Full Length Research Paper

# The ideas of geography teachers about in-service geography training activities

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The aim of the study is to evaluate the geography workshop (new approaches and new knowledge in geography), in view of the teachers, conducted within the in-service training activities for the geography teachers working in Sivas and Erzurum. The guestionnaire, used as the data collection tool, was developed by the researcher. The questionnaire consists of three parts. In the first part of the questionnaire, the questions ask for the personal information. In the second part, there are nine questions asking for the reasons why the participants take part in the in-service training activities. In the same part, there are nine questions asking for the types of in-service training activities which the participants are willing to take part about geography teaching. In the last part of the questionnaire, there is an "evaluation form for in-service training activities" graded in three options Likert scale consisting of 14 questions. The recommendations of teachers and experts were taken into consideration in the preparation of the questionnaire. The Cronbach Alpha reliability rating of the questionnaire was found as 0.88. The frequency, percentage and arithmetical means of the data were evaluated. Chi-square test was conducted in order to find whether there was a meaningful relation between sex, the location in which the participants are living and the level of education of the participants in the in-service training activity. The findings of the study are as follows: Considering the in-service training activity conducted in cities of Sivas and Erzurum, the geography teachers were of the same idea that these activities consisted of the up-to-date topics and these activities were conducted in appropriate environments. The first three in-service training activities which the geography teachers were willing to take part with the highest demand were: applied field studies; the application of new teaching programme in geography; geographical information systems. Geography teachers were positive towards the in-service teaching activities. There was a meaningful relation between the location in which the geography teachers are living, their level of education, sex and their expectations from the in-service training activities.

Key words: Geography teachers, teaching of geography, in-service training, teacher training.

#### INTRODUCTION

In this part of the study, the question "Why is the inservice training important?" will be tried to be answered. Moreover, samples of in-service training activities for the geography teachers in Turkey and geography teachers' perspectives towards these training activities will be given.

### Why is the in-service training important?

The history of mankind on the Earth started in a life style which is defined as hunter-gatherer. Because of the technological innovations and discoveries, this hunter-gatherer life style has exhibited a continuous shift and

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improvement throughout history. In these days in which we live through an age of technology and information, these shifts and improvements are experienced more swiftly. Humans, professional bodies and non-governmental organizations and societies have to keep up with these shifts and improvements.

In our world, where the technological shifts are increasing in a very fast manner, these shifts have their effects particularly on the labour market (Can and Kavuncubasi, 2005). In this period in which technology changes swiftly, information accumulates rapidly, there are abrupt changes in the social and economic areas and organization, human resources management gains impetus, total quality management applications gain significance, the qualities that are demanded in the staff are also subject to changes. In such an environment, the importance of in-service training pragrammes conducted to help the staff to gain the required abilities is increasing every day (Noe. 1999: Gultekin and Cubukcu, 2008).

In-service training is a kind of teaching type which helps the working staff to obtain the ability to keep up with the changes within their organization, to learn new knowledge in order to reach the targets determined by the organization, to improve him/herself in his/her profession. In-service training is defined as the educational opportunities to help the staff to improve themselves in their professions for all the personnel in all the work fields (education, health, technology, and private sector, all working fields in public organizations, press and media) organizations...)(Unesco, 1986; Akcamete, 2005).

In our age, the change which is experienced in all the fields certainly has an effect on the educational organizations. Educational organizations have to keep up with this change and constantly renew themselves. In this process, the role which the teachers will play has a significance importance because the quality of a school is tightly connected to the quality of the education provided by its teachers. In order to help teachers to provide education in such quality, they need to be trained well in the pre-service period, but they also need to improve themselves constantly in in-service period (Seferoglu, 2005; Ucar and Ipek, 2006).

No matter how well the teachers were trained in the pre-service period, they need to be constantly trained in in-service programmes in order to help them to be successful. As a result, in-service teacher training is regarded as complementary for the pre-service teacher training and as an important way to obtain new information and abilities concerning the profession (Gultekin et al., 2010).

The purpose of in-service training is to educate the personnel through in-service activities such as courses, workshops, and wokrshops. In-service training is a short term educational activity which helps the teachers to obtain professional knowledge and abilities and new ideas considering the improvements in their own fields and educational technologies (Tok and Dos, 2010).

Thanks to in-service training programmes, teachers might have the opportunity to take part in different environments away from their daily routines and they might co-operate with their colleagues on the similar problems they encounter, discuss their problems together, and share their ideas and experiences (Nicolaidis and Mattheoudakis, 2008).

In-service training is a necessity for the organizations to constantly improve and renew themselves, and achieve success. The use of phrases such as teaching and training, personnel improvement, personnel replenishment, improvement in human resources, continuing education, professional improvement, professional promotion, and organizational replenishment in place of inservice training clearly shows that in-service training is one of the integral activities of modern organizations (Ozdemir, 1997).

In Turkey, the in-service training need of the personnel working for the Ministry of National Education is provided by the Department of In-service Training as the central controlling body and City Directory of National Education as the local controlling body under the "In-service Education Guideline" number: 22252 date: 4.8.1995 (Baloglu, 2007).

#### Geography in-service teaching programmes designed for geography teachers

Throughout the world, there have been some regulations and programmes in order to improve geography teaching. In Turkey, one of the recent and major developments in the field of geography teaching is geography curriculum which was developed in accordance with constructivist approach and which was gone into effect in 2005. This programme exhibits major differences from the previous programmes in terms of the philosophy behind it, its content, dimension of testing and evaluation.

Initially, geography teachers were very unfamiliar with this programme. The geography teachers who received their education within the guidelines of behaviorist approach were expected to conduct their profession within the guidelines of constructivist approach.

As a result, there have been regular in-service training schemes from 2005 to 2012 in order to educate geography teachers in terms of its philosophy, content and dimension of testing and evaluation of the new teaching programme of geography curriculum. However, the studies such as reports, academic articles aiming at evaluating these activities for the geography teachers is limited in number. In this respect, Meydan (2011) with his study "The Comparison of Expectation Levels from the Workshops Considering the New Geography Programme and Developments" presents a distinguished report.

However, in other disciplines such as physics, biology, English, science and technology, there have been many studies conducted about in-service training topic (Ozturk,



Figure 1. The floating islands in the Lake Zökün.

