



COMPARING THE EFFECTIVENESS OF THREE PROFESSIONAL DEVELOPMENT MODELS IN ENHANCING TEACHERS' TEACHING EFFECTIVENESS

AHMAD KORD¹, MOHMAD NABI KARIMI^{2*}

¹M.A student of English language teaching, Department of English language, College of basic sciences, Zahedan branch, Islamic Azad university, Zahedan, Iran
mobile: 00989159901707

²Assistant professor of English language teaching, Department of foreign languages of Tehran Kharazmi University, Tehran in Iran



AHMAD KORD

ABSTRACT

This research tried to compare the effectiveness of three specified teacher professional development models. The three professional development models of peer coaching, class observation and action research were analyzed and assessed comparatively among 15 EFL teachers in three experimental groups. There were 8 male and 7 female teachers in the sample of this study. All three groups were given a one month treatment period during which they were given specific tasks and activities. The English Language teaching Competency Test (ELT-CT) test was used both as a pretest and posttest to determine any likely changes during the treatment. The results from the test scores revealed that action research has had the highest degree of effectiveness than the other two models ($F= 6.237$, $df= 2$, $p<.05$). The effects of the treatment in the other two groups were not statistically significant. Additionally, the results from the paired samples T-test confirmed the same results ($t=-5.718$, $df=4$, $p<.05$). Moreover, the results from the questionnaires and interviews indicated that action research has had the highest impact on the group's teaching performance from the teachers' perspective.

Key terms: Teacher professional development; Peer coaching/ Mentoring; Action research; Observation

Article Info:

Article Received:01/04/2015

Revised on: 09/04/2015

Accepted on: 12/04/2015

©KY Publications

INTRODUCTION

Teacher training and teacher education has attracted considerable attention during the last two decades. In fact the idea that teachers can play a leading role in the quality of L2 learning has always been important, i.e. improving teachers' skills can exert a large positive influence on the progress rate of English learners. Recent research especially suggests that there has been growing recognition of teachers as the most important criteria in

studentoverall achievement (Carey, 2004; Haycock,1998). In this regard, most teachers try to build upon their knowledge of teaching and learning both in practical and theoretical terms. Training courses focus more specifically on the practical and real class situations and is aimed at providing teachers with techniques, strategies and skills on how to teach languages effectively. On a broader scope, however, teacher education and development go beyond this and get English

teachers to reflect and theorize based on their extensive experience. In this vein, professional development models have gained significance over the years. According to some recent research, there is a strong correlation between teachers' teaching and students' school success (Diaz-Maggioli, 2004; Sparks, 2002). In other words, different teachers adopt various teaching models or practices in order to improve and enhance their professional skills in the field of EFL. In this sense, Huberman (1989), believes that teachers' careers include cycles of conflict or resolution that can lead to growth and development later in their profession. Furthermore, Pontz (2003) pointed out that in order for professional development to be effective the educational context must include: clarity of goals, adequate levels of challenge, capitalization on previous knowledge, sustainability over time, organizational support, and alignment of achievement with the goals set.

For many teaching English has turned into a professional career today, and has filled up a large proportion of their daily lives. Therefore, the need for getting promoted on this career can now be felt far better compared to the past. Sparks (2002) argues that professional development must be embedded in everyday lives of teachers, together with strong administrative support and use of skills that are linked to their particular needs.

Professional development models offer strategies, techniques and practices that can help teachers progress both more qualitatively and quantitatively in their teaching profession. Some of these strategies are: action research, reflective teaching, peer coaching, studying related journals, mentoring, observation and exploration. Among these models some may be more effective and facilitate the process of development more effectively. In fact what is important here is the concept of 'teacher learning' which can be mediated through these models. Adler (2000) describes teacher learning from a situative perspective and maintains it "is usefully understood as a process of increasing participation in the practice of teaching, and through this participation, a process of becoming knowledgeable in and about teaching" (p. 37). In this respect, finding models or programs that can best

help foster teacher learning and development can be increasingly beneficial and influential in designing a productive system of education in almost any subject. Cohen and colleagues (2003) stated that excellent programs of development, field testing, and revision are three essential elements for designing a well-defined instructional system. One practical approach to finding a good model is to simply compare the different existing programs and strategies in order to explore the effectiveness of each of them.

