
DEVELOPING AN EDUCATIONAL MANAGERIAL GUIDE FOR THE STRATEGIC PLANNING OF HIGHER EDUCATION IN JORDAN

Dr. Nour Khaled Mashaqbah,

Department of Educational Administration - Faculty of Education, University of Hail, KSA.

ABSTRACT : *This study aimed at developing an educational managerial guide for strategic planning in higher education in Jordan, based on the theoretical literature on the subject and the current planning reality in the Ministry of Higher Education. The study society consisted of all employees in the departments of the Ministry of Higher Education in Jordan in 2013/2014, and the study sample consisted of (186) employee who participate directly in decision-making. In order to achieve the objective of the study, the theoretical literature and previous studies were surveyed and a questionnaire was developed to measure the planning reality in the Ministry of Higher Education, and to reveal the degree of willingness to practice all stages of strategic planning. The questionnaire consisted of (74) paragraphs summarized the reality of the plan available in the Ministry of Higher Education and the challenges facing it. Statistical averages and standard deviations were used to determine the planning reality in the Ministry of Higher Education and the degree of desire to practice its stages. It was found that the Ministry of Higher Education adopts the plan of implementation and then the long-term plan and the strategic plan. The entity familiar with and participating in the development of the plan was represented in the senior leadership in the ministry. The results of the study showed the need for the Ministry of Higher Education to provide an educational management guide in the strategic planning of the ministry. Accordingly, an educational management guide for the strategic planning of the Ministry of Higher Education was developed. The main outcome of the study was the development of the Educational Guide to Strategic Planning.*

KEYWORDS: *Managerial Guide, Strategic Planning, Educational Institutions, Ministry of Higher Education*

INTRODUCTION

The current environment today is a constantly changing environment and it is difficult for enterprises to effectively invest their potential and anticipate their future without planning them in an organized manner. The Holy Koran is a noble message organized according to a timetable that appears to be a strategy governed by the age of man, but in fact it is extended by the age of the generations, this is evidenced by the saying of the Almighty: "And I (Allah) created not the jinn and mankind except that they should worship Me (alone)" (Holy Quran, Adh-Dhariat:56). And that the development of the individual to raise its value and build communities does not occur automatically, but is linked to education, which is based on planning, and that the integrated methods of interrelated and reactive processes and its ultimate goal to raise the standard of living of the individual stems from planning, development and education, as education is a process that develops the ability of individuals and their readiness, values, ideas and trends to play their roles efficiently and effectively, and the tool to achieve such planning as it directs and controls the course of this process and adjust it according to priorities.

Strategic planning emerged in the middle of the 19th century as a modern administrative concept rooted in a Greek military concept to achieve a competitive advantage in the movements of the army, taking advantage of time to reach its goals. However, its association with education and educational institutions came at the beginning of the 1990s.(Hussain, 2002).

The strategic planning is defined as a systematic approach that identifies potential and expected possibilities and designs alternative strategies to make rational decisions necessary for the implementation process by looking for the future (Hussein, 2002). The strategies are a method chosen by the institution to benefit from its available resources to achieve the most appropriate results. Hence, strategic planning was used to develop plans based on strategies to look into the future and develop a comprehensive vision in order to achieve the desired results from the institutions. (Alsely, 2000).

Strategic planning reflects a realistic understanding of what is going on in the internal environment of the institution, try to identify the strengths and weaknesses in them, understand the environment of the external institution, try to identify the opportunities and risks involved, to be able to foresee the future, prepare to formulate a set alternatives strategies that lead the institution to achieve their objectives, and to provide better conditions that will facilitate the achievement of the objectives (Al-Marsi, 2002).

That educational institutions strive to achieve their educational goals effectively through strategic planning, which began its relationship with higher education in 1959, in the first official meeting held for those responsible for strategic planning in higher education when the climate of education is experiencing a state of instability beyond inflation. The work published by George Clare (1983) entitled "Academic Strategy" was a qualitative shift to focus on strategic planning, when responsible and institutes were accredited, they became indispensable in assessing management and institutional effectiveness as a whole. (Doris, 2006, P: 28).

Higher education has undergone a radical change in the patterns and fields of education, this development has been in response to the challenges faced by higher education, which are characterized by the development of educational techniques, the increase in demand, the huge explosion of knowledge, and the spread of the phenomenon of globalization, which led researchers to the need for a change in the way of thinking towards strategic directions and effective leadership based on the investment of human resources, and preparation, especially the appropriate preparation to accommodate all variables, and the good selection of alternatives in the light of a clear vision and a future perspective aware of the process of change. The ability of the educational system to achieve its objectives at all stages and reach quality and quality is achieved through strategic guidance and planning to reach the university institutions of excellence and development to adapt to the requirements of the age. Higher education is a very important stage because it completes the previous basic and secondary education stages. (Alsely, 2000).

Strategic planning is an essential element in any modern educational management, and must be practiced by educators continuously, and double their investments around it to be effective, to be able to deal with educational problems, because it represents the tool of development and its basic means, and has a role in the economy, social life, and the growth of culture and civilization. To achieve educational reform through effective strategic planning based on scientific foundations, starting from reality and analysing the trends of the recent past and preparing for a future vision that is hoped to be the case in the future (Gnome, 2009). Therefore, strategic planning is one of the most important types of long-term future planning, which has been sought by many private and public institutions in order to transfer it to the hoped-for situation, by virtue of the characteristics and nature of this type of planning that distinguish it from other types of institutions, and for its ability to place the institution in the position of competition and discrimination from other institutions, and the higher education is the major nucleus and the production base of educational institutions, if the planning in this institution is strong and according to scientific foundations, vision, mission and goals based on a clear strategy, the outputs will be strong and meet the ambitions laid out by the planners when they draw up the strategic plan for higher education.

Problem and Questions of the Study:

The implementation of strategic planning in the field of education has become a necessity to meet the requirements of the proper administrative process, and in the management of educational institutions, but the two processes still need to be paired, especially when preparing of strategic planning taking into account all that would improve organization's performance. A prospective study was conducted and a preliminary questionnaire was distributed to employees at the Ministry of Higher Education to determine the degree of exercise of staff for strategic planning, it was found that the linkage between strategic planning and the existence of an administrative education manual for strategic planning based on scientific foundations has not received sufficient attention from higher education officials. The researcher noted through her work in the field of education that the planning process and the formulation of strategic plans are still being built without the availability of an educational administrative guide. Hence the research problem and the degree of correlation between the availability of the educational management guide for strategic planning in achieving the quality of performance in the Ministry of Higher Education and Scientific Research, and the positive impact of this guide on the educational process at all stages, the researcher was urged to develop an administrative guide for educational strategic planning in the Ministry of Higher Education and Scientific Research of Jordan, this has positive implications for the learning process and the direct positive reflection on students and society. Hence, the problem of the study is to answer the main question: What is the developed educational management guide for strategic planning for higher education in Jordan?

