Can the Organizational Intelligence Be Developed in Schools by Inservice Training?  
(Giresun Mustafa Kemal Primary School Case)

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Abstract: The aim of this study is to determine the effect of a SWOT analysis in developing organizational intelligence. To fulfill this, an inservice training program for the staff of a primary school has been developed to improve its organizational intelligence. This program is applied in Giresun Merkez Mustafa Kemal primary school which collaborated willingly. As a conclusion, there are significant differences in all of the dimensions apart from effective communication with colleagues. This shows that the administered workshop has developed organizational intelligence. However, there has been no change in “effective communication with colleagues” dimension. In this context, it can be expected that the result can change if a more detailed workshop is administrated.

Key words: Organizational intelligence · organization intelligence inservice · school intelligence ·

INTRODUCTION

In today's world organizations confront fast and astonishing changes. Their survival will depend on adaptation capability they'll perform to comply with those changes. As a result of this situation, the management concept with its process acquire a different character, technology progresses and globalization process actualized accordingly.

In our age, consistently sustaining its importance, knowledge concept and intuition of it change fast. In organizational circumstances, shared individual knowledge transform into organizational information. Effective application of organizational knowledge forms intelligent organizations progressively. However, in order to achieve these, an intuition of making use of knowledge in creative ways is required.

In this consistently changing progression, educational organizations should provide not only students but also all its joint owners with coherent knowledge, skills and efficiencies and promote their learning potential. There­fore, organizational intelligence turns out to be the most important aptitude in this process [1-5].

In this study, the concept of organizational intelligence, development and importance of organizational intelligence and the role of organizational intelligence at school are put on the discussion ground with the help of previous researches to verify problem statement.

Organizational intelligence: Albrecht [1] defines organizational intelligence as the capacity to spur the brain power of an organization into actual and to focus it to realize the mission. He explains organizational intelligence as the collective sum of individual intelligences. He also identifies deliberate and spontaneous sides of organizational consciousness—like individual conscious—which effects organizational behaviour and productivity. His model of organizational intelligence integrates deliberate and spontaneous learning. He quotes from Gardner's study that, organizations have multiple intelligence dimension provides them with developing into direction of their potential. Albrecht [1], claims organizational intelligence has seven dimensions those of which are strategic vision, desire to change, grouping and coherence, performance pressure, expansion of knowledge, enthusiasm and common fate.

Simie (2005,190), defines organizational intelligence as an intellectual capacity to solve problems within an organization. The core of this definition is getting together of human being along with technical capacity in problem solving process. Basically

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organizational intelligence comprises combination of knowledge, experience, consciousness and understanding in organizational problems [6].

Halai (2006) defines organizational intelligence as a capacity of creating consciousness and making use of it in their marketing environment from strategic aspect [4].

According to Macgilchrist (2004), who studied organizational intelligence at school level, organizational intelligence is related to capacity of organizations progression. Intelligence comprises cleverness, understanding, intuition and experience besides knowledge and aptitude. These are just like the gas, water and oil within a car that make it run. We use each of them for performing different function but for the same purpose [5].

In Turkey, organizational intelligence is mainly studied by Erçetin (2002). Erçetin and Demirkulak (2002, 41) define organizational intelligence as the junction of skills that an organization needs and uses. Those skills are; adaptation to different situations, quick response, being relax and flexible, being open minded, having imaginative power and finding solutions to new problems. The use of mentioned skills require a perfectly functioning and constructed organization, effective management, effective human resources, technology, knowledge and organizational learning skills [7].

From individual intelligence to organizational intelligence: Last developments in individual intelligence largely effect the studies in new emerging field of organizational intelligence. Definitions of organizational intelligence mostly made in compliance with individual intelligence [8]. It is mostly admitted that individual intelligence is the capacity of information processing and adaptation to the new environment [9].

Intelligence is the capacity to transfer information for continuity in development, adaptation, attributes and stability with inner and outer environment of any open system. This can occur in many ways supporting different valid intelligent perspectives. This time it becomes reasonable to say that organizations create intelligence synergy which is beyond the sum of each multiple intelligence field they are integrated to. Another important issue is the requirement in using different ways to evaluate individual intelligence. According to this there is no appropriate one way to measure intelligence. Individual intelligence was the measure to determine a students chance of success in educational system in mid 80's an deven in 90's. Students were expected to have defined skills and knowledge in result oriented system.

Gardner’s multiple intelligence theory and Goleman’s emotional intelligence concept has proved that individual intelligence scale, although used as the most common criteria scale for success in educational system, is inefficient to define the individual intelligence [2].

