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Effect of Research Engagement on EFL Teachers' Motivation for and Efficacy in Teacher-Research

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Abstract

The purpose of this study is to investigate whether research engagement helps participating teachers develop as motivated and efficacious teacher-researchers. Seventeen non-native English as a Foreign Language (EFL) teachers participated in the study. The study specifically aimed to examine if there are any differences in participants' motivation for research and efficacy in research at the end of the INSET course. Data came from Motivation for and Efficacy in Research questionnaires which were originally developed for the purposes of this study and other sources (i.e. interviews, essays). The findings of the study indicated that even though the participants' efficacy for research engagement increased significantly, the instruction did not elicit any statistically significant changes in their motivation levels. Results also revealed significant implications for teacher educators, EFL teachers, teacher education departments and MA programs.

Keywords

Teacher-research

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Introduction

Teacher-research in Language Teaching

In language teaching, the roots of teacher-research date back to 1980s. The concept of *teacher as researcher* started to be recognized as a result of the limitations of the large scale and longitudinal studies conducted with the aim of identifying the best methods and approaches in language teaching/learning which were open to doubt (Allwright & Bailey, 1991). This was probably because of their being essentially quantitative and having involved large groups of participants. In addition, they were conducted by academicians who had no or little concern about the practitioner due to the lack of collaboration between the researcher and the practitioner.

Since these classroom-based studies were not conducted by the teachers themselves or at least in cooperation with them, they also failed to meet the needs and to solve the problems of the language teachers (Borg, 2010). Thus, the approach that defines the teacher as the technician who is expected to practice the findings of academic research has become the focus of the criticism. Allwright (2005) verbalizes the situation as 'disillusionment with technicist research'.

Therefore, classroom-based research which fore fronted the practitioner as the owner of the story of her own classroom practice appeared as an alternative research methodology and a logical step in the historical progress of teacher-research. As Freeman (1996) and Kemmis (1980) pointed out, the gap between teachers and researchers, in other words between theory and practice started to narrow down. Therefore, teaching was no longer perceived to be 'something that certain people do and others

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research' (Freeman, 1996, p. 106). In other words, an important step was taken to change the perception that research conducted by academicians can influence teachers' understanding and practice in their classrooms (Freeman, 1996). With this aim, teachers were encouraged to engage in a systematic research process to solve their own problems or test the applicability of innovations in their own contexts either in collaboration or individually.

As Nunan (1989) pointed out, the concept of teacher-research has definitely brought a change to the concept of teacher. A teacher's identity as a researcher has been fore fronted because of the importance of their researching their own classroom to improve own teaching and the necessity of being involved in educational innovations and school-based curriculum development (Carr & Kemmis, 1985). Moreover, teacher-research has been accepted as the 'end-point of professional development'.

Teacher Research and Teacher Efficacy

Teacher efficacy is a concept referring to a teacher's feelings about his/her capability in performing the actions in a way leading to achievement. In the field of language teaching, there have been many studies conducted with the aim of investigating the role of teachers' efficacy in language teaching (Chagon, 2005; Tangen, 2007; Lee, 2009; Swanson, 2010; Jie-ying, 2011; Güven & Çakır, 2012). As shared features of all these studies, the factors affecting teachers' efficacy in a language teaching context and the possible outcomes of teachers' having high or low efficacy have been investigated.

In addition to the above-mentioned studies, there is another strand of research aiming at investigating the mutual effect of being engaged in teacher research and teacher efficacy (Cabaroğlu, 2014; Cooper-Twamley, 2009; Henson, 2001; Liu, 2009; Seider & Lemma, 2004). Due to the active and collaborative nature of teacher-research, it has been widely suggested that, this activity not only causes instructional effectiveness, it may also impact teacher efficacy positively. In other words, teacher research is likely to facilitate teachers' perceptions of self-efficacy, collaboration, positive student-teacher interactions, and professional development.

As can be seen in the previous discussion, teacher efficacy in language teaching and the relation between doing teacher-research and efficacy have been investigated in the field. However, there has been no attempt to investigate teachers' efficacy in doing research. One of the objectives of the present study is to fill this gap in the literature.

Teacher Research and Motivation

Motivation has been identified as "some kind of internal drive which pushes someone to do things in order to achieve something" (Harmer, 2001). In addition, it is used to be defined as "the success or the failure of any complex task" (Brown & Lee, 1994). By being accepted as one of the fundamental reasons of success in every field, motivation of teachers has also been widely investigated (Bernaus, Wilson, & Gardner, 2009; Coladarci, 1992; Fallout, 2010; Gherali-Roussos, 2003; Nunan & Lamb, 1996; Pennington, 1992; Praver & Oga-Baldwin, 2008; Suslu, 2006). These studies commonly found that major factors affecting teachers' motivation negatively are; administrative problems, classroom management, stress, low salary rates, lack of materials and overloaded time schedules. Additionally, teachers were found to be motivated when they actively take part in the decision-making processes of school goals, have autonomy, good working conditions and are valued as professionals.

Despite being very limited, another area of literature regarding teacher research is related to the factors motivating teachers to be research engaged. As a result, professional development as an obvious result of teacher-research engagement has been accepted as a significant factor (Atay, 2008; Borg, 2003, 2006, 2009). Therefore, such specific factors motivating teachers to be involved in such professional development is also valuable for the field. However, not much attention has been paid to it until now.

As it is clear in the above discussion, teacher motivation has been investigated in specific relation to language teaching. However, teachers' motivation to be engaged in/with research is of least importance.

Method

This study aims to see the possible effects of an INSET course as one of the components of an MA program in TEFL to help in-service teachers develop as teacher-researchers who can explore their own teaching practice. With this purpose in mind, the study investigated whether there are any differences in participating EFL teachers' research motivation and efficacy at the end of the INSET course.

Particularly, this study addressed the following research question to be answered:

1. Does the INSET course affect teachers' motivation for and efficacy in teacher research? If so, how?

In this study, convergent parallel design strategy which is among the mixed method strategies was adopted (Creswell & Clark, 2011). This design is suggested when the concurrent timing was used to gather data through quantitative and qualitative sources during the same phase of the research process. In this design, the data sources are kept independent during analysis and then the results are mixed during the overall interpretation. This approach is also claimed to enable triangulation and gathering stronger data for reliability concerns.

Setting and Participants

This study was conducted in the MA in TEFL program of a private university in Istanbul, Turkey. At the time of the study, there were 61 MA in TEFL students enrolled in the program. 17 students (5 male, 12 female) participated in the study. 13 participants were working in private institutions whereas 4 were working in state schools. 12 of them were full-time; the other five were part-time instructors of EFL. Seven participants were working at high-schools, nine participants were working at university level and only one participant was working at a kindergarten. The reason of this purposive sampling is owing to the fact that, these 17 MA students had not taken any research course before the semester when the study was conducted.

Treatment: Current Issues in In-service Teacher Education and Professional Development (INSET)Course

INSET course is one of the required courses that the MA in TEFL students takefor partial fulfillment as the requirement of thesis and non-thesis MA in TEFL program. The course was originally aimed at having a theory-based content which were mostly presented by the students. As the outputs of the course, students were expected to (a) have a wider knowledge of many of the issues faced by in-service TEFL teachers as a result of course readings, discussions and research, (b) read in depth on the subject of an issue of concern to themselves and/or their colleagues which has implications for professional development, (c) expand their ability to set up and report an action research project, (d) be able to contribute to the professional development of colleagues, (e) gain experience in presenting research findings.

The course was offered 3 hours per week for 15 weeks in MA in TEFL program in. The readings for the course were compiled according to academic level of students who were all in-service teachers. Books with the purpose of educating in-service language teachers as teacher-researchers were reviewed (e. g. Nunan, 1989; Richards & Lockhard, 1994; Freeman, 1996; Gebhard & Oprandy, 1999; Lankshear & Knobel, 2004; Roth, 2007) and weekly readings were compiled in a pack (see appendices for detailed schedule)

Data Collection Instruments and Procedure

Data were collected through Teachers' Efficacy in Research Scale and Teachers' Motivation for Research Scale, and interviews and essays both at the onset and outset of the treatment (see Figure 1).

