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Development of Learning Spaces for Students in the Tourism and Hospitality Professions

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Abstract

The objectives of this research were to 1) to develop learning spaces for tourism and hospitality students and 2) to develop the courses to strengthen the skills of students in the tourism and hospitality professions who are studying in learning spaces with the integration of the Science of Learning at the curriculum level, namely the tourism courses and other courses offered at the University of Phayao. Qualitative research using purposive random sampling with a total of not less than 30 people. satisfaction of participants in learning space development for tourism and hospitality professionals was divided into three parts: Part 1General information Part 2 Assessment of satisfaction of participants in learning space development for tourism and hospitality professionals Part 3 General recommendations. Consideration of the content validity was conducted by finding the Index of Objective Congruence (IOC) between 0.60 - 1.00. Based on the results of the study, it was found that 1. Learning skills and innovation - Creativity/problem-solving/Communication and working with other people is as follows: Overall, it was indicated that there is satisfaction at a high level 1.1 Content is in line with the principles and objectives of learning development, Content is in line with the activities of learning development and The arrangement by priority of the content of activities is appropriate. The tourism and hospitality courses that assist in the improvement and development of the skills students can be suummarized as follows: 1. Herbs for tourism courses, 2. Recreation for tourism courses, 3. Flower arrangement for hospitality courses, and 4. Development courses for local souvenirs that are unique to the identity of Phayao province.

Keywords: Development, Learning space, The tourism and hospitality professions, Students

Introduction

The Liberal Arts program, Department of Tourism, School of Business and Communication Arts, University of Phayao opened bachelor's degree level classes in the year 2002 with each year, an average of 90 students graduating from the Department of Tourism and entering professional work in tourism and hospitality or various service industries, such as tour operators, hotels, spas, airlines, etc. However, in current circumstances, there are a number of factors that occur which greatly impact the tourism industry of countries, from the progress of science and technology to the COVID-19 pandemic that has had a major impact around the world. These factors cause the style and needs of consumers to change. Curriculum development and creation of learning spaces for Hospitality and Tourism students is therefore a major necessity so that students and interested persons can gain new knowledge that is up-to-date with the changes in the world by the development of learning spaces for students in the tourism and hospitality professions from the Department of Tourism and students from other departments who are interested. There is a strong necessity to be prepared for the efficient producing of personnel in tourism and hospitality who are able to enter the workforce. This is in line with the learning targets of the 21st century, which include having personnel in the tourism and hospitality profession that have the potential ability to be a force in driving the sustainable growth of this industry in the future.

The objectives of this research project on development of learning spaces for students in the tourism and hospitality professions were 1) to develop learning spaces for tourism and hospitality students and 2) to

develop the courses to strengthen the skills of students in the tourism and hospitality professions who are studying in learning spaces with the integration of the Science of Learning at the curriculum level, namely the tourism courses and other courses offered at the University of Phayao. These goals will enable students to have multidisciplinary knowledge and the ability to apply knowledge from various activities organized in learning spaces in their careers in the future.

Literature review

2.1 Concepts related to learning spaces

Learning can happen any place, any time, whether in educational institutes, restaurants, cafés, a corner in a public park, bookstores, educational institutes or other locations, and must encourage advanced learning and life skills that are important and necessary. Thus, the design and management of learning spaces creates areas that allow people to gather together for learning and the exchange of ideas. The term "learning spaces" has been defined by academic institutions and scholars as follows.

Oblinger (2006) mentioned that learning is the principal activity of colleges and universities with learning sometimes occurring in classrooms (educational) and sometimes from communication with interpersonal interaction (informal education). An area, whether a physical space or a virtual space, may affect learning because it can bring people together, encourage exploration, create cooperation, and facilitate discussion of various issues as well as include information that is not mentioned in classrooms for discussion in order to create continuous learning.

The Office of the Learning Park (2015) proposed that learning spaces are areas where the public can study, do research, and discover the world. Learning occurs through play or artistic activities, courses, reading and media use as well as other types of informal activities through a variety of formats such as e-learning, lectures and presentations.

Soonpan (2013) mentioned that learning spaces can be divided into physical spaces and virtual spaces. For physical spaces, light, sound and air quality will be considered, whereas for virtual spaces, availability and accessibility of information technology are important. The learning that occurs in the present time and the future will be an interconnection between physical areas and virtual spaces. In addition, the dimension of learning of the students, especially in higher education, will be viewed as the dimension of "classroom" with expansion to "building", "campus" and "city". Also, there is another space that is located outside classrooms that should be given attention, which is "in-between" spaces, which may be located between classrooms, between buildings, between campuses, or even between cities. These are social spaces allowing learners to have interactions that result in informal learning, which promotes and supports formal learning.

