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Learner characteristics based on the desirable outcomes framework, national education standards at higher education level of Thailand: Policy research

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Article Info

Abstract

The objectives of this research were to assess learner characteristics based on desirable educational outcomes; to study the management conditions of educational institutions to develop learner characteristics based on education standards; and to study educational management guidelines to achieve desirable outcomes based on national education standards 2018 at the higher education level in Thailand. The sample consisted of 300 representatives and the key informants were 21 representatives of those involved in higher education management. Cronbach's alphas for the questionnaire for faculty members and administrators, questionnaire for students, and questionnaire for entrepreneurs were .92, .96 and .98, respectively, and a focus group discussion form. Research data were analyzed using the percentage, mean and standard deviation for quantitative data and content analysis for qualitative data. Research findings revealed that learners have learner person attributes, co-creator of innovation, and strong citizenship at the high level. The institution's administration attempts to implement educational policies and strategies in compliance with educational standards. The curriculum management, teaching management, media and learning networks, teacher development, promotion and support from the agency, and involvement of network alliance focus on ensuring that learners clearly meet the educational standards. The management guidelines to achieve desirable outcomes should focus on the competency-based curriculum development, instructional management that focuses on providing practical experience, and developing teachers to have the necessary attributes. In addition, laws and regulations should be reviewed so that they do not become obstacles to the management of diverse higher education in line with rapidly changing conditions.

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Introduction

The national education standard is a specification of characteristics and desirable quality for Thai people. It is the principal standard for all departments and all educational levels to use as a framework for developing standards and curriculum. The first education standard was created in accordance with the provisions of the National Education Act of 1999 and the amendment (2nd edition) of 2002. It later developed to be the 2018 National Education Standards, which were the requirements for desirable characteristics, which were learner person characteristics, innovative co-creator's characteristics, and strong citizenship characteristics, to create Thai people 4.0 under the common goal of maintaining Thainess and being able to compete on the world stage (The Secretariat of the Education Council, 2018). The Ministry of Education has proceeded to mobilize and clarify guidelines for relevant agencies to be able to transform the desirable outcomes framework into practice accordingly connected and in the same direction as well as supervising, monitoring and evaluating the results of education management according to the national education standards periodically, continuously and systematically (The Secretariat of the Education Council, 2018).

Higher education in Thailand is predominantly provided at universities and colleges. The two distinct levels of educational attainment are the diploma level and graduate degrees. The management of higher education aims to develop advanced workforce with specific knowledge and skills along with the development of a complete human being to develop society and the nation. The management of higher education is in accordance with the National Education Standards of 2018. Therefore, the aim is for all institutions of higher education to adhere to as a guideline for the development of learners to achieve desirable outcomes with the expectation that the educational management would perform the important role in shaping a country's competitive advantage under economic and social dynamics. However, the higher education system's instructional style in Thailand still has some problems and has not been able to adapt to those changes. The graduates, especially at the bachelor's degree level, who will become the major workforce of the country, remain focused on single-discipline teaching and learning. Additionally, there still are the barriers to develop innovative thinkers in Thai universities and organizations such as the lack of integrated analytical skills and creative

and innovative minds, the nature of Thai people to a certain extent to resist new ideas, sometimes feeling uncomfortable about changes and uncertainty, or when implementing ideas in organizations, it often takes a lot of effort and time to produce results (Ruchiwit et al., 2019).

The implementation of the development of learner characteristics based on the desirable results of education in accordance with the National Education Standards 2018, has been in action for some time. Therefore, it is necessary to follow up and evaluate the desirable outcomes of education based on the national education standards that occur to learners to determine what level of development they are at. It aims to assess the characteristics of learners according to the Desired Outcomes of Education (DOE Thailand) framework based on 3 aspects: learner person characteristics, innovative co-creator's characteristics, and strong citizenship characteristics. It is also necessary to study the management conditions of educational institutions in order to develop learner characteristics based on the national educational standards. This will lead to guidelines for education management to achieve desirable outcomes, which will result in enhancing the quality of education to be able to develop potential of learners to be Thai 4.0 persons who can continue to compete well in the world.