2007; Aribas et al., 2012; Usun, 2003; Metin and Ozmen, 2010; Kaya et al., 2004; Gul and Aslan, 2009).

In his study, Meydan (2011) investigated the satisfaction levels of the geography teachers' expectations from the in-service training workshops about the new geography programme and geography teaching. At the end of his study, Meydan reached at this conclusion: "The attitudes of geography teachers towards the inservice training workshop are positive. However, the content of these kinds of activities should be enriched."

With this study the perception of the geography teachers considering the in-service training activities focusing on geography was determined. Moreover, the in-service training activities which were primarily needed by the geography teachers were also determined. It is thought that these findings will provide useful data for the following in-service teaching activities.

## The new approaches and new insights in geography in-service training programme and the activities conducted within the programme

The workshops conducted within the in-service training programmes both in Sivas and Erzurum were carried out in two-day programmes. The first day of the programmes was allocated to theoretical input, and the following day was designed for the applied field activities.

In the first day of the programme, the Geography teachers were acknowledged about the new information and new approaches in Geography (constructivism approach). The titles are as follows:

- (i) Floating Islands.
- (ii) Water management in terms of geopolitics and geostrategy.
- (iii) Climate change and its effects on humans in terms of environmental processes.
- (iv) Natural disasters in the Earth and in Turkey with their formation and progress.
- (v) Applications in geography teaching.



Figure 2. The investigation of rock samples.

(vi) Geography teaching based on activities.

In the presentation of the theoretical information, the researcher made use of methods such as presentation, lecturing, question and answer, modeling and replication, and group work etc.

In the following day, through the applied field activities, the activities conducted are listed as follows:

- (i) Horizontal, monoclinal, fault layers, and thrust faults and strike-slip faults are presented and practised.
- (ii) Information was provided about the formation of the Lake Tortum. The landslide basin, the fall area and slide area were shown.
- (iii) The floating islands in the Lake Zökün are presented (Figure 1).
- (iv) Rock and plant samples were collected from the environment. The main rock and plant samples were presented. The methods were presented about the identification of these rocks and plants (Figure 2).
- (v) The effects of thermal power plants (Kangal thermal power plant) and stopes on natural environment were presented.
- (vi) The transition of the potential energy into kinetic energy in the thermic power plant was presented (Figure 3).
- (vii) The karstic formation in Sivas (lapya, doline etc.) gösterildi.
- (viii) The salt production was presented in the saltpans around Tortum (Figure 4).
- (ix) The relation between erosion and vegetation was shown practically.

#### Aim of the study

The aim of the study is to determine the effectiveness of the workshop from the perspective of the teachers taking part in the workshop conducted as part of an in-service training programme. Thus, by determining the drawbacks of the workshop conducted as part of the in-service training, it is aimed to suggest some alternatives schemes for



Figure 3. The turbine unit of the thermal power plant.

the in-service training programmes for the future training of geography teachers.

#### **METHODOLOGY**

This study is a descriptive study whose main aim is to determine the thoughts of geography teachers considering the in-service training activities.

Descriptive approach was used in the study. The data were collected through questionnaire and they were processed through quantitative data analysis methods.

#### Sample group

Some workshops were held within the in-service training programmes targeting geography teachers in Sivas and Erzurum.

The workshop, new approaches and new knowledge in geography was conducted in Sivas on 20th to 21st April with Turkish Geography Association, Sivas Directorate of National Education and Cumhuriyet University.

The workshop, new approaches and new knowledge in geography was conducted in Erzurum on 24th to 25th May with Turkish Geography Association, Erzurum Directorate of National Education and Ataturk University.

The aim of the workshops conducted in Sivas and Erzurum within the in-service training programme was to inform the geography teachers about the recent developments in their profession and pedagogy and to contribute to the professional developments of the teachers.

The sample group of the study is the geography teachers taking part in the workshops conducted within the in-service training programme, new approaches and new knowledge in geography presented on 20th to 21st April, 2012 in Sivas and on 24th to 25th May 2012 in Erzurum. A total of 93 geography teachers took part in the workshops conducted in these cities.

29 Geography teachers took part in the workshop in Erzurum, 35 Geography teachers took part in the workshop in Sivas. The Geography teachers taking part in the each workshop works in these cities. However, 29 geography teachers did not fill the questionnaire completely or miscompleted it, so they were excluded from the sample group of the study. The data from the remaining 64 geography teachers were taken into consideration.

#### **Data collection tool**

The data of the study were collected through questionnaire form.



Figure 4. Saltpan.

Following the completion of the literature review related to the research topic, the draft of the questionnaire was formulated. For the reliability study of the questionnaire form prepared as the data collection tool, three expert in the profession (geography teaching), one language expert and two experts in educational sciences were consulted for their suggestions and improvements. In accordance with the suggestions of the experts, the final draft of the questionnaire form was reached.

The resulting data collection tool consists of three parts. In the first part of the questionnaire, the questions ask for the personal information. In the second part, there are nine questions asking for the reasons why the participants take part in the in-service training activities. In the same part, there are nine questions asking for the types of in-service training activities which the participants are willing to take part about geography teaching. In the last part of the questionnaire, there is an "evaluation form for in-service training activities" graded in three options likert scale consisting of 14 questions. Each statement in part three was evaluated three options likert type scale, that is, 1. Do Not Agree, 2. Partially Agree, 3. Agree. The Scale was designed from negative to positive.

The data were analyzed through SPSS Version 17. The Cronbach Alpha reliability rating of the questionnaire was found as 0.88. "The reliability level above 0.70 indicates that the questionnaire is reliable" (Buyukozturk, 2007).

### **FINDINGS**

In this part of the study, the data indicating the reasons why the participants took part in the in-service training activities, the types of in-service training programmes which they were willing to take part in and participants' perspectives of the in-service training activities are focused on.

Findings about why did you take part in the workshop new approaches and new knowledge in geography?