The following questions stemmed from this main question:

1. What is the reality of strategic planning in Jordanian higher education?
2. Are there statistically significant differences at the level of ($\alpha \leq 0.05$) in the responses of the study sample on the reality of the strategic planning attributable to variable (gender, qualification, experience)?
3. What is the best educational management guide for strategic planning for higher education in Jordan?

Aims and Importance of the Study:

It is hoped that the following parties will benefit from the results of this study:

1. The Ministry of Higher Education and Scientific Research to develop a guiding tool to improve the strategic planning process.
2. Contribute to the development of strategies and mechanisms that can be used by officials in higher education and scientific research.
3. Enriching the Arab library with studies on the extent to which the government is linked to strategic planning.

Terminology of study

There are some terms that will be adopted in this study and have been defined conceptually and procedurally:

Planning: is a process that includes the identification of different objectives, policies, procedures, programs, methods of work, sources of funding, knowledge of expected problems and ways of addressing them, based on accurate information with a view to overcoming expected problems and continuously developing their performance. (Lawzy, 2002, 92)

Strategy: Is the method chosen by the organization to take advantage of the resources available to it and to achieve the best results. It is a general trend and a decision taken by the institution to determine the course of its work within a specified period. (Al-Salmi, 2002, 120).

Strategic Planning: Is a systematic approach that orients the future and potential educational horizons, and prepares to confront them by diagnosing available and anticipated capabilities and designing alternative strategies, and making rational decisions on their implementation and follow-up of this implementation. A

comprehensive scientific process based on orienting the future and understanding the variables related to the internal and external environment of the institution, under which the leadership of the educational organization to define the vision, mission and objectives of the organization in order to move from the current situation to the desired situation to achieve excellence and optimal point. (Hussein, 2002, 169).

Study limitations

The results of this study can be generalized in the light of the following determinants:

Human Boundaries: This study is determined by the responses of the leaders and educational in the Ministry of Higher Education and Scientific Research of Jordan.

Time Limits: This study is determined by the responses of leaders and educational experts in the Ministry of Higher Education and Scientific Research and their perceptions in Jordan in the academic year 2013/2014.

Previous Studies

Al-Abbsi (2004), the study aimed at building an educational guide for strategic planning in Jordanian secondary schools. To achieve this goal, the theoretical literature and previous studies were surveyed and a questionnaire was constructed to measure the reality of planning in the Jordanian secondary schools which reached 1127 school. Most of the secondary schools adopt the annual development plan, followed by the traditional annual plan, followed by the long-term plan, the lowest of which is 1.5% of the total is a strategic plan, and the need to provide an educational guide for strategic planning in Jordanian secondary schools. The researcher recommended that the subject of strategic planning be given attention worthy of its importance as a suitable technology to deal with the twenty-first century and characterized by rapid dynamic changes, as well as the adoption of the subject of strategic planning course taught in universities, especially colleges of education to provide graduates with appropriate competencies for this type of planning.

Al-Husani (2005), conducted a study aimed at identifying the degree of application of the phases of the strategic planning process in the Ministry of Education in the Sultanate of Oman, The study society consists of all the administrative leaders in the Ministry of Education in the Sultanate of Oman on the following posts: Directors General and their deputies, department directors and their deputies and heads of departments in the ministry's office and educational districts in the academic year 2006/2007, which are 728 individuals, A random stratified sample of 391 individuals was selected, In order to achieve the objective of the study, a questionnaire was distributed which included six phases of the strategic planning process, consisting of (56) paragraphs. The study showed that the degree of implementation of the stages of the strategic planning process by the administrative leaders in the Ministry of Education in the Sultanate of Oman was medium at all stages of the strategic planning process. And the absence of statistically significant differences at the level of ($\alpha \leq 0.05$) for the degree of application of the phases of the strategic planning process by the administrative leaders in the Ministry of Education in the Sultanate of Oman attributed to the job title. The researcher recommended that the Ministry of Education in Oman adopt strategic planning as a tool of change in Development of administrative work.

Al-Hajjar (2008), conducted a study aimed at examining the reality of strategic planning in the Palestinian universities, examining the external environment, the internal environment, assessing needs, the university's vision, the objectives of the university, strategies for achieving the objectives, and achieving the improvement of strategic planning in Palestinian universities. The researcher used the analytical descriptive method based on the study of reality through the examination of documents in the Palestinian universities as well as the results of the previous studies and the interviews conducted on a sample of 22 officials in the Palestinian universities. The study found that most Palestinian universities, Gaza University, Islamic

University, Al Quds Open University, Al-Aqsa University, Al-Azhar University, Abu Dhabi University, An-Najah Birzeit University lack strategic plans and the ability of officials to formulate strategic planning elements is weak. The researcher recommended the adoption of a model for strategic planning that can be pursued by Palestinian universities and improves the planning process.

Dirani and Al-Khatib (2011), the study aimed to propose an administrative model for the development of the concept of strategic thinking for the directors of public schools in Jordan. A questionnaire was developed and distributed to all the study community (115) principals in the Directorate of Education in for the academic year 2007/2008. The most important findings of the study: The degree of awareness of the concept of strategic thinking and practice high among the principals of public schools in Jordan. The study showed that there are no statistically significant differences in the degree of practicing principals in Jordan for the concept of strategic thinking due to gender variables, scientific qualifications, and Management experience. In the light of the results of the study, a proposed administrative model was developed to develop the concept of strategic planning for the director's principals of public secondary schools in Jordan. The study recommended adopting the proposed administrative model and conducting further studies that address the strategic thinking of the Jordanian educational organizations.

