

School DNA and Its Transfer

İzzet Döş

University of Sutcu Imam, Kahramanmaras, Turkey

This study aims to examine the concept of “organizational DNA” which clarifies the features of an organization and helps to predict about the state of organizations in terms of schools and to bring “DNA transfer” up for discussion. Thus, a descriptive study was conducted with the help of six high school principals. The study was carried out by using maximum variation sampling with the phenomenological pattern. The data were collected through a questionnaire with open-ended questions, interviews and focus group discussions. Descriptive and content analysis methods were used to analyze the data. At the end of the study, four different features regarding the school DNA were defined and it was suggested that rotations, training school principals and leader teachers and replacement of administrators may be effective in transferring school DNA.

Keywords: holography, school DNA, school codes, transferring school DNA

Introduction

Each organization has its own purpose, culture, operation system, structure, function and rules. These dimensions present the typical features particular to the organization. An organization consists of individuals who have accepted the values and culture of the organization, while; on the other hand, trying to reach the goals of the organization. These individuals internalize the culture, purpose, aims, philosophy and values of their organizations and maintain their organizational commitment by accepting these features. Organization, in this sense, is a sum of individuals and each individual is like a reflection of that big organization in which they work.

Deoxyribonucleic acid (DNA) is the genetic material of all living cells and of many viruses. DNA has three major functions; storage of genetic information (1), self-duplication and inheritance (2), expression of the genetic message (3). The genetic code is the sequence of bases on one of the strands. A gene is a specific sequence of bases which has the information for a particular protein. DNA is self-replicating; it can make an identical copy of itself. Replication allows the genetic information to pass faithfully to the next generation (Sinden, 1994:393).

Employing the experience gained from the studies conducted on how organizations become organized and how they have been functioning for years, Booz / Allen / Hamilton developed the frame of organizational DNA. Organizational DNA is defined as a flexible database that can be accessed by anyone having information about the organization, structure and procedure, and basic relationships among individuals in the organization

and their relationships with individuals outside the organization (Candir, 2005:124). Organization DNA is the sense of vision, values and aims that hold an organization together. It is a concept that enables every individual to comprehend and internalize the mission of the whole firm. Just like DNA carrying a holographic code involving the information about the human body in the nature, it is possible to carry the whole organization to its cultural and other codes (Morgan, 1997:119). Organizational DNA is a metaphor used for the factors underlying an organization and helping to explain its performance and describe its “personality”. We use the DNA metaphor because it is useful in understanding the idiosyncratic characteristics of an organization. Like the DNA of living organisms, the DNA of living organizations consists of four essential building blocks which combine and recombine to express distinct identities or personalities. These organizational building blocks, are decision rights, information, motivators and structure which largely determine how a firm seems and behaves, both internally and externally. The good news is that, unlike human DNA, organizational DNA can be modified (Knott and Neilson, 2006).

Organizational DNA is defined as structure, correct decisions, motivators and information. The organizational structure is associated with how the organization seems and what it includes; making correct decisions with what is decided how and by whom; motivators with situations that motivate people, aims, incentives, career, history of organization; information with how performance is measured, activities are coordinated and information are transferred (Neilson et al., 2004; Niehues & Gross, 2004). Organization DNA not

only directs individual and organizational decisions but also arranges organizational relationships and expectations. It guides decision-making in providing the best adaptation to the changing environments (Holladay, 2005). Additionally, Onay and Erguden (2012) defined organizational DNA as the genes and abilities of an organization and explained that the equivalent of the basic element forming the human DNA in organizational DNA is human. Ivanov (2012) states that organization DNA is both a hereditary and dynamic aspect of an organization in which roles, relationships and complexities create organizational dynamism and attitudes. Govindarajan and Trimble (2005), on the other hand, suggest that organizational DNA consists of the following;

Structure: Formal reporting structure, decision authority, information flows, task/process flows

Staff: Leadership traits, staffing policies, competencies, promotion policies / career paths

Systems: Planning, budgeting, and control systems; business performance evaluation criteria; incentive/compensation systems

Culture: Notions about behaviors that are valued; embedded business assumptions; decision biases.

