EXPECTED LEARNING OUTCOME OF SUKHOTHAI THAMMATHIRAT OPEN UNIVERSITY STAKEHOLDERS

Chantana Thongprayoon
Sukhothai Thammathirat Open University
chantanatpy@gmail.com

ABSTRACT

The objectives of this research article are: 1) to identify Sukhothai Thammathirat Open University stakeholders' opinions towards the student Expected Learning Outcome; and 2) to provide some suggestions for the study programmes. The sample of 198 volunteer participants were selected from seven groups of Sukhothai Thammathirat Open University stakeholders, including 58 freshmen, 35 bachelor's degree students, 26 master's degree students; 21 doctoral students; 21 academic staff, 21 support staff, and 16 potential employers. Data were gathered through a five-point rating scale questionnaire, face-to-face interviews, and focus group discussions, and were analysed with descriptive statistics. The initial Expected Learning Outcomes, which were identified based on a review of related literature, were morals and ethics, responsibility for citizenship, analytical skills, problem-solving skills, lifelong-learning, self-recognition, roles and responsibility, inter-cultural literacy, subject-specific skills, speaking and writing skills, interpersonal skills, IT skills, and team-work and collaboration skills. The Expected Learning Outcomes were then grouped into 4 categories according to the associated meaning of the items. These categories were Morals and ethics, Knowledge and cognitive skills, Attitudes, and Key and specific skills. The results indicate the Expected Learning Outcomes that most stakeholders had the highest concern was Morals and ethics. However, as indicated by the survey, the lifelong learning ability was also considered as an important Expected Learning Outcome. The stakeholders from the face-to-face interview and focus group discussion suggested that every course should illustrate the Expected Learning Outcomes in the course contents and activities. Furthermore, the university should facilitate student clubs for participating in campus activities to enable the students to meet the required outcomes.

Keywords: Expected Learning Outcome, stakeholder, skill, programme.

INTRODUCTION

Expected Learning Outcomes (ELOs) are the main criteria of the ASEAN University Network Quality Assurance (AUN-QA) guidelines, which have stated that the curriculum is one of the most effective ways to teach how to learn and instil lifelong learning responsibility in students. The learning process should foster a commitment to critical inquiry, development of study skills and information-processing skills, and a willingness to experiment with new ideas and practices. Student Learning Outcomes are statements of what a learner is expected to know, understand,

and/or be able to demonstrate after completing a process of learning as well as the specific intellectual and practical skills gained and demonstrated with successful completion of a unit, course, or programme. Learning outcomes, together with assessment criteria, specify the minimum requirements of credit. They are distinct from the aims of learning in that they are concerned with the achievements of the learners rather than with the overall intentions of the teachers. The student learning outcomes may be stated at the university, programme and course levels in order to ensure the curriculum is guided by clearly formulated learning outcomes, reflecting the relevant demands and needs of all stakeholders (HRK German Rectors' Conference, n.d.). Well-written ELOs not only help students accomplish learning achievement, but also meet accreditation requirements to attain teaching and learning excellence. Stakeholders include students, course tutors, lecturers, course subject matter experts, external academic experts, industrial experts, and others.

LITERATURE REVIEW

According to the Thai Qualifications Framework for Higher Education (TQF: HEd), there are five domains of Learning Outcomes (National Qualifications Framework for Higher Education in Thailand: Implementation Handbook, 2006):

(1)   *Ethical and Moral Development.* This emphasises habits of acting ethically and responsibly in personal and public life, which are consistent with high moral standards. It also emphasises the ability to resolve value conflicts through the application of a consistent system of values.

(2)   *Knowledge.* This domain includes the ability to understand, recall and present information including knowledge of specific facts; knowledge of concepts, principles and theories; and knowledge of procedures.

(3)   *Cognitive Skills.* This is the ability to apply knowledge and understanding of concepts, principles, theories and procedures when asked to do so. It also highlights the analysis of situations and application of conceptual understanding of principles and theories in critical thinking and creative problem solving when faced with unanticipated new situations.