Traditionally, intelligent test as applied in educational field, it causes problems to reach a judgement or label individuals or groups through it.

Identifying a student’s preferences is more than just a criteria to estimate his/her success or failure; it will provide teacher with new pedagogic approaches for different learning styles. Understanding organizational intelligence will help to determine the strong and weak sides of an organization. It can also help the leader and organizational development facilitator to focus on designating educational and adaptation program.

There are some basic assumptions in adapting individual intelligence to organizations. First assumption is the functional similarity between individual and organizational intelligence. Organizational intelligence can be defined as the capacity of processing information towards the goal, interpreting it, decoding and transformation. Thus, an organization can improve its adaptive potential in the environment. This concretizes the second assumption, namely “organizational intelligence is adaptive”. Third assumption is organizational intelligence’s being an experimental learning process emphasizing organizational success and failure [9].

Learning with intelligence implies that organizations learn perfectly from the experiences, they are provided with proper information and they have potential to put more effective performance in.

Although individual and organizational intelligence have similarity in common, they are not proportionally equal. Organizational intelligence is a social outcome. Organizational intelligence is different from well-known concept of individual intelligence. Group intelligence is a functional intelligence of a group of people working as a unit [10].

Intelligence is transferring information and using it for its continuity and developing in this environment. However, contrary to natural systems, social systems cannot be motivated through intuitions. Social organizations have lots of alternatives to choose. In this case intelligent functions as a choosing the right mechanism.

Organizational intelligence is defined as the capacity to process information and to adapt emerging situations. It is also claimed to be a social outcome of organizational symbols, interactional cliches, organizational culture and
members interactual [8]. Therefore one can assume that organizational intelligence differs from individual intelligence with having a social structure. A social structure without human emotions cannot be thought. Thus, organizations social existence mainly depend on emotions. That's why emotional intelligence is considered as one dimension of organizational intelligence.

Concept of organizational intelligent make us think of an organization as a living organism. This assumption requires an organization to have some definite characteristics. Morgan (1998,77) identifies those characteristics as (1) learning ability and (2) self-managing ability. According to Morgan (1998,57) learning systems should do the followings in order to manage themselves [11]:

- They should perceive, observe and scan their environment,
- They should relate this information to system behaviours determined by organizational norms,
- They should identify important deviations from these norms,
- They should make corrections if inconsistent situation observed.

If those four conditions are realized, a continuous transfer of information will have been created that allows system to perceive changing characteristics of the enviroment and to establish a connection in between. Thus, the system will process in an intelligent and self-managing way [11].

Organizational intelligence at schools: Organizational intelligence has outlined a new organizational aspect reflecting dynamic and organic nature of schools. Gardner's (1999) multiple intelligence theory, offered schools a new scope of organizational nature to improve their capacity and suggested new ways. This new approach has brought a different aspect to the schools which functions in old mechanical style.

Maegilchirst (2004) suggests that successful schools achieve their goals within the core of learning, teaching, effectiveness and development through simultaneous practicing of nine kinds of intelligence. Those nine intelligences with their explanations are stated below [5]:

1) Contextual intelligence: School's capacity to see itself as the connection from the aspect of a bigger society and the world. It can also be defined as self-organizing capacity.

2) Strategic intelligence: It implies the capacity of a school to anticipate the needs for development, actual planning and applications. This capacity consists planning skills.

3) Academical intelligence: It is related to promoted and profound academical knowledge values. This kind of intelligence can be summarized with the words value added, effective learning and teaching. It appreciates students problems and contributions.

4) Reflective intelligence: It consists of management activities and reflective processes in general and students knowledge acquiring process in special besides basic skills. The reflection is being aware of stake in students low expectancy level and students happiness.

5) Pedagogies intelligence: It is defined as school's perception of itself on educational organization basis. This dimension identifies dynamic relation between learning and teaching as well as learning and thinking.

6) Professional intelligence: It is about capacity of teachers on working together for especially classroom activities. It implies that teachers should be given the opportunity to contribute to the learning needs in many different ways.

7) Emotional intelligence: It is about capacity of teachers and students feelings which they attribute remarkable value. Howard Gardner (1999) makes a distinction between interpersonal and personal intelligence [12]. Personal intelligence is the capacity of understanding other people.

8) Spiritual intelligence: Spirituality is a source of creativeness and vigor that is available for everyone. It activates researches, thoughts, observations, anticipations, empathy, artistic expression and sense of humor within us.