Therefore, the phrase "learning spaces" refers to physical areas and virtual spaces where learners are able to study, do research and have discussions among themselves or between learners and teachers and encourage learning and life skills that are important and necessary. Learning spaces will be in educational institutes, restaurants, cafés, bookstores, a corner in a public park, or expanded to the entire city to become a Learning City. Aungchokchai (2017) added that the real classroom of humans is the environment that surrounds us and continually allows humans to have many experiences, affect development, and modify behaviors in numerous dimensions or informal learning spaces.

2.2 Informal Learning Spaces

The terms "informal learning spaces" and "learning spaces" are sometimes understood to have the same meaning; however, if the details are considered, it can be seen that learning spaces are explained as concrete spatial forms, such as classrooms, libraries, and online communities, whereas informal learning spaces do not give importance to tangible areas but focus on generating learning with the senses or creation of interaction as the key factors. Thus, learning in informal learning spaces may occur continually all of the time whatever the location. Uskov et al. (2015) mentioned that informal learning spaces must be areas where people have freedom in learning based on targets of their own. However, learning that occurs must be through a process that includes interaction with other things around us by using all five senses, namely sight, touch, hearing, smell, and taste. Informal learning spaces may be a place, area, environment or any learning resource, both in the real world or the virtual world, that people are able to access in order to independently seek knowledge according to their needs based on satisfaction. In addition, Aungchokchai (2017) synthesized the data related to the characteristics of informal learning spaces that result in benefits for learning from both scholars in Thailand, such as Rommayanon (2014), and international scholars such as Riddle & Souter (2012) and Ben (2015), and then summarized the benefits as follows: 1) leads to people's desired targets, 2) maintains people's identity 3) provides learning communities, 4). are flexible and unlimited in terms of time, and 5) provide an atmosphere of learning.

2.3 Human-centered design

This type of design is based on the principle of humans and the needs of users. Humans have primary needs that can be divided into two categories, which are 1) physical needs and 2) needs related to moods or emotional needs. In order to respond to these needs, a design that promotes an efficient learning process (cognitive effectiveness) should: 1) promote the creation of social interactions between users (social support), 2) result in emotional satisfaction (emotional functioning), and 3) be able to respond to physical needs (physical function).

If an environment is not able to respond to these needs, it will cause users to feel uncomfortable and unhappy. If it is an environment for learning, it may result in working without concentration and not being able to gain any benefits at all from that learning (Heewargen, 1998). According to the important principles of human learning, the brain and the mind are interrelated. Learning is a physical process and a social process occurring when there is interaction with other people. These two factors will be inseparable among the things that learners are interested in and their perception of the environment or external stimuli that impact each other. Learning occurs all of the time, during the times of both consciousness and unconsciousness, as the environment affects learning in every field (Caine et al, 2004).

The use of human-centered design principles with education comprises many concepts, namely 1) an environment that promotes learning and recognition (Kaplan & Kaplan, 1982), 2) concepts of promoting the building of relationships (social support), and 3) an increase in emotional satisfaction (emotional functions) (Jordan, 2000). These proposed concepts are related to creation of satisfaction. The design can be divided into three levels: level 1 – benefits received from use (functionality), level 2 – in addition to being useful, it must be easy to use (usability), and level 3 – the design provides satisfaction and appreciation during use (pleasure) (Blackmore et al, 2011). Nevertheless, the concept of spatial design should start from the learning objectives based on the courses, which determines the behaviors and activities that provide a response based on the activities and design environment according to the design theory that is effective and relevant for successful and fit-for-purpose work (Crawley et al, 2008).

2.4 ASEAN Mutual Recognition Arrangements on Tourism Professionals (ASEAN MRA on TP: MRA-TP)

The ASEAN Mutual Recognition Arrangements on Tourism Professionals (ASEAN MRA on TP: MRA-TP) was arranged by a consensus of all 10 member countries of the Association of Southeast Asian Nations (ASEAN) with the objective to facilitate convenience in the mobility of tourism professionals between ASEAN member countries in order to exchange information and best practices and raise the level of capability and potential of tourism personnel in member countries to the international level for the work positions that improve and develop personnel in the tourism industry under the Agreement as mentioned. However, the occupation of tour guide is not included as it is a profession reserved for Thai people only. Presently, human resource development in the tourism industry under the Agreement is conducted in two branches, six departments, and 32 work positions. Those that pass the assessment of capability and are given the ASEAN Tourism Personnel Standards Certificate are referred to as ASEAN Tourism Professionals (ATP). This enables them to register in the ASEAN Tourism Professional Registration System (ATPRS), which functions as an intermediary between ASEAN tourism professionals (ATP) and employers in the tourism industry in ASEAN member countries for job matching, which employers can use to search for and contact ASEAN tourism professionals that have the qualifications that meet the requirements. Moreover, ASEAN tourism professionals (ATP) can apply for vacancies announced by employers, and those who have be given the standards certificate as mentioned have the right to travel for work in ASEAN member countries. However, they must also comply with the regulations and related terms of the countries where they go to work. In addition, the Department of Tourism, Ministry of Tourism and Sports of Thailand is currently in discussion with related agencies to determine the rights and benefits for those that have received the ASEAN Tourism Personnel Certification, such as special compensation, etc.

