age population. The avenues for education and learning In line with the strategy of human development to a lifelong learning society [3], aim to create a link between educational qualifications and operational competence to enable development in accordance with the concept of life-long education in Section 15 of the National Education Act 1999.

That a person can be educated both by the education system as well as being able to bring the accumulated academic results that can be compared and transferred [4] The Office of the Vocational Education Commission (OVEC) is responsible for managing vocational education in the government sector and having its own standards. And the Office of the Private Education Commission under the Ministry of Education. That is responsible for managing vocational education in the private sector Originally, it was not certified by VEC, but at present, a committee has been set up to create a common standard for both public and private sectors. By promoting and giving opportunities for people with knowledge and experience Work can apply for the transfer of learning outcomes and prior experience to credit for competency development Of their own until receiving the qualification By creating a guideline for the transfer of learning outcomes and work experience Performance standards compared to the transfer of knowledge and professional experience [2] but there has not yet been a central agency to act in rigorously matching and transferring learning outcomes and experiences. Which abroad, especially developed countries in

Europe and North America including the Common Wealth countries in the ASEAN region, there are also Malaysia and Singapore has a central agency that serves to transfer knowledge from educational qualifications and work experience. The creation of competency-based courses provide opportunities for those who are already working to improve their performance or to increase their professional qualifications. The level of knowledge and ability of working people resulting in better income and quality of life while the nation will have human resources that are continuously developed support the development of the country at a higher level. There is no problem with human resources, which in the years 2015-2017 consists of at least 30 million people working already employed, tens of times more than those in the vocational education system each year. It is a major problem facing Thailand at the moment [5]

In England, there is a case studies from a central organization called Office of qualification and testing (The Office of Qualification and Examinations Regulation) by requiring the Vocational Education Agency provide curriculum according to national occupation standards. And can transfer the learning that arises from the practice into credits or compared to transfer in reverse by working with the professional council by using the qualification and credit framework (QCF) as a qualification and credit transfer system. There are organizations that are recognized to be able to transfer qualifications (Awarding organization) and accredited test and training canter. Serves to assess knowledge and experience As well as providing training courses to enable learners to gain the professional qualifications they need the qualifications are defined as unit-based qualification units, which are defined as 1 credit equivalent to 10 learning hours. The information that will be used to be assessed from the requesting person for an assessment to compare knowledge and / or competence is stored in the Credit Bank for further assessment. Therefore, education and training are considered as investments. As such, they should provide a sufficient profit. It is necessary to access the skills which were developed during training and were eventually transferred to the workplace, in order to

investigate the profit and the effectiveness of the provided education. [6] many organizations are starting to tune into the concept of training transfer, till date there remains a dearth of practical strategies that organizations can implement to maximize the transfer and increase the impact of training. [7]

The factors affecting the implementation of knowledge and experience transfer were studied. In the context of vocational education and professional training of Australia until it was popular consists of time and personnel costs of the school. Experiences of personnel in educational institutions, government policies, networking obtaining the Trust of the Central Authority Supervision system of workplace trainers And criteria for assessing labour skill standards While the success factors of the vocational administration of the knowledge and experience transfer system [8], it was found that the success factors consist of: Economic linkages with stakeholders including government agencies must have real cooperation. The effectiveness of government funds and other sectors providing vocational education. Establishing cooperation between basic education and vocational training in a transferable manner and the development of educational institutions in cooperation with sustainable industries. There are also other elements. Related to the transfer of knowledge and experience Contains the credibility of the school and the course is properly accredited. The basic knowledge before entering the curriculum that requested to compare professional education qualifications. The qualifications of the students studying according to the curriculum, educational system, curriculum, courses studied according to the curriculum and academic results according to other regulations and conditions of that course. At present, there are only 57 educational institutions in Thailand that have comparable to the transfer of knowledge and experience. [2]. In addition, it was found that some of the educational establishments did not meet the specified

operational standards. [2], and there are still problems in the operation of the educational institutions that do not have the same standard due to the inaccuracies of each school and the unclear of different practices. The operating budget Lack of personnel responsible for direct knowledge transfer work Lack of documents and manuals Including the problems of public relations for recruiting that are not yet comprehensive [9]. The aforementioned problems may affect the reduction of educational institutions that manage to transfer knowledge and experience in the future and adversely affect the image and confidence of society towards the overall experience of the country's education management system [5].