The reasons which were given by the geography teachers working in Sivas and Erzurum for their participation to the workshop new approaches and new knowledge in

**Table 1.** The reasons for the geography teachers to take part in the in-service training.

| The reasons for taking part in the workshop                            | N  | X    | Ss   |
|--|----|------|------|
| To learn developments considering my branch                            | 64 | 8.43 | 1.79 |
| To improve myself and acquire different approaches                     | 64 | 8.53 | 1.46 |
| To meet with my colleagues working in the same city with me            | 64 | 5.12 | 3.20 |
| To share information with my colleagues                                | 64 | 6.64 | 2.77 |
| To keep up with scientific and technological developments              | 64 | 8.09 | 1.70 |
| Because I was called for   | 64 | 3.12 | 3.29 |
| To seek answers to the academic problems that I encounter in school    | 64 | 6.29 | 2.76 |
| To seek answers to the problems resulting from the curricula           | 64 | 7.14 | 2.36 |
| To seek answers to the problems resulting from the geography textbooks | 64 | 6.54 | 2.56 |

Table 2. The types of in-service training activities that geography teacher are willing, to take part in.

| The types of in-service training programmes geography teachers are willing to take part | N  | $\overline{\mathbf{x}}$ | Ss   |
|---|----|-------------------------|------|
| The new geography teaching programme and its application                                | 64 | 7.90                    | 2.31 |
| Geography information systems   | 64 | 7.81                    | 2.27 |
| Applied field studies   | 64 | 7.90                    | 1.83 |
| New methods and techniques in geography teaching  | 64 | 7.68                    | 2.22 |
| Educational projects considering nature and environment                                 | 64 | 7.71                    | 1.93 |
| Activities for project formulation  | 64 | 6.95                    | 2.19 |
| Activities related to local development projects  | 64 | 6.95                    | 2.22 |
| Activities conducted by Turkish Geography Association                                   | 64 | 7.14                    | 2.37 |

geography carried out as part of an in-service training programme are given in Table 1.

Among the reasons which were given by the geography teachers working in Sivas and Erzurum for their participation to the workshop carried out as part of an inservice training programme, the first reason is the option "to improve myself and acquire different approaches" with rating  $\overline{\mathbf{x}}_{=8.53}$ . The options such as "to keep up with the up-to-date information related to my profession", "to keep up with scientific and technological developments" follow this option. The lowest chosen option is "because I was called for this workshop", with rating  $\overline{\mathbf{x}}_{=3.12}$  (Table 1).

## Findings about what types of in-service training activities related to geography you want to participate, such as panels, workshops?

The types of in-service training activities which the geography teachers working in Sivas and Erzurum were willing to take part in are given in Table 2. The geography teachers working in Sivas and Erzurum mostly wanted to take part in in-service training activities focusing on the applied field studies ( $\overline{x}_{=7.90}$ ) and the application of new geography teaching programme ( $\overline{x}_{=7.90}$ ). The inservice training activities which had the lowest demand from geography teachers were activities related to project formulation and local development projects (Table 2).

#### Finding evaluating the in-service training activities

There are 14 questions which evaluate the in-service training activity.

### Findings about "the length of the workshop is enough"

32.8% of the geography teachers agreed and 20.3% of them partially agreed with the item "the length of the workshop is enough". While there was a meaningful relation with the variable of city in which they live  $[x^2=8,455, p<.05]$  varken, there was no such relation with variables of sex and level of education. It was found that the observed difference considering the variable of city in which they live was meaningful. There was a meaningful relation between the perceptions of the teachers who live in different cities considering the length of the workshop (Table 3).

### Findings about "the time schedule of the workshop is appropriate"

17.2% of the geography teachers agreed, 34.4% of them partially agreed with the item "the time schedule of the workshop is appropriate", which was a part of the inservice training programme. While there is a meaningful

| <b>Table 3.</b> The Chi-square results of the variables of city, sex | x and level of education considering the item |
|--|---|
| "The length of the workshop is enough".                              |   |

| Independent variable     | 1(Do N | 1(Do Not Agree) |    | ally agree) | 3 (Agree) |      |
|--------------------------|--------|-----------------|----|-------------|-----------|------|
| independent variable     | f      | %               | f  | %           | f         | %    |
| City                     |        |                 |    |             |           |      |
| Sivas                    | 22     | 62.9            | 6  | 17.1        | 7         | 20.0 |
| Erzurum                  | 8      | 27.6            | 7  | 24.1        | 14        | 48.3 |
| $x^2=8.455* sd=2 p=.015$ |        |                 |    |             |           |      |
| Sex                      |        |                 |    |             |           |      |
| Female                   | 5      | 26.3            | 4  | 21.1        | 10        | 52.6 |
| Male                     | 25     | 55.6            | 9  | 20.0        | 11        | 24.4 |
| $x^2=5.679* sd=2 p=.058$ |        |                 |    |             |           |      |
| Level of education       |        |                 |    |             |           |      |
| Graduate                 | 17     | 42.5            | 7  | 17.5        | 16        | 40   |
| Postgraduate             | 13     | 54.2            | 6  | 25.0        | 5         | 20.8 |
| $x^2=2.530$ sd= 2 p=.282 |        |                 |    |             |           |      |
| Total                    | 30     | 46.9            | 13 | 20.3        | 21        | 32.8 |

relation in terms of the variable of city, [ $x^2=9,498$ , p<.05], there were no meaningful relation in terms of the variable of sex and level of education (Table 4). The observed difference considering the variable of city was found to be meaningful. In other words, there is a meaningful difference between the perceptions of the geography teachers working in different cities considering the time schedule of the in-service training.

### Findings about "the content of the workshop is apropraite for its purpose"

43.8% of the geography teachers agreed and 39.1% of them partially agreed on the item "the content of the inservice training is appropriate to its purpose". While there is a meaningful relation considering the variables of city and sex [ $\chi^2=8,210$ , p<.05 /  $\chi^2=13,634$  p<.05], there is no meaningful relation considering the level of education (Table 5). It was found that the observed difference considering the variables of city and sex were to be meaningful.

### Findings about "the topics of the seminar are up-to-date"

40.6% of the geography teachers Agreed and 34.4% of them partially agreed on the item "the topics of the workshop are up-to-date". While there is a meaningful relation in terms of the variable of city [ $x^2=7,511$ , p<.05], there was no meaningful relation in terms of the variables of sex and the level of education (Table 6). The difference observed in the valiable of city is found to be

meaningful.

### Findings about "the content of the workshop is backed up with documents"

32.8% of the geography teachers agreed and 40.6% of the partially agreed on the item "the content of the workshop is backed up with documents, which was a part of the in-service training programme" while there was a meaningful relation in terms of the variable of sex  $[x^2=7,724, p<.05]$ , there was no meaningful relation in terms of the variables of city and level of education. The difference observed in the variable of sex was found to be meaningful (Table 7).

