Designing a Model for Effective Educational Management and Supervision for the Gifted and Talented Education

The aim of this research is to find out the characteristics of effective educational management and supervision in gifted and talented education. Qualitative research method was used in the study. The data collected from supervisors, managers, assistant managers, lecturers, coordinators, specialists, consultants in 2018-2019 academic term were analysed using content analysis technique. As a result of the research, the themes of educational program management, communication, human resource management, leadership, organizational targets, organizational behaviours (Educational Management); accountability and efficiency, professional development, organizational development, technology-based development, qualifications of supervision and supervisors (Educational Supervision) build up the model, and the research reveals the contents of these themes.

Keywords: educational management, educational supervision, gifted education, model, qualitative method

Introduction

Educational management has the responsibility to bring together various resources and allocate them effectively to achieve the desirable organizational goals (Okendu, 2012). Education management involves the management of all subcomponents of education like educational programs, human resources, professional development, and organizational psychology. Implementations that will reveal whether the managerial strategies are carried out in accordance with the organizational objectives are the actions related to the supervision processes. Educational supervision has crucial role to improve educational systems, as well. It provides evaluation, monitoring reports, suggestions for better educational environment. Supervisors are required to report on the quality of education including, pupil achievement, quality of teaching, behaviour and safety of pupils, quality of leadership and management (Ofsted, 2012). The effectiveness of educational management and supervision cannot be separated from each other to reach the defined educational goals.

It is seen that the managers of successful gifted education programs aim for excellence, set goals that match with national standards, and follow up-to-date information by attending conferences. These managers are responsible for setting goals to raise awareness and make systematic changes (Van Tassel-Baska, 2008).

Educational programs are the first element to carry out student success in general education, and gifted education as well. National Association for Gifted Children (NAGC) defines that educators need to possess a repertoire of evidence-based instructional strategies in delivering the curriculum to develop
students’ talents, enhance learning, and gifted programs have a positive effect on students (NAGC, 2021).

While there are many research on educational management and supervision, the existing literature lacks these fields in gifted and talented education (GTE). However, available research and resources provide evidence and guiding suggestions for GTE.

Considering the gaps in related field, the present study may be foreseen to contribute to related literature by defining the key elements of educational management and supervision in GTE.

**Problem Statement**

The main problem is GTE doesn’t have specific educational management and supervision system which is obviously needed. In GTE, the curriculum, teacher selection process, student selection process, implementations, project based education, managerial approaches, instructional strategies are different from general education system.

In general, school management is not seen as a profession in Turkey, but is rather perceived as a temporary assignment for teachers (Beycioğlu et al., 2018). Given the importance of educational leadership, Bush (2008) argues that the development of effective leaders should not be left to chance. It should be a deliberate process designed to produce the best possible leadership and management for schools and colleges. School leadership is a different role from teaching and requires separate and specialised preparation.

By presenting a holistic approach to analyse together with educational management and supervision features, this research targets to define how to design an effective educational management and supervision model, and questions its practicality. So that, this research is foreseen to present a solution to the specific educational management and supervision problems in GTE.

The aim of the research is to design an educational management and supervision model for the GTE. This model will be based upon the opinions and suggestions of all shareholders: Managers, assistant managers, teachers, lecturers, supervisors, counsellors, coordinators, facilitators in GTE in Turkey and the US.

Research questions are as follows:

1) What are the key elements for the effective educational management in GTE?
2) What are the key elements for the effective educational supervision in GTE?
Theoretical Framework

Gifted students have a number of different cognitive and social-emotional features such as rapid comprehension of complex information, rapid awareness of relationships, attention to detail, flexible thinking, comprehensive synthesis, in-depth learning and independence, and a high level of self-awareness (Clark, 2008). For these special individuals, unlike the normal education process, there is a need for challenging education programs that can meet gifted students’ needs, a teaching staff who can effectively present these education programs, and a management staff with the potential and competence to evaluate the teaching programs and teachers.

All teachers must be able to recognize the learning differences, developmental milestones, and cognitive/affective characteristics of gifted and talented students (NAGC, 2013). It shows that administrative support has a positive effect on teachers’ ability to apply new instructional activities and differentiate teaching for gifted students. (Cortina, 2011). In the US, there are defined qualifications for the managers in gifted education e.g. they should provide educational programs for the gifted and talented students and care for professional development and awareness for students’ interest and needs and supply source and materials (NAGC, 2021). The managers in gifted education should have knowledge about gifted students. They should be in collaboration for professional development and accountability. They should demonstrate leadership skills for teachers to use and evaluate instructional strategies. They should be coordinators for preparation of challenging educational programs. They should have trainings and/or certificates in the gifted education field (Cited by Summak & Çelik Şahin, 2014). Wynn (2010) points that the managers in GTE should have these competences: Ethical management, visionary leadership, lifelong learning. Spillane, Hallett & Diamond (2003) stated that the manager’s problem solving strategies and competences effect the teaching practice. Supervision can be described as experienced persons (supervisors) prepare the less experienced persons under their supervision and provide support for enriching their practice that can be described as “raising under supervision” (Bradley & Kottler, 2001). The aim of supervisor is to increase the competence of the supervisee and to develop supervision candidate in the frame of ethical rules by integrating the theoretical knowledge and application experiences (Holloway, 1995). Kaplan Sayı (2018) stated that the participants of teacher training program for gifted education reported they need individual support and feedback which are mainly the topic of supervision.