Pidcock (2001), the aim of this study is to investigate strategic planning as carried out in a new university (NU) in response to requirements brought in by the Higher Education Funding Council for England (HEFCE) in 1998. A literature review identifies a rational and cyclical planning model for education, beginning with the institutional values and mission, involving all staff, and leading to a process of evaluation. The model also requires that the planning process focus on the institution's core purpose. This study investigates the match at NU between the model identified and actual practice, largely using semi-structured interviews based on purposive sampling, but also referring to internal documentation. After a discussion of methodological issues, the findings are presented and analyzed. Awareness of institutional mission is found to be low, as is perceived staff involvement in strategic planning; evaluation mechanisms have not been developed in the first year of operation after the announcement of HEFCE's new requirements. The common view is that there is no link between strategic planning and the university's core business of teaching, learning, scholarly activity and research. Ways must therefore be found to raise awareness of the strategic planning process, to generate a sense of ownership of the process, and to demonstrate the value of the process in terms NU's core academic activities. The study ends with a suggestion for further research activity.

Wattananimitkul (2003), the study aimed at increasing the number of universities and monitoring the successful management of businesses that consider SWOT analysis and strategic management as tools necessary to develop and implement tasks, and universities need a unified source of guidance in order to meet students' needs and produce good management. The results of the study showed that the internal and external universities need to provide important practices and effects. The researcher has written a number of articles and researches related to the use of SWOT analysis and strategic management in educational institutions, the study recommended focusing on the specific element of the university mission which involves making contributions towards achieving their jobs to search for knowledge, create and disseminate knowledge, provide services, and the development and development of the role of missions in the university because it is the way to achieve the goals of universities and the implementation of plans and provide assessment.

Wilkins (2006), the study aimed to answer the following questions:

1. What are the environmental impacts on strategic planning?

2. What is the degree of understanding of the participants in the strategic planning of the objectives of the strategic planning process?
3. What is the degree to which participants understand the constraints of strategic planning?
4. What is the degree of understanding of participants in strategic planning on how to improve strategic planning in educational systems?

The study used interviews with the target group of 8 members of the study community which consisted of 21 members of the educational leaders in the state and reviewing the documents. The results of the study show that the environment surrounding the organization affects the strategic planning in which the impact depends on several influences, the most important of which is the size and complexity of the system provided for service and the reputation of the system in the community. The participants also expressed clearly their understanding of the objectives of the planning process and are pleased to participate in the strategic thinking about the future of the educational system in their departments, they are also upset that the strategic planning process is proceeding without a monitoring and follow-up system, the study recommended that there should be a need for a clear policy enables the system to deal effectively with strategic planning in educational systems and the need to pay attention to environmental issues and the need for the adoption of information systems to help educational leaders for success in strategic planning.

Werkolla (2007), the Study entitled "Human Perceptions of Strategic Planning: An Experiment for the Dean of the Community Research University of Minnesota", the study aimed to explore the process of strategic planning in higher education by analyzing the deans' description of their living experiences through their direct participation. The author used the analytical analysis, and interviews with deans, and the study community consists of fifteen deans who presented their in-depth vision of the planning process and the role of academic leadership in it. The study results that strategic thinking is at the forefront of the strategic planning process, the intellectual change of public identity is an initial strategy to stimulate material and structural finance, the principle of balance and participation is a central change. Academic leadership must be integrated in an integrated and continuous way of strategic thinking and interaction between individuals.

Comments on the previous studies:

The previous studies dealt with the impact of strategic planning on job satisfaction, creativity, sense of job security and organizational loyalty, as in the study of Hajjar (2008). The tools used were as varied as the questionnaire, interviews and observations, as in Dirani and Al-Khatib (2011) and (Wilkes, 2006). This study meets with previous studies in raising the creative level in educational organizations and ministries. The study tool is the questionnaire, and differs from the previous studies of the study community and the adoption of evolutionary correlative approach; this study is characterized as linking terrorism with strategic planning in the Ministry of Higher Education and Scientific Research in Jordan.

METHOD AND PROCEDURES

The development research methodology was used to determine the degree of participation of employees in the Ministry of Higher Education and Scientific Research in strategic planning.

Study Society and sample:

The population and sample of the study consisted of all employees in the Ministry of Higher Education and Scientific Research who participate in the strategic planning process according to the statistics obtained from the records of the Ministry of Higher Education and Scientific Research in year 2014. The total number of these employees was (186) employees, The tool was distributed to all employees

of the Ministry of Higher Education and Scientific Research table (1) shows the distribution of the society of the study.

Total number	Gender	Number	Under Graduation	Graduation	Higher Education
186	Male	94	23	43	28
	Female	92	23	60	9

The Study Tool

To achieve the objective of the study and the degree of practice of the Ministry of Higher Education and Scientific Research of Jordan for strategic planning, the questionnaire was used as a tool for collecting the relevant data and was used as a main tool due to its suitability for this type of field study to obtain information and data from the sample of the study.

The tool was built on the following sources:

Access to previous studies, relevant pedagogical literature, and recent trends in the subject matter of the study. And to benefit from studies and educational research related to governance in general, and strategic planning in particular, and the consultation of some of the experienced and specialized workers in this area of universities and the Ministry of Higher Education and Scientific Research, and researchers. And then build the questionnaire according to the following steps:

First: determine the main dimensions as follows:

First dimension: Strategic planning concept / plan for planning (14 paragraphs).

Second dimension: Strategic analysis (10 paragraphs).

Third dimension: Strategic direction (philosophy, mission and goals) (19 paragraphs).

Fourth Dimension: Strategic Drafting (8 paragraphs).

Fifth dimension: strategic implementation (12 paragraphs).

Sixth dimension: Follow-up and strategic control (5 paragraphs).

Seventh dimension: obstacles to the implementation of strategic planning (6 paragraphs).

Second: Formulation of the paragraphs falling under each dimension.

Third: Preparing the questionnaire in its final form, which included (74) paragraphs.

Fourth: Each paragraph was given a weight that is listed according to a five-graded scale to measure the degree of practice of the Jordanian Ministry of Higher Education and Scientific Research for strategic planning (strongly agree, agree, neutral, disagree, strongly disagree).

Fifth: Each paragraph was given a weight that is listed according to the Likert scale to measure the degree of practice of the Jordanian Ministry of Higher Education and Scientific Research for strategic planning, (strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1)), and it is determined that the arithmetic average of the responses of the sample for each paragraph (1 – less than 2.5) indicates on the level of "little" practice, (2.5 - less than 3.5) indicates on the level of "medium" practice and (3.5 - 5) indicates on the level of "large" practice.