(4)   *Interpersonal Skills and Responsibility.* This emphasises the work that is effective in groups, and exercise leadership. It also accentuates the acceptance of personal and social responsibility, as well as responsibility for one's own learning.

(5)   *Analytical and Communication Skills* This requires the use of basic mathematical and statistical techniques, effective communication in oral and written form, and the use of information and communications technology.

Universities worldwide emphasise three types programme learning outcomes: knowledge, skills and attitude. University of Virginia (n.d.) states that student learning outcomes are the accumulated knowledge, skills, and attitudes that students develop during a course of study. (Institutional Assessment & Studies, University of Virginia, 2014). The Council for Higher Education Accreditation (CHEA) (as cited in Harvey, 2004) defines student learning outcomes as the knowledge, skills, and abilities that a student has attained at the end or as a result of his or her engagement in a particular set of higher education experiences. University of Warwick (as cited in Harvey, 2004) defines learning outcomes as the skills and knowledge which a student will possess upon successful completion of a course. Learning outcomes as set out in Warwick course specifications are divided into four categories: 1) subject knowledge and understanding; 2) subject-specific skills which are practical skills, practice of which is integral to the course, e.g. laboratory skills, language skills, counselling skills; 3) cognitive skills, intellectual skills such as an understanding of methodologies, synthesis, evaluation or ability in

critical analysis; and 4) key skills which are readily transferable to employment in other contexts, such as written and oral communication, working within a team, problem solving, numeracy, and IT skills. Whereas, the American Association of Law Libraries (AALL) (as cited in Harvey, 2004) defines learning outcomes as statements that specify what learners will know or be able to do as a result of a learning activity. Outcomes are usually expressed as knowledge, skills, or attitudes. Learning outcomes should flow from a needs assessment. It is important to determine the gap between an existing condition and a desired condition – that is, the knowledge, skills, or attitudes required to fulfil the need. They represent the solution to the identified need or issue. Learning outcomes provide direction in the planning of a learning activity.

According to The United Nations Educational, Scientific and Cultural Organization (UNESCO) (as cited in Harvey, 2004), outcomes are anticipated or achieved programme results or the accomplishment of institutional objectives, as demonstrated by a wide range of indicators (such as student knowledge, cognitive skills, and attitudes). They are direct results of the instructional programmes, planned in terms of student/learner growth in all areas. An outcome must be distinguished from an objective, which is a sought-after result. Generally, each outcome statement should describe one effect of the instructional programme, and not accumulate several into one statement.

The present study is mostly concerned with the ELOs relevant to Sukhothai Thammathirat Open University (STOU) stakeholders. The stakeholders in this study refers to the students of all levels, academic staff and supporting staff from STOU as well as potential employers of the students (industrial, private, and public sectors). The ELOs indicators developed from related literature review consist of 13 elements (HRK German Rectors' Conference, n.d.): 1) Morals and Ethics, 2) Self-Recognition, 3) Analytical Skills, 4) Subject-Specific Skills, 5) Role and Duty Responsibility, 6) Citizenship Responsibility, 7) Speaking and Writing Skills, 8) Interpersonal Skills, 9) Information and Technology (IT) Skills, 10) Teamwork and Collaboration Skills ,11) Problem Solving Skills, 12) Lifelong Learning Ability, and 13) Intercultural Literacy.

RESEARCH OBJECTIVES

This research has two objectives: 1) to identify STOU stakeholders' opinions towards the ELOs; and 2) to provide some suggestions for quality improvement and assurance of the study programmes.

METHODOLOGY

The research conducted at STOU involved participants who were volunteers in STOU activities during September and October 2015. A total of 182 participants answered the questionnaires. The participants who answered the questionnaires consisted of 58 freshmen, 35 bachelor's degree students, 26 master's degree students, 21 doctoral students, 21 academic staff, and 21 support staff. The 21 academic staff were interviewed face-to-face and answered questionnaires. For data triangulation, academic staff were individually interviewed face-to-face and answered the questionnaires. A total of 16 potential employers were also included in this study. The potential employers were divided into two focus groups. The five-point scale questionnaire based on the aforementioned 13 ELOs also includes open-ended questions. The validity and reliability of the research tools were justified by two experts in the field. The five rating scale questionnaires denote the following meanings relating to the importance of the

ELOs: 5 = the most important; 4 = very important; 3 = neutral; 2 = slightly important; and 1 = the least important. The interpretations of the mean scores are: 4.51-5.00 = the most important; 3.51-4.50 = very important; 2.51-3.50 = neutral; 1.51-2.50 = slightly important; and 1.00-1.50 = the least important. Data gathered were analysed with descriptive statistics.

