

# Research in English Language Pedagogy (2021) 9(2): 452-468



©Author(s) 2020, open access at http://relp.khuisf.ac.ir/

DOI: 10.30486/RELP.2021.1911365.1227

## **Original Article**

# EFL Teacher Educators' Perceptions of Inquiry-based Pedagogy: A Glance through Its Prerequisites and Challenges

Rasoul Salehi<sup>1</sup>. Parviz Alavinia<sup>1,\*</sup>

<sup>1</sup> Department of English Language and Literature, Faculty of Humanities, Urmia University, Urmia, Iran

Submission date: 4 October, 2020 Acceptance date: 6 June, 2021

### **Abstract**

Teacher educators play a seminal role in charting a clear roadmap and shedding light on a prosperous pedagogical journey for novice teachers. Though professional development programs today act as a proper springboard for scaffolding the incomplete knowledge of fledgling teachers, there seems to be a dire need for expanding the scope of such in-service programs to include more elements of successful teaching such as Inquiry-Based Pedagogy (IBP). Driven mainly by this aspiration, the current study strove to explore the teacher educators' perceptions of IBP, considering the role and importance of inquiry in EFL instruction as well as the challenges that impede the practices of IBP. To conduct the study, 100 EFL teacher-educators from three Farhangian Universities in Iran were chosen through cluster random sampling. A 40-item questionnaire and a 10-item interview protocol were the instruments utilized for data collection. Data analysis via NVivo program, Factor Analysis, and multivariate analysis revealed teacher educators' positive perceptions of IBP. The findings offer useful implications for curriculum designers, EFL teachers, and teacher educators, particularly as regards the integration of IBP into education.

**Keywords**: Inquiry-based Pedagogy, Teacher Education Programs, Teacher Educators' Perceptions

Corresponding Author's E- mail: p.alavinia@urmia.ac.ir



### 1. Introduction

Teachers are the most principal promoters in the context where English as a Foreign Language (EFL) is pursued. Teacher education programs, including teacher training courses (TTC) for pre-service teachers and teacher development modules (TDM) for in-service teachers, have surmounted traditional packages, transcended modern curricula, and attained postmodern principles to realize and amend past ideas and practices for novel premises and materials to meet the current needs and to shape new demands so that optimal teaching and learning of the postmodern era is attained (Kumaravadivelu, 2008). Such programs are supposed to extend EFL teachers' knowledge, expand their perspective, revive their thoughts, and grow classroom upshots via interactive and two-way communication convened between the teacher-educators and student teachers.

Given the requirements of postmodern education, teacher-educators should underscore the role of inquiry among teachers to assist them in undergoing comprehensive collaboration, suggest theoretical backgrounds for contributing educators and instructors, check out the objectives and goals of education in the form of communication, elucidate the value of critical thinking, and provide researchers and teachers with the opportunity for conducting various studies (Chu et al., 2017). Accordingly, educational policy-makers and school administrators should take the best pedagogy relevant to the inquiry and appoint teacher-educators to present such pedagogy to student-teachers in the programs.

Impressively, gone are the days when the traditional pedagogies were practiced in an EFL context and, instead, the postmodern instructions including the inquiry-based pedagogy (IBP) as an authentic literacy have become dominant features of curricula for language teaching. The rationale for IBP is to introduce the processes and problems of inquiry to the learners, provide them with opportunities to be involved dynamically in the process of inquiry, assist them in gaining experiences over the outcomes of the teaching and learning, and develop learners' attitudes and competencies oriented to concepts and principles of learning (Khalaf & Zin, 2018). Therefore, the stakeholders including teacher-educators and student teachers need to define, conceptualize, and pursue IBP and manifest its characteristics as contextual factors in classroom settings. They, moreover, should be acquainted with the various barriers they may face on the way of implementation of IBP and they are expected to make reform efforts through inquiry to fulfill the assigned and

unassigned short-term objectives and long-term goals of the teaching profession and to optimize the learning process.

Language teaching and learning within the framework of IBP can reinforce learners' cognitive qualities, develop their theoretical aspects, help them rationalize learning via critical thinking, and encourage them to acquire the new language. These facets of IBP have made it more ubiquitous nowadays in the field of language teaching and learning (International Baccalaureate Organization, 2014). IBP is a sort of improved pedagogy in teaching and learning that converts the conventionally empirical teaching styles to cognitively triggering procedures to promote students' awareness and attainment in various fields of knowledge and research (Dorier & Garcia, 2013; Gago, 2004; Kikis-Papadakis, 2013; Osborne & Dillon, 2008; Rocard et al., 2007). Informed by the dire need for conducting further probes into the role of IBP in teacher education, the researchers in the present study strove to examine the perceptions of EFL teachers and teacher educators about the role, significance, and challenges of IBP in the EFL context of instruction.