There is limited number of research on the influence of managerial support and supervision of teacher practices regarding the education of gifted students (Cortina, 2011). The current study will present a new aspect for holistic view of educational management and supervision in GTE. It is assumed that there will be specified supervision and management model for the GTE after the professionals’ and field experts’ opinions examined.
Materials and Methods

The study is a qualitative study and supported by qualitative data sources. The research as to designing a model for educational management and supervision in GTE is an example of case study, an approach facilitating the usage of the discovery of a phenomenon in its own context using data triangulation. What’s common between Yin and Stake, using different methods in their case studies, is that the topic of interest is discovered well and the essence of the issue is uncovered (Baxter and Jack, 2008).

Content analysis was utilized in the analysis of the data. The main goal of content analysis is to reach concepts and relations for which data are conceptualized. Afterwards, the data are re-organized and themes are determined. A conceptual framework based on literature review was used for the codes used in the analysis, and interpretation of the obtained data. Thus, phenomena could be organized or understood better (Yildirim & Simsek, 2006). Essentially, qualitative content analysis involves interpreting, theorizing, or making sense of data by first breaking it down into segments that can be categorized and coded, and then establishing a pattern for the entire data set by relating the categories to one another (Gubrium & Holstein, 1997). Berg & Howard (2012) characterize qualitative research as meanings, a concept, a definition, metaphors, symbols and a description of things.

Research Settings and Participants

The participants of the present paper were carefully selected according to the theoretical framework of the research. In line with the research aim, the participants were defined according to purposeful sampling technique and they were chosen from gifted and talented education, educational management and supervision departments. The participants are the lecturers from educational management and supervision departments of universities, teachers, managers, and supervisors at the Ministry of National Education (MoNE) in Turkey and teachers, counsellors, coordinators, facilitators, lecturers and managers in gifted education in the US. Purposeful sampling techniques for primary research have been well described by Patton (2002) defines purposeful sampling as selecting information-rich cases for study in depth, and these cases are those from which one can learn great deal about problems of research purpose.
Table 1. The participants profile in Turkey and the US

<table>
<thead>
<tr>
<th>Title</th>
<th>Organization</th>
<th>N</th>
<th>Gender</th>
<th>f</th>
<th>Title</th>
<th>Organization</th>
<th>N</th>
<th>Gender</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Dr.</td>
<td>University A-B</td>
<td>2</td>
<td>Female</td>
<td>2</td>
<td>Coordinator</td>
<td>Gifted and Talented Education (GTE)</td>
<td>7</td>
<td>Female</td>
<td>10</td>
</tr>
<tr>
<td>Assoc. Prof. Dr.</td>
<td>University C</td>
<td>1</td>
<td>Male</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assist. Prof. Dr.</td>
<td>University D</td>
<td>1</td>
<td>Male</td>
<td>1</td>
<td>Specialist</td>
<td>GTE</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers (PhD.)</td>
<td>MoNE</td>
<td>2</td>
<td>Male</td>
<td>2</td>
<td>Counsellor</td>
<td>GTE</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>MoNE</td>
<td>3</td>
<td>Male</td>
<td>1</td>
<td>Teacher</td>
<td>GTE</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MoNE</td>
<td>2</td>
<td>Male</td>
<td>2</td>
<td>Lecturer</td>
<td>GTE</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant Manager</td>
<td>MoNE</td>
<td>2</td>
<td>Male</td>
<td>2</td>
<td>Facilitator</td>
<td>GTE</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>MoNE</td>
<td>23</td>
<td>Male</td>
<td>16</td>
<td>Manager</td>
<td>GTE</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
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<td>34</td>
<td></td>
<td>16</td>
<td></td>
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</tr>
</tbody>
</table>

As seen in Table 1, there are four professors working at different universities. There are two teacher participants who have PhD. degree, there are three managers, two assistant managers and 23 supervisors working at MoNE. In total, there are 34 participants from Turkey. There are seven coordinators, three specialists, one consultant, one teacher, two lecturers, one facilitator working in the field of GTE participated in the research from the US. In total there are 16 participants from the US.

After the model was designed, it was presented to the field experts’ opinions. The participants of the evaluation were shown in Table 2.