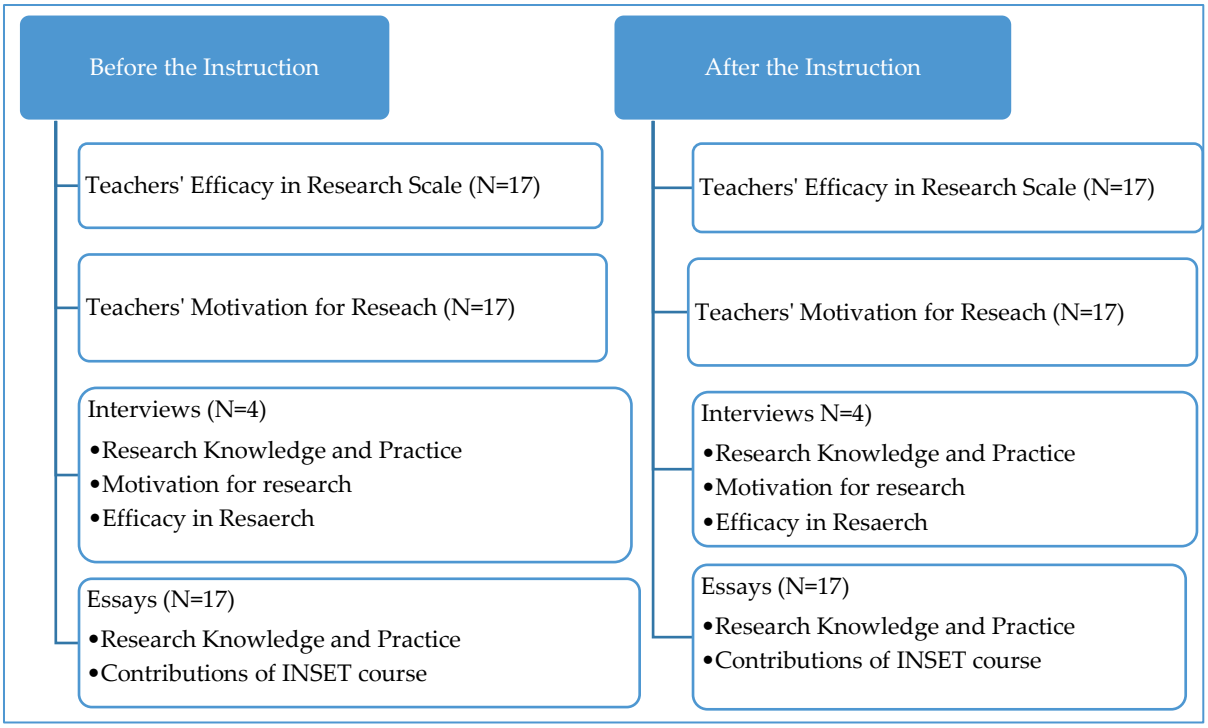

Figure 1. Data Collection Instruments and Procedure

Teachers' Efficacy in Research Scale and Teachers' Motivation for Research Scale

In order to investigate the efficacy and motivation levels of participants with specific attention to teacher-research engagement, no questionnaires was available in the field. Therefore, for the purposes of this study, two scales aiming to meet the purpose of the study and fill the gap in the field were decided to be developed.

Motivation for Research Questionnaire

After a detailed review of the literature, previously developed various motivation scales (e. g. Hardre, Beesley, Miller, & Pace, 2011; Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009; Vallerand et al., 1992; Waugh, 2002) were examined for wording. Before developing the items, unofficial negotiations were held with colleagues and pre-service teachers. They were asked questions like; What kind of factors motivate you to do research?, Do demotivating factors such as unappreciative work environment prevent you from researching?, Are you motivated? Why/not?. After these negotiations, items aiming at investigating motivation were created and a pool of 45 items were prepared. While preparing the items, rules for construction of a questionnaire were strictly followed. According to these rules, statements are suggested to be easy to read and follow including clear instructions about how to respond the items. Additionally, every statement is recommended to be relevant to one or more aspects of the study, ambiguous and leading questions are advised to be avoided. If the items are not in the native language of the respondents, simple language is suggested to be used without jargon, double negatives and complicated expressions.

Items such as; *I do research to get a promotion* were written to examine participants' extrinsic motivation to do research whereas items just like; *I do research because it helps keep up with the recent developments* aimed at investigating intrinsic motivation of the participating teachers. There were 22 items for extrinsic motivation and 23 items for intrinsic motivation.

Later on, for the purpose of content validity, these 45 items were given to four different experts who were academics in the ELT department for scrutiny and suggestions. The experts were asked to evaluate items with regard to relevance, content coverage and understandability. While giving this scale to experts, some changes or eliminations and further item suggestions were anticipated. Hence, the experts gave detailed feedback on each item. Some items were reformulated, some of them were

eliminated and some were added. In the end of this step the statements were tested for relevancy, clarity and simplicity as well as for conformity with the basic rules of questionnaire construction stated above by the researcher. As a result, some ambiguous items involving double negatives and jargon were corrected and reformulated. After doing necessary revisions, the questionnaire was assigned to experts again and revised till it was considered to be satisfactory.

After all these steps, final version of the scale with 25 items was prepared. With 14 items, intrinsic motivation of teachers for research was aimed to be investigated whereas with 11 items extrinsic motivation was aimed to be tapped. This scale was administered to randomly selected 30 pre-service teachers who were attending to English Language Teaching certificate program in the same institution. The students were asked to indicate the extent to which they agree with the statements related to their motivation for research on a 4 point Likert scale ranging from "not at all true" (1) to "very much true" (4).

After the data were gathered, KMO and Bartlett's test of Sphericity assumptions were checked to be able to conduct factorial analysis. The KMO value varies between 0 and 1. A value close to 1 indicates that patterns of correlations are compact, and factor analysis will yield reliable factors (Akbulut, Şahin, & Erişti, 2010; Kline, 1994). KMO values of .60 or above are acceptable (Tabachnick & Fidell, 2007). As can be seen in table 1, KMO value was found to be .716 and Bartlett's test of Sphericity resulted in .000. These are the tests to evaluate whether the data meet the sampling adequacy assumption or not. In other words, meeting this assumption means the sample was large enough to apply a satisfactory factorial analysis (Büyüköztürk, 2003).

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy			,716
Bartlett's Test of Sphericity	Approx.Chi-Square		1179.830
df	300	Sig.	,000

To examine the factor structure behind the scale, principle component method was performed and it was followed by varimax rotation (rotated component matrix). The factor analysis resulted in two independent factors with factor loadings greater than 0.4.

Factor 1 includes 14 items all of which measure the intrinsic motivation of teachers for research. Therefore, this factor was named as 'intrinsic motivation'. On the other hand, factor 2 includes 11 items measuring extrinsic motivation of participants for research. Thus, it was named as 'extrinsic motivation. As a result of this analysis, two major constructs were observed to evaluate constructs about intrinsic and extrinsic motivation of teachers for research engagement (see table 2 for factor analysis).

Table 2. Rotated Component Matrix for Motivation for Research Questionnaire

	Component	
	1	**2**
Item 1	.575	
Item 2	.624	
Item 3		.510
Item 4	.772	
Item 5	.770	
Item 6	.720	
Item 7	.821	
Item 8	.763	
Item 9	.836	
Item 10	.790	

Table 2. Continued

	Component	
	1	**2**
Item 11	.586	
Item 12	.801	
Item 13	.876	
Item 14		.855
Item 15		.885
Item 16		.721
Item 17		.850
Item 18		.868
Item 19		.911
Item 20	.619	
Item 21	.806	
Item 22		.785
Item 23		.855
Item 24		.742
Item 25		.650

Extraction Method: Principle Component Analysis

Efficacy in Research Questionnaire

Having reviewed the literature, various efficacy questionnaires (Ashton, Buhr, & Crocker, 1984; Tschannen-Moran & Woolfolk Hoy, 2001; Gibson & Dembo, 1984; Henson, Kogan, & Vacha-Haase, 2001) were examined for the purposes of appropriate wording to use and the stem of the items. As the first step, an intensive literature review was done to identify the constructs to be investigated. Later, unstructured interviews were held with a few EFL teachers to elicit their concepts and capabilities related to research. Some of the questions asked were; What is research?, Do you read articles?, Have you ever done research?, What kind of steps do you know?. Following literature review and interviews, an item pool with 47 items was created with the purpose of investigating the following constructs which were elicited from literature review; *defining research and related concepts*, *reviewing literature*, *posing problems*, *collecting data*, *analyzing data*, *doing research*, *collaboration*, *presenting and applying findings*. In the process of development, rules suggested in the field were followed as mentioned in the previous section.

After creating an item pool, items were given to four ELT academicians for feedback on the relevance, content and intelligibility for the content validity purposes. Following their evaluations and feedback, some of the items were deleted, some were revised and some new items were added. However, the constructs were kept the same on their suggestion. After this process, the researcher tested the statements for clarity, relevance and simplicity once more. Having done the necessary changes, the scale was assigned to experts for a second time and their approval was received.

As a result of expert opinions and revisions, there were 42 items on a four point likert scale ranging from "strongly disagree" (1) to "strongly agree" (4). The questionnaire was administered to randomly chosen 30 pre-service teachers who were attending to English Language Teaching Certificate program in the same institution. This group was selected on purpose because they were the closest group to the actual participants of the study in terms of academic level by being all graduates of English language related departments.

On the data gathered from the piloting the Kaiser–Meyer Olkin (KMO) measure of sampling adequacy (KMO) and Barlett's test were calculated to assess whether the sample was large enough to apply a satisfactory factor analysis and examine to determine appropriateness of factor analysis (Büyüköztürk, 2003). For the piloting, KMO was found to be .667 and Bartlett's test of Sphericity resulted in a significant value supporting the factorability of the correlation matrix obtained from the items (.000, $p< 0.01$).

After checking these assumptions, varimax rotation factorial analysis was performed, and the items which loaded under the same factor were observed not to share common constructs (see table 4 for factor analysis). Therefore, the number of items reduced to 33.

And this revised scale was administered to other randomly selected 20 students again. Before performing the factorial analysis, sampling adequacy assumption tests were applied again. As a result, KMO was found to be .661 which is considered as a mediocre result (Pallant, 2001). The Bartlett's test of sphericity also resulted in a significant value (see table 3) for the application of the factorial analysis for the data.

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy			,661
Bartlett's Test of Sphericitym Approx. Chi-Square			1655.498
df	561	Sig.	,000

Factorial analysis was performed and the following rotated component matrix shows the results of the factor loading for the 33 items in the questionnaire. Even though the items in the questionnaire were aimed to group under eight constructs as stated previously, after factorial analysis, some items in different constructs tended to merge with other items. Therefore, after merging the items, factorial analysis revealed four independent constructs with factor loadings greater than 0.4. A*bility to follow the process of doing research*, *ability to deal with findings*, *instrumentation*, and *ability to understand and analyze data* are the tags given to constructs based on the commonalities of items loaded under each one.