## 2. Literature Review

The range of applications of the term 'inquiry' has increased in educational studies since the early 20th century. A teacher should put the students on the right track to participate actively in the classroom discussions and challenges, contemplate in critical layout, seek inquiries, and come to the pertinent culmination. That is, an effective teacher in an inquiry-oriented approach is expected to depart any single student from being merely a knowledge receiver and to provide him/her with assistance to be a knowledge producer. Hence, teachers should persuade students to feel free to ask relevant questions in vivid language and subsequently aid them in creating new ideas or concepts to enjoy describing the various topics (Ozgur & Yilmaz, 2017).

To appraise the efficiency of inquiry methods, a teacher should use classroom assessment techniques. Luckily, there is a variety of flexible instruments used to supply influential comments, which are easily adapted to teachers' precise requirements such as asking students what is working well, pointing out weak points, and suggesting solutions. Furthermore, a teacher can have colleagues express feedback on his/her competency and experience to discuss and rate feedback at the academic status (Salinitri, et al., 2018). There are steps assigned by the curriculum to be followed and teacher's co-workers could

be highly beneficial in realizing if a teacher falls within the scope of IBP-related programs or if s/he should be invited for further teacher education programs.

IBP discusses the arranged resources offered by teacher educators within the courses on the professional teaching to elevate EFL teachers' competence apropos fresh knowledge and new skills on the teaching performance focusing on the collaboration among students and interaction between an educator and learners in an asking and answering format in a critical thinking atmosphere and to assist the teachers in acquainting the students with new skills and strategies of discussion and investigation germane to the classroom issues and society matters (Gordon, 2004). The IBP programs for EFL teachers need to be planned and run every year involving approximately all education staff and teachers. The IBP in Iran is pursued and advocated in the form of seminars, lectures, and workshops based on the requisite changes and listed issues for-the modern life (Vejargah, 2008).

IBP, in general, raises questions of what the teacher and students need to do in a collaborative way as well as how they need to do it for optimal results in the classroom. According to Salinitri, et al. (2018), these questions exist not only in the relationship between theory and practice but also between the expectation and goals of the stakeholders.

Khan (2012) explored the influence of inquiry-based learning on students' achievement in an eighth-grade science class. As the results revealed, the inquiry-based method of instruction led to considerable outperformance and improved performance of students vis-à-vis the group that was trained via the traditional model of science instruction.

Wells (2011), on the other hand, probed the part played by IBP in language classes and suggested that preceding knowledge and skills and the insight of IBP can influence the development of teaching and learning.

In a later probe, Kim (2017) investigated the relevance of IBP to teaching styles and strategies to promote understanding among learners. The results indicated that the teachers could gain the most benefit from those strategies and techniques which are presented in the teacher education programs.

Furthermore, based on the study conducted by Anderson (2002), it was indicated that in addition to helping learners gain a better and more profound understanding of their lessons, inquiry-based pedagogy can enable students to boost their higher-order intellectual

skills. In a similar vein, Fattahi and Haghverdi (2015) sought to find the association between inquiry-based instruction and critical thinking. The findings of their research pointed toward a significant go-togetherness between inquiry-based mode of learning and critical thinking skill.

In much the same way, Duran (2016) analyzed the influence of inquiry-based learning on developing critical thinking skills in sixth-grade secondary school students in Turkey. Applying the approach in the learners' science and technology classes, he found that the implementation of inquiry-based pedagogy significantly contributed to students' learning and critical thinking procedures in those classes. Similarly, Gomez (2017) explored the efficacy of an inquiry-based learning program established by a group of preservice instructors in the context of a literature class. The study revealed a great deal of enhancement among the participants, particularly as regards problem-solving skills, as a result of being exposed to Inquiry-based Learning (IBL).

As regards perceptions toward IBP, several studies have been carried out, among which reference can be made to the investigation performed by Lee (2014). In his probe into learners' attitudes toward inquiry-based learning, he explored the perspectives of a group of EFL learners learning Chinese as their second language. Through the study findings, it was revealed that an inquiry-based teaching approach could generate enthusiasm among students and the approach led to enhancing students' performance in grasping the taught material.