Conceptual framework

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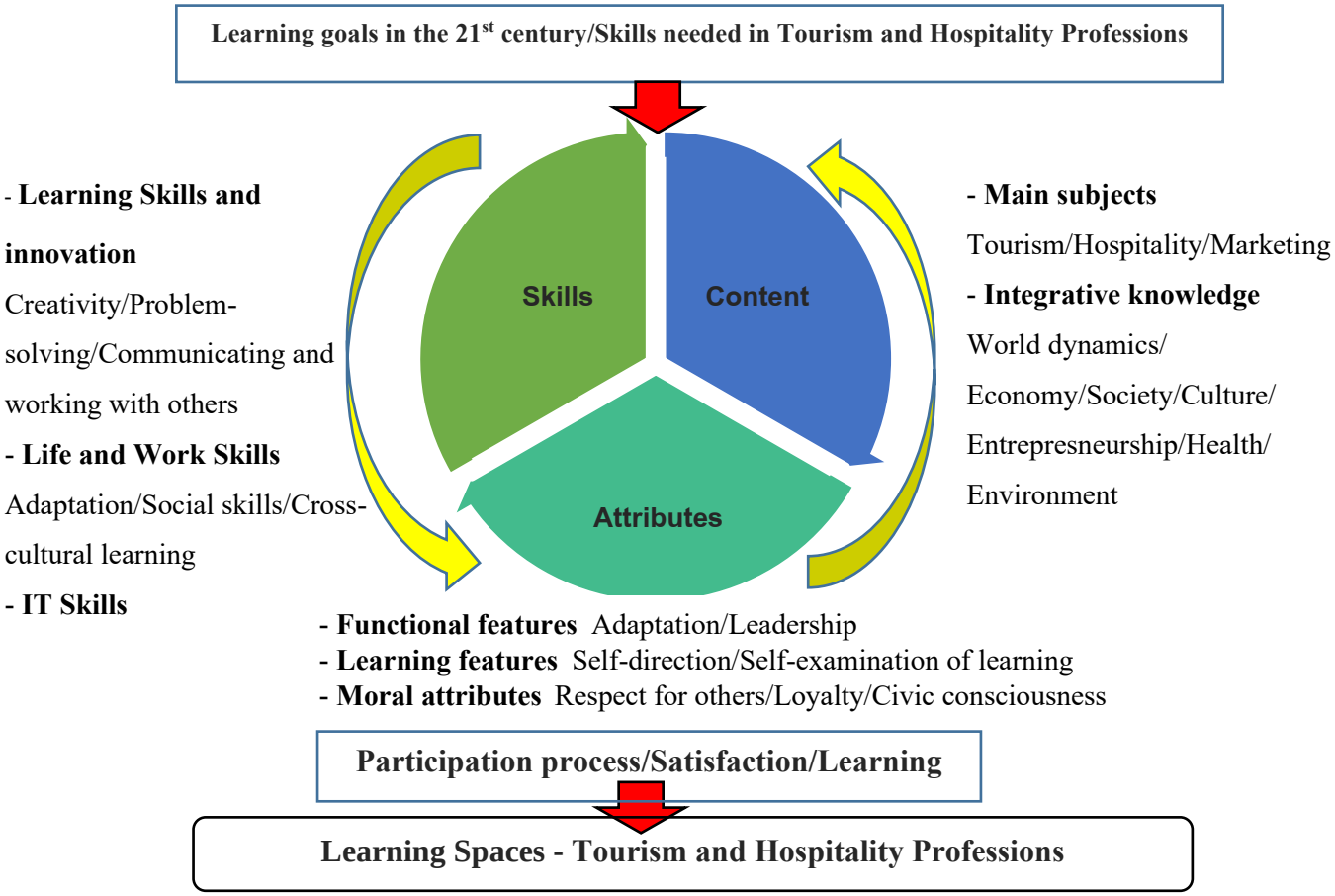

Figure 1 Conceptual framework

Research methodology

Qualitative research, in the form of mixed-method research (MMR), was conducted using analysis and synthesis of the content from documents, research work, in-depth interviews, training, focus group discussions, followed by application of the analyzed data, summarizing and writing a descriptive narrative, and quantitative research using a questionnaire.

1. Key informants

Key informants were a group of students that study in the University of Phayao selected using purposive random sampling with a total of not less than 30 people.

