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Development of Guidelines to Promote the Competence of Graduates According to Higher Education Qualification Standards in the Educational Administration Field of Study

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Abstract

This research aimed (1) to analyze the components confirming the competence of graduates according to the higher education qualification standards, the field of educational administration with empirical data (2) to examine the consistency of these components and indicators with empirical data, and (3) to improve a competency development manual for graduates. The sample group used in the research was conducted into 2 phases: Phase 1 consisted of 400 lecturers in the field of educational administration by two-stage random sampling, and Phase 2 consisted of 5 experts, higher education lecturers who teach in the field of educational administration, educational administrators, and educational institution administrators by purposive random sampling. The research instrument was a questionnaire on the competency of graduates according to the higher education qualification standards in the field of educational administration, consisting of 80 items in a 5-level rating scale based on the concept of Likert (1967), classified into 4 components and 2 levels of education, namely, master's degree and doctoral degree, with a discrimination power index of .20 or higher and a reliability of .65 for the whole version. Data were analyzed using the mean, standard deviation and second-order confirmatory factor analysis using the M-Plus program.

The results of the research found that the competency components of both master's degree and doctoral graduates consist of four dimensions: knowledge (10 indicators), skills (10 indicators), ethics (10 indicators), and character (10 indicators). The consistency check results at both levels were consistent with the empirical data. These findings have practical implications for improving the competency development manual for master's degree graduates, suggesting that the focus should primarily be on skills, followed by knowledge, ethics, and personal characteristics. Similarly, the doctoral degree should focus mainly on skills, followed by individual traits, knowledge, and ethics.

Keywords: Guidelines Development, Graduate Competency, Higher Education Qualification

Introduction

The Ministry of Higher Education, Science, Research and Innovation (MHESI) is responsible for formulating a higher education plan to sustainably develop the quality and opportunities of higher education for people of all ages in the country. It is a source of knowledge, research and innovation that are beneficial to the country's competitiveness, with 3 strategies: graduates and personnel, a new research and higher education ecosystem (Office of the Higher Education Standards Committee, 2022) and the announcement of the Higher Education Standards Committee on the criteria for graduate-level curriculum standards B.E. 2022. The objectives of the master's and doctoral degree programs are to develop academics and professionals with high levels of knowledge and skills in various fields through the research process, as well as the ability to continuously link and integrate related disciplines. At the master's level, the focus is on knowledge and understanding of the process of creating and applying new knowledge for the development of work and society, while the doctoral degree aims to have the ability to conduct research to create new knowledge that is beneficial to the development of society and the country (The Act on the Administration of the Ministry of Higher Education, Science, Research and Innovation B.E. 2019 on Higher Education Qualification Standards B.E. 2022, 2022). Therefore, it is necessary to set the standards of higher education qualifications as a guideline for further education management.

Higher education qualification standards are requirements on the learning outcomes of learners resulting from studying according to the higher education curriculum standards set by the education level. Higher education qualification standards are used to promote, supervise, inspect, monitor and evaluate and assure the quality of higher education, including the preparation or improvement of the curriculum to achieve learning outcomes according to the higher education qualification standards in terms of knowledge, skills, ethics and personal characteristics. It must show the development of different learning outcomes according to the higher education qualification standards. The learning outcomes of graduates of all levels of higher education qualification standards must include at least four aspects: 1) Knowledge refers to things accumulated from studying, researching or experiences from the curriculum, which are necessary and sufficient for applying or extending knowledge in working, living together in society and developing sustainably for living in the digital age. 2) Skill refers to the abilities that arise from learning, practicing to be agile, quick and skilled in order to develop work, develop careers or academics, develop oneself and develop society. 3) Ethics refers to personal behavior or actions that reflect being a person with virtue, morality and ethics. For the public and private benefits both in front of and behind others, and 4) Personal characteristics (Character) refers to personality, character traits and values that reflect specific characteristics of the profession, and institution, developed through learning and training experiences from the curriculum to be appropriate for each level of higher education qualification standards (Office of the Higher Education Standards Committee, 2022).