In another study, Haddock (2014) collated teachers' beliefs of inquiry-based teaching strategies. The results indicated strong beliefs among participants of the inquiry-based teaching indicators within three domains: planning, enactment, and reflection. The study focused on the knowledge of the origin of inquiry-based teaching strategies to determine accurate professional development required for the classroom, based on the evaluation schemes in the educational system. Furthermore, the study concluded that teachers who showed a remarkable perception of teaching under the IBP themes would achieve better results than those teachers who lacked it.

Likewise, McGregor (2016) elicited the perception of the teachers and students undergoing the diverse years of teaching over the role of IBP, the role of teacher-educators, and the related outlook in teaching and learning activities. The results of his study indicated that the students demonstrated their growing awareness of IBP when they were faced with IBP in the classroom.

In Iran, studies indicate the teacher education programs for EFL teachers suffer from some flaws and shortcomings including inadequate layout (Khanjani, et al., 2016) and the content deficiency (Ananisarab & Mobasheri, 2009) so that the outcomes of the classrooms should declare the lack of positive attitude among the teachers towards the programs and weak performance among the students (Atai & Khaki, 2006). The studies represent the dissatisfaction of the stakeholders with the present situation of the programs and their hope for setting the sound grounds for teaching materials (Mirhassani & Beh-afarin, 2004).

To address the research-based issues, the perception of teacher-educators of the IBP is worth investigating with the hope of portraying a clearer depiction of the teaching profession, increasing teachers' awareness of every principle of teaching practices, displaying how to participate in classroom context efficiently, detecting the areas in teaching that may need adequate attention regarding teaching competency, and growing awareness of the importance of IBP for more competent EFL teachers. Hence, to attempt to bridge the gaps identified in the literature, the study seeks to tap into the perceptions of teacher-educators of the role of IBP in the classroom and of the challenges that could impede the practices of IBP with the hope of providing a wider perspective on how IBP features can develop the insight of EFL teachers, offering pedagogical steps to take in the classroom, and showing the areas that need adequate provision and attention. As a limited number of studies have investigated the role of IBP in Iran, it seems essential to expand the quantitative and qualitative research in the field for tangible outcomes. In this regard, Fattahi and Haghverdi (2015) conducted a study to delve into the connection between the IBP approach to teaching and critical thinking and Abdi (2014) carried out research on IBP learning methods and their effect on students' academic achievement. However, it seems indispensable for ELT context to embark on the teacher-educators' perceptions to shed a brighter light on the knack and know-how of IBP.

Drawing on the concise literature addressing IBP, its efficacy and significance in different learning contexts, the researchers in the current study are of the view that scant scrutiny has been appropriated to exploring Iranian EFL teacher-educators perceptions concerning the role and significance of IBP, as well as the impediments on the way of its implementation. Thus, informed by this gap and in line with the objectives of the study, they set forth the following research questions:

RQ1. How do EFL teacher-educators perceive the role and importance of inquiry in EFL instruction?

RQ2. How do EFL teacher-educators perceive the challenges that impede the practices of inquiry-based pedagogy?

### 3. Method

# 3.1 Design and Context of the Study

As the research objectives and questions of the current study involved investigating the teacher-educators' perceptions of IBP in Iran, the design of the study was mainly descriptive in nature and followed survey analysis. In order to identify TEFL teacher-educators' perceptions on the role and significance of IBP in the EFL context, a structured questionnaire, as well as a semi-structured interview, was employed. The study was conducted in three provinces (Zanjan, Tehran, and Araak) during July 2019.

# 3.2 Participants

This study addressed the population of teacher-educators who taught in Farhangian Universities (FUs) from the cities of Zanjan, Tehran, and Araak. Through cluster random sampling, 100 teacher-educators serving at the FUs participated in the study. The participants were from both genders (66 males and 34 females), and in terms of age and experience, the sample was quite diverse. The rationale for this sampling lies in several factors. To sample the population in clusters is convenient since it is not logically possible to list all the members of a target population teaching in the FUs throughout Iran. That is, the nature of the distribution of population across the country, time, expenses, and the FUs locations was considered. Such probability sampling enabled the researchers to select random groups and ensure all individuals had an equal chance of being included in the sample (Ary, Jacob, Sorensen, & Razavieh, 2010). In order to reconsider the results gathered from the questionnaire distribution, an interview protocol with 20 teacher-educators participating in the first phase was conducted.