Organizations achieve their goals through their personnel. Individuals integrate with philosophy, vision, mission and culture that exist in the core DNA of the organization (Gunduz et al., 2011:523). Individuals who embrace the values of an organization to the core and participate in all the organizational activities with pleasure are the main sources of organizational life (Chao et al., 1994:730). Socialized (Balci, 2008:43) members who have internalized the characteristics and values of their organization can be thought to have all the organizational values. If these values are regarded as organizational DNA, each valuable organization member can be recognized as a small copy of the organization. This approach is discussed through holographic approach carrying the characteristics of the whole.

Holographic approach is born from the idea that all the characteristics that constitute the whole are included in the parts of the whole. These parts, even if they are separated from the whole organization, can establish a new system on their own by "reorganizing themselves". A seed falling from a tree carries all the codes and characteristics, namely the DNA of that tree and the seed is a candidate for becoming a great tree. Morgan (1997:122) explained the growth of organizations holographically with the following example. When a customer-centered firm with an outstanding service concept wants to expand its business, a core staff including a manager and two service experts split up from the unit to set up a new office. In this way, the culture, characteristics and information of the whole organization are transferred to the newly

established part with these three people. New members to this new unit become identical to the organization because they quickly adopt and internalize the distinctive characteristics of the whole (organization). The firm, in this way, can obtain a decentralized mechanism and adapt to local environments' typical conditions. Moreover, it also protects its characteristic of being a totally integrated firm.

Supposing that organizational DNA is coded to its personnel as described in the example above, it is also possible to regard each individual as basic structures or organs carrying the organization's DNA. When the principal "the piece reflects the whole" described in the holographic approach is adapted to organization, it is accepted that each member has the vision, culture, values and philosophy of the organization. Then, individuals who are well-accepted in their social environment and work in effective schools as well as having the characteristics of these schools are expected to carry the codes of these schools to less effective ones. Especially school principals, vice-presidents and teachers with leadership skills can be candidates to carry the school DNA.

A successful school principal carrying the DNA of an effective school will carry the codes of this success when s/he is appointed to another school (this can be through compulsory or voluntary rotation). When an administrator is appointed to a new school, s/he will try to apply and indwell these values to this new organization. The principal will put the success codes that he has obtained at the previous school in charge at the new one and the new school will follow its course to be an effective school. In this way, the process of organizational DNA transfer will be completed.

Purpose

The purpose of this study is to suggest and discuss the counterpart of organizational DNA at school. In this way, this study is expected to offer new ideas to school stakeholders about the transfer of characteristics of effective and successful schools to less effective or successful ones.

Methodology

The research is a descriptive study carried out by employing qualitative data. The study was designed with phenomenological pattern, which focuses on phenomena that are aware of but that we do not have in-depth and detailed information about. This pattern is used for phenomena that we are not unfamiliar with but that we cannot completely cognize (Yildirim & Simsek, 2008:72).

Maximum variation sampling is chosen and employed among the purposeful sampling methods. The purpose here is to have an idea about a specific

area by working on average situations (Yildirim and Simsek, 2008:110). This research was made in Kahramanmaraş – Turkey in May – 2012 with six high school principals working at different types of schools. Two of these school principals are female

while the rest are male. Two of these presidents works at Anatolian High School; one at an Anatolian Teacher Training High School and the other at a Fine Arts and Sports High School and the others at regular high schools.

Table 1. General information about the participants.

President	Experience (Management/Year)	School	Gender
A.K.	18	Anatolian High School	Male
A.S.	13	Anatolian High School	Male
Ö.Y.	22	Fine Arts and Sports High School	Male
K.M.	19	Anatolian Teacher Training High School	Male
A.T.	8	General High School	Female
B.Z.	7	General High School	Female

Data Collection Tools

The data were obtained through interviews, focus group discussions and a form consisting of open-ended questions. There are two main questions and some more probe questions related to each two in the form. The aim was to find out the perceptions about and what school principals understand about “school DNA” and “transfer of school DNA” while preparing the data collection tool.