The transfer of knowledge and experience is particularly necessary in a competitive socio-economic environment. That requires personnel with knowledge ability to keep up with change. The comparison of knowledge and experience transfer in addition to promoting further qualifications or further study in the future. It is also considered to elevate the value of the competent person to perform the task. The resource of the research issue that how is vocational education managed to transfer knowledge and experience? How is knowledge management in place to transfer knowledge and experience? And what factors are involved to make it successful? Knowledge of all 3 issues. It can be developed into a pattern and used as a guideline for applying it to educational institutes under Vocational Education. With an educational arrangement that is equivalent to transfer knowledge and experience. It will be very useful in academic circles and the Thai educational community to exchange and disseminate knowledge in the future. The Objective was aimed to study the problem of knowledge and experience transfer of Vocational Education in Thailand.

Literature Review

The researcher has studied the conceptual framework as follows.

1. The operations to transfer knowledge and experience

The researchers study operational guidelines to transfer knowledge and experience Office of the Vocational Education Commission [2] on criteria and the transfer of knowledge and course experience. Which has the following steps

Step 1: The educational institutions appoint a committee to examine the knowledge and experience of the subjects requested by the learners to transfer their knowledge and experience.

Step 2 provides the certified learners with the knowledge and experience of the course and register for an assessment of knowledge and experience.

Step 3: Educational institutions appoint a committee for assessing knowledge and subject experience.

Step 4: Educational institutions must keep documentary evidence for the process of transferring knowledge and course experience

2. To carry out education and transfer knowledge and experience both at Thailand and abroad.

Based on the academic concept and related research: CAEL [10], PAA / VQ [11], Emma Pollard [12]), Malaysia Qualification Age nay [13] and European Union [14] , the researcher can synthesize the transfer knowledge and experience are shown in Table 1.

Table 1 Synthesis of the process of transfer of knowledge and experience

No.	list	CAEL	PAA/VQ	Emma Pollard	MQA	European Union	frequency
1.	Prepare announcements and public relations	✓	✓	-	✓	✓	4
2.	Cooperate with the educational institutions that transfer the equation	-	-	✓	-	-	1
3.	Establishment - Support for the transfer of grades and experience	✓	✓	✓	-	-	3
4.	Orientation for learners to plan and manage assessments	✓	✓	✓	✓	✓	5
5.	Prepare an Evaluation Request Assessment Criteria Guide	✓	✓	-	✓	✓	4
6.	Submit a request for assessment In order to transfer knowledge and experience	✓	✓	-	✓	✓	4
7.	Make a resume	✓	✓	-	✓	✓	4
8.	Check the qualifications for basic knowledge and experience.	✓	✓	✓	✓	✓	5
9.	Name announcement Persons eligible for assessment	✓	✓	-	✓	✓	4
10.	Inform details of expenses / registration	✓	✓	✓	✓	✓	5

11.	Announcement of date, time and place That provides an assessment	✓	✓	✓	✓	✓	5
12.	Create incentives for each person to compare and transfer	-	✓	✓	-	-	2
13.	Carry out the transfer of knowledge and experience	✓	✓	✓	✓	✓	5
14.	Measurement and evaluation	✓	✓	✓	✓	✓	5
15.	Record evaluation traces with method of recording evaluation results.	✓	✓	-	✓	✓	4
16.	The committee reports the assessment results to organizations that have been accepted to certify the results of the transfer.	✓	✓	-	✓	✓	4
17.	Announcement of the comparison of knowledge and experience transfer / Record and transfer of knowledge and experience	✓	✓	-	✓	✓	4
18.	Define the duration of the academic results that have been transferred.	✓	-	✓	-	✓	3
19.	The assessor provides feedback. Discuss the results of the assessment and introduce credits Learning outcomes that are comparable	-	✓	✓	-	✓	3
20.	Registration, certification and issuance of the announcement	✓	✓	✓	✓	✓	5
21.	The appeal	-	✓	-	✓	-	2
22.	Preparation of information	✓	✓	-	-	✓	3

