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Digital Transformation in School Management and Culture

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Abstract

Quality becomes milestone for enhancing learning and teaching practices through contemporary standards. In this respect, considering the outcomes of transformation is essential. School management is an umbrella of facilitating learning and teaching. Therefore, role of digital transformation in school management is an intensified need to be underlined. In establishing school culture, school management plays an essential role that digital transformation effects the school management and culture for the quality in education. The nature of this research is qualitative. Reflective reports of headmasters are gathered as data to understand the readability and awareness of school management to the digital transformation in the case of North Cyprus. In addition, content analysis is done to realize the upcoming issues in school management and digital transformation. As this focus is demanding for developing countries especially North Cyprus, this research revealed that headmasters have awareness on the use of digital and technological facilities. They are aware on digital transformation although budget and application restrictions are revealed to apply this transformation.

Keywords: culture, digital management, transformation, quality

1. Introduction

Social and cultural values play an important role on institutions while forming the culture. The key point of development of the institutions is to provide vital information for the individuals in the institutions and to represent this in a visible way. This especially allows the cultural structures to be at quality standards in educational institutions.

Today, educational systems and schools can form the basis of stepping forward to the participatory management approach to be at quality standards. By taking into consideration the opinions and considerations of all the components and stakeholders of school administrations, all the decisions and activities could ensure the continuity of the present conception of sustainability [1]. Participation during judgement and coordination and being functional at cooperating is needed in order to create quality in education and oriented action performance [2].

The strategic structure and functioning of educational institutions is very important in the twenty-first century in terms of creating human profile [3]. Individuals who learn focus on learning. In the twenty-first century, knowledge and ethics play an important role on human nature, so it is needed to adopt creative thinking, flexible thinking and peace to the individuals. It is unavoidable to have an education system, of the individual in peace with himself, with life and world, and have a vision of giving importance to the values. It is needed to increase the security of the school environment, form contents for the recovery of education in peace for the development of a self-confident generation by facing technology. The education system of today emerges as an important question mark in terms of how much positive contribution it gives to the child's both psychological and social development under the framework of school education. The presence of technology and informatics in daily and educational life could affect negatively, both psychological and social development of the learner. Also, the necessity of implementation of social interactions brings together a value and peace to the education process [4].

A school environment must be managed securely as much as having a secure environment, and all the management stakeholders must communicate correctly with each other. In this context, it is expected to reflect today's administrative efficiency features of school teachers and administrators for correct performance [5].

It is also needed for administrative efficiencies, emotional strength, performance and technology, and when required, strategic steps must be taken for a sustainable positive image of the institution. To achieve this, a school culture must be created to provide its sustainable structure [6]. To form a school culture, visible and invisible institution sizes must be well known by all the school staff and stakeholders and needed to be internalized.

Institutions must do the internal and external audit processes to see how it is perceived from outside, such as symbols and logos in visible and rituals in invisible sizes, which are important elements to affect the continuity of the institution culture [7, 8]. At the point of invisible sizes, institutions must increase their sharings in a consensus to ensure the continuity of the image to prevent conflict management by using empathy educations [9, 10].

Quality becomes a milestone for enhancing learning and teaching practices through contemporary standards. Quality provides insights on enhancing standards of education to adopt transformation. In this respect, transformation is crucial. It is referred as an alteration, act and process to revamp the existing situation. Therefore, transformation in education is facilitated by the impact of the information and communication technologies. It is noticed that information and communication technologies play a great role to acquire changes in an education

system. As schools are small units, as an example of organizations, digitalization of learning and teaching activities become intensified to accomplish transformation in education.

Information Communication Technology (ICT) has an impact on global economy, people's lives, as well as on the education system, especially in schools. The way of managing schools and the ways of learning and teaching have changed. In this respect, education becomes in transformation through digitalization. The use of new technologies change the way of school management and culture. In this respect, knowledge creation, learning and innovation become the milestone through support of digitalization in school management and culture. This puts an emphasis on establishing transformation in education, especially in school management. Digital based learning, teaching and leadership gain importance to facilitate contemporary standards in learning and teaching practices for the quality [11]. ICT has a social impact that makes headmasters and parties in schools to enhance school culture based on digitalization in knowledge creation. In this regard, it is essential to question the culture of schools and their management within the process of adaptation to digital transformation.

