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The Effect of Reflective Teaching on Iranian EFL Students achievement: The Case of Teaching Experience and Level of Education

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Abstract: High quality teaching, student learning, and students achievement is dependent on the skills teachers use and the existence of professional expertise such as teachers reflectivity. The purpose of this study was to see whether there was any relationship between Iranian EFL teachers reflectivity and their students' language achievement and whether there was any difference between teachers reflectivity, considering their teaching experience and level of education. For the study, 83 EFL teachers from nine language institutes in Isfahan, Iran, were randomly selected. Larrivee's (2008) reflectivity questionnaire, which classifies reflectivity into four levels: pre-reflection, surface reflection, pedagogical reflection, and critical reflection, was used for data collection; furthermore, an observation checklist, based on the questionnaire, was also used. Data analysis revealed that the more experienced the teachers, the more reflective they were; moreover, teachers with higher degrees were more reflective. In addition, there was a positive relationship between teachers reflectivity and students achievement.

Keywords: Teachers reflectivity, Students achievement, Teacher experience, Teachers' level of education

Introduction

In today's world, education is more challenging than ever. It is considered as one of the most significant elements in the development of people. Consequently, teachers and their characteristics are the key factors in teaching and learning. Since teachers have a crucial impact on students learning, they must have an active role in the process of teaching and learning. There are many teacher characteristics that correlate with positive students learning outcomes, including their knowledge, skills, attitudes and experience. Yet, according to Sanders (2000), Goldhaber (2002) and Ashraf, Samir and Yazdi (2016), one of the most important factors which influences student's achievement is teacher reflectivity and teachers' perception of reflective practice in improving their learners' learning.

Kemmis (1994), cited in Ahmad et al. (2013), stated that students' development will not be completed if teachers are not creative in using their skills in the process of education. This creativity can be developed through reflective practice; moreover, teachers' abilities to think critically, plan, organize, observe and create will be increased by reflectivity. Various materials will be offered to students to learn and experience by teachers who are reflective. Moreover, competent teachers often think about their practice, goals, purposes, and methodologies, through a reflective process, which may contribute to making a new world of

education; therefore, the improvement of a reflective process can act as a significant tool in enhancing self-knowledge and pursuing new ways of educating students. MacKinnon (1987) stated that getting involved in a process of cyclical reflection and goal setting makes teachers more likely to think about new curricular approaches or practices. One part of the nature of the critical reflection process is constant evolution. Teachers should believe that the possibilities for learning and change are never totally closed (Brookfield, 1995). Continuous growth is increased by getting far from practice and looking into different aspects of experience from different standpoints (Holly, 1989). A developing community of learners demands teachers to be in continuous development and to be able to uphold their pedagogy and educational philosophies. The motive for this study derives from the assumption that English educators need to find a vehicle for growth and improvement. One of the reasons for being a reflective teacher is that decisions made by teachers will affect the lives of their pupils; therefore, a reflective teacher is one who carefully appraises his/her teaching practices, takes new decisions based on his previous experience, and implements his/her goals systematically (Akbari, Behzadpoor, & Dadvand, 2010). Moreover, teachers need to be reflective in order to cope with possible uncertainties. Nowadays, there is a great difference in classroom among pupils and also society is changing. Therefore, teachers have to deal with these differences and changing circumstances. They also have to adapt to students' differing ethnicity, level of development, motivation for learning, and achievement. All of these require a teacher to be reflective and respond to different needs of students. According to Grant and Zeichner (1984),

Reflective teaching enables teachers to act more deliberately and intentionally, and free them from routine and impulsive acts. Reflection, according to Dewey, emancipates us from merely impulsive and routine activityenables us to direct our actions with foresight and to plan according to ends in view of purposes of which we are aware. It enables us to know what we are about when we act (p.105).

Literature Review

The origin of reflective practice in the literature traces back to John Dewey (1933) and Schön (1983). Dewey makes a distinction between a reflective and a routine action. A routine action, according to Dewey, is a behavior that is guided impulsively, traditionally, and authoritatively. On the other hand, reflection is an "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends" (p. 6).