2. Data collection tools

2.1 Review of related concepts ; 2.1.1 Concepts related to learning spaces 2.1.2 Informal learning spaces 2.1.3 Human-centered design and 2.1.4 ASEAN Mutual Recognition Arrangements on Tourism Professionals:

(ASEAN MRA on TP: MRA-TP)

2.2 Assessment of satisfaction of participants in learning space development for tourism and hospitality professionals consisted of:

Part 1 – General information: 1) sex, 2) age, and 3) courses studied at University of Phayao. The questions were in the form of a checklist.

Part 2 – Assessment of satisfaction of participants in learning space development for tourism and hospitality professionals consisted of: 2.1 Learning skills and creative innovation/problem-solving/Communication and working with other people, 2.2 Life skills and adaptive work/Social skills/cross-cultural learning, and 2.3 Skills in information technology

Part 3 – General recommendations

2.3 The survey created was presented to qualified persons for consideration of the suitability and accuracy of the language and covering of the content of the research work in order to be revised as recommended by the experts.

2.4 The assessment form was revised in accordance with the recommendations of the qualified persons and then presented to the content experts. Measurement and evaluation considered the content conformity by finding the index of conformity (IOC) between each question and the identification of whether there is consistency. The conformity index (IOC) value of 0.60 or higher is considered appropriate, and evaluation of content and measurement by three experts found that the index of conformity Index (IOC) had a value of 0.60-1.00.

3. Data collection

Data collection for use in this research was collected as follows.

Part 1 – Data collection included three steps, comprising:

Step 1 – Examination of the primary data of learning spaces and building an understanding to clarify the objectives of the study, together with planning the actions to be taken in the area by organizing brainstorming sessions of the research team to express opinions on the problems and guidelines of curriculum development in order to solve these problems through learning spaces.

Step 2 – Data collection of the problems related to the learning of students in order to develop learning spaces and compile guidelines for organizing training courses for students in learning spaces.

Step 3 – Testing of the courses that were designed and assessment of learning outcomes obtained from experimenting with the learning courses in order to develop the skills that are necessary for students to be employed in real work situations.

Part 2 – Data collection in which the researchers conducted data collection manually by conducting the follow-up included:

1. Selection of the areas for data collection in the field on development of learning spaces in University of Phayao
2. Verification of the consistency of the assessment form during data collection and after data collection in in the field
3. Compiling of the data and checking for accuracy
4. Preparation of the survey for coding by providing numbers to the assessment form and organizing the respecive categories
5. Coding that involves adding the codes to the assessment form, and then filling in the coding form
6. Checking for consistency of the variables based on the various codes
7. Use of computer-assisted data analysis
8. Data analysis by statistical methods with the available computer program.

4. Data validation

The data collection for completeness and comprehensive fulfilling of the objectives of the study should be able to clearly respond to the educational problems. Therefore, the researchers must always verify the data, and data verification was done simultaneously with the data collection as an immediate examination of the data in the field. Data was collected in categories. By examining the data, it is easier to divide it into categories. The data validation of the study participants was conducted using a triangulation method to enhance the accuracy of the qualitative research work by reducing the patterns or discrepancies caused by a single source or single aspects of data triangulation. Through examination of the data obtained, consisting of location sources and informant sources, it can be seen that the data obtained from different points according to the informants is reliable and accurate due to using data from multiple sources under the same method with interviews of different people with various statuses on the same subject.

5. Data analysis

5.1 Qualitative research was used to collectively analyze the data from interviews, focus group discussions, observation and the data collection tools using a content analysis method after the collection of the data.

5.2 Quantitative research was used to analyze the results related to satisfaction of the participants in the development of learning spaces for students in the tourism and hospitality professions by use of statistics, percentage, mean and standard deviation in order to obtain content that covered the objectives of the study and was able to answer the research questions.

The scoring and the interpretation of the results (Srisa-ard, 2002) were as follows. The criteria for the scoring of opinions related to satisfaction of the participants in the development of learning spaces for students in the tourism and hospitality professions:

A score of 5 indicates the Highest satisfaction.

A score of 4 indicates High satisfaction.
A score of 3 indicates Moderate satisfaction.
A score of 2 indicates Low satisfaction.
A score of 1 indicates the Lowest satisfaction.

The criteria for the interpretation of scoring results of opinions related to satisfaction of the participants in the development of learning spaces for students in the tourism and hospitality professions:

Mean of 4.51–5.00 indicates the Highest satisfaction.
Mean of 3.51–4.50 indicates High satisfaction.
Mean of 2.51–3.50 indicates Moderate satisfaction.
Mean of 1.51–2.50 indicates Low satisfaction.
Mean of 1.00–1.50 indicates the Lowest satisfaction.