## 3.3 Instruments

Data were gathered via questionnaire and interview implementation. The study questionnaire was adapted from Akhter (2013) and fell on a four-level Likert-type scale.

The teacher-educators' questionnaire was composed of 40 items related to IBP. Moreover, a semi-structured interview was conducted to explore the teacher-educators' perceptions of IBP, which was congruent with the questionnaire for the consistency of the findings.

Following the pilot study, the instruments went through expert validation by three university professional lecturers in testing. Furthermore, Cronbach's Alpha for internal reliability of the questionnaire equaled 0.79, and 0.82, respectively.

To go through a factor analysis of the questionnaire items, the analysis of the major components was run utilizing a varimax rotation to explore whether there was any structure of factors which underpinned the response patterns in the Likert-type questions. Therefore, the questionnaire items proved appropriate to obtain a picture of the perception of the teacher-educators with regard to the role and importance of IBP in the EFL context covering a wide range of issues.

### 3.4 Data Collection Procedure

The first phase of the study was carried out in the late June 2019 during which the study questionnaire was distributed among 100 teacher-educators at FUs in Zanjan, Tehran, and Araak. A week later, the first researcher in the current study gathered the filled questionnaires. Fortunately, a perfect return rate was encountered and all questionnaires administered were safely completed and returned (66 males and 34 females). The second phase of the data collection was concerned with conducting face-to-face interviews (composed of 10 statements) with 20 teacher-educators in the early July 2019. In the interview sessions, the participants were asked to take a quick glance at the questions prior to holding the interview. Each interview lasted around 20 minutes and all sessions were audio-recorded. All interviews were transcribed verbatim soon after each interview was over. It's also worth noting that the participants had provided informed consent prior to holding administering questionnaires and holding interview sessions and they were ensured that their responses would be kept confidential.

## 3.5 Data Analysis Procedure

In dealing with the research questions, initially, the descriptive statistics were reported concerning teacher-educators' perceptions of different aspects of IBP. Furthermore, to pinpoint the potential differences in attitudes, multivariate analysis was run on the obtained data. Moreover, to analyze the data gathered from the interview

comments, NVivo (a qualitative data analysis computer software package) was employed for content analysis. To cater to anonymity, teacher-educators were assigned numbers, e.g. (TE1) indicating the first teacher and (TE20) representing the last one. In analyzing the data from interviews, the researchers followed the six-phase coding framework suggested by Braun and Clarke (2006). In so doing, after reading the transcripts a number of times, the researchers highlighted the parts that appeared to be EFL teacher-educators' perceptions towards the IBP. The researchers then cut the highlighted parts out and pasted them on index cards based on the similarities and differences in teacher-educators' perceptions. Next, the researchers labeled and assigned a relevant 'code' to each index card. Then, a digit for each code was specified to facilitate the analyses of the data via computer software, that is, digit 3 "Agree", 2 "Undecided", and 1 "Disagree". Having been coded manually, the obtained data were fed into NVivo and analyzed for the thick description of the results. Finally, the emergent themes were considered and compared based on the objectives and the questions of the study.

### 4. Results

In dealing with teacher-educators' perceptions of IBP expressed through questionnaires, the descriptive data, including the mean of the responses, the standard deviation, and the number of participants were tabulated. Then, the difference between the mean scores of the participants was tested. Table 1 shows the descriptive statistics relevant to the first research question.

Table 1

Descriptive Statistics of Teacher-educators' Perceptions of Inquiry-based Pedagogy

	Mean	SD	N
Views about teaching	17.72	2.38	100
Method of teaching	21.20	1.32	100
Views about inquiry-based pedagogy	14.98	2.25	100

As it can be seen in Table 1, the highest mean belonged to the 'Method of teaching' as one of the subscales of the questionnaire (M=21.20, SD=1.32) while the lowest mean was for 'Views about inquiry-based pedagogy' (M=14.98, SD=2.25). Table 2 shows whether these differences in the perceptions are significant or not.

