

The Effect of High School English Teachers Awareness of Pedagogical Competence on Students' Learning Achievements

Ghasem Aghajanzadeh Kiasi, Corresponding author, Associate Professor, Rasht Branch, Islamic Azad University, Rasht, Iran, Email: aghajanzadeh@iaurasht.ac.ir

Parviz Maftoon, Associate Professor, Science and Research Branch, Islamic Azad University, Tehran, Iran, Email: pmaftoon@srbiau.ac.ir

Abstract

The study examined the impact of high school English teachers' awareness of pedagogical competence on student learning. A psychometric measurement instrument of English language teachers' pedagogical competence (ELTPC) was first developed through factor analysis with 320 high school teachers in Guilan, northern Iran. Based on the developed instrument, 36 teachers were divided into two groups of aware and unaware teachers of pedagogical competence (PC) according to Contrasting Groups Method. Then, 160 high school third graders received instruction from the aware and unaware teachers for 7 weeks. Finally, a survey regarding the teachers' implementation of pedagogical competence in classrooms was conducted with 30 students. The findings showed that the students in the aware teacher group outperformed the students in the unaware group of teachers. Although based on the survey results, the aware teachers were reported to act better with regard to the students' learning achievements, they were not reported as highly practicing the pedagogical competence. The findings can be practically used by teachers, teacher educators, and education administrators.

Keywords: English Teachers, Awareness of Pedagogical Competence, High School Students

1. Introduction

Language teachers' awareness of PC has always been the heart of students' language learning and, as Apelgren and Giertz (2010) argue, has played a vital role in students' learning achievements and performance. Teachers' awareness-raising is applied in a cyclical process, in which teachers continuously monitor, evaluate, and revise their practice, and thereby, creatively mediate developed frameworks for teaching and learning. Teachers' awareness of the language teaching situation in certain contexts makes them think and rethink of their practice and attune their teaching accordingly; their awareness results in reflection on their pedagogy, and PC influences language teaching performance. In language teacher education, Johnstone (2006) notes that reflective teaching has been put forward as a way out of the teacher's dilemma and as a counteraction against the influences of "centralization and control" in which "teachers are seen simply as deliverers of a fixed curriculum" (p. 661) and are not valued as professionals who test out their interpretations and solutions of problems.

Not only should teachers be aware of what to teach, but also they should be aware of why and how that subject should be taught. As Li (2002) argues, developing pedagogical awareness and having an in-depth understanding of teaching and learning theories can help teachers convey the subject matter effectively to students. Any successful educational system requires that the teachers' awareness of PC be high, since the awareness of the competent teachers and the value of this competence as a qualification are required as very important components of proficient teaching.

In the history of ELT, teachers' awareness of PC has always been the focus of attention for researchers and institutions. The traditional view of ELTPC is an issue of teaching practice; that is, teachers develop teaching situations to

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function and create conditions for learning through knowledge, methods, and actions. Altering the traditional concept of PC that considers it as merely teaching skill or ability, Thomas (1987) adds more dimensions to ELTPC. To him, teaching is not the only determining factor; teachers' managerial and disciplinary, preparatory and planning, and assessment and monitoring abilities are also critical. Furthermore, Olsson, Martensson, and Roxa (2010) certify that PC enjoys a broad concept than that of mere teaching skill. To them, PC involves four crucial facets: (1) pedagogical practice or actual teaching activities related to student learning; (2) teaching and student learning being observed; (3) theoretical knowledge of teaching and student learning; and (4) planning as a means for improved pedagogical practice. Yet, to the researchers, the concept of PC is so broad and comprehensive that it requires a multilateral dimension in the context of the broader curriculum and longer-term instructional plans.

As such, the practice of teaching and learning needs to be monitored and assessed in an ongoing process of assessment (Inbar-Lourie, 2013). Assessment, in fact, reflects all teachers' demanding job of preparation for teaching the subjects in a manageably organized classroom in order to make sure if what has been done in a course is of a satisfactory outcome.

In addition, the English language teaching profession is developed through a scientific attitude toward the practice of teaching that allows the attitude to take a central role in an interaction with the overall pedagogical knowledge (Apelgren & Giertz, 2010). Moreover, teachers need to own the belief that represents the way they see the English language, the stand they take against it, the belief they carry out according to the importance of language skills and sub-skills, and most importantly, their belief in the instructional objectives designated for the course. Xu (2012) states that teachers' deep-rooted beliefs about language learning would infuse into their classroom performances more

than a particular methodology and that teachers' beliefs and attitudes unconsciously drive teachers to adopt different teaching-learning methods.

2. Literature Review

In the literature, teaching quality and students' learning achievement have been mostly attributed to teachers' awareness. A study conducted by Strauss and Sawyer (1986) revealed that teachers' awareness and the quality of teachers had a major impact on student learning. Similarly, Wright and Bolitho (1993) noted that teachers' awareness might have a significant positive impact on preparing lessons, evaluating and adapting materials, interpreting and designing syllabi, and also assessing learner's performance. Ellis (1997) believes that awareness-raising practices are needed to develop teacher's conscious understanding of the principles of L2 teaching and the practical techniques that can be used in different kinds of lessons. Andrews (2007), however, believes that teachers' language awareness has no potential to exert a powerful effect upon teaching effectiveness, at least as far as L2 teachers are concerned. Andrew found that there were inadequacies in the knowledge of grammar and general understandings of the language of prospective and practicing language teachers.