Validity of the tool

In order to verify the validity of the tool and the appropriateness of the distribution of the paragraphs in the study fields, the study relied on:

Content Validation:

The questionnaire was presented to a group of 15 arbitrators who are considered experts in the field of educational administration from the official universities, they were asked to give an opinion on the degree of affiliation of the paragraph, the accuracy of the language formulation and the proposed amendment, the

views of the arbitrators were responded to with the necessary deletion and modification, the transposition of certain terms from one dimension to another, and addition of new terms, and in the light of the proposals made, the questionnaire was finalized.

Stability of the tool

The reliability of the questionnaire is intended to give the same result if the questionnaire was redistributed more than once under the same conditions. The reliability of the study instrument was verified using the internal consistency method by applying the Cronbach Alpha as shown in table (2)

Paragraph number	Dimension	Filed	Number of Paragraph	Internal Consistency/ Cronbach's alpha
1 - 14	First	Planning for planning	14	0.803
14 - 24	Second	Strategic Analysis	10	0.788
25 - 43	Third	Strategic direction	19	0.940
44 - 51	Fourth	Strategic drafting	8	0.692
52 - 63	Fifth	Strategic implementation	12	0.971
64 - 68	Sixth	Follow-up and strategic control	5	0.665
69 - 74	Seventh	Constraints apply of strategic planning	6	0.986

DISCUSSION OF RESULTS

The following is the discussion of the results obtained by answering the study questions.

Question 1: What is the reality of strategic planning in higher education and scientific research?

In order to answer this question and to determine the reality of strategic planning in higher education and scientific research, the arithmetical mean and the standard deviation of the individuals' estimates were calculated on the dimensions of the study as a whole. The results showed that after the planning for planning, the average mean was 3.40 and a standard deviation of 1.07. The highest mean was of (3.35) for the strategic implementation with a standard deviation of (1.04) as shown in table (3).

Paragraph number	Dimension	Filed	Number of Paragraph	Arithmetic mean	standard deviation	Assessment Degree
1 - 14	First	Planning for planning	14	3.40	1.07	Medium
14 - 24	Second	Strategic Analysis	10	3.44	1.02	Medium
25 - 43	Third	Strategic direction	19	3.45	0.99	Medium
44 - 51	Fourth	Strategic drafting	8	3.46	1.30	Medium
52 - 63	Fifth	Strategic implementation	12	3.53	1.04	Medium
64 - 68	Sixth	Follow-up and strategic control	5	3.52	1.04	High
69 - 74	Seventh	Constraints apply of strategic planning	6	3.42	1.11	Medium

Averages and standard deviations were also calculated for all resolution clauses and the arithmetic averages ranged between 3.70 - 3.12. The standard deviations ranged between (1.22 - 0.92). As well as the results of the test of the questionnaire paragraphs according to the sample estimates and the statistical significance thereof, as shown in table 4.

Rank	Paragraph Number	Paragraph	Arithmetic Means	Standard Deviations	T. Test	Statistical Significance
1	62	Write the strategic plan clearly	3.70	1.06	2.378	0.019
2	20	See unique experiences in strategic planning	3.61	1.01	1.352	0.178
3	67	Inform all interested in the degree of achievement in the Ministry of Higher Education and Scientific Research first	3.61	1.11	1.196	0.233
4	13	Agreement on the development of a strategic plan for higher education	3.60	1.04	1.195	0.234
5	55	Identify the information needed for the implementation process	3.59	.95	1.224	0.223
6	39	The clarity of the message of the Ministry of Higher Education and Scientific Research in the senior management	3.58	.96	0.997	0.321
7	68	Develop the strategic plan continuously	3.57	1.03	0.817	0.415
8	63	Periodic reporting of the implementation process according to specific timetables	3.56	1.02	0.748	0.455
9	45	The commitment of the Ministry of Higher Education and Scientific Research to the time programs it sets for achieving its objectives	3.54	.94	0.555	0.580
10	56	Provide effective incentive systems that will motivate the employees of the Ministry of Higher Education and Scientific Research	3.54	1.08	0.408	0.684
11	33	Contribution of employees in the Ministry to direct the work towards the common goal	3.53	.97	0.411	0.681
12	23	The existence of a comprehensive central database describing the current status of the Ministry of Higher Education and Scientific Research	3.52	.99	0.242	0.809
13	47	Prioritizing the strategy within the limits available to the Ministry in the surrounding environment	3.52	.94	0.213	.0832
14	50	Choose the most suitable strategic alternatives to achieve the objectives	3.52	1.07	0.262	0.793
15	71	Difficulty predicting the effect of internal variables on planned activities in the future	3.52	1.07	0.262	0.793
16	36	The Ministry of Higher Education and Scientific Research shall work in accordance with a clear vision to reduce weaknesses	3.51	.95	0.784	0.434
17	64	Determine who is responsible for the follow-up process	3.51	.94	0.128	0.898
18	65	Adopting a formal, documented system to monitor progress in achieving the objectives	3.51	1.07	0.113	0.910

19	41	The Ministry fulfills the objectives set for itself in the light of its available resources	3.50	1.00	- 0.040	0.968
20	24	The consistency of the philosophy of the Ministry of Higher Education and Scientific Research with the philosophy of the State	3.49	.99	- 0.081	0.936
21	22	Acquiring the necessary skills for the strategic planning process in the senior leadership of the Ministry of Higher Education and Scientific Research	3.48	1.00	- 0.301	0.763
22	40	The message of the Ministry of Higher Education and Scientific Research to all workers is clear	3.48	.95	- 0.296	0.767
23	21	Possessing the necessary skills for the strategic planning process in the employees of the Ministry of Higher Education and Scientific Research	3.47	1.06	- 0.320	0.749
24	25	The consistency of the mission of the Ministry of Higher Education and Scientific Research with the philosophy of the State	3.47	.98	- 0.327	0.744
25	35	Harmonize the objectives of departments and individuals with the general objectives of the ministry	3.47	1.06	- 0.341	0.733
26	42	The Ministry of Higher Education and Scientific Research has developed appropriate strategic alternatives	3.47	1.05	- 0.343	0.732
27	51	Draw alternative action plans for each flexible strategy	3.47	1.03	- 0.350	0.727
28	54	A description of the various activities to be undertaken to ensure the success of the Strategic Plan	3.46	.96	- 0.543	0.588
29	26	Suits the philosophy of the Ministry of Higher Education and Scientific Research with its standards	3.45	.99	-0646	0.520
30	28	The Ministry of Higher Education and Scientific Research is keen to formulate measurable goals	3.45	.98	0.654	0.514
31	70	Lack of experience of senior management in higher education and scientific research in strategic planning steps	3.44	1.15	- 0.663	0.509
32	27	The message of the Ministry of Higher Education and Scientific Research fits in with its standards	3.43	1.04	- 0.845	0.399
33	34	Use brainstorming strategy to improve performance in the ministry	3.43	1.04	- 0.845	0.399
34	37	The Ministry of Higher Education and Scientific Research shall work according to a clear vision to invest the strengths and reduce the weaknesses	3.43	1.08	0.168	0.867
35	57	Achieving balance in the implementation of all strategic issues included in the plan	3.43	1.03	- 0.817	0.415
36	66	Activate accountability system based on achievement standards during the implementation process	3.42	1.04	- 0.962	0.338
37	58	Provide sufficient flexibility to deal with changes in the environment during the implementation of the plan	3.41	1.02	- 1.065	0.288