Table 2

Multivariate Test Result of Teacher-educators' Perceptions of Inquiry-based Pedagogy

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	.89	198.84	2	98	.00	.89
Wilks' Lambda	.10	198.84	2	98	.00	.89
Hotelling's Trace	8.28	198.84	2	98	.00	.89
Roy's Largest Root	8.28	198.84	2	98	.00	.89

As Table 2 reveals, the differences among the four subscales of the Inquiry-based Pedagogy Questionnaire were significant (Wilks' Lambda = .10, F (2, 98) = 198.84, p = .00). However, to observe the precise differences between the subscales of the questionnaire, i.e. Views about Teaching and Inquiry-based Pedagogy, Views about Teaching and Wiews about Inquiry-based Pedagogy, Views about Teaching and Method of Teaching, Methods of Teaching and Inquiry-based Pedagogy, Methods of Teaching and Views about Inquiry-based Pedagogy and finally, Views about Inquiry-based Pedagogy and Method of Teaching, a pairwise comparisons test was run. Table 3 indicates the pairwise comparison results of the teacher-educators' perception of IBP.

Table 3

Pairwise Comparisons Results of Teacher-educators' Perceptions of Inquiry-based Pedagogy

		Mean Difference	2		95% Confidence Interval for Difference		
(I) factor1	(J) factor1	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	
Views about teaching	Method of teaching	-3.48*	.32	.00	-4.36	-2.59	
	Views about inquiry-based pedagogy	2.73*	.43	.00	1.53	3.92	
	Inquiry-based pedagogy	2.73*	.43	.00	1.53	3.92	
Method of teaching	Views about teaching	3.48*	.32	.00	2.59	4.36	
	Views about inquiry-based pedagogy	6.21*	.33	.00	5.27	7.14	
	Inquiry-based pedagogy	6.21*	.33	.00	5.27	7.14	

As demonstrated in Table 3, the difference between the subscales of the questionnaire, 'Views about Teaching and Inquiry-based Pedagogy' (p = .00), 'Views about Teaching and Views about Inquiry-based Pedagogy' (p = .00), 'Views about Teaching and Method of Teaching' (p = .00), 'Methods of Teaching and Inquiry-based

Pedagogy' (p = .00) and 'Methods of Teaching and Views about Inquiry-based Pedagogy' (p = .00) and finally, 'Views about Inquiry-based Pedagogy and Method of Teaching' (p = .00) was significant. However, the highest mean belonged to the subscale of 'Method of teaching' (M = 21.20, SD = 1.32) for teacher-educators.

The second research question of the study explored teacher-educators' perceptions concerning the challenges that impede the practices of inquiry-based pedagogy. In dealing with this research question, the themes of the interviews were extracted. NVivo 11 was used and all three related stages were pursued. Stage 1 was the pre-coding stage or data familiarization during which the researchers ran a word frequency query to explore which words were most commonly used. This allowed the researchers to visually interpret the text. The words were inquiry, pedagogy, literacy, knowledge, benefits, and difficulty. Stage 2 was referred to as a coding stage through a bottom-up approach during which the researchers re-read each transcript and coded emergent themes. By using a bottom-up approach, it was possible to select and add meaningful comments to containers called nodes. And stage 3 was identified as the post-coding stage or report findings during which inductive thematic analysis led to the development of six emergent themes, which are presented, summarized, and ranked in order of importance. The results of this analysis are briefed in Table 4.

Table 4

Teacher-educators' Perceptions of Themes of Inquiry-based Pedagogy

Views	Teacher Educators' Responses						
Teacher	Understanding	Elements	Language	Procedural	Benefits	Difficulty	
Educators=20	of IBP	of IBP	Literacy	Knowledge	of IBP	of IBP	
Percentages	36	18	14	11	15	6	

Thus, Table 4 shows that out of 100% IBP premises applied in the EFL context of Iran, the majority of themes, 36% was related to teacher-educators' understanding of IBP which is regarded as a suitable stream for teaching EFL in Iran. Moreover, 18% of IBP premises pertinent to the elements of IBP serve as productive and useful themes in teacher-educators' profession. Among the IBP premises, 14% encompassed the language literacy for all participants. In addition, IBP influenced 11% of the procedural knowledge or practical principles in teaching EFL. Furthermore, the participants confirmed that 15% of

the role of prosperity in teaching EFL belonged to the benefits of IBP. Lastly, teachereducators believed that 6% of the premises of IBP were of the serious difficulties.