Purpose of the study

This study is aimed at examining and analyzing three different models of teacher professional development comparatively and find out whether any of these models can be more effective in improving the quality of the instruction in EFL teachers. The three models to be compared in this research are *peer coaching*, *action research* and *observation*. In other words, the study aims at exploring the effectiveness of these three models in enhancing teachers' skills and efficiency.

Research questions

1. Which one of the three teacher development models analyzed in this study, i.e. action research, observation and peer coaching, is more effective in enhancing teachers' teaching effectiveness?
2. What are the attitudes of the teachers towards the three professional development models utilized in the study?

Review of literature

Teacher professional development models and their effects

As for the definition of the term Professional development of teachers, it is explained as a process of continual intellectual, experiential, and attitudinal growth of teachers (Bailey et al., 1998). The concept of development is further explicated by Burden (cited in Raths & Katz, 1986) by stating that development basically refers to the phenomenon of change in form over time. This change is usually from simple to complex forms and it includes different stages. He further asserted that those who pursue teaching as a professional career exhibit these phases and developmental characteristics as do all other adults.

At this very beginning, however, a distinction should be made between the two notions of 'teacher development' and 'teacher training' which may be confused at times. The essential difference between teacher training and development is whether the element of personal growth is involved or not in the teacher learning processes. Some of the defining characteristics of both concepts can be identified in reference to Wallace's (1991) three models of teacher learning: (a) the applied science, (b) the craft, and (c) the reflective models.

In this regard, Bartlett (1990) and Wallace (1991) suggest that our reflective efforts, which involve posing questions about how and why we teach the way we do in the classroom and what values our behavior represent, can provide a lot of opportunities for us to change. It should be noted, however, that the notion of change in the "training" perspective is quite different from the change that the "development" approach entails. In the latter perspective, changes are not necessarily limited to the behavioral level as expected in the former, but rather changes occur in the levels of attitude and awareness that lead to deeper understanding of our teaching practice (Bailey, 1991; Freeman, 1989). Put another way, the main tenet of teacher development as compared to training is not to judge what we do, but in essence, it is the description and understanding of "what we are now by reflecting on how we got to be here" (Bailey, Curtis, & Nunan, 2001, p. 247).

In an in-depth study, done recently, Darling-Hammond et al. (2010) reviewed the current state of professional development in the United States of America. Their literature review concluded that effective professional development is characterized as being ongoing, intensive, and connected to practice and school initiatives; its main focus is on the teaching and learning of specific academic content; and it constructs strong professional relationships among teachers."

Considering these definitions, now the question is that to what extent these professional models are effective. Certain studies have shown that different modalities of professional development improved curricular knowledge and understanding in areas as diverse as reading comprehension and

science, as well as fostering of student motivation (Ermeling, 2010; Frey & Fisher, 2009; Levine & Marcus, 2010).

According to a study done by Ponte, Ax, Beijaard, and Wubbels (2004) development of knowledge in teachers can be partially seen in a study of the effect of action research on three major areas of teacher cognition: ideological (norms, values), empirical (connection between phenomena) and technical (methods); among these three, only the technical knowledge has been improved. Other results were also found on teachers' conceptions and practices relating to student self-regulated learning (Hoekstra, Brekelmans, Beijaard, & Korthagen, 2009). Moreover, changes in teacher beliefs or expectations of student achievement in societies with low-income, was an outcome maintained over two years of professional development programs (Timperley & Phillips, 2003). Similarly Cantrell & Callaway (2008) observed that the effects of experience in developing skills for literacy instruction resulted in high and low implementers. The differences between them were explicated based on their levels of general, personal and collective efficacy.

More with regard to the efficiency of the different development models, again Bailey, Curtis, and Nunan (1998) investigated the reflective teaching and professional development by practicing three different models comparatively. They concluded that professional development is a matter of self-development. Just as teachers cannot do the learning for the learners, teacher educators cannot do the learning for pre- or in-service teachers. Additionally, they believed that the self-selected use of any of the three activities could lead to powerful professional development, and as emphasized by them, this is especially the case when the data are shared with trusted colleagues.

Different types of TPD

According to two prevalent studies by Gaible and Burns (2005, 2006) TPD can be explained and classified into three broad categories:

1) *Standardized TPD*: the most centralized approach, best used to disseminate information and skills among large teacher populations. This approach typically represents a centralized approach,

involving workshops, training sessions and in many cases the cascade model of scaled delivery. Standardized, training-based approaches generally focus on the exploration of new concepts and the demonstration and modeling of skills.