Table 2. The participants to evaluate and review the model

<table>
<thead>
<tr>
<th>Title</th>
<th>Organization</th>
<th>Number</th>
<th>Gender</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Dr.</td>
<td>University A-B</td>
<td>2</td>
<td>Female</td>
<td>5</td>
</tr>
<tr>
<td>Assoc. Prof. Dr.</td>
<td>University C</td>
<td>1</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Assist. Prof. Dr.</td>
<td>University D</td>
<td>1</td>
<td>Male</td>
<td>6</td>
</tr>
<tr>
<td>PhD.</td>
<td>MoNE</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>MoNE</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>MoNE</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 2, the participants who evaluated and criticized the model are working at universities, and MoNE, Turkey, and in the US. Five of them are female, and six are male.

Data Collection Tool and Data Analysis

The data collection tool was developed by the researcher. The questions are based on literature review and previous researches in the light of research problem. The questions were about characteristics of effective educational management and supervision in GTE. The tool then was served to the field specialists (Three professors, and two assistant professors, and one teacher). According to their suggestions, the form was revised. The participants were informed about the study in writing through emails and verbally. Also, the explanation was made that their participation was voluntary. They voluntarily completed the survey, the data collection process is based on participants’
willingness. The data collection tool includes demographical questions and open-ended questions.

Validity and Reliability Analysis

According to Yin (1984), in order to make a research design more effective, its internal and external validity and reliability should be ensured. The objectivity is under risk as subject judgements could interfere in the process (as cited in Yildirim & Simsek, 2006). In order to ensure the internal validity of the research, the comments of the participants and research results were shared and the participants confirmed. For the pilot implementation, five teachers, five managers, five lecturers were asked questions and the intelligibility of the questions was examined. It was seen that the participants did not have difficulty in understanding the questions and answered easily.

Good qualitative research applies standards of trustworthiness such as member-checking, stepwise replication, and audit trails, each of which seeks to verify the substance of what participants said so that interpretations are not subjective iterations of the researcher’s own belief system. Peer briefing and the use of external auditors serve to enhance the credibility of a study by assessing whether the findings resonate with others not connected with the study (Lincoln & Guba, 1985).

Results

In this section of the paper, the findings are presented in relation to each of the research questions posed before.

Table 3. The findings about characteristics of effective educational management

<table>
<thead>
<tr>
<th>Category</th>
<th>Codes in Turkey</th>
<th>Codes in the US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational program management</td>
<td>Development oriented information management 8</td>
<td>Professional development 5</td>
</tr>
<tr>
<td></td>
<td>Social needs</td>
<td>Adequate funding 5</td>
</tr>
<tr>
<td>Modern learning environments</td>
<td>Determined scope and content</td>
<td>Adaptation to individual needs, Inclusive identification process, 3</td>
</tr>
<tr>
<td>Process evaluation</td>
<td></td>
<td>Socio emotional support, 2</td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td>Student centered learning, Advanced instruction 2</td>
</tr>
<tr>
<td>Technology support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time management,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methodology centered approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilot implementation of the</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
program, Changeable attainments, Instructional leadership, Must be free from exam pressure, Development of individual skills, Sustainable development, Student centered

guarantee, Flexibility of content, Technology access, Career planning services, Developing positive relationships, Personalized and differentiated curricula, Systematic and regular recording, Communication, Teamwork

Standardized identification, Multiple measures, Set of organizational goals and expectations, Affective growth, Multiple criteria, Opportunities for students, Flexible services, Emotionally supportive environment, Person, not online, instruction, Searching for innovation, Advocate and support

### Communication

<table>
<thead>
<tr>
<th>Strong communication channels</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>9</td>
</tr>
</tbody>
</table>

| Provision of outsource       | 5  |
| Organization justice         | 3  |
| Accountability, Taking the human resources' opinions, Promotional activities, Information technologies, Empathy, Objectivity of management, Visionary leadership | 2 |
| Courtesy, Strong social capital | 1 |

### Human resource management

| Talent Management            | 10 |
| Merit, Career and competence oriented personnel selection | 9 |
| Professional development     | 6  |
| Internal evaluation, Equality | 4  |
| Accountable evaluation, Performance evaluation | 3 |
| Appraisal, Self-control      | 2  |
| Provision of accredited training programs, Professional approach | 1 |

### Leadership

| Communicative               | 5  |
| Democratic                  | 4  |
| Inclusive, Supportive, Solution-oriented | 3 |
| Particpative, Self-confident, Ethical | 2 |
| Distributtor, Sincere, Learning leaders, Humanist, Promoting personal development | 1 |

| Administrative support       | 3  |
| Instructional leadership, Coaching | 2 |
| Fight for financial support, Value intelligence, Inform the shareholders against myths, Top down/bottom up leadership, To be against stereotyping, Leading new teaching initiatives, Role models, Regular feedbacks, | 1 |
As seen in Table 3, the characteristics of the effective educational management are defined by the participants. In educational program management category, it was explained that there should be determined scope and content, time management, process evaluation, methodologies. Feedback is also emphasized. The educational program should be development oriented and flexible. Instructional leadership plays an important role. Additionally, another important aspect is the educational program should focus on improving
and developing individual skills, and enhance skill based education. One of the quotations is as follows:

“Content should be defined, time plan should be made, process should be evaluated, teaching methods and techniques should be concentrated, resource information should be disseminated, and feedback should be structured very well and should aim improvement.”