1.1. Technology and education in North Cyprus

The education system in North Cyprus has a centralized management policy in which educational policies and strategies are decided by the government. There is a pre-school, secondary school, high school and higher education system. Education is compulsory until high schools. All schools are connected to a central authority. The headmasters are responsible for the management and following the rules of the central authority [12].

The Cyprus Turkish Education System aims at educating people to do researches, to question and think scientifically through the ability of communication they gain within 14 years. The new education system relies on basic education, secondary education and higher education. Pre-school education starts at the ages of 4–5 and it basically covers games until the ages of 5–6. Compulsory education starts at the age of 6 until 13. The first semester starts on 1 September and ends on 30 June. There is a break in February. Classes start at 7:55 in the morning and end at 12:00. There are six lessons and two breaks during the day. Classes in secondary schools end at 13:00. Twice a week, there are social activities in the afternoons.

The headmasters are responsible for implementing the rules and regulations of the Ministry of Education. Their main responsibilities are:

- coordinating school management
- knowledge management
- motivating and controlling the teachers and the other school staff
- coordinating teaching learning activities and school activities
- managing collaboration and resources

It is the responsibility of the headmasters to manage resources and follow new trends in education. Therefore, technological resources are set by teachers and headmasters. This shows

how innovative they are to be digital leaders in school management to foster quality-oriented school culture.

In this respect, considering the outcomes of transformation is essential. School management is an umbrella of facilitating learning and teaching. Therefore, the role of digital transformation in school management is an intensified need to be underlined. In establishing school culture, school management plays an essential role that digital transformation affects the school management and culture for the quality in education.

Primary education institutions are taking steps in terms of improving organizational structures in a quality framework with strategic structure and functioning of the learning cycle. At the path of quality, it is important to create theoretical and applied frame for enrichment of strategic structure and progress by evaluating the culture of the institution. At this point, the symbols, rituals and values belonging to the institution give information about the vision and function of the institution. Also, they draw attention to create future quality steps.

This research aims at finding out the importance of technology and the evaluation of the functionality of symbols, rituals and values at the rural area educational institutions. In this research, the data was gathered by using an interview technique, based on qualitative research design. The descriptive analysis focused on the functionality of the existing symbols, values, rituals, roles and responsibilities of the school administrators and teachers for the improvement of the functionality of symbols and rituals through technology use.

2. Methodology

This research has a qualitative nature. Reflective reports of headmasters were gathered as data to understand the readability and awareness of school management to digital transformation in North Cyprus. In addition, a content analysis was done to realize the upcoming issues in school management and digital transformation.

A snowball sampling technique was used to set the survey group [13]. Because the best data could be gathered from the rural area school administrators and teachers, it was believed that the sampling technique was relevant to the aim of the survey. This survey was carried out with 10 school administrators and 50 teachers from 3 rural area schools in North Cyprus.

2.1. Data collection procedure

The data was collected between 23 February and 15 April, 2016, when all the participants were available. The data was collected through a 40-minute face-to-face interview with the school administrators and teachers of three rural area schools with the aim of surveying the situation of symbols, values and rituals. To gather richer data from the interviews, a comfortable and relaxing environment was created.

2.2. Data collection

On the interview form, the questions were prepared to define the exact perceptions of the teachers and school administrators of the three schools about symbols, rituals and values. For

the validity of the interview form, three experts examined the questions. Because of some similarities in contents, some of the questions were removed and some were combined. Also, the intelligibility of some questions was improved and the final version of the interview form was set. Two school administrators and three teachers were chosen, and a pilot interview was given to assess the clarity of the questions and the appropriateness of the answers. The recorded answers were put into written form as an interview documentation. Later, two other experts examined the documentation for clarity. There was a 91% agreement between the two experts. At the end of the survey, the validity of the questions was approved and the process of collecting data started.