Table 4. Rotated Component Matrix for Efficacy in Research Questionnaire

	Component				
	1	**2**	**3**	**4**	**5**
Item 1					.679
Item 2			.559		
Item 3					.645
Item 4			.729		
Item 5					.784
Item 6			.841		
Item 7			.725		
Item 8	.626				
Item 9		.779			
Item 10	.424				
Item 11				.766	
Item 12		.773			
Item 13		.705			
Item 14				.552	
Item 15	.575				
Item 16	.774				
Item 17					.508
Item 18	.841				
Item 19	.734				
Item 20		.594			
Item 21				.595	
Item 22		.621			
Item 23		.848			
Item 24				.662	
Item 25		.697			
Item 26		.599			
Item 27	.776				

Table 4. Continued

	Component				
	1	**2**	**3**	**4**	**5**
Item 28			.674		
Item 29	.859				
Item 30			.664		
Item 31	.868				
Item 32	.843				
Item 33			.511		

Extraction Method: Principle Component Analysis

Interviews and Essays

Three different interviews were done with randomly selected four participants in order to trigger the discussion and not to limit their opinions. The interviews, aiming at eliciting the participants' research knowledge and practice, efficacy in research, motivation for research, were conducted at the outset and at the end of the instruction (see appendices). The first interview was conducted to investigate the participants' research knowledge and practice. The questions were grouped under two headings; research knowledge and research practice. Questions in the first group aimed to tap the participants' knowledge and conceptions related to research whereas questions in the second group aimed to evaluate participants' ideas and experiences of research practice. The second interview was done to elicit their feelings of efficacy in research. There were seven questions in this interview. All of the questions aimed at tapping their feelings regarding their capability to be engaged in research by doing and/or engaged with research by reading. The third one was to evaluate how motivated the participants were to be engaged in and/or with research. There were seven questions, all having the purpose of investigating their ideas related to their motivation in conducting, reading or implementing research.

For the purposes of the study, the participants were required to write two different essays. One was to elicit their research knowledge and practice. After providing a guideline with some prompting questions, the participants wrote their essays both in the first week of the treatment and in the last week of the treatment. The second essay was to explore the participants' opinions about the relative contributions of the INSET course and other MA courses to their research knowledge. It was written in the final week of the semester when the INSET course and other courses were over. Data gathered from qualitative data sources were analyzed through content analysis and open coding strategy. Transcriptions of interviews and essay written by the participants were analyzed for commonly emerging codes. And then the frequency of these codes were calculated through an intensive analysis of the content by two researchers.

Trustworthiness of Qualitative Data

In order to ensure the reliability and validity of the qualitative data gathered from interviews and essays, trustworthiness criteria proposed by Guba and Lincoln (1985) were used. This evaluation was done according to four criteria they suggested; credibility, transferability, dependability and confirmability. To ensure the credibility of the qualitative data, prolonged engagement, triangulation, background qualifications and experience of the researcher and member checks were used as suggested techniques by Guba and Lincoln (1985). To ensure transferability, thick description was the suggested technique. By providing detailed description of context in which the study was conducted and the participants, the results of the study can be transferred to similar contexts. the research design, its implementation, the data collection procedures and the analysis were all explained in a very detailed way to accomplish dependability. To ensure the confirmability of the data, triangulation of different data sources, thick description of each section and the post facto notes of the researcher helped. And the results approved the reliability of the data.

Reliability of Quantitative Data

Reliability values of the other two quantitative data sources were also checked and given in table 4. Normality assumption was also checked for these two questionnaires which were administered

both before and after the instruction. As can be seen in table 5 these scales met this assumption in both pre- and post- administration.

Table 5. Normality test for Efficacy in and Motivation for Research Questionnaires

	Before the Instruction			After the Instruction		
	Kolmogorov-Smirnov			Kolmogorov-Smirnov		
	Statistics	df	Sig.	Statistics	df	Sig.
Efficacy Scale	.123	17	.200	.074	17	.200
Motivation Scale	.126	17	.200	.123	17	.200

Having met the normality assumption, reliability test was run for these two questionnaires to see how reliable data were to interpret. Table 6 illustrates that both questionnaires resulted in reliable values.

Table 6. Reliability of Efficacy and Motivation Questionnaires

	Before the Instruction	After the Instruction
	Cronbah's Alpha	Cronbach's Alpha
Efficacy Scale	.92	.86
Motivation Scale	.86	.86

Results

This study investigated whether the INSET course affected participating EFL teachers' motivation for and efficacy in being engaged in teacher-research and if so how. Participants' motivation for and efficacy in research were tapped through Motivation for Research and Efficacy in Research questionnaires which were originally prepared for this study and interviews and essays.

Motivation for Research before the Instruction

The participants' motivation for research before the instruction was first examined through a questionnaire prepared by the researcher in which the participants were asked to state their ideas on a four point likert scale (1=strongly disagree, 4=strongly agree). The most and least highly rated items in this questionnaire before the instruction can be seen in the following table.

Table 7. Descriptive Statistics of the Most and Least Highly Rated Items in the Motivation for Research Questionnaire Before the Instruction

Highly rated items I do research…	**M**	**SD**	**F**	**Least highly rated items** I do research…	**M**	**SD**	**F**
12 …to find solutions for the problems in my teaching	3.47	.624	16	25 …not to lose my job	1.35	.492	0
21 …to improve my teaching abilities	3.35	.618	16	15 …because it is part of my contract	1.35	.492	0
13 …because it helps modifying my teaching materials	3.29	.606	16	22 …because administration encourages	1.52	.624	1
1 …to investigate issues in the field.	2.76	.996	12	14 …to get a promotion	1.76	.635	2
9 …to discuss results with my colleagues.	2.88	.826	13	18 …to be paid extra	1.64	.848	2
9 Sonuçları iş arkadaşlarımla tartışmak	2.88	.826	13	18 Ekstra ödeme almak	1.64	.848	2

Participants felt that, doing research to find solutions for the problems (Item 12; M=3.47), to improve teaching skills (Item 21; M=3.35), to modify teaching materials (Item 13; M=3.29), to investigate issues in the field (Item 1; M=2.76) and to discuss results with colleagues (Item 9; M=2.88) were the motivating factors. On the other hand, doing research not to lose their job (Item 25; M=1.35), as part of the requirements in their contract (Item 15; M=1.35), because administration encourages (Item 22; M=1.52), to get a promotion (Item 14; M=1.76) and to be paid extra (Item 18; M=1.96) were felt to be the least motivating factors.

Pre-instruction interviews with the participants and written reflections (essays) helped better understand what motivate them to be research engaged. In addition, interviews and essays also provided demotivating factors to be research engaged.

Motivating Factors

Findings of interviews and essays showed some motivating factors parallel to the findings of the questionnaire. These can be listed as; (a) finding solutions to problems (N=8) and (b) professional development (N=9). Other factors mentioned by the participants are curiosity (N=2) and helping other teachers (N=2), pressure from administration (N=2), promotion (N=1), extra payment (N=1) and holiday (N=1). They are presented in the following excerpts.

> Reaching a solution for a problem in my teaching can be motivating (Pre-instruction, Motivation for Research Interview).

> Research enables me to get satisfaction in teaching (Pre-instruction, Motivation for Research Interview).

> If I am given extra time for holiday or paid extra for research, I would do it willingly (Pre-instruction, Motivation for Research Interview).

Demotivating Factors

Findings of the interviews and the essays also showed that; (a) disinterest of administration (N=3), (b) lack of time (N=4), (c) loaded schedules (N=4), (d) problems of the school culture (N=1), (e) inflexible curriculum (N=1) were felt to be the demotivating factors to be research engaged. Following excerpts from various participants demonstrate the presence of these factors:

> When I told the administration that I was interested in doing research concerning my teaching, they weren't interested and they just told me to use my energy for teaching (Pre-instruction, Motivation for Research Interview).

> If I have time, I am sure I do research willingly. But I am teaching 25 hours at school and may be twice of this time at home (Pre-instruction, Motivation for Research Interview).

> The reasons of my demotivation are the strict regulations concerning the curriculum and the extra-curricular responsibilities imposed on me (Pre-instruction, Motivation for Research Interview).

Similar to the findings in the questionnaire, interviews and essays also revealed that finding solutions to the problems, professional development, curiosity about the issues in the field of ELT and discussions and sharing of results with colleagues are felt to be motivating factors. On the other hand, factors such as; doing research not to lose the job, encouragement of the administration, as a requirement or to be paid extra were not rated that high.

Besides, the results of interviews and essays on the research process provided factors which were felt to be demotivating. To illustrate, loaded schedules, inflexible curriculum, school culture were stated among the demotivating factors hindering participants' research engagement. Therefore, the participants felt that there are some motivating and demotivating factors that might affect their research engagement before the instruction.

Motivation for Research after the Instruction

The questionnaire results after the instruction showed that, participants rated items about improving teaching abilities (Item 21; M=3.70), understanding students' expectancies (Item 10; M=3.52), trying new methods (Item 4; M=3.52), finding solutions to problems (Item 12; M=3.41) and modifying teaching materials (Item 13; M=3.41) most highly. Before the instruction, finding solutions to problems (Item 12; M=3.47), modifying teaching materials (Item 13; M=3.29), investigating issues in the field (Item 1; M=2.76) and discussing results with colleagues (Item 9; M=2.88) were the items which were rated most highly.

On the other hand, factors that were felt to be least motivating at the beginning of the instruction did not change after the instruction. These factors are; doing research not to lose job (Item 25; M=1.29), as a part of the requirements in the contract (Item 15; M=1.29), because administration encourages (Item 22; M=1.76), to get a promotion (Item 17; M=1.64) and to be paid extra (Item 18; M=1.47).

Table 8. Descriptive Statistics of the Most and Least Highly Rated Items in the Motivation for Research Questionnaire after the Instruction

Highly rated items I do research…	**M**	**SD**	**F**	**Least highly rated items** I do research…	**M**	**SD**	**F**
21 …to improve my teaching abilities	3.70	.469	17	15 …because it is part of my contract	1.29	.587	1
10 …because it helps me better understand my students	3.52	.514	17	25 …not to lose my job	1.29	.469	0
4 …because I like trying new methods	3.52	.514	17	18 …to be paid extra	1.47	.717	2
12 …to find solutions for the problems in teaching	3.41	.514	17	14 …to get a promotion	1.64	.701	2
13 …because it helps modifying teaching materials	3.41	.507	17	22 …because administration encourages	1.76	1.09	4

Above table shows the most and the least highly rated items at the end of the instruction. Additionally, Wilcoxon Signed Rank test was performed to see the significance of the effect of instruction on the participants' motivation for research statistically. Significance value showed that the instruction did not elicit a statistically significant change in the motivation levels of the participants to be engaged in research (Z=-1.657, p= .097). However, the results demonstrated that 10 participants rated higher on motivation scale after the instruction.