9) Ethical intelligence: It approves the importance of students rights. It also consists of values and beliefs formed by the goal of the organization.

Importance of the study: The rapid changes in information and technology has effected education and educational organizations. This fact fosters educational organizations to re-assess the conjecture and to develop and implement new strategies in order to adapt emerging conditions. That obligation makes
schools, the fundamental educational organization, to be reorganized to self-adapt themselves and so organizational intelligence will be the first thing to take into consideration. Organizations have become living, learning, developing live organisms (systems) within this process. In this case, as a living organism, educational organizations should develop organizational intelligence and make use of it. School’s intelligence, to be more specific, states a common capacity to realize the goals achievement [5].

Restrictions: The findings obtained from the study are restricted to the school subjected to application.

Problem statement: Is a workshop depends on SWOT analysis effective for developing organizational intelligence?

Sub problems:

1. How are the weak and strong sides of the school, with opportunities and threats, perceived by the teachers?
2. How are the determined and below stated actual dimensions of organizational intelligence perceived by the teachers before the workshop applied?
   1. Adaptation to emerging situations
   2. Effective communication with colleagues
   3. Agility in actual and reactual
   4. Intuition and anticipation
   5. Using imagination power and creativity
   6. Being relax and flexible in functioning
   7. Finding solutions to emerging situations
3. How are the actual dimensions of organizational intelligence perceived by the teachers after the workshop applied?
4. Is there a significant difference between teachers first (pre application) perceptions and later (post application) perceptions on actual dimensions of organizational intelligence?

**MATERIALS AND METHODS**

Research model: SWOT analysis is applied to determine weak and strong sides of organization with the situations it perceives as an opportunity or threat in order to develop organizational intelligence. The findings can be used to form a road-map in educational studies.

This is an empirical study in which pre-test and post-test model is used to develop skills related to organizational intelligence in schools.

Research group: A designated one group pre-test and post-test model is applicable to a study whereas intrinsic process and behaviours of a group is subjected to change [13]. That’s why the “one group pre-test and post test designated model” is used in this study. The sample of the study consists of 40 teachers and 2 educational leaders of Mustafa Kemal Primary School in Giresun City. The teachers and leaders are chosen on basis of volunteer determination.

The permission of Educational Director’s Office of Giresun is taken for the application. After taking the permission a group meeting is held with teachers and the leaders to explain the scope of the study.

Instrument: In this study different techniques are used to collect data. The first technique is the workshop. In the research process four workshops have been gathered.

In addition to the workshops, “multi dimensional organizational intelligence scale” which has been developed by Erçetin and others (2007) is applied [14]. Those dimensions are; (1) agility in actual and reactual, (2) adaptation to different situations, (3) being relax and flexible in functioning, (4) using imagination power, (5) intuition and anticipating, (6) effective communication with colleagues and (7) finding solutions to emerging situations. A one-to-five scale (1= not at all, 5= completely) consisting 58 items was applied.

Collection of data: In the research process four workshops have been gathered. “multi dimensional organizational intelligence scale” which has been developed by Erçetin and others (2007) is applied [14]. SWOT analysis is applied at the beginning and at the end of educational program. Afterwards, data obtained from the scale is analyzed and compared.

Data analysis: In analyzing data for subproblems, frequency, percentage, mean etc. statistical techniques are used.

In comparing two category variables, like sexuality, t-test is applied. In multi category variables, like seniority (1-5 years, 6-10 years, 11-15 years, 16-20 years, ve 21 years and more) One way variance analysis (ANOVA) is applied. To determine the cause of significant difference between groups, Tukey multicomparison test is applied.

In order to apply ANOVA and t-test techniques, following requirements must be fulfilled [15]:

1. The grades of dependent variables must be in periodic or ratio scales.
2. Distribution of dependent variables grades must be normal.
3. Variance of dependent variables must be equal for each sample.

Since the conditions are not fulfilled for some variables, Tamhane’s T2 ve Wilcoxon nonparametric tests are applied.

Since some of the variables don’t show homogenous distribution in comparing values related to pre-test and post-test, t-test couldn’t be applied. Instead of t-test the nonparametric Wilcoxon test is applied. Therefore the grades(values) are transformed into z-values for comparison.

**FINDINGS AND INTERPRETATIONS**

**Results of SWOT analysis according to teachers perceptions are as follows:** According to teachers perceptions, internal weaknesses of the school are determined as; “school’s being fresh and not being well-known”, “lack of communication”, “lack of group study” ve “rivalry in school”. External weaknesses are; “students having transportation problem”, “parents paying little attention to students (children)” and “inadequate relation between school and parents”.