Educational Administration is a graduate study field consisting of master's and doctoral degrees to produce educational administrators with qualifications to enter the position of educational institution administrators, educational administrators, educational supervisors, executives of business units, industries that apply knowledge in administration and research, including lecturers in higher education institutions to have the potential and be experts in being professional administrators. It aims to create administrative competence, both core competences, namely, focusing on performance, good service, self-development, teamwork, ethics and professional ethics, competences according to the position, namely, curriculum administration and learning management, learner development, classroom management, analysis, synthesis and

research for development, executive leadership, building relationships and cooperation with communities for learning management, and administrative competences, namely, leadership, vision, academic leadership, policy and strategic planning, technological capabilities, leading to effective educational administration. (Burapha University, 2021, p. 4) Therefore, graduates in the field of educational administration at both the master's and doctoral levels must have competence according to the higher education qualification standards of the Ministry of Higher Education, Science, Research and Innovation in all 4 areas in order to enter the position of educational administrators with quality and efficiency, have expertise in being a professional administrator, can create research and be a creator of educational administration innovations, have the ability to be an academic leader and professional development with knowledge in educational administration principles, be a leader in morality, ethics and can develop education in line with national development (Burapha University, 2021, p. 7). And after graduation and entering the position of educational administrator, they still need to continuously develop their educational administration competence in order to maintain the standards of being a quality educational administrator.

From the study of Ngamkanok (2023) on components and indicators of the competence of graduates according to the higher education qualification standards, the field of educational administration, and created a manual for developing the competence of graduates according to the higher education qualification standards, the field of educational administration, by collecting data and conclusions from interviews with experts and focus group discussion. The results of the study found that the components and indicators of the competence of graduates according to the higher education qualification standards, the field of educational administration, both master's and doctoral degrees, consist of 4 components and 80 indicators, namely 1) Knowledge component, consisting of 10 master's degree indicators, 10 doctoral degree indicators, 2) Skills component, consisting of 10 master's degree indicators, 10 doctoral degree indicators, 3) Ethics component, consisting of 10 master's degree indicators, 10 doctoral degree indicators, and 4) Character component, consisting of 10 master's degree indicators, 10 doctoral degree indicators. The results of the study found that there is still a lack of quantitative data analysis to examine and confirm the components and indicators of competence of graduates according to the higher education qualification standards, field of educational administration, including prioritizing the components and indicators that will lead to more efficient development of graduate competence.

Therefore, the researcher is interested in developing a guideline to promote graduate competence according to higher education qualification standards, educational administration discipline by analyzing the confirmatory elements and examining the consistency of the elements and indicators of graduate competence according to higher education qualification standards, educational administration discipline with empirical data, including using the results from such analysis to improve and develop the manual for developing graduate competence according to higher education qualification standards, educational administration discipline to be more efficient.

Research objectives

1. To analyze the components confirming the competence of graduates according to the higher education qualification standards, the field of educational administration with empirical data
2. To examine the consistency of the components and indicators of the competence of graduates according to the higher education qualification standards, the field of educational administration with empirical data

3. To propose the guideline for improving the manual for developing the competence of graduates according to the higher education qualification standards, the field of educational administration

Conceptual framework

This research is divided into 2 phases: Phase 1: Examining the consistency of the components and indicators of graduate competence according to the higher education qualification standards, the field of educational administration with empirical data; and Phase 2: Improving the manual for developing graduate competence according to the higher education qualification standards, the field of educational administration. The researcher used the components and indicators according to the MHESI higher education qualification standards of the Ministry of Higher Education, Science, Research and Innovation and from the research of Ngamkanok (2023), consisting of 4 components: 1) knowledge components, 2) skills components, 3) ethics components, and 4) character components as a conceptual framework, as shown in Figure 1.