Research conceptual framework

There are two important concepts in this study: (1) Learner characteristics based on the Desirable Outcomes of Education (DOE Thailand) framework consisting of 3 aspects: learner person characteristics, innovative co-creator's characteristics, and strong citizenship characteristics; and (2) The management conditions and the guidelines of educational management for educational institutions to achieve desirable outcomes, by synthesizing management concept related to the development of learner characteristic covering 9 issues: educational management policies/strategies (Damon et al., 2016; Smith et al., 1998); curriculum (Cheong, 1994; Pike et al., 2021); instructional management (Burden, 2020; Wubbels et al, 2014); media and affiliated learning networks (Harasim, 1995; Tess, 2013); measurement and evaluation; (Corrigan et al., 2007); development of teachers, faculty and educational personnel (Ashwin, 2005; Joyce, 2002); promotion and supports of the parent affiliation (Kahne & Sporte, 2008); networks that promote education management (Troussas et al., 2021); and management and the integration of management (Adams & Morgan, 2007).

Methodology

This research is a mixed method research. The research population included those involved in higher education management, consisting of faculty members, administrators, students, and entrepreneurs, covering all regions, including the Central Region, the Northern Region, the Northeastern Region, and the Southern Region.

Participants

The research sample consisted of 300 representatives of those involved in higher education management. They are classified into 100 faculty members and administrators, 100 students, and 100 entrepreneurs, all of whom were obtained by multi-stage random sampling, from the Central Region, the Northern Region, the Northeastern Region, and the Southern Region. Key research informants included 21 representatives of those involved in higher education management, classified into 8 faculty members and administrators, 8 students, and 5 entrepreneurs, all of whom were obtained by purposive sampling using a chain selection method with snowball selection technique.

Research Tools

To assess learner characteristics based on desirable educational outcomes and to study the management conditions of educational institutions to develop learner characteristics based on education standards, the data collection tools consisted of three 5-level rating scale questionnaires, with Cronbach's alphas for the questionnaire for faculty members and administrators, questionnaire for students, and questionnaire for entrepreneurs at .92, .96 and .98, respectively. After receiving the results of the assessment of learner characteristics and the conditions of educational institutions' management, qualitative data were collected by three semi-structured focus group discussion forms, which were the form for faculty members and administrators, for students, and for entrepreneurs so as to gain educational management guidelines to achieve desirable outcomes. Verification results of the data collection tools showed that the tools were appropriate with high content validity.

Data Collection

Questionnaires were mailed to respondents with a specified time for return. While focus group was conducted within three different groups of participants; 8 faculty members and administrators' group, 8 students' group, and 5 entrepreneurs' group. At the commencement of focus group, the participants were briefed on the purposes of the study as well as the focus group's procedure.

Data Analysis

Quantitative data were statistically analyzed using mean, and standard deviation, while qualitative data were analyzed with content analysis.

Results

1. Learner characteristics based on desirable outcomes of education in accordance with the National Education Standards 2018.

The data from 5-level rating scale questionnaires, from faculty members and administrators, from students, and from entrepreneurs showed the learner characteristics based on desirable outcomes of education as Table 1–Table 3.

Table 1 Learner person characteristics according to the desired outcomes of education framework

Learner person characteristics	Faculty members & administrators		Students		Entrepreneurs	
	M	*SD*	*M*	*SD*	*M*	*SD*
1. Have passion to learn, always learning new things and have a clear goal of learning new things	4.15	0.60	4.13	0.69	4.38	0.61
2. Recognize, understand and adapt to changing situations	4.26	0.54	4.24	0.66	4.26	0.65
3. Can access and use digital technology in learning and keep up with the changes that occur	4.43	0.49	4.35	0.63	4.44	0.67
4. Have the ability to direct, inspire, or motivate oneself and others to work towards the goals	3.93	0.72	4.04	0.79	4.33	0.70
5. Have knowledge according to the course and knowledge about living skill	3.93	0.62	4.11	0.69	4.26	0.70
6. Have a systematic thinking process, able to solve problems efficiently	3.80	0.83	4.01	0.76	4.16	0.68
7. Can apply knowledge to create jobs and careers to improve the quality of life of oneself, family, and society	4.07	0.91	4.14	0.70	4.36	0.63
Total average	4.08	0.49	4.14	0.53	4.31	0.51

