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How Creative Are Iranian EFL Teachers?

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Abstract: The study of creativity has been of great interest to educationalists in general and language teaching practitioners in particular. With all these, very little if any has been reported on the issue in Iranian EFL context. Having this in mind and drawing on the latest profile of creativity, effort was made to see how creative Iranian EFL teachers are. In so doing, a total of 36 English language teachers filled a checklist designed based on EFL Teachers' Creativity Profile (EFLTCP). The results indicated that the participants' perception did not match the way they performed their activities in the classroom. The main discrepancies were seen in teachers' Expertise and Management perceptions with their real practice in the classroom. The findings of this study can be used by language teacher educators, curriculum designers, and language teachers.

Overview

Creativity is present undoubtedly in many aspects of human life. It is the process of making connections and, sometimes, is about productivity, about making something new from those connections (Gardner, 1993). Creativity has been a subject of research to psychologists, sociologists and cultural theorists who are interested in studying the origins of the creative mind and creative activities particularly within the domains of the arts and culture (Boden, 2004). Creativity takes place indeed in the interaction between a person's thoughts and a socio-cultural context (Csikszentmihalyi, 1996). Intellectual skills, knowledge, styles of thinking, personality, motivation and environment all take key parts and work together to open up the space for creativity (Hall & Thomson, 2005). As with many fields investigating human activity, the conceptualization of creativity is divergent, conflicting, and subject to diverse perceptions (Reilly, Lilly, Bramwell, & Kronish, 2011).

With the shift from an industrial economy to a knowledge economy, skills supporting the creation of knowledge and innovation have become of great value (Sawyer, 2006). Focus on learning for deeper understanding as the core requirement of innovation (Bereiter, 2002) needs creative and improvisational teaching (Sawyer, 2006). Due to the recent rise of new educational policies and the increase in tensions and dilemmas facing schools, along with the growing demand for a wider variety of skills and knowledge among children, the need for creative teaching seems more crucial than ever (Woods & Jeffrey, 1996). As the population of students is divergent, creative teaching seems necessary to meet the students' complex educational needs. Also, teachers must be creative when facing multilingual and multicultural learners with diverse learning needs and socioeconomic histories. Therefore, successful teaching does depend on teacher's creativity (Reilly, Lilly, Bramwell, & Kronish, 2011).

Ebneroumi and Pouladi Rishehri (2011) focused on the viewpoints of administrators regarding the characteristics of the creative school. They found a framework that could be used

to identify the characteristics of creative schools. This framework included four dimensions: new insight in education, a flexible administrative structure, adequate physical space and the context of creative leadership with economic, political, cultural, information technology, social, technical and technological aspects. As this framework suggests, one of the dimensions of a creative school is new insight in education that could be related to teachers' creativity. Teaching can be deemed creative when a teacher combines existing knowledge in some novel or unique way or introduces new processes to cultivate cognition to get useful results. This may be either planned before the act of teaching, or improvised as a response to the demands of the learning context (Csikszentmihalyi, 1996). Moreover, the rising paradigm of student-centred constructivism requires teachers to modify curricula to meet the interests and needs of their particular students, and the ever-increasing press of information. Thus, creative teachers are needed both to increase students' creativity and to effectively implement modern curricula. Teacher creativity is needed in order to be more effective in enacting strategies in line with the current thinking about learning. Özcan (2010) examined contributions of English teachers' behaviour on students' creative thinking abilities and relationships between these effects and teachers' characteristics that may be related with them. The results of the study showed that English teachers' behaviour provided positive contributions on students' creative thinking abilities. Morais and Azevedo (2011) studied the concept of creative teacher and pupil from the teachers' viewpoint. Their study revealed that teachers' perceptions about the creative pupil and teacher were not very distant from concepts defined by explicit theories. However, some misconceptions and unfamiliarity regarding both concepts and regarding creativity, in general, seem to emerge too. Newton and Beverton (2012) studied pre-service teachers' conceptions of creativity within the curriculum for English. They found that it is important that teachers in schools as well as those responsible for educating teachers in universities be advised that teachers' conceptions of creativity in English may be inadequate in several respects and that they may not recognize opportunities for creativity. As the literature suggests, the concept of creative teachers has become the concern of many researchers, though no precise criteria is proposed to identify who a creative teacher is or how creative a teacher is.