Reflective teaching conceptualizes teaching as a complex and highly skilled activity which, most importantly, requires teachers to exercise judgment in deciding how to act. To connect reflection to solving problems, Dewey concludes that before accepting a suggestion, it is necessary to seek or investigate its value. Hence, this needs thinking that is deep and based on knowledge and experience that is flexible and logical. According to Dewey (1933), this view will be achieved by personal adjustment like 'open mindedness', 'wholeheartedness', and 'responsibility'. According to Grant and Zeichner (1984), these three characteristics are prerequisites for reflective action from Dewey's stand point. Built on Dewey's ideas about reflection, Schön, in the 1980s, introduced the two terms of reflection-on-action and reflection-in-action. Reflection-on-action is the result of intentional and analytical thinking about a teaching event after it occurs (Schön, 1983). In this kind of reflection, there is no direct link to the existing action (Schön, 1987). It occurs after resolving a perplexity or experience. Reflection-in-action occurs when a practitioner faces a situation

which is ambiguous and must be solved. Throughout this process, the teacher thoughtfully interacts with a problematic situation, discusses and studies it. In this kind of reflection, when teachers deliver the learning that has been planned carefully, they need to be continuously aware and observe the session while it develops. Being aware of this situation enables the teacher to make changes as it demands. Chen and Kompf (2012) states that reflective thinking begins as a process, first by raising a problem which the teacher investigates using different methods. The teacher then addresses the problem by changing and reforming his prior thoughts and opinions.

Stacks, Wong and Dykehouse (2013) investigated whether teachers' reflective functioning could be measured and coded and whether it was related to their self-reported behaviors which support social emotional skills. According to the researchers, teachers who were highly reflective gave significantly more examples of using behaviors known to foster social emotional skills than teachers rated in the moderate and low reflective functioning categories. It should be mentioned that the link between reflective practice and understanding behaviors lies in the construct of reflective practice which roots in attachment theory and psychoanalytic thinking (Slade, 2005).

Levels of Reflection

The earliest attempts to define levels or types of reflection were Van Manen (1977) and Schön (1983). Van Manen (1977) and Taggart and Wilson (2005) proposed a hierarchical representation of three levels, namely technical, practical, and critical reflection. The lower level focuses on technical rationality which means dealing with methodological problems and theory development to achieve objectives. At this level, the teachers have minimal schemata to draw when dealing with a problem and go through lessons using instructional approaches provided by management (Taggart & Wilson, 2005). The concern for contextual and social factors increases as the levels rise. However, it should be mentioned that there is not any generally agreed term for defining different levels (Larrivee & Cooper, 2006). This is in spite of many arguments about different types and levels of reflection in the literature which, in addition, also often compares reflective practitioners with non-reflective (pre-reflective) teachers. Larrivee (2004) identifies four levels, which are considered for the present study: pre-reflection, surface reflection, pedagogical reflection, and critical reflection (Larrivee, 2004).

Pre-reflection

Though the pre-reflection level is not among the reflection levels, the pre-reflection is the starting point to for a teacher to be reflective. At this level, individuals tend to focus on just one aspect of the situation not justifying their beliefs since they think the answer to a situation is there. Therefore, they often use personal beliefs, which are not supported with experience, research or theory, as evidence. According to Larrivee (2008), teachers' interpretation of the classroom circumstances, at this level, makes no considerable relevance to other situations and events. Larrivee and Cooper (2006) believe that these teachers are reactive and ascribe ownership of problems to students or others, so students and classroom situations are beyond their control.

A number of studies have been done on the reflective thinking of pre-service teachers (e.g. Van Manen, 1977; Lee, 2005; Goh, 2011; Gurol, 2011); however, little has been done about the differences between teachers with different years of experience and level of education on their reflection.

Surface Reflection

According to Van Manen (1977), the initial level, surface reflection, is called technical rationality. For Van Manen, this level deals with problems of methodology and development of theory to achieve objectives. At this level, according to Larrivee and Cooper (2006), the focus of a teacher's reflection is on methods and strategies utilized to reach the preset objectives and the teacher's concern is to manage the classroom; therefore, maintaining order is important. Taggart and Wilson (2005) believe that while reflecting at technical level, practitioners function with minimal schemata from which to draw when dealing with problems. They state that the particular and unique events act as the important part for improving an expert repertoire which is essential to thoughtfully manage non-routine issues.

Pedagogical Reflection

As Taggart and Wilson (2005) state, "the second level of reflection involves reflections regarding clarification of and elaboration on underlying assumptions and predispositions of classroom practice as well as consequences of strategies used" (p. 4). Larrivee and Cooper (2006) assert that at this level, teachers think carefully about educational purposes, the theories, fundamental techniques and the relationship between theory and practice. Taggart and Wilson (2005) further continue that, in the contextual level, as the second level, teachers reflect on the connections between theory and practice. According to Larrivee and Cooper (2006), teachers who engage in pedagogical reflection attempt to understand theoretical principles for classroom practice and foster the consistency between the espoused theory (what they say they do) and theory-in use (what they really do).