The responses of the potential employers from the two focus group discussions were grouped into four categories (University of Warwick (as cited in Harvey, 2004): 1) Morals and ethics, 2) Knowledge and cognitive skills, 3) Attitudes and 4) Key and specific skills.

RESEARCH FINDINGS

The findings were divided into two parts according to the research objectives.

Part One: STOU's Stakeholders' Opinions towards the ELOs of the Students

The first part of the results showed the opinions of the students, the academic and support staff. The 140 students were from all levels of study: Freshmen, Bachelor's Degree, Master's Degree, and Doctoral Degree levels. Participants were 21-59 years old, living in several regional areas in Thailand and of various occupations. Most students were unemployed, private employees, or freelance workers. Some were university instructors.

Table 1: Six groups of stakeholders' opinions on ELOs
n = 182

ELOs	Levels of mean scores and meaning						
	Freshmen n = 58	Bachelor students n = 35	Master students n = 26	Doctoral students n = 21	Academicians n = 21	Support staff n = 21	Average mean scores
1. Morals & Ethics	4.61 (Most important)	4.82 (Most important)	4.58 (Most important)	4.67 (Most important)	4.77 (Most important)	4.52 (Most important)	**4.67 (Most important) Rank 2**
2. Self-recognition	4.54 (Most important)	4.79 (Most important)	4.54 (Most important)	4.67 (Most important)	4.64 (Most important)	4.43 (Very important)	**4.60 (Most important)**
3. Analytical skills	4.56 (Most important)	4.71 (Most important)	4.69* (Most important)	4.81* (Most important)	4.64 (Most important)	4.33 (Very important)	**4.62 (Most important)**
4. Subject-specific skills	4.44 (Very important)	4.70 (Most important)	4.65 (Most important)	4.67 (Most important)	4.23 (Very important)	4.38 (Very important)	**4.51 (Most important)**
5. Role & duty responsibility	4.51 (Most important)	4.77 (Most important)	4.56 (Most important)	4.76 (Most important)	4.77 (Most important)	4.67 (Most important)	**4.67 (Most important) Rank 2**
6. Citizenship responsibility	4.56 (Most important)	4.77 (Most important)	4.54 (Most important)	4.62 (Most important)	4.77 (Most important)	4.52 (Most important)	**4.63 (Most important)**

7. Speaking & writing skills	4.39 (Very important)	4.81 (Most important)	4.62 (Most important)	4.67 (Most important)	4.36 (Very important)	4.24 (Very important)	**4.52 (Most important)**
8.Interpersonal skills	4.42 (Very important)	4.64 (Most important)	4.58 (Most important)	4.57 (Most important)	4.50 (Most important)	4.33 (Very important)	**4.51 (Most important)**
9. IT skills	4.28 (Very important)	4.46 (Very important)	4.46 (Very important)	4.48 (Very important)	4.18 (Very important)	4.00 (Very important)	**4.31 (Very important)**
10. Team work & collaboratio	4.34 (Very important)	4.86* (Most important)	4.54 (Most important)	4.48 (Very important)	4.64 (Most important)	4.19 (Very important)	**4.51 (Most important)**
11. Problem solving skills	4.54 (Most important)	4.74 (Most important)	4.62 (Most important)	4.81* (Most important)	4.68 (Most important)	4.19 (Very important)	**4.60 (Most important)**
12. Lifelong learning ability	4.68* (Most important)	4.83 (Most important)	4.69* (Most important)	4.76 (Most important)	4.82* (Most important)	4.71* (Most important)	**4.75* (Most important) Rank 1**
13. Intercultural literacy	4.51 (Most important)	4.80 (Most important)	4.50 (Most important)	4.57 (Most important)	4.64 (Most important)	4.05 (Very important)	**4.51 (Most important)**
Average mean scores	**4.49 (Very important)**	**4.75* (Most important)**	**4.58 (Most important)**	**4.66 (Most important)**	**4.59 (Most important)**	**4.35 (Very important)**	**4.57 (Most important)**