For the communication category, the participants focused on the strong communication for each teacher and the manager must ask each personnel’s opinion during the decision process. The objectivity of the managers was emphasized. The managers’ need for authorization to collaborate with the institutions. Participants care about the existence of strong communication channels. Objectivity of communication for teachers and managers’ asking their personal ideas in decision-making processes are defined by the participants.

In human resource management category, the participants indicated that there must be merit selection of the managers and teachers, and career and competence oriented personnel selection should be taken into consideration. The professional development of the personnel should be supported. Additionally, there must be an inclusive approach towards each personnel, the managers should present impartial behaviours towards the teachers. The talents of the teachers and managers should be defined and supported.

Another category is the effective leadership. Participants explained the effective leaders as communicative, entrepreneur, democratic, collaborative, participative and supportive. In addition to these features, the leaders must be sincere and humanist. They should be good listeners, motivators, and try to find solutions to the problems. As defined in the organizational targets category, the participants indicated the changing conditions and organizational targets should be determined in suitable for the each school’s learning environment. The targets must aim to develop the institution. All the personnel should take part in decision process. The targets should be national and care about traditional values, but follow the contemporary developments. Most of the participants explained the importance of collective/joint decisions. One of the quotations is as follows:

“It should be established in accordance with the existing conditions of the institution.”

In the organizational behaviour category, participants explained that there should be appraisal system and no hierarchy. The managers should be active and fair. The participants emphasized the sense of belonging, job satisfaction, and organizational commitment. One of the quotations is as follows:

“Performance must be supervised and guided away from any subjective factors.”

In management category, the participants seem to expect merit, justice, equity. The management should be adaptable into the different circumstances. Information sources should be used actively. The managers should be collaborative, and participative.
Additionally, they try to create high sense of belonging and motivation among the personnel.

As also seen in Table 3, the features of educational program management in GTE are defined by the participants in the US. The importance of professional development was described. The participants explained that the quality of the programs should be ensured and advertised to the families. Data-based developments, curriculum-based programs, setting organizational goals and expectations, adaptation to individual needs and adequate funding are the other subjects that participants put emphasis on. One of the quotations is as follows:

“There should be educational management to ensure that the quality of program that is being delivered is the same as the quality of program that is being advertised to families.”

In communication category, the participants defined good working relationships in inter organizations and intra organization as well. They emphasized the importance of good relations and communications for the effective educational programs. Other themes are coordination, aspiration for educational impact, positive relationship among shareholders, sharing, expectations for collaboration, and encourage interdisciplinary work. One of the quotations is as follows:

“There should be communication within the department in between the department and other departments.”

In human resource management category, the participants declared that both the teachers, and coordinators must have professional development opportunities. The other codes are different attitudes/approaches, internal and inter organizational evaluation, licensure, and recruitment of successful teachers. One of the quotations is as follows:

“There must be a professional development for people delivering gifted and talented services both as teachers and as coordinators. This is essential, otherwise a program will not be meeting the needs of its students.”

In leadership category, the participants defined that there should be leading new teaching initiatives for administrative support, role models and instructional leadership. Some of the participants stated the importance of administrative support, instructional leadership, and coaching. One of the quotations is as follows:

“Fight for financial support of programs. Stand up to those who say that gifted students are smart and don’t need help. Support parents and students against stereotyping. Value intelligence.”
In organizational targets category, the participants emphasized on creating and sharing vision, joint decisions, involving parents, educational spectrum. Organizational targets should be based on students’ needs and are visionary. These targets should be defined by all stakeholders, and this leads to progressive approaches. One of the quotations is as follows:

“Goals should be based on gifted student needs, not school board beliefs about what all students need or should be taught.”

In organizational behaviour category, the participants explained setting up a clear program, ownership over job description, appreciation, organizational culture, a good educational program. Gifted and talented program must not be at risk of closing. Additionally, job satisfaction, admission of proposals, full time positions, surveys, shared commitment, goal of supporting student needs are the other subjects that participants focused on. One of the quotations is as follows:

“When ideas and proposals are met with respect and open deliberation, staff are motivated as the culture and climate are healthy.”

When examined both countries, the findings showed that there are common codes used by the participants related to the categories e.g. the participants from both countries defined development, technology, and progress for educational program management. In communication category, collaboration was used as common code. In human resource management category, the participants used professional development as a common code.