Critical Reflection

At the contextual level, practitioners consider ethical and political issues related to instructional planning and implementations (Taggart & Wilson, 2005). The practitioner contemplates the values of ends as well as reaching these ends in the best way. The third level, according to Taggart and Wilson (2005), is called the dialectical level. They propose that classroom implications need to be expanded socially while reflecting on conflicting perspectives and interrogating issues and practices. According to Larrivee and Cooper (2006), the term critical reflection, as the third level of reflection, has the most agreement in the literature since it considers both social and ethical consequences of teaching practice.

The purpose of this study is to examine this difference based on the three reflective thinking levels, namely surface reflection, pedagogical reflection, and critical reflection. Furthermore, the pre-reflection stage also considered in the study. The present study will address the following questions:

1. Which level of reflective teaching is used more by Iranian EFL teachers (pre-reflection, surface reflection, pedagogical reflection, and critical reflection)? Does this level manifest in their classes?
2. Does experience and level of education make a significant difference in teachers' reflection?
3. Is there any relationship between reflective teaching and students achievement?

Method

Participants

The participants included 83 EFL teachers, both males and females, with an age range between 25 and 40, in nine institutes in Isfahan, Iran. The teachers held B.A or M.A degrees in Teaching English as a Foreign Language (TEFL) or English literature. The participants' teaching experience ranged from one to eighteen years.

Instruments

Teacher's Reflectivity Questionnaire

The teacher's reflectivity questionnaire, used in this study, was the simplified version of the questionnaire developed by Larrivee (2008). The language chosen for the questionnaire was English since the participants in this study were EFL teachers. The questionnaire included 53 items with three levels of reflection and a pre-reflection level. Participants answered 14 items on pre-reflection level; at the pre-reflective or non-reflective level, teachers react to students and classroom situations automatically, without conscious consideration of alternative responses. Eleven (11) items dealt with the surface reflection; at which, teachers' reflections focus on strategies and methods used to reach the predetermined goals. Teachers are concerned with the thing that meets expectations rather than considering the value of goals as ends considered without other related ideas or situations. Fourteen (14) items were related to the pedagogical level; at this level, practitioners apply the field's knowledge base and current beliefs about what represents quality practices. And finally, there were 14 items on critical reflection. At this level, a teacher reflects on the moral and ethical implications and consequences of his classroom practices. This instrument is a five-point Likert scale in which the five options of 'Never', 'Rarely', 'Sometimes', 'Often', and 'Always' are scored from 1 = never to 5 = always for all items. The validity of the modified version was confirmed by two expert judges. The criteria for choosing the expert judges was their recognised research and professional expertise. Both had published papers with questionnaires as the data collection instrument and one had published a paper on reflection. Both were experienced teachers who were the supervisors of English language institutes. The reliability index of the questionnaire, estimated using Cronbach's Alpha, was .807.

Observation Checklist

The observation checklist consisted of 23 items in four levels. Ten items concerned the pre-reflection level, three were about surface reflection level, six items were on pedagogical reflection, and four items focused on critical reflection. The purpose of having an observation checklist was to triangulate the data as a way of assuring the validity of research through the use of a variety of data collection instruments on the same topic.

Procedure

Teacher reflectivity questionnaire was distributed among 83 English teachers randomly selected from nine English language teaching institutes in Isfahan, Iran. In the questionnaire, teachers were asked to write their teaching experience, level of education and the final exam scores of their students. After analyzing the questionnaires, the researchers randomly selected three teachers for classroom observation. The reason for selecting only three teachers was

practicality and permission issues. The observed classes were recorded in order to have an exact detail. Each observation took approximately one hour. As stated above, the reason for including the observation was to see if the teachers who perceived themselves as reflective, according to their questionnaires, were reflective or non-reflective in practice. Observations made during the session were evaluated based on the checklist items.