Table 9. Rank Statistics of Motivation for Research Questionnaire

		N	**Mean Rank**	**Sum of Ranks**
Post – Pre	Negative Ranks	7[a]	5,93	41,50
	Positive Ranks	10[b]	11,15	111,50
	Ties	0[c]		
	Total	17		

a. Post < Pre
b. Post > Pre
c. Post = Pre

Interviews revealed similar results to the questionnaire findings in relation to motivation after the instruction. Post-instruction interviews also provided participants' views on what demotivates them.

Motivating Factors

Before the instruction, finding solutions to problems (N=8) and professional development (N=9) were stated as the two intrinsically motivating factors. Similarly, at the end of the course participants indicated; (a) professional development and problem solving (N=15) as the motivating factor which is parallel to the findings of the questionnaire. Additionally, the participants indicated (b) having increased self-confidence as a teacher (N=13), (c) excitement and enjoying during the application of new activities and methods for research (N=6) and (d) the students' improvement (N=2), pressure from administration (N=2), promotion (N=1), extra payment (N=1) and holiday (N=1) as the factors that might have motivated them. After having conducted research, they added, the interest of colleagues (N=3) as another motivating factor to be research engaged. Following quotations exemplifies the presence of these factors.

> I learned a lot. I searched, I wrote, I asked and I learned both conducting a research and the solution to a problem in my classroom. I saw that I improved a lot (Post-instruction, Motivation for Research Interview).

> I saw that I can change something. I don't need anyone to consult. No one else can better know the problems I am suffering (Post-instruction, Motivation for Research Interview).

> My friends wanted me share the results in a meeting. It was a great feeling (Post-instruction, Motivation for Research Interview).

> Finally, some participants stated that they got excited and enjoyed in the process of research engagement.

> In future, I know that nothing will motivate me to do research but my excitement to solve a problem by the help of new activities and methods will (Post-instruction, Motivation for Research Interview).

> I noticed that as a result of the activities I applied for my research, my students become more eager and they motivated (Post-instruction, Motivation for Research Interview).

Demotivating Factors

While the participants mentioned disinterest of the administration, lack of time, loaded schedules as the demotivating factors before the instruction, they added the challenge they experienced during the research process as another demotivating factor after the instruction. Therefore, commonly stated demotivating factors at the end of the treatment are; (a) disinterest of the administration (N=3), (b) challenging process of research (N=2) and (c) lack of time (N=2). Following quotations show their feelings about these factors.

> I could have been more motivated with the support of my administration (Post-instruction, Motivation for Research Interview).

> I don't think research is important for my institution. This sometimes demotivates me (Post-instruction, Motivation for Research Interview).

> The load we have, the time required to read, collect data and report seem all demotivating (Post-instruction, Motivation for Research Interview).

To sum up, the highly rated items in the questionnaire and interviews and essays at the end of the instruction, show that factors such as professional development, improving teaching abilities, finding solutions to problems and trying new methods are the factors that were felt to motivate participants mostly. Additionally, having increased self-confidence was also mentioned as another motivating factor in the interviews and essays. Additionally, the participants felt that interest of colleagues to be motivating.

On the other hand, the participants felt that not having time, loaded schedules and disinterest of administration were demotivating them to be research engaged after the instruction. Additionally, with hands-on experience in research, they also realized that it is not an easy process and they added challenge among the demotivating factors after the instruction.

Efficacy in Research before the Instruction

The participants' efficacy in research was investigated through a questionnaire prepared by the researcher (1=not at all true, 4=very much true) (see appendix) and pre-instruction interviews and essays. Following table shows the most and the least highly rated items in the questionnaire before the instruction.

Table 10. Descriptive Statistics of the Most and Least Highly Rated Items in the Efficacy for Research Questionnaire before the Instruction

Highly rated items I feel I can…	**M**	**SD**	**F**	**Least highly rated items** I feel I can…	**M**	**SD**	**F**
8 …collect information by observinga class	3.17	.727	14	18 …use statistics to analyze my data	1.58	.951	4
13 …do an interview to collect data	3.23	.664	15	10 …chose the most appropriate method	2.05	.555	3
14 …collect information by taking notes during observation	3.23	.752	14	32 …combine and analyze data collected through different instruments	2.11	.658	4
20 …interpret results of my research	2.58	.712	10				
28 …do research on topics in ELT	3.11	.696	12				

These results show that participants felt more efficacious in data collection by observing (Item 8; M=3.17), doing an interview (Item 13; M=3.23) and taking notes (Item 14; M=3.23). Additionally, they rated items about doing research in the field of ELT (Item 28; M=3.11) and interpreting results (Item 20; M=2.58) highly. However, they felt less efficacious in statistical data analysis (Item 18; M=1.82), choosing the most appropriate method (Item 10; M=2.05), combining and analyzing data collected through various instruments (Item 32; M=2.11).

Findings of the pre-instruction interviews and essays provided support for the above findings as well as providing reasons for the participants' feelings of efficacy. Moreover, findings indicated why the participants did not feel efficacious in certain aspects.

Feelings of Efficacy in Data Analysis

Similar to the questionnaire results, findings of the pre-instruction interviews and essays showed that 10 out of 17 participants indicated not feeling sufficiently capable in doing data analysis. For the reasons of being incapable of doing data analysis; (a) not having enough knowledge (N=8) and (b) thinking of statistics as the only way to do analysis (N=8) were stated. These reasons are given in the quotations below.

> Statistical analysis really scares me (Pre-instruction, Motivation for Research Interview).

Feelings of Efficacy in Data Collection

Parallel to the questionnaire findings, in the interviews and essays before the instruction, more than half of the participants (N=9) stated that they felt efficacious to collect data. However, 8 of them indicated not feeling sufficiently capable because of (a) not having enough knowledge (N=5) and (b) their beliefs about the difficulty of the process (N=4). These findings were depicted in the following excerpts:

> I really do not know scientific ways of data collection (Pre-instruction, Efficacy in Research Interview).

> I am not sure about the data collection methods. I don't know the stages of data collection (Pre-instruction, Efficacy in Research Interview).

Feelings of Efficacy in Data Interpretation

Questionnaire results showed that 7 participants did not feel efficacious to interpret the findings of their research. Parallel to this finding, in the interviews and essays, same number of participants (N=7) stated not being capable in data interpretation because of (a) not having necessary knowledge (N=3) and (b) thinking of numerical data only (N=4).

> I don't know how to analyze and interpret the statistical results (Pre-instruction, Efficacy in Research Interview).

> By checking numbers I can say that the bigger value shows more impact of something. Interpretations like this can be done. But I am not sure whether this way is applicable in all results (Pre-instruction, Efficacy in Research Interview).

> It is all about your statistical knowledge. If you are good at it, interpreting can be easy (Pre-instruction, Efficacy in Research Interview).

Feelings of Efficacy in Conducting Research

Parallel to the questionnaire results, interviews and essays written before the instruction showed that 13 participants felt efficacious in conducting research; however, 4 participants out of 17 did not feel capable to conduct research because of the fact that they believe it is academic (N=4) and they do not know how to do it (N=4).

> Research sounds very academic that's why I don't feel capable (Pre-instruction, Efficacy in Research Interview).

> I need help. I can't do it on my own because I don't know how to do it (Pre-instruction, Efficacy in Research Interview).

> I should have necessary knowledge to conduct research. Now, I don't have it and I don't feel confident (Pre-instruction, Efficacy in Research Interview).

To sum up, questionnaire results, interview and essay findings showed that more than half of the participants felt capable in data collection, data interpretation and conducting research. The common reasons of the participants who stated not feeling capable in these aspects are not having adequate knowledge, thinking of research as academic. On the other hand, both questionnaire and other data sources showed that most of the participants did not feel efficacious in doing data analysis because of not having adequate knowledge and thinking of statistical analysis only.

Efficacy in Research after the Instruction

Table 11 presents the most and least highly rated items in the Efficacy in Research questionnaire after the instruction. Before the instruction, participants rated items about data collection (items 3, 13, 14), data interpretation (Item 20) and doing research (Item 28) the most highly. At the end of the instruction, items about data collection through observation (Item 14; M=4.00), writing research questions (Item 4; M=3.88), defining teacher research (Item 1; M=3.82), interpreting data (Item 20; M=3.76) and conducting research (Item 24; M=3.64) were rated most highly.

On the other hand, before the instruction, statistical analysis (Item 18; M=1.82), choosing the appropriate method (Item 10; M=2.05) and analyzing data collected with different instruments (Item 32; M=2.11) were the least highly rated items. After the instruction, the items about preparing a questionnaire (Item 11; M=2.41), doing statistical analysis (Item 18; M=2.47) and saving some time to spend on doing research (Item 25; M=3.05) were rated least highly.

