

THE READINESS LEVELS OF SECONDARY SCHOOL ADMINISTRATORS TO THE INNOVATION MANAGEMENT

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ABSTRACT

The innovation management has great significance in the creation of future educational institutions. These institutions, which undertake important mission in converting the innovative activities to economic and social values, are also expected to be ready for the innovation management. The knowledge of the readiness levels of the administrators of these institutions to the innovation management is seen to be a significant factor in the innovation of educational institutions.

This research was seen to be necessary by the virtue of this importance. It was conducted with the aim of determining “the Readiness Levels of Secondary School Administrators to the Innovation Management” through their own opinions, and providing suggestions in the light of these opinions.

In order for the research, which was carried out by using the *General scan model*, to achieve the specified objectives, primarily the literature review was performed. For determining the opinions, the “School Administrators Innovation Attitude Scale” was used in order to determine opinions, which was developed by Top as a 24-item five-point likert scale, determined the Cronbach Alpha reliability parameter as 0,895, and adapted in 2012 to Nevşehir province. School principals and Vice-principals, working at secondary schools in Nevşehir province in the academic year of 2011-2012, constitute the population of this research.

As a result of the research, school administrators stated that they were ready for innovation management according to the overall arithmetic averages in the level of “ $\bar{X}=4,33$ ” with a degree of “completely.” When analyzed in terms of duty variable, it was discovered that school principals, unlike vice-principals, were ready for innovation management at higher levels. It can be stated that after school administrators get promoted to the rank of school principal, then, their readiness levels to the innovation proposals increased. The following suggestions have been made by looking at the research results: assuring measures should be taken to enable vice-principals to get post-graduate level training which also includes innovative management in order to render them more sensitive on the subject of innovative management and efforts that would ensure innovative management to be the vision of schools should be concentrated upon. The reason behind the increase in the attitudes of school administrators towards innovation after getting promoted to the position of school principal should be treated as a separate subject of research.

Key Words: Education, School, Innovation, Administrator, Secondary School.

INTRODUCTION

This research was conducted with the aim of determining the “the Readiness Levels of Secondary School (High-School) Administrators to the Innovation Management” in line with their own opinions, and presenting suggestions to the implementers in the light of these opinions. When we consider the general purpose of education systems in accordance with the specified targets, the ability of the individuals living in society to see the problems by paying attention to the needs of the society and develop the ability to solve them, and to raise

the level of satisfaction, it will appear before us as a requirement that educational organizations, which will realize these purposes, reshape their management philosophies in accordance with the needs of the age as well as the future without standing idle against the changes and developments taking place in the world (Töremen, 2002: 185-202).

Based on Top's (2011: 6) quotation from Elçi (2006), innovation, which means "the introduction of new methods in social, cultural and administrative environment," includes factors such as the better satisfaction of human beings as stated-above which harbors innovations, changes and developments in its essence with its Turkish equivalence, the offering of more quality and productive services (Top, 2011: 6). This being the case, the adopted application of the management perception, which is open to innovations, comes to the forefront (Taş, 2007: 183-192; Top, 2011: 6). It appears before us as a requirement that educational organizations, in a rapidly changing world, should shape their management philosophies in accordance with the needs of the age and the future without standing idle against the changes and developments taking place in the world. In order to educate the human being of the 21st century, who has made continuous development as the philosophy of life, thinks analytically, possesses improved problem-solving and decision-making skills, is open to the concept of team-work and flexible, seeks information and has access to it, is eager to learn, has high personal qualities and a room with self-improvement, is a believer, is an entrepreneur, is self-confident, has national and universal values, it is necessary for every school to transform into a school of quality one by one. This necessitates the indication of change that will enable the improvement in education, and, the coordination of families in addition to teachers and students, school administrators, and the participation of all related members of society together with the efforts of continuous development (Gülşen, 2003: 68-69). The readiness levels of the administrators to this innovation become more important in achieving the purpose of these efforts.

It is widely accepted that the change and innovation concepts of the administrators of educational institutions highly affect the achievement of the specified objectives. From this point of view, since the management perceptions of the administrators will affect the realization levels of the specified objectives in the institutions, it becomes greatly important to discover whether these perceptions overlap with modern administrative conception or not. According to Özden's (1998: 44) quotation, Deming believes in the necessity of initiating change in the institutions by administrators. Since it is obvious that the school administrators will be effective in the application of these changes and innovations in educational institutions, priority should be given in convincing these people on the subject of innovation.

