Development, Implementation, and Evaluation of An Effective Feedback Program for School Principals to Improve In-class Teaching

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Abstract
This study aims to develop a program on giving effective feedback (GEFP) which is designed to improve principals’ feedback capacities that support teachers’ in-class teaching and to examine the impact of this program. The program covers leadership, supervision, classroom observation, trust, active listening, feedback and statistical analysis topics. Experimental mixed method design was used in this research. The study group and sample of the research consist of 16 school principals and 602 teachers working in the experimental (N=8) and control (N=8) group schools in the province of Hatay in the 2018-2019 academic year. The “school principal feedback scale” was used as the quantitative data collection tool, and a semi-structured interview form was used as the qualitative data collection tool. It was concluded that GEFP contributed significantly to both the process and function factors of the feedback and increased the capacity of school principals to give effective feedback within the scope of improving teaching. The calculated effect size revealed that the contribution of GEFP to the function factor is higher than the process factor. Qualitative findings revealed that school principals realize the importance of supervision and feedback, improve themselves professionally, change their managerial behaviors positively, and show instructional leadership behaviors. As a result, it was determined that school principals started to give effective feedback by demonstrating behaviors related to the feedback process literature after GEFP. Considering the contribution of giving effective feedback to teachers to improve their teaching, it is recommended that GEFP should be provided for all school principals as in-service training.

Introduction
The main purpose of the supervision carried out in schools is to improve in-class teaching. This aim cannot be achieved with any supervisory process that does not give feedback at the end; because at the end of such a supervision, a teacher will not be aware of what he has done well in the lesson and should continue or what he has to do better, and also he will not be able to get the suggestions he needs for his professional development from the school principal. Therefore, supervision must have effective feedback to serve a purpose other than fulfilling the legal procedure. For this reason, it can be said that the success of school principals in their supervisory duties depends on the effectiveness of the feedback they give to the teachers. In this context, school principals need to know the characteristics and stages of giving effective feedback.

Buron and McDonald-Mann (1999) define effective feedback as providing people the information they need to improve their strengths and eliminate their weaknesses; and they add that without such feedback, best skills cannot be identified, weaknesses cannot be fixed, and mistakes will be repeated.
Unfortunately, most of the time, the evaluation does not go beyond paperwork that does not help and support teachers. Large-sample studies in which school principals use summative evaluation reveal that almost every teacher receives above-average grades; however, the results of such evaluations are not convincing to teachers (DiPaola & Hoy, 2014). If low-performing teachers are not adequately supported by school principals for their professional development, they will not be able to know what their weaknesses are and which skills they need to develop (Dobbelaer, Prins, & van Dongen, 2013). Although some studies (Dedering & Muller, 2011; Göker, 2015) have revealed the importance of effective feedback, there are some other studies (Ärlestig, 2008; Blase & Blase, 1999) revealing that principals have difficulties in providing consistent, timely and meaningful instructional feedback to teachers.

**Review of Literature**

The main purpose of educational organizations is to prepare students for social life by equipping them with knowledge and skills. As in all organizations, the level of goals achieved in schools is determined by supervision, which is a part of the administrative process. Although the instructional supervision carried out in educational institutions has more than one purpose, its main purpose is to improve the teaching process. Identifying teaching and learning problems and producing solutions to these problems is an essential part of the supervision process to increase the quality of the teaching process (Chao & Dugger, 1996). Instructional supervision can be defined as the instructional leadership process (Burke & Krey, 2005) that aims to increase the quality of teaching (Beach & Reinhardt, 2000) by providing feedback to teachers about their classroom practices (Glatthorn, 1984), directly supporting them (Glickman, Gordon, & Ross-Gordon, 1998), providing expert assistance (Oliva & Pawlas, 2008), and helping schools increase their capacity, contributing to the increase of students’ academic success (Sergiovanni & Starratt, 2002).

School leaders influence teaching and, thus students’ learning (du Plessis, 2013). The principal can ensure quality teaching in the classroom by designing effective observation tools, organizing planning interviews, performing objective lesson observations, and providing constructive suggestions in the feedback interview (Sullivan & Wircenski, 1988). The role of the supervisor is not to make judgments and report these judgments to the teacher but to collect observational and inferential data that can be used to enable the teacher to make better decisions about his/her teaching performance and its impact on students (Nolan & Hoover, 2008). Therefore, the school principal who knows what effective teaching is and how to evaluate it, and how to help teachers improve their teaching can be defined as an instructional leader (Thomas & Vornberg, 1991).

Workplace feedback is informing other employees and team members about their actions to help them achieve individual, group, and corporate goals (Lunenburg & Ornstein, 2000; Poertner & Miller, 1996). Feedback aimed at continuous improvement is a powerful motivator that enables people to do a task better (Oliva & Pawlas, 2008). People will do better when they receive feedback on how well they are progressing towards their goals; because feedback helps them identify inconsistencies between what they do and what they want to do (Robbins & Judge, 2011).