Results

Objective 1 – Development of learning spaces for students in the tourism and hospitality professions

Part 1 General data of questionnaire respondents

Table 1 Number and percentage related to the general data

Data on sex, age and education	**Sample group**	
	Number	**Percentage**
Sex		
Male	40	24.844
Female	121	75.155
Total	**161**	**100.00**
Data on sex, age and leducation	**Sample group**	
	Number	**Percentage**
Age		
19 years	38	23.602
20 years	56	34.782
21 years	50	31.559
22 years	15	9.316
23 years	2	1.242
Total	**161**	**100.000**
Data on sex, age and education	**Sample group**	
	Number	**Percentage**
Courses studied at University of Phayao		
Tourism	108	67.080
Jurisprudence	37	22.981
Political Science	1	0.621

Data on sex, age and education	Sample group	
	Number	Percentage
Chinese language	5	3.105
English language	1	0.621
Social Development	5	3.105
Management	1	0.621
Engineering	3	1.863
Total	**161**	**100.000**

Part 2 Assessment form on the satisfaction of the participants in development of learning spaces for students in the tourism and hospitality professions

Table 2 Number, percentage, mean and standard deviation based on opinions related to the survey

	Level of opinions					Mean ($\bar{X}$)	Standard Deviation (S.D.)	Interpretation
	Highest (5)	High (4)	Moderate (3)	Low (2)	Lowest (1)			
2.1 Learning skills and innovation								
Creativity/problem-solving/Communication and working with other people								
2.1.1 Content in line with the principles and objectives of learning development	49 (30.50)	92 (57.00)	18 (11.25)	2 (1.25)	0 (0.00)	4.167	0.663	High
2.1.2 Content in line with the activities of learning development	49 (30.50)	87 (54.0)	23 (14.25)	2 (1.25)	0 (0.00)	4.136	0.693	High
2.1.3 The arrangement by priority of the content of activities is appropriate	55 (34.2)	77 (47.8)	23 (14.3)	6 (3.7)	0 (0.00)	4.124	0.788	High
Overall mean						**4.142**	**0.624**	**High**
2.2 Life and work skills								

	Level of opinions					Mean ($\bar{X}$)	Standard Deviation (S.D.)	Interpretation
	Highest (5)	**High (4)**	**Moderate (3)**	**Low (2)**	**Lowest (1)**			
Adaptation/Social skills/cross-cultural learning								
2.2.1 Personality and manners	62 (38.509)	74 (45.962)	22 (13.664)	3 (1.863)	0 (0)	4.211	0.745	High
2.2.1.1 Pleasant facial expressions	70 (43.478)	65 (40.372)	26 (16.149)	0 (0)	0 (0)	4.733	0.724	Highest
2.2.1.2 Polite manners and humility	72 (44.720)	63 (39.130)	25 (15.527)	1 (0.621)	0 (0.000)	4.279	0.743	High
2.2.1.3 Self-confidence	63 (39.130)	65 (40.372)	27 (16.770)	6 (3.726)	0 (0.000)	4.149	0.830	High
2.2.1.4 Sincerity	70 (43.478)	69 (42.857)	19 (11.801)	1 (0.621)	2 (1.252)	4.267	0.830	High
2.2.1.5 Has human relations	70 (43.478)	63 (39.130)	21 (13.433)	6 (3.726)	1 (0.621)	4.211	0.854	High
2.2.1.6 Responsible regarding duties	80 (49.689)	57 (35.403)	21 (13.434)	2 (1.242)	1 (0.621)	4.323	0.795	High
2.2.1.7 Neat appearance	69 (42.857)	62 (38.509)	25 (15.527)	5 (3.105)	0 (0.000)	4.211	0.817	High
2.2.2 Ability in presentation	66 (40.993)	65 (40.372)	23 (14.285)	5 (3.105)	2 (1.242)	4.167	0.874	High
2.2.2.1 Use of language	58 (36.248)	70 (43.478)	28 (17.391)	4 (2.484)	1 (0.621)	4.118	0.824	High
2.2.2.2 Use of tone	54 (33.540)	75 (46.583)	30 (18.633)	2 (1.242)	0 (0.000)	4.124	0.747	High