Statement of the Problem

In a continuously changing information society, technological and social innovations are seen as the engines for economic growth and competitiveness, and as the main prerequisites for welfare (Florida, 2002; Andiliou & Murphy, 2010). One way to promote these innovations is to support creativity and collaboration in learning and working practices (Shalley & Gilson, 2004; Sawyer, 2006). Therefore, the aim of education is not only to enhance the development of specific knowledge and skills, but also to support and teach collaboration and creative problem solving among students (Craft, 2008; Arvaja, Hämäläinen, & Rasku-Puttonen, 2009).

Further, supporting and promoting creativity is often set as the target in educational settings. A number of approaches and techniques may be required to promote several aspects of creativity that seems a polemic issue. On the other hand, it is not defined specifically to which type of learning activities and processes they refer to or how they should be supported. Nor do teachers necessarily find pedagogical support for their decisions and teaching activities from curricula (Voogt, 2008). Moreover, even though there are effective ways of supporting collaborative learning and creativity, it is often problematic to enforce research findings from

specific conditions in various authentic educational contexts (Brown, 1992; Kollar, 2010) or to reach productive collaboration and creativity in authentic classroom situations (Sawyer, 2006; Arvaja, 2007).

In Teaching English as Foreign Language environments, teachers mostly face these problems, which could be due to lack of a unified profile of creativity in foreign language learning and teaching to assess the EFL teachers' creativity index. Consequently, the present study is going to investigate the creativity index of Iranian EFL teachers through a validated creativity profile designed for EFL teachers.

The study

The present research is part of a broader study of the development and validation of EFL teachers' creativity profile. The study had two phases; a theoretical phase devoted to the development of the profile, and a practical phase related to the assessment of the EFL teachers' creativity index based on the proposed profile. This paper is related to the practical phase that investigates the creativity index of Iranian EFL teachers.

Instrument

To achieve the goals of this study, a checklist comprising of 43 likert-type items was designed according to the components of the proposed EFL teachers' creativity profile. For the validation of the profile, 466 TEFL Ph.D. holders and M.A. graduates participated in the study and several steps were undertaken. To provide the evidence for content validity, 13 Ph.D. holders in TEFL were invited to peer-review the items gathered in the item pool. They were asked to rate the appropriateness of items. Analysing the reviewers' views led the researchers to eliminate, add, and modify some items. Consequently, of the original 108 items, 51 items were remained for further validation. In this phase, 296 out of 466 participated to conduct exploratory factor analysis. Since sample's suitability for factor analysis is the first step of exploratory factor analysis, Bartlett's Test of Sphericity was employed. The obtained results showed a high significance ($p < .001$) and the factorability of the matrix was supported by the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value of .8. Principal Components Analysis (PCA) supported three fixed factors for the sample, each explaining 28.3%, 13.3% and 10.2% of the variance. These factors were named Individual Difference, Expertise, and Management. Only these three factors could exceed the criterion value obtained from Parallel Analysis. A three-factor solution was also supported by inspection of the screen plot. Inspection of the pattern matrix showed a clear three-factor solution as well, with some exceptions. Some items showed low loadings and some loaded inappropriately on other factors. Accordingly, it was decided to remove these items from EFLTCP. Thus, PCA with oblimin rotation was duplicated with these items removed. This resulted in a 43-item scale (CRTV-43), with seventeen Individual Difference items, twenty Expertise items and six Management items. To conduct Confirmatory factor analysis using maximum likelihood estimation, the 43-item checklist based on the proposed profile was distributed among the second independent sample of 157 cases. Accordingly, some other alternative models were investigated. As identified in the exploratory factor analysis, a 43-item three-factor model was investigated allowing the factors to freely correlate. Factor loadings in this model were statistically significant. Although the chi-square test

was significant [$p = .001$], the other fit indices indicated good fit. The GFI statistic (.927) was reasonable, and the TLI (.978), CFI (.986), and RMSEA (.049) indicated good fit. Moreover, Cronbach's alpha analysis was employed to verify whether or not the checklist possesses reliability and internal consistency. A coefficient value of 0.82 indicates that the developed checklist possesses good internal consistency reliability.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.827	.835	43

Table 1: Reliability statistics of the checklist

Participants

A total of 36 EFL teachers were picked up randomly from six private English language institutes in Gorgan, Golestan province, Iran. The teachers taught English to the male and female students. They were asked to fill in the checklist prepared for the subjects. Their ages ranged from 22 to 36 years. They were graduated from different Iranian State and Azad universities, with the educational levels of B.A., M.A., and undergraduate Ph.D. in Teaching English as a Foreign Language and English Literature. The demographic information of the participants is presented in Table 2.