Table 11. Descriptive Statistics of the Most and Least Highly Rated Items in the Efficacy in Research Questionnaire after the Instruction

Highly rated items I feel I can…	**M**	**SD**	**F**	**Least highly rated items** I feel I can…	**M**	**SD**	**F**
14 …collect information by taking notes during observation	4.00	.492	17	11 …prepare a questionnaire	2.41	.870	3
4 …write research questions	3.88	.332	17	18 …use statistics to analyze my data	2.47	.717	6
1 …define what teacher research is	3.82	.392	17	25 …save some time in my daily life to spend on doing research	3.05	.658	14
20 …interpret findings of research	3.76	.437	17	15 …analyze data collected through a questionnaire	3.05	.747	14
24 …conduct research about topics in the field of ELT	3.64	.507	17				
31 …analyze data collected through observation	3.47	.514	17				
9 …analyze data in the transcriptions	3.35	.492	17				
16 …analyze data through categorizing and coding	3.29	.587	16				

Wilcoxon Signed Rank test was performed to see the significance of the effect of instruction statistically on the participants' feelings of efficacy in research. Significance value showed that the instruction elicited a statistically significant change in the efficacy levels of the participants in research (Z=-3.408, p= .001). Additionally, the ranks statistics demonstrated that 15 participants rated higher and 2 rated the same on efficacy scale after the instruction (see table 12).

Table 12. Rank Statistics of Efficacy in Research Questionnaire

		N	**Mean Rank**	**Sum of Ranks**
Post – Pre	Negative Ranks	0[a]	,00	,00
	Positive Ranks	15[b]	8,00	120,00
	Ties	2[c]		
	Total	17		

a. Post < Pre
b. Post > Pre
c. Post = Pre

Findings were complemented with data from interviews and essays. They helped understand why the participants felt efficacious and inefficacious in the following aspects; (1) conducting research, (2) data analysis, (3) interpreting results, and (4) data collection.

Feelings of Efficacy in Conducting Research

Before the instruction, in the questionnaire 5 participants stated not feeling sufficiently capable in conducting research related to topic in the field of ELT. Similarly, interviews and essays written before the instruction showed that 4 participants out of 17 did not feel capable to conduct research. However, after the instruction, in the questionnaire, all participants (N=17) stated feeling capable in conducting research about topics in the field of ELT. Parallel to the questionnaire findings, 15 participants indicated that they felt efficacious to conduct research mostly because of the hands-on experience during the course in the post-instruction interviews and essays.

> Before this course, I did not know how to conduct research. But after learning the procedure and the cycle of teacher research, I feel more confident in both designing and conducting research. (Post-instruction, Efficacy in Research Interview).
>
> I learned both conducting a research and how to find solutions to problems in my classroom (Post-instruction, Efficacy in Research Interview).
>
> INSET course inspired me and gave confidence and I learnt how to examine my problem systematically. It also helped me to understand the importance of doing a research and to bring some solutions to real issues. I had a clear idea about how to design a project more efficiently (Post-instruction, Efficacy in Research Interview).

Feelings of Efficacy in Data Analysis

Before the instruction, in the questionnaire, 13 participants indicated not feeling capable to do statistical analysis and 10 out of 17 participants indicated not feeling sufficiently capable in doing data analysis in the interviews and essays. Similar to the pre-instruction results, 11 participants indicated being incapable in statistical data analysis in the questionnaire after the instruction. Additionally, post-instruction interviews and essays showed that 10 participants were not efficacious in doing statistical analysis. However, all participants stated being capable in doing analysis of transcriptions and observation notes and doing coding in the questionnaire. This finding was also supported with post-instruction essays and interviews. 13 participants out of 17 felt efficacious to do qualitative data analysis (e.g. coding).

> I am capable enough to do coding but for the statistical analysis I need practice (Post-instruction, Efficacy in Research Interview).
>
> I can't say that I'm expert in data analysis but I can say that I know how to analyze written data through coding for my purposes (Post-instruction, Post-instruction, Efficacy in Research Interview).

Feelings of Efficacy in Data Interpretation

At the beginning of the instruction, questionnaire results and interviews and essays showed that 7 participants did not feel efficacious to interpret the findings of their research. However, after the INSET course, 17 participants indicated being efficacious in the questionnaire and 13 participants stated that they feel efficacious in the post-instruction interviews and essays. Following excerpts show this finding.

> Interpreting the data was generally fun for me because I felt that I am really finishing a job that is a product of own classroom. Interpreting the results was like giving the last shape to your research and it was what made the research real (Post-instruction, Efficacy in Research Interview).
>
> Actually, data interpretation is not very different from analysis. Because while we are analyzing, the results mean something. (Post, instruction, Efficacy in Research Interview).

Feelings of Efficacy in Data Collection

Before the instruction, in the questionnaire, 15 participants stated feeling capable to collect data through interview, 14 stated being efficacious in note-taking, 8 indicated being capable in collecting data through audio/video recording and 14 felt capable in doing observation to collect data. Additionally, pre-instruction interviews and written documents showed that 9 participants felt that they can collect data; however, after the INSET course, questionnaire findings showed that all participants (N=17) felt capable to collect data through any of the above mentioned ways. Similarly, interviews and essays showed that 15 participants indicated feeling efficacious after the INSET course as can be seen in the following excerpts.

> I can say I am capable to collect data because we have worked on it both in the class and during our research process (Post-instruction, Efficacy in research interview).
>
> Since my class size was small, data collection was not so hard at least in quantity. I managed somehow to collect data (Post-instruction, Efficacy in Research Interview).

All in all, the statistical analysis revealed no significant change in participants' motivation level. This result is not surprising since it was not possible to affect the work related conditions through instruction.

Moreover, questionnaires and interviews demonstrated similar findings in terms of motivation for and efficacy in research. Specifically speaking, finding solutions to problems, professional development, helping colleagues, modifying teaching materials, extra payment, promotion, encouragement of the administration were the commonly reported motivating factors before the instruction. However, after being engaged in the research process, they added the self-confidence they gained, the excitement they experienced, the interest of colleagues and students' improvement as other motivating factors to be research engaged.

Furthermore, in the essays and interviews, the participants stated that disinterest of the administration and having loaded schedules demotivate them before the instruction. At the end of the instruction, after having experienced conducting teacher-research, they added the challenge they faced during the process as another demotivating factor.

With specific relation to participants' efficacy in research, questionnaire results and findings of interviews demonstrated that, majority of the participants' felt efficacious in data collection, data interpretation and conducting research before the instruction. The common reasons of the participants who stated not feeling capable in these aspects are not having adequate knowledge, thinking of research as academic. On the other hand, both questionnaire and other data sources showed that most of the participants did not feel efficacious in doing data analysis because of not having adequate knowledge and thinking of statistical analysis as the only technique. After the instruction, results showed that nearly all participants felt efficacious in data collection, interpretation of findings, doing research and doing qualitative data analysis. However, they still did not feel sufficiently capable in doing statistical analysis.

Summary of the Findings Regarding the possible effects of the INSET course on participating EFL teachers' research knowledge and practice, findings indicated expansion or elaboration in the participants' research knowledge and practice.

With specific relation to participants' research knowledge, it can be concluded that their knowledge of research expanded and they elaborated on the sub-constructs such as data collection methods, steps of research, characteristics of research and data analysis starting from the second week of the instruction. In other words, the research knowledge of participants before and after the instruction did not demonstrate a total conceptual change; however, the existing knowledge elaborated and expanded. Specifically, despite stating questionnaires, survey, observation and interview as the only data collection instruments at the outset, after the instruction they expanded their knowledge about data collection tools by adding other sources like written reflective journals and post facto notes to their knowledge base. Furthermore, although the participants defined the characteristics of research as a systematic problem solving process as part of data collection before the instruction, the close relationship of this process with professional development to gain insight into their teaching was focused at the end of the instruction. Hence, their understanding of research started to mean as a way of professional development. Additionally, even though *data interpretation* and *sharing results* were not counted among the steps of research before the instruction, these steps were added into their definition of research after the instruction.

In relation to the possible effects of the INSET course on participating EFL teachers' research practice, findings revealed expansion or elaboration of the participants' feelings of research practice mostly because of the participants' engagement in hands-on activities to be engaged in research process

during the semester as a requirement. Analysis both before and after the instruction demonstrated that participants thought of academicians and teachers as two diverse professions and they should not conduct the same type of research. However, the reasons stated before the instruction were only their being different professions and having different concerns. At the end of the instruction, having different purposes and the necessity of applying diverse methodology were also added to the participants' opinions about research practice. Finally, participants indicated the inevitability of engaging in/with research with the purpose of teaching better and helping students learn better. Yet, loaded schedules demotivating some participants and hindering their research engagement should also be considered as a reason of not doing research. In other words, although the percentage of the participants who agreed on the teachers' engagement in/with research increased after the instruction, they still considered that the need to follow the steps of research was waste of time and troublesome.

Moreover, after the instruction, the benefits of research engagement indicated by the participants expanded by involving its being advantageous for professional development, finding solutions to teaching problems, understanding the teaching context in a better way, developing teaching skills, improving motivation and eagerness to teach, preventing burn-out. However, they also stated many difficulties such as reviewing the literature, collecting and analyzing data, deciding on the problem to focus.

Therefore, the instruction did not cause any changes in participants' research knowledge and practice in the form of total conceptual change concerning research knowledge as discussed in detail in the above section previously. The initial basic research knowledge of the participants was elaborated as a result of hands on experience in teacher research within the framework of the course. Additionally, again due to hands on experience and readings as a part of the requirement of the course, their ideas for the necessity of research were elaborated by involving different aspects and subcomponents. Similarly, their ideas about the benefits of doing research became more embraced.

Secondly, in an attempt to investigate the participants' motivation for and efficacy in research, the findings both before and after the instruction indicated that the instruction in the INSET course resulted in the statistically significant change in participants' efficacy in research whereas it did not cause any significant change in their motivation level. However, the results demonstrated that 10 participants rated higher on motivation scale after the instruction.

Specifically speaking, finding solutions to problems, professional development, helping colleagues, modifying teaching materials, extra payment, promotion, encouragement of the administration were the extrinsic factors that were stated to affect their motivation for research before the instruction. However, after being engaged in the research process, they added the self-confidence they gained, the excitement they experienced, the interest of colleagues and students' improvement as other motivating factors to be research engaged.