Two open-ended questions were asked in the data collection tool and efforts given to obtain more data and go into detail with descriptive probe questions during the interviews. The first part consist of “What do you understand from the concept “School DNA?”” and the probe questions “What do you think DNA of schools that have organizational structures involves? What may be the elements forming school DNA? What is the place of school culture, values, aims and vision in creating school DNA?”. The second part of the data collection tool includes the main question “How can school DNA be transferred?” and the probe questions “What kind of system we should apply to transfer the codes of an effective school? What is the role of rotation (compulsory and periodical replacements that the Ministry of Education arranges for school principals) in the transfer of school DNA?”. These questions were discussed with two domain experts and the results obtained were reconsidered with them to negotiate the purpose and *confirmability* of these data.

The flexibility provided with open-ended questions, the use of different data collection tools that confirm the findings, face-to-face meetings, sharing the same environment with participants and having discussions on the research topic when necessary are important criteria in terms of the validity of the research. The data were sometimes given in direct quotations and conclusions reached were explained

by utilizing the findings to add some more validity criteria to the research.

The description of individuals participating in the study and research environment, explanation of concepts related to the research topic, the information given about data analysis (collection, analysis, interpretation, etc.) and the description of the stages of the research are criteria that are related to external validity of the study. Directly giving the data obtained with a descriptive approach, confirmation of research results by individuals with domain expertise and analysis of data depending on the conceptual framework are dealt with as the criteria related to the internal validity of the research (Dey, 1993; Yildirim & Simsek, 2008).

Data Analysis

The data were analyzed and interpreted through descriptive and content analysis. The data was audio-recorded or noted down during the interviews. The audio records were handled first and transcribed. The transcribed data were confirmed with focus group discussions after the interviews. The confirmed data were then typed into a text file and transferred to the program “Atlas Ti”. Content analysis was done through Atlas Ti. The content analysis was carried out by two different researchers. The codes determined by these two researchers were compared to ensure reliability. The formula “reliability = [number of agreements/ (total number of agreement+ disagreement)] X100” was employed (Miles and Huberman, 1994). 87% concordance was observed in this study.

The information, structure, correct decisions and motivators that form organization DNA were regarded as sub-themes of the first theme. On the other hand, the themes that the research questions were presented were interpreted in the second theme.

Findings and Interpretation

The answers to the eight questions (two main and six probe questions) were dealt with in this part of the research. Efforts are given to describe views on the characteristics and transfer of school DNA.

1st Theme: School DNA

In this theme, the answers given to the main question “What do you understand from the concept “School DNA”? Could you please explain your view?” and to the probe questions “What do you think DNA of schools that have organizational structures involves? What may be the elements forming school DNA? What is the place of school culture, values, aims and vision in creating school DNA?” were examined.

The statements of school principals about school DNA were as follows: *activities that connect people, activities that organize and improve human relations, birthdays, funerals, special days, organization culture, students attitudes towards school, the place where teachers and students are happy, school principal's views and management styles, teachers in decision-making processes, school atmosphere, school safety, teachers' attitudes and perceptions of school, teachers' acceptance of school, seeing school as a value, an environment where teachers work safely, school that is running smoothly, school clubs, regulations, data systems, etc.*

The codes obtained as a result of the content analysis of the data gathered from the participants and the themes and the schemes that these codes form were given in Table 2.

Table 2. The codes that constitute school DNA.

Structure theme	School Principal School Culture and Atmosphere School Vision Smooth Running School Safety
Motivators theme	Activities that connect people, Remembering special days like funerals and birthdays of teachers, Personnel's perception of school as a value, Happiness of teachers and students, A motivating school atmosphere for teachers, Love of school and happiness of students Academic and athletic success of students, Students' acceptance of moral and ethical values, Teachers' acceptance of school, Fixed perspective about what is expected from personnel, An atmosphere where people know what to do.
Decision Rights theme	Organization structure of school School principal's view and management style Teachers' participation in decision-making processes Decision of group and board of teachers Involve parents and students in decisions in relevant topics Brainstorming with school stakeholders at certain periods
Information theme	Regulations Activity corners (photographs, certificates of achievement) Old graduates School clubs, Teacher group meetings, Regional education meetings, Inspector reports, Electronic data system

In the light of these data, the “structure” of school DNA can be accepted as school principal, school culture, atmosphere and safety.