For this purpose, the emphasis was given to determine what "Possible Factors Affecting the Implementation of Innovation in the Education System" by conducting a prior field-scanning and the conceptual framework was established. Later on, for determining opinions, the "School Administrators Innovation Attitude Scale," which was developed by Top (2011) as a 24-item five-point likert scale, determined the Cronbach Alpha reliability parameter as 0,895, and adapted in 2012 to Nevşehir province, was implemented and evaluation was made as result of statistical analysis. In this part of the research, the conceptual framework of the research was primarily focused.

Change and Innovation in Education

In the world of today, when considering the idea that organizations existed for human beings began to shape the management philosophies in dizzying pace of change and developments happening almost in every area, educational institutions, whose raw material is humans, are required to adopt modern management approaches that place human at the center. Because it is a reality that must be accepted that educational institutions, like all other institutions, cannot remain indifferent in the face of these changes and developments. Starting from this reality, orientation towards human-centered modern management approaches in educational organizations is seen to be mandatory (Bursalioğlu, 1991: 1-57; Eren, 1989: 10-43; Güçlü, 2000: 23-29; Kozlu, 1986: 4-30; Özdemir, 1997: 2). In such circumstances, instead of blindly trying to manage institutions by strictly adhering to the management approaches of the past, the adoptive application of management approaches, which are open to innovation, comes to the forefront (Drucker, 1998: 228-229; Taş,

2007: 183-192; Töremen, 2002: 185-202). When it comes to the stage of implementation, implementers may encounter certain obstacles as described below.

Factors Affecting Implementation of Innovations in Education

In order to educate the human being of the 21st century, who has made the continuous development as the philosophy of life, thinks analytically, possesses improved problem-solving and decision-making skills, is open to the concept of team-work and flexible, seeks information and has access to it, is eager to learn, has high personal qualities and a room with self-improvement, is a believer, is an entrepreneur, is self-confident, has national and universal values, it is necessary for every school to transform into a school of quality one by one and school administrators should also be pioneers in this transformation. This necessitates the indication of change that will enable the improvement in education, and, the coordination of families in addition to teachers and students, school administrators, and the participation of all related members of society together with the efforts of continuous development (Gülşen, 2003: 68-69).

According to research conducted in the field of education, the desired results cannot be achieved from the innovation activities happening occurring in educational organization despite all the good intentions since the necessary co-ordination was not obtained due to mistakes made in all the stages of implementation from the planning of the innovations in education. During the process of innovation, a number factors, affecting the implementation of innovation either positively or negatively, has been encountered each time. Factors affecting the implementation of innovations in education can be classified as such: a) Political Factors, b) Environmental Factors, c) Intervention Factors and d) Resource Factors (Cemaloğlu, 1999: 17-25, Karip, 1997: 65-77).

a) Political Factors

Certain institutional policies are needed to be adopted in order to carry out the purposes and principles of administration. Institutional policies provide guidance to the actions of administration, and prepare the ground for the creation of institutional culture shaped by the vision and mission. Well-defined institutional policies will facilitate the smooth execution of institutional mechanism. While Rogers & Shaemaker (1971: 22-23) state that it would take a long time for innovation to find a large area of implementation after its full-adaptation, they also mention that certain characteristics of innovation implementations such as *relative advantage*, *compatibility*, *provability*, and *discernability*, affect this period of acceptance.

It is necessary to know the educational policy factors for the smooth execution of educational policies. Educational policy factors, either inside or outside of educational system, are supremacies that could have direct or indirect effect and inflict the desired impact upon themselves through education policy. (Hesapcioglu, 1994: 35; Karip, 1997: 65-68).

b) Environmental Factors

It is necessary to make changes in the institutional environment in addition to the physical elements in order to trigger behavioral change both in personnel and students of the educational institutions. Environments, which attempt to carry out institutional purposes with win-win approach, will facilitate innovation in education (Covey, 1998, p.218). It is expected that each of the top-level educational administrators should primarily be leaders with visions that focus on innovation and with mentality that is open to innovation (Munroe, 2010: 146-147).