In addition, according to Olsson, Martensson, and Roxa (2010), teachers' pedagogical awareness is directly related to teachers' in-classroom decision-making, classroom management, teaching methods, and assessment techniques as important elements of PC. As asserted in OECD (2012) report, conditions such as students' behavior, the nature of the instructional task, and the classroom and school environment, along with teachers' characteristics and cognitive processes can impact the pedagogical decisions made by teachers. Thus, quality teaching hinges on the quality of the pedagogical awareness held by teachers.

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In yet another study, Allen and Swearingen (2002) found that mediated instruction resulted in progress from one stage of pedagogical awareness to another and is important for both in-service teachers and pre-service teachers.

Similarly, teachers' awareness is directly related to teachers' practices, and their beliefs about teaching, what language is, and how it should be learned. Gebhard and Oprandy (1999) believe that awareness is related to discovering and rediscovering teaching beliefs that contribute to understanding classroom practices. Thus, awareness provides teachers with a better basis for figuring out the how and what of their teaching and also with the pertinent perceptions that play a main role in their thoughts. Accordingly, teacher belief used as a tool to tackle the problems with the questions of teaching and learning possesses (Kalaja, 2011), is a very important component of PC that is missing in previous studies.

Therefore, an improved awareness of the PC and an understanding of what teachers are doing while working are needed. Lindahl (as cited in Larsson, 2009) believes that teachers gradually become aware of their actions with regard to desirable or undesirable students' learning achievements. This suggests that increasing awareness of being reflective both regarding themselves as professionals and in relation to the students is necessary. According to Larsson (2009), teachers' awareness about their doing and thinking make them take further steps in their professional development. Sheridan and Williams (2007) also mention the importance of reflective ability as an integral element of teachers' awareness while teaching high quality and using a variety of ways to enhance student learning at the same time.

It is worth mentioning that students' achievement is influenced by so many personal and contextual factors including teacher quality. The notion raised here might seem to be somehow far-fetched at first sight. However, considering all

possibly related components of ELTPC, namely preparation, management, teaching, assessment, subject mastery, attitude, and belief mentioned implicitly above, the researchers intended to investigate the degree of teachers' awareness of PC through a researcher-made questionnaire and measure the impact of their awareness on learner's learning. Accordingly, the research question is:

1. Is there any statistically significant difference between high school English language teachers' awareness of PC and their learners' learning achievement?

3. Method

3.1. Participants

The population of the present study consists of four groups of participants (teachers and students). The first two groups included high school English teachers. The first group was chosen through the probability sampling method (Stage cluster sampling) from the province of Guilan divided into four clusters of North, South, East, and West. From each cluster, 8 towns were selected as a sample (32 towns, 41.5 %), as a stratified sample of the study. From each town, four high schools were randomly selected from different parts of the towns. In each high school, two or three teachers were randomly selected. The final sample population of the research consisted of 320 in both boys and girls schools. The teachers were of both genders with an average of 14.5 years of teaching experience and an average age of 38.5, with different university degrees from B.A (106 respondents, 29%), M.A.(116 respondents, 36.25 %.) Ph.D. candidates (21 respondents (6.5%), and Ph.D. holders (18 respondents, 5.6 %) in ELT. The second teacher group of participants consisted of 36 teachers chosen randomly from the third-grade high school English language teachers practicing teaching in Rasht city with an age range of 25-45. They were of both gender (20 female &

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16 male) in TEFL (15), English Translation (5), English Literature (2), and Linguistics (14). The first group of students included 160 high school third graders of both genders chosen based on their average score from the 36 teachers' classes. The second student group referred to 30 male and female students chosen randomly from the first group of students.

3.2. Instrument and Procedure

To answer the research question, the following instruments and procedures were utilized.

3.2.1. ELTPC Instrument

In the first phase of the study, an ELTPC instrument (See appendix A) on a five-point Likert scale was developed through a comprehensive investigation and analysis of the extant literature.

The researchers employed exploratory factor analysis to explore the possible underlying structure of interrelated variables (Child, 2006) of ELTPC, and to determine the number of common factors influencing the set of measures that contributed to establishing the strength of the relationship between each factor and each observed measure (Cokluk & Kayri, 2011). The ELTPC constructs intended for EFA were preparation, management, teaching, subject mastery, assessment, attitude, and belief with 9, 8, 9, 9, 8, 9, 8 variables, respectively.

The questionnaire was, then, piloted on sixty-five high school English teachers to estimate its reliability coefficient through Cronbach's alpha that showed a reasonable reliability index of 0.88. Having piloted the questionnaire, the researchers administered it to 365 high school English teachers. Forty-five

teachers, however, failed to complete the questionnaire correctly, leaving 320 teachers with over 87% of the total population. The internal consistency of the questionnaire items was calculated through Cronbach's alpha to evaluate how each item could contribute to the variance of the instrument. The alpha value was 0.834, indicating that the instrument was internally reliable.

Concerning the validity of the instrument, the type of question, language, wording, and the order of items were checked based on the criteria of relevance, clarity, simplicity, and ambiguity. The iterative revisions of the instrument based on the seven experts' opinion produced a 60-item questionnaire. The ethics of questionnaire development and the related confidentiality were fully respected.