From Table 1, the ELO which was ranked the highest by the stakeholders was Lifelong learning ability (where the mean score, $\overline{x}$ = 4.75). The second highest scores ($\overline{x}$ = 4.67) were for Morals & ethics, and Role & duty responsibility.

The Bachelor students ranked highest on almost every item of the ELOs, with an average mean score, $\overline{x}$ = 4.75. They rated highest on Team work & collaboration ($\overline{x}$ = 4.86). Freshmen, Master students, academicians and support staff rated highest on lifelong learning ability (freshmen: $\overline{x}$ = 4.68, Master students: $\overline{x}$ = 4.69, academicians: $\overline{x}$ = 4.82 and support staff: $\overline{x}$ = 4.71 respectively). Doctoral students rated highest on Problem solving skills ($\overline{x}$ = 4.81). The highest score among the 13 ELOs was Lifelong learning ability ($\overline{x}$ = 4.75).

Table 2: Frequency of the potential employers' opinions on ELOs

Expected Learning Outcome (ELOs)	Frequency
Good Habits, good attitudes, positive	12
Knowledge, ability, expertise, ability to apply knowledge and experience	8
Curiosity, ability to develop self and skills	7
Creativity, innovation	6
Opinion leaders, dare to present and express ideas	5
Morals and ethics	4
Reflection and judgment, ingenious and cleverness	4
Ability for problem solving at hand	4
Sacrifice and devotion	4
Patience, ability to work under pressure, don't give up to obstacles	4
Spirits, kindness, care for others, sincerity, mind service	4
Diligence	4
Role and duty responsibility	4

Devotion, exertion, determination	3
Objectivity, impartial, no defamation	3
Language skills	2
Human relations	2
Punctuality	2
Team work skills	2
Humbleness, modest, politeness	2
Change acceptance	2
Social and cultural skills	1
IT skills	1
Communications skills	1
Maturity	1
Respectfulness	1
Discipline, conformity	1
Mission and duty apprehension	1
Environmental adjustment	1
Health concern	1
Total	**97**

According to the two focus group discussion with potential employers, the most important ELOs as shown in Table 2 are good habits, good attitudes and being positive. The items in Table 2 were grouped into four categories in Table 3: Morals and ethics, Knowledge and cognitive skills, Attitudes, and Key and specific skills. The ELO that the potential employers considered as highest important are Morals and ethics. From the Morals and ethics point, the employers wanted employees who would sacrifice, devoted, had spirits, be kind, cared for others, sincere, had mind service, be diligent, and be responsible with their roles and duty.

However the highest frequency of all were good habits, good attitudes, and positive which are belong to the Attitudes dimension. The employers wanted employees who had good habits, good attitudes, and positive as well as having patience, ability to work under pressure, not to give up on obstacles and so on.

From the Key and specific skills dimension, the employers wanted employees who were knowledgeable, had expertise, and had the ability to apply knowledge and experience. While, under the Knowledge and cognitive skills dimension, the employers wanted employees who had curiosity, ability to develop self and skills.