Results

For the first research question, a one-way between-groups analysis of variance (ANOVA) was conducted to explore the reflectivity of teachers in different levels. Reflection was divided into four levels (level 1: pre-reflection; level 2: surface reflection; level 3: pedagogical reflection and level 4: critical reflection). There was a statistically significant difference at the $p < .05$ level in reflectivity scores in different levels $F(3, 328) = 310.526$, $p = .000$ (Table 2). The mean score for level 1 ($M = 31.5542$) (Table 1) was significantly different from level 3 ($M = 55.9398$) and different from level 4 ($M = 49.5542$). Level 2 ($M = 30.2289$) was significantly different from level 3 and 4.

As stated above, the participants in this study showed the employment of these strategies in their classroom. However, the performance of teachers among the four levels was different. The pedagogical reflection level scored the highest and was the most used reflection level by teachers. Critical reflection, pre-reflection and surface reflection were the next highest scoring levels of reflection, respectively. However, in order to investigate whether Iranian EFL teachers reflect in their classroom while teaching, an observation was conducted and the researchers observed three teachers' classes after randomly selecting them out of 83 participants of the study. After observing and recording the classes, the researchers analysed the data and found the following evidence of reflective levels. For example,

- One teacher whose questionnaire responses indicated surface level reflection, demonstrated this in the classroom by considering the differing needs of students when she explained the grammar a second time, in another way, for the student who did not get the rule.

Teachers who were more pedagogically reflective did the following in their classes:

- Organized the activities so that they were suitable for real interaction among the students and analyzed the impact of task structures, such as cooperative learning groups and partner on students learning.
- Made a conscious effort at all times to pay attention to all students equally
- Asked questions to connect new concepts to students' prior knowledge.
- Gave a variety of explanations, models or descriptions, knowing that one explanation may not be sufficient for all students.

Observing these instances in the class corresponds to the pedagogical questions of the observation checklist.

The instances of the critical reflection are as follows:

- The teachers addressed issues of equity and social justice that arise in the classroom by going around the class, correcting all the students one by one, when the teacher asked them to work on the grammar exercises of the new lesson.
- Their students had an equal opportunity to answer and to be successful; however, in a way not interfering with others.
- The teachers also treated students equally and with the same respect.

In conclusion, the analysis of the observation data of the three teachers supported the findings of their questionnaire responses. The pedagogical reflection level was the highest

and the most used reflection level by teachers and then critical reflection, pre-reflection and surface reflection, respectively.

	N	Mean	Std. Error
pre-reflection	83	31.5542	.69384
surface-reflection	83	30.2289	.54353
pedagogical reflection	83	55.9398	.82164
critical reflection	83	49.5542	.83087
Total	332	41.8193	.71380

Table 1: Descriptive Statistics of Reflective Teaching

	Mean	SE	Sig.	F	df
Pre-reflection/ Pedagogical Reflection	-24.38*	1.034	.000		2
Pre-reflection/Critical Reflection	-18.00*	1.034	.000		2
Surface Reflection/ Pedagogical Reflection	-25.71*	1.034	.000		2
Surface Reflection/ Critical Reflection	-19.32*	1.034	.000		2
Pedagogical Reflection/ Critical Reflection	6.83*	1.034	.000		2
Between Groups			.000	310.526	3
Within Groups	44.45				328

*. The mean difference is significant at the 0.05 level.

Table 2: ANOVA Results for Reflectivity in Teaching

For the second research question, a One-Way Analysis of Variance (ANOVA) was used (Table 3) to explore the impact of years of experience on the levels of reflectivity, as measured by the reflectivity questionnaire. Participants were divided into three groups according to their years of experience (group 1: one to five; group 2: six to nine; group 3: ten or above). There was a statistically significance difference at the $p < .05$ among the three groups: $F(2, 80) = 4.88, p = .039$. Since the Sig. value is less than .05 ($p < .05$), there is a significant difference among the mean scores on reflectivity for the three groups. The two groups that are significantly different from one another in terms of their reflectivity scores (group 1: one to five years and group 2: six to nine) are presented in Table 4.

	N	Mean	Std. Deviation	Std. Error
one to five years	44	131.4545	14.42455	2.17458
six to nine years	24	140.1250	11.68169	2.38452
ten or above	15	141.0667	11.30402	2.91869
Total	83	135.6988	13.77939	1.51248

Table 3: Descriptive Statistics of Reflectivity/ Years of Experience

	Mean	SE	Sig.	F	df
One to five years/ Six to nine years	-8.67*	3.43	.039		
Between Groups	847.501		.01	4.88	2
Within Groups	173.431				

*. The mean difference is significant at the 0.05 level.