The above percentages address one of the challenges that teacher-educators face concerning the IBP in the EFL context of Iran, which is the difficulty of using IBP at the rate of 6%. Thus, data collated from interviews and questionnaires indicate that the theme 'Difficulty of IBP' is one of the challenges encountered by teacher-educators when inquiry is practiced. It is of some factors that seem not to allow the necessary steps of IBP to be covered in practice. To illustrate the difficulty, it is worth mentioning that question 10 answered by 20 teacher-educators about the difficulty of the IBP was indicative of the following problems as *insufficient practical skills for teachers* (TE 1, 2, 5, 12, 14, 16, and 19), the tradition-oriented climate in Iran (TE 4, 7, 8, 9, 10, 13, 18, and 20), and the shortage of time (TE 2, 3, 6, and 7).

The results of Table 4 indicated the exact percentages of the themes elicited from the conducted interviews with 'Difficulty of IBP' which was the only theme falling below 10%. Since the six percentage points out of 100% IBP themes related to the 'Difficulty of IBP' demonstrated that 94% of the materials and skills of IBP were considered productive by the participants, it indicated the teacher-educators' positive perceptions of the inquiry-based pedagogy for EFL context in Iran.

## 5. Discussion

The results obtained for the first question demonstrated that the perception of EFL teacher-educators of the IBP themes in the teaching profession stands as the basic element to deliver the IBP constituents more than the existing IBP-free properties in the EFL context. They also signify that teacher-educators' view of the method of teaching IBP is more important than the other factors.

The possible explanation, based on the EFL teacher educators' perceptions, is that IBP is required to develop the insight of the EFL teachers for the success of the EFL classroom in the (post)modern era. According to Arthur (2005), every single teacher has the capability to act as a true decision-maker in the L2 classroom based on his or her association with the IBP themes and materials that he or she receives from teacher-educators during the presentation and instruction in the classroom. Consequently, IBP accentuates teaching and learning in the EFL context via transferring the sources and

materials for better performance of learners. That is, as the EFL teachers and students embark more on IBP, teachers become more dynamic and productive in teaching professional knowledge in the classroom, and students gain grounds and make strides more in their classroom activities and in their real life.

The results from the study conform to the studies carried out by Kim (2017) and Wells (2011). Kim suggested that offering the IBP styles and strategies in teacher education programs can develop a sense of responsibility among the teachers especially in the case of encouraging students to be involved in the classroom and life affairs with a critical approach and attitude although laying much more emphasis on IBP strategies would make teachers largely misdirected.

Additionally, in line with Wells' (2011) findings, it seems that the participants in the study who have been familiarized with the IBP principles and themes can benefit more from the materials of the teacher education program due to developing an awareness of the issues and approaches to tackle the issues which are often faced by teachers and students in the classroom.

As regards the second research question, almost all EFL teacher-educators participating in the study expressed positive perceptions about the themes of IBP and showed the relevant challenging areas by presenting the exact percentages over the themes. The results proved that the themes of IBP for the teaching profession are salient as the percentages showed that the themes of IBP regarding understanding, presenting, and handling the professional theories and practices are deemed important in the EFL classroom. They also displayed that the theme related to the Difficulty of IBP merely received 6% of the total, i.e., the least percentage in teaching demonstrating that teacher-educators' perception is positive. This is conceivably due to the theoretical notions of IBP considered and utilized by teacher-educators since they have the minimum contacts with students in the real classrooms of the schools (Akhter, 2013).

The probable description is that the perception of the themes of IBP builds and restores teacher-educators' confidence and commands as they develop their vision of the themes to be accurately handed over to the teachers and equip them for appropriate involvement in an EFL context. According to Fan (2015), inexperienced and experienced teachers themselves are teaching and learning coincidently so that they may fall on the brink of dissociating themselves from the assigned syllabi outlined in the textbooks or

teacher education programs. In this regard, teacher-educators assist teachers in understanding the themes of IBP regarding the theories and practices offered to the teachers or help them with the knowledge about presenting the classroom activities that overpowers teachers to be more confident and certain of their own teaching and their students' learning.

The results of the second question are in line with the studies carried out by Haddock (2014) and McGregor (2016). The former concluded that participating teacher-educators in the L2 context benefited from the themes of IBP, particularly from the theme 'understanding of IBP'. Furthermore, based on the results of McGregor's study, it was recommended that familiarizing the learners with IBP relevant to teaching and learning should raise insight and ability and it eventually causes a remarkable advancement in the teachers' and students' sense of commitment. Moreover, they promote learning opportunities and shape beliefs and attitudes on the student side.