The researchers administered the 60-item questionnaire to 320 participants. It means the factor analysis contained 60 variables implying that the analysis was $320/60 = 5.3$ respondents for each variable, which conformed to the sample size criterion. Furthermore, carrying out an EFA required the researchers to follow the extraction principles which determined the number of factors to be retained for the constructs based on eight processes of gaining correlation matrix, communalities, total variance explained, scree plot, component matrix, rotated component matrix, and components transformation matrix via Principal Component Analysis (PCA).

Based on the results, it was found that the total number of variables supporting the constructs of the questionnaire was reduced to 53 from the initial 60 variables. The final version of the psychometrically developed measurement instrument that could measure the multidimensional aspects of the high school ELTPC consisted of 53 items which was neither short nor long.

3.2.2. Awareness of ELTPC

Following the development of the ELTPC instrument, in the second phase of the study, an experiment was conducted to measure the effect of the English language teachers' awareness of PC on student learning achievement. First, to figure out the degree of teachers' pedagogical awareness or unawareness, 44 out of 72 high school English teachers who were practicing teaching in the third grade were randomly selected. Then, based on the score gained from the teachers' responses to the questionnaire and according to Contrasting Groups Method of the cut score and standard-setting (Livingston & Zieky, as cited in Pitoniak & Cizek, 2016), teachers with a minimum of 216 responses and those with a maximum of 271 responses were divided into two groups of unaware teachers and aware teachers, respectively.

Since this dichotomous category was established based on test scores, it was advisable, according to Best and Khan (2006) to compare those at the top with those at the bottom and omit those near the middle of the distribution from analysis because they obscure the differences that may exist. This process helped the researcher achieve a sharper contrast between the two groups. Therefore, 4 teachers from either side (8 in total) in the middle of the distribution were omitted, and the data reached from 36 teachers were left for further analysis.

3.3.3. Student Experiment

Regarding the selection of the students, a total number of 224 high school students of the third grade (133 females and 91 males) with an average score of 'A' (17-20) were randomly selected from the 36 teachers' classes. To make sure that there was no pre-existing difference between the student participants regarding their general English proficiency and that the participants were

homogeneous in their general English, a pretest was administered to the students, which was a Kunkour (university entrance examination) test. It was chosen because it covered 3 lessons of the students' high school English book taught in the third grade. In addition, the Kunkour tests are supposedly believed to have enjoyed the approximate degree of reliability and validity although they were also estimated in the process of the present study (Appendix B). The pretest acted as a homogeneity test, as well. After the mean and the SD were calculated, the students with a score of 1 SD above and below the mean ($\pm 1SD$ from the mean) were selected as the participants of the study. Thus, a total number of 160 students, 80 in each group of teachers, were finally selected for the experiment. After a period of two months of instruction and a week after the last lesson, a posttest of materials covered in the instruction period was administered to the students to know the difference between the pretest and posttest scores of each participant and to measure the amount of improvement.

3.3.4. Student Survey

The experiment provided the present study with a very valuable report. However, the student evaluation of teaching practice would produce more accurate measures of teacher effectiveness if the experiment were combined with another assessment tool like a survey. In this way, as done in the present study, a structured survey was conducted with 30 students (18 males and 12 females). They were selected from both pedagogically aware and unaware teacher groups. Twenty close-ended items were adapted from the ELTPC instrument for the survey purpose. The survey questions were easily worded semantically and syntactically for the students' ease of understanding. However, they were rendered into Persian for students to avoid any misunderstanding and

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ambiguity. The students were covertly divided into two groups based on the teachers' categorizations of aware and unaware teachers.

Confidentiality was achieved by making the students sure that no teacher would see their responses to questions, and the result would only be used for the research purpose. All students reported answering the questions truthfully and that their relationship with their teacher did not affect their response. The data gathered on the students' assertions of their teachers' in-class performance were first collected utilizing tape recording and then transcribed for further analysis. Next, the students' answers to survey questions were categorized as 'yes', 'not sure', and 'no' that were codified as 2, 1, and 0, respectively, where applying and not applying the components of PC were indicated by 'yes' and 'no' code, and the students' doubt on the application of the components was codified as 'not sure' code (1).

Both first-level and second-level analyses were utilized for analyzing the survey results. In the first-level analysis, a description of the data- for example, how many individuals responded to each response alternative -was focused on. In the second-level analysis, the data were first analyzed (one question at a time), and the mean was obtained with the description of the data for questions.

4. Results

The descriptive statistics of the students' performance in the pretest as shown in Table 1 indicated that the means of two groups proved to be the same and standard deviations differed slightly. The small number of SD compared to the mean showed that the groups were homogeneous.

Table 1. Group Statistics of Students' Pretest Scores in AT and UT Groups

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Pretest	ATs*	80	12.5909	1.59341	.33972
	UTs	80	12.5652	1.34252	.27994

*ATs=aware teachers' group, UTs= students in unaware teachers' group

Furthermore, to make sure of the students' homogeneity and that there was no statistically significant difference between the groups at the start of the instruction, an Independent Samples *t*-test was run order to determine whether there is statistical evidence that the associated population means are significantly different.