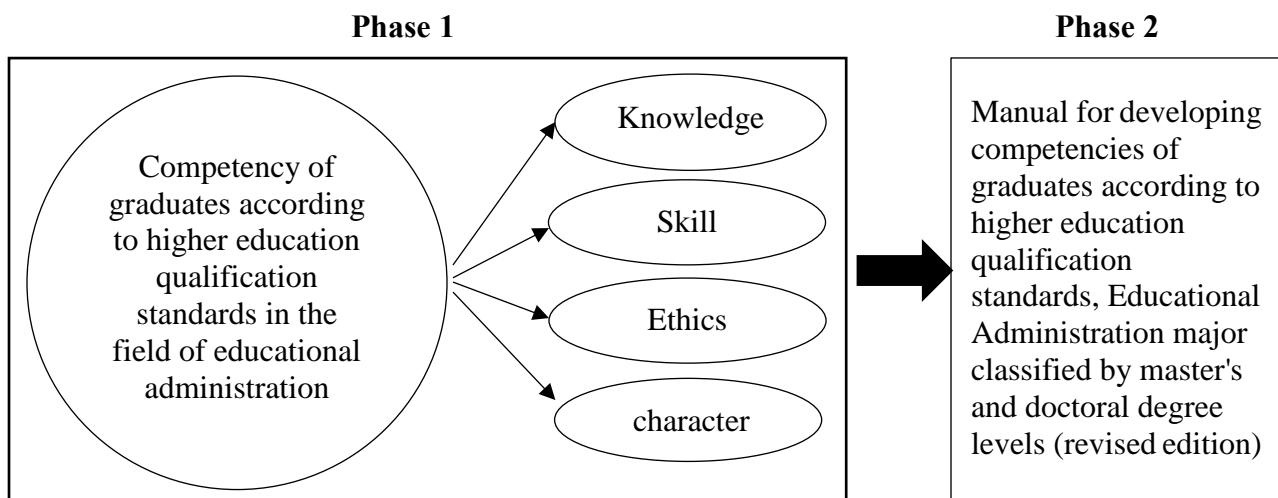


Figure 1 Research concept framework

Methodology

Phase 1: Testing the consistency of the components and indicators of competency of graduates according to the higher education qualification standards, consisting of:

Population: lecturers in the field of educational administration or fields related to teaching and learning, educational administration at the master's and doctoral levels of higher education institutions that have received curriculum standards, production standards and graduate standards accreditation from the TCT, totaling 290 institutions.

Sample: The sample group consisted of lecturers in the field of educational administration or fields related to teaching and learning in educational administration at the master's and doctoral levels of higher education institutions that have been certified by the curriculum standards, production standards and graduate standards from the TCT totaling 135 institutions, with a total sample size of 400 people. The sample size was determined using a two-stage random sampling method, consisting of:

Step 1 Randomly selecting higher education institutions using the simple random sampling method, resulting in a total of 135 institutions.

Step 2 Randomly selecting 3 lecturers/institution using the simple random sampling method.

Phase 2: Improving the manual for developing competencies of graduates according to higher education qualification standards in the field of educational administration

The target group consists of 5 qualified persons selected by purposive random sampling with the following qualifications 1) educational administrators and educational institution administrators, higher education lecturers who play a role in policy-making or are responsible for managing education in the field of educational administration in both the public and private sectors. 2) Have a master's degree or higher and have expertise in educational administration, or have research works, textbooks in educational administration that are accepted and 3) have at least 1 year of experience in administration.

Instruments used in the research

1. The instrument used in collecting data in the first phase is a questionnaire on competency of graduates according to the higher education qualification standards, the field of educational administration, consisting of 80 items, a 5-level rating scale based on the concept of Likert (1967), classified according to the 4 components of the higher education qualification standards, the field of educational administration, and 2 levels of education, namely, master's degree and doctoral degree with a discrimination power of .20 or higher and a reliability of .65 for the whole version.

2. The instrument used in collecting data in the second phase is an assessment form on the competency development manual for graduates according to the higher education qualification standards, the field of educational administration, consisting of 18 items, a 5-level rating scale based on the concept of Likert (1967), assessing 4 aspects: Correctness, appropriateness, feasibility, and usefulness

Steps and methods for data collection

The researcher conducted data collection in the first phase from the sample group in person by sending questionnaires by mail and using Google Form questionnaires.

Data analysis

Phase 1 data analysis consists of:

1. Analyze data from the questionnaire on competency of graduates according to higher education qualification standards, educational administration major with basic statistics using the SPSS program using descriptive statistics, including frequency, percentage, mean, and standard deviation.