### Findings about "the activities within the wokrshop were conducted in line with the timetable"

34.4% of the geography teachers agreed and 42.2% of them partially agreed on the item: the activities within the workshop throughout the in-service training programme were conducted in line with the timetable". There was no meaningful relation in terms of the variables of city, sex and level of education (Table 8).

## Findings about "the topics in the workshop was presented in line with the methods and techniques appropriate to its aim"

31.3% of the geography teachers agreed and 45.3% partially agreed on the item: the topics in the workshop

**Table 4.** The Chi-square results of the variables of city. sex and level of education considering the item "The time schedule of the workshop is appropriate".

| Independent veriable            | 1(Do N | ot Agree) | 2 (Partia | 3(Agree) |    |      |
|---------------------------------|--------|-----------|-----------|----------|----|------|
| Independent variable            | f %    |           | f         | %        | f  | %    |
| City                            |        |           |           |          |    |      |
| Sivas                           | 11     | 31.4      | 15        | 42.9     | 9  | 25.7 |
| Erzurum                         | 20     | 69        | 7         | 24.1     | 2  | 6.9  |
| $x^2=9.498* sd=2 p=.009$        |        |           |           |          |    |      |
| Sex                             |        |           |           |          |    |      |
| Female                          | 10     | 52.6      | 6         | 31.6     | 3  | 15.8 |
| Male                            | 21     | 46.7      | 16        | 35.6     | 8  | 17.8 |
| $x^2=0.190* sd=2 p=.909$        |        |           |           |          |    |      |
| Level of education              |        |           |           |          |    |      |
| Graduate                        | 17     | 42.5      | 14        | 35       | 9  | 22.5 |
| Postgraduate                    | 14     | 58.3      | 8         | 33.3     | 2  | 8.3  |
| $x^2=2.540 \text{ sd}=2 p=.281$ |        |           |           |          |    |      |
| Total                           | 31     | 48.4      | 22        | 34.4     | 11 | 17.2 |

**Table 5.** The Chi-square results of the variables of city. sex and level of education considering the item "The content of the workshop is appropriate for its purpose".

| la denon dent verieble            | 1(Do N | lot Agree) | 2 (Partia | ally Agree) | 3(Agree) |      |
|-----------------------------------|--------|------------|-----------|-------------|----------|------|
| Independent variable              | F      | %          | f         | %           | f        | %    |
| City                              |        |            |           |             |          |      |
| Sivas                             | 9      | 25.7       | 16        | 45.7        | 10       | 28.6 |
| Erzurum                           | 2      | 6.9        | 9         | 31          | 18       | 62.1 |
| $x^2=8.210^* \text{ sd}=2 p=.016$ |        |            |           |             |          |      |
| Sex                               |        |            |           |             |          |      |
| Female                            | 1      | 5.3        | 3         | 15.8        | 15       | 78.9 |
| Male                              | 10     | 22.2       | 22        | 48.9        | 13       | 28.9 |
| $x^2=13.634* sd=2 p=.001$         |        |            |           |             |          |      |
| Level of education                |        |            |           |             |          |      |
| Graduate                          | 7      | 17.5       | 12        | 30          | 21       | 52.5 |
| Postgraduate                      | 4      | 16.7       | 13        | 54.2        | 7        | 29.2 |
| $x^2=2.540$ sd= 2 p=.281          |        |            |           |             |          |      |
| Total                             | 11     | 17.2       | 25        | 39.1        | 28       | 43.8 |
| ·                                 |        |            | ·         |             |          |      |

p<.05.

conducted as part of the in-service training programe was presented in line with the methods and techniques appropriate to its aim. While there was no meaningful relation in terms of the variable of city, there is a meaningful relation in terms of the variables of sex and level of education [ $x^2=7.823$ , p<.05/  $x^2=10.591$ , p<.05] (Table 9). The difference observed in the variable of sex and level of education is found to be meaningful.

## Findings about "the workshop was presented in feasible environments (the building, lecture hall, field study)

50.0% of the geography teachers agreed and 32.8% of them partially agreed on the item: the workshop was presented in feasible environments (the building, lecture hall, field study) there were no meaningful relations in

**Table 6.** The Chi-square results of the variables of city. sex and level of education considering the item "The topics of the workshop are up-to-date".

| Indopendent veriable     | 1(Do N | 1(Do Not Agree) |    | 2 (Partially Agree) |    | gree) |
|--------------------------|--------|-----------------|----|---------------------|----|-------|
| Independent variable     | f      | %               | f  | %                   | f  | %     |
| City                     |        |                 |    |                     |    |       |
| Sivas                    | 10     | 28.6            | 16 | 45.7                | 9  | 25.7  |
| Erzurum                  | 6      | 20.7            | 6  | 20.7                | 17 | 58.6  |
| $x^2=7.511* sd=2 p=.023$ |        |                 |    |                     |    |       |
| Sex                      |        |                 |    |                     |    |       |
| Female                   | 3      | 15.8            | 4  | 21.1                | 12 | 63.2  |
| Male                     | 13     | 28.9            | 18 | 40                  | 14 | 31.1  |
| $x^2=5.689* sd=2 p=.058$ |        |                 |    |                     |    |       |
| Level of education       |        |                 |    |                     |    |       |
| Graduate                 | 11     | 27.5            | 10 | 25                  | 19 | 47.5  |
| Postgraduate             | 5      | 20.8            | 12 | 50                  | 7  | 29.2  |
| $x^2=4.235$ sd= 2 p=.120 |        |                 |    |                     |    |       |
| Total                    | 16     | 25              | 22 | 34.4                | 26 | 40.6  |
| 0.5                      | ·      |                 |    | ·                   |    | ·     |

**Table 7.** The Chi-square results of the variables of city. sex and level of education considering the item "The content of the workshop is backed up with documents".