From the analysis of the concept of academics and various departments as above researchers choose a process to transfer knowledge and experience by using a frequency of 3 or more by applying for synthesis and grouped using the operational period as a basis synthesis is a practice approach to transfer knowledge and experience in 3 steps as follows:

Step 1 Preparation for the transfer of knowledge and experience

- 1.1 Prepare announcements and public relations
- 1.2 Notify details of expenses / registration
- 1.3 Notice of date, time and place that provides an assessment

Step 2 Guidelines before the transfer of knowledge and experience

- 2.1 Prepare an Evaluation Request for Assessment Criteria Manual
- 2.2 Submit a request for assessment In order to transfer knowledge and experience
- 2.3 Make a resume of applicants
- 2.4 Orientation for learners to plan and manage assessments

2.5 Check the qualifications of basic knowledge and experience.

2.6 Name announcement Persons eligible for assessment

Step 3 Guidelines between knowledge and experience transfer

- 3.1 Conduct a transfer of knowledge and experience
- 3.2 Measurement and evaluation
- 3.3 Record the traces of the assessment with the method of recording the evaluation results.
- 3.4 Reporting of assessment results to a recognized organization Certification of transfer results
- 3.5 Announcement of the results of knowledge and experience transfer

Step 4 the approach after the transfer of knowledge and experience.

- 4.1 Define the duration of the academic results that have been transferred.
- 4.2 The assessor gives feedback. Discuss the results of the assessment and introduce credits learning outcomes that are comparable
- 4.3 Registration for certification of the issuance of the announcement

4.4 Preparation of information

Methodology

The development of operating models to transfer knowledge and experience of educational institutions under the Vocational Education Commission, the researcher defines the research scope as follows.

The researcher study the state of operation problems, transfer knowledge and experience of educational institutions under the Office of the Vocational Education Commission

1. The informants

The main group of informants is 1) the 10 directors of the school or deputy directors of academic department. 2) the head of department responsible for courses or supervisors to transfer knowledge and experience in the educational institutions under the Office of Vocational Education Commission, totaling 20 people selecting by purposive sampling.

2. Research tools

The research instrument was a semi-structured interview by using the conceptual framework for operational research compared to transfer knowledge and experience.

3. The construction and quality of research tools as follow:

1) Study and research ideas, theories, research works and related theories documents.

2) Use the information to create the question of the interview.

3) Present the interview form to the thesis advisor and solve joint thesis advisor. And revise according to suggestions

4) Take the interview form offer to five experts to find the consistency of content and objectives.

4. Information Collection

For collecting data, the researcher was done as follows.

1) The researcher makes a letter requesting cooperation in collecting research data from the faculty industrial Education King Mongkut's Institute of Technology Ladkrabang with a group of 20 informants of 10 educational institutions

under the Vocational Education Commission in Thailand.

2) Researcher sends the questionnaires to 10 educational institutions under the Vocational Education Commission to the main informants.

3) The researcher investigate appoint a group of informants to collect data by interviewing.

4) The researcher investigate interviews and records.

Data Analysis

The researcher interviewed the informants and records data according from the topic as follow:

1. Educational personnel consisting of 1) Experience 2) Have knowledge, understanding, system to transfer knowledge and experience 3) Designation of responsible person 4) Personnel development related to the transfer 5) Supervision 6) Teachers

2. Management features consist of 1) Vision and Leadership 2) Focusing on the interests of learners 3) Motivating

3. Networking for educational institutions consisting of 1) Networking with communities 2) Networking with enterprises and industry 3) Building Cooperation with government agencies

4. The competency of educational institutions consisted of 1) rules, regulations and operating procedures 2) educational institutions have a quality assurance system 3) educational institutions are flexible 4) assessment criteria labor skill standards 5) Student manual 6) Educational Institutions should conduct research and development of a transfer calibration system 7) Information system.