2. Analyze the relationship of indicators and components of competency of graduates according to higher education qualification standards, educational administration major, including Pearson's product momentum, Bartlett's test of sphericity, and Kaiser-Mayor-Olkin (KMO) index to find out the nature of the relationship of the variables.

3. Analyze confirmatory components using the M-Plus program to check the consistency of components and indicators of competency of graduates according to higher education qualification standards, educational administration major.

Phase 2 data analysis consists of: Analyze data from basic statistics using the SPSS program using descriptive statistics, including frequency, percentage, mean, and standard deviation.

Research results

1. The analysis of the components confirming the competence of graduates according to the higher education qualification standards, the field of educational administration at the master's degree level, consists of 4 aspects: 1) knowledge, 10 indicators, 2) skills, 10 indicators, 3) ethics, 10 indicators, and 4) characters, 10 indicators. The component with the highest factor loading is the skill component (B) with a value of 0.84, consisting of the top 3 indicators with the highest weight: having the ability to use technology and digital technology sufficiently for use in managing educational institutions, including communication, networking, and systematic and up-to-date data collection (B15), having the ability to systematically analyze data based on information databases sufficient for use in making decisions in managing educational institutions (B11), and having the ability to apply various knowledge related to management to use in situations, both in managing projects and resources efficiently and systematically and to the greatest benefit (B16). Next is the personal characteristics component (D) with a value of 0.79, consisting of the top 3 indicators with the highest weight: having a habit of always learning and seeking knowledge. To develop oneself in both professional aspects and knowledge necessary for improving the quality of life, to be a person who keeps up with the world and events (D34), to love working as a team, to demonstrate leadership that aims to create cooperation in working together (D37), and to be a leader, to demonstrate leadership in accordance with the role and responsibilities in the profession appropriately (D32), and the knowledge component (A) has a value of 0.76, consisting of the top 3 indicators with the highest weight, namely, having knowledge and understanding of principles, concepts and theories of educational administration sufficient to apply to practice to build on knowledge and connect new knowledge to develop the profession (A1), having knowledge and understanding of formats, methods of management and development of educational organizations sufficient to apply to practice in line with various contexts (A2), and having knowledge and understanding of the roles and responsibilities of leadership of educational administrators. And teamwork that is sufficient for self-development and team development (A3) and the doctoral level consists of 4 aspects: 1) Knowledge, 10 indicators 2) Skills, 10 indicators 3) Ethics, 10 indicators and 4) character, 10 indicators. The component with the highest weight is the skills component (BB) with a value of 0.78, consisting of the top 3 indicators with the highest weight: having the ability to use technology and digital technology in the development of innovations that are accepted for use that are beneficial to the management of educational institutions, including communication, networking, and systematic and up-to-date data storage (BB15), having the ability to think at an advanced level based on information databases and linking various bodies of knowledge to be used in decision-making for the efficient management of educational institutions (BB11), and having the ability to apply and create new knowledge related to management for use in accordance with the situation, including the management of projects and resources efficiently, systematically and with the highest benefit (BB16). Followed by the ethics component (CC) with a value of 0.76, consisting of the top 3 indicators with the highest weight: being honest, straightforward in both one's conduct and professional practice. Awareness and consciousness of duties and responsibilities towards the educational institution (CC21), responsibility, and full attention to administration, focusing on the public interest as the main principle in performing duties (CC25), and diligence, not discouraged by obstacles, demonstrating dedication and sacrifice for the public interest (CC29). The knowledge component (AA) has a value of 0.75, consisting of the top 3 indicators with the highest weight: having knowledge and understanding of principles, concepts and theories of educational administration thoroughly and deeply, leading to the creation of new knowledge or innovation in educational administration (AA1); having knowledge and

understanding of forms, methods of administration and development of educational organizations thoroughly and deeply, leading to the creation of new forms of administrative innovation (AA2); and having knowledge and understanding of the roles, responsibilities, leadership of educational administrators and teamwork thoroughly and deeply, leading to the development of leadership and teamwork by applying accepted research findings to various contexts appropriately (AA3), as shown in Figure 2.