People need feedback to improve their work (Garber, 2007) and often show feedback-seeking behavior because they have an intense desire to know how they are doing (Luthans, 2011). Teachers also need accurate information about what they do in the classroom to identify their strengths and weaknesses and initiate the necessary change (Freiberg, 1987). One of the main reasons why employees cannot perform at the desired level is the lack of feedback on their performance (Caldwell, 2000). The feedback should give information about the performance by comparing the behavior of the employees (inputs) with the performance outputs (Ashdown, 2014). People’s changing their own behavior regarding their performance depends on accepting their feedback giver as empathetic, supportive, non-judgmental, knowledgeable and reliable, and perceiving the given feedback as concrete, irrefutable, accurate, reducing uncertainty and containing information focused on a few specific objectives (Brinko, 1990). Ashdown
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(2014) states that negative and poor feedback can lead to low motivation and performance; therefore, the feedback should contain information that will increase performance rather than being judgmental, and the statements that will harm the self-esteem of the individual should be avoided.

Ramaprasad (1983), who defines feedback as the information used to change somehow the difference between the actual level of a system parameter and the reference level, states explicitly that the information about the difference is not feedback on its own but the information that closes this difference is feedback. In other words, he indicates that the information produced within the system and affecting the system is feedback; the information that does not have the ability to change the performance of the system cannot be considered as feedback. Similarly, Wiggins (2012) states that he does not accept advice, praise and evaluation as feedback, and defines feedback as information about the effort made to reach a goal. Benligiray (2014:6) defines feedback as information about a performance that will lead to action to improve that performance. All three researchers defined feedback as information that has an impact on performance. Zbar, Marshall, and Power (2007) evaluate feedback as a process and define it in the context of performance management as a process that helps staff improve their work and provides them with the best possible support to be more effective and do their best.

The need for people to know how they do a job makes feedback valuable to them. Without feedback on their performance, it is difficult for employees to find the answer to what to do better and how to improve. Constructive feedback given in a timely and specific manner helps employees determine whether the work is fit for purpose and if not, how it can be improved (Cannon & Witherspoon, 2005). With feedback, letting people know how successful they are and helping them with what they need to do to improve their performance will make reaching their goals easier (Lunenburg, 2011). Various studies (Luthans, 2011; Scheeler, Ruhl, & McAfee, 2004) revealed that giving objective and timely feedback is preferable to none, and that feedback may be related to the process of achieving a goal or the content of the goal (degree of achievement). Managers need to know the characteristics of effective feedback because poor feedback is worse than no feedback (Lavigne & Good, 2015). Poor feedback leads to performance problems, confusion, wasted effort, anxiety, poor work quality, and avoidance of responsibility (Maurer, 2011). However, if the feedback is timely, accurate, specific, behavioral, constructive and from a reliable source; it becomes a source of motivation for the employee (Zbar, Marshall, & Power, 2007). Therefore, effective performance and continuous improvement can be possible with valuable feedback (Buron & McDonald-Mann, 2004).

Professional development is only possible with feedback (Di Paola & Stronge, 2003); because feedback allows staff to identify and resolve ongoing problems (Garubo & Rothstein, 1998), it provides the information people need to develop their strengths and overcome their weaknesses. Without effective feedback, problems will become ingrained, as weaknesses and mistakes will continue, because people will not realize their best abilities (Buron & McDonald-Mann, 2004). With feedback after a detailed classroom observation, it is easier for teachers to change their classroom practices for progress and development (Zepeda & Mayers, 2004). Therefore, it can be said that the essence of increasing the quality of learning and improving the teaching of the teacher is directly related to the quality of the feedback given by the supervisor (Göker, 2015).

The first condition for feedback to be effective is that it is understood and accepted by the recipient (Dobbelaer, Prins, & van Dongen, 2013). Freeman (1985) explained the characteristics of effective feedback as timely and frequent, objective, accurate, consistent, clear, specific, reliable, reasonable and mutual. Similarly Tulgan (1999) abbreviated the features of effective feedback as FAST (Frequent – Accurate – Specific – Timely). According to him, effective feedback is accurate and specific information that is given frequently and provided timely. Luthans (2011) similarly states that feedback is very effective when it is positive, immediate, clear and job-related. Effective feedback allows the recipient to understand exactly what he or she is doing and its effect on others (Weitzel, 2000), and is based on fact, not opinion (Chappelow & Leslie,
Therefore, creating and delivering a specific message based on observed performance can be the key to effective feedback (Weitzel, 2004). However, even if carefully framed, the effectiveness of feedback may vary depending on the way the teacher receives feedback, the degree of trust between the supervisor and the teacher, the teacher’s experience level, the school’s communication structure, and the conditions surrounding classroom observation (Zepeda, 2017).

For supervision to become meaningful and effective, principals must provide constructive feedback to teachers. Giving constructive feedback to teachers is one of the technical skills that the school principal should have (DiPaola & Hoy, 2014). Frase and Streshly (1994) state that school principals define supervision as paperwork that is done only once a year and has much bureaucracy, and they think that this is due to the principals’ need for more training and dedication to give feedback. In interviews with teachers, Montgomery (2012) revealed that administrators’ demanding their recommendations, which are not good, to be fulfilled in an authoritarian way created a trust problem for teachers in feedback interviews. If teachers do not believe in the reality or necessity of the feedback given, even feedback that reveals strengths and weaknesses will not initiate behavior change in teachers. Frase and Streshly (1994) state that principals are too busy to spend time in the classroom, and teachers receive feedback from their principals as “we already know we are doing a great job”. Moreover, it is claimed that this non-constructive, superficial feedback for teachers is often the only feedback received and that school principals do not fulfill their responsibility to provide feedback. Therefore, it can be said that school principals, as instructional leaders, should develop themselves professionally in order to be able to fulfill their responsibilities to improve teaching, manage the feedback process and be effective in this process.