| Indopondent veriable            | 1(Do N | ot Agree) | 2 (Partially Agree) |      | 3(Agree) |      |
|---------------------------------|--------|-----------|---------------------|------|----------|------|
| Independent variable            | f      | %         | f                   | %    | f        | %    |
| City                            |        |           |                     |      |          |      |
| Sivas                           | 11     | 31.4      | 14                  | 40   | 10       | 28.6 |
| Erzurum                         | 6      | 20.7      | 12                  | 41.4 | 11       | 37.9 |
| $x^2=1.119* sd=2 p=.571$        |        |           |                     |      |          |      |
| Sex                             |        |           |                     |      |          |      |
| Female                          | 3      | 15.8      | 5                   | 26.3 | 11       | 57.9 |
| Male                            | 14     | 31.1      | 21                  | 46.7 | 10       | 22.2 |
| $x^2=7.724* sd=2 p=.021$        |        |           |                     |      |          |      |
| Level of education              |        |           |                     |      |          |      |
| Graduate                        | 12     | 30        | 13                  | 32.5 | 15       | 37.5 |
| Postgraduate                    | 5      | 20.8      | 13                  | 54.2 | 6        | 25   |
| $x^2=2.922 \text{ sd}=2 p=.232$ |        |           |                     |      |          |      |
| Total                           | 17     | 26.6      | 26                  | 40.6 | 21       | 32.8 |

p<.05.

terms of the veriables of city, sex and level of education (Table 10).

### Findings about "the workshop has contributed to my proffessional knowledge"

40.6% of the geography teachers agreed and 37.5% of

them partially agreed on the item: the workshop has contributed to my proffessional knowledge. While there is a meaningful relation in terms of the variable of sex [ $x^2=8,993$ , p<.05], there were no meaningful relation in terms of the variables of city and level of education. The difference observed in variable of sex is found to be meaningful (Table 11).

**Table 8.** The Chi-square results of the variables of city. sex and level of education considering the item "The activities within the workshop were conducted in line with the timetable"

| Indones dont variable    | 1(Do N | ot Agree) | 2 (Partially Agree) |      | 3(Agree) |      |
|--------------------------|--------|-----------|---------------------|------|----------|------|
| Independent variable     | f      | f %       |                     | F %  |          | %    |
| City                     |        |           |                     |      |          |      |
| Sivas                    | 7      | 20        | 16                  | 45.7 | 12       | 34.3 |
| Erzurum                  | 8      | 27.6      | 11                  | 37.9 | 10       | 34.5 |
| $x^2$ =.617* sd=2 p=.734 |        |           |                     |      |          |      |
| Sex                      |        |           |                     |      |          |      |
| Female                   | 4      | 21.1      | 6                   | 31.6 | 9        | 47.4 |
| Male                     | 11     | 24.4      | 21                  | 46.7 | 13       | 28.9 |
| $x^2=2.114* sd=2 p=.348$ |        |           |                     |      |          |      |
| Level of education       |        |           |                     |      |          |      |
| Graduate                 | 9      | 22.5      | 13                  | 32.5 | 18       | 45   |
| Postgraduate             | 6      | 25        | 14                  | 58.3 | 4        | 16.7 |
| $x^2=5.916$ sd= 2 p=.052 |        |           |                     |      |          |      |
| Total                    | 15     | 23.4      | 27                  | 42.2 | 22       | 34.4 |
|                          |        |           |                     | -    |          |      |

**Table 9.** The Chi-square results of the variables of city, sex and level of education considering the item "The topics in the workshop was presented in line with the methods and techniques appropriate to its aim".

| Independent variable      | 1(Do N | ot Agree) | 2 (Partia | 3(Agree) |    |      |
|---------------------------|--------|-----------|-----------|----------|----|------|
| independent variable      | f      | f %       |           | %        | f  | %    |
| City                      |        |           |           |          |    |      |
| Sivas                     | 12     | 34.3      | 14        | 40       | 9  | 25.7 |
| Erzurum                   | 3      | 10.3      | 15        | 51.7     | 11 | 37.9 |
| $x^2=5.117* sd=2 p=.077$  |        |           |           |          |    |      |
| Sex                       |        |           |           |          |    |      |
| Female                    | 1      | 5.3       | 8         | 42.1     | 10 | 52.6 |
| Male                      | 14     | 31.1      | 21        | 46.7     | 10 | 22.2 |
| $x^2=7.823* sd=2 p=.020$  |        |           |           |          |    |      |
| Level of education        |        |           |           |          |    |      |
| Graduate                  | 13     | 32.5      | 12        | 30       | 15 | 37.5 |
| Postgraduate              | 2      | 8.3       | 17        | 70.8     | 5  | 20.8 |
| $x^2=10.591$ sd= 2 p=.005 |        |           |           |          |    |      |
| Total                     | 15     | 23.4      | 29        | 45.3     | 20 | 31.3 |

p<.05.

### Findings about "the workshop provided me new information in terms of pedagogy"

42.2% of the geography teachers agreed and 34.4% of them partially agreed on the item the workshop provided

me new information in terms of pedagogy". While there is a meaningful relation in terms of the variable of sex  $[x^2=11,558 p<.05]$ , there were no meaningful relation in terms of the variables of city and level of education. The difference observed in variable of sex was found to be

**Table 10.** The Chi-square results of the variables of city, sex and level of education considering the item "The workshop was presented in feasible environments (the building, lecture hall, field study).

| f  |             |  |   | 3(Agree)   |  |
|----|-------------|--|---|--|--|
|    | f %         |  | %   | f  | %  |
|    |             |  |   |  |  |
| 4  | 11.4        | 10   | 28.6  | 21   | 60   |
| 7  | 24.1        | 11   | 37.9  | 11   | 37.9   |
|    |             |  |   |  |  |
|    |             |  |   |  |  |
| 2  | 10.5        | 4  | 21.1  | 13   | 68.4   |
| 9  | 20          | 17   | 37.8  | 19   | 42.2   |
|    |             |  |   |  |  |
|    |             |  |   |  |  |
| 8  | 20          | 9  | 22.5  | 23   | 57.5   |
| 3  | 12.5        | 12   | 50  | 9  | 37.5   |
|    |             |  |   |  |  |
| 11 | 17.2        | 21   | 32.8  | 32   | 50   |
|    | 7<br>2<br>9 | 7 24.1<br>2 10.5<br>9 20<br>8 20<br>3 12.5 | 7 24.1 11  2 10.5 4 9 20 17  8 20 9 3 12.5 12 | 7 24.1 11 37.9  2 10.5 4 21.1 9 20 17 37.8  8 20 9 22.5 3 12.5 12 50 | 7 24.1 11 37.9 11  2 10.5 4 21.1 13 9 20 17 37.8 19  8 20 9 22.5 23 3 12.5 12 50 9 |