Table 3: Frequency of the potential employers' opinions on 4 groups of ELOs

Expected Learning Outcome (ELOs)	Morals & ethics	Knowledge & cognitive skills	Attitudes	Key & specific skills	Frequency
Good habits, good attitudes, positive thinking, open mindedness			12*		12
Knowledge, expertise, ability				8	8
Curiosity, ability to develop self and skills continually, learning new things		7*			7
Creativity, innovation		6			6
Opinion leaders				5	5
Morals and ethics	4				4
Reflection and judgment		4			4
Ability for problem solving		4			4
Sacrifice and devotion	4				4

Patience, ability to work under pressure, don't give up to obstacles			4		4
Spirit, kindness, care for others, sincerity, mind service	4				4
Diligence	4				4
Role and duty responsibility	4				4
Devotion, exertion, determination	3				3
Objectivity, impartiality, no defamation			3		3
Language skills				2	2
Human relations				2	2
Punctuality	2				2
Team work skills				2	2
Humbleness, modesty, politeness	2				2
Change acceptance			2		2
Social and cultural skills			1		1
IT skills				1	1
Communications skills				1	1
Maturity			1		1
Respectfulness	1				1
Discipline, conformity	1				1
Mission and duty apprehension			1		1
Environmental adjustment				1	1
Health concern			1		1
Total	**29**	**21**	**25**	**22**	**97**

The sum of the frequency count in Table 3 is shown in Table 4. The ranking of the four areas of the ELOs by the potential employers in the discussion groups is shown in Table 4.

Table 4: Ranking of 4 areas of ELOs by STOU students' potential employers

ELOs	Frequency	Ranking
Morals and ethics	29	1
Attitudes	25	2
Key and specific skills	22	3
Knowledge and cognitive skills	21	4
Total	97	-

In comparing the ELOs between the findings from the questionnaires and the focus group discussion, the former rated highest in Lifelong learning ability, while the latter gave the highest frequency on the Morals and ethics.

Part Two: Suggestions for the Programmes of Study at STOU

Suggestions for the programmes of study at STOU to satisfy the ELOs were made by two groups of stakeholders. The first was from the 21 academic staff in response to the open-ended questionnaire items and the face-to-face interviews. The second was from the 16 potential employers in response to the focus group discussions.

Suggestions from the 21 Academic staff

According to the academic staff, the university executives should revise the policy and re-organise the QA system and re-plan the strategy for the intended ELOs. Teachers should take measures to foster a good attitude to life-long learning among their students, which is the unique and strong point of STOU, and encourage their students to perform effectively. They should show students how to search for information from various sources as well as facilitate the students' clubs to promote effective learning competence and outcomes. They should further display symbols of the morals and ethics expected from the students all over the campus, and integrate them in the programmes of study.

At the faculty or school level, academic staff should cultivate and integrate the ELOs in the learning process of each course. They should promote humanity skills among all students entering the study programme. The course design should include multi-learning activities, assignments and case studies, especially about related moral and ethics issues. They should encourage students to gain direct experience in their daily lives by providing various activities and evaluating their skills and expertise, in addition to knowledge and professional standards. They should emphasise students' self-recognition and other desired characteristics such as discipline, respectfulness, self-development, creativity for self and work development, open-mindedness to accept and care for others, appropriate cognitive skills, and the ability to analyse rationally from factual information, as well as the skills of life-long learning and natural learning.

Suggestions from the 16 potential employers

The potential employers suggested ways to satisfy the ELOs of the students and the study programme of STOU. The university should encourage the value of integrity and integrate the moral and ethical concepts in the learning process of every course because morals and ethics are the most important desired characteristics from employers. They should emphasise students' sense of responsibility, which is essential for success in their life. Instructors should be open-minded to design effective learning strategies accordingly.

The university should guide the students so that they know how to manage their schedules for learning and practice their performance by themselves or with their peers. They should encourage students to have life-long learning attitudes and practice from the beginning of the study programme. Students need to know the learning course purposes, which will benefit of themselves, their family, and society. They should learn about self-control, be patient, be diligent, and be able to apply knowledge in their daily lives and practical work. They should also be open-minded towards self- development.