	Level of opinions					Mean ($\bar{X}$)	Standard Deviation (S.D.)	Interpretation
	Highest (5)	High (4)	Moderate (3)	Low (2)	Lowest (1)			
2.2.2.3 Spoken communication	63 (39.130)	69 (42.857)	24 (14.906)	5 (3.105)	0 (0.000)	4.180	0.797	High
2.2.2.4 Use of public speaking	58 (36.3248)	69 (42.857)	26 (16.149)	7 (4.347)	0 (0.000)	4.093	0.864	High
2.2.2.5 Informative speaking	57 (35.403)	72 (44.720)	25 (15.527)	2 (1.242)	0 (0.000)	4.099	0.860	High
2.2.2.6 Giving advice	64 (39.751	64 (39.751)	27 16.770	6 (3.726)	0 (0.000)	4.155	0.833	High
2.2.2.7 Interjection of knowledge	65 (40.372)	68 (42.236)	24 (14.906)	3 (1.863)	0 (0.000)	4.198	0.804	High
....2.2.3 Moral and ethical	68 (42.236)	66 (40.993)	22 (13.664)	5 (3.105)	0 (0.000)	4.223	0.798	High
2.2.3.1 Contributing to the common good and recognizing resopnsibilities	66 (40.993)	74 (45.962)	17 (10.559)	3 (1.863)	1 (0.621)	4.248	0.766	High
2.2.3.2 Understanding of others and a desire for them to be happy in this profession	73 (45.341)	71 (44.993)	16 (9.937)	1 (0.621)	0 (0.000)	4.341	0.681	High
2.2.3.3 Generosity, kindness, etiquette and appropriate dress	76 (47.204)	59 (36.645)	19 (11.801)	7 (4.347)	0 (0.000)	4.267	0.834	High
2.2.3.4 Self-knowledge, honesty and integrity	77 (47.826)	63 (39.130)	17 (10.559)	4 (2.484)	0 (0.000)	4.323	0.763	High

	Level of opinions					Mean ($\bar{X}$)	Standard Deviation (S.D.)	Interpretation
	Highest (5)	High (4)	Moderate (3)	Low (2)	Lowest (1)			
Overall mean						**4.214**	**0.655**	**High**

2.3 Skills in information technology

2.3.1 Able to use information technology	54 (33.540)	73 (45.341)	31 (19.254)	2 (1.242)	1 (0.621)	4.099	0.792	High
2.3.2 Can easily adapt to new technology	64 (39.751)	74 (45.962)	20 (12.422)	2 (1.242)	1 (0.621)	4.229	0.760	High
Overall mean						**4.164**	**0.732**	**High**

Summary and conclusions

Objective 1 – Development of learning spaces for students in tourism and hospitality professions

Part 1 General data of questionnaire respondents

The summary of the results of the study regarding the sex of the students indicated that the proportion of the respondents to the questionnaire was calculated as female = 75.155% and male = 24.844%.

The summary of the results of the study regarding the age of the students can be arranged from High to Low as follows: 20 years calculated as 34.782%, 21 years calculated as 31.559%, 19 years calculated as 23.602%, 22 years calculated as 9.316% and 23 years calculated as 1.242%.

The conclusions of the study of the students that responded to the questionnaire can be categorized by courses studied at University of Phayao arranged from High to Low as follows: the majority is the group that study the tourism courses, calculated as 67.080%, followed by the Jurisprudence curriculum calculated as 22.981%, Chinese language courses calculated as 3.105%, the Social Development curriculum, calculated as 3.105%, courses in Engineering, calculated as 1.863%, courses in Political Science, calculated as 0.621%, English language courses, calculated as 0.621%, and courses in Management, calculated as 0.621%.

Part 2 Assessment form of satisfaction of the participants in development of learning spaces for students in tourism and hospitality professions

The summary of the results of the study of students that responded to the questionnaire 2.1 Learning skills and innovation - Creativity/problem-solving/Communication and working with other people is as follows: Overall, it was indicated that there is satisfaction at a high level with mean = 4.142 and S.D. = 0.624. The results of the study for the subsections are as follows: 2.1.1 Content is in line with the principles and objectives of learning development calculated as mean = 4.167, S.D. = 0.663 2.1.2 Content is in line with the activities of learning development calculated as mean = 4.136 S.D. = 0.693 and 2.1.3 The arrangement by priority of the content of activities is appropriate calculated as mean = 4.124, S.D. = 0.788.

The summary of the results of the study of the students that responded to the questionnaire 2.2 Life and work skills - Adaptation/Social skills/cross-cultural learning is as follows: Overall, it was indicated that there is satisfaction with mean = 4.214 and S.D. = 0.655. The results of the study subsections are as follows: 2.2.1