**Table 11.** The Chi-square results of the variables of city, sex and level of education considering the item "The workshop has contributed to my professional knowledge".

| To Love the Arm Calls    | 1(Do N | 1(Do Not Agree) |    | 2 (Partially Agree) |    | gree) |
|--------------------------|--------|-----------------|----|---------------------|----|-------|
| Independent variable     | f      | %               | f  | %                   | F  | %     |
| City                     |        |                 |    |                     |    |       |
| Sivas                    | 9      | 25.7            | 10 | 28.6                | 16 | 45.7  |
| Erzurum                  | 5      | 17.2            | 14 | 48.3                | 10 | 34.5  |
| $x^2=2.655* sd=2 p=.265$ |        |                 |    |                     |    |       |
| Sex                      |        |                 |    |                     |    |       |
| Female                   | 3      | 15.8            | 3  | 15.8                | 13 | 68.4  |
| Male                     | 11     | 24.4            | 21 | 46.7                | 13 | 28.9  |
| $x^2=8.993* sd=2 p=.011$ |        |                 |    |                     |    |       |
| Level of education       |        |                 |    |                     |    |       |
| Graduate                 | 11     | 27.5            | 13 | 32.5                | 16 | 40    |
| Postgraduate             | 3      | 12.5            | 11 | 45.8                | 10 | 41.7  |
| $x^2=2.264$ sd= 2 p=.322 |        |                 |    |                     |    |       |
| Total                    | 14     | 21.9            | 24 | 37.5                | 26 | 40.6  |

p<.05.

meaningful (Table 12).

### Findings about "the workshop satisfied my expectations"

31.3% of the geography teachers agreed and 37.5% of

them partially agreed on the item "the workshop satisfied my expectations" within the in-service training progrogramme. While there was a meaningful relation in terms of the variable of sex [ $x^2=17,611 p<.05$ ], there were no meaningful relations in terms of the variables of city and level of education. The observed difference in terms of the variable of sex was found to be meaningful (Table

**Table 12.** The Chi-square results of the variables of city, sex and level of education considering the item "The workshop provided me new Information in terms of pedagogy".

| 1(Do Not Agree) |                | 2 (Partially Agree)                                |  | 3(Agree)  |  |
|-----------------|----------------|--|--|---|--|
| F               | %              | f  | %  | f   | %  |
|                 |                |  |  |   |  |
| 12              | 34.3           | 9  | 25.7   | 14  | 40   |
| 3               | 10.3           | 13   | 44.8   | 13  | 44.8   |
|                 |                |  |  |   |  |
|                 |                |  |  |   |  |
| 1               | 5.3            | 4  | 21.1   | 14  | 73.7   |
| 14              | 31.1           | 18   | 40   | 13  | 28.9   |
|                 |                |  |  |   |  |
|                 |                |  |  |   |  |
| 11              | 27.5           | 10   | 25   | 19  | 45.7   |
| 4               | 16.7           | 12   | 50   | 8   | 33.3   |
|                 |                |  |  |   |  |
| 15              | 23.4           | 22   | 34.4   | 27  | 42.2   |
|                 | F 12 3 1 14 14 | F %  12 34.3 3 10.3  1 5.3 14 31.1  11 27.5 4 16.7 | F % f  12 34.3 9 3 10.3 13  1 5.3 4 14 31.1 18  11 27.5 10 4 16.7 12 | F         %         f         %           12         34.3         9         25.7           3         10.3         13         44.8           1         5.3         4         21.1           14         31.1         18         40           11         27.5         10         25           4         16.7         12         50 | F         %         f         %         f           12         34.3         9         25.7         14           3         10.3         13         44.8         13           1         5.3         4         21.1         14           14         31.1         18         40         13           11         27.5         10         25         19           4         16.7         12         50         8 |

13).

## Findings about "the workshop provided me with alternative solutions to the problems encountered within the classroom"

31.3% of the geography teachers agreed 23.4% of them partially agreed on the item "the workshop carried out as part of the in-service training programme provided me with alternative solutions to the problems encountered within the classroom". While there was a meaningful relation in terms of the variable: sex [ $x^2=9,915 p<.05$ ], there were no meaningful relations in terms of the variables: city and level of education. It is possible to suggest the difference observed in terms of the variable sex to be meaningful (Table 14).

## Findings about "the workshop provided me with alternative pedagogic solutions to the problems encountered within the classroom"

23.4% of the geography teachers Agreed and 21.9% of them partially agreed on the item "The workshop carried out as part of the in-service training programme provided me with alternative pedagogic solutions to the problems encountered within the classroom. While there was a meaningful relation in terms of the level of education  $[x^2=6,136 \ p<.05]$ , there were no meaningful relations in terms of the variables of city and sex. It is possible to

suggest the difference observed in terms of the variable of the level of education as meaningful (Table 15).

## Findings about "the workshop led to the acquisition of new perspectives towards the current teaching of geography"

31.3% of the geography teachers agreed, 28.1% of them partially agreed on the item the workshop carried out as part of the in-service training programme led to the acquisition of new perspectives towards the current teaching of geography". While there were meaningful relations in terms of the variables of sex and level of education [ $x^2$ =6,553 p<.05 /  $x^2$ =13,250 p<.05], there was no meaningful relation in terms of the variable, city. It is possible to suggest the difference observed in terms of the variables of sex and level of education as meaningful (Table 16).