5. After that the researcher collect the data and analysis by using the Content Analysis method.

Results

The part of the interviews	The Interviews' Synthesis
1. Education personnel	
1.1 Experience	<ol style="list-style-type: none">1. Personnel and teachers involved in teaching and learning / transfer of knowledge and experience should have experience, receive training and development or study visit in teaching and learning management compared to transfer of knowledge and experience.2. Teachers should have experience in joining the qualifications audit committee or knowledge and experience assessment committee.3. Teachers or assessment committee should have knowledge, expertise and experience. The courses that are equivalent to transfer knowledge and experience in order to be able to assess according to the course performance and able to suggest additional solutions or exchange knowledge with the assessed participants.
1.2 There is knowledge and understanding of the system to transfer knowledge and experience.	<ol style="list-style-type: none">1. Personnel must have knowledge and understanding of procedures, principles and methods of organizing group studies to compare and transfer knowledge and experience correctly in accordance with the guidelines of the Office of Vocational Education Standards. Office of the Vocational Education Commission.2. Teachers should have educational qualifications corresponds to the field of study that provides teaching and transfer of knowledge and experience.3. Teachers should be able to analyse course competencies and Knowledge examination and measurement and evaluation.4. Personnel must have knowledge. Understanding of the curriculum and able to arrange study plans correctly in accordance with the practice of the Vocational Education Standards Institute Office of the Vocational Education Commission.5. Personnel must be able to develop a variety of assessment tools that covered according to the specified course performance Standardized and verifiable.
1.3 Designation of responsible person	<ol style="list-style-type: none">1. Academic Deputy, Head of Curriculum Development Head of Department that organizes group instruction to transfer knowledge and experience.2. Officials to prepare documents and evidences follow the right steps since the application process between study and graduation and to keep documentary evidence to support the audit.3. Appoint committees to execute various procedures and

methods and group teaching and learning to transfer knowledge and experience in accordance with the guidelines of the Office of Vocational Education Standards of the Office of the Vocational Education Commission.

1.4 Human resource development related to transfer equivalents

1. Promote and support relevant personnel to receive training and development or study visit in teaching and learning management compared to transfer of knowledge and experience.
2. Make a guideline manual and meeting for clarification build understanding of relevant personnel able to practice teaching groups to compare and transfer knowledge and experience correctly.
3. Promote and support further education in order to develop knowledge and experience to be applied in the assessment of knowledge and experience transfer.
4. Encourage training experience in the workplace during the holidays to learn from real experiences in various technologies to be up to date at all times.

1.5 Supervision

1. There is an appointment of the teaching and learning supervision committee within educational institutions and performance in the workplace In order to use the information obtained for evaluation. And use it to improve to develop effective teaching and learning management able to produce manpower to meet the needs of the next establishment.
2. Support and promotion in sending the supervision committee to receive training or study visit. In the workplace to increase knowledge and experience.
3. Invite external speakers to provide knowledge to enhance their skills and specific skills.

1.6 Teachers

1. Should have a good attitude and accept the change. And not attached to the normal teaching and learning systems alone.
 2. Be enthusiastic in the study of knowledge guideline and how to manage group instruction to transfer knowledge and experience. To perform the job properly.
 3. Should have knowledge and expertise in the professional field that provides group teaching and transfer knowledge and experience.
 4. Understand roles Warranted and perform duties with willingness.
 5. Experience and professional skills corresponds to the subjects assessed against the transfer of knowledge and experience.
 6. Able to design learning management. Measurement and evaluation Suitable for students.
 7. There is morals, ethics and ethics according to professional standards.
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2. Executive features

2.1 Vision and leadership

1. There should be a policy to promote, support, monitor and evaluate. Teaching and learning management to transfer knowledge and experience and use the assessment results to further develop the teaching and learning management.
2. To be a leader in coordinating with businesses to honour and build credibility Make establishments believe in managing and teaching together.
3. Knowledge and understanding promote the procurement of materials and equipment for use in teaching and learning management. It is sufficiently modern and efficient.
4. Manage the compensation budget for the personnel concerned to be sufficient and appropriate.
5. Knowledge and understanding of procedures and methods Group teaching and learning to transfer knowledge and experience In accordance with the guidelines of the Office of Vocational Education Standards of the Office of the Vocational Education Commission.
6. Attention, supervision and follow-up of operations in order to provide advice, advice and solve problems that may arise in a timely manner.
7. Set an example of being a good publicist. To reach the target audience and increase the number of learners
8. Support and promote the development of personnel involved in training, study and study tours in group teaching and transfer of knowledge and experience
9. Have a good attitude towards teaching and learning as compared to knowledge and experience transfer.