2) *Site-based TPD*: intensive learning by groups of teachers in a school or region, promoting profound and long-term changes in instructional methods. Site based TPD often takes place in schools, resource centers or teachers colleges. Teachers work with local (“in house”) facilitators or master teachers to engage in more gradual processes of learning, building master of pedagogy, content and technology skills. Site based TPD often focuses on the specific, situational problems that individual teachers encounter as they try to implement new techniques in their classroom practices. Site-based models tend to:

- (a) Bring people together to address local issues and needs over a period of time
- (b) Encourage individual initiative and collaborative approaches to problems
- (c) Allow more flexible, sustained and intensive TPD
- (d) Provide ongoing opportunities for professional learning among a single set of Teachers

3) *Self-directed TPD*: independent learning, sometimes initiated at the learner’s discretion, using available resources that may include computers and the Internet. In self-directed TPD, teachers are involved in initiating and designing their own professional development and would share materials and ideas as well as discuss challenges and solutions. In self-directed TPD, teachers are involved in initiating and designing their own professional development and would share materials and ideas as well as discuss challenges and solutions.

Observation

Regarding class observation, the literature is also extensive and insightful. To begin with, Freeman and Cornwell (1993) indicated that teachers can learn from experts by taking courses, or undergoing programs of staff training in new techniques and approaches, from formal meetings, discussions, performance appraisals, clinical supervision, students, or peer observation.

Gebhard (1999, p. 35) defined classroom observation as “the nonjudgmental description of classroom events that can be analyzed and given interpretation.” Furthermore, according to Gebhard, the central aim of classroom observation is to develop our self-awareness by seeing ourselves in others’ teaching.

However, from a traditional point of view, observation is often applied to emphasize how to do things, that is, the mastery of specific types of teaching behaviors or techniques that experienced teachers employ, so that novice teachers can apply them in their own teaching (Richards, 1998; Day, 1990).

In this way, an important point made by Fanselow (1977) about class observation is that the same classroom event or behavior can be seen differently when observers hold different views of teaching. Now if observation is linked to critical reflection, it can become a powerful exploratory tool for us to develop a deeper understanding of ourselves and help us make informed teaching decisions. This can further activate our “action-system knowledge” brought by Day (1990) and can keep us from blindly following what others say and do in their classes (Gebhard, 1999).

Action research

Action research is also a widely used approach to improving teaching skills. As Cohen and Manion (1985) pointed out, action research is “a small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention” (p. 174). In other words, action research involves teachers systematically changing some aspect of their teaching practice in response to some issue or concern that would pose as a problem to be addressed, collecting relevant data on the effects of changed practice, and interpreting and analyzing the findings in order to determine whether another intervention would be necessary (Bailey, Curtis, & Nunan, 2001, p. 134).

Moreover according to Lewin (1946), action research is “a comparative research on the conditions and effects of various forms of social action and research leading to social action”; this type of research uses “a spiral step,” each of which

is “composed of a circle of planning, action and fact-finding about the result of the action”.

On the other hand, looking at the nature of action research, O'Brien (2001) asserts that although action research has been referred to by different names such as participatory research, collaborative inquiry, emancipatory research, action learning or contextual action research, it is truly understood as “learning by doing” namely, a group of people encounter a problem; they do something to resolve it; they then see how successful their efforts are and if they are not satisfied with the result they can try it again.

From Carr and Kemmis's (1986) definition, McDonough (1993) proposes four characteristics of 'pure' action research as follows:

- It is participant-driven and reflective;
- It is collaborative;
- It leads to change and the improvement of practice not just knowledge in itself; and
- It is context-specific.

Furthermore, action research has also been defined and characterized by other researchers. For example, Ferrance (2000) defines action research as “a disciplined inquiry done by a teacher with the intent that the research will inform and change his or her practices in the future” (p. 1). While many types of action research are conducted in the classroom, common components include identifying a challenge, determining the current status and the changes to be made, changing one or more variables, monitoring results of the changes that were made, and reflecting on results to inform improvement (Finch, 2003).

Peer coaching

As for the definition of the term, peer coaching is described as a professional development method that has been shown to increase collegiality and improve teaching. It is a confidential process through which teachers share their expertise and provide one another with feedback, support, and assistance for the purpose of refining present skills, learning new skills, and/or solving classroom-related problems (Dalton and Moir, 1991).

According to Joyce & Showers (1995), the processes in peer coaching build trust and develop strong professional relationships between trusted colleagues. Peer coaching is often used as a

professional development method in K-12 teaching and administration situations. It has been shown to increase collegiality and improve teaching.