Purpose of the Research

Knowing how to give effective feedback that will help the subordinates reach the highest level of their potential is necessary for principals to succeed in their leadership role. Therefore the feedback given by a manager should be constructive, empowering and non-destructive (Buron & Mc Donald-Mann, 1999). Cherasaro et al. (2016) revealed that teachers’ reaction to feedback is affected by how useful they find it and how reliable they perceive the feedback to be. Most supervision models assume that the school principal can provide constructive feedback to improve teaching or design a system in which other stakeholders provide this support to teachers (Wahlstrom & Louis, 2008). However, it is not clear whether this situation assumed in theory has implications in practice. As instructional leaders, school principals must give their teachers feedback in various situations throughout the academic year. The feedback given must be effective in order to achieve its purpose. This research is about feedback, which is a part of the professional development dimension of teachers. The main purpose of this study is to analyze the changes/experiences that occur in the effective feedback capacity of the principals with the “Giving Effective Feedback Program (GEFP)” given to the school principals. The ability of school principals to develop their effective feedback capacity was examined with the GEFP developed by the researchers. In addition, the experimental group participants’ views and perceptions about the applied program were also analyzed. The questions “What is the impact of the GEFP on school principals’ capacity to give feedback to teachers?” and “What are the perceptions of school principals regarding to GEFP as participant?” are the main problem statements of this research.

Methodology

Research Design

Experimental mixed method design was used in this research. The basic assumption of using both quantitative and qualitative methods together is that they explain the research problem and question better than either method alone (Creswell, 2012). Experimental designs are research designs that aim to discover cause-and-effect relationships between variables. In such designs, provided that the groups are assigned unbiasedly, and the effects of other independent variables that may affect the dependent variable are controlled; the reason for the change in the dependent variable can be attributed to the experimental procedure applied (Büyüköztürk,
Creswell (2012) mentions that mixed methods can be used to provide an alternative perspective to research and states that additional qualitative data collection for experimental studies with beneficial results will develop a deeper understanding of how the experimental intervention works.

**Sampling**

In this study, the sample selection was carried out with the multi-stage sampling method, which is a sampling type used in mixed studies. The distinguishing feature of the multi-stage sampling method is that it includes different groups embedded in each other and uses different sampling strategies while determining the sample from different groups (Mertkan, 2015).

The research universe consists of official secondary school teachers working in the Antakya district of Hatay province in the 2018-2019 academic year and the principals of these schools. In the research universe, there are 68 secondary schools, 68 school principals and 1380 teachers working in these schools.

The sample of this study was formed in three stages. In the first stage, the schools of the principals working in the current school for the first year and the principals working temporarily were excluded from the scope. Again, the schools of school principals who do not want to participate in an effective feedback program were not included in the scope. At the end of the first stage, 46 schools remained. In the second stage, schools were divided into strata. The first stratum is the seniority of school principals (2-5, 6-15, and 16+); the second stratum is the number of teachers that schools have (1-15, 16-50, and 51+). These two criteria were determined as strata as it is thought to affect giving feedback. Thus, the schools were distributed to 3x3 strata, in other words, to 9 strata. As a result of the distribution, it has been determined that there is no school which has more than 51 teachers and a principal with 2-5 years of seniority. Therefore, the sample has decreased to 8 strata. With the disproportionate stratified sampling method, 2 schools were selected from each of the remaining 8 strata, as the experimental group first. After the first election in each layer, the school chosen was put in the bag again. Thus, a total of 16 schools were selected, 8 of which were in the experimental group and 8 in the control group, which were included in the quantitative dimension of the research. In the third stage of the sample selection, all of the school principals in the experimental group were determined as participants for the qualitative dimension of the research, using the embedded sampling method. The total number of teachers in the 8 schools in the experimental group is officially 295, and the total number of teachers in the 8 schools in the control group is officially 307.

**Data Collection Tools**

In the research, “Personal Information Form”, “School Principal Feedback Scale (SPFS) (Balcı & Özkan, 2020)” were used as a quantitative data collection tool, and “Semi-Structured Interview Form” was used as a qualitative data collection tools. SPFS is a scale answered by teachers to determine the effectiveness of the feedback given by the school principals to the teachers in improving classroom teaching. SPFS has 34 items consisting of 2 factors: process and function. The scale has a 5-point Likert-type rating as 1) I totally disagree, 2) I don’t agree, 3) I neither agree, nor disagree, 4) I agree, and 5) I totally agree. In the process factor, there are statements to manage the feedback process, such as the administrative behaviors exhibited by the school principals, the communication methods they prefer, and their competence in class supervision. The function factor consists of statements that reveal feedback functions such as raising awareness about teachers’ performance, offering suggestions to improve the teaching process, and motivating them. Cronbach alpha reliability coefficient calculated for the scale is .99 which is very high.

Qualitative data of the study were collected by interview method. Interviews using the semi-structured interview form were conducted with the school principals of the experimental group, and it was tried to determine in depth the experiences of the school principals regarding the education they received and the changes that occurred in them. In order to examine the effects of GEFP on school principals, a semi-structured interview form consisting of 7 open-ended questions was prepared to be used in the qualitative interviews. While
preparing interview questions; attention was paid to the fact that the questions were easy to understand, goal-oriented, open and closed-ended, detail and explanation-oriented, and that the questions were not multidimensional and did not direct the interviewee (Yıldırım & Şimşek, 2016).