Table 4: ANOVA Results for Reflectivity/ Years of Experience

The second research question was also to find if there was any difference between teachers' level of education (bachelors and master's degree) and their reflectivity. In order to investigate this difference, an independent-sample T-test was run (Tables 5 and 6). There was a significance difference in mean scores for the teachers with a bachelor (M=133.1321, SD=15.41233) and master's degree (M=141.3448, SD=11.70859), $t(-2.449) = 80$. As observed, the value in the Sig. (2-tailed) was calculated to be .008 which was significant at $p < .05$. Therefore, the higher the teachers' degree the more reflective the teachers are.

Education	N	Mean	Std. Deviation	Std. Error Mean
Bachelor's Degree	53	133.1321	15.41233	2.11705
Master's Degree	29	141.3448	11.70859	2.17423

Table 5: Descriptive Statistics of Level of Education and Reflectivity

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	T	df	Sig. (2- tailed)	Mean Difference
Equal variances assumed	1.08	.033	-2.449	80	.014	-8.212
Equal variances not assumed			-2.706	71.604	.008	-8.212

Table 6: Independent T-tests for Level of Education and Reflectivity

For the third research question, the relationship between class mean and teacher reflectivity was investigated using Pearson product-moment correlation coefficient. There was a large, positive correlation between the two variables $r = .757$, $n = 166$, $p < 0.01$ with high levels of reflectivity associated with high achievement (Table 7). Therefore, higher levels of teachers reflectivity leads to better student's achievement in English learning.

	N	Sig. (2-tailed)	Pearson Correlation
Class Mean/ Teacher Reflectivity	166	.000	.757*

*. Correlation is significant at the 0.01 level (2-tailed).

Table 7: Pearson Correlation between Class Mean and Teacher Reflectivity

Discussion

Analysis of data related to the first question showed that there was a significant difference among the levels of reflection in teachers, that is, teachers' reflective practice is more dominant first at the pedagogical level then, critical, pre-reflection and surface reflection levels, respectively. Observing three teacher's classes, it was found that the depth of reflection was evident in all three teachers' practice, that is, their reflective practice was dominant at two levels of pedagogical and critical, which is consistent with the analysis of the quantitative questionnaire data.

The reason why teachers are more pedagogically reflective might be that they are constantly thinking of how teaching practices are affecting students learning and how to enhance learning experiences. It is revealed that teachers reflect on instructional goals, the theories, basic approaches, and the relationship between theoretical principles and practice. They attempt to understand the theoretical basis for classroom practice and to promote consistency between espoused theory (what they say they do and believe) and theory in use (what they actually do in the classroom). At this level the teachers' goal is to continuously improve practice and reach all students.

Another reason for the dominance of the pedagogical reflection among other reflection levels might be that in the English language teaching institutes in Iran, most teachers have to pass Teacher Training Courses (TTC), which are professional development programs, before being hired in the institutes. Participation in professional development programs in institutes can be a way to integrate reflection into practice. Professional development programs focus on specific teaching strategies and methods, the relationship between theory and practice and the teacher's perspectives that affect practice. This kind of professional development causes teachers to step back and reflect on how they teach, and why they teach in a specific way. Wilhelm, Coward, and Hume (1996), cited in Ferraro (2000), describe the curriculum for a professional development program as offering "interns an opportunity to explore perspectives, develop management ability, and reflect on the ethical implications of practice in classrooms with cultural compositions vastly different from their previous experiences" (p. 2).

Furthermore, constant observation of classes by institutes, which may affect teachers' advancement and pay-level, might be an influential factor on teachers being dominantly pedagogically reflective. Still another point that can justify the findings about pedagogical reflection is that the participants in this study were B.A. and M.A. graduate students of English. In other words, they had at least four years of academic studying of English Language Teaching (ELT) theories and practices which knowingly or unknowingly bring pedagogy and the related issues into their focus.

The second research question indicated that experienced teachers are more reflective than the novice or inexperienced ones. As stated in the previous section, the teachers were divided into three groups considering their years of experience, namely one to five years, six to nine years and ten years or above.