In this regard, many coached instructors have reported positive changes in their behaviors, when provided with an appropriate program that insures accountability, support, companionship, and specific feedback over an extended period of time (Licklider, 1995; Tschantz, & Vail, 2000). The results of a study done by Vacilotto & Cummings (2007) with pre-service teachers, indicated that peer coaching fostered the exchange of teaching methods and materials, cultivated the development of teaching skills, and encouraged participants to reflect upon their own teaching methods and styles.

There is a controversy over the extent to which the coaching practices can be beneficial in academic and educational settings. For example in one study, Richard (2003) pointed out that coaching, which was part of a broader package of reforms, was producing test score improvements in the San Diego School District. Similarly, Guiney (2001) looked at the impact of literacy coaching in Boston Public Schools and concluded that, “several schools have had dramatic increases on parts of the state's difficult test, the MCAS [Massachusetts Comprehensive Assessment System]—increases that can be directly connected to teachers' work that was undertaken with their coaches” (p.12).

Methodology

Participants

In this study the researcher selected 15 English teachers, almost equally selected from both genders, that is, 8 males and 7 females. The participants had either a B.A or M.A degree in English with an average of 7 years of teaching English to adult EFL learners. The ages of these teachers range from 23 to 30, making the sample fairly young. Moreover, the participants were chosen from three private language institutes in the city of Khash with almost the same educational facilities and physical conditions. They all speak Persian as their first language and English as a foreign one. Furthermore, they are currently teaching English to Iranian EFL learners at almost all proficiency levels. Regarding the sampling method,

the convenience sampling model was employed in the present study.

Instrumentation

As for the purpose of this study, The English Language Teacher Competency Test (ELT-CT) designed by Pishghadam (2010) was used to measure teachers' efficiency and skills (Appendix 1). The testis comprised of 61 items with the reliability of 0.64, calculated by using Cronbach alpha. Moreover, the ELT-CT has been validated by employing Rasch analysis version 3.66. Fit statistics showed that all items fit the Rasch model based on the criteria given by Bond & Fox (2007). The construct validity and the predictive validity of this test have also been declared by Pishghadam and Khosropanah (2011a, 2011b). Each item in the test has four choices a, b, c and d, and there is one correct answer for each item, meaning that each participants will receive a score out of 61. It takes around one hour to answer the test items.

Additionally, a small questionnaire containing 5 questions was given to the participants in order to document their feedback and attitudes towards the effectiveness of the very model they have practiced to develop their professional skills.

Procedures

Data collection

The participants in the study were divided into three groups, each containing 5 teachers. In order to make sure that the participants in each group are fairly homogeneous, they were selected in a way that the mean scores of their ELT-C test were found to be very similar, meaning that they were almost at the same level of language teaching competency before the treatment. For each of these groups one specific professional development model was assigned during the treatment period. In group A the participants were required to practice "peer coaching" for about 20 minutes before and/or after their classes for at least three days per week and within a period of four weeks. During this stage, the participants had to share and discuss their class experiences and tried to benefit from each other's instructional skills and expertise. The participants in group B were asked to "observe" the classes of other teachers, take notes during their observations and further reflect on their notes, 3 times per week

and again for a period of four weeks. Similarly, the teachers in group C tried to solve certain problems in their classes by resorting to "action research" techniques, with the same frequency and the same duration as those of group A and B. In so doing, the participants changed some aspects of their instruction in order to solve a particular problem and then reflected on and analyzed the produced results. The researcher then checked if the participants were following the required practices by calling or texting them every day during the treatment stage.

Regarding the posttest, once the treatment period was over, each of the participants took the ELT-C test again to determine if their teaching competency had improved by any degree. Beside this, the participants started a new class with students of the same level, i.e. intermediate in their institute in order to see if they had practically changed in their teaching skills. The students in these classes were all placed by using an OPT (Oxford Placement Test).

During the last stage, the teachers provided their feedback and attitudes towards the instruction quality and the effectiveness of the professional model they had practiced in the specified questionnaires. Along with the questionnaires, the researcher interviewed all the 15 participants within 2 or 3 days after the final session with the same 5 questions as in the questionnaire. Each interview took around 10 minutes.