Table 2. The Independent Samples *t*-Test of Pre-test in AT and UT Groups

	Levine's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Diff.		
								Lower	Upper	
pretest	Equal variances assumed	.926	.341	.059	43	.954	.0256	.4385	-.85863	.91001
	Equal variances not assumed			.058	41.10	.954	.0256	.4401	-.86323	.91461

As shown in Table 2, the two-tailed sig of the test above is '0.95' which is much higher than the assumed *p* value which is '0.05'. Therefore, it can be inferred that there was no significant difference between the groups at the start of the study by referring to the mean difference that is '0.02'.

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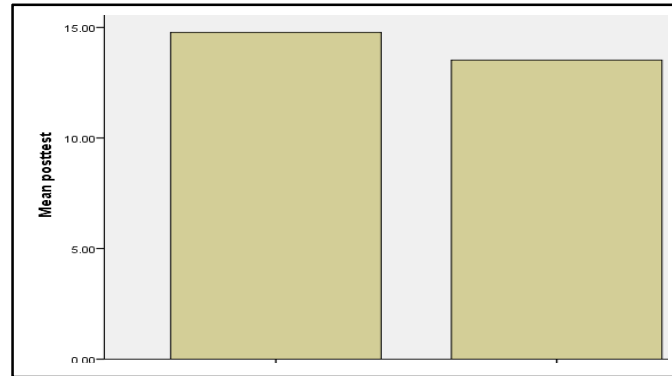


Figure 1. Achievement Posttest of AT and UT Groups

The students received the aware and unaware teachers' instruction that covered the three lessons of the students' third-grade high school English book. After a two-month instruction, a posttest was administered to the students a week after the last lesson. To determine if there was a significant improvement from the pretest to the posttest and to see whether there existed a significant difference between the two groups, an Independent Samples *t*-test was run on the post-test scores of the students.

The statistical analyses of the students' posttest scores (Table 3) were also run to compare and contrast the overall achievement of participants in the two groups and to check whether the teachers' awareness of PC was effective.

Table 3. Group Statistics of Students' Post-test Scores in AT and UT Groups

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Post-test	ATs	80	14.8758	1.68954	.32935
	UTs	80	13.4225	1.43951	.28192

The mean score obtained from the aware teacher (AT) group is higher than that of the unaware teacher (UT) group; the mean score of AT is almost 15 whereas the mean score of UT is approximately 13.5. The difference in mean score is believed to be significant.

As displayed in Figure 1, there exists a significant difference between the performances of teachers in aware and unaware groups, which suggests that the AT group has done significantly better. It needs to be mentioned that the data obtained from the posttest was normally distributed and means and the standard deviation were appropriate measures of tendency (Figure 2).

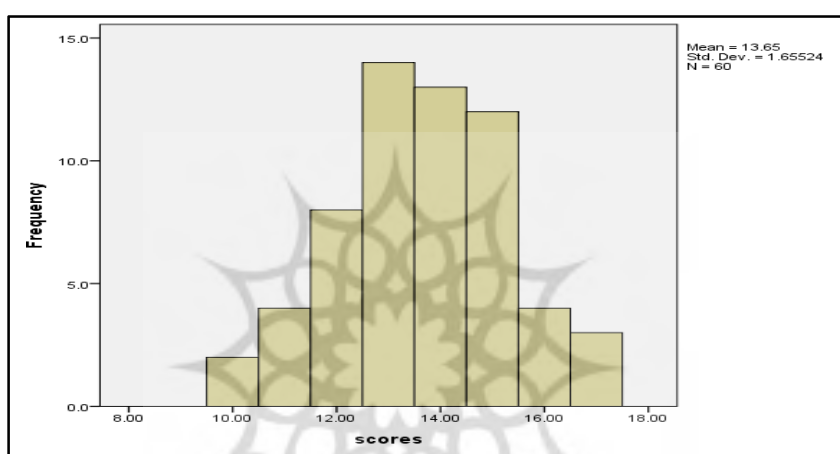


Figure 2. *The Normal Distribution of Scores*

As shown in Table 4, the amount of two-tailed sig, 0.015, is significantly less than the predetermined amount of p value, 0.05. It shows that there is a significant difference between the groups. Since the amount of t , 2.5, is higher than the critical value, it can be concluded that the group, which received instruction from pedagogically aware teachers, outperformed the group instructed by the pedagogically unaware teachers.

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Table 4. The Independent Samples t-Test of Posttest Scores in AT and UT Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Diff.	
								Lower	Upper	
posttest	Equal variances assumed	.115	.737	2.537	43	.015	1.25099	.4931	.2564	2.24558
	Equal variances not assumed			2.532	42.38	.015	1.25099	.4940	.2542	2.24770

Based on the result of the student experiment, there existed a difference between teachers' awareness of PC and the improvement of language ability in learners. The difference between the performance of students from the pre- to the posttest who had received instruction from the aware and unaware teachers of PC was a valuable finding. It indicated that teachers' awareness of PC played an important role in applying what they thought was appropriate in their teaching of the students. Thus, being aware or the factor of awareness, regardless of what they did in class, was a determining factor that affected teachers' teaching and resulted in fostering students' learning achievement.