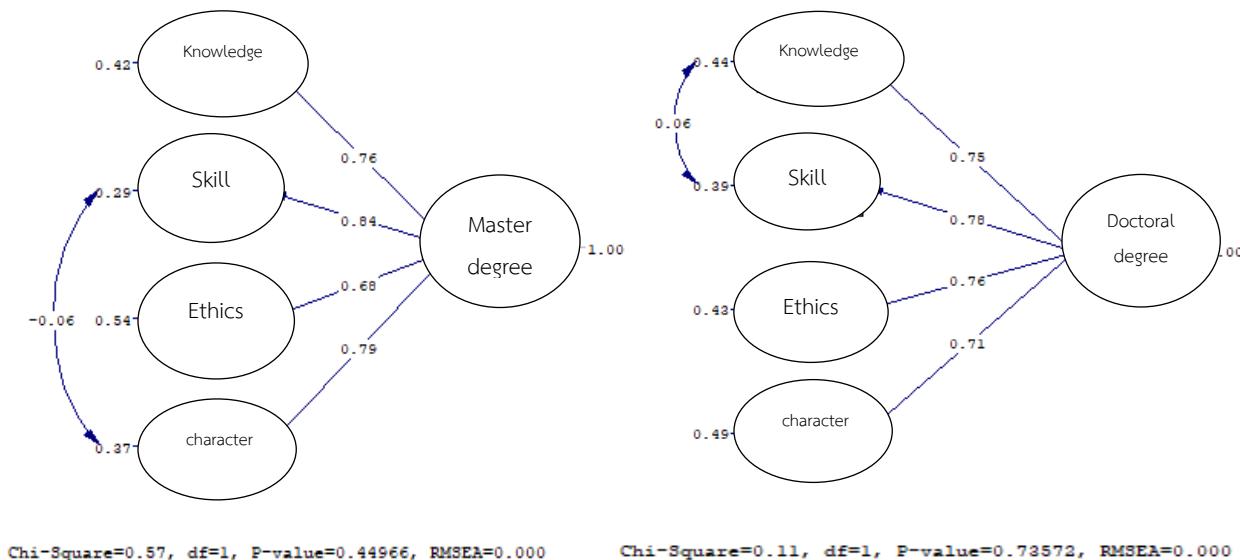


Figure 2 Results of the inspection of the harmony of components and performance indicators.
Graduates following higher education qualification standards Field of Study:
Educational Administration

2. The results of the consistency test found that the components and competency indicators of graduates according to the higher education qualification standards in the field of educational administration at the master's and doctoral levels were consistent with the empirical data as shown in Table 1.

Table 1 Results of the examination of the consistency of the components and indicators of graduates.

Education level	Conformity index							
	χ^2	df	χ^2/df	p	GFI	AGFI	SRMR	RMSEA
Master's degree	0.57	1	0.57	.45	1.00	.99	0.005	0.000
Doctor's degree	0.11	1	0.11	.74	1.00	.99	0.002	0.000

3. Guidelines for enhancing the manual for developing graduate competencies align with higher education qualification standards. The field of educational administration at the master's degree level has seen significant advancements, with a key focus on skills. This is highlighted by the confirmatory component analysis, which found that the skills component had the highest factor loading at both the master's and doctoral levels, surpassing knowledge, ethics, and personal

characteristics. At the doctoral level, the order of priority was skills, followed by personal characteristics, knowledge, and ethics.