Personality and manners calculated as mean = 4.211, S.D. = 0.745 2.2.1.1 Pleasant facial expressions calculated as mean = 4.733, S.D. = 0.724 2.2.1.2 Polite manners and humility calculated as mean = 4.279, S.D. = 0.724 2.2.1.3 Self-confidence calculated as mean = 4.149, S.D. = 0.830 2.2.1.4 Sincerity calculated as mean = 4.267, S.D. = 0.830 2.2.1.5 Has human relations calculated as mean = 4.211, S.D. = 0.854 2.2.1.6 Responsible regarding duties calculated as mean = 4.323, S.D. = 0.795 2.2.1.7 Neat appearance and dress calculated as mean = 4.211, S.D. = 0.817 2.2.2 Ability in presentation calculated as mean = 4.167, S.D. = 0.874 2.2.2.1 Use of language calculated as mean = 4.118, S.D. = 0.824 2.2.2.2 Use of tone calculated as mean = 4.124, S.D. = 0.747 2.2.2.3 Spoken communication calculated as mean = 4.180, S.D. = 0.797 2.2.2.4 Use of public speaking calculated as mean = 4.093, S.D. = 0.864 2.2.2.5 Informative speaking calculated as mean 4.099, S.D. = 0.860 2.2.2.6 Giving advice calculated as mean = 4.155, S.D. = 0.833 and 2.2.2.7 Interjection of knowledge calculated as mean = 4.198, S.D. = 0.804 2.2.3 Moral and ethical calculated as mean = 4.223, S.D. = 0.798 2.2.3.1 Contributing to the common good and recognizing responsibilities calculated as mean = 4.248, S.D. = 0.766 2.2.3.2 Understanding of others and desire for them to be happy in this profession calculated as mean = 4.341, S.D. = 0.681 2.2.3.3 Understanding of others and a desire for them to be happy in this profession calculated as mean = 4.267, S.D. = 0.834 and 2.2.3.4 Self-knowledge, honesty and integrity calculated as mean = 4.323, S.D. = 0.763 The summary of the results of the study of the students that responded to the questionnaire 2.3 - Skills in information technology is as follows: Overall, it was indicated that there is satisfaction at a high level with mean = 4.164 and S.D. = 0.735. The results of the study subsections are as follows: 2.3.1 Able to use information technology calculated as mean = 4.099, S.D. = 0.792 2.3.2 Can easily adapt to new technology calculated as mean = 4.229, S.D. = 0.760**.**

Objective 2 – Course development for improvement of the skills of students in tourism and hospitality professions

Course development to improve the skills of students in tourism and hospitality professions involves data collection from the focus group discussions, by the use of group interviews, in order to provide the opportunity for the informants to express opinions as a group. Selection of participants for these focus group discussions was conducted by purposive sampling to select specific informants comprising professors and researchers totallng five people. The focus group discussions were on curriculum development to improve the skills for the tourism and hospitality professions. The tourism and hospitality courses that assist in the improvement and development of the skills students can be suummarized as follows: 1. Herbs for tourism courses, 2. Recreation for tourism courses, 3. Flower arrangement for hospitality courses, and 4. Development courses for local souvenirs that are unique to the identity of Phayao province. These courses to enhancce the skills in the tourism and hospitality professions were designed and created by learners and teachers of these subjects, by which these courses provide the highest benefits for learners due to the consideration of consistency with the current challenges and needs of learners to have the skills, knowledge and ability, both theoretical and practical, in order to apply them to the creation of careers and income as well as support the growth of the tourism and hospitality industry in the future. The learning outcomes of the courses will help to strengthen the skills, knowledge and ability in the field of tourism and hospitality for learners, which will result in the creation of a good quality of life for local people. Moreover, it provides human resource development in the tourism industry as human capital is related with knowledge, abilities, personality, emotional intelligence and maturity, experience, relations and education, including training and studying, that are important factors in human resource development (Singh, 1997).

Discussion

Organizing learning spaces has importance and is necessary for courses in higher education in the present time due to current learners being of a new generation that have special characteristics, which are a preference for classes that are fun and enjoyable with an emphasis on social interaction and teamwork more than working independently. In addition, they also like hands-on or cooperative activities that are better than reading and lectures (Brown, 2005). By organizing learning spaces for students in the tourism and hospitality professions, an environment is created that can help improve the learning and mental retention of students. There are rooms specifically for conducting learning activities, which are professional labs that are clean, quiet, convenient, comfortable, safe, and well-ventilated with an environment that facilitates learning by providing materials, instructional equipment and the tools for learning that are readily available. There are desks for group work that can be easily moved in order to allow learners to conveniently use them

for conducting experiments or actual practice. Moreover, the arrangement of learning spaces inside the lab can be used in a variety of ways, such as subdivisions for group activities and open spaces for presentations and creating scenarios. This is in line with the concepts of scholars proposing the design principles for learning spaces in the 21st century, which are organizing learning spaces for multipurpose use accommodating many types of work in order to be able to arrange numeous categories of classroom activities, such as a large hall that can be divided into smaller areas for conducting group activities or individual work. In addition, there is also furniture that can be easily moved in order to provide convenience in organizing a wide variety of proactive educational activities (Chism, 2006; Kneppell & Riddle, 2012). Furthermore, organizing areas for group work facilitates social interaction by having spaces furnished with tables, chairs, materials and equipment for work and cooperative learning such as circular meeting tables with media equipment for two-way communication, such as whiteboards, etc. (Chism & Bickford, 2002; Reushle, 2012).