As “motivators” of school DNA, activities that connect people in school and administration giving importance to personnel are seen as the first value to motivate teachers. The second value is the fact that the moral and academic developments of students are means of motivation. The third value, on the other hand, is that students themselves are happy at their schools and they really love their

school. The third value is mostly about students' motivations. The fourth value is that the atmosphere and environment at school guide and motivate both students and staff.

“Correct decisions/decision rights” of school DNA is considered as school stakeholders participating in the decision making processes. For the “information” part of school DNA, the institutional memories of schools are dealt with. The data also put forth by stakeholders about school are accepted to be in information theme.

One of school principals of Anatolian high schools, A. K., pointed out the following about this: “*School is a place where a group of people live together. We cannot separate school from society because it is a reflection of society and we are trying to integrate people into society to ensure the life of society. They say “Everybody cherishes his own way of doing things.”. Just like the saying, schools also have their own features. These features separate one school from another. For example; the relationship between people, activities that connect people; these are very important. We put much emphasis on activities that connect teachers to each other in our school. The more we look after each other, the more successful our school will be. In my opinion, the features that separate one school from another are social activities and values that connect people. These may be the things that form the DNA of school, because these values have created a culture and this culture belongs to the school.*”

The views of Ö.Y., a fine arts and sports high school principal, about this theme: “*To me, the school DNA is the management style of that school. The expectations of parents determine the school’s vision and efforts. The students who attend my school receive music education and we sometimes happen to give lectures to even one student in a class when necessary. Both students and teachers of my school know they need to put their best efforts in any activity because there is no fine arts and sports high school other than ours in this city. There is no need to speak of this expectation; everybody knows this. Students attending a science high school think*

that they need to do their best to be among the best because teachers, school administration and parents are in that expectation; this expectation drive students to study more.”

A.T., a general high school principal about this topic: “*I am a person trying to create distinctness in my own school. It has only been 1.5 years since I came here with rotation. I intended to bring a new breath of fresh air atmosphere; I mean, I thought of creating a new school. I was wondering whether I could practice the things that I did in my previous school. For example, I arranged an exercise program that took place in the school garden half an hour before the bell in the mornings. Our physical education teacher volunteered for the task. They told me no one would come and I said I was willing to do it even if there were only two people. Students began to like this exercise routine in time and now almost two third of the school attends to the morning exercise. We do warm-up and then some physical exercises half an hour before lessons start. I think this application became a code for my school. I can say it became a part, the DNA of my school.*”

2th Theme: Transfer of School DNA

In this part, the answers for the main question “How can school DNA be transferred?” and to the probe questions “What kind of a system we should put into effect to transfer the codes of a successful school to another? What is the role of rotation in the transfer of school DNA?” were examined.

Table 3. Transfer of school DNA.

Themes	Codes
Negatives about DNA Transfer	Social environment disharmony of schools Unequal physical conditions of schools Personnel problems
Rotation	They need to have time to create school culture There are non-objective practices in a rotation system. There is no objectivity in creating school points. The performance of school principals should be prioritized. Rotation should take place once in seven or eight years.
Transfer Method	Seminars for new school Change of position of education administrators and teachers Successful schools and less successful ones should perform mutual studies. Teachers and administrators may be chosen from the less successful school and given training. Ones a school principal is successful in one school, s/he can be successful at any school. Leading school principals may be appointed to less successful schools. Regional group studies can be carried out and groups of teachers may share their experiences with each other. Effective school managers can be trained and these individuals may go to other schools as educators. Formation of an eager staff in the new school Leading school principals should choose their teachers and administrators on their own. There should be institutions for school principal’s in service trainings. There should be new training programs about education administration. There should be leadership academies for training of leaders. The administrators in the education field should be given the right to have their master’s and doctor’s degree.