Data analysis

In the quantitative section of the analysis, the mean scores from the ELT-C tests after the treatment period were calculated for each of the three groups, that is, A, B, C. The mean scores were then compared by ANOVA to find out if there existed a meaningful difference in the progress rate of the three groups (inter-group comparison). Also, a paired samples T-test can be applied in order to calculate any significant intra-group progress by comparing the mean scores of the tests before and the tests after the treatment for each group separately. This was done to figure out which group of teachers underwent a noticeable change in their teaching effectiveness or competency.

Furthermore, the feedbacks from both the questionnaires and the interviews were analyzed,

classified and interpreted comparatively among the three groups to make sure which group had achieved the most improvement during the professional development model under study. In addition, the results from this section revealed the teachers' attitudes towards the professional models they had practiced during the treatment stage. Finally, based on the results from the experiment together with the qualitative analysis of the interviews and the questionnaires the researcher

decided whether any of the development models had been more effective than the other two.

Results and discussions

The quantitative findings

Table 1 below provides descriptive statistics for the scores obtained from the ELT-CT test. Moreover, it includes the mean scores and standard deviations of the pre-test results in all three groups. On the other hand, table 2 shows the result from the one way ANOVA, comparing the means of the three groups in the pre-test.

Table 1. The mean scores and standard deviation of the test scores in the pretest.

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					observation	5		
action research	5	40.2000	6.97854	3.12090	31.5350	48.8650	31.00	48.00
peer coaching	5	41.8000	5.21536	2.33238	35.3243	48.2757	37.00	49.00
Total	15	41.8667	7.86372	2.03040	37.5119	46.2214	26.00	54.00

Table 2. The results from the way ANOVA comparing the means of the 3 groups in the pretest.

ONE WAY ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.933	2	14.467	.207	.816
Within Groups	836.800	12	69.733		
Total	865.733	14			

As can be seen the mean scores of the three groups in the pretest are fairly similar ranging from 40.2 to 43.6. To see whether these differences are statistically significant or not, the ANOVA was run. As Table 5 shows, there is no statistically significant difference between the three groups at time of pretest ($F= 0.207, df= 2, p>.05$). Therefore, it can be implied that the two groups are homogeneous.

As for the results from the posttest, Table 3 provides descriptive statistics for the scores obtained from the ELT-CT test after the treatment period. The table includes the mean scores and standard deviations of the posttest results in all three groups. Additionally, table 4 shows the result from the one way ANOVA, comparing the means of the three groups in the posttests.

Table 3. The mean scores and standard deviation of the test scores in the posttest.

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Observation	5	45.4000	9.71082	4.34281	33.3424	57.4576	31.00	56.00
action research	5	57.6000	1.14018	.50990	56.1843	59.0157	56.00	59.00
peer coaching	5	44.4000	5.85662	2.61916	37.1280	51.6720	38.00	53.00
Total	15	49.1333	8.70030	2.24641	44.3153	53.9514	31.00	59.00

Table 4. The results from the way ANOVA comparing the means of the 3 groups in the posttest.

ONE WAY ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	540.133	2	270.067	6.237	.014
Within Groups	519.600	12	43.300		
Total	1059.733	14			

As indicated in table 3, it is evident that the mean scores of the three groups in the posttest are not analogous, ranging from 44.4 to 57.6. To see whether these differences among the three groups are statistically important or not, again the ANOVA was run. As shown in table 4, there is a statistically significant difference between the three groups at time of posttest ($F= 6.237$, $df= 2$, $p<.05$). Therefore, since the mean of the action research group ($M= 57.6$) is higher than those of the other two groups ($M= 45.4$, $M= 44.4$), it can be concluded that the treatment in the action research group has had a more noticeable positive effect on participants'

teaching performance. This, further, means that the participants in the action research group has undergone a more noticeable change during the treatment and through the practices of action research model.

Moreover, regarding the changes within each group, the results from the paired samples test are given below in order to see if there exists a noticeable difference from the pretests to the posttests in each of the three groups separately. In other words, the statistics below show whether the treatment in each experimental group has brought about any significant change or not. Tables 5 and 6 provide this information as follows:

Table 5. The results from the Paired Samples Statistics, indicating the means and the standard deviations of the pretest and posttest within each group.