The data collected from the survey as shown in Table 5 represented almost considerable differences among the students' assertions of their teachers' in-class performance in two AT and UT groups.

Table 5. Students' Answers to Survey Questions in AT and UT Group

Questions	Students in AT			Students in UT			Total
	Yes (2)	Not sure (1)	No (0)	Yes (2)	Not sure (1)	No (0)	
1. Making the class interesting?	10	1	4	8	2	5	30
2. Going back over each lesson?	8	3	4	7	2	6	30
3. Giving homework to do at home?	15	0	0	15	0	0	30
4. Making you feel good when you do good work?	7	4	4	5	4	6	30
5. Helping you with your problems in learning English?	8	1	6	5	3	7	30
6. Explaining lessons in a way that is easy to understand?	7	2	6	7	1	7	30
7. Using a variety of classroom activities and resources?	7	3	5	8	3	4	30
8. Being well prepared for class?	6	4	5	5	4	6	30
9. Encouraging students to raise questions?	9	2	4	5	3	7	30
10. Paying attention to all students equally?	8	2	5	7	4	4	30
11. Maintaining discipline?	8	4	3	12	1	2	30
12. Asking questions to see if you understand?	8	2	5	5	3	7	30
13. Beginning lessons by explaining what and why you are going to do?	10	1	4	8	2	5	30
14. Monitoring our work, to see if you understand the lesson?	8	3	4	8	2	5	30
15. Being very knowledgeable about the subject matter?	9	3	3	9	2	4	30
16. Giving tests and quizzes?	12	0	3	12	0	3	30
17. Encouraging cooperation.	10	1	4	8	2	5	30
18. Believing passing university entrance exam is the goal of learning English?	8	5	2	9	4	2	30
19. Believing being able to communicate is the goal?	8	4	3	7	2	6	30
20. Testing only the materials covered?	13	0	2	11	2	2	30
Total	179	45	76	160	46	94	300

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As Table 5 shows, the difference between 'yes' code (2) in two groups is 19, collectively, 179 ($\bar{x} = 11.93$) for AT and 160 ($\bar{x} = 10.66$) for UT, which is perceptible to show a statistically significant difference. This difference is somehow the same in 'no' code (0) with 18 differences. It means that students in AT and UT groups reported 25.33% ($\bar{x} = 5.06$) and 31.33% ($\bar{x} = 6.25$) of the components of PC not implemented by teachers. With regard to 'not sure' code (1), both groups had approximately the same percentage of 15% and 15.33%, respectively.

Comparing the number of responses given to the 'yes' code (2), the researchers found that questions 3, 6, 14, 15, and 16 received equal responses. That is, both groups had the same idea of their aware and unaware teachers. However, the big differences in the responses lay in question 9 with 4 differences and questions 4 and 12 with 3 differences for each. It indicated that teachers in the UT group showed a difference of 4 with AT teachers revealing that "*they maintained discipline in the classroom*" to a higher extent.

Questions 1, 4, 10, 17, and 20 were given two more responses by AT group compared to the UT group's responses. However, questions 7, 18, and 19 were given one more response by the UT group compared to AT students' responses meaning that teachers in the UT group showed a difference of one compared to AT group in "*using a variety of classroom activities and resources*", and "*believing that passing the university entrance exam is the goal of learning English in high schools*".

Regarding the 'no' code (0), the survey revealed that the questions 16, 18, and 20 received equal values of 3, 2, and 2, respectively; the questions 7, 10, and 11 received one less 'no' code in UT group than that of AT group. However, the other 12 questions received fewer 'no' code in the AT group compared to the same codes in the UT group. Questions 2, 4, and 12 were utilized less in the UT

group but were paid more attention to in AT group. Question 3 received 100 % of the students' responses of 'yes' code in both groups, and question 20 received 86% of the responses in the AT group and 73% in the UT group. However, questions 8 in AT and 4 and 5 in UT received the least percentage of 40% and 33%, respectively.

5. Discussion

The results showed that students in AT group reported a more positive aspect of the implementation of PC components in their classrooms. The result of the survey was in line with the result of the experiment revealing that pedagogically aware teachers outperformed the pedagogically unaware teachers, and pedagogical awareness fostered the students' learning mastery of their English language. It also proved that the awareness of the PC was an important factor leading to the utilization of PC in the action setting of the classrooms. However, the key point worth mentioning is that although the results were in favor of AT group in terms of implementing PC and students' learning achievement, they were not very much different from the results achieved by the UT group. Moreover, the AT group's implementation of PC, although aware of it, was not high by itself.

Although, based on the survey results, the AT group was reported to exhibit better performance than that of the UT group, the AT group was not reported as highly practicing the PC components. The survey analysis revealed that no one teacher in the AT group achieved 100% implementation of any component of PC; they hardly reached over 65% of implementation. It showed that the components of PC were not implemented at a satisfactory level by pedagogically aware teachers. The highest rate of implementation was between 53 % and 66.6%. Moreover, they did not implement 40 % of some components. This

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implies that pedagogically aware teachers could not practically show their awareness in their teaching practice and that there was a low match between what the teachers' claimed to act and what they really acted in classrooms.