On the contrary, the participant from Turkey expressed the importance of internal evaluation, the participant from the US described the importance of both internal and inter-organizational evaluation. In the leadership category, the common code is support, in organizational targets category, it is joint decisions, in organizational behaviour category, it is job satisfaction, and lastly, in management category, the common codes are communicative, and information sources.

Table 4. The findings about characteristics of effective educational supervision in Turkey and the US

<table>
<thead>
<tr>
<th>Category</th>
<th>Codes in Turkey</th>
<th>$f$</th>
<th>Codes in the US</th>
<th>$f$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability and Efficiency</td>
<td>Development oriented</td>
<td>12</td>
<td>Funding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Encouraging the instruction, motivating</td>
<td>11</td>
<td>Clear understanding of GTE’s importance, Support high intelligence, Rooted and tied to research and best practice</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Rule of law</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process and result oriented, target oriented, clinical supervision, Distance supervision, Collaborator, Participation of auditors, Professionalism, Specific criteria, Feedback,</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional development</td>
<td>By observation</td>
<td>4</td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------------------------</td>
<td>-------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Process evaluation</td>
<td>By the specialists, By external supervisors, By student success</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance criteria, Appraisal system</td>
<td>By scientific criterion</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical, Self–evaluation, International evaluation</td>
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<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational development</td>
<td>Monitoring development</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process evaluation</td>
<td>Data based, Taking current conditions into account</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous supervision</td>
<td>Onsite observation, With the participation of all stakeholders, Specific criteria</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal, Through appropriate studies</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology-based development</td>
<td>Data collection and analysis</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimize errors, Saving time</td>
<td>Data collection and analysis, Increase communication efficiency</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick intervention, Comparison, Data protection, Objectivity</td>
<td>Track and show the success, Source of learning, Bridge distances, Successful integration of program, Supports professional</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As seen in Table 4, in accountability and efficiency category, the effective supervision should focus on development, and include developmental guidance. Participants explained that accountability bring the effectiveness, and the supervision should care the process and results. A participant stated that distance supervision is effective. The supervisors should present feedback for the improvements, encourage the instruction. They should be motivating, emerging the talents, knowledgeable, and collaborator. One of the quotations is as follows:

“There should be a supervision system directly proportional to the developmental guidance system.”

The participants stated that the professional approaches and standardization bring the accountability. Additionally, the trust between the parties is crucial. The equality, rule of law and equity are emphasized. Feedback should be presented, and supervision shouldn’t be for control, but for development, and improvement. One of the quotations is as follows:

“As a single measure cannot give effective results in all institutions, special supervisions for different institutions should be adopted and also authorized activities by taking the self-specific climate of each institution.”

In professional development category, the participants stated that professional development of the teachers and managers should be evaluated in the process and the evaluation should be done by the specialists and external supervisors. Monitoring should be continuous. The participants expressed the importance of the criteria for the evaluation, and agreed that student success
will be the indicators of the professional development. The participants stated the importance of ethical evaluation of the performance. Professional development should be done by specialists, external supervisors, observations. Observation and process evaluation are the other important subjects. In organizational development category, participants explain that organizational development should be supervised in the institution. The schools’ current circumstances should be taken into account during the supervision. All the stakeholders should be included in development process. Process evaluation, monitoring the development are the other important subjects. The development should be planned, and data driven monitoring should be preferred. Technology-based development, and informational technologies are crucial in gifted education supervision. Using information technologies minimize errors, create security for the data, and helps saving time. It facilitates the quick intervention, and analysis. One of the quotations is as follows:

“As technology contributes to every stage of education, it also contributes to the supervision role. Intervention measures can be taken from here, for example, by monitoring both institutions and classrooms with cameras.”

In supervision and supervisor category, the participants listed the desired characteristics of the supervisors. These are smiling, entrepreneur, convincing, specialist, sharing, innovative, open to development, constructive, knowledgeable, fair and objective, unaffected by the external forces, humanist, capable of revealing the talents, reputable, have communication skills, facilitator, merciful, patriotic. The supervisors also should be confident and motivating. One of the quotations is as follows:

“As experienced in the field, tolerant, solution-oriented approach to problems, communication and reassuring people.”

As also seen in Table 4, the participants defined the characteristics of effective educational supervision in the US. In accountability and efficiency category, they defined the support for high intelligence, supervision should be based on research and best practice and done in organizational level. There should be key performance indicators (KPI) in supervision process. The support from top down and bottom up is important, and the supervision should have a cooperative control of stakeholders. Clear understanding of GTE’s importance, KPI, educational initiatives, participation, task oriented supervision, stronger supervision policy, and effective oversight are emphasized. Knowing the standards and expectations, setting the standards, converting to digital supervision fasten the growth, involving parents, negotiation, administrative approach, nationwide criteria, flexibility for student needs, accountability of the impact, supporting teachers, ensuring the program delivery, assessment are the other subjects that were mentioned. One of the quotations is as follows:

“The best programs are always transparent.”
In the professional development category, the participants indicated that it should be done by international evaluation, by skills of coordinating, by skills of supervising teachers, by emails, by visits, and by providing the needed training. Connection to the research field, regularly, objective supervision, ongoing development, mentor/master observation list, measurement of underachievement are the other subjects which participants described. One of the quotations is given below:

“Ongoing education and fully trained supervisors are a necessity.”