It was observed that there were differences besides similarities between schools in the part “negatives about transfer of DNA” in the themes created related to transfer of school DNA. The most important thing that distinguishes some schools from others is the socioeconomic environment where they are located. Socioeconomic environment is one of the most important factors that determines cultural basis for schools. The structure and socioeconomic status of families are important variables in terms of success and adaptation to school (Aslanargun, 2007; Balci, 2007; Koc, Avsaroglu & Sezer, 2004; Sezer, 2007; Sisman, 2011). Even if schools are in the same neighborhood, there can be significant differences in physical opportunities between schools. Personnel problems in schools, teachers’ qualifications, physical opportunities, equipment, etc. are among the major differences among schools. These kinds of variables are seen as issues that can cause problems in transferring and adapting features of effective schools to less effective ones. The biggest problem in transferring a successful school’s characteristics to a new school is the idea that schools are never completely equal. This idea is generally valid; however, schools in the same environment have generally the same patterns. The unconformity between schools in transferring DNA of effective schools may lead to some issues in adapting the effective applications to new schools. Other important problems are that staff members of some schools are insufficient or unfruitful and that they resist changing. The resistance of personnel arises from organization DNA because there is a particular climate and culture established in the school and a new manager is trying to transfer another organization’s DNA.

An Anatolian high school principal A.S and Anatolian teacher training high school principal K.M. shared their views about this issue: *“Sometimes it is not possible to adapt the codes to the new school in transferring school DNA because physical opportunities may not be sufficient. The new manager for the school may not find the enough personnel to do the necessary changes and transitions. Socioeconomic environment of the school is also important. It is necessary to count these aspects as weak points. Besides, when I go to the new school, there should be staff that can understand me. Otherwise, it is really hard to implement changes.”*

Another problem is explained by A.T.: *“If a successful school principal is appointed to another, s/he goes to the new school with a plan in his/her mind and s/he transfers the DNA, namely the applications that s/he is used to. It is necessary for the school managers to leave trained staffs to behind them. Otherwise, the school they left may lose their qualifications”.*

Fine arts and sports high school principal Ö.Y. shared his following ideas about this theme: *“It can*

be suitable to carry codes that can be named school DNA among schools. However, there can be unconformities from time to time. Problems may occur in transferring codes, DNA, to a new school due to different physical conditions and, social and economic environments. It is not possible to transfer the codes of an effective school to another; this task is certainly time consuming.”

Rotation is the compulsory replacement of school principals. School principals can stay at a school for five years at most and they have to go to other schools according to the points they receive with respect to certain criteria. There are some school principals who argue that these criteria employed for evaluation are not objective and some who demand that rotation should be applied according to performance. *“What was the state of school before the new principal came and what changes occurred thanks to the new principal?”* was regarded as the main question that should be asked for rotation. Furthermore, it is stated that seven or eight years of rotation period instead of five years will be much more effective.

The rotation has important roles in transferring school DNA. However, it is necessary to practice rotation without disturbing the motivation of school principals and within a certain program. As can be understood from the interviews and the data, there is a clear view that if rotation is practiced without going into the ins and outs, it is likely that it will cause a lot of problems. However, a rotation applied according to fair and objective criteria can be quite suitable as well.

General high school principal Z.B. shared his/her views about rotation: *“Rotation has both positive and negative aspects as well. Sometimes a school with forty points and another one with sixty points are regarded as the same. Sometimes a village school and a school in the city center are regarded as the same and rotation takes place between these schools. However, these schools are not the same institutions and there are major differences between these schools. While school principals are subjected to rotation, the rotation criteria should focus on the performance of the school principal. Rotation plays important roles in transferring organization DNA. School culture is not shaped in a short period of time. The school principal who has just been appointed to a new school cannot create a new culture and value chain in short. The school principal, surely, needs time to establish the codes in the previous school where s/he achieved success and order. It will take between five and eight years for the school to get on the rails. Therefore, rotation should be carried out once every eight years, not five.”*

General high school principal A.T. and Anatolian high school principal A.S. on rotation: *“Rotation should be applied to school principals; however, the period should not be five, but seven or*

eight years. The feedbacks from the activities done in school are not immediate. Rotation should be applied to teachers as well and its period can be ten years. The principals should have the right to arrange their school personnel. The school principals should be able to choose teachers and vice-principals. Furthermore, teachers, students and parents should be able to choose me. Learner organizations can only be established by leader principals. Learner organizations can be maintained by learner principals. A principal is everything for a school. A principal can make changes. I agree with the opinion "A school is a school only with its principal." The image, efficacy and success of the school are only through a principal. Teachers have said "You have opened up our horizons." to me thanks to the activities I have done."