Discussion

1. The analysis of the components confirming the competence of graduates according to the higher education qualification standards, the field of educational administration, master's degree and doctoral degree, consists of 4 aspects: knowledge, skills, ethics and personal characteristics. It was found that the component with the highest factor loading at both master's degree and doctoral degree levels is the component of skills related to the ability to use technology and digital technology sufficient for use in managing educational institutions, including communication, networking, systematic and up-to-date data collection, the ability to analyze data systematically based on sufficient information database for use in decision-making in educational institution management, and the ability to apply various knowledge related to management to use according to the situation, both in managing work, projects and resources effectively, systematically and to the greatest benefit. This is because in the present era, educational institution administrators must have knowledge and skills in digital technology along with administrative competence, especially to be an administrator in the 21st century, which must have management skills in the digital age, consistent with Jiamthong (2018), who stated that the skills of educational institution administrators in the digital age are very important and essential skills for management in the digital age, consisting of communication and technology skills, creative skills, human relations skills, and technical skills. Innovation skills are consistent with Intaramanee (2019) who stated that the skills of school administrators in the digital age refer to skills related to promoting the use of technology and information by having a vision for using information from technology and information to create added value in school management and teaching management, encouraging teachers to use new technologies and information to create distinctiveness that is different from other schools, providing an experience beyond expectations for students, parents, and stakeholders, creating an atmosphere and work environment for organizational culture, promoting creativity, and pushing teachers and students to continuously invent management innovations and teaching innovations, including utilizing the knowledge, expertise, and potential of teachers, students, and stakeholders. It is consistent with Khantong and Boobpha (2021) who stated that school administrators in the digital age need to have knowledge, understanding, and be able to use current digital tools, equipment, or technology, such as computers, phones, tablets, and online media, to maximize the benefits of communication and collaboration among people in the organization. School administrators must create an atmosphere of teacher participation to encourage them to dare to express their opinions. School administrators must have the knowledge and ability to select or use modern digital technologies in the organization appropriately, evaluate organizational potential, and always find ways to develop the organization.

2. The results of the consistency test found that the components and competency indicators of graduates according to the higher education qualification standards, the field of educational administration at the master's and doctoral levels are consistent with the empirical data. This is because the sample group who provided the information were lecturers in the field of educational administration or fields related to teaching and learning in educational administration at the master's and doctoral levels of higher education institutions that have been certified by the curriculum standards, production standards and graduate standards from the Teachers Council of Thailand. They hold academic positions at the assistant professor, associate professor and professor levels, and most of them have 10 years or more teaching experience, resulting in data

that is consistent with the reality and the guidelines for developing the competency of graduates according to the higher education qualification standards, the field of educational administration at the master's and doctoral levels, which is consistent with the study of Seeladlour (2016) who studied the development of competency indicators for administrators of basic education institutions. It was found that the competency indicator model of administrators of basic education institutions that was created was consistent with the empirical data and was consistent with Noinaul et al. (2021) Regarding the analysis of the components of desirable characteristics of educational administrators in the digital age, it was found that there were 5 main components namely, Component 1, the aspect of using innovation and technology in educational institution administration, Component 2, the aspect of vision and self-development, Component 3, the aspect of personality of educational administrators Component 4, the aspect of knowledge and administrative ability, and Component 5, the aspect of responsibility, with 3 variables. The results of the component analysis were consistent with the empirical data.

3. Guidelines for improving the manual for developing competencies of graduates according to higher education qualification standards. The field of educational administration at the master's degree level has been improved by giving priority to skills. This is because the results of the confirmatory component analysis found that the component with the highest factor loading at both the master's and doctoral levels is the skills component, followed by knowledge, ethics, and personal characteristics, respectively. As for the doctoral level, the improvement was given priority to skills, followed by personal characteristics, knowledge, and ethics, respectively.

Research Suggestions

Suggestions for Applying the Research Results

1. Higher education institutions that provide master's and doctoral degree programs in educational administration use the components and indicators of graduate competence according to the higher education qualification standards in educational administration that are confirmed by empirical data to plan for the development of graduate competence according to the higher education qualification standards in educational administration.

2. The Faculty of Education can use the data from the research results to improve the manual for developing graduate competence according to the higher education qualification standards in educational administration classified by master's degree and doctoral degree to be more efficient.

3. The Ministry of Higher Education, Science, Research and Innovation and higher education institutions can use the research results as a guideline for promoting the competence of graduates according to the higher education qualification standards in educational administration at both master's and doctoral levels, which will result in educational administrators or educational administrators with quality, efficiency and skills in educational administration, development of educational quality and national educational administration.

Suggestions for future research

1. Qualitative research should be conducted to follow up on graduates of higher education in educational administration who have performed their duties as administrators of educational institutions or educational administrators regarding the executive competence developed according to the revised curriculum.

2. Competence studies should be conducted in areas other than those found in the research.

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