c) Intervention Factors

In order to make the anticipated changes in innovation plans, it is necessary to have reliable information about education system as well as the related external environment, to use technological opportunities effectively and to ensure the participation of all parties (Gülşen, 2011: 170; Kavrakoglu, 1997: 45). The individual perceptions of innovation implementers on innovation are directly proportional to their dedication to innovation. The motivation levels and innovation perceptions of school administrators also have a decisive influence on the success of the implementation of innovation in education.

d) Resource Factors

It is expected the change to take place more easily in schools with an adequate level of financial resources. There is a need for staff that will use the financial resources well for the successful implementation of innovation. The success of the implementation depends upon the qualifications of the personnel who will carry out that particular implementation. In addition to the adequacy of staff, it is also necessary to adapt encouraging as well as discouraging implementation of sanctions as a policy in the institution about innovation when occasions require (Cemaloğlu, 1999: 17-25, Karip, 1997: 65-77).

The knowledge of the stages of the innovation is thought to be important when the above-mentioned factors are considered. Information in the process of innovation, collected from techniques and tools, is evaluated in an appropriate and systematic way. Later on, ideas are developed with these evaluations and, then, these ideas are transformed into the methods and tools of design and production (Eren, 1989: 29). The process of innovation can be analyzed in five stages, each of which should be developed by creativity. These stages are as follows (Top, 2011: 16):

- a. "At which field institution requires innovation should be determined at first.
- b. New ideas should be created in the areas institution feels the need for innovation.
- c. Ideas, which are decided to be implemented, are turned into conceptual states. The interaction of the idea of innovation with cost calculations is provided after making the task analysis.
- d. The tasks of developing innovation are materialized with the participation of all units of the institution.
- e. The implementation stage of ideas that turned into product is expected to positively affect the motivation of the institution."

When the above-stated factors and features are considered, it is also necessary to analyze the process of transforming innovation activities into the product by adapting them to a particular school in educational institutions. In this process, it was seen that administrator attitudes and the readiness levels to innovation management have great importance in leaving positive affect in the institutional motivation of that school. The knowledge of the attitudes of administrators, who work particularly at secondary schools that provide training prior to business life and higher education, towards the innovation management, was seen to be more important, and thus the need to conduct such a research and to learn opinions on "The Innovation Management of Secondary School Administrators" had been felt.

METHOD

Research Model and Population and Sampling

In order to execute this research, the *General scan model* has been used. The "School Administrators Innovation Attitude Scale" was used with the purpose of determining opinions.

School principals, chief vice-principals, vice-principals (instead of using expressions like chief vice-principals and vice-principals, only the expression of "vice-principal" will be used from now onwards) , working at secondary schools (high schools) in Nevşehir province in the academic year of 2011-2012, constitute the population of this research. Since all school administrators that make up the research population were contacted, no extra sampling was taken. Data on the scale participation levels of the sample group are shown in Table 1.

Table 1: Scale Participation Frequencies (f) and Percentage (%) Distributions of the Sampling Group

Sampling Group	Scale				TOTAL	
	Responders		Non-responders			
	f	%	f	%	f	%
School Principal	35	74,47	12	25,53	47	100
Chief Vice-Principal/Vice-Principal	117	95,12	6	04,88	123	100
TOTAL	152	89,41	18	10,59	170	100

As can be seen in Table 1, the total of 89.41% of the scales sent, in other words, 152 of them were returned. The weights assigned for the participation degrees to the statements in the scale and the limits of these weights are shown in Table 2. The weight degrees of the statements in the scale developed by five-point likert scale type, as seen in Table 2, followed a positive pattern from the option of “strongly disagree” to “totally agree” option.

Table 2: Weights Assigned for the Participation Degree to the Statements and Limits of These Weights

WEIGHT	OPTION	LIMITS
1	Strongly Disagree	1.00–1.80
2	Disagree	1.81–2.60
3	Partially Agree	2.61–3.40
4	Mostly Agree	3.41-4.20
5	Totally Agree	4.21–5.00

Data Collection Tool And Its Development And Interpretation

First of all, the literature review was conducted in order for the research to achieve the specified objectives. The “School Administrators Innovation Attitude Scale,” developed by Top in 2011, prepared as a five-point likert scale type and consists of 24 items, was used in the evaluation of the opinions of administrators, working at secondary schools (high schools) in Nevşehir province, towards innovation management. Statistical programs were used in the interpretation of data obtained with the scale. All the reliability and validity analysis of the scale were done by Top (2011, p.56), and their factor loadings and reliability values were determined as a result of Cronbach alpha reliability analysis. The obtained results are shown in Table 3.