**Procedure**

With the Giving Effective Feedback Program developed within the scope of this research, it is aimed at school principals to provide teachers with feedback that will contribute to better classroom teaching. Considering the relevant literature, a program has been developed that includes the things to be done by school principals before, during and after class supervision to give effective feedback in educational organizations and the statistical analysis of quantitative data on student achievement. The program was designed as 8 sessions in total. The first 4 sessions of the program were designed for the “process” factor, and the last 4 sessions were designed for the “function” factor. The session order of GEFP and the factors related to the sessions are given in Table 1.

<table>
<thead>
<tr>
<th>Session name and sequence</th>
<th>factors related to the sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Process</td>
</tr>
<tr>
<td>1. Session: Leadership</td>
<td>✔</td>
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<tr>
<td>2. Session: Supervision and evaluation</td>
<td>✔</td>
</tr>
<tr>
<td>3. Session: Trust</td>
<td>✔</td>
</tr>
<tr>
<td>4. Session: Active listening</td>
<td>✔</td>
</tr>
<tr>
<td>5. Session: Feedback</td>
<td>✔</td>
</tr>
<tr>
<td>6. Session: Classroom observation</td>
<td>✔</td>
</tr>
<tr>
<td>7. Session: Statistical analysis - Theory</td>
<td>✔</td>
</tr>
<tr>
<td>8. Session: Statistical analysis - Practice</td>
<td>✔</td>
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</table>

In this study, GEFP was applied to the school principals as 8 activities, 2 activities per week in total 4 weeks. The effectiveness of the program was tested with the pretest-posttest control group on teachers to whom school principals gave feedback. At the same time, the program’s effects on the participants were revealed through the analyses obtained using the case study method, one of the qualitative research approaches.

**Data Analysis**

In order to test whether GEFP is effective, independent samples t-test analysis was used to determine whether there was a significant difference between the pre-test and post-test scores of the experimental and control groups. The significance level was accepted in the statistical analysis as “p < .05”. The Cohen-d index was used to calculate the effect size. This technique is used to test whether there is a significant difference between two classified variables (Büyüköztürk, 2018).

The qualitative research part of this study was carried out according to the case study pattern. Qualitative data from interviews with school principals participating in GEFP were analyzed by inductive content analysis. Before starting the content analysis, all interview texts were read once. Afterward, the texts were started to be read again in the context of the research problem and the codes were determined by labeling the statements that answered the research problem. This process was repeated once more with a second iteration. Thus, the researcher had the opportunity to identify the codes and code groups he could not notice in the first cycle and re-evaluate the relationship between the codes he determined and the theme. After all interview recordings were completed, a code table was created with the codes obtained. Themes were obtained by grouping similar codes in the resulting code table. To see the distribution of the codes in the themes, the repetition frequencies of the codes are given as frequencies. After the codes and themes were determined by content analysis, the data that became more understandable were interpreted within the framework of the research problem. Interpretations are supported by direct quotation examples. Critical and explanatory expressions are preferred in the quotations. In order to hide the identity of the participants in the statements made directly, “Sp”, which is the abbreviation of the word
school principal, and abbreviations consisting of numbers (such as Sp1, Sp2) were used.

**Results**

**Quantitative Findings**

Table 2 shows the results of the independent samples t-test, which was conducted to determine whether there was a significant difference between the pre-test scores of the experimental and control groups obtained from the school principal feedback scale (SPFS).

<table>
<thead>
<tr>
<th>Factors / Groups</th>
<th>N</th>
<th>x</th>
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<th>sd</th>
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</tr>
<tr>
<td>Experiment</td>
<td>239</td>
<td>3.82</td>
<td>.80</td>
<td>465</td>
<td>1.32</td>
<td>.186</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>228</td>
<td>3.73</td>
<td>.81</td>
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<tr>
<td>Experiment</td>
<td>239</td>
<td>3.70</td>
<td>.84</td>
<td>465</td>
<td>1.66</td>
<td>.098</td>
<td></td>
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<tr>
<td>Control</td>
<td>228</td>
<td>3.56</td>
<td>.93</td>
<td></td>
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<tr>
<td>Experiment</td>
<td>239</td>
<td>3.76</td>
<td>.80</td>
<td>465</td>
<td>1.54</td>
<td>.124</td>
<td></td>
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<tr>
<td>Control</td>
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<td>3.64</td>
<td>.84</td>
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</table>

When Table 2 is examined, no significant difference was found between the pre-test scores of the experimental and control groups, both at the level of sub-factors and in the whole scale (p >.05). When the mean scores are examined, it is seen that the experimental group has a higher mean in both factors and the whole scale. However, the mean difference between the experimental and the control groups is not significant. Therefore, the SPFS scores of both groups were not different from each other before the program was implemented.

After the application of the program, independent samples t-test analysis was used to determine whether there was a significant difference between the post-test scores of the experimental and control groups obtained from SPFS, and the results are given in Table 3.