Finally, the results appear to be compatible with Pedaste et al. (2012) theory of IBP in teaching language, which argues that the parameters of IBP have the potential benefits for L2 teacher education programs as well as insight and values for L2 teachers. It can finally be concluded that involved figures in the EFL context, including educational policy-makers, school administrators, teacher-educators, and particularly EFL teachers, may benefit from the perception of teacher education program as a determining factor in shaping and developing EFL teachers' teaching and students' learning. In other words, the findings show that the IBP premises presented in the teacher education program are associated with the pedagogic principles of the teacher-educators and competency development of EFL teachers.

# 6. Conclusion and Implications

The current study set out with the aim of exploring EFL teacher-educators perceptions of the role and importance of inquiry in EFL instruction, as well as investigating the challenges that impede the practices of inquiry-based pedagogy. Through the study findings, the positive attitude of EFL teacher-educators toward the impact of IBP and the IBP-oriented teacher education program on their professional insight and knowledge was revealed. Furthermore, the theoretical assumption that having awareness of the themes of IBP has a positive impact on EFL teachers' professional activities in the

classroom indicates that the awareness of IBP influences the classroom performance in the L2 context.

In conclusion, the study unveils that EFL teacher-educators' perceptions of the role and themes of IBP play a significant role in the development of English language teaching and learning. The results of the study can have implications for curriculum designers, teacher educators, and language teachers in the L2 context so that the curriculum designers might be urged to consider more productive materials in accordance with IBP pedagogy to empower L2 teachers to determine and promote their professional knowledge and skills for a more prolific teaching career. Furthermore, the results lay the foundations for L2 teacher educators to reconsider the materials and strategies both in teacher education programs and classroom settings as the needed aspects in the modern era. In addition, language teachers as the principal figures in the L2 context take a great advantage of the IBP-oriented results of the present study, for they can build a vivid picture of IBP and make an effort to follow the pertinent theories and put them into their teaching practice.

Like all other studies, the current study suffered from a number of limitations the most important of which were accessing and arranging with the participants to fill out the questionnaires and urging them to take part in interview sessions. Future researchers are recommended to delve more deeply into the requirements and complications of implementing IBP in different educational levels and settings, and the challenges facing instructors and learners for the proper implementation of inquiry-based approaches.

## References

- Abdi, A. (2014). The effect of inquiry-based learning method on students' academic achievement in science course. *Universal Journal of Educational Research*, 2(1), 37–41.
- Akhter, N. (2013). An investigation of Pakistani university teacher-educators' and student-teachers' perceptions of the role and importance of inquiry-based pedagogy in their professional learning experiences in initial teacher education (Master Thesis, Glasgow University).
- Ananisarab, M., & Mobasheri, A. (2009). The impact of short-term pre-service teacher training courses on the teachers' attitude and practice. *Roshd FLT Journal*, 92(24), 54-65.
- Anderson, D. R. (2002). Reforming science teaching: What research says about inquiry. *Journal of Science Teacher Education*, 13(1), 1-12.
- Arthur, D. (2005). The effect of inquiry-based instruction on students' participation and attitudes in a third-grade science classroom (Master thesis, University of Central Florida).