2.2 Determining the benefits of learners

1. Learners can apply knowledge and experience. Including new skills necessary for the job can be applied in their professional development
2. Develop learners to be good people. Able to adjust to live happily with others in society
3. Use the qualifications obtained to adjust the salary. Promoting positions or examinations filling in a stable and progressive career
4. To organize teaching and learning by encouraging learners to develop themselves according to their potential.

2.3 Motivation

1. Allocate adequate and appropriate compensation budget to relevant personnel.
 2. Duration of teaching and learning in accordance with regulations but flexible, suitable for the situation and students.
 3. Facilitate management, consultation, suggestion and problem solving.
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4. Purchasing adequate and up-to-date materials and equipment for teaching and learning.
 5. Find successful people for examples for teachers and learners.
 6. Bring the performance of teaching and learning management and transfer to be part of the criteria for evaluating performance.
 7. Point out the goals and achievements of the working group and group learners to transfer knowledge and experience.
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3. Establishing a network of educational institutes

3.1 Building a network of cooperation with communities

1. Signed cooperation for teaching and learning curriculum to be in line with the community context. Including the sharing of resources such as buildings, personnel, etc.
 2. Invitation to a meeting of community representatives to discuss Curriculum development and exchange knowledge between communities and schools.
 3. Bring local wisdom to be a part of teaching and learning management.
 4. Visit to build relationships on important occasions.
 5. Invite experts from the community to join the test or join the assessor.
 6. Issuing a service unit with the community Formal and informal.
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3.2 Network with establishments and industrial sectors

1. Signed cooperation on teaching and learning curriculum to be in line with the industry context. Able to produce manpower to meet the needs of the labour market. In which details are clearly defined in the joint teaching and learning arrangement including the sharing of resources such as buildings, personnel, etc.
 2. Provide training for teachers in the workplace.
 3. Enterprises and industry to participate as a speaker. To learners
 4. Invite experts from the establishment to join the test or join as an assessor.
 5. Provide the establishment to certify the qualifications of the employees who come to study with the transfer of knowledge and experience.
 6. Provide teachers with study visits and work experience training in the workplace.
 7. Invite enterprises and industry to participate in activities of educational institutions.
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3.3 Create cooperation with government agencies

1. Signed cooperation on teaching and learning courses. In which details are clearly defined in the joint teaching and learning arrangement including the use of shared resources such as buildings materials - equipment, personnel, etc.
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2. Invite experts from government agencies to join the test or join the assessor.
3. Invite government agencies to take part in being a speaker for learners.
4. Invite government agencies to participate in activities of educational institutes and educational institutions to participate in government agencies that are networked.

4. Competency of educational institutions

4.1 rules, regulations and procedures

1. Set the qualifications of learners clearly according to the requirements of the Bureau of Vocational Standards. Especially in the field of work experience. Those who wish to study vocational courses. There must have 3 years of work experience and those wishing to study a vocational program must have 2 years of work experience.
2. Course knowledge and experience transfer can be transferred to two thirds of the course
3. Learners must pass the qualification examination by the preliminary assessment committee.
4. There is an assessment committee in conjunction with the establishment. In removing lessons from work experience. To compare courses and prepare academic results
5. Declare clear procedures, deadlines, locations and the responsible person or committee.
6. Apply modern technology in teaching and learning.
7. There is a meeting to discuss those involved in the preparation, development of the curriculum. Including the definition of course competencies
8. Duration and costs. The teaching and learning management should be flexible according to the needs of the learners.

4.2 Educational institutions have a quality assurance system.

1. There is a standard set of educational institutions make quality assurance indicators (KPIs) and assess.
2. Bring quality assessment criteria to be included in planning to be in line with teaching and learning management.
3. There are professional service activities to the community.
4. Make information and information for reporting.
5. There is a systematic process of collecting information, monitoring, evaluating and reporting results.

4.3 Educational institutions are flexible

1. Should be set to allow students to pay instalments for enrolments.
2. Determine the students to be able to dress in staff uniform to attend.

3. Adjust learning methods changing teaching methods to suit the students by studying in a classroom with self-learning and online learning.
4. Adjust the methods, tools for the calibration of the transfer. And measurement and evaluation to suit the students.