According to teachers perceptions, internal strengths of the school are determined as; “class and branch teachers being sufficient”, “guidance teachers being sufficient”, “teachers teaching for a long time in the same school”, “teachers having self-confidence”, “teachers sparing time for their students”, “school’s constructional appropriateness” and “standardizing number of students in a classroom”. External strength is, “school’s environment gives opportunities for effective education”.

Internally perceived treats for the school are; “difference of opinions between managers and teachers”, “managerial incompetences”, “teachers gathering in separate groups”, “long lunch breaks”, “parents associates interference” ve “uneducated parents associate members”. External treats are, “transportation problem of some students” and “the difference in parents economical, cultural and educational level”.

Internally perceived opportunities for the school are, “teachers being sufficient”, “schools having lots of open spaces”, “teachers being young”, “school’s having a multi purpose meeting room”, “school’s having all-day sessions” ve “school’s having a kindergarten class” External opportunities are; “school’s being in a developing neighborhood”, “people’s being considerate of education in neighborhood” and “school’s being close to faculty of education”.

**The results of second sub problem is stated below, statistically shown in Table 1:** Before the workshop, the teachers perceptions about Actual Dimensions of Organizational Intelligence are; for “Adaptation to emerging situations” dimension is sometimes; for “Effective communication with colleagues” dimension is usually; for “Agility in action and reaction” dimension is usually; for “Intuition and anticipation” dimension is usually; for “Using imagination power and creativity” dimension is usually; for “Being relax and flexible in functioning” dimension is seldom, for “Finding solutions to emerging situations” dimension is always.

**In Table 2 the results of third problem is stated statistically:** After the workshop, the teachers perceptions about Actual Dimensions of Organizational Intelligence are; for “Adaptation to emerging situations” dimension is sometimes; for “Effective communication with colleagues” dimension is usually; for “Agility in action and reaction” dimension is usually; for “Intuition and anticipation” dimension is usually; for “Using imagination power and creativity” dimension is usually; for “Being relax and flexible in functioning” dimension is usually;
Table 3: Comparison data of actual dimensions of organizational intelligence

<table>
<thead>
<tr>
<th>Actual dimensions of organizational intelligence</th>
<th>z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adaptation to emerging situations</td>
<td>-1.163</td>
</tr>
<tr>
<td>2. Effective communication with colleagues</td>
<td>-2.678*</td>
</tr>
<tr>
<td>3. Agility in action and reaction</td>
<td>-1.780</td>
</tr>
<tr>
<td>4. Intuition and anticipation</td>
<td>-0.466</td>
</tr>
<tr>
<td>5. Using imagination power and creativity</td>
<td>-0.380</td>
</tr>
<tr>
<td>6. Being relax and flexible in functioning</td>
<td>-0.772</td>
</tr>
<tr>
<td>7. Finding solutions to emerging situations</td>
<td>-0.639</td>
</tr>
<tr>
<td>Sum of organizational intelligence</td>
<td>-0.829</td>
</tr>
</tbody>
</table>

(p<0.05)

sometimes, for “Finding solutions to emerging situations” dimension is always.

The comparison of teachers first and later perceptions on the determined dimensions are stated below in Table 3: A significant difference is found between teachers first (pre application) perceptions and later (post application) perceptions on actual dimensions of organizational intelligence. After the workshop significant difference is found in all dimensions except effective communication with colleagues. This proves the effectiveness of the workshop on development of organizational intelligence.

CONCLUSIONS AND RECOMMENDATION

In the light of the findings it can be inferred that a process of education (here workshop) using analysis with decent methods will develop the organizational intelligence. It can be assumed that the organizations aware of this fact will prevail in the future.

The recommendations considering the result of the study are as stated below:

1. In every step of organizational intelligence developmental process SWOT analysis can be applied.
2. New perceptions can be brought up on how institutional and individual intelligence might differ in the developmental process.
3. Before the study to improve organizational intelligence is applied, the following problem areas are identified in situational analysis; communication, confidence, group study, participating management, school-environment relations. Educational directors can consider this issues in the education programs for effective organizational functioning.
4. On the dimension of “Effective communication with colleagues”, more comprehensive and multidimensional studies can be conducted.
5. The studies to develop organizational intelligence can become widespread and the Ministry of National Education can come up with a program in accordance with this.
6. Studies considering the effects of sexuality, seniority, branch, school type and etc. variables on organizational intelligence can be used to broaden the point of view.

REFERENCES