Table 3: “School Administrators Innovation Attitude Scale” Value and Indicators

Factor Name	Number of Items	Factor loadings	Explained Variance %	Explained Variance cumulative %	Cronbach alpha
Readiness for Innovation Management	24	10,987	45,779	45,779	0,895

FINDINGS AND COMMENTS

In this section of research, data, obtained by scale on “The Readiness Levels of Secondary School Administrators to the Innovation Management,” was interpreted with the help of statistical processes and were placed in tables. The packaged programs in computer environment were made use of in the interpretation of data. Assessments have been made in the light of the information obtained as a result of interpretations. Tables that were created with the help of obtained data and assessments based on these data given in the tables are shown below.

Table 4: General Results of School Administrators Innovation Attitude Scale

Duty Variable		f	\bar{X}
1	School Principal	35	4,49
2	Chief Vice-Principal / Vice-Principal	117	4.18
General Arithmetic Mean			4.33

When Table 4 is analyzed according to research data, school administrators showed their participation to the suggestions in innovation management scale with general arithmetic mean of “ $\bar{X}=4,33$ ” and with the degree of “totally agree.” When data is analyzed separately according to duty variable, while school administrators stated their participation, according to general arithmetic mean, to suggestions in the scale with the level of “ $\bar{X}=4,49$,” and with the degree of “totally agree,” whereas vice-principals stated their participation with the level of “ $\bar{X}=4,18$ ” and with the degree of “mostly agree.” This result overlaps with the research data conducted by Top (2011, p.60-64). With regard to School Administrators Innovation Attitude Scale, in the tests carried out in order to identify the difference in the readiness levels according to the duty variable, a significant difference in favor of school principals was discovered between school principals and vice-principals in the level of $p<0,01$. According to this result, it can be stated that school principals approach to innovation management more positive, and their readiness levels are at higher level than those of vice-principal. It was seen that the duty school administrators perform is a variable which affects their perceptions related to innovation and there has been an increase in the readiness levels of administrators to innovation statements after they got promoted to the position of school principal. When all of statements in the scale were analyzed and evaluated, the following data have been discovered. These data were described in Table 5.

Table 5: School Administrators Innovation Attitude Scale

No	Statements	Principal		Vice-Principal	
		N	\bar{X}	N	\bar{X}
1	I easily adapt to changes since we possess innovative organizational culture.	35	4,50	117	4,25
2	In-service trainings and seminar works that I attended allow me to be innovative.	35	4,00	117	4,00
3	I easily adapt to innovations because of the academic education I received.	35	4,75	117	4,00
4	Innovation is among the long-term main objectives of our school.	35	4,50	117	3,50
5	I work for the adaptation of the innovation concept as a vision at our school.	35	4,75	117	4,50
6	Our school has an innovative culture (like being open to innovation)	35	4,25	117	4,00
7	I provide opportunities for staff to show their creativity.	35	4,75	117	4,50
8	I provide opportunity to staff for their individual development.	35	4,50	117	4,75

9	I support the staff to take risks in the work processes.	35	4,75	117	4,00
10	I provide environments that support and motivate innovation for those who want to make innovation.	35	4,50	117	4,50
11	I provide all tools such as authority, and source to group or individuals who want to make innovation at our school.	35	4,00	117	4,50
12	I ensure the use of all the resources of our school to carry out the objectives.	35	4,25	117	3,75
13	I ensure the use of all the resources of our school to carry out the objectives.	35	4,25	117	4,00
14	Staff easily expresses their opinions and suggestions in environments where administrators are present and propose suggestions to the administration about programs or activities.	35	4,75	117	4,00
15	I take criticism and objections of the staff seriously.	35	4,50	117	4,50
16	I inform staff about the results of innovation (innovative implementations).	35	4,25	117	4,24
17	I encourage teachers and staff to get information about educational activities.	35	4,50	117	4,75
18	I pay attention the perspectives of the staff towards innovation.	35	<u>5,00</u>	117	4,50
19	I bring an innovative structure to the human resources of the school I work.	35	4,75	117	3,75
20	I think it is necessary to establish a Research and Development Department in order to transform the developed new ideas into new implementations.	35	4,50	117	4,00
21	Innovation help us to recognize the internal and external environment, to adapt to our environment and to see the future better as school.	35	4,25	117	4,50
22	I believe that making innovation (innovative administration) puts us one step forward in external competition.	35	4,75	117	4,50
23	Our school has clear objectives for innovation.	35	4,50	117	3,75
24	I allowed the creation of autonomous units such as project groups, quality circle and development teams in our school.	35	4,25	117	3,75
GENERAL AVERAGE		35	4,49	117	4,18