### **RESULTS AND SUGGESTION**

Deriving from the findings of the study the results and suggestions below can be put forward:

As can be seen in Table 1, teachers working both in Sivas and in Erzurum voluntarily took part in the workshop "New Approaches and New Knowledge in Geography" as part of the in-service training programme. The teachers were informed about the in-service training

**Table 13.** The Chi-square results of the variables of city. sex and level of education considering the item "The workshop satisfied my expectations".

| Indopondent variable            | 1(Do Not Agree) |      | 2 (Partially Agree) |      | 3(Agree) |      |
|---------------------------------|-----------------|------|---------------------|------|----------|------|
| Independent variable            | f               | %    | F                   | %    | f        | %    |
| City                            |                 |      |                     |      |          |      |
| Sivas                           | 15              | 42.9 | 12                  | 34.3 | 8        | 22.9 |
| Erzurum                         | 5               | 17.2 | 12                  | 41.4 | 12       | 41.4 |
| $x^2=5.284* sd=2 p=.071$        |                 |      |                     |      |          |      |
| Sex                             |                 |      |                     |      |          |      |
| Female                          | 2               | 10.5 | 4                   | 21.1 | 13       | 68.4 |
| Male                            | 18              | 40   | 20                  | 44.4 | 7        | 15.6 |
| $x^2=17.611* sd=2 p=.000$       |                 |      |                     |      |          |      |
| Level of education              |                 |      |                     |      |          |      |
| Graduate                        | 13              | 32.5 | 12                  | 30   | 15       | 37.5 |
| Postgraduate                    | 7               | 29.2 | 12                  | 50   | 5        | 20.8 |
| $x^2=2.987 \text{ sd}=2 p=.225$ |                 |      |                     |      |          |      |
| Total                           | 20              | 31.3 | 24                  | 37.5 | 20       | 31.3 |

**Table 14.** The Chi-square results of the variables of city, sex and level of education considering the item "The workshop provided me with alternative solutions to the problems encountered within the classroom".

| Indopondent variable            | 1(Do Not Agree) |      | 2 (Partially Agree) |      | 3(Agree) |      |
|---------------------------------|-----------------|------|---------------------|------|----------|------|
| Independent variable            | f               | %    | f                   | %    | f        | %    |
| City                            |                 |      |                     |      |          |      |
| Sivas                           | 19              | 54.3 | 9                   | 25.7 | 7        | 20   |
| Erzurum                         | 10              | 34.5 | 6                   | 20.7 | 13       | 44.8 |
| $x^2=4.672* sd=2 p=.097$        |                 |      |                     |      |          |      |
| Sex                             |                 |      |                     |      |          |      |
| Female                          | 3               | 15.8 | 6                   | 31.6 | 10       | 52.6 |
| Male                            | 26              | 57.8 | 9                   | 20   | 10       | 22.2 |
| $x^2=9.915* sd=2 p=.007$        |                 |      |                     |      |          |      |
| Level of education              |                 |      |                     |      |          |      |
| Graduate                        | 18              | 45   | 7                   | 17.5 | 15       | 37.5 |
| Postgraduate                    | 11              | 45.8 | 8                   | 33.3 | 5        | 20.8 |
| $x^2=2.940 \text{ sd}=2 p=.230$ |                 |      |                     |      |          |      |
| Total                           | 29              | 45.3 | 15                  | 23.4 | 20       | 31.3 |

p<.05.

programme through the Internet and though formal letters sent by the Diroctorates of National Education of Sivas and Erzurum.

As can be seen in Table 2, in the future in-service training programmes targeting geography teachers, more emphasis on time should be spent on the topics such as applied field studies, in-class activities considering the

application of geography teaching programmes and applications considering the geographical information systems.

As can be seen in Table 3, 62.9% of the geography teachers working in Sivas pointed out that the length of the workshop conducted as part of the in-service training programme was not enough. A two day-programme was

**Table 15.** The Chi-square results of the variables of city, sex and level of education considering the item "The workshop provided me with alternative pedagogic solutions to the problems encountered within the classroom".

| Indopondent veriable      | 1(Do N | 1(Do Not Agree) |    | 2 (Partially Agree) |    | 3(Agree) |  |
|---------------------------|--------|-----------------|----|---------------------|----|----------|--|
| Independent variable      | f      | %               | f  | %                   | f  | %        |  |
| City                      |        |                 |    |                     |    |          |  |
| Sivas                     | 22     | 62.9            | 6  | 17.1                | 7  | 20       |  |
| Erzurum                   | 13     | 44.8            | 8  | 27.6                | 8  | 27.6     |  |
| $x^2=2.123* sd=2 p=.346$  |        |                 |    |                     |    |          |  |
| Sex                       |        |                 |    |                     |    |          |  |
| Female                    | 7      | 36.8            | 5  | 26.3                | 7  | 36.8     |  |
| Male                      | 28     | 62.2            | 9  | 20                  | 8  | 17.8     |  |
| $x^2=3.889* sd=2 p=.143$  |        |                 |    |                     |    |          |  |
| Level of education        |        |                 |    |                     |    |          |  |
| Graduate                  | 21     | 52.5            | 6  | 15                  | 13 | 32.5     |  |
| Postgraduate              | 14     | 58.3            | 8  | 33.3                | 2  | 8.3      |  |
| $x^2$ =6.136 sd= 2 p=.047 |        |                 |    |                     |    |          |  |
| Total                     | 35     | 54.7            | 14 | 21.9                | 15 | 23.4     |  |

**Table 16.** The Chi-square results of the variables of city. sex and level of education considering the item "The workshop led to the acquisition of new perspectives towards the current teaching of geography".

| Indonendant veriable        | 1(Do N | 1(Do Not Agree) |    | 2 (Partially Agree) |    | 3(Agree) |  |
|-----------------------------|--------|-----------------|----|---------------------|----|----------|--|
| Independent variable —      | f      | %               | f  | %                   | f  | %        |  |
| City                        |        |                 |    |                     |    |          |  |
| Sivas                       | 14     | 40              | 10 | 28.6                | 11 | 31.4     |  |
| Erzurum                     | 12     | 41.4            | 8  | 27.6                | 9  | 31       |  |
| $x^2$ =.014* sd=2 $p$ =.993 |        |                 |    |                     |    |          |  |
| Sex                         |        |                 |    |                     |    |          |  |
| Female                      | 4      | 21.1            | 5  | 26.3                | 10 | 52.6     |  |
| Male                        | 22     | 48.9            | 13 | 28.9                | 10 | 22.2     |  |
| $x^2=6.553* sd=2 p=.038$    |        |                 |    |                     |    |          |  |
| Level of education          |        |                 |    |                     |    |          |  |
| Graduate                    | 13     | 32.5            | 8  | 20                  | 19 | 47.5     |  |
| Postgraduate                | 13     | 54.2            | 10 | 41.7                | 1  | 4.2      |  |
| $x^2$ =13.250 sd=2 p=.001   |        |                 |    |                     |    |          |  |
| Total                       | 26     | 40.6            | 18 | 28.1                | 20 | 31.3     |  |

p<.05.

applied in both cities, consisting of one day theory and one day practice.