Also, there is learning management for learners to have experts or people that have professional experience to support and mentor learners closely by emphasizing that learners have hands-on practice from actual experience and focus on cooperation, collaboration, and group work in order to encourage learners to help each other and enable learners to use their ideas creatively in teamwork. They will have more courage to think, take action and be assesrtive than when working alone. This is in line with the concept of Prachayaprut (2017), which mentioned that the methods of management courses in the 21st century will change from having classes with lectures only to teaching that allows learners have a proactive role in the creation of knowledge, namely 1) group learning, team-based learning, cooperative learning, and collaborative learning, 2) learning from experience or practice in a real context, for example use of problem-based learning, project-based learning, etc., 3) learning that encourages sudents to seek knowledge themselves, such as investigative learning, research-based learning, etc., and 4) learning by use of technology, for example learning that combines the use of technology, which is Blended Learning, online learning, and learning by use of mobile communication technology, which is known as M-learning.

The results from the development of learning spaces for students in tourism and hospitality professions that are designed physically to be appropriate for learners and the content is designed to provide consistency in both professional knowledge and integrated knowledge in related sciences with a process of studying, natural learning and the needs of learners, is that spaces have a relaxed creative atmosphere and facilitate a variety of learning situations. This provides learners with satisfaction in terms of life and work at a higher level than other skills, which are adaptive skills, socialization, and cross-cultural learning. The students feel happy and enjoy learning and thus, are responsible regarding the duties that have been assigned and behave politely and humbly because classes in learning spaces create a closeness and social bond between teachers and learners. In addition, it was found that learners have satisfaction with the skills in information technology at a secondary level, After participating in the activities in the area of learning management, they are able to adapt to modern technology easily and can use cutting-edge information technology as well. Furthermore, learners have satisfaction with their learning skills and innovation, which comprise the skills in creativity, problem-solving, communication, and working with other people. The learners also have satisfaction with the content that is in line with the principles and objectives of learning development at a high level and with the content in line with the activities of learning development at a secondary level. From this, it can be seen that, regarding learning outcomes in the tourism and hospitality professions, the skills that learners have the most are life and work skills because these are the skills that are highly necessary for work in the tourism and hospitality professions as it is an industry which involves working together with a large number of people. Thus, this is a learning outcome that is desired and matches the objectives of learning in the tourism and hospitality professions. This is in line with concept of Prachayaprut (2017), who offered the opinion that desired learning outcomes for learners in the 21st century are as follows: 1) to have knowledge in core subjects, which comprise English, reading and the language arts, mathematics, economics, science, geography and history, government and civc duties, etc., 2) to have knowledge related to important issues in the 21st century, namely global awareness and basic knowledge of finance, the economy, business and entrepreneurship, citizenship, health and the environment, 3) to have the learning skills and innovation, namely creativity and innovation, critical thinking and problem-solving, communication and collaborative work, 4) to have the skills in information, media and technology, namely basic knowledge of information, media, information technology, and communication, and 5) to have life and work skills, namely flexibility and adaptability, originality and self-direction, social skills and cross-cultural learning, productivity and accountability, leadership and responsibility.

Nonetheless, the development of learning spaces for learners in higher education may need to be changed based on the changes of models of education in the 21st century due to education currently being able to occur at any place and at any time. Learning is not a personal activity but one in which there is an exchange of learning between people, groups of people, or organizations as a network (Sirisanglert, 2013). Therefore, learning activities and teachers should have

collaboration with other people or the creation of knowledge networks in order to provide learners with knowledge from many aspects in order to encourage students to have the ability to seek knowledge and link knowledge from other sources of data by relying on information technology as a tool in acquiring knowledge, which is currently a highly important skill. This is in line with the concept of learning based on Connectivism, which is based on the belief that knowledge is comprised of a network of connections inluding many entities that may be people, groups of people, systems or servers. With regard to learning, it is the creation of connections among networks of various sources of information and an understanding of the patterns of relationships among different data sources. Students can increase their knowledge by connecting with these networks (Kop & Hill, 2008). The aim of learning activities in the networks is to acquire knowledge that is accurate and up-to-date wih the ultimate goal being that students are able to apply the knowledge to practice. The skills and abilities of learners that are necessary for learning in networks are being able to search for knowledge and to connect knowledge and ideas from a variety of data sources, which are the skills that are more important than having currently available knowledge (Sirisanglert, 2013). Thus, for the development of learning spaces to have potential in continuous learning and achievement of desired learning outcomes, educators should promote and support network-based creation of knowledge and encourage learners to make efforts to seek knowledge on their own through the use of information technology, which is appropriate in the present time.

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