<table>
<thead>
<tr>
<th>Factors / Groups</th>
<th>N</th>
<th>x</th>
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<th>Cohen-d</th>
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<tr>
<td>Experiment</td>
<td>254</td>
<td>3.98</td>
<td>.82</td>
<td>487</td>
<td>2.97</td>
<td>.003</td>
<td>.27</td>
</tr>
<tr>
<td>Control</td>
<td>235</td>
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<td>.89</td>
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<tr>
<td>Experiment</td>
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<td>.80</td>
<td>487</td>
<td>5.59</td>
<td>.000</td>
<td>.51</td>
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<tr>
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<td>4.46</td>
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</table>

When Table 3 is examined, a significant difference was found between the post-test scores of the experimental and control groups, both at the level of sub-factors and in the whole scale (p <.05). When the average scores are examined, it is seen that the experimental group has a higher mean in both sub-factors and the whole scale. Therefore, it can be said that the program implemented improved the school
principals’ capacity to give effective feedback. When the difference in scores between the averages is examined, it is seen that the development mostly occurs in the function factor.

Cohen effect size for experimental and control group post-test scores; d= .27 in the process factor, d= .51 in the function factor, and d= .40 in the whole scale. The effect size of the significant difference between the experimental and control groups can be interpreted as small in the process factor and medium in the function factor and whole scale. Based on these findings, it can be said that GEFP improves the function factor of feedback more. It can also be said that at least 66% of the control group was below the average of the experimental group in terms of the average score obtained from the entire scale.

Table 4 shows the results of the independent samples t-test to determine whether there is a significant difference between the SPFS scores obtained from the experimental group teachers before and after the program.

Table 4 Independent Samples t-Test Results of Experimental Group Pre-Test and Post-Test SPFS Scores

<table>
<thead>
<tr>
<th>Factors / Tests</th>
<th>N</th>
<th>( M )</th>
<th>S</th>
<th>sd</th>
<th>t</th>
<th>p</th>
<th>Cohen-d</th>
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</thead>
<tbody>
<tr>
<td>Process</td>
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<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>239</td>
<td>3.82</td>
<td>.80</td>
<td>491</td>
<td>-2.21</td>
<td>.028</td>
<td>.20</td>
</tr>
<tr>
<td>Post-test</td>
<td>254</td>
<td>3.98</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Function</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>239</td>
<td>3.70</td>
<td>.84</td>
<td>491</td>
<td>-4.46</td>
<td>.000</td>
<td>.40</td>
</tr>
<tr>
<td>Post-test</td>
<td>254</td>
<td>4.03</td>
<td>.80</td>
<td></td>
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<tr>
<td>SPFS</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>239</td>
<td>3.76</td>
<td>.80</td>
<td>491</td>
<td>-3.45</td>
<td>.001</td>
<td>.31</td>
</tr>
<tr>
<td>Post-test</td>
<td>254</td>
<td>4.01</td>
<td>.78</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

It is seen that there was a significant difference between the pre-test and post-test scores of the teachers in the experimental group in all factors and in the whole scale (p <.05) in Table 4. When the average scores are examined, it is seen that the post-test score is higher both in the factors and in the whole scale. When the difference in scores between the averages is examined, it is seen that the development mostly occurs in the function factor. In the post-test comparison with the control group, the mean difference was mostly in favor of the function factor. Therefore, it can be said that the implemented program improves the feedback function factor the most.

When the effect size is examined, the Cohen effect size between the pre-test and post-test scores of the experimental group; d= .20 in the process factor, d= .40 in the function factor, and d= .31 in the whole scale. The effect size of the significant difference between the pre-test and post-test scores of the experimental group can be interpreted as the medium in the function factor and small in the process factor and the whole scale. In other words, it can be said that at least 62% of the experimental group’s post-test average scores are higher than the pre-test average.

In order to determine whether the change in the analysis of the dependent variable being significant in favor of the experimental group really resulted from the education given or from a different external factor, it was examined whether there was a significant difference between the SPFS scores obtained from the control group teachers before and after the program. The results of the independent samples t-test analysis performed for this purpose are given in Table 5.

It is seen that there is no significant difference between the SPFS pre-test and post-test scores of the teachers in the control group in all factors and in the whole scale (p >.05) in Table 5. Although the mean scores are slightly higher in favor of the post-test both in the factors and in the whole scale,
the difference is not significant. Therefore, it can be said that the development in the experimental group was not affected by any other external factors, and this improvement resulted only from the program applied.

Table 5 Independent Samples t-Test Results of Control Group Pre-Test and Post-Test SPFS Scores

<table>
<thead>
<tr>
<th>Factors / Tests</th>
<th>N</th>
<th>-x</th>
<th>S</th>
<th>sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pre-test</td>
<td>228</td>
<td>3.73</td>
<td>.81</td>
<td>461</td>
<td>-.388</td>
<td>.698</td>
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<td>Post-test</td>
<td>235</td>
<td>3.76</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Function</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>228</td>
<td>3.56</td>
<td>.93</td>
<td>461</td>
<td>-.417</td>
<td>.677</td>
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<tr>
<td>Post-test</td>
<td>235</td>
<td>3.60</td>
<td>.90</td>
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<td>SPFS</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>228</td>
<td>3.64</td>
<td>.84</td>
<td>461</td>
<td>-.418</td>
<td>.676</td>
</tr>
<tr>
<td>Post-test</td>
<td>235</td>
<td>3.68</td>
<td>.86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1 Change of mean scores

The change in test scores for the entire scale is shown in Figure 1. While the mean score of the experimental group was = 3.76 in the pre-test measurement, it is seen that this score increased to = 4.01 in the post-test. In the control group, it is seen that the pre-test mean score = 3.64 and the post-test mean score = 3.68. Considering the analyzes made with average scores, it can be said that the feedback given by the school principals participating in the GEFP is more effective than the feedback given by the school principals who did not receive this training.