38	8	Promote the direction of action towards the common goal	3.40	1.01	- 1.191	0.235
39	18	Studying laws that have an impact on the strategic planning process	3.40	1.07	- 1.273	0.205
40	49	Make initial plans that identify strategic alternatives that can be relied on	3.40	.95	- 1.224	0.223
41	71	The difficulty of predicting the impact of external variables on planned activities in the future	3.40	1.16	- 1.143	0.255
42	17	Analysis of the Ministry of Higher Education and Scientific Research of the Internal Environment to identify and remedy weaknesses	3.39	1.09	- 1.252	0.212
43	52	To integrate the sub-strategies and the overall strategic plan of the Ministry of Higher Education and Scientific Research	3.39	1.08	- 1.297	0.196
44	53	Preparing annual plans based on the strategic plan in the departments of the Ministry of Higher Education and Scientific Research	3.39	.98	- 1.430	0.155
45	60	Setting timetables for each component of the strategic plan according to realistic scientific bases	3.39	1.02	- 1.304	0.194
46	19	Study the impact of the economic situation in the strategic planning process	3.38	1.10	- 1.386	0.168
47	32	Setting the vision of the Ministry of Higher Education and Scientific Research after discussing it with the ministry employees	3.38	1.05	- 1.450	0.149
48	43	Periodic meetings between members of the planning team to exchange views	3.38	1.11	- 1.336	0.184
49	3	The presence of a strategic planning team in the Ministry of Higher Education and Scientific Research	3.37	1.15	- 1.388	0.167
50	29	The Ministry of Higher Education and Scientific Research periodically reviews its mission	3.37	1.06	- 1.586	0.115
51	48	Harmony of the strategies of the Ministry of Higher Education and Scientific Research with international standards	3.37	1.05	- 1.567	0.119
52	59	Detailed financial budgets for each component of the Strategic Plan	3.37	1.08	- 1.531	0.128
53	69	The difficulty of having a database on which to build the strategic plan	3.37	1.04	- 1.507	0.134
54	74	The difficulty of balancing strategic and operational planning	3.37	1.10	- 1.498	0.136
55	7	The use of experts for consultation during the design of the strategic plan	3.35	1.02	- 1.884	0.061
56	30	The Ministry of Higher Education and Scientific Research periodically review its objectives	3.35	1.14	- 1.615	0.108
57	44	The Strategic Planning Team will reach a consensus on the objectives set	3.35	1.01	- 1.857	0.065
58	46	The commitment of the Ministry of Higher Education and Scientific Research to the budget specified in the Executive Plan	3.35	.92	- 2.064	0.041
59	10	Develop a time frame for the strategic planning process	3.34	1.01	- 1.950	0.053

60	38	The Ministry of Higher Education and Scientific Research shall set its objectives in the light of a clear vision that it has and which is agreed by all in the Ministry	3.34	.96	-	2.084	0.039
61	14	Analysis of the Ministry of Higher Education and Scientific Research of the Foreign Environment to identify the threats it faces to avoid it	3.33	1.15	-	1.812	0.072
62	16	Analysis of the Ministry of Higher Education and Scientific Research of the internal environment to identify its strengths in order to strengthen it	3.32	1.14	-	1.974	0.050
63	73	Consider the strategic vision as mere slogans	3.32	1.14	-	2.001	0.047
64	9	Follow scientific methods to employ resources available to reach the desired goals	3.31	1.14	-	2.108	0.037
65	12	Building an institutional culture supportive of the strategic planning process	3.29	1.13	-	2.338	0.021
66	11	Distribute roles to members of the Strategic Planning Team	3.28	1.20	-	2.346	0.020
67	6	To take into consideration the views of the staff in the strategic planning process	3.27	1.11	-	2.660	0.009
68	31	The Ministry of Higher Education and Scientific Research set its objectives after discussing them with the staff of the ministry	3.27	1.07	-	2.700	0.008
69	61	Review the final strategic plan to make adjustments to suit feedback	3.22	1.14	-	2.987	0.003
70	1	The clarity of the concept of strategic planning among employees in the Ministry of Higher Education and Scientific Research	3.21	1.15	-	3.140	0.002
71	2	The importance of strategic planning in determining future directions	3.19	1.10	-	3.525	0.001
72	15	Analysis of the Ministry of Higher Education and Scientific Research of the External Environment to identify the opportunities available to them	3.17	1.10	-	3.788	0.000
73	5	Community participation in the strategic planning process	3.13	1.22	-	3.800	0.000
74	4	Participation of all departments of the Ministry in drawing the strategic plan	3.12	1.17	-	4.520	0.000

Question 2: Are there statistically significant differences at the level ($\alpha \leq 0.05$) in the responses of the study sample members on the reality of the strategic planning due to the variables (gender, qualification, experience)?

The second question was answered in order to detect the differences between the averages for the estimates of the sample on each of the seven dimensions using the arithmetic means and the standard deviations as shown in table 5.