Finally, views about other methods in transferring school DNA were discussed. The features that stand out among these views: "Trained administrators with leadership skills should be appointed to less effective schools. Schools should do mutual activities with other schools. A new staff should be formed in a new school. An academy where school leaders can be trained should be available. A higher education for administrators should be available." School principals mean everything for schools. A school can be improved if its principal is a natural leader. Therefore, principals with such characteristics should be appointed to less effective schools and many of their characteristics can be transferred to these new schools with an approach that can be called "gene transfer".

General high school principal A.T. stated the following about the transfer of school DNA: "Schools with established culture and system have their own climates. Unsuccessful schools without an institutional culture are the ones that have not been able to realize structural alterations. There should be seminars for more effective schools. Suppose there are two schools; a successful school and an unsuccessful one. You need to group these and make them do mutual activities. Any high school with institutional culture may transfer its experience and knowledge to the other school. Individuals with leadership skills can be chosen from the unsuccessful school and trained to transfer the DNA of the successful school."

Anatolian high school principal A.S. stated the followings: "If a leader school principal is appointed to an institution, the principal creates an A team in that school. If a school is successful, it means the school president is a leader. This type of principals can be successful anywhere. The codes of the school can be transferred to new schools through principals with this kind of DNA. When the principal is appointed to a new school, s/he carries the DNA of the previous school to the new one. S/he tries to employ this information, experience and knowledge in the new school. New things trigger

new actions and open new doors. Experience is, on the other hand, failures from our past."

Anatolian teacher training high school principal K.M. stated the following: *Effective and successful schools are models for their environments. Administration, personnel relations, motivations, values and cultures of these model schools can be transferred to new schools. Similarly, group leaders are heads among teachers. I have given a room for every group leader. Our teachers hold meetings in these rooms; they take care of students and improve themselves. Leaders in unsuccessful schools should be trained. The principals and vice-principals in effective schools can be sent to other schools. However, these appointments should be regular. I can go to other schools as well, but I need to have a small team that can understand me and work with me in my new school. Otherwise, it is very difficult to make the change.*"

Principals can change schools very effectively. The effect of the school principal is easily seen in the first years of the school after the opening. The main values and principles that the school principal creates are influential on both teachers and students for years (Çelik, 2003:56). With suitable assurances given to school principals to be appointed to other schools, DNA of successful organizations can be transferred to new organizations, thus creating organizational change and rotation.

Conclusion and Recommendations

Organizational DNA is an identity and fingerprint of the organization. As in living organisms, organizational DNA consists of four elements. These are information, structure, correct decisions and motivators. In this study, efforts to determine the characteristics creating school DNA, and the transfer of school DNA are discussed.

The first element constituting organization DNA is structure. The structure is created by school principal, culture, atmosphere, and school security at schools.

It can be said that the qualities of the school principal and his/her administration philosophy play an important role in school DNA. Principal is the most critical element; school principal is effective in motivating the personnel, stimulating the personnel, forming a new structure (Can, 2010; Sahin, 2006; Yildirim, 2011), teachers' showing different behaviors regarding management types, teachers' morale, attitude and behaviors (Holloway, 2012; Yavuz, 2009), forming and arranging a positive culture that will diminish the negative effects for teachers and students (Balci, 2007; Sisman, 2011). Accordingly, the character and specific behaviors of the school principal are evaluated in the structure of school DNA.

The culture of an organization is all the beliefs, feelings, behaviors, and symbols that are

characteristic of an organization. Organization culture is a system of norms, behaviors, values, beliefs and habits that are shared among group members or direct individuals' behaviors in an organization. Every organization has a culture that can have a significant influence on the attitudes and behaviors of organization members (Alvesson and Sveningsson, 2008; Bakan, 2008:13; Kose et al., 2001:219; Lunenburg, 2011). School climate refers to the quality and character of school life. School climate is based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures (Cohen et al., 2009:182). Every educational organization has a climate that distinguishes it from other schools and influences behavior and feelings of teachers and students in that school. As for schools, climate is a necessary link between organizational structure and teacher attitude and behavior (Gunbayı, 2007:70). Organization culture and atmosphere is a lifestyle that reflects the specific features of every institution. This is a reflection, which is directed to organizational life, of organization DNA.