In organizational development category, the participants explained that supervision should be done by skill-based education, student achievement, guiding teachers, external evaluation, and organizational surveys on focus groups, review of program development, and staff performance. By results of organization, scrupulously by conscientious people, various stakeholders, comparison to national standards, self-evaluation, and accurate representation of identification are the other subjects that participants explained. One of the quotations is as follows:

“Programs should complete self-evaluations based on best-practice and those evaluations should be communicated with administration, who would then provide support and feedback and resources to improve the programs.”

In information technologies category, the participants defined the benefits of information technologies as follows; track and show the success, source of learning, bridge distances, data collection and analysis, increasing communication efficiency, successful integration of program, bridge the distances and support professional developments. One of the quotations is as follows:

“Information technologies can track and show success. Very important. It is also the source of learning content, not the skills.”

In qualifications of the supervision and supervisors in GTE are defined as follows: Allowing multidimensional evaluations, listening for all shareholders, deciding on long term vision, and grow the opportunities, coping up with recent trends, having interpersonal skills, fairness, and openness to new ideas, and facilitating professional learnings. The participants also explained being courageous, well educated, and supportive, showing empathy, being open to communication, experienced in gifted education, effective collaborator, open minded, involving in professional organization, sharing leadership, accountability, kind, committed, compassionate, not to settle for status quo. One of the quotations is:

“Strong interpersonal skills, fairness, openness to new ideas, empathy, courage.”
When examined both countries, there are some common codes for each category. The participants from both countries explained participation, in organizational development category. However, the code internal evaluation was used by the participants in Turkey, external evaluation was used by the participants in the US. The code participation of various stakeholders was used in both countries. In technology-based development category, common code was data collection and analysis. In supervision and supervisors category, the common codes for both countries are as follows: communication skills, supportive, fairness, and open to development, cope up with recent trends.

Table 5. The opinions on the model

<table>
<thead>
<tr>
<th>Category</th>
<th>Codes in Turkey</th>
<th>( f )</th>
<th>Codes the US</th>
<th>( f )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive effect on Gifted and</td>
<td>Professional</td>
<td>6</td>
<td>Comprehensive,</td>
<td>1</td>
</tr>
<tr>
<td>Talented Education</td>
<td>development</td>
<td></td>
<td>Helpful,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td>4</td>
<td>Regulative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scientific impact</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Close the gap,</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parallel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>implementations,</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Equivalency,</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Development,</td>
<td></td>
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<td></td>
<td>Necessity</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Environment of</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>trust, solution</td>
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</tbody>
</table>

As seen in Table 5, the participants declared positive approach and attitudes towards the effective educational management and supervision model designed for the GTE. All of the participants agreed that the model will certainly be beneficial for the field. Participants emphasized the assumed rise in the quality of the organizations in GTE.

The professional development of the teachers and managers will be continuous if the model is implemented in the field. There will be equivalence, and parallel implementations among the organizations in GTE. The participants explained the model will provide environmental of trust if the professionals’ opinions are taken into considerations. Some participants expressed the necessity of the model in the field. One of the participants explained the importance of data and knowledge management, according to him, for the sustainability of the model, it is crucial. The participant suggested the family and society participation into the model. According to the participants from the US, the model is comprehensive, helpful and may bring regulation. The other participant emphasized the importance of out-of-school opportunities and measuring the growth of these students. The participant also added that there shouldn’t be exam pressure. There should be support for psychosocial development, provision of outsource, authorized managers, and different base for education. One of the quotations is as follows:
“The model is successful, thank you for that. The data and information management can be included for the sustainability of it. Additionally, family and society participation is important.”

Discussion

The aim of this study is to design a model including the important aspects of educational management and supervision in GTE. The results of this study were interpreted carefully, but it should be noted that there are two limitations. The first one is participating stakeholders share their subjective opinions. It has been suggested to add parents and students’ point of views for further researches. Another limitation is the methodology. Qualitative research method was used in current study. Mix methods with reaching more participants may be suggested to gain more in-depth knowledge.

The effectiveness of the educational approaches has always been a central problem in regulation and reform strategies. In this study, the characteristics of an effective educational management and supervision were examined based on the field experts’ opinions in educational sciences, GTE. The designed model includes the themes of educational program management, communication, human resource management, leadership, organizational targets, organizational behaviours under the title of Educational Management; accountability and efficiency, professional development, organizational development, information technology, qualifications of supervision and supervisors under the title of Educational Supervision.