The Variable		Arithmetic Means	standard deviations
Gender	Male	3.44	0.53
	Female	3.38	0.73
Qualifications	Under graduations	3.14	0.71
	Graduations	3.42	0.58
	Higher Education	3.41	0.62
Experience	Less than 5 years	3.48	0.63
	5 – 10 years	3.22	0.63
	Over 10 years	3.52	0.57

The results showed that there were no statistically significant differences due to the gender variable in each of the following dimensions: strategic analysis, strategic direction, strategic formulation, follow-up, strategic control, and obstacles to strategic application. As for planning for planning, ($\alpha \leq 0.05$). When conducting a post-test comparison between the levels of experience, there were statistically significant differences between employees with 5-10 years of experience and employees with more than 10 years experience for employees with more than 10 years of experience s And for the period of strategic implementation, there were statistically significant differences of experience at the level of significance ($\alpha \leq 0.05$). In conducting the longitudinal comparison test, there were statistically significant differences between the average estimates of employees with 5-10 years experience and the average estimates of employees estimated (5-10 years) and more than 10 years for the benefit of employees with more than 10 years of experience. This is due to motivation of workers in the first years of their service, ten years later, they participate in planning as a result of their reception top leadership.

The results of the study were analyzed according to their variables and dimensions and to reveal the statistical significance of the differences between the Arithmetic Means of the sample estimates. The 3-Way ANOVA analysis was applied according to the variables (gender, qualification, experience) on the dimensions of the study. The results were as follows:

I. First dimension (planning for panning): The results showed a statistically significant effect on the experience variable at the significance level of ($\alpha = 0.05$). When conducting a post-test comparison of the levels of experience, there were statistically significant differences between the employees whose experience (5- 10 years) and employees with more than 10 years 'experience in favor of employees with more than 10 years' experience, and no statistically significant differences due to gender and academic qualification as shown in table 6.

Source of Contrast	Sum of squares	Degrees of freedom	Average squares	F. Value	Level of significance
Qualifications	0.507	2	0.253	0.419	0.658
Experience	4.279	2	2.139	3.539	0.031
Gender	0.253	1	0.253	0.418	0.519
The error	90.680	150	0.605		

Total	95.719	156		
--------------	--------	-----	--	--

II. Second Dimension (STRATEGIC ANALYSIS): The Arithmetic Means and standard deviations were calculated for the estimates of the sample members according to the variables and levels of the study. The highest mean of the experience was more than 10 years (3.50) and the standard deviation was 0.73 as shown in Table 7.

The Variable		Arithmetic Means	standard deviations
Gender	Male	3.42	0.68
	Female	3.39	0.89
Qualifications	Under graduations	3.37	0.87
	Graduations	3.45	0.72
	Higher Education	3.36	0.73
Experience	Less than 5 years	3.45	0.76
	5 – 10 years	3.26	0.78
	Over 10 years	3.50	0.73

To reveal the statistical significance of the differences between the Arithmetic Means of the estimates of the sample members on the second dimension of the study variables, the results showed that there were no statistically significant differences according to the variables of the study as shown in Table 8.

Source of Contrast	Sum of squares	Degrees of freedom	Average squares	F. Value	Level of significance
Qualifications	0.074	1	0.074	0.126	0.723
Experience	0.533	2	0.266	0.455	0.635
Gender	1.741	2	0.871	1.487	0.229
The error	87.810	150	0.585		
Total	90.824	155			

III. Third dimension (strategic direction): The Arithmetic Means and standard deviations were calculated for the sample estimates. The highest mean (3.51) and standard deviation (0.55) as shown in Table 9.

The Variable		Arithmetic Means	standard deviations
Gender	Male	3.51	0.55
	Female	3.34	0.82
Qualifications	Under graduations	3.48	0.76
	Graduations	3.40	0.65
	Higher Education	3.45	0.66
Experience	Less than 5 years	3.48	0.69
	5 – 10 years	3.25	0.72
	Over 10 years	3.58	0.60

In order to reveal the statistical significance of the differences between the Arithmetic Means of the sample estimates, the results showed that there were no statistically significant differences according to the variables of the study as shown in Table 10.

Table 10 Results of the analysis of the variance of the tripartite to detect the differences between the mathematical averages of the strategic direction of the members of the sample of employees of the Ministry of Higher Education according to the study variables					
Source of Contrast	Sum of squares	Degrees of freedom	Average squares	F. Value	Level of significance
Qualifications	0.923	1	0.923	2.028	0.156
Experience	0.149	2	0.074	0.163	0.850
Gender	2.511	2	1.255	2.759	0.067
The error	68.263	150	0.455		
Total	71.846	155			

IV. Fourth Dimension (STRATEGIC DRAFT) Arithmetic Means and standard deviations were calculated for the sample estimates, with the highest mean (3.57) and standard deviation (0.71). As shown in Table 11.

Table 11 The Arithmetic Means and standard deviations of the estimates of the sample members from the Ministry of Higher Education and Scientific Research on the third dimension according to the levels of variables (gender, qualification, experience)			
The Variable		Arithmetic Means	standard deviations
Gender	Male	3.50	0.68
	Female	3.37	0.89
Qualifications	Under graduations	3.42	0.85
	Graduations	3.49	0.75
	Higher Education	3.38	0.76
Experience	Less than 5 years	3.52	0.85
	5 – 10 years	3.22	0.72
	Over 10 years	3.57	0.71

To reveal the statistical significance of the differences between the Arithmetic Means of the estimates of the sample members according to the variables of the study, the results showed that there were no statistically significant differences according to the variables of the study. Table (12) shows this.

Table 12 Results of the analysis of the variance of the tripartite to detect the differences between the mathematical averages of the strategic direction of the members of the sample of employees of the Ministry of Higher Education according to the study variables					
Source of Contrast	Sum of squares	Degrees of freedom	Average squares	F. Value	Level of significance
Qualifications	.967	1	.967	1.632	.203
Experience	1.026	2	.513	.866	.423
Gender	3.562	2	1.781	3.005	.053
The error	88.304	150	.593(a)		
Total	92.859	155			

V. Fifth Dimension (Strategic Implementation): The Arithmetic Means and standard deviations of the sample estimates were calculated according to the variables of the study. The highest mean was 3.57 and the standard deviation was 0.67. Table 13 shows this.

The Variable		Arithmetic Means	standard deviations
Gender	Male	3.51	0.64
	Female	3.40	0.84
Qualifications	Under graduations	3.44	0.79
	Graduations	3.48	0.72
	Higher Education	3.45	0.70
Experience	Less than 5 years	3.55	0.77
	5 – 10 years	3.23	0.70
	Over 10 years	3.57	0.67

To reveal the statistical significance of the differences between the Arithmetic Means of the estimates of the sample members according to the variables of the study, the results showed that there were statistically significant differences of experience in favor of estimations of employees with 5-10 years of experience and average estimates of employees whose estimates were less than five years for those with less than 5 years of experience, as well as the existence of statistically significant differences between the levels (5-10) years and more than 10 years for the benefit of employees with more than 10 years of experience. The results also showed that there were no statistically significant differences between the Arithmetic Means of the employees' estimates on the fifth dimension due to gender and scientific qualification as shown in Table 14.