As can be seen in Table 4, 69% of the geography teachers working in Erzurum pointed out that the time schedule of the workshop conducted as part of the inservice training programme was inappropriate. The workshop conducted as part of the in-service training

programme was applied on 24th to 25th May in Erzurum.

These dates were on the same week with the exam weeks of the students. The inappropriateness considering the time schedule of theworkshop possibly resulted from the heavy programme of the teachers because they had to give examinations and evaluate these examinations and record the grades on the same









Figure 5. The places where the in-service training programme took place.

week of the workshop.

The time schedule should be taken into consideration for the future workshops and in-service training programmes. These programmes should be held in the proper times for the geography teachers.

Aribas et al. (2012), in a study they conducted, encountered similar problems considering the time schedule of the in-service training programmes and made the suggestions below in accordance with the feedback from the teachers: "The in-service training programmes should be applied in the semester or summer months when the teaching-learning activities are not conducted and a general evaluation examination should be given in the end of the in-service training."

Yildiz and Aribas (2012) pointed out a similar problem considering the time schedule of the in-service training programmes as follows: "As a result of the research, the majority of the teachers thought that the course was not applied in a proper time, the length of the course was partially enough and that the in-service courses in winter months and the cold classes decreased the effectiveness of the course".

As can be seen in Table 8, the majority of the applicants are of the idea that the workshop conducted as part of the in-service training programme was applied in accordance with the time schedule of the workshop programme. This situation shows that the lecturers leading the presentation were experienced in time management.

As can be seen in Table 10, the majority of the partici-

pants are of the idea that the workshop was conducted in appropriate encironments (building, lecture hall, field studies etc.). Some pictures can be seen below about the environments in Sivas and Erzurum where the workshops as part of the in-service training were conducted (Figure 5).

As can be seen in Table 8, 40.6% of the participants agreed, 37.5% of them partially agreed on the item that the workshop has contributed to their proffessional knowledge. This result is in consistent with the results of the study conducted by Onen et al. (2009:9-23). Onen et al., in their study, pointed out that the in-service training activities positively affected individual and professional developments of the teachers.

As can be seen in Table 15, there is a meaningful difference between graduates and postgraduates. 32.5% of the graduate teachers agreed and 15% of them partially agreed on the item that the workshop provided them with altenative pedagogic solutions to the problems encountered within the classroom. This meaningful difference might result from the fact that a group of teachers was appointed without receiving any pedagogic training and they also could not have opportunities to make up for this lack by keeping up with new development in pedagogy.

As can be seen in Table 16, there is a meaningful relation between graduates and postgraduates. According to the statements pointed out by this sample group, it can be concluded that male geography teachers and

postgraduate geography teachers more closely follow the new developments in geography teaching in Turkey.

The workshop conducted as part of the in-service training in cities of Sivas and Erzurum was carried out with association of the NGO "Turkish Geography Institution", universities (Cumhuriyet and Ataturk Universities) and Directorates of National Education (Sivas and Erzurum Directorates of National Education). The employed model of the present study was different from the usual model employed in the in-service training programmes conducted by the Ministry of National Education. In the present study conducted in both cities, instead of the participants, the trainers of the Universities travelled to Sivas and Erzurum, which greatly decreased the cost of the project. Moreover, by this means, a local in-service training programme was conducted to the participants in both cities. The in-service training project of Kaya et al. (2004:112-119) is consistent with the philosophy of the present study. The in-service training projects prepared by Kaya et al. emphasized the suggestion that "the in-service training of teachers working in different brances in elementary and secondary schools in Turkey should be conducted on the local scale through association of Education Faculties Diroctorates of Ministry of National Education".

#### DISCUSSION

Aribas et al. (2012) in their study, the perspectives of the English teschers towards the in-service training programmes, found that the perspectives of the English teachers generally concentrated on the option "Partially Agree" option.

In the present study, while geography teachers in majority concentrated on the "Agree" option for the items 5, 6, 11 and 12, they concentrated on the "Partially Agree" option for the items 7, 8, 9 ve 13.

Basturk (2012) in his study, the evaluation of the perception and the expectations of theelementary school teachers toward in-service training, it was determined that the perceptions of the elementary school teachers toward in-service training were positive, and they had high expectations from the in-service training programmes they were going to participate. Moreover, Basturk, in the same study, determined statistically significant differences in the perceptions of the teachers toward inservice training programmes in terms of the variables of sex and the branches of the teachers. It was found that the male teachers working in elementary schools had a more positive perception toward the in-service training programmes in comparison with the female teachers and class teachers perceived the in-service training more positively in comparison with the branch teachers.

Metin and Ozmen (2010), in their study, the evaluation of the in-service training needs of the Science and Technology teachers focusing on performance evaluation, determined that teachers need in-service training

programmes considering the assessment tools such as performance evaluation and anecdote record used in performance evaluation, control list, graded measure, graded rating, graded rating key, product file, peer and self evaluation forms.

Camuzcu and Duruhan (2011), in their study, reported that teachers who graduated from Science and Literature Faculties without receiving pedagogic formation training need more in-service training considering the topics related to teaching-learning activities.

In the present study, there are also findings similar to the findings of Camuzcu and Duruhan study. Graduate geography teachers reported that they need applied pedagogic trainings in in-service teaching activities.

In a study conducted by Gokyer (2012), teachers pointed out that the topics of the in-service training seminar were not of the quality to improve them and the topics were not determined in line with their needs. There is a mismatch between Gokyer study and the results of the present study.

As a result, the expectations of teachers from the inservice training programmes show differences in accordance with their educations levels (graduate, postgraduate), the institution or organization in which they work (high school, science high school, Anatolian school, vocational high school etc.), the length of time they work in the profession, the type of the university they receved education (faculty of education, science and literature faculty), sex, the geographical location they live. In order to attain effective in-service training programmes, these programmes should have the qualities to satisfy the professional needs of the teachers. For that reason, educational needs of the teachers should be determined prior to the application of the programme and the seminars, workshops etc. should be formulated in accordance with these needs. This conclusion derived from the findings of the present study shows similitude with some studies focusing on the in-service training programmes (Joerger, 2002; Ekinci and Yildirim, 2009; Ucar and Ipek, 2006; Meydan, 2011).

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