DISCUSSION

Most stakeholders consider Lifelong learning ability as the most important ELO. The item "Lifelong learning ability" is a sub-category of the knowledge and cognitive skills area, according to this study. It embraces the pursuit of knowledge and continuing education throughout life. According to the Lifelong Learning Council Queensland Inc., lifelong learning is flexible, diverse and available at different times and in different places beyond traditional schooling and throughout adult life. STOU must continue to develop this concept into a continuously supportive process which stimulates and empowers individual students to achieve all expected knowledge, attitude, and skills. They should apply them with confidence, creativity and enjoyment in all their life circumstances. The stakeholders also identify Morals and Ethics as an equally important ELO. This corresponds with the Thai Qualifications Framework or TQF. The Ethical and Moral development emphasises the ability to resolve value conflicts through the application of a consistent system of values. This is also indicated by the potential employers who rank Ethics and Moral, and Attitudes as high. Other ELOs, conforms to the domains of the TQF such as Knowledge, Cognitive Skills, Interpersonal Skills, and Responsibility, and Analytical and Communication Skills. These are the ELOs that the students at all level considered as most important with highest mean scores.

The academic staff and the potential employers also provided suggestions to improve the study programmes. The academics emphasised the role of teachers who should take measures to foster a good attitude to life-long learning among their students and encourage their students to perform effectively. They recommended management and planning of learning activities to correspond what was stated in the AUN-QA. To justify, they explain that students come to the university to learn something and, therefore, the university must distinctly formulate student learning expectations in terms of knowledge, skills and attitudes or competencies. The university should address professional ethics as part of the learning activity and outcomes. The potential employers want graduates who have morals and ethics, knowledge, cognitive skills, and key and specific skills, such as being opinion leaders who dare to present and express the right ideas.

STOU academics suggested that every course in the programmes, offered by each STOU school, should propose the ELOs in the course contents and activities within the learning process since they are crucial for students to meet the stakeholders' expectations. Furthermore, STOU should facilitate student clubs, which were established throughout the country, to participate in the university activities to support and lead the students to meet the required outcomes. The graduates should also have the sense of responsibility, which is essential for success in their life. The university should encourage student to have life-long learning attitudes and practice from the beginning of the study programme. All these skills correspond to the ELOs that stakeholders in this study referred to.

The findings imply that STOU must align the ELOs to the TQF and facilitate the achievement of ELOs through the supportive management system, qualified staff, adequate instruments, and effective technology. The university should develop and implement a strategy for the continuous enhancement of graduate quality. The areas that the ELOs should focus on are Attitudes, Morals and ethics, Key and specific skills, and Knowledge and cognitive skills. The well-written ELOs not only help students accomplish learning achievement, but also support institutions and curricula to pass accreditation requirements and attain teaching and learning excellence.

CONCLUSION

In conclusion, the findings suggest that STOU, as a distance learning institutions should adopt strategies to support and facilitate their students in the current borderless education sphere. Institutions should enable curricular and pedagogic reform to facilitate an effective learning environment to enrich students' learning experiences. As an education provider, STOU should design and provide learning platforms to deliver learning content for student engagement and interaction. Students should have an academically challenging experiences and better learning opportunities as well as greater peer-to-peer interactions. These improvements will ensure the effectiveness of programmes in achieving the expectations of all stakeholders. The students' learning experiences should be gauged effectively. The visions and missions of academic institutions should reflect multi-stakeholders' demands on the validity and proficiency of educational performance as a whole. This study forms the basis for quality improvement and assurance towards providing a quality educational experience.

REFERENCES

National Qualifications Framework for Higher Education in Thailand: Implementation Handbook. (2006). Retrieved October 1, 2014, from http://www.mua.go.th/users/tqf-hed/news/FilesNews/FilesNews8/NQF-HEd.pdf

Harvey, L. (2004). *Analytic quality glossary: Quality research international.* Retrieved September 18, 2015, from http://www.qualityresearchinternational.com/glossary/learningoutcomes.htm

HRK German Rectors' Conference. *ASEAN University Network Quality-Assurance: Manual for the Implementation of the Guidelines.* Retrieved April 24, 2016, from http://www.aunsec.org/pdf/aunwebsite/02_AUNQAImplementationManual.pdf

Institutional Assessment & Studies, University of Virginia. (2014). Student Learning Outcome: IAS. Retrieved September 18, 2015, from http://avillage.web.virginia.edu/iaas/assess/resources/learningoutcomes.shtm