Source of Contrast	Sum of squares	Degrees of freedom	Average squares	F. Value	Level of significance
Qualifications	0.437	1	0.437	0.832	0.363
Experience	0.412	2	0.206	0.392	0.676
Gender	3.542	2	1.771	3.371	0.037
The error	78.281	150	0.525		
Total	82.672	155			

VI. Sixth dimension: Follow-up and strategic control The Arithmetic Means and standard deviations of the estimates of the sample members were calculated according to the variables and levels of the study as shown in table 15.

The Variable		Arithmetic Means	standard deviations
Gender	Male	3.49	0.82
	Female	3.57	0.85
Qualifications	Under graduations	3.41	0.93
	Graduations	3.61	0.72
	Higher Education	3.48	0.91
Experience	Less than 5 years	3.57	0.83
	5 – 10 years	3.36	0.86
	Over 10 years	3.62	0.79

In order to reveal the statistical significance of the differences between the Arithmetic Means of the estimates of the sample members, the results showed that there were no statistically significant differences at the level of (0.05) according to the variables as shown in table 16

Table 16 Results of the analysis of the variance of the tripartite to detect the differences between the mathematical averages of the strategic direction of the members of the sample of employees of the Ministry of Higher Education according to the study variables					
Source of Contrast	Sum of squares	Degrees of freedom	Average squares	F. Value	Level of significance
Qualifications	0.138	1	0.138	0.199	0.656
Experience	1.276	2	0.638	0.922	0.400
Gender	2.163	2	1.081	1.562	0.213
The error	103.132	150	.692		
Total	106.709	155			

VII. Seventh Dimension: Impediments to the application of strategic planning the Arithmetic Means and standard deviations of the estimates of the sample members of the Ministry of Higher Education and Scientific Research were calculated on the obstacles to the application of strategic planning according to the variables and levels of the study, as shown in Table 17

Table 17 The Arithmetic Means and standard deviations of the estimates of the sample members from the Ministry of Higher Education and Scientific Research on the third dimension according to the levels of variables (gender, qualification, experience)			
The Variable		Arithmetic Means	standard deviations
Gender	Male	3.38	0.86
	Female	3.43	0.86
Qualifications	Under graduations	3.33	0.85
	Graduations	3.43	0.88
	Higher Education	3.43	0.84
Experience	Less than 5 years	3.55	0.87
	5 – 10 years	3.35	0.88
	Over 10 years	3.26	0.79

In order to reveal the statistical significance of the differences between the Arithmetic Means circles of the estimates of the sample members on the seventh dimension of the study according to the study variables, the results showed that there were no statistically significant differences at the level of (0.05) between the average of the estimates of the workers according to the variables of the study as shown in table 18

Table 18 Results of the analysis of the variance of the tripartite to detect the differences between the mathematical averages of the strategic direction of the members of the sample of employees of the Ministry of Higher Education according to the study variables					
Source of Contrast	Sum of squares	Degrees of freedom	Average squares	F. Value	Level of significance
Qualifications	.104	1	.104	.141	.708
Experience	.518	2	.259	.352	.704
Gender	2.639	2	1.320	1.792	.170
The error	109.716	150	.736		
Total	112.977	155			

Question 3: What is the educational management guide developed for the strategic planning of higher education in Jordan?

After reviewing the previous literature of strategic planning and referring to the law of universities, and relying on the researcher own experience in education and the consultation of experts in the subject, and

after taking feedback such as written and oral observations, and results of the survey the contents of the developed guide was determined as follow:

1. A theoretical introduction shows that strategic planning represents a compass that defines the map of the Ministry of Higher Education, without it, the map cannot be decoded to move in the desired direction. Its concept, historical development, importance, the need of the Ministry of Higher Education for this guide, and the benefits for the adoption of this guide.
2. The importance of providing the strategic planning guide and presenting the benefits of strategic planning and its stages.
3. General guidelines to deal with the guide and how to work with its contents, and broadcast the culture of change required and convince officials to distance from the central involvement of workers in the planning process of the Ministry of Higher Education.
4. Include the guide the objectives emanating from the literature of strategic planning and consistent with the stages and not inconsistent with the relevant legal texts.
5. Designing the guide in the form of practical sessions and clarifying the persons involved the place, time, objectives, procedures, and indicators of success, sources and observations in a clear and detailed manner.
6. Assign a session to present the strategic plan to the employees and persons involved to take feedback and assign all departments to design their plans emanating from the mother strategic plan in accordance with the common vision and the ministry's message.
7. Attach appendices to the guide to refer to when necessary.
8. After designing the guide, it was introduced to a group of experienced arbitrators to write notes and provide feedback.

CONCLUSIONS

The study concluded a number of important results; based on the discussion of the results obtained by answering the study questions. Where the results showed that the dimension of the strategic implementation had the highest arithmetical mean of (3.53) and a standard deviation of (1.04). The degree of practice was high, and the paragraph stating: "Writing the strategic plan clearly" obtained the highest arithmetic mean, this can be explained by all employees are able to review the strategic plan, and involve all interested parties (the Minister of Higher Education and Scientific Research, all employees involved in decision-making). And the paragraph stating: "Review the final strategic plan to make adjustments to match the feedback" got the lowest average score and a low level of exercise and that is due to the lack of a culture of workers to pay attention to feedback and the lack of tools to monitor feedback.

The follow-up and the strategic control dimension obtained an average of (3.52) and a standard deviation of (1.04); the degree of practice was high. The paragraph that states: "Seeing distinguished experiences in the field of strategic planning" got the highest arithmetic mean and high degree of exercise, this result can be explained by the frequent exchange of experiences between the employees of the Ministry of Higher Education and Scientific Research and similar ministries in the neighboring Arab countries and the developed countries in this field as well as, linking the Ministry of Higher Education and Scientific Research with the international Internet network, Encourage the twinning with other ministries. The paragraph that states: "system of standards-based accountability is to be implemented during the implementation process" has received the lowest average arithmetic and to a small extent due to the laws and legislations, which largely overlook their application.