Qualitative Findings

Within the scope of the question of what are the perceptions of the school principals about GEFP as a participant, the themes were formed by grouping the codes according to the common tendencies and codes found by reading the interview texts over and over. The determined themes and codes are presented in Table 6.

Table 6 Perceptions of school principals about GEFP

<table>
<thead>
<tr>
<th>Themes</th>
<th>Codes</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arousing Awareness</td>
<td>The importance of supervision and feedback</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Teachers' need for support</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Need for professional development</td>
<td>6</td>
</tr>
<tr>
<td>Professional development</td>
<td>Supervision</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Giving feedback</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Statistical analysis</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Leadership</td>
<td>2</td>
</tr>
<tr>
<td>Managerial behavior change</td>
<td>Developing a positive attitude</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
<td>12</td>
</tr>
</tbody>
</table>
When Table 6 is examined; it can be said that GEFP creates professional awareness in school principals, develops them professionally in managing the supervision and feedback process, and enables them to focus on the purpose of improving teaching. Table 6 can also be interpreted that GEFP is effective in their managerial preferences by showing them instructional leadership behaviors, increasing their self-efficacy levels, and providing job satisfaction in them.

It can be said that GEFP raises awareness among school principals about the importance of supervision and feedback in improving teaching. Sp7 realized the importance of giving feedback: “In the past, if things were going well, I would stay quiet so that I wouldn’t interfere. However, I realized that was wrong.” Sp6 stated that the teacher needed professional support: “Teachers want it. So they said that it would positively contribute to them… Maybe they need it. I mean external evaluation, they want it.” School principals stated that they realized they didn’t know enough about supervision and feedback after GEFP. Some of the participants expressed their views on this subject as follows: “After this training, I realized that I had lack of knowledge in this subject (Sp5)”, “I learned clearly that we did not know well (Sp6)”, “I felt like completing the points that I didn’t have about this topic (Sp1).”

Qualitative findings reveal that GEFP not only raises awareness in school principals but also develops them professionally. School principals stated that they learned new things about supervision (f=14), giving feedback (f=6), statistical analysis (f=6), communication (f=4), and leadership (f=2). They also said they improved themselves professionally and applied what they learned. The number of school principals who stated that they had made progress in the field of supervision is 7. The fact that the most developed area is supervision may be due to the generalization of the education given by the school principals under the supervisory process. Sp8 stated that he learned how to do supervision scientifically: “I saw that supervision could be done scientifically as well. It’s not just about going to class, observing, and leaving. … I learned that this is a process, that it should be carried out within a certain plan, and that it would be beneficial to repeat it as much as possible.”

The findings show that the managerial behaviors that school principals have previously preferred or exhibited have changed in the desired direction within the scope of GEFP. It is seen that the attitudes of the school principals in the supervision process have changed positively (f=12) and they have started to carry out the process clearly and objectively (f=11) in cooperation with the teachers (f=12). While Sp3 used to inform the teacher on the day of the supervision, he stated that he now informs the teacher one week in advance and that he is making preparations for the lesson in which the supervision will be held: “I used to say the teachers that I would come to the class on the supervision day in old times. But now I told the teachers that I wanted to...
listen to their lessons together at least a week ago. I did my own research on which subject they will teach and how it will be dealt with, to see how this subject can be taught.” Sp4 said, “I used to make a general assessment, but now I focus on a subject in an observation.” He stated that he is now making more detailed observations. Stating that he met with the teacher before the observation and exchanged ideas about the supervision process, Sp7 said, “We decided together with the teachers in which area to observe. If there is an area that the teacher needs, I make observations in that area.” Sp7 emphasized collaboration. Sp8: “It becomes more convincing when you base it on something, on form, on analysis, on tangible things. As such, they accept the feedback.”

The theme of focusing on the purpose consists of the codes of responsibility (f=12) and internalization (2). In the code of responsibility, there are statements in which school principals state that they should develop themselves professionally and are responsible for improving teaching. The statements of the school principal stating that they transformed the gains they got from the education they attended into a habit were included under the internalization code. While Sp1 is emphasizing the improvement of the school principals by saying “Administrators need to renew themselves. I think that administrators who do not renew themselves always regress.”, Sp4 expressed the professional development responsibility of the school principal as “First of all, we are doing a job, teacher. While doing this job, it is necessary to improve its quality constantly.”

The qualitative data analysis also reveals that GEFP contributes to school principals’ display of instructional leadership behaviors during supervision. School principals stated that they motivate teachers with their feedback (f=13), support teachers (f=12), and follow the post-supervision process (f=8). All of the participating school principals used expressions stating that they created awareness in teachers with the feedback they gave and that they motivated them to improve their teaching. Sp2 expressed the effect of the feedback he gave on teachers as follows: “They told me that we weren’t doing any measurement work on whether the gains were achieved or not in daily plans. That’s their statement, we weren’t doing it. We were just making two exams in a term, we were evaluating the success we achieved with those exams in general terms. Now, they said, we started to evaluate them weekly. As a result of the weekly evaluation, we started to measure which gains were achieved and which gains were not, and to provide feedback again.” Sp7 mentioned that the feedback given should be followed up in order to increase student success: “I believe that as the school principal, after following up, we will see the reflections in the success of the students.” Sp8 said, “So I gave feedback, it’s not over, it’s important to see the conclusion.” He emphasized the importance of following the process.