Paired Samples Statistics						
Group			Mean	N	Std. Deviation	Std. Error Mean
Observation	Pair 1	pretest	43.6000	5	11.54556	5.16333
		posttest	45.4000	5	9.71082	4.34281
action research	Pair 1	pretest	40.2000	5	6.97854	3.12090
		posttest	57.6000	5	1.14018	.50990
peer coaching	Pair 1	pretest	41.8000	5	5.21536	2.33238
		posttest	44.4000	5	5.85662	2.61916

The results of the paired sample test in Table 6 clearly show that there is a significant difference in the means of the pretest and posttest of only two groups, that is, the action research group ($t=-5.718$, $df=4$, $p<.05$) and the peer coaching group ($t=-2.804$, $df=4$, $p<.05$). However, the results for the observation group indicates that the difference is not statistically significant ($t=-1.686$, $df=4$, $p>.05$). These results point to the fact that the treatment has been effective in only the action research and peer coaching groups while the observation group has seen a minor change. Put another way, the influence of the three professional models examined in the three experimental groups are not the same

with action research having the biggest impact and observation the lowest impact.

Likewise, as mentioned earlier in this section, the comparison of the means of the posttest also showed a larger difference on the part of the action research group. In this respect, the result of the one way ANOVA revealed that the mean of the action research group is statistically higher than the other two groups, and although the three groups were homogeneous at the pretest stage, they had changed in a way that at the posttest stage they were not homogeneous again ($F= 6.237$, $df= 2$, $p<.05$).

Table 6. The results from the paired samples test, comparing the means of the pretest and posttest within each group.

Group		Paired Samples Test								
		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)	
Mean	Std. Deviation	Std. Error Mean	Lower	Upper						
observation	Pair 1	pretest - posttest	-1.80000	2.38747	1.06771	-4.76443	1.16443	-1.686	4	.167
action research	Pair 2	pretest - posttest	-17.40000	6.80441	3.04302	-25.84879	-8.95121	-5.718	4	.005
peer coaching	Pair 3	pretest - posttest	-2.60000	2.07364	.92736	-5.17477	-.02523	-2.804	4	.049

The qualitative findings

After analyzing and studying all the information provided by the participants in the questionnaires and the interviews across all three groups (observation, action research and peer coaching), it was revealed that the peer coaching group has had the weakest influence on the actual practice of the teachers in the groups with few particular problems and situations where the model has been effective. In contrast, the action research group reflected a fairly noticeable change in their instructional patterns and behavior as they all experimented with something new and found on their own personal discovery, which in turn contributed directly to the reinforcement of the things they acquired through practical research techniques. Observation, on the other hand, came second in this ranking with an average degree of effectiveness on the overall performance of the teachers in that group. In spite the fact that the participants in this group noticed and probably learned a great deal from their observations, not all of the acquired points were put into practice in their real classroom practice. It appears from the results that most teachers are more inclined towards personal discoveries and things they believe works best in their own context of teaching and learning. Moreover, what they see is effective in the work of their peers during observations or coaching is not always convincing enough to encourage them to change an already existing and probably working practice in their teaching approaches. However, observation was found to be more effective than discussing problems with peers probably because what teachers see is

workable and viable in a real language class leaves a more fundamental impression, which may later turn into practice. Furthermore, it should be noted here that the above findings are merely what the participants have reflected in their report and during the interviews. In this respect the participants' attitudes and feedback enlightened many aspects of these three professional development models, as they were practically tested under real classroom conditions. Regarding the action research group, it was also found that the frequency of experimenting with such models is fairly lower compared to the other two models, which as reported, was more often practiced and required on the part of EFL teachers in private language institutes. In other words, action research strategies, though more effective than peer coaching and classroom observation in reality, are less commonly performed by teachers and encouraged by educational supervisors.

Other research studies into this field also revealed the effectiveness of most professional development models (e.g. Ermeling, 2010; Frey & Fisher, 2009; Levine & Marcus, 2010). The results are also in accordance with other studies such as the study done by Ponte, Ax, Beijaard, and Wubbels(2004)and Hoekstra, Brekelmans,Beijaard, &Korthagen(2009). Moreover, regarding thechanges in teacher beliefs Timperley& Phillips (2003)'s study was similar to the findings of this paper.Two other studies, Nunan (1998) and Cantrell & Callaway (2008) also confirmed that teacher professional development models are effective with differing degrees.