The strategic formulation came in third place, with an average score of 3.46, a standard deviation of 1.03, and a medium practice. The paragraph stating that the Ministry of Higher Education is committed

to the time programs it sets for achieving its objectives received the highest mean and a large degree of exercise. The Ministry of Higher Education in the Ministry of Finance, and the paragraph stating that "the Ministry of Higher Education's commitment to the budget set out in the Executive Plan" has received the lowest average arithmetic due to its association with the public budget and the continuous support for the budget of the various ministries by the government.

In the fourth place was the strategic direction and obtained an average of (3.45), a standard deviation (0.99) and a medium level of practice. The paragraph stating that "the clarity of the message of the Ministry of Higher Education and Scientific Research in senior management" obtained the highest average arithmetic and a large degree of practice, The importance of the message and its role in strengthening the identity of the institution or nature, and its links with the institution and the link financial and material results. The paragraph, which states that "the Ministry of Higher Education set its objectives after discussing it with ministry employees," is the lowest average and the average practice. This can be explained by the fact that senior management officials in the Ministry of Higher Education and Scientific Research are limited to participating only in the first class and the first because of their experience in this area, for their conviction that they are better able to carry out this task.

The strategic analysis came in fifth place, with an average of 3.44, a standard deviation of 1.02, a medium level of practice, and a paragraph on "Experiencing unique experiences in strategic planning." Problems facing the Ministry of Higher Education and Scientific Research. The paragraph, which states that "the Ministry of Higher Education's external environment analysis to identify the opportunities available for its use" has obtained the lowest average arithmetic and a medium degree of practice. This can be explained by the lack of experience of staff with tools for strategic analysis.

In the sixth place were the obstacles to the implementation of strategic planning. It obtained an average of 3.42, a standard deviation of 1.11, and a medium practice. The paragraph that states "the difficulty of predicting the effect of internal variables on planned activities in the future" This is due to forced migrations to Jordan. The paragraph, which states that "the strategic vision is a mere slogan" has received the lowest average arithmetic, due to the conviction of the workers that the vision is a path that sets the direction of the institution as a whole to achieve the goals required of them.

Planning for planning came in seventh place with an average score of 3.40, a standard deviation of 1.07 and a medium practice. The paragraph stating that "agreement to develop a strategic plan for higher education" is at the highest arithmetic mean. This can be explained by the fact that strategic planning helps Organizations to achieve long-term goals by translating strategic plans and targets into detailed plans, programs and budgets that can be implemented and helping managers to develop appropriate alternatives to key problems facing the organization. The paragraph stating that "all sections of the ministry participate in the drawing of the strategic plan" received the lowest average arithmetic and explained that drawing the plan from the tasks of senior leaders only.

Recommendations

To establish governance in the Ministry of Higher Education as the strategic planning in all its dimensions is an important part, the Ministry has to do the following:

1. The need to spread the culture of governance and strategic planning among the employees of the Ministry of Higher Education through the holding of lectures and distribution of publications urging them to commit to strategic planning.

2. The Ministry of Higher Education and Scientific Research must analyze its external environment in order to identify the various variables that may affect it in the future. The Ministry's strategic objectives must also be shared by all the parties responsible for achieving them in order to develop their self-responsibility.
3. Include all levels in the Ministry of Higher Education in the committees of governance and strategic planning and not limited to planning at senior levels in the Ministry of Higher Education.
4. Provide specialized training courses in strategic governance and planning involving relevant staff at the three administrative levels of those responsible for planning and implementing strategic plans.
5. To give priority to the evaluation aspect in the implementation of strategic plans to identify deviations in order to draw lessons to be used to modify the paths of these plans.
6. Pay attention to aspects of follow-up implementation and control of strategic plans by giving incentives to perform well and punish poor performance and not only to develop strategic plans excellent.
7. Preparing a guide for strategic planning in the Ministry of Higher Education and Scientific Research to be a guide for its employees to have a single language in which they work.

References:

- Al-Absi, Mohammed (2004): Building an educational guide for strategic planning in Jordanian secondary schools (unpublished PhD thesis). University of Jordan: Amman, Jordan. Arifj, Sami (2001): University and Scientific Research. Amman: Dar Al-Fikr.
- Al-Hajjar, Raed (2008): A Proposal to Improve the Strategic Planning Process in Palestinian Universities, Second Conference for Planning and Development of Education and Scientific Research in the Arab Countries, 24-27
- Al-Hussny, Mohammad (2009): The degree of implementation of the stages of the strategic planning process in the Ministry of Education in the Sultanate of Oman, Studies of Educational Sciences, Volume 36, pp. 227-245.
- Al-Lozi, Mousa (2002): Administrative Development, I2, Dar Wael for Printing and Publishing: Amman.
- Dirani, and Al - Khatib, (2011). A Proposed Administrative Model for Developing the Concept of Strategic Planning for Directors of Government High Schools in Jordan. Studies of Educational Sciences Vol. 38, Mahlq 2, pp. 480-503.
- Doris, Michael, (2006): Successful Strategic Planning, New Trends in Institutional Research, Translated by Abed Rabbo, Sama, I, Riyadh: Obeikan Publishing and Publishing.
- Gnoui, Ahmed (2009): The Role of Strategic Planning in Higher Education Institutions and Scientific Research, Symposium in Our Education Magazine, King Khalid University: Saudi Arabia.
- Hussein, Hassan (2002), A Proposal to Implement Strategic Planning in the Egyptian University Education, Journal of Education, Special Issue, pp. 160-210, Scientific Association of Comparative Education and Educational Administration: Egypt.
- Morsi, (2002): Strategic Thinking and Strategic Management Applied Approach, University House: Egypt.
- Salmi, Ali (2001): Contemporary Management Thoughts, Dar Ghraib for Printing and Publishing: Cairo.
- Pidcock, S (2001): Strategic planning in a new university, Journal of further and higher education, 25, 1.
- Wang, Li. (2010). Higher Education Governance and University Autonomy in China. Globalisation, Societies and Education, 8 (4) p477-495.
- Wattanimitkul, W. (2003): Revisiting the missions and educational strategic management of universities in Thailand.
- Wilkins, J. (2006). Participant perception of strategic planning in an urban school district. A case study EdD.

Werkolla, Lean, Marie (2007)" Humanitarian Scenarios For Strategic Planning: the experience of living the Dean of University research community A Doctorate Dissertation, Faculty Of The Graduate School Of The University Of Minnesota ,Pro Quest Information and learning Company.
<http://ww.umi.com/dissertations/fullecit/3216275>