4.4 Evaluation criteria Labour skill standards

1. Use the criteria for assessing the performance of each course.
2. Support and encourage the graduates and take the labour skill standard test in order to certify the quality of the graduates from outside agencies.

4.5 Student manual

Define the learners' schedule, procedures and practices since enrolment until graduation clearly such as study plans, registration methods, payment, activities, learning forms, transfer rules, etc.

4.6 Educational institutions should conduct research and develop a transfer system.

1. The satisfaction of learners with teaching and learning should be assessed to bring results to be used in the development Forms and methods of teaching and learning
2. There should be a learning management plan. To suit individual learners
3. The achievement of graduates should be measured. To be used in the development of teaching and learning management to be accepted by external agencies

4.7 Information system

1. It should be up to date, interesting, complete with information and up to date, and easy to understand.
2. Personnel involved in duties should have knowledge and creativity in the preparation or development of the system

Discussions

This research study the problem of knowledge and experience transfer of Vocational Education in Thailand under the Vocational Education Commission. The results of the research were as follows:

1. Education personnel consisted of 1) Experience 2) Knowledge, understanding, knowledge transfer system and experience 3) Designation of responsible person 4) Human resource development related to transfer 5) Supervision 6) Teachers consistent with the research of Wan Hanim Nadrah binti Wan Muda, et. al. [15]

studied the leadership 4.0 in technical and vocational education and training institution founded that the Technical and Vocational Education and Training (TVET) Institution play an important role in preparing youth to enter the workforce and in improving their employability throughout their careers and Vocational education in the industrial revolution era 4.0 needs to get support from various parties in order to have a major contribution in economic development. [16]

2. Management characteristics consisted of 1) Vision and Leadership 2) Focusing on the benefits of learners 3) Motivation because the management must think for benefits of learners consistent with Lai Chee Sern [17] stated that the poor service quality perceived is probably due to inadequate systems, or inadequate management or staff

training, rather than failure to meet specific needs of students from different demographic types. Recommendations are provided for overcoming the poor service, and for further research.

3. Networking for schools consisted of 1) Networking with community cooperation. 2) Create networks with establishments and industry 3) Create the cooperation with government agencies consistent with Wan Azlinda Wan Mohamed and others [18] found that the work-based learning may facilitate in developing the problem solving skills in students. Thus, the strengthening cooperation between industries and training institutions is essential in order to benefit students, the future workers of tomorrow.

4. The competency of educational institutions consists of 1) rules, regulations and operating procedures. 2) Educational institutions have an operating system quality assurance 3) Educational institutions are flexible 4) Evaluation criteria Skill Standards 5) Learners' Handbooks 6) Educational institutions should conduct research and development of a transfer calibration system 7) Information systems consistent with the research by Gitashree Gogoi. [19] said due to the multiple growths in vocational field the work has more comprehensive and extended. Students are struggling to choose right types occupation or vocation according to their abilities or potentialities. And Heilmeier, Sonja, and Health, Nick. [20]. an assessment to transfer the results of a student education to the University of Simon Fraser, Canada in 1998. The research report found that 400 college graduates in British Columbia the results can be transferred up to 85.2% of the total number of credits to be studied. The average is 8.3 for transfer students. Per student who cannot transfer the results of studies the primary reason that students' academic results cannot be transferred is because the courses and content do not match with the course and subject matter of the study plan in the university. Some students transfer the results of the transferred courses more than necessary because the weight of the transfer in each course is not the same it depends on the course-based study plan. Which most of the fields of study that students choose not able to transfer academic results as required by the university.

Conclusion

The results were found the following:

1. Educational personnel consisting of 1) Experience 2) Have knowledge, understanding, system to transfer knowledge and experience 3) Designation of responsible person 4) Personnel development related to the transfer 5) Supervision 6) Teachers
2. Management features consist of 1) Vision and Leadership 2) Focusing on the interests of learners 3) Motivating
3. Networking for educational institutions consisting of 1) Networking with communities 2) Networking with enterprises and industry 3) Create the cooperation with government agencies
4. The competency of educational institutions consisted of 1) rules, regulations and operating procedures 2) educational institutions have a quality assurance system 3) educational institutions are flexible 4) assessment criteria labour skill standards 5) Student manual 6) Educational Institutions should conduct research and development of a transfer calibration system 7) Information system.