The results of this research confirm that in effective educational management, educational program management should include determined scope and content, process evaluation and assessments. NAGC (2021) emphasizes that educators need to develop and use a comprehensive curriculum and differentiate, accelerate, expand it. Curriculum must emphasize advanced, conceptually challenging, in-depth, and complex content.

The results of this study provide evidence for the importance of improving and developing individual skills including methodology and data based developments. Van Tassel-Baska (1988) recognized that curriculum experiences for gifted learners need to be carefully planned, written down, and implemented in order to maximize their potential effect. Avery (2001) explained that the methodology employed in the evaluations in gifted programs drew on multiple data sources in order to illuminate the strengths and weaknesses of these programs. Data collection strategies were multiple like questionnaires, observations, and interviews. The current study’s results have an implication that feedback engages an important place, so that, the analysis of collected data should be shared with the shareholders in the organization.

The results showed that instructional leadership plays an important role in educational program management. Gallagher & Gallagher (1994) supported the current study’s results, and put the emphasis on instructional leadership skills. Managers gained more responsibility to lead their schools toward greater learning opportunities; however, a great deal depends on the principal’s
strength as an instructional leader. It is through improvement of teacher practice that the principal affects student learning (Hallinger & Heck, 1996). Summak & Çelik Şahin (2013) stated that creating a learning environment for recognizing and improving potentials of gifted and talented students are closely related to instructional leadership skills of managers in gifted education.

The present research showed evidence of the importance of sharing the quality of programs with parents. Lewis, Cruzeiro, & Hall (2007) stated that parents, teachers, and the students themselves are important advocates for gifted education; however, without the school principal’s support, services for gifted learners will continue to be disjointed. Input was sought from teachers, students, and parents for summary evaluation at the end of the year. Colangelo & Dettmann (1983) stated that although educators emphasize the role of parents in the education of gifted children, little substantial information is given to parents in this area. Parents are subject to a variety of misconceptions about the gifted child and hold stereotypic views that can interfere with understanding their own gifted child. Therefore, there is certainly need to share the process, strategies used in the educational programs and share the quality of the programs with parents.

In the communication category, the research results suggest strong communication channels and managers’ objectivity while communicating. Lewis, Cruzeiro & Hall (2007) pointed services for gifted students should be part of the school’s mission and be communicated clearly to the public. Communication is the process that links the individual, the group, and the organization (Lunenburg & Ornstein, 2004). If the principal does not share the vision with school personnel and community members, special programs such as special education and gifted education go nowhere (Lewis, Cruzeiro & Hall, 2007). In a research by Aslan and Doğan (2016), it was stated that the managers should consider the shared decisions and involving the teachers into decision making process to increase the low motivation level. Teachers’ involvement in school decision-making was seen to facilitate better decisions, because those closest to students know best how to improve their schools and are in the best position to make and carryout decisions. It is motivating and creates energy, resulting in greater commitment to the job and increased job satisfaction (Flannery, 1980). The results of current research suggest good communication will bring good working relationships and aspiration for educational impact.

In human resource management category, the results provide evidence for the need of merit selection of teachers and managers. According to Armstrong (2004), the objective of an organization’s policies, processes and programs for the delivery of learning is to achieve its human resource development strategies by ensuring that it has knowledgeable and competent people required to meet its present and future needs. The current paper reveals that professional development of human resources should be supported. Ugoani (2020) emphasized that education is necessary in human resource development and management development because a failure in educational planning would directly result to a failure in management development. It is the power for
managerial effectiveness because it includes aspects of planning and 
administration.

According to the results of current study, talents of human resources 
should be supported. As human resource management theme of the model 
proves, there should be merit, accountable evaluation, support for professional 
development, appraisal, career and competence oriented personnel selection in 
the process. Human resources now have a vital role in helping organizations 
compete and achieve their goals; effective and efficient employees are 
considered a competitive advantage (Horváthová, 2011).

In Leadership category, the present study revealed the importance of being 
communicative, entrepreneur, democratic, collaborative, supportive, and 
participative. The principal’s major responsibility is to ensure that learning 
takes place in each and every classroom, for each and every student. Principals 
must be sure that teachers are well trained to work with the wide range of 
students in their classrooms. There are some sources supporting this result. It is 
crucial that teachers receive quality staff development in areas of student 
learning, including gifted education, because they have the power to influence 
student learning more than anyone else. This would seem to be a logical 
approach to improving gifted programs because the principal oversees the 
entire educational program and provides a direction (Ubben, Hughes, & Norris, 
2004). The instructional leadership of the managers in gifted education is also 
emphasized in the present study, and this concurs with the findings of 
Sergiovanni (2006) suggesting that principals must be instructional leaders 
who are directly involved in the teaching and learning life of the school. In 
organizational targets category, the current research proves evidence that 
organizational targets should be in line with schools’ learning environments 
and must aim to develop the organization. The findings are consistent with 
Chaveerug & Ussahawanitchakit (2008) research suggesting the great 
commitment towards learning in organization, the more likely organizations 
will achieve organizational targets. The results of current research present the 
importance of shared decisions and participation in the decision process. 
Shared leadership practices in schools increase confidence in the school and 
create a positive emotion for work.