When items in Table 5 are separately analyzed, the highest level of participation was shown by principals with the degree of " $\bar{X}=5.00$ " at the level "totally agree" to the statement of "I pay attention the perspectives of the staff towards innovation." The lowest level of participation was shown by vice-principals with the degree of " $\bar{X}=3.50$ " at the level of "mostly agree" to the statement of "Innovation is among the long-term main objectives of our school." When analyzed separately according to duty variable, while the highest level of participation was shown by school principals with the degree of " $\bar{X}=5.00$ " at the level of "totally agree" to statement number 18, which is "I pay attention the perspectives of the staff towards innovation," whereas the highest level of participation was shown by vice-principals with the degree of " $\bar{X}=4.75$ " at the level of "totally agree" to statement number 8, which is "I provide opportunity to staff for their individual development." The statements, for which the lowest level of participation was shown, were the statement number 2, which is "In-service trainings and seminar works that I attended allow me to be innovative," and the statement number 11, which is "I provide all tools such as authority, and source to group or individuals who want to make innovation at our school." School principals showed participation to both of these statements with the degree of " $\bar{X}=4.00$ " and at the degree of "mostly agree." The statement, for which the lowest participation was shown by vice-principals, and the statement, for which the lowest participation was recorded throughout the scale, was the statement number 4, which is "Innovation is among the long-term main objectives of our school." Vice-principals showed their participation to this statement with the degree of " $\bar{X}=3.50$ " at the level of "mostly agree" which is closer to the choice of "neutral."

CONCLUSIONS AND SUGGESTIONS

Conclusions

The following conclusions have been reached as a result of the research:

1. As a result of the research, school administrators stated their readiness to the innovation management with the degree of " $\bar{X}=4,33$ " at the level of "full" according to general arithmetic mean.
2. It was seen that there has been an increase in the readiness levels of administrators to the innovation statements after being promoted to the rank of school principal.
3. When analyzed in terms of duty variable, it was seen that school principals showed higher readiness levels with regard to vice-principals.
4. While principals stated their readiness to innovation management with the degree of "totally," vice-principals expressed their readiness to it with the degree of "mostly."
5. The highest level of participation was shown by principals with the degree of " $\bar{X}=5.00$ " at the level of "totally" to statement of "I pay attention the perspectives of the staff towards innovation."
6. In the statement, where the lowest participation was seen, vice-principals showed their participation with the degree of " $\bar{X}=3.50$ " at the level of "mostly" to the statement of "I provide opportunity to staff for their individual development."

Suggestions

The following suggestions are deemed to be appropriate based on the research results.

1. In order to render vice-principals more sensitive in the subject of innovation management by looking at the results, necessary measures should be taken to ensure that they receive graduate education.
2. In order to ensure the inclusion of innovation management among the long-term objectives of schools, the periodical enlightenment of all stakeholders on innovation management should be realized.
3. It is also necessary to consult to the opinions of other stakeholders in order to obtain more comprehensive results.
4. It is a necessity to make a better planning in order to free innovation movements from political policies, to ensure required coordination by overcoming bureaucratic obstacles, to obtain adequate level of financial support, to take expectations into account and to keep differences in mind.
5. The reason behind the increase in the attitudes of school administrators towards innovation after getting promoted to the position of school principal should be treated as a separate subject of research.

IJONTE's Note: This article was presented at 5th International Conference on New Trends in Education and Their Implications - ICONTE, 24-26 April, 2014, Antalya-Turkey and was selected for publication for Volume 5 Number 2 of IJONTE 2014 by IJONTE Scientific Committee.

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