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References

- [1] Office of the National Economic and Social Development Board. (2011). Economic Development Plan and National Society No. 10 (2007-2011). Bangkok: Office of the Prime Minister.
- [2] Vocational Education Commission (2014). Process development education report. Compare the transfer of professional experience into the system of professional qualifications, Bangkok: Office of the Commission Vocational Education Ministry of Education.
- [3] Office of the Education Council (2013). Research report on the future of production and development of vocational

- workforce according to the labour market demand and national development direction. 1st edition Nonthaburi : Printing House 21 Century
- [4] Office of the Education Council. (2005). National Qualifications Framework 1st edition, Bangkok: Office of the Education Council Secretariat
- [5] Apichai Pansen et al. (2017). Complete report. Development of a system of treasury credits for Knowledge transfer Skills to raise the level of skill standardized labor or education at a higher level. Research Fund (TRF).
- [6] Vasiliki Brinia and Maria Efstathiou (2013). Relationships between factors affecting the transfer of vocational safety training in the workplace: the case study of aluminium of Greece. Journal of Technical Education and Training (JTET) Vol. 5, No.2| December 2013.
- [7] Rajaprasad, S.V.S . & Chalapathi, P.V.(2016). Quality function deployment method for ascertaining influential factors on transfer of safety training skills in Indian construction organizations. Journal of Technical Education and Training (JTET). Vol. 8, No.1| June 2016.
- [8] Puckett, J., Davidson, J., and Lee, E. (2012). Vocational Education The missing Link in Economic Development.” Dallas :The Boston Consulting Group. Inc.
- [9] Jutharat Newamat (2008). “Evaluation of the knowledge and experience transfer of the college.Under Vocational Education Kamphaeng Phet Province. ”Master of Education Thesis Education assessment field. Graduate School: Sukhothai Thammathirat Open University.
- [10] Cael (2019), Competency-Based Degree Programs in the U.S. Council for Adult and Experiential Learning.
- [11] PAA/VQ-SET. (2012). Guide for Centre’s Achieving QCF Centre Recognition (Online). <http://www.paa-uk.org/Centres/New%20Centres/QCF/QCF%20Guide%20for%20Centres%20QP2.23%20July%202012.pdf>. June 21,2018
- [12] Emma Pollard, Kari Hadjivassiliou, Sam Swift and Martha. (2017).). Credit Transfer in Higher Education A review of the literature March 2017.Green-Institute for Employment Studies. <https://www.employment-studies.co.uk/23,2018>.
- [13] Malaysian Qualification Agency. (2011). Code of Practice for Programmed Accreditation.2nd edition.
- [14] European Union (2018), European Union. (2018). The European Qualifications Framework: Supporting Learning, work and cross-border mobility. 1st edition, Luxembourg: Publications office of the European Union.
- [15] Wan Hanim Nadrah binti Wan Muda, et. al. Leadership 4.0 In Technical And Vocational Education And Training Institution. *PSYCHOLOGY AND EDUCATION* (2021) 58(3):3733-3739
- [16] Yoto, Marsono and Bella Cornelia Tjiptady. (2021) Model For Development Of Students 'Capability In Industry Practices In Era 4.0. *PSYCHOLOGY AND EDUCATION* (2021) 58(1): 3268-3275
- [17] Sern, L. C. (2010). Learning with worked-out problems: the impacts of instructional explanation and self-explanation prompts on transfer performance. Journal of Technical Education and Training, 2(2). Retrieved from <https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/299>
- [18] Wan Mohamed, W. A., Omar, B., & Romli, M. F. R. (2010). Developing problem solving skills for lifelong learning through work-based learning among community college students. Journal of Technical Education and Training, 2(1). Retrieved from <https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/288>

- [19] Gitashree Gogoi. (2020). A Study on Vocational Guidance and needs of Vocational Guidance towards secondary level students with reference to Sivasagar District, Assam. *PSYCHOLOGY AND EDUCATION* (2020) 57(9): 1552-1554
- [20] Heilmeier, Sonja, and Health, Nick (2000). . "Transfer Credit Evaluation of Students Entering Simon Year 1998." Simon Fraser University (Canada). {Online}. Access 1 June 2019. Available from <http://www.bccat.bc.ca.com>.