In organizational behaviours category, the results emphasized that 
managers should be fair and the appraisal system should be objective. The 
fairness will bring the job satisfaction, organizational commitment and sense of 
belonging. Regarding organizational factors associated with job satisfaction, 
organizational justice has proven to play an important role (Silva & Caetano, 
2016; Colquit, 2001). Evidence suggests that perceptions of fairness show a 
positive association with key attitudes and behaviours for organizational 
effectiveness, such as citizenship, commitment and higher performance 
(Cohen-Charash & Spector, 2001; Mylona & Mihail, 2018).

In Educational Supervision, in the accountability and efficiency category, 
the results focused on developmental guidance based on research and best 
practice. The accountability of supervision process in education creates 
reliability beyond any doubt. The integration of accountability in the education
management processes helps to improve service delivery and control
indiscipline in the organization thereby increasing efficiency in the system
(Nakpodia & Okeimute, 2011). Developmental supervision is a specific
approach to supervising practicing teachers in schools wherein the supervisor
adjusts communication based on professional needs of the teacher (Glickman
et al., 2014). Supervisors who have the essential duty of putting educational
that supervision of instruction potentially improves classroom practice, and
contributes to student success through the professional growth and
improvement of teachers.

In professional development category, the results suggested professional
development should be evaluated by specialists and external supervisors by
continuous monitoring. Several studies also characterize principals, the key
implementers of teacher evaluation, as inaccurate raters of teacher behaviour,
thus raising questions of accuracy and integrity of evaluation results (Porter et
al., 2001). This supportive conclusion justifies the current research result
because it emphasizes the need for expertise and professionalism for accurate
evaluation and objectivity. Another result showed that student success and
measurement of achievement are the indicators of professional development.
Guskey (2000) defined professional development as the activities designed to
enhance the professional knowledge, skills, and attitudes of educators so that
they might improve the learning of students. So that student success and
teachers’ professional development are closely connected with each other.

In organizational development category, skill-based education and student
achievement, and scientific research, data-driven monitoring were emphasized
for supervision. According to the results all the stakeholders should be
included in development process. Weston, Ferris & Finkelstein (2017)
explained that the purpose of the organizational development area was
generally defined as trying to foster a better institutional environment for
teaching and learning. So that, as stated in the present paper, the data-driven
and research based development will certainly contribute to the organizational
development.

In information technologies category, the results suggest that technology
based developments in supervision is crucial, so that, using information and
communication (ICT) technologies minimize the errors and create data
security. The use of technology in education contributes a lot in the
pedagogical aspects in which the application of ICT will lead to effective
learning with the help and supports from ICT elements and components
(Jamieson-Procter et al., 2013).

The current study result suggests that ICT is a source of learning and
facilitates data collection and analysis. Supporting this result, Kosmützky &
Nokkala (2020) stated that ICTs help learners to make informed decisions and
adopt responsible measures for the integrity of the environment. This link
fosters a quality, comprehensive, and transformative education that affects
content and learning outcomes.
Figure 1. The Effective educational management and supervision model in the gifted and talented education

In supervision and supervisor category, the results suggest that multidimensional evaluation will bring objectivity and reliability. The supervisors should be fair and visionary leaders. Additionally, they should be specialists and capable of revealing talents. They should have good communication skills. Segun (2004) contends that supervision is the
stimulation of professional growth and development of teachers, a selection and revision of educational objectives, materials of instruction, methods of teaching and the evaluation of instruction. Segun’s view highlights the essence of supervision in the area of teachers’ professional development and the processes that must be followed to achieve the desired educational objectives.

**Conclusion**

At the end of the research, the effective educational management and supervision model for the GTE has been designed within the light of the results as seen in Figure 1. Effective educational management includes educational program management, communication, human resource management, leadership, organizational targets, and organizational behaviours. Effective educational supervision includes accountability and efficiency, professional development, organizational development, technology-based development, qualifications of supervision and supervisors.

The model demonstrates the continuous feedback in a cyclical way in both educational supervision, and management in GTE. Based on the results of the study, some suggestions were presented. These suggestions are as follows:

- The opinions of the participants are both in the field of educational management, supervision and GTE. So that, the results are certainly guiding us to a better practice. The designed model as a result of this research may be shared with policy makers in education to be implemented.
- The model is foreseen to be the solution of needs and problems in educational management and supervision in GTE. For managers and teachers in this field, professional development opportunities may be presented for improvement.

**References**


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