It has been found that the practices in the supervision and feedback processes after GEFP increase the job satisfaction of both school principals and teachers. The school principals stated that both they and the teachers were relieved during the supervision process (f=11) and that the practices in this process satisfied them (f=6). Sp4 “As I said, it was comfortable. I was also relaxed. Our teachers stated that they thought that a colleague came and observed my lesson, it was not like the principal came to listen to the lesson.” He stated that the supervision process was comfortable for both him and his teachers. The school principals stated that the feedback they gave after the GEFP had a good reflection on the teachers, and both they and the teachers were satisfied with the process. Sp5 “I am very pleased, they are also very pleased. So, going into details made me and them happy.” He stated that his feedback was accepted with satisfaction by his teachers, thus he was also satisfied. Md8 stated that “teachers like it very much” to support them with feedback.

After the GEFP, the statements that school principals believed that they could successfully manage the supervision process, give effective feedback, and feel competent in these matters were determined under the theme of professional self-efficacy. There are codes of self-confidence (f=8) and self-evaluation (f=7) under this theme. In the interviews, the school principals stated that they were confident that they could conduct the supervision effectively and give effective feedback. While Sp8 showed his belief that he could increase success with
the feedback he gave by saying, “I can do this now”, Sp6 expressed his self-confidence as follows: “With the training, we have got and these documents, we are now more qualified. At least I won’t hesitate what to do anymore; now I know what to do.” Sp7 made a more general evaluation and said, “There is a saying, actually a question: Which one is right, doing the right job or doing the job in a right way? As school principals, we are always focused on doing things in the right way. Maybe it’s because we don’t know how to do the right job.” Sp7 stated that school principals lack the knowledge to supervise and give feedback.

In the interviews, the participants were asked whether they recommend GEFP to other school principals and whether they have any suggestions regarding the program. The answers were grouped under the theme of recommendations for GEFP. All 8 school principals wanted their colleagues to benefit from this training by disseminating GEFP (f=10); they also made suggestions for improving the program (f=9). Some participant views on disseminating GEFP are as follows: “I think that all school principals should receive the training on how effective supervision should be,(Sp3)”, “Really everyone should get it. (Sp6)”, “This training was not just a feedback training, it was like a package program for the school principals. That’s why I recommend it. (Sp8)” The participants made suggestions to improve GEFP, such as increasing the duration of the statistical analysis sessions, repeating the training at regular intervals, and increasing the number of field experts giving the training.

All of the interview questions were asked to determine the school principals’ perceptions about GEFP. Among these questions, there is also a question in which they were asked to summarize the education they attended with a metaphor. When the codes were examined by content analysis, it was seen that there was no negative perception toward GEFP. It was determined that the codes were divided into 2 groups as positive perceptions (f=15) and neutral perceptions (f=2), which were interpreted under the theme of perceptions related to GEFP. Sp2 showed positive thoughts toward GEFP by saying: “It was like a machine; everything was running smoothly. It was beautiful. It worked in a planned and systematic way. It reached a conclusion. In that sense, I consider the education as a machine. I am happy. Let me be clear, it was one of the seminars and courses we benefited from.”. Sp6 expressed his positive perception of the program: “We enlarged this job; out of all the other work we will do in our schools, we focused on it, we got our experience. We discovered our situation, it became like a lens. In other words, we have seen the point in a large and comfortable way. It made me magnify and focus there.” On the other hand, Sp8, who had a neutral perception of education, defined GEFP as “a slightly choppy sea”.

**Evaluation of Quantitative and Qualitative Findings Together**

The quantitative part of the research was carried out with the teachers, and the qualitative part with the school principals who received the training. The results obtained from the research’s quantitative and qualitative findings reveal that GEFP improves school principals’ capacity to give effective feedback. Qualitative findings revealed that school principals realized the importance of supervision and feedback and met their professional development needs thanks to this training. School principals stated that GEFP contributed to them in supervision, giving feedback, statistical analysis, communication, and leadership. Whether the school principals actually applied the achievements they stated they had achieved or not was tested with SPFS according to the teachers’views. The analysis showed that the teachers found the feedback given by the school principals after the GEFP significantly more effective than the pre-test. When the quantitative and qualitative findings obtained within the scope of the research are evaluated together, it is seen that the results match and support each other. It was concluded that the school principals reflected the gains they obtained from GEFP, which was determined with the qualitative research to their practices with the quantitative research carried out with the teachers.

**Discussion and Conclusion**

Research findings show that the GEFP increased the effectiveness of the feedback given by the participants in the experimental group. It has been
determined that GEFP is effective in both the feedback’s function and process factors. When the significant difference in factors is examined in terms of effect size, it is seen that GEFP is more effective on function factor. In conclusion, the findings reveal that GEFP significantly improved the capacity of the experimental group to give effective feedback.