In this survey a four-phase content analysis was done.

2.3. Coding the data

During the interviews, the recorded data was analysed and each row was numbered by giving a number to each row and an interview dump was formed. Following this, the documents and cassettes were examined by an expert for clarity and correctness. The collected data was examined and divided into significant meaningful parts and coded by significant supplementaries in itself. After coding the data, a code list, which was a key list, was created while processing the data. Later, the coding keys and documentations were read by the participants, agreements and disagreements were discussed and the necessary arrangements were done. For the reliability calculation of the survey, the formula of reliability of [14] was used, and an 88% reliability rate was reached. A calculation rate of 70% or over is accepted as reliable [14].

2.4. Finding themes

In the phase of coding the data, the designated codes were collected in certain categories in order to create themes. In this survey, four dimensions were formed with school administrators and teachers of the three schools aiming at searching the situation of the values, rituals and symbols.

2.5. Organizing the data according to the themes and codes

In this phase, opinions of the participants were explained in a clear language and were presented to the reader from the first hand. Dipnotes were used in order to identify which opinion belonged to which participant. An example to the coding system is provided below.

Example 1.....(T1)

T: Candidate Teacher

A: School Administrators

3. Findings and conclusion

3.1. Findings

The findings from three primary schools are presented below. Mathematical analysis method was used in order to make the findings reliable, to lessen the bias and to make it possible to allow comparisons between the different topics and categories that came into view. Therefore in the research, findings were presented in percentage in tables. The opinions and ideas of the participants were also presented as much as possible.

3.1.1. Function of the symbols, values and rituals in education establishment

The first part of the research dealt with the functioning and findings of the symbols, values and rituals. Under this heading, in order to find out about the functioning of the symbols, rituals and values in an education establishment, questions were asked to 10 school administrators and teachers. Their thoughts are presented in **Table 2**.

Participants	School administrators	Teacher	Total
School 1	2	6	8
School 2	5	26	31
School 3	3	18	21
Total	10	50	60

Table 1. Demographic Information.

Referring to symbols, values and rituals in an education establishment, 40% of the participating school administrators said their function should be to make the children love their country, their citizens and their environment. The teachers expressed by a 43% consensus saying it increases the children’s nationalistic emotions. These two categories seemed to be the highest amongst all the others in **Table 1**.

Therefore, these findings showed that the school administrators and the teachers, all agreed on the symbols, values and rituals functioning in a positive way to make the children love their country, to love its inhabitants and their surroundings. Moreover, it is stated that the symbols, values and rituals made the children to adapt to their surroundings better in the future, to be more in harmony in their community and also to increase their nationalistic favour and to transfer the cultural heritage to the future generations.

School administrators expressed their views as such ‘We, in our schools always organize ceremonies on meaningful, historical days, and perform many activities with the children to keep them about loving their country, their citizens and their environment’. Also, a teacher expressed his views related to these topics as such ‘I consider my students’ development to love their flag and to be nationalists very important. Every morning in the classroom, I talk to

them about the important days from our historical past and religious days. I want their nationalism to develop and take root in their minds’ (T:35).

Themes	School administrators		Percentage	Teacher		Percentage
	Stating opinion	Not stating opinion		Stating opinion	Not stating opinion	
Culture of community to be transferred to future generations	2	8	20%	5	45	10%
Children’s adaption to be in harmony in the futurein his surroundings	3	7	30%	6	44	12%
Children’s love for their country, their surroundings and tied to these aims by heart	4	6	40%	18	32	36%
Continually increasing children nationalistic favour	1	9	10%	21	29	43%

Table 2. The functions of the symbols, values and rituals in the education establishment.

3.1.2. *The increase in the symbols, values and rituals and the school administrators’ duty and responsibilities*

The second part of the research dealt with the aim to find the role of school administrators in the increase in symbols, values and rituals. The participants’ opinions and thoughts are given in **Table 3**.