The difficulty of novice teachers to reflect critically may be due to the fact that novice teachers are at the early stages of their professional development; therefore, they are mainly involved in their 'survival' in classroom so they tend to focus on technical means of solving

the problems (Hatton & Smith, 1995; Gelfuso & Dennis, 2014). In addition, they have not as yet gained a firm basis of theoretical knowledge in education, theories of learning and political, historical, and social aspects of teaching. This knowledge involves the explanation of the dynamic interaction between various components within the learning situation and their significance. Thus, critical reflection can only take place if the teachers anchor their decisions consciously in their knowledge, their views and positions with regard to society and education, and at the same time consider the educational and ethical implications of those decisions (Yost et al, 2000, cited in Penso, Shoham & Shiloah, 2001). Less teaching experience also makes it difficult for the novice teachers to perceive what is happening in the class to explain and grasp the significance of the observed episodes, since they still lack adequately developed ideas to connect their theoretical and practical knowledge to their teaching action (Barnes, 1989); therefore, they start developing habitual routines to enable them to cope with the new professional life which might, in turn, lead to associating reflection with confusion (Eraut, 1995)

Dividing teachers into three groups, based on their years of teaching experience, showed that teachers with one to five years of experience are less reflective than teachers with six to nine years of experience than teachers with above ten years of experience. The reason for experienced teachers to be more reflective might be that experienced teachers' knowledge is highly developed regarding students and distinguishing different classroom conditions. These teachers select information in the course of planning and teaching, and make significant use of educational routines. Also, experienced teachers recognize knowledge, thinking, problem solving techniques and decision-making processes they used in designing instruction for language curricula. Another reason for supporting the findings of this research question is what is stated by Richard (2004), that teachers entering the profession may find their initial teaching endeavor stressful, but with experience they gain a repertoire of teaching strategies that they make use of and rely on them throughout their teaching. Furthermore, the findings also indicate that teachers with higher level of education (master's degree) are more reflective than those teachers with lower level of education (bachelor's degree) and therefore it seems to overstate the relationship between the degree level and reflectivity.

Experienced and more educated teachers may have more opportunities to teach at higher levels or advanced classes and have higher achieving students in their classrooms. Hence, it is possible that students who perform poorly have a double disadvantage because they are more likely to be taught by less experienced teachers with a lower level of education (Greenberg, Rhodes, Ye, & Stancavage, 2004). Experienced teachers have deeper understanding of their own teaching style therefore, they might be more reflective teachers. Danielson's (2009) idea may provide another reason for the relationship between teachers' level of education and reflectivity. Danielson (2009) asserts that expert teachers adjust their thinking to accommodate the level of reflection as the situation demands. Their teaching is identified by a deliberated competence that allows them to identify and replicate best practice and clarify serendipitous practice. Due to their ability to reflect, great teachers know when and what to do, and why.

To summarize, teachers with higher levels of education draw on their repertoire of knowledge, skills and awareness of a situation so that they can change direction and operate differently in the classroom. In other words, rather than trying any other approach randomly, the teacher uses the collected experience and knowledge to seek alternatives in the classroom in response to the needs of the pupils. Also according to Schön (1983), when professionals begin to separate out the things, they know when to do and what to do; therefore, they become more effective in their work.

In response to the third research question, the present study found that teachers' reflectivity is positively correlated with the students' achievement. One reason for the significant relationship between teacher reflectivity and students' achievement is found in Akbari, Kiany, Naeeni and Allvar (2008) who suggest that students' learning and the responsibility for students' success is at the centre of reflective practice. Dewey (1933) points to the responsibility as one of the characteristics of a reflective teacher, and Waltermire (1999) also states that reflective practice begins with a teacher's passionate commitment to help children to be successful. Dewey believes that reflective teachers try to resolve complex classroom difficulties into educational experiences which promote students' learning. According to Ahmad et al. (2013), reflective teachers are effective teachers since these teachers analyze the goals of classroom activities and adjust teaching aids for meaningful learning. They also create a friendly and exciting learning situation in the classroom; nevertheless, the other side of the reflective teaching coin is that acting as reflective teachers can present difficulties since these teachers should consider different needs of the students. Characteristics such as self-assessment and self-observation encourage them to be aware of their own performance and their students' problems. Reflection helps teachers to examine and assess their teaching in order to make logical decisions for essential adjustment to develop attitudes, beliefs, and teaching practices which affect students' achievement and performance. Undoubtedly, effective reflection in teaching can avoid students becoming stuck in educational ruts and therefore they become more motivated about learning (Akbari et al., 2008). According to Wright, Horn, and Sanders (1997), effectiveness varies differently in teachers. This difference of effectiveness in teachers is the main factor influencing students' academic gain.