When the pre-test means of the experimental and control groups are examined, it is seen that the effectiveness of the feedback given by the school principals is at the level of “I agree”. Although a significant difference was detected after GEFP, the effect size of this difference remained low due to the high mean in the pre-test. As in Ergen and Eşiyok (2017)’s findings that teachers find school principals generally sufficient in supervising teaching, or Çınar (2010)’s findings that teachers positively evaluate the effectiveness of school principals in the communication process, the fact that teachers saw school principals as sufficient in managing the supervision process may have caused the pre-test scores to be high. In their research on the competencies of school principals within the scope of teacher performance evaluation, Bozan and Ekinci (2019) found that teachers’ perceptions of school principals’ competence towards the teacher performance evaluation process were at the level of “agree” and “strongly agree”; in the purpose and application-evaluation factor, they were at the level of “neither agree nor disagree”. Although their research problem was different from this research, the factors of Bozan and Ekinci (2019) are similar to the factors of this research. In this research, the process factor for managing the feedback process is similar to their process factor, while the function factor focusing on the function of feedback statements is similar to their purpose factor. In the pre-test, the average of the process factor was higher than the function factor. Therefore, the results obtained in this study are similar to those obtained by Bozan and Ekinci (2019).

Teachers should know what they need to do to benefit from the evaluation and be more effective in their lessons (Oliva&Pawlas, 2008). When they do not receive effective feedback on the supervision results, it is inevitable that they think the supervision is useless. In their research, Shulman, Sullivan, and Glanz (2008) exemplify this situation by revealing that the inspections carried out are far from ideal. The study conducted by Arslantaş, Tösten, and Avcı (2020) revealed that the vast majority of teachers consider class observations carried out within the scope of supervision as an academic requirement, and they find it appropriate, provided that qualified people conduct the supervision. However, some of the teachers stated that it is not appropriate to be observed in lessons for various reasons, such as the incompetence of the supervisor, the use of supervision as an element of pressure, and the perception of supervision as an indicator of distrust of the teacher. Similarly, in the study conducted by Özcan and Özdemir (2010), teachers stated that they absolutely want supervision to be carried out, but they see supervision only as a bureaucratic task due to current practices, and therefore they believe that the functionality of supervision should be questioned. Although supervision is seen as a necessity by teachers, the reason why supervision cannot go beyond fulfilling a bureaucratic process is the lack of feedback, which is perhaps the most essential element of supervision. Various studies show lesson visits that do not give importance to feedback have little contribution to teachers (Blase&Blase, 1999; Grissom, Loeb & Master, 2013) because the supervision performed without feedback is as if it has never been done for the teachers.

As a result of the interviews with the school principals regarding the effectiveness of GEFP, it was determined that the implemented program had various positive contributions to the school principals. Thanks to this training, school principals first realized that they needed professional development. They stated that they had deficiencies, especially in terms of supervision, and feedback and that they had the opportunity to remedy these deficiencies with GEFP. Similarly, Ağaoğlu and Ağaoğlu (2020) revealed in their research that school principals need in-service training for their professional development in the field of supervision. Therefore, to stay up to date and maintain their effectiveness, supervisors should participate in in-service activities, evaluate themselves regularly and systematically, and ask teachers to evaluate their effectiveness (Oliva&Pawlas, 2008).
Since evaluating the teaching act is a very complex task requiring specialist skills, people who perform it feel pressure on them (Dudney, 2002). Koşar and Buran (2019) concluded that the supervision process creates anxiety in both the teacher and the school principal and that various problems arise due to the anxiety, and they considered the teachers’ negative perception of every criticism as a major problem. It is thought that this is due to the fact that school principals do not know how to give negative feedback. For this reason, the feedback must be correctly perceived by the receiver (Ilgen, Fisher, & Taylor, 1979). Weisberg et al. (2009) consider the “widget effect”, which tends to assume that all teachers have the same effectiveness in the classroom, as another problem. They argue that the failure of assessment systems to provide accurate and reliable information about teachers’ teaching performance reinforces this effect. In order to break the generalization effect, they recommend adopting a comprehensive performance evaluation system, training the evaluators, integrating the performance evaluation system with human capital policies, and adopting dismissal policies for teachers who do not improve if the process works fairly and effectively. It is thought that the suggestion of Weisberg et al. (2009) to train managers can be realized with GEFP, the effectiveness of which has been revealed in this research.

In summary, it has been concluded that the capacity of school principals to give effective feedback can be improved with GEFP developed within the scope of this dissertation. Both quantitative and qualitative analyses have revealed that the training provided increases the professional competence of school principals in supervision and feedback and these principals reflect the gains they have obtained through this training to their practices.

**Recommendations**

In line with the findings and results obtained from the research, various suggestions were made for policymakers, practitioners, and researchers:

- Considering the contribution of effective feedback to teachers to the improvement of teaching; all school principals can benefit from GEFP as in-service training.
- Since teachers need support about their classroom practices, school principals can provide more frequent feedback to teachers by making more class visits.
- Frequent feedback does not mean overwhelming teachers with too much feedback at once. School principals may limit their feedback to priority issues, as giving too much feedback at once will demotivate teachers.
- The contribution of verbal and written feedback to teachers in improving teaching can be compared in future researches.
- While this study suggests that GEFP improves the feedback that principals give teachers to improve classroom instruction, additional studies are needed to confirm the actual effects of principal feedback on teachers’ classroom instruction.

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