Referring to the functions of the symbols, values and rituals, 50% of the school administrators said that the preparation of the symbols, values and rituals, which has an important role in the history of the nation, should not be organized or prepared haphazardly. A total of 48% of the teachers said that the message should be given to the students through the symbols, values and rituals supported by different activities. These two topics seemed to be the highest amongst the others. In consequence, school administrators and teachers agreed that those symbols, values and rituals which occupied important meaning in the past for all the country and community should be prepared seriously not haphazardly. Besides the message to the students, symbols, values and rituals ought to be supported by different activities.

Furthermore, school administrators should be more hard working and spend more time to explain to the students the values, symbols and rituals to make them take those symbols, values and rituals as examples. These are the school administrators’ duties and responsibilities. In order to strengthen the values, symbols and rituals, to root in the students psyche, more social activities and cultural trips must be organized.

A school administrator, with regard to the increase in the functioning of the symbols, values and rituals as a topic, expressed his opinion as such ‘It is my duty and responsibility as a school

administrator to be very serious and careful in preparation of those symbols, values and rituals which have historical roots and have a very important place in the community’ (A:6). A teacher stated his/her opinion as such ‘It is the duty of the school administrators to support the message they wish to give the students through the symbols, values and rituals by using different activities’.

Themes	School administrators		Percentage	Teacher	
	Stating opinion	Not stating opinion		Stating opinion	Not stating opinion
The symbols, values and rituals that occupy an important place in the history of the community	5	5	50%	12	38
Topics and messages wished to be given to the students through the symbols, values and rituals to be supported by different activities	2	8	20%	24	26
Explaining the meaning and importance of the values, symbols and rituals to the students and the message wished to be given	2	8	20%	8	42
Organizing more social activities and cultural trips in order to strengthen the meaning of the rituals, values and symbols	1	9	10%	6	44

Table 3. Increase in the functioning of the symbols, values and rituals, and the duty and responsibilities of the school administrators.

3.1.3. *Determining the person to take part in increasing the functionality of the values, symbols and rituals*

The third part of the survey was done to determine the person to take responsibility for the increase in the functioning of the values, symbols and rituals. In **Table 4**, the opinions, topics and given percentage are categorized and presented.

Themes	School administrators		Teacher	
	Stating opinion	Not stating opinion	Stating opinion	Not stating opinion
School administrators, class, and branch teachers taking responsibility and duty	6	4		
Local authorities and civil/public organizations to take part in the increasein the symbols, values and rituals	3	7		
Parents’ and associations’ responsibilities and duties	1	9		

Table 4. Determining the responsible person to take part in the increase in the functioning of the symbols, values and rituals.

In determining the person to take part in increasing the functioning of the symbols, values and rituals, 60% of school administrators stated that 'school administrators, class teachers and branch teachers should take part'. Thematic findings showed that for the increase in the symbols, values and rituals, especially local authorities and civil public groups should take responsibility and duties besides the increase in the responsibility and duty of the local authorities and civil public groups. Even more, families' and parents associations' role should also be increased.

For the increase in the functioning of the symbols, values and rituals, a school administrator presented his idea as, 'In order to increase the worth of the symbols, values and rituals, the message we wish to give to our students, it is vital and can easily be said that school administrators, class and branch teachers have to work diligently very hard'.

A teacher said that local authorities and civil public organizations must also take a leading role to increase the functioning of the symbols, values and rituals.

3.1.4. Using technology to increase the worth of values, symbols and rituals

While using the symbols, values and rituals, 50% of the participating school administrators and 48% of the teachers stated that in the transfer of the symbols, values and rituals, with the use of technology, they should increase using visual materials and effective films. Also, 40% of the participating school administrators and 34% of the teachers, for implementing the worth of the symbols, values and rituals, insisted on more technology, such as social media and Internet, more social activities and more cultural trips. It is understood that those two themes are the highest amongst all. In this phase, school administrators and teachers use technology on using symbols, values and rituals. Also, it can be said that to make the meaning of the values, rituals and symbols on children, more powerful cultural trips and social events are needed to use technology more effectively. A school administrator, with regards to the use of technology in transferring symbols, values and rituals, stated his/her belief as, 'I am trying to make more use of the technology in transferring the symbols, values and rituals to my students' (A:10).