Additionally, in the essays and interviews, the participants stated that disinterest of the administration and having loaded schedules demotivate them initially. After having experienced teacher-research, they added the challenge they encountered during the process as another demotivating factor.

Furthermore, majority of the participants' felt efficacious in data collection, data interpretation and conducting research before the instruction. The commonly stated reasons of the participants who stated not feeling capable in these aspects were not having adequate knowledge, thinking of research as academic. On the other hand, both questionnaire and other data sources showed that most of the participants did not feel efficacious in doing data analysis because of not having adequate knowledge and thinking of statistical analysis as the only technique. At the end of the instruction, results showed that nearly all participants felt efficacious in data collection, interpretation of findings, doing research and doing qualitative data analysis. However, they still did not feel sufficiently capable in doing statistical analysis. Therefore, the instruction, hands-on assignments and the research engagement in the INSET courses significantly affected participants' intrinsic motivation and efficacy in research.

Discussion and Conclusion

The purpose of this study was to investigate the possible contribution of the *Current Issues in INSET and Professional Development* course as one of the required components of an MA program in TEFL to help participating EFL teachers develop further as motivated and efficacious teacher-researchers who can explore their own practice in their teaching contexts. In doing so, the effect of instruction on participants' research knowledge and practice, motivation for research, efficacy in research were evaluated. Finally, their ideas about the relative contribution of the INSET course and other MA courses they attended on their research knowledge were analyzed.

With specific relation to the purpose of investigating the effects of the instruction on participants' research knowledge, results showed that participants had some research knowledge before the INSET course. Specifically speaking, they knew that research is a way of solving problems by collecting data following some steps in a systematic manner. They were also aware of the fact that data have to be analyzed. However, statistical analysis was believed to be the only way for analysis. Additionally, from the beginning of instruction, the importance of research results to give ideas for teachers was forefronted which showed the pragmatic perspective of research (Borg, 2013). It is also noteworthy that although they thought that research can be done by both academicians and teachers, participants' understandings of research was incomplete in the sense that they did not know specific characteristics of academic and teacher research. Therefore, it can be concluded that the participants had the construct of research as a general term without knowing the details related to it.

These results are in accord with previous research which investigated teachers' conceptions of research (Borg, 2009, 2013; McNamara, 2002; Rainey, 2000; Ratcliffe et al., 2004). All of these studies provided evidence for research knowledge of teachers without being exposed to any formal instruction.

The findings related to the participants' engagement *in* research before the instruction demonstrated that although most of the participants agreed with the teachers' engagement in research in order to solve problems and teach better, some of them stated that they did not do research because of time limitations, loaded programs, and not knowing much about conducting research.

These barriers stated to prevent participants from being research engaged were parallel with many previous studies (Allwright, 1993; Allison & Carey, 2007; Atay, 2006; Borg, 2003, 2007, 2009; Burns, 2009; Edwards & Willis 2005; Henson, 2001; Maharaj-Sharma, 2011). All these studies shed light to the factors that deter teachers from practicing research actively.

On the other hand, with specific relation to engagement *with* research, the majority of the participants stated reading published research by accessing relevant readings through their institutions' libraries. Most of the participants also believed that academicians and teachers should conduct different types of research because of the distinctions in their purposes. This result is in line with the findings of some studies (Borg, 2003, 2007, 2009, 2013) which investigated how teachers were engaged in research. Additionally, as mentioned earlier, some of them preferred reading discussion forums. This preference to read forums, which are online platforms to discuss and share ideas, supports the results of previous studies in which the participants claimed the difficulty in understanding published research full of inapplicable results(Borg, 2003, 2007, 2009, 2013).

In order to investigate the effect of instruction, participants' research knowledge and practice were also investigated after 15-weeks of instruction during which they were required to read, discuss, reflect, and do research. Findings showed no difference in the participating teachers' research knowledge; however, it is clear that the existing knowledge they had before the instruction was elaborated and expanded by creating a more detailed structure of research as a construct within the INSET course.

These findings concur with the findings of the studies which were conducted in formal settings such as in an MA program (Atay, 2008; Borg, 2009; Edwards & Willis, 2005; Reis-Jorge, 2007; Wyatt, 2010; Yaylı, 2012). Despite not stating that there appeared to be no change but broadening in the

participants' research knowledge clearly, it is probable that in all these studies, participants who are BA graduates started with some pre-existing research knowledge and then expanded it with the formal instruction to which they were exposed to.

Moreover, the participants emphasized the close relationship of the research process with professional development in order to gain insight into their teaching. Therefore, they started to think of research as a way of professional development which is commonly stated in previous studies (Akyel, 2000; Benton & Wasko, 2000; Macaro & Mutton, 2002; Stremmel, 2002; Atay, 2006, 2008; Korucu, 2011; Gao & Kwan Chow, 2012) showing evidence for the positive effect of research engagement on professional development.

In addition to the investigation of the effect of instruction on the participants' research knowledge, the effects on their research practice was also investigated at the end of instruction. Findings fore fronted participating teachers' beliefs regarding the gap between theory and practice. As indicated previously, they had deep anxiety about not finding anything relevant to their problems and practical ideas with which to apply to their teaching found in the academic research due to different aims and methods. They also believed that academics are far removed from the reality of teaching contexts. As Freeman (1996 suggested this understanding may also be due to the fact that some researchers do not place *the knower of the story* at the center. Additionally, the strictly controlled research methodology of the academic articles might have hindered teachers from reading academic research itself.

With specific relation to participating teachers' research practice, the INSET course has caused some changes mostly owing to the engagement in hands-on activities to conduct research as a requirement. Yet, even though the percentage of the participants who agreed on the teachers' engagement in/with research increased after the instruction, they still felt that following the steps of academic research was too time consuming and burden some. Participants also complained about the challenges with which they had to cope, such as reviewing the literature, collecting, and analyzing data.

At present, there is a common agreement that it is not possible for language teachers to apply what they were instructed in the INSET course into their daily life due to the demanding and strict cycle which were all for research purposes in a formal setting. However, since the setting of the research was an MA in TEFL program, it was necessary to accomplish all the requirements for academic purposes. Hence, as Allwright (1998) suggested, instead of creating such a burden for EFL teachers who do not have adequate time and support and who would do amateur research unwillingly by suffering, they should be encouraged to understand the problems in their contexts and find practical solutions within a more flexible research cycle. For the instructional purposes, the participants were required to publicize their research projects. However, when they engage in research out of MA program, they do not have to follow such a strict cycle and publicize their reports. Instead, they can do research just with the purpose of finding practical solutions.

In addition to participants' research knowledge and practice, their motivation for research and efficacy in research were also investigated both before and after the instruction. Regarding teachers' motivation for research, questionnaire, interview, and essay findings showed that professional development, being curious about the issues in ELT and solving problems were the factors that motivate them mostly. On the other hand, loaded schedules, and inflexible curriculums were felt to be demotivating before the instruction. After the instruction, professional development, problem solving, improving teaching abilities were among the motivating factors. On the other hand, challenge of the research process, lack of administrative support, and loaded schedules were also felt to be demotivating. The challenge that participants faced during research engagement was due to the loaded syllabus and strict research cycle required for instructional purposes. However, they can apply the theoretical knowledge they learned in the INSET course to find practical solutions for the problems they encounter in their teaching contexts.

These findings support previous studies which have shed light on factors that motivate and demotivate teachers (Wilby, 1989; Coladarci, 1992; Pennington, 1992; Nunan & Lamb, 1996; Gherali-Roussos, 2003; Suslu, 2006; Praver & Oga-Baldwin, 2008; Bernaus et al., 2009; Fallout, 2010). Moreover, these results concur with the findings of the studies of which focus is on teachers' research engagement (Hardre et al., 2011).

With specific relation to the effect of instruction on teachers' efficacy in research, before the instruction, questionnaire results, interview and essay findings showed that more than half of the participants felt capable in data collection, data interpretation and conducting research. On the other hand, most of the participants did not feel efficacious in doing data analysis because of not having adequate knowledge and thinking of statistical analysis as the only way. After instruction, results showed that nearly all participants felt efficacious in data collection, interpretation of findings, doing research and doing qualitative data analysis. However, they still did not feel sufficiently capable in doing statistical analysis which might be due to lack of practice and hands-on experience regarding statistical analysis within the related course and might be because of not including it as one of the main components in the syllabus. All in all, findings showed that the instruction affected participants' feelings of efficacy in research significantly.

This positive and significant effect of instruction on participants' feelings of efficacy was found to be similar to the findings of previous studies which investigated the impact of research engagement on these feelings (Cabaroğlu, 2014; Cooper-Twamley, 2009; Henson, 2001; Liu, 2009; Seider & Lemma, 2006). In addition, the findings of the study contribute to the field by providing results demonstrating the impact of research-engagement on feelings of efficacy in research instead of teaching.

Implications

The present study has implications for both the INSET course and the field of language teacher education. To begin with, the results of the present study provided insights into the design of undergraduate and graduate teacher education programs. Language teachers should be introduced to research during their undergraduate years and they should be provided with necessary information to explore their own teaching practices during their teaching career. Additionally, MA in TEFL programs, which serve as professional development settings for language teachers should integrate hands-on experience through research engagement and activities aiming at improving the research skills of the MA students into their course syllabuses with the purpose of narrowing the gap between theory and practice.

Secondly, the findings of this study imply that demotivating factors preventing teachers from research engagement should be taken into consideration by the administrators. That is, work conditions of language teachers, extracurricular responsibilities imposed on them and workloads should be improved in order to allow educators some time for professional development. Furthermore, the administrators should have the awareness and should be conscious about the contribution of such engagement on language teachers' professional development. In other words, they need to support and encourage teachers to be involved in such activities.

The findings also showed that despite valuing the process of research engagement, participants complained about the challenging process of research engagement, which mostly results from the inflexible nature of teacher-research cycle. Therefore, as proposed by Allwright (1993, 1998, 2007), the emphasis should be placed on *understanding* rather than *problem-solving* and *puzzling event* instead of *problem* which is burdensome and causes a negative feeling about the teaching context.