Conclusion

The research findings in this study indicate that teacher reflectivity might influence students' achievement. Almost all the claims related to the influence of teachers' reflectivity on students' achievement outcomes have been theoretical (Akbari et al., 2008). In contrast, this study has shed an empirical light on the issue. Furthermore, according to the results presented, it has shown that among the levels of reflection, pedagogical reflection level had the highest degree of correlation with students' achievement; whereas, the surface reflection level resulted in the lowest level.

The study showed that more experienced and more educated teachers (with a master's degree) are more pedagogically and critically reflective. Reflective teaching develops meaningful thought and discussion among peers about teaching and learning that will stimulate appropriate change in curriculum and pedagogy. These judgmental practices, in EFL contexts, can positively affect the understanding of what is going on in the classrooms and produce changes in methodology, assessment, and education (Pacheco, 2005). Language teachers cannot perceive themselves as inactive performers in the field. Preferably, they should involve themselves deeply in the process and the only way to do this is taking time to think and reflect on their practices to encourage more effective learning in their students (Pacheco, 2005).

Implications of the Study

The results of this study suggest two very distinct opportunities for educational administrators. The first is in the area of students and the second is in the area of

developmental teacher evaluation in conjunction with inexperienced and experienced teachers. Based on these results, students benefit from more effective teachers as reflective teachers have an advantage in terms of attaining higher achievement. The other area for improved students achievement is the implementation of studies which will lead to improved teacher effectiveness.

The other area for improved student achievement is the implementation of studies which will lead to improved teacher effectiveness. School administrators need to promote reflection as part of teachers' professional development and as a component of the school's continuous improvement plan. Information on how specific teacher attributes correlate with teacher quality can help guide administrators' hiring decisions. As Zhang (2008) states, teacher experience and teacher education level are considered as two factors related to teacher quality. The employment of experienced and highly educated teachers who are likely to be more reflective, and the support for less qualified and experienced teachers through improved professional development can help provide quality learning for students.

References

- Ahmad, I., Said, H. B., Zeb, A., Rehman, Sh. U., Ahmad, SH., & Khan, W. (2013). How reflective practice improves teachers' classroom teaching skill? Case of community based schools in District Chitral, Khyber Pakhtunkhwa. *Social Sciences and Humanities*, 4 (1), 73-81.
- Akbari, R., Kiany, G. R., Naeeni, M. I., & Allvar, N. k. (2008). Teachers' teaching styles, sense of efficacy and reflectivity as correlates of students achievement outcomes. *IJAL*, 11(1), 1-27. <http://ijal.khu.ac.ir/article-1-70-en.html>
- Akbari, R., Behzadpoor, F., & Dadvand, B. (2010). Development of English language teaching reflection inventory. *System*, 38(2), 211-227. <http://dx.doi.org/10.1016/j.system.2010.03.003>
- Ashraf, H., Samir, A., & Yazdi, M. T. (2016). Reflective teaching practice in an EFL context: A qualitative study. *International Journal of English Linguistics*, 6(7), 48. <https://doi.org/10.5539/ijel.v6n7p48>.
- Barnes, H. (1989) Structuring knowledge for beginning teaching, in M.C. Reynolds (Ed.) *Knowledge base for the beginning teacher*. New York: Pergamon Press.
- Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.
- Chen, S., & Kompf, M. (2012). *Chinese scholars on Western ideas about thinking, leadership, reform and development in education*. Rotterdam: Sense Publishers. <https://doi.org/10.1016/j.system.2010.03.003>
- Danielson, L. (2009). *Fostering reflection*. Retrieved from: www.ascd.org.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Illinois, Chicago: Henry Regnery.
- Eraut, M. (1995). Schon shock: a case for refraining reflection-in-action?. *Teachers and teaching*, 1(1), 9-22. <http://dx.doi.org/10.1080/135406095010102>
- Ferguson, R. (1998). Teachers' perception and the black-white test score gap. In C. Jencks and M. Phillips (Eds.), *The black-white test score gap* (pp.273-317). Washington, DC: Brookings Institution Press.
- Ferraro, J. M. (2000). *Reflective practice and professional development*. ERIC Digest.
- Gelfuso, A., & Dennis, D. V. (2014). Getting reflection off the page: The challenges of developing support structures for pre-service teacher reflection. *Teaching and Teacher Education*, 38, 1-11. <https://doi.org/10.1016/j.tate.2013.10.012>