Table 2 Co-innovator characteristics according to the desired outcomes of education framework

Co-innovator characteristics	Faculty members & administrators		Students		Entrepreneurs	
	M	SD	M	SD	M	SD
1. Figure out how to solve problems that arise in society	3.82	0.84	3.92	0.75	4.21	0.66
2. Can use the knowledge of various fields to integrate and apply for benefit	4.10	0.62	4.01	0.77	4.23	0.71
3. Can use their creativity to lead to the creation of new things or new ideas	4.02	0.84	3.98	0.77	4.34	0.62
4. Can create new things or new ideas to increase opportunities and value in their work and livelihood	3.92	0.78	3.88	0.79	4.28	0.71
5. Can create new things or new ideas to increase opportunities and value in the development of society and the country	3.57	0.90	3.84	0.84	4.16	0.73
Total average	3.88	0.68	3.39	0.66	4.24	0.60

Table 3 Strong citizenship characteristics according to the desired outcomes of education framework

Strong citizenship characteristics	Faculty members & administrators		Students		Entrepreneurs	
	M	SD	M	SD	M	SD
1. Courage to express their disagreement with wrong action or wrong thing	4.18	0.82	4.28	0.69	4.41	0.64
2. Show appreciation to the people in society who are good and knowledgeable	4.13	0.56	4.43	0.61	4.56	0.56
3. Demonstrate strong citizenship, such as being responsible, respect for the freedom of oneself and others, respect for rules and laws, adhering to equality, fairness, democratic values, etc.	3.89	0.87	4.36	0.67	4.52	0.59
4. Demonstrate cooperation to create a balanced society based on natural resources, Thai wisdom and culture with generosity for self-reliance and good quality of life	4.00	0.85	4.28	0.63	4.41	0.61
5. Demonstrate competence in conflict management by nonviolent means for peace in Thai and global society	3.67	0.92	4.09	0.73	4.20	0.67
Total average	3.97	0.69	4.28	0.52	4.41	0.51

Table 1 shows the assessment of the learner person characteristics. The learners had a high level of learner characteristics from the point of view of all groups, faculty members and administrators, students, entrepreneurs. Most learners had passion to learn, always learning new things, recognize and can adapt to changing situations. They can access and use digital technology in learning and keep up with the changes, have the ability to direct, inspire, or motivate oneself and others to work towards the goals, and have knowledge according to the course and knowledge about living skill. Besides, they had a systematic thinking process and are able to solve problems efficiently. They also can apply knowledge to create jobs and careers to improve the quality of life of oneself, family, and society

Table 2 shows the assessment of innovative co-creator's characteristics. The learners had a high and moderate level of learner characteristics from the point of view of all groups, faculty members and administrators, students, entrepreneurs. Most learners had the knowledge of various fields to integrate and apply for benefit and can use their creativity to lead to the creation of new things or new ideas. Nevertheless, they might need to develop the creation of new things or new ideas to increase

opportunities and value in their work and livelihood. They also need to develop how to solve problems that arise in society and how to create new ideas to increase opportunities and value in the development of society and the country.

Table 3 shows the assessment of the strong citizenship characteristics. The learners had a high and moderate level of learner characteristics from the point of view of all groups, faculty members and administrators, students, entrepreneurs. Most learners can express their courage to the disagreement with wrong action or wrong thing, at the same time, they can show appreciation to the people in society who are good and knowledgeable. They can also demonstrate cooperation to create a balanced society based on natural resources, Thai wisdom and culture with generosity for self-reliance and good quality of life. However; they might need to better demonstrate on strong citizenship, such as being responsible, respect for the freedom of oneself and others, respect for rules and laws, adhering to equality, fairness, democratic values, etc. as well as the competence in conflict management by nonviolent means for peace in Thai and global society.

In addition, the data from the focus group discussion reveal that:

1) *Learner person characteristics*. The learners had a high level of learner characteristics. Most learners had passion to learn and study hard, enthusiasm, creative thinking, positive attitude towards learning, analytical thinking and problem-solving skills, readiness to learn, understanding and adapting well to changing situations. Besides, they had high skills in using technology and were able to live and solve problems rationally, and were able to apply knowledge to create jobs and careers. They had taken care of their physical health. However; there may be issues with mental management and emotional state.