Next, results showed that EFL teachers have difficulty in understanding and finding applicable ideas in academic research. Therefore, the collaboration and cooperation between teachers and researchers should be enhanced and teachers should be provided with valid and reliable findings applicable in their teaching contexts.

Limitations of the Study

The present study has some limitations too. The first limitation lies in the fact that the researcher herself instructed the INSET course which served as the treatment. In other words, the lack of an external researcher throughout the data collection process might have affected the credibility and objectivity of the researcher who was the instructor. Moreover, since the researcher is the instructor of the course, the participants might have been hesitant to indicate their genuine feelings during the interviews and in their essays. However, it was not probable to collect data by the help of another researcher since data collection was linked to instruction.

Furthermore, being in a formal education setting and due to fairness concerns, the participants were required to engage in a structured research process, which was burdensome and tiring.

Finally, the study investigated the effect of instruction on participants' research knowledge and practice. In order to see long-term effects of instruction, participants should have been followed up in their teaching contexts out of the structured MA in TEFL program. Unfortunately, due to time constraints, only the immediate effects of instruction could have been investigated.

Recommendations for further Research

Despite the limitations discussed in the previous section, this study also provides foundations for further research.

First of all, since the factors that motivate and demotivate teachers can change in different contexts, it is recommended to replicate the present study in different contexts. Additionally, as a result of the differences in education systems and school cultures, further research is necessary to investigate the differences in research knowledge of the teachers in different countries.

Moreover, the syllabus of the INSET course should be modified due to the challenge it caused with its strict design.

Further research should also investigate the research practices of the participants out of the borders of MA in TEFL program which is a structured context.

Finally, further research is needed to investigate EFL teachers' motivations for research and efficacy in research in different contexts since it has not yet been previously investigated.

References

Akbulut, Y., Şahin, Y. L., & Erişti, B. (2010). Development of a scale to investigate cybervictimization among online social utility members. *Contemporary Educational Technology*, *1*(1), 46-59.

Akyel, A. S. (2000). Collaboration to Explore Teaching: A Case Study Report. *TESL Canada Journal*, *18*(1).

Allison, D., & Carey, J. (2007). What do university language teachers say about language teaching research?. *TESL Canada Journal*, *24*(2), 61-81.

Allwright, D. (2005). Developing principles for practitioner research: The case of exploratory practice. *Modern Language Journal*, *89*(3).

Allwright, D., & Bailey, K. (1991). *Focus on the language classroom*. Cambridge: Cambridge University Press.

Allwright, D. (1993) Integrating 'research' and 'pedagogy': appropriate criteria and practical possibilities. In J. Edge and K. Richards (Eds.), *Teachers develop teachers research* (pp. 125-135). Oxford: Heinemann.

Allwright, D. (1998). Contextual factors in classroom language learning: An overview. In K. Malmkjar and J. Williams (Eds.), *Context in Language Learning and Understanding* (pp. 115-134). Cambridge: Cambridge University Press.

Allwright, D. (2007). Practitioner research. *Language Teaching Research*, *11*(1).

Atay, D. (2006). Teachers' professional development: Partnerships in research, *TESL-EJ*, *10*(2).

Atay, D. (2008). Teacher research for professional development. *ELT Journal*, *62*(2).

Ashton, P., Buhr, D., & Crocker, L. (1984). Teachers' sense of efficacy: A self- or norm-referenced construct. *Florida Journal of Educational Research*, *26*(1), 29-41.

Benton, J., & Wasko, J. (2000). Anything worthwhile takes time: Eight schools discuss impacts and impressions of doing action research. *Networks: An Online Journal of Teacher Research*, *3*(1).

Bernaus, M., Wilson, A., & Gardner, R. C. (2009). Teachers' motivation, classroom strategy use, students' motivation and second language achievement. *Porta Linguarum*, *12*, 25-36.

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, *36*(02), 81-109.

Borg, S. (2006). Conditions for teacher research. *English Teaching Forum*, *4*, 22-27.

Borg, S. (2007). Research engagement in English language teaching. *Teaching and Teacher Education*, *23*(5), 731-747.

Borg, S. (2009). English language teachers' conceptions of research. *Applied Linguistics*, *30*(3), 358-388.

Borg, S. (2010). Language teacher research engagement. *Language Teaching*, *43*(4), 319-429.

Borg, S. (2013). *Teacher research in language teaching: A critical analysis*. Cambridge University Press.

Brown, D., & Lee, H. (1994). *Teaching by principles: an interactive approach to language pedagogy*. Pearson.

Burns, A. (2009). *Doing Action Research in Language Teaching: A guide for practitioners*. New York and London: Routledge.

Büyüköztürk, Ş. (2003). *Sosyal bilimler için very analizi el kitabı: İstatistik, araştırma deseni, SPSS uygulamaları ve yorum* (3rd ed.). Ankara: Pegem Publishing.

Cabaroğlu, N. (2014). Professional development through action research: Impact on self-efficacy. *System*, (4), 79-84.

Carr, W., & Kemmis, S. (1985). *Becoming critical: Knowing through action research*. Victoria: Deakin University Press.

Chagon, C. T. (2005). Teachers' perceived efficacy among English as a foreign language teachers in middle schools in Venezuela. *Teaching and Teacher Education*, *21*, 257-272.

Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education*, *60*, 323-337.

Cooper-Twamley, S. M. (2009). *Action research and its impact on teacher efficacy: A mixed methods case study* (Unpublished doctoral dissertation). Baylor University.

Creswell, J. W., & Clark, V. L. (2011). *Designing and conducting mixed methods research*. Sage.

Edwards, C., & Willis, J. (2005). *Teachers exploring tasks in English language teaching*. Palgrave: MacMillan.

Fallout, J. (2010). Strategies for teacher motivation. *The Language Teacher*, *34*(6).

Freeman, D. (1996). Redefining the relationship between research and what teachers know. In K. M. Bailey and D. Nunan (Eds.), *Voices from the language classroom* (pp. 88-115). Cambridge University Press.

Gao, X., & Chow, A. W. K. (2011). Primary school English teachers' research engagement. *ELT Journal*, 66(2).

Gebhard, J., & Oprandy, R. (1999). Exploring our teaching. In J. Gebhard and R. Oprandy (Eds.), *Language teaching awareness*. *A guide to exploring beliefs and practices* (pp. 3-19). Cambridge, UK: Cambridge University Press.

Gherali-Roussos, E. (2003). *The motivation of English language teachers in Greek secondary schools* (Unpublished doctoral dissertation). Nothingham University.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, *76*(4), 569-582.

Guba, E. G., & Lincoln, Y. S. (1985). Competing paradigms in qualitative research. *Handbook of Qualitative Research*, *2*(163-194).

Güven, S., & Çakır, O. (2012). A Study on primary school English teachers' self-efficacy beliefs. *Education and Science*, *37*(163), 43-52.

Hardre, P., Beesley, A., Miller, R., & Pace, T. (2011). Faculty motivation to do research: Across disciplines in research-extensive Universities. *The Journal of the Professoriate*, *5*(1).

Harmer, J. (2001). *The practice of english language teaching*. Essex: Longman Press.

Henson, R. K. (2001). The Effects of participation in teacher research on teacher efficacy. *Teaching and Teacher Education*, *17*.

Henson, R. K., Kogan, L. R., & Vacha-Haase, T. (2001). A reliability generalization study of the teacher efficacy scale and related instruments. *Educational and Psychological Measurement*, *61*(3), 404-420.

Jie-ying, Y. (2011). Teacher efficacy and college English teaching. *Asia-Pacific Science and Culture Journal*, *1*(1).

Kemmis, S. (1980). *Action research in retrospect and prospect*. Paper presented to the Annual Meeting of the Australian Association for Research in Education, Sydney, Australia.

Kline, P. (1994). *An easy guide to factor analysis*. London: Routledge.

Korucu, S. (2011). *The use of action research as a model in the professional development of an English teacher: A case study* (Unpublished master's thesis). Selçuk University, Konya.

Lankshear, C., & Knobel, M. (2004). *A handbook for teacher research: From design to implementation*. Open University Press.

Lee, J. (2009). *Teachers' sense of efficacy in teachıng English, perceived English language proficiency, and attitudes toward the English language: A case of Korean public elementary school teachers* (Unpublished doctoral dissertation). Ohio State University.

Liu, K. (2009). *Action research: Impact of holistic method on teacher candidates' self-efficacy*. Paper presented at the 18th Annual Conference of the Global Awareness Society International.

Macaro, E., & Mutton, T. (2002). Developing language teachers through a co-researcher model. *Language Learning Journal*, *25*, 27-39.

Maharaj-Sharma, R. (2011). Case study of five science teachers' understandings of classroom research and their willingness to become active classroom researchers. *Asian Social Science*, *7*(9).

McNamara, O. (2002). Evidence-based practice through practice-based evidence. In O. McNamara (Ed.), *Becoming an Evidence-based Practitioner* (pp. 15-26).

Nunan, D. (1989). *Understanding language classrooms*. Prentice Hall.

Nunan, D., & Lamb, C. (1996). *The self-directed teacher*. Cambridge University Press.

Pallant, J. (2001). *SPSS survival manual*. Maidenhead, PA: Open University Press.

Pennington, M. C. (1992). Motivating English language teachers through job enrichment. *Language, Culture and Curriculum*, *5*(3).

Praver, M., & Oga-Baldwin, W. (2008). What motivates language teachers? Investigating work satisfaction and second language pedagogy. *Polyglossia*, *14*.

Rainey, I. (2000). Action research and the English as a foreign language practitioner: Time to take stock. *Educational Action Research*, *8*(1), 65-91.