School safety is counted in the structure forming the school's DNA as well. A safe school is described as a school where students, teachers and administrators can have positive interactions without feeling threatened. Besides, it is also described as a place where there is no fear, violence and doubt (Memduhoglu & Tasdan, 2007:70). Therefore, it can be said that safety constitutes the basic structure of the school.

The second theme that constitutes the organization DNA is motivation values. These values consist of three parts in schools. First of them is the motivation from interaction among personnel and administration's or school principal's attitude. The second part is that the academic success of students motivates both teachers and students. Besides academic success, students' possessing moral and social values thanks to the education given at school is a reflection of the efforts made by teachers. The third motivation element is students' meeting their needs at school and being happy. This element is more about students' motivations. The fourth motivator is the atmosphere and culture felt at school.

The third theme of organization DNA is correct decisions and decision-making authority. These are described as the administration structure of the school, the principal's administration philosophy, staff's participation in the decision-making processes, consulting students' and parents' views.

The last theme of organization DNA is information. It can be said that the information in school DNA is created by the institutional memory. School clubs, graduates and communities related to the school are thought to be great data sources. Besides, formal electronic databases and supervisor

reports are regarded as beneficial information sources for schools.

It is thought that the transfer of school DNA is possible with the following applications:

- Rotation,
- Training leader administrators and teachers and appointing them to other schools,
- Mutual seminars and tasks in school development by schools,
- Replacement of successful principals,
- Opening leadership academies and schools

The rotation of school principals may play an effective role in transferring school DNA. However, it will be a lot easier if there is a small core staff that will believe and cooperate with the effective leader appointed to a new school. The structure of effective, happy and successful schools cannot be created in a short period of time. A strong organizational structure may take years to establish. As described with the findings, the school principal appointed to a new school will not be able to set up the codes in his/her mind but string it out. The number of people around the school principal at the new school will increase in time. The Ministry of Education determined the rotation duration as five years. In this study, it is stated that five years is not enough to establish a new school and a period of seven-eight years is suggested.

In-service training for teachers as leaders through other means improve the skills and effectiveness of teachers (Gultekin & Cubukcu, 2008). Leaders that will drag people behind them through in-service training or leadership/administration academies can start the change in the schools they are appointed to. Teacher leaders who influence school culture, build and maintain a successful team, and equip other potential teacher leaders to improve student achievement (Greenlee, 2007:46). The values teachers give to students and their perspectives play important roles in schools' efficacy because an important shareholder of effective schools is teachers (Morrison, 2004; Mortimore, 1993; Reynolds, 1995).

Suggestions

The following suggestions can be improved as a result of the study:

- Establishment of professional schools to train school managers
- Determination of the codes of effective and successful schools and actions to extend these codes to other schools.

References

- Alvesson, M. & Sveningsson, S. (2008). *Changing organizational culture cultural change work in progress*. Sweden: Routledge Taylor ve Francis Group.