2) C*o-innovator characteristics*. The learners had a high level of co-innovator characteristics. Most learners had the ability to communicate, while some might have difficulty in communication and working with others. In the overview, learners were creative, reasonable, assertive, and had strong academic knowledge. Nevertheless, they might need to develop their soft skills. In addition, they would have the opportunity to apply their knowledge to work that runs parallel to their studies, be able to create new innovations, and be able to set up their own business or venture.

3) *Strong citizenship characteristics*. The learners had a high level of strong citizenship characteristics. Most of them would uphold their rights and equality, be assertive and defend their rights. They had a good working relationship with people in the organization, quite high self-confidence, the courage to act in a good manner, the respect for social rules and regulations, the knowledge of their own roles, and the responsibility for assigned tasks. Also, they participated in political activities to express their own position, with honest cooperation and having a volunteer spirit to work for the public.

2. Management conditions of educational institutions to develop learner characteristics based on the desirable outcomes' framework. The results from the focus group discussion show that:

1) *Education policy and strategy*. Higher education institutions had tried to use educational management policies and strategies that focus on ensuring the learners to be qualified based on educational standards by supervising and monitoring the performance periodically, continuously and systematically.

2) *Curriculum*. Higher education institutions had made an effort to manage the curriculum that focuses on ensuring that learners meet the educational standards.

3) *Instructional management, learning internships, and professional experiences*. Higher education institutions had made efforts to organize teaching,

learning internship and professional experience that focus on learners to be qualified based on educational standards.

4) *Media and learning networks*. Higher education institutions had tried to manage media and learning networks to be ready and conducive for instructional management, which is expected to help develop learners to have qualifications based on educational standards.

5) *Measurement and Evaluation*. Higher education institutions placed importance on measuring and evaluating learning outcomes by developing a systematic measurement and evaluation system as well as a variety of assessment methods. They had the assessment based on actual conditions and encouraged relevant people to participate in the assessment of learning, which is expected to help develop learners to meet national educational standards.

6) *Faculty and educational personnel development.* Higher education institutions placed importance on developing the quality of faculty and educational personnel so that they have knowledge and ability in instructional management that affect the development of learners to meet the standards of education.

7) *Promotion and support from the agency*. The agencies had made efforts to promote and support higher education institutions to be able to manage education for developing learners to have qualifications based on educational standards.

8) *Network partnership*. Higher education institutions had tried to organize networks that promote education management to be ready and conducive to instructional management, which is expected to help develop learners to meet the standards of education.

9) *Management and integration of education management.* Higher education institutions had made efforts in managing and integrating educational management in relation to educational management in order to develop the quality of learners based on educational standards.

3. Guidelines for educational management to achieve desirable results. The results from the focus group discussion were as follows:

1) The competency-based curriculum should be emphasized in terms of the body of knowledge, work skills, life skills and characteristics of learners based on national education standards, especially morality, ethics and good attitude towards work. The curriculum should be more practice-oriented by reducing the course content, with emphasis on experience training at the workplace. In addition, there should be the development of a curriculum

that meets the needs of the labor market. Also, the instruction should be linked to the real area or area-based education in order to train learners to implement their knowledge and skills with spatial practice.

2) Providing practical experience should be focused on training learners to be able to integrate knowledge, skills, and innovation with real work. Moreover, it should develop the learner's characteristics, both hard skills and soft skills.

3) There should be the emphasis on the development of instructors' characteristics, both to have necessary skills for working in the professional field (hard skill) and skills for living and working with others (soft skills). There should be the policies and encouragement for instructors to create innovative products or work that is a concrete example. Instructors should also have the opportunity to develop themselves by learning new innovations from various entrepreneurs.

4) There should be the development of trainers in the workplace. This is because the trainers in the workplace must have skills in teaching and mentoring or coaching the learners, which will allow students to develop and realize good working models.

5) Policy-level agencies should improve regulations to facilitate the management of diverse higher education in line with rapidly changing conditions and to promote the creation of unique identities of each institution.