- Ary, D., Jacobs, L. C., Sorensen, S., & Razavieh, A. (2010). *Introduction to research in education*. Cengage Learning.
- Atai, M. R., & Khaki, N. (2006). Iranian FLT teachers' perceptions of the efficiency of short-term in-service teacher programs. *Roshd FLT Journal*, 79(20), 33-40.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Phycology*, 3(2), 77-101.
- Chu, S. K. W., Reynolds, R. N., Tavares, V. J., Notari, M, & Lee, C. W. Y. (2017). 21st century skills development through inquiry-based learning: From theory to practice. Springer Nature Pte Ltd.
- Dorier J., & Garcia F. J. (2013). Challenges and opportunities for the implementation of inquiry-based learning in day-to-day teaching. *ZDM Mathematics Education*, 45(6), 1-13.
- Duran, M. (2016). The effect of the inquiry-based learning approach on student's critical –thinking skills. Eurasia Journal of Mathematics, Science & Technology Education, 12(12), 2887-2908.
- Fan, X. (2015). Effectiveness of an inquiry-based learning using interactive simulations for enhancing students' conceptual understanding in physics (Doctoral dissertation, The University of Queensland). Retrieved from https://tspace.liberary.uq.edu.au.
- Fattahi, F., & Haghverdi, H. (2015). Does inquiry-based learning enhance students' critical thinking: A case study of Iranian EFL learners? *International Journal of Language Learning and Applied Linguistics*, 9(3), 134-141.
- Gago J. M. (2004). Europe needs more scientists: Report by the high-level group on increasing human resources for science and technology. European Commission.
- Gomez, L. F. (2017). Learning by teaching: Training EFL pre-service teachers through inquiry-based learning. *Electronic Journal of Foreign language teaching*, *14*(1), 21-36.
- Gordon, S. P. (2004). *Professional development for school improvement: Empowering learning communities.*U.S.A: Pearson Education.
- Haddock, L. (2014). A comparison of teachers' beliefs of the use of inquiry teaching, origin of knowledge of inquiry teaching, and student achievement between international baccalaureate and non-international baccalaureate primary years' program schools. (Doctoral dissertation, University of Central Florida). Retrieved from https://stars.library.ucf.edu/etd.
- International Baccalaureate Organization. (2014). *Program standards and practices*. IBO. Retrieved from http://www.ibo.org/globalassets/publications/become-an-ib-school/programmestandardsandpractices.pdf
- Khalaf, B. K., & Zin, Z. (2018). Traditional and inquiry-based learning pedagogy: A systematic critical review. *International Journal of Instruction*. 11(4), 545-564.
- Khan, A. W. (2012). Inquiry-based teaching in mathematics classroom in a lower secondary school of Karachi, Pakistan. *International Journal of Academic Research in Progressive Education and Development*, 1(2), 1-7.
- Khanjani, A., Vahedy, F., Jafarigohar, M. (2016). The EFL pre-service teacher training in Iran: Is it adequate or not? *Iranian Journal of English for Academic Purposes*. 5(1), 3-25.

- Kikis-Papadakis, K. (2013). *Deliverable N 2.1: National working papers on analysis of policy context*. Mathematics and science for life. Retrieved from www.mascil-project.eu.
- Kim, J. (2017). *Inquiry-based learning: A case study of an experienced elementary mathematics teacher in action* (Doctoral dissertation, University of Toronto). Retrieved from https://tspace.liberary.utoronto.ca.
- Kumaravadivelu, B. (2008). *Understanding language teaching: from method to post method*. Lawrence Erlbaum Associates Inc.
- Lee, H. (2014). Inquiry-based teaching in second and foreign language pedagogy. *Journal of Language Teaching and Research*, 5(6), 1236-1244.
- McGregor, D. G. (2016). Exploring the impact of inquiry learning on students' beliefs and attitudes towards mathematics (Doctoral dissertation, The University of Queensland). Retrived from https://tspace.liberary.uq.edu.au.
- Mirhassani, A., & Beh-afarin, R. (2004). Assessment of needs, pedagogical constraints and objective setting in EFL teacher education programs (TEPs): EFL teacher education evaluation. *Roshd FLT Journal*. 69 (16), 45-57.
- Osborne J., & Dillon J. (2008). Science education in Europe: Critical reflections. A report to the Nuffield Foundation. Nuffield Foundation.
- Ozgur, S. D., & Yılmaz, A. (2017). The effect of inquiry-based learning on gifted talented students' understanding of acids-based concepts and motivation. *Journal of Baltic Science Education*, 16 (6), 994-1007.
- Pedaste, M., Mäeots, M., Leijen, Ä., & Sarapuu, T. (2012). Improving students' inquiry skills through reflection and self-regulation scaffolds. *Technology, Instruction, Cognition & Learning*, 9(2), 81-95.
- Rocard M., Csermely P., Jorde D., Lenzen D., Walberg-Henriksson H., & Hemmo V. (2007). *Rocard report:*Science Education Now: A New Pedagogy for the Future of Europe. EU 22845, European Commission.
- Salinitri, G., Palazzolo, S., Nahaiciuc, R., Iacobelli, E., Li, Y., & Zhou, G. (2018). Analysis of Canadian inquiry-based science teaching practices and its implications for reciprocal learning. *Universal Journal of Educational Research* 6(10), 2280-2293.
- Vejargah, K. (2008). In-service education planning. SAMT.
- Wells, A. (2011). *Inquiry-based learning: Fact for fallacy?* (Master thesis, University of Manitoba). Retrieved from https://mspace.lib.umanitoba.ca.