This issue might be due to the existence of a mismatch between what the teachers perceive of PC and the degree to which their perception of PC would be practically operationalized in the context of classrooms. That is, the aware teachers, for instance, may be convinced of the importance of, say, lesson plan, assessment, the importance of subject mastery, updating knowledge, and so on. They may not act upon them, however, for quite a lot of reasons such as not owning the required knowledge of preparing a lesson plan, assessment principles, not having time to update their knowledge via reading journal articles and attending conferences, not being in the mood of any change in their instruction due to being unmotivated as a result of their financial problems, students' poor learning condition, etc.

The finding certifies Kumaravadivelu's (2012) argument that the post-method teacher needs to be aware of all aspects of teaching practice. Studies conducted by Strauss and Sawyer (1986) and Wright and Bolitho (1993) also confirmed the findings of the present study. The authors assert that teachers' awareness may bring up a significantly positive effect on preparing their lessons, evaluating and adapting the course materials, interpreting and designing the course syllabi, and assessing their learner's performance.

In addition, Parrott (2015) also asserts that teachers' awareness of PC leads them to select materials that will aid their learners' understanding and use of the language they are teaching, identifying instances of the language which illustrate the aspects teachers want learners to focus on in the lesson. Teachers' awareness of the language teaching situation makes them think and rethink of their practice and attune their teaching accordingly. As Johnstone (2006) argues, teachers'

awareness results in their reflection of their pedagogy that results in reflective teaching and students' learning in the end. In addition, Voss, Kunter, and Baumert (2011) indicate that better content knowledge of teachers resulted in higher student achievement and that higher general pedagogical knowledge led to a higher quality of instruction, and better instructional pacing leading to students' learning achievements.

The finding that teachers' awareness is critical to students' learning achievement is, however, in contrast with Andrews' (2007) report that the teacher's language awareness does not levy the potential and powerful effect upon teaching effectiveness, as far as L2 teachers are concerned.

With regard to the overall goal of the research pertinent to the student evaluation of teacher's performance, the present research is in line with the research conducted by Chapman and Sammons (2013) who reported that student feedback, as part of teaching evaluations, have often been developed in schools as part of a wider school self-evaluation program as a means of achieving school improvement. Furthermore, a study done by Coe, Aloisi, Higgins, and Major (2016) revealed that student ratings is one of the approaches that demonstrate moderate validity in signaling effectiveness. Student evaluation is a reliable and valid approach that contributes to teachers' formative assessment.

6. Conclusion

The difference in the performance of students in two groups of the aware and unaware teachers of PC produced valuable data. It indicated that teachers' awareness of PC played an important role in students' learning achievements. Thus, being aware of the PC was influential in raising students' learning achievement. However, being aware of the PC does not lead to the employment of the elements of the competence wholly, and the operationalization of the PC

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may be a failure. The students' survey on their teachers' performance in terms of their implementation of PC provided the present research with a very valuable report. In such a case, one may not find a perceptible difference between the performance of the aware and unaware teachers in terms of students' achievement in the classrooms according to the instructional objectives decreed by the school administration.

Therefore, as Erdem and Koc (2016) note, the development of PC of the English language teachers should be geared to aimed and continuous activities developed and designed in order to update, develop, and increase teachers' knowledge, skills, and attitudes in managerial, personal, educational, and subject field of teachers so that improvement in student learning can be fulfilled.

In this regard, the education administration and the English language committees should stress the need for developing pedagogical awareness as an integral part of PC to ensure the quality of education that will end up with learners' achievement. Teacher education programs should be designed to link theoretical concepts with practical, real-world teaching settings. To narrow or bridge the gap observed between theory and practice, the implementation of PC in teacher education needs to be promoted.

The present faced some limitations that should be acknowledged. The lack of previous studies on this topic in the Iranian setting was the first limitation, and the researcher had to base the foundations on foreign studies and establish his own direction. Another limitation was that no questionnaire regarding the measurement of teachers' pedagogical competence could be found in the literature. The researcher-developed questionnaire might entail the problem of being local and context specificity.

Assessing teacher performance was also difficult, and researchers continue to wrestle with appropriate measures, such as teachers' self-report, supervisors'

ratings, and independent observations. In the current study, the assessment of teachers' pedagogical competence was done by an empirical experiment and a survey with a student. However, each measure is limited and future research will require the development of better databases, as well as more reliable measures.

The research was conducted at the high school level, and the experiment, in the quantitative phase, was only carried out on the third grade of high school students and teachers. Thus, the findings cannot be generalized to other school levels and higher education. Most importantly, in spite of the researchers' effort to control factors by triangulation and manipulation of the variables by limiting to teachers' gender, age, fields of study, university degree, and teaching experience, the subjectivity of pedagogical competence and complexity of the teachers as a human being may challenge the findings.

The constructs of the pedagogical competence in the present research are only those identified by the researchers based on the available literature and, therefore, may not be all the constructs English teachers might hold in their teaching practices. Finally, the findings of the research may be limited to the participants and the context where the present research took place. Nationwide research of this kind may be needed to generalize the findings wholly.

The present research showed that much research is still needed to deal with the issue of pedagogical competence, and fully support the relationship among teacher's awareness of pedagogical competence, quality instruction, and student learning outcome. However, based on the limitations and delimitations pointed out in the current research, the following suggestions can be offered for further research studies:

- It is suggested that similar research be conducted within a larger sample, in an inter-provincial scale, to support the generalizability of the researcher-developed questionnaire.