- Aslanargun, E. (2007). The review of literature on school-parent cooperation and students' school success. *Manas Social Sciences Journal*, 9(18), 119-135.
- Bakan, I. (2008). The relationship between manager's demographic specialities and perceiving on organizational culture and leadership kinds: A field research. *Karamanoglu Mehmetbey University Journal of Social and Economic Research*, 14, 13-40.
- Balci A. (2007). *Effective school and school improvement theory, practice and research*, Ankara:Pegem A Publishing.
- Balci A. (2008). *Organization metaphors*. Ankara:Ekinoks Publishing.
- Can, N. (2010). *Teacher Leadership*. Ankara: Pegem A yayıncılık.
- Chao, G. T., O'learyKelly, A. M., Wolf, S., Klein, H. J. & Gardner, P. D. (1994). *Organizational socialization: its content and consequences*. *Journal of applied psychology*, C. 79, S.5, ss.730-743.
- Cohen, J., McCabe, E. M., Michelli, N. M. & Pickeral, T. (2009). School climate: research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180-213.
- Candir, E. (2005). *Organizational DNA an application*. Master thesis. Institute of Social Sciences, University of Uludag, Bursa.
- Celik, V. (2003). *Educational Leadership*. Ankara: Pegem A Publishing.
- Dey, I. (1993). *Qualitative data analysis*. London: Routledge Taylor Francis Group.
- Govindarajan, V. & Trimble, C. (2005). Organizational DNA for strategic innovation. *California Management Review*, 47(3), 47-76.
- Greenlee, B. J. (2007). Building teacher leadership capacity through educational leadership programs. *Journal of Research for Educational Leaders*, 4(1), 44-74.
- Gunbayi, I. (2007). School climate and teachers' perceptions on climate factors: Research into nine urban high schools. *The Turkish Online Journal of Educational Technology*. 6(3), 70-78.
- Gultekin, M. & Cubukcu, Z. (2008). Perceptions of primary school teachers about in-service training. *Manas Social Sciences Journal*, 10(19), 185-201.
- Gunduz, H. B., Besoluk, S. & Onder, I. (2011). From the complex system leadership perspective: DNA leadership. *International Journal of Human Sciences*, 8(1), 521-544.
- Holloday, R. (2005). Simple rules:organizational DNA. *ODP Practitioner*, 37(4).
- Holloway, J. B. (2012). Leadership behavior and organizational climate: an empirical study in a non-profit organizational. *Emerging Leadership Journeys*, 5(1), 9- 35.
- Ivanov, S. (2012). The problem of defects in modern organizations: Preliminary research findings. *International Conference on Management and Education Innovation IPEDR* 37, 42-45.
- Knott, D. G. & Neilson, G. L. (2006). Organizing to execute:it's in the DNA. *Ivey Business Journal*
- Koc, M., Avsaroglu, S. & Sezer, A. (2004). The relationship between academic performance and problem areas. *Social Sciences Journal of Selcuk University*, (11), 499-513.
- Kose, S., Tetik, S. & Ercan, C. (2001). Factors that make up culture of organization. *Journal of Management and Economics*, 7(1), 219-242
- Lunenburg, F. C. (2011). Understanding organizational culture: a key leadership asset. *National Forum Of Educational Administration And Supervision Journal*, 29(4), 1-12.
- Memduhoglu, H. B. & Tastan, M. (2007). School and student safety: a conceptual analysis. *Journal of Faculty of Education of Cukurova University*, 3, 69-83.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis* (2. Edition). London: Sage publication.
- Morgan G. (1997). *Images of Organization*. Ankara:MESS Publishing.
- Morrison, K. (2004). *A Guide to Teaching Practice*. Published on the Companion web Resource for Routledge Falmer.
- Mortimore, P. (1993). School Effectiveness and the Management of Effective Learning and Teaching. *School Effectiveness and School Improvement*, C.4, S.4, ss.290-310.
- Neilson, G., Pasternack, B.A. & Mendes, D. (2004). The 7 types of organizational DNA. *Strategy and Business*, 35, 95-103.
- Niehues, A. & Gross, S. (2004). Organizational DNA "Cracking the Code on Execution". Aerospace, Defence & Transportation Practice.
- Onay, M. & Erguden, S. (2012). A new metaphor: corporate dna. *Journal of Social Sciences and Humanities*, 4(1), 203-212.
- Peterson, K. D. & Deal, T. E. (1998). How to leaders influence the culture of schools. *Educational Leadership*, 56(1), 28-30.
- Reynolds, D. (1995). The effective school: An inaugural Lecture. *Evaluation & Research in Education*, 9(2), 57-73.
- Sezer, O. (2007). Some demographic characteristics of the repeating students and the opinions of the students and the teachers about repetition. *Journal of Education Faculty of Inonu University*, 8(14), 31-48.
- Sinden, R.R. (1994). *DNA Structure and Function*. San Diego, California, USA: Academic Press, Inc.
- Sahin, I. (2006). Administrative Processes in the Primary Curriculum Laboratory Schools. *Ege Journal of Education*, 7(2), 1-25.
- Sisman, M. (2011). *The pursuit of excellence in education, effective schools*. Ankara: Pegem A Publishing.
- Yavuz, M. (2009). Evaluation of school principals' views and practices on management in regard of the management theories. *Journal of Values Education*, 7(18), 121-155.
- Yildirim, N. (2011). A qualitative analysis on motivation of school principals. *Journal of AIBU*, 11(1), 71-85.