		Frequency	Percentage
Gender	Female	18	50
	Male	18	50
Education	Bachelor	21	58.3
	Master	13	36.1
	Ph.D.	2	5.6
Age range	22-26	13	36.1
	26.1-32	19	52.8
	32.1-36	4	11.1

Table 2: Demographic Information of the Subjects

Raters

Two raters conducted the observation phase to achieve the inter-rater reliability. Both raters had M.A. in TEFL and were teaching English for several years. The inter-rater reliability was estimated using Kappa statistics that is presented in Table 3.

	Agreement
Inter-rater reliability	0.83

Table 3: Inter-Rater Reliability Statistics

Procedure and Data Collection

The checklists were distributed among the subjects of the study in summer 2013. They were asked to put a check mark on the appropriate extent from *very little* to *very much*. A parallel checklist was also designed special for raters. The first rater observed the teaching process of the subjects in two sessions. Each session lasted one hour and a half. She filled in the checklist designed for the raters right after the class was over. The second rater observed the teaching process of the subjects in one session. Each session lasted one hour and a half. She also filled in the checklist designed for the raters right after the class was over.

All the data obtained from the checklists filled by the subjects and raters of the study were put into statistical analysis. They were entered into SPSS and analysed using descriptive statistics in terms of frequencies, percentages, and means. Inferential statistics was also employed. The results of the study will be presented at length in the following section.

Results

To assess the EFL teachers’ creativity index, the data gathered from the checklists of observers and teachers were put into analysis concerning the three main components of Creativity Profile, i.e. *Individual Differences*, *Expertise*, and *Management*, and their nine sub-sections. The data were analysed in terms of frequencies, percentages, and means. The analysis was employed for each sub-section of the checklist separately. The results are presented at length in the following sections.

Results of the Analysis of Individual Differences Section

Due to what was discussed earlier, the study embarked on the investigation of the EFL teachers’ creativity through the different sections of the 43-item likert-type checklist. First, the portions of the subsections of Individual Differences, i.e. *Personality Traits* and *Thinking Style*, were inspected. Individual differences were included to recognize the variation of psychological factors that a creative individual may possess. The results are presented in Tables 4 and 5.

Individual differences	Very little		Little		Average		Much		Very much		Mean
	frequency	percent	frequency	percent	frequency	percent	frequency	percent	frequency	percent	
Personality Traits	1	8.3	8	22.2	16	44.4	9	25	-	-	2.86
Thinking Styles	5	13.9	6	16.7	14	38.9	5	13.9	6	16.2	3.02

Table 4: Distribution of the data of Individual Differences related to the teachers’ perception

As Table 4 illustrates, the means of the creativity factors of subjects’ Personality Traits is 2.86 out of 5 and for Thinking Style is 3.02 out of 5. From the obtain results, it can be concluded that teachers’ perception of the level of their Individual Differences is not very high.

Individual Differences	Very little		Little		Average		Much		Very much		Mean
	frequency	percent	frequency	percent	frequency	percent	frequency	percent	frequency	percent	
Personality Traits	8	22.2	13	34.2	9	25	3	8.3	3	8.3	2.44
Thinking Styles	7	19.4	14	38.8	11	30.6	3	8.3	1	2.8	2.36

Table 5: Distribution of the data of Individual Differences related to the raters' observations

As the above table indicates, the means obtained from the raters' observations are not high. Comparing the results obtained from Tables 4 and 5 reveals that there is a difference between how teachers perceive their individual differences factors and how others see them.

Results of the Analysis of Expertise Section

In this section, the portions of Expertise were investigated. The subsections of Expertise are *Knowledge, Developmental Area, Teaching Style Preferences, Class Activity, and Skill*. Knowledge refers to the teachers' use of general knowledge to teach English. Developmental channels are proposed to investigate the extents to which the subjects benefited from the students' developmental areas to transmit knowledge. Teaching Style Preferences are described to investigate to what extent the teachers have tendency towards the Creative Teaching Styles in order to transmit knowledge. Class Activity is included in the Creativity Profile to examine to what extent the teachers employ the activities which are components of creative teaching in order to transmit knowledge. Skill subsection is designed to measure the extent of the participants' creative teaching skill. The results related to these subsections are illustrated in the following tables.