Conclusion

The results from the teachers' questionnaires were not entirely in accordance with the statistical findings. The results in this section of the test agreed with the previous one in that, action research was again the most influential model according to the participants' feedback and opinion. In this regard, the participants' attitude and feedback towards action research strategies were more positive and noticeable compared to those of peer coaching and class observation. The highest degree of change and improvement was reflected in this group, the action group that is. Furthermore, the qualitative results suggested that class observation came second in its degree of effectiveness and that the participants in this group were able to learn tangible important things through observation and comparison. Finally, the peer coaching model was believed to have the least impact on the actual practice of the teachers as they claimed their personal beliefs did not allow them to agree with their peers in most cases. This was in contrast to what was found in the statistical findings where peer coaching was reported to have a fairly noticeable effect on the instructional behavior of the participants. In this case it appears that there exists a certain degree of difference between what had happened in reality in the participants' teaching practice and what they believed had influenced them in their classes. Moreover, what was reported in teachers' questionnaires is true in the sense that they could have developed a positive sense towards that specific professional development model.

As a result, regarding the most important question of the present study, it could be claimed that action research has had the highest degree of effectiveness among the other two professional models with both quantitative and qualitative evidence supporting it. Concerning the other two models, it appears that the findings are somewhat contradictory across the quantitative and qualitative data. Yet, based on the former, it is true to say that peer coaching comes second in its degree of effectiveness and class observation the last with the least reported impact on the participants' teaching performance. In this study the teachers' questionnaires were meant to elicit the participants' feedback and attitude

towards the teacher professional development models; thus, the findings would be based on the test results after and before the treatment periods. According to this information, it appears that action research strategies are more effective in manipulating teachers' patterns of class behavior and further can enhance teachers' confidence in some cases. The ability to experiment with new practices, many of which might be against teachers' old beliefs and personal theories, provides a good chance for them to stay dynamic on their profession and also remove the wrong old habits which may keep them from improving their teaching skills. The action research practices also develop a sense of courage in the teachers as they feel comfortable with accepting new ideas.

Regarding the implications, the findings can be used widely in teacher training programs. On the one hand the findings can help educational supervisors to help improve the quality of teaching and learning in academic circles and private language schools. Supervisors can provide teachers with more effective teacher professional development models in order to improve their teaching skills. Class observation, peer coaching and action research strategies can be encouraged more widely among teachers.

References

- Adler, J.(2000). Social practice theory and mathematicsteachereducation: A conversation between theory and practice. *Nordic Mathematics Education Journal*,8 (3), 31-53.
- Bartlett, L. (1990). Teacher development through reflective teaching.In J. C. Richards & D. Nunan (Eds.), *Second language teacher education* (pp.202-214). New York: Cambridge University Press.
- Bailey, K. M. (1991). The processes of innovation in language teacherdevelopment: What, why and how teachers change. In J. Flowerdew, M. Brock& S. Hsia (Eds.), *Perspectives on second language teacher education* (pp. 253-282). Kowloon, Hong Kong: City Polytechnic of Hong Kong.
- Bailey, K. M., Curtis, A., & Nunan, D. (1998). Undeniable insights: The collaborative use