Ratcliffe, M., Bartholomew, H., Hames, V., Hind, A., Leach, J., Millar, R., & Osborne, J. (2004). *Science education practitioners' views of research and its influence on their practice*. York: Department of Educational Studies, University of York.

Reis-Jorge, J. (2007). Teachers' conceptions of teacher-research and self-perceptions as enquiring practitioners - A longitudinal case study. *Teachers and Teacher Education*, *23*.

Richards, J. C., & Lockhard, C. (1994). *Reflective teaching*. New York: Cambridge University Press.

Roth, W. M. (2007). *Doing teacher-research: A handbook for perplexed practitioners*. Sense Publishers.

Seider, S. N., & Lemma, P. (2004). Perceived effects of action research on teachers' professional efficacy, inquiry mindsets and the support they received while conducting projects to intervene into student learning. *Educational Action Research*, *12*(2), 219-238.

Stremmel, A. (2002). Nurturing professional and personal growth through inquiry. *Young Children*, *57*(5), 62-70.

Suslu, S. (2006). Motivation of ESL teachers. *The Internet TESL Journal*, *12*(1).

Swanson, P. B. (2010). Efficacy and language teacher attrition: A case for mentorship beyond the classroom. *The NECTFL Review*.

Tabachnick, B., & Fidell, L. (2007). *Using multivariate statistics*. Boston: Allyn & Bacon.

Tangen, D. (2007). *A contextual measure of teacher Efficacy for teaching primary level students who have ESL* (Unpublished doctoral dissertation). Queensland University of Technology.

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education*, *17*, 783-805.

Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work extrinsic and intrinsic motivation scale: Its value for organizational psychology research. *Canadian Journal of Behavioral Science/Revue Canadienne Des Sciences Du Comportement*, *41*(4), 213.

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, *52*(4), 1003-1017.

Waugh, R. F. (2002). Creating a scale to measure motivation to achieve academically: Linking attitudes and behaviours using Rasch measurement. *British Journal of Educational Psychology*, *72*(1), 65-86.

Wilby, P. (1989). The secret of successful schools. *Reproduced in The Straits Times*, *4*.

Wyatt, M. (2010). An English teacher's developing self-efficacy beliefs in using groupwork. *System*, *38*(4).

Yaylı, D. (2012). A hands on experience of English language teachers as researchers. *Teacher Development: An International Journal of Teachers' Professional Development*, *16*(2), 255-271.

Appendices

INTERVIEW QUESTIONS ABOUT EFFICACY IN RESEARCH

1. Do you feel capable of conducting research? Why/ not?
2. Do you feel capable of investigating problems in your classroom? Why/not?
3. Do you feel capable of collecting data that you need to solve the problems?
4. Do you feel capable of analyzing the data you collect? Why/not?
5. Do you feel capable of reporting results the results in your practice?
6. Do you feel capable of applying results into your teaching?
7. Do you feel capable of understanding published research?

INTERVIEW QUESTIONS ABOUT THE MOTIVATION FOR RESEARCH

1. What motivates a teacher for carrying out a research?
2. Are you motivated to conduct research?
3. If yes, what motivates you to conduct research?
4. If your answer is 'no', what demotivates you to conduct research?
5. Do you read recent research in the field? Why/not?
6. Do you think that you will implement the results in your teaching? Why/not?
7. If you do research, is it because of external factors (e.g., getting a promotion) or internal factors (e.g., professional development)?

INTERVIEW AND ESSAY QUESTIONS TO INVESTIGATE TEACHERS' OPINIONS ABOUT THE CONTRIBUTION OF INSET COURSE AND OTHER COURSES ON THEIR RESEARCH KNOWLEDGE AND PRACTICE

1. Did the INSET course and other courses help you improve your research knowledge?If yes, how?
2. Did the INSET course and other courses contribute to your research practice? If yes, how?
3. Did you enjoy the courses you take ? If yes, what did you enjoy most during the courses?
4. Did you have difficulty during the courses? If yes, in what?
5. Did the courses affect your research skills? If yes, how?

ESSAY GUIDELINE AND INTERVIEW QUESTIONS TO ELICIT RESEARCH KNOWLEDGE AND PRACTICE

Research Knowledge

1. What is research?
2. What are the steps in conducting research?
3. What is the difference between qualitative and quantitative research?
4. What are the data collection methods?
5. Do you know how to analyze data?
6. Do you know how to interpret the results of data analysis?

Research Practice

1. Should teachers do research? Why/not?
2. Should teachers and applied linguists conduct same type of research? Why/not?
3. Do you practice doing research?
4. If your answer is 'yes' to question 4, how frequently do you do?
5. If your answer is 'yes' to question 4, what kind of help do you need?
6. If your answer is 'no' to question 4, why don't you do?
7. Do you have an access to published research?
8. If yes, what type of journals do you prefer to read?
   a. ELT Journal
   b. TESOL Quarterly
   c. Forum
   d. Teacher Education
9. Do you find what you read helpful? Why/not?

INSET COURSE SYLLABUS

Week/Date	SUBJECT	READINGS	TASKS	IN-CLASS
1/11th Feb	The course will be introduced and mutual expectations will be discussed.		The students will be assigned to complete weekly task 1.	
2/18th Feb	- What is research? -What is teacher research? - The role of teacher as a researcher - A Rationale for Teacher research	1.An introduction to teacher research (Lankshear&Knobel, 2004; Ch. 1) 2. Basic issues and concerns (Nunan, 1989, Ch. 1) 3. 1. Teacher research and professional development (Nunan, 1989, Ch. 6) 4. Exploring our teaching (Gebhard&Oprandy, 1999, Ch. 1)	The students will be assigned to complete weekly reflective task 2.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
3/25th Feb	- Teacher research as a systematic inquiry	1. Teacher research as a systematic inquiry (Lankshear&Knobel, 2004; Ch. 2) 2.The process of exploration (Gebhard&Oprandy, 1999, Ch. 2)	The students will be assigned to complete weekly reflective task 3.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
4/ 4th Mar	-Identifying problems and purposes for research	1. Formulating our research purposes: Problems, questions, aims and objectives (Lankshear&Knobel, 2004; Ch. 3) 2. From Questions to planning the project (Freeman, 1998, Ch. 4) 3. Problem posing and solving with action research (Gebhard&Oprandy, 1999, Ch. 4)	The students will be assigned to complete weekly reflective task 4. **- Students identify a problem in their own classrooms to conduct teacher-research by the help of task 4.** -Students will start keeping reflective journals. -They will reflect on the first three reflective tasks in the first entry of their journals.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
5/11th Mar	- General approaches - Reviewing the literature	1. General approaches to teacher research (Lankshear&Knobel, 2004; Ch. 4) 2. Informing the study (Lankshear&Knobel, 2004; Ch. 5)	The students will be assigned to complete weekly reflective task 5. -**Students write a brief literature review for their teacher-research projects as suggested in task 5 and decide on the appropriate approach to solve their problems.** -Students will write a journal entry on the process of identifying a research problem.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week

6/18th Mar	-Quantitative research designs -Quantitative data collection techniques	1. An introduction to teacher research as quantitative investigation (Lankshear&Knobel, 2004; Ch.8)		- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
7/25th Mar	- Qualitative research designs -Qualitative data collection techniques -Triangulation	1. A background to data collection in qualitative research (Lankshear&Knobel, 2004; Ch.9) 2.Collecting and analyzing data (Freeman, 2004, Ch. 5)	The students will be assigned to complete weekly reflective task 6. -**Students will decide on the data collection method for their research.** -Students will write a journal entry on the process of choosing an appropriate method for their research.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
8/ 1st Apr	-Collecting spoken data - Analyzing spoken data	1.Collecting spoken data in qualitative research (Lankshear&Knobel, 2004; Ch.10) 2. Analyzing spoken data (Lankshear&Knobel, 2004; Ch.13)	The students will be assigned to complete weekly reflective task 7. **-Students who collected spoken data for their research will do the analysis.** **-** Students will write a journal entry on the process of transcribing and analyzing data.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
9/ 8th Apr	-Collecting observed data -Analyzing observed data	1. Collecting observed data (Lankshear&Knobel, 2004; Ch.11) 2. Classroom observation (Nunan, 1989, Ch. 5) 3. Seeing teaching differently through observation (Gebhard&Oprandy, 1999, Ch. 3) 4. Analyzing observed data (Lankshear&Knobel, 2004; Ch.14)	The students will be assigned to complete weekly reflective task 8. - **Students who collected observed data for their teacher research will do the analysis.** -Students will write a journal entry on the process of observation and analysis of observation data.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week

10/15th Apr	-Collecting written data -Analyzing written data	1. Collecting written data (Lankshear&Knobel, 2004; Ch.12) 2. Analyzing written data (Lankshear&Knobel, 2004; Ch.15)	The students will be assigned to complete weekly reflective task 9. **-Students who collected written data will do the analysis.** - Students will write a journal entry on the process of collecting written data and analysis.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
11/22nd Apr	-Collecting and analyzing questionnaire data		The students will be assigned to complete weekly reflective task 10. - Students will write a journal entry on the process of adapting appropriate questionnaire and doing the analysis.	- Readings assigned in the previous week will be discussed -In-class discussion on the reflective task assigned in the previous week
12/29th Apr	-Reporting research results -Making research public	1. Quality and reporting in teacher research (Lankshear&Knobel, 2004; Ch.16) 2. Reporting teacher research (Nunan, 1989, pp. 121-126)	**Students will write their teacher-research reports** -Students will write a journal entry on the process of reporting their research.	
13/6th May	**PRESENTATIONS OF THE RESEARCH PROJECTS (In-class discussion and feedback session)**			Whole class feedback will be provided to the students' papers.
14/13th May	**PRESENTATIONS OF THE RESEARCH PROJECTS (In-class discussion and feedback session)**			Whole class feedback will be provided to the students' papers.
15/20th May	**FINAL EXAM**			