Discussion

From the research findings, the interesting results point out that teachers, students and entrepreneurs have consensus that learners have the characteristics of learners at the high level. They always learn and have a clear goal of learning new things, which may come from the fact that they have already chosen to study in the faculty and field that they are interested in. In addition, from the point of view of entrepreneurs, it is seen that most of the learners who are tertiary institution students are people who want to learn because they have goals in their working life, eager to work and seek what they want in life and in the future. This is in line with Knowles (1978)'s view of the learning psychology of adult learners as those who have maturity and a wide range of experiences, are ready to learn and have the maturity to be ready to learn in various academic areas. The findings also show that such has a distinctive feature of learners in using digital technology. The survey results by World Economic Forum (2020) show that emerging occupations that have changed are directly related to digital technology. Therefore, in teaching learners at the higher education level, the institutions should focus on problem-centered learning management in line with the needs of the students. This should provide a more integrated and competency-based and work-based curriculum and link it to the real-world. Moreover, the institutions should cultivate students to have innovative competencies (Ruchiwit et al., 2019) to train students to use their knowledge and skills with spatial practice and to meet the needs of international agencies or organizations including having the opportunity to apply knowledge to work that runs parallel to learning (Insombat & Neramit, 2020).

It was also found that the students had strong citizenship characteristics. They have the courage to express their disapproval of what is wrong or approval of what is right, uphold rights and equality and fairness in society. This is consistent with the research of Panichphinchai and Panichphinchai, (2017) which found that citizenship was expressed in equal measure, differences acceptance, having morals, ethics, and respecting the rights of oneself and others, and being socially responsible, with understanding and participation in democracy. The findings can be supported by Cogan and Derricott (1998) who explain strong citizenship characteristics that the learner will have the ability to find solutions to the problems of world society, can work responsibly with others and fulfill their roles and responsibilities in society. The person who has strong citizenship can understand, accept and appreciate different cultures, and think analytically in a critical manner. They also can consider systematically and have willingness to resolve conflicts through peaceful means.

Research also indicates that the current curriculum management condition puts too much emphasis on knowledge, and still lacks of linking the feeder factors with what characteristics of learners are needed. The institutions have to also adjust to produce more graduates that meet the needs of the enterprises. It proposed that the curriculum should be practice-oriented, focusing on practical experience, and develop learner competency that meets the needs and necessities of the work place and in line with the needs of the labor market. This corresponds to the implementation of the Secretariat of the Education Council (2020) which states that educational institutions should have policies and prescribe higher education curriculum aiming to produce quality manpower. It should be a competency-based curriculum linked to the development of manpower for national development (Ruchiwit et al., 2019). Knowledge and experience need to be applied

in work and real life and encourage students to create new innovations such as learning management, productivity-based learning management, criticality-based teaching using research process, problem-based teaching (Insombat & Neramit, 2020; Ma-Oun, 2016), teaching and learning in the new learning ecosystem (Mezirow, 1997), holistic learning (Miller, 2005), including an emphasis on internships and vocational training for students to succeed in entering new workplaces (Calway & Murphy, 2000).

Therefore, to keep pace with the fast-changing world, affiliation agencies and educational institutions should give importance to and formulate a policy in developing curriculum that focuses on work competency, in line with the needs of the labor market. The higher education teaching method, in the new learning ecosystem, should focus on the concept of learner, innovative co-creators, and strong citizenship to ensure that each learner and graduate is equipped with desirable characteristics. A student-centered approach is required to produce qualified graduates with those skills. They should also establish a policy to develop instructor competencies to have the potential in integrating various fields of study to be interdisciplinary or multi-disciplinary as well as the potential to develop innovation and skills in learning management. In addition, there should be the development of a system to mobilize cooperation with network partners both domestically and internationally. For further research, an educational institution management model should be developed for the desirable outcomes of learner characteristics. There should also be the study of the causal factors affecting the development of learner characteristics based on the desirable educational outcomes framework to achieve the national educational standards. For further research studies, follow-up research and evaluation of learner characteristics should be encouraged. Such should also support the agencies or universities to study and research development of guidelines for teaching and learning management in order to develop learner characteristics that are desirable outcomes according to the 2018 National Education Standards.

Conflict of Interest

The author declares that there is no conflict of interest.

Fundings

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