- of three professional development practices. *Tesol Quarterly*, 32(3), 159-169.
- Bailey, K. M., Curtis, A., & Nunan, D. (2001). *Pursuing professional development: The self as source*. Boston, MA: Heinle & Heinle.
- Burns, A. (1996). Collaborative action research and curriculum change in the Australian Adult Migrant English Program. *TESOL Quarterly*, 30, 591-598.
- Carey, K. (2004). The real value of teachers: Using new information about teacher effectiveness to close the achievement gap. *Thinking K-16*, 8(1), 3-42.
- Cohen, L., & Manion, L. (1985). *Research methods in education*, (2nd ed.). London: Croom Helm.
- Cohen, D. K., Raudenbush, S. W., & Ball, D. L. (2003). Resources, in-struction, and research. *Educational Evaluation and Policy Analysis*, 25, 119-142.
- Dalton, S., & Moir, E. (1991). "Evaluating LEP teacher training and n-service programs." Paper presented at the Second National Research Symposium on Limited English Proficient Student Issues. Washington, DC.
- Darling-Hammond, L., Ruth Chung Wei, R., & Frank Adamson, F. (2010) *PROFESSIONAL LEARNING IN THE UNITED STATES: Trends and Challenges; Part II of a Three-Phase Study*. The Stanford Center for Opportunity Policy in Education
- Day, R. R. (1990). Teacher observation in second language teacher education. In J. C. Richards, & D. Nunan, (Eds.), *Second language teacher education*. New York: Cambridge University Press.
- Diaz-Maggioli, G. (2004). A passion for learning: Teacher-centered professional development. Alexandria, VA: Association for Supervision and Curriculum Development.
- Ermeling, B. A. (2010). Tracing the effects of teacher inquiry on classroom practice. *Teaching and Teacher Education*, 26(3), 377-388.
- Fanselow, J. F. (1977). Beyond Rashomon: Conceptualizing and observing the teaching act. *TESOL Quarterly*, 11(1), 17-41.
- Freeman, D. (1989). Teacher training, development and decision-making. *TESOL Quarterly*, 23(1), 27-45.
- Frey, N., & Fisher, D. (2009). Using common formative assessments as a source of professional development in an urban American elementary school. *Teaching and Teacher Education*, 25(5), 674-680.
- Gaible, E., Burns, M. (2005). *Using Technology to Train Teachers [Online]*. Available from infoDEV: <http://www.infodev.org/en/Publication.13.html>
- Gebhard, J. G. (1999). Seeing teaching differently through observation. In J. G. Gebhard & R. Oprandy (Eds.), *Language teaching awareness: A guide to exploring beliefs and practices* (pp. 35-58). New York: Cambridge University Press.
- Haycock, K. (1998). Good teaching matters . . . a lot. *Thinking K-16*, 3(2), 3-14.
- Hoekstra, A., Brekelmans, M., Beijaard, D., & Korthagen, F. A. J. (2009). Experienced teachers' informal learning: Learning activities and changes in behavior and cognition. *Teaching and Teacher Education*, 25, 363-373.
- Huberman, M. (1989). *La vie des enseignants – Evolution et bilan d'une profession*. Neuchâtel, Switzerland: Delachaux.
- Joyce, B., & Showers, B. (1995). *Student achievement through staff development*. White Plains, NY: Longman.
- Levine, T. H., & Marcus, A. S. (2010). How the structure and focus of teachers' collaborative activities facilitate and constrain teacher learning. *Teaching and Teacher Education*, 26(3), 389-398.
- Lewin, K. (1946). Action research and minority problems, *Journal of Social Issues*. 34(2).
- Licklider, B.L. (1995). *The effects of peer coaching cycles on teacher use of a complex teaching skill and teachers' sense of efficacy*. *Journal of Personnel Evaluation in Education*, 9(1), 55-68.
- McDonough, J. (1994). A teacher looks at teachers' diaries. *ELT Journal*, 28(1), 57-65.

- Nunan, D. (1992). The teacher as decision-maker. In J. Flowerdew, M. Brock & S. Hsia (Eds.), *Perspectives on second language teacher education* (pp. 135-65). Kowloon, Hong Kong: City Polytechnic of Hong Kong.
- O'Brien, R. (2001). *An overview of the methodological approach of action research*, Universidade Federal da Paraíba, João Pessoa.
- Pishghadam, R., & Khosropanah, F. (2011a). The predictive validity of the English Language Teachers Competency Test. *International Journal of Education*, 3(1), p.5.
- Pishghadam, R., & Khosropanah, F. (2011b). Examining the construct validation of the English Language Teachers Competency Test. *Journal of International education studies*. 4(3), p.6.
- Ponte, P., Ax, J., Beijaard, D., & Wubbels, T. (2004). Teachers' development of professional knowledge through action research and the facilitation of this by teacher educators. *Teaching and Teacher Education*, 20(6), 571-588.
- Pontz, B. (2003). *Beyond rhetoric: Adult learning policies and practices*. Paris: Organization for Economic and Cooperative Development.
- Raths, J. D., & Kathz, L. G. (Eds.). (1986). *Advances in teacher education (Vol.2)*. New Jersey: Ablex Publishing.
- Richards, J. C. (1998). *Beyond training*. New York: Cambridge University Press.
- Sparks, D. (2002). *Designing powerful staff development for teachers and principals*. Oxford, OH: National Staff Development Council.
- Tchantz, J.M., & Vail, C.O. (2000). *Effects of peer coaching on the rate of responsive teacher statements during a child-directed period in an inclusive preschool setting*. *Teacher and Special Education*, 23, 189-201.
- Timperley, H. S., & Phillips, G. (2003). Changing and sustaining teachers' expectations through professional development in literacy. *Teaching and Teacher Education*, 19(6), 627-641.
- Vacilotto, S., & Cummings, R. (2007). Peer Coaching in TEFL/TESL Programmes. *ELT Journal*, 61(2), 153-160.
- Wallace, M. J. (1991). *Training foreign language teachers: A reflective approach*. New York: Cambridge University Press.