Another teacher stated a belief as such 'What I wish is to give my students are effective indoors and outdoor activities to do with symbols, values and rituals through social media and Internet'.

3.2. Conclusion

In this study, the results and suggestions obtained from the primary schools, school administrators and teachers of rural areas, analysing symbols, values and rituals, are stated under four headings as below.

In reference to the functioning of the symbols, values and rituals in education establishment, the school administrators stated, '40% of the children's aim is to love their country, their surroundings and to be tied to these aims by heart'. The teachers stated, '43% of the children's national emotions topped up'. Therefore, by referring to this survey, the school administrators and school teachers stated that the symbols, values and rituals that are present in their schools

contributed to their country, surroundings and their citizens. In addition to these, the present symbols, values and rituals by their functioning helped children to be in harmony within their surroundings as well as increase their responsibility for the community they live in.

These findings [9] show similarities with [10] work. However, in order to develop children’s nationalistic emotions and the communities’ cultural heritage, to be transferred to the next generations, more use must be made of the symbols, values and rituals.

In the functioning of the symbols, values and rituals, 50% of the school administrators stated that, ‘Those symbols, values and rituals which have an important place in community, must be prepared seriously and due application’. Teachers stated their opinion as, ‘The values, symbols and rituals, which constitute 48%, must be supported by different activities’. Therefore, school administrators and teachers in their schools must prepare those symbols, values and rituals very haphazardly. In addition, the message wished to be given to the students through the symbols, values and rituals by the school administrators must be supported. Our result is similar to their results. Unless we can advise more cultural trips and social activities to be organized in order to strengthen the meaning of the values, symbols and rituals on children.

A total of 60% school administrators, class and branch teachers should take part and responsibility in the increase and functioning of the symbols, values and rituals. A total of 56% of the teachers stated, ‘local authorities and civil establishments should play a bigger role and duty’. These results show similarities with the results obtained by [4]. In addition to these, in order to increase the symbols, values and rituals’ worth, larger duties and responsibilities are laid on student-parent associations and the families too.

Topics	School administrators		Percentage	Teacher	
	Stating opinion	Not stating opinion		Stating opinion	Not stating opinion
Use of technology, visual material, and effective films while using symbols, values and rituals	5	5	50%	24	6
Message wished to be given to the students through the symbols, values and rituals	4	6	40%	17	33
Explaining the importance and meaning of the symbols, rituals and values to the children in order to increase awareness	1	9	10%	9	41

Table 5. Role of technology and digitalization in school culture.

The fourth topic comprises of the contribution of technology, when using the symbols, values and rituals. Participating members’ opinions and percentage are stated in **Table 5**. While using the symbols, values and rituals, 50% of the administrators and 48% of the teachers stated an opinion that while benefiting from technology, they should use visual materials and effective films. Also, through symbols, values and rituals, the messages wished to be given to the

students are to make more use of technology to be more effective. Social media and Internet activities, indoors and outdoors, were supported by 40% of the school administrators and 34% of the teachers. These two topics seem to be the highest amongst all the others. In this respect, the participants stated the effective use of technology, films and Internet in schools to transfer the symbols, values and rituals to their students in a more effective way. They also pointed out that the use of technology should be furthermore increased especially in and out of schools. Symbols, rituals and values wished to be taught to students in an effective way, those activities that are done in and out of school premises should be publicized through social media, Internet and all the technological means in hand.

These findings show similarities with the findings obtained by studies [1, 2]. Besides strengthening symbols, values and rituals in the students, more social activities and cultural trips should be organized, and these social activities and trips should be recorded by using technology to be shown to student at later stages.

As this focus is demanding for developing countries, especially North Cyprus, the research in this chapter revealed that headmasters are aware of the use of digital and technological facilities in schools. They are aware of digital transformation although there are restrictions, both in application and budget.

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