- Goh, P. S. C., & Matthews, B. (2011). Listening to the concerns of student teachers in Malaysia during teaching practice. *Australian Journal of Teacher Education*, 36(3), 92-103.
<http://search.informit.com.au/documentSummary;dn=534975368209911;res=IELAPA>
> ISSN: 1835-517X. <https://doi.org/10.14221/ajte.2011v36n3.2>
- Goldhaber, D. (2002). The mystery of good teaching: Surveying the evidence on student achievement and teachers' characteristics. *Education Next*, 2(1), 50-55.
- Grant, C. A. & Zeichner, K.M.(1984). On becoming a reflective teacher. In C. Grant (Ed.), *Preparing for reflective teaching* (p. 103-114). Massachusetts, Boston: Allyn & Baco.
- Greenberg, E., Rhodes, D., Ye, X., & Stancavage, F. (2004, April). *Prepared to teach: Teacher preparation and student achievement in eighth-grade mathematics*. Paper presented in the annual meeting of the American Educational Research Association, San Diego, CA.
- Gurol, A. (2011). Determining the reflective thinking skills of pre-service teachers in learning and teaching process. *Energy Education Science and Technology Part B: Social and Educational Studies*, 3(3), 387-402.
- Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education*, 11(1), 33-49.
[https://doi.org/10.1016/0742-051X\(94\)00012-U](https://doi.org/10.1016/0742-051X(94)00012-U)
- Holly, M. L. (1989). Reflective writing and the spirit of inquiry. *Cambridge Journal of Education*, 19(1), 71-80. <http://dx.doi.org/10.1080/0305764890190109>
- Larrivee, B. (2004). *Assessing teachers' level of reflective practice as a tool for change*. Paper presented at the Third International Conference on Reflective Practice, Gloucester, UK.
- Larrivee, B., & Cooper, J.M. (2006). *An educator's guide to teacher reflection*. Boston, MA: Houghton Mifflin.
- Larrivee, B. (2008). Development of a tool to assess teachers' level of reflective practice. *Reflective Practice*, 9, 341 – 360. <http://dx.doi.org/10.1080/14623940802207451>
- Lee, H. J. (2005). Understanding and assessing pre-service teachers' reflective thinking. *Teaching and Teacher Education*, 21, 699–715.
<https://doi.org/10.1016/j.tate.2005.05.007>
- MacKinnon, A. M. (1987). Detecting reflection in action among pre-service elementary science teachers. *Teaching and Teacher Education*, 3(2), 135-145.
[https://doi.org/10.1016/0742-051X\(87\)90014-X](https://doi.org/10.1016/0742-051X(87)90014-X)
- Pacheco, A. Q. (2005). Reflective teaching and its impact on foreign language teaching. *Revista Electrónica "Actualidades Investigativas en Educación"*, 5, 1-19.
- Penso, S., Shoham, E., & Shiloah, N. (2001). First steps in novice teachers' reflective activity. *Teacher Development*, 5, 323-338.
<http://dx.doi.org/10.1080/13664530100200147>
- Richards, J. C. (2004). Towards reflective teaching. *The Language Teacher*, 33, 2–5.
- Sanders, W. L. (2000). Value-added assessment from student achievement data: Opportunities and hurdles. *Journal of Personnel Evaluation in Education*, 14(4), 329-339. <https://doi.org/10.1023/A:1013008006096>
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. California, San Francisco: Jossey-Bass.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. NY, New York: Basic Books.
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269-281. <http://dx.doi.org/10.1080/14616730500245906>

- Stacks, A.M., Wong, K., & Dykehouse, T. (2013). Teacher reflective functioning: A preliminary study of measurement and self-report teaching behavior. *Journal of Reflective Practice*, 14(4), 487-505. <http://dx.doi.org/10.1080/14623943.2013.806298>
- Taggart, G. L., & Wilson, A.P. (2005). *Promoting reflective thinking in teachers: 50 action strategies*. Thousand Oaks. CA: Corwin Press.
- Van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, 6(3), 205-228. <http://dx.doi.org/10.1080/03626784.1977.11075533>
- Waltermire, L. (1999). *The nature, roles, and interplay of the inner and outer voices of reflective teaching*. Unpublished MA Thesis, Oklahoma State University, Oklahoma.
- Wright, S.P., Horn, S.P., & Sanders, W.L. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of Personnel Evaluation in Education*, 1(1),57-67.
- Zhang, D. (2008). *The effects of teacher education level, teaching experience, and teaching behaviors on student science achievement*. Graduate Thesis, Utah State University, Logan.