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- It is also suggested that the same process administered in the present research be conducted at the university level with English language university instructors to see if the present findings are applicable at the higher education level.
- It is also suggested that each one of the teachers' characteristics, such as gender, age, university degree, the field of study, and teaching experience be measured with each pedagogical competence individually.
- It is also suggested that since the experiment phase of the present research was conducted only on the high school third-grade students and teachers, the other grades be also dealt with in further research.

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Appendix A

Questionnaire Instrument of English Language Teachers' Pedagogical Competence

Items	5	4	3	2	1
1. I use lesson plans for effective language teaching.					
2. I maintain discipline and order in my classes.					
3. I believe native-like pronunciation is important in speaking English.					
4. I set clear expectations that hold students accountable for learning.					
5. I motivate students to learn English.					
6. I have a sense of humor in my English language classes.					
7. I understand the need to update my teaching knowledge.					
8. I teach students based on their language proficiency levels.					
9. I use English material resources that facilitate learning.					
10. I exchange my teaching experiences with my colleagues.					
11. I plan for students' independent study to bring variations to teaching English.					
12. I use various instructional techniques.					
13. I review the lesson before the end of class.					
14. I follow the principles of teaching English (e.g., concrete to abstract, simple to complex, known to unknown, etc.).					
15. I communicate with parents to improve students' language learning.					
16. I simplify complex language concepts/ points for my students.					
17. I attend workshops to improve my general language proficiency.					
18. I believe learning grammar and vocabulary is the only way to learn English.					
19. I implement continual measurements during the course.					
20. I respect the English language teaching profession.					
21. I use students' exam scores to improve my teaching.					
22. I believe learning English is learning vocabulary.					
23. I inform students of the performance objectives they will be expected to achieve.					
24. I test only the materials covered in class.					
25. I provide students with feedback.					
26. I keep records of the students' language performance to track their rate of learning.					
27. I assess language proficiency levels of students based on their learning performance in class.					
28. I recognize the importance of English in today's world.					
29. I encourage shy students to participate in carrying out language activities.					
30. I update my English language teaching skills by attending in-service courses.					
31. I use different teaching tools in my English language classes.					

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32. I seek information for content knowledge via reading journal articles, book chapters, attending conferences.						
33. I adopt appropriate teaching methods.						
34. I prepare instructional materials for all sections of an English lesson.						
35. I am familiar with different English language activities.						
36. I have a good knowledge of subject matter.						
37. I use different sources (books, the internet, newspapers ...) to provide students with the needed materials.						
38. I pay attention to all students.						
39. I maintain a competitive atmosphere in my classes.						
40. I am interested to continue my career as an English language teacher.						
41. I believe going to a private English language institute is an important way to learn the English language.						
42. I provide students with activities relevant to the English lesson.						
43. I encourage students to raise questions in my language classes.						
44. I prepare necessary English language materials for students.						
45. I encourage teamwork to improve learning.						
46. I analyze the results of my various assessments to improve language instruction.						
47. I believe learning English is learning grammar rules.						
48. I allow students' participation in my English language classes.						
49. I am familiar with the appropriate use of English teaching materials.						
50. I believe passing university entrance exam is the goal of learning English in our high schools.						
51. I prepare audio-visual (CDs, DVDs ...) materials for teaching purposes.						
52. I am interested in students' learning achievement.						
53. I take a reflective stance toward English language teaching.						

Appendix B

Pretest used in student experiment

Grammar and Vocabulary

- 1- This academic center has given Mr Rahimi a prize he has been the best scholar during the last ten years.
 - 1) unless
 - 2) even though
 - 3) since
 - 4) so that
- 2- All the experiments in this university were based on observations and researches on this new product.
 - 1) conducted
 - 2) conduct
 - 3) conducting
 - 4) were conducting
- 3- Please keep the kids quiet the grandpa can rest.
 - 1) so as to
 - 2) although
 - 3) so that
 - 4) while
- 4- I need to know all details about this project. I can't risk a large amount of money on such a plan like it.

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- 1) spend 2) spending 3) to spend 4) be spent
- 5- Everybody knows what sort of an inappropriate film may have on kids and even adults.
- 1) goals 2) effects 3) samples 4) details
- 6- Because of information technology a scientist can the latest technology into universities and academic centers.
- 1) emphasize 2) attract 3) survive 4) introduce
- 7- The city officials have taken serious to stop inflation and unemployment.
- 1) services 2) measures 3) abilities 4) functions
- 8- It may not bother you if you have any kind of failure. However, it will hurt you when you want to make your previous mistake once again.
- 1) estimated 2) increased 3) performed 4) experienced
- 9- Nowadays it is much easier to documents, money, and whatever you want to any part of the world.
- 1) involve 2) transfer 3) stretch 4) attach
- 10- Students picked up the next pamphlet as soon as they were allowed to do so.
- 1) interchangeably 2) continuously 3) immediately 4) efficiently

Cloze Test

Where does Man live in his twentieth - century world? If you examine a population map, you will see several ...86... populated areas. These centers are surrounded by larger areas. What has made these centers so desirable to Man? To answer this question, you must know what man ...87... and looks for when he chooses a place to live in. He must get water for himself and neighbors that live near him. He makes his home somewhere near a ...88... of water. Even early people who had no fixed dwelling places, had to travel to places where there were water holes. Water is more ...89... to man than coal and gold. He also wants food several times a day to ...90... his strength, and a place in which he can be safe from disturbance while he is sleeping.

- 11- 1) mainly 2) extremely 3) regularly 4) densely
- 12- 1) protects 2) defines 3) needs 4) composes
- 13- 1) balance 2) source 3) performance 4) observation
- 14- 1) acceptable 2) valuable 3) productive 4) respectable
- 15- 1) keep up 2) try on 3) stick in 4) rely on

Reading Comprehension

Passage I

Robots seem very new to most people. But they have a long history. They began as mechanical toys. For more than two thousand years, people have been trying to make machines that copy what living things do. The first one was made by a Greek inventor. The bird could rotate, turning on the end of a wooden bar. A device like this sounds simple to us. But the strange bird delighted the Greeks of long ago. Workers in France built a mechanical lion in 1500. To get it to work, they rebuilt the lion several times. Finally, it was able to walk around the court of the king. It could even raise its paw as a salute to the French flag.

In the 1700 s, a Swiss clockmaker built a puppet. It looked like a child sitting at a desk. The puppet's right hand was equipped with a pen. The clockmaker would hook a machine to his own arm and write a message. The

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machine inside the puppet would then copy his arm movements. The puppet was then able to write the same message as the clockmaker's. The puppet seemed to have the intelligence of a thinking being. However, it needed the help of a human being to make it work.

Early robots were made for fun. Dolls that could walk, dance, and even pick things up were sold as merchandise in fine shops. People seemed surprised at machines that were automatic. They could operate by themselves once they had been turned on. Today's robots are very complicated machines with many different uses. They work in many modern factories. They even work in space. The uses of robots seem endless.

16- The Greeks of long ago.....

- 1) were delighted by the rotating toy - bird.
- 2) were all inventors of robots.
- 3) copied the things that birds did.
- 4) invented devices that made simple sounds.

17- The mechanical lion built in France could do the following except:

- 1) walking around the king's court
- 2) raising its paw
- 3) raising the French flag
- 4) saluting the French flag

18- It is not true that the Swiss clockmaker's puppet.....

- 1) looked like a human child
- 2) had a pen in its right hand
- 3) could copy the arm movements of its builder
- 4) had the intelligence of a thinking being

19- The following are true about the puppet except that it.....

- 1) had a machine inside
- 2) needed the help of its maker to work
- 3) could write the messages dictated to it
- 4) was sitting at a desk

20- The writer has tried to imply that.....

- 1) modern robots are quite different from the early ones.
- 2) robots of today do not surprise people.
- 3) robots of our time are in fact the advanced forms of the early robots.
- 4) today's and yesterday's robots have many different uses.

Passage II:

In October 1957, the first satellite, called "sputnik" was sent into orbit. Today, hundreds of satellites are spinning around the Earth. Communications satellites are among the most important of these man-made moons. In countless ways these satellites have improved life for much of humankind. They brought people together and made Earth a smaller place.

For us, watching an Olympic competition live from the other side of the planet was an impossibility just a few years ago. But today we can see a sporting event that takes place anywhere in the world -And from the clarity of the image, we cannot tell that the program -in color and in focus- is coming from the far side of the globe.

How does satellite communication work? Powerful devices send TV signals from the Earth to the satellites. After a satellite picks up the TV signals, it beams them back to Earth over a wide area. These signals are received by special "dishes" on Earth. These dishes are electronic devices with large curved shapes that resemble a dish. They transmit the signals, sending them out to be picked up by your television set and also people can set up the dishes that take up a small area of the roof of a house.

In another way, communications satellites have increased our closeness to the rest of the world. Before this century, there was no such thing as an overseas telephone call. Instead, people sent letters and other correspondence

across the oceans by ship. The first phone calls often crackled and faded. But today people can talk to friends and relatives on other continents and their voices sound perfectly clear.

This is made possible by satellite, communications satellites have far exceeded the dreams of the first pioneers who launched them. They do more than these pioneer scientists ever expected to make Earth a smaller world.

21- Paragraph 1 does not tell us that communications satellites

- 1) are no more called man - made moons.
- 2) brought people closer to each other.
- 3) have improved life for mankind.
- 4) have made a smaller Earth.

22- According to the passage, which one of the following is not true today?

- 1) Watching live programs of an Olympic competition is possible.
- 2) We can get TV programs from the other side of the planet.
- 3) Nowadays the phone calls are not so clear.
- 4) People can watch sporting events coming from the far side of the globe.

23- A satellite communication system does not depend on

- 1) very strong devices to send signals from the Earth.
- 2) TV signals to be sent to the satellite.
- 3) special dishes on Earth to receive signals.
- 4) enough area on the roof of a house for dishes.

24- What was impossible before the present century?

- 1) surface mail correspondence.
- 2) sea mail correspondence.
- 3) an overseas telephone call.
- 4) writing to friends and relatives on other continents.

25- The author concludes that communications satellites

- 1) have not met the expectations of the scientists.
- 2) were used by the first pioneers.
- 3) have done jobs far beyond what the pioneer scientists expected.
- 4) have not really made Earth a smaller world.