Expertise	Very little		Little		Average		Much		Very much		Mean
	frequency	percent	frequency	percent	frequency	percent	frequency	percent	frequency	percent	
Knowledge	6	16.7	7	19.4	10	27.7	6	16.7	7	19.4	3.02
Developmental Area	4	11.1	6	16.7	6	16.7	9	25	11	30.6	3.47
Teaching Style	3	8.3	3	8.3	12	33.3	9	25	9	25	3.5
Class Activity	2	5.6	18	50	13	36.1	2	5.6	1	2.8	2.5
Skill	4	11.1	12	33.3	11	30.6	7	19.4	2	5.6	2.75

Table 6: Distribution of the data of Expertise related to the teachers' perception

Table 6 illustrates the means of the creativity factors (i.e., the subjects' Expertise are recognized as average, and over average by the teachers). The following table demonstrates the overall data analysis related to the Expertise section obtained from the raters' observations.

Expertise	Very little		Little		Average		Much		Very much		Mean
	frequency	percent	frequency	percent	frequency	percent	frequency	percent	frequency	percent	
Knowledge	14	38.8	11	30.6	5	13.9	3	8.3	3	8.3	2.16
Developmental Area	8	22.2	11	30.6	9	25	5	13.9	3	8.3	2.52
Teaching Style	8	22.2	10	27.7	11	30.6	5	13.9	2	5.6	2.55
Class Activity	10	27.7	14	38.8	7	19.4	1	2.8	4	11.1	2.30
Skill	-	-	6	16.7	14	38.8	10	27.7	6	16.7	3.44

Table 7: Distribution of the data of Expertise related to the raters' observations

According to Table 7, the means of the Expertise section are not very high from the raters' perspective. Comparison of Tables 6 and 7 shows that there are some differences in the teachers' interpretation of their expertise and what it really is. As it is evident, the teachers overestimated their expertise in four subsections, namely Knowledge, Developmental Area, Teaching Style, and Class Activity. On the contrary, they underestimated their skills in teaching English.

Results of the Analysis of Management Section

Management as the last part of the EFL Teachers' Creativity Profile is divided into two sub-sections, i.e. *Class Management*, and *Time Management*. Class Management was scrutinized to investigate the extent to which the subjects employ creative methods of handling classrooms. Time Management was included in the profile to investigate the extent to which the subjects manage the class time effectively. The results related to this subsection are illustrated in the following tables.

Management	Very little		Little		Average		Much		Very much		Mean
	frequency	percent	frequency	percent	frequency	percent	frequency	percent	frequency	percent	
Class Management	2	5.6	4	11.1	18	50	8	22.2	4	11.1	2.3
Time Management	6	16.7	5	13.9	7	19.4	11	30.6	7	19.4	2.32

Table 8: Distribution of the data of Expertise related to the teachers' perception

As it is shown in the above table, the obtained means are almost low. The results obtained from the rater’s observation related to this section are illustrated in the following table.

Management	Very little		Little		Average		Much		Very Much		Mean
	frequency	percent	frequency	percent	frequency	percent	frequency	percent	frequency	percent	
Class Management	6	16.7	11	30.6	8	22.2	6	16.7	5	13.9	2.8
Time Management	9	25	15	41.7	2	5.6	7	19.4	3	8.3	2.44

Table 9: Distribution of the data of Expertise related to the raters’ observations

As Table 9 illustrates, the mean related to Class Management was 2.8 and mean of the Time Management was 2.44. According to the results of this section, the obtained means from the raters’ observation was higher than what was perceived by the teachers.

Results of the Analysis of Overall Estimations of the Means

The following table demonstrates the overall mean of each section of the EFL teachers’ creativity index from the teachers’ perception and the raters’ points of view. It is evident from the following table that Expertise has obtained the highest mean from the teachers’ perspective. Whereas the means of the Expertise and Management sections, are almost equal (i.e., from the raters’ points of view). Teachers viewed Management as the least realized creative factor, while the observers identified Individual Differences as the least realized component of creativity among the participants.

EFL Teachers’ Creativity Index			
Variables	Individual differences	Expertise	Management
Overall means perceived by teachers	2.94	3.048	2.31
Overall means observed by raters	2.4	2.594	2.6

Table 10: Creativity index of the Subjects

The Difference between the Teachers’ Perceptions and their Observed Practice

To investigate whether or not the differences are significant, a Chi square test was employed for every single item of the checklist. The results are presented in the following tables.

NO	Statements	X2		Asymp. sig	Result	
		value	df		accept	reject
1	have original ideas.	8.95	8	.34		*
2	go beyond the boundaries of classroom’ material and context.	27.61	16	.035	*	

3	employ her/his own intuitional methods.	7.97	12	.787		*
4	have ideas and behaviours that are usually different from other people.	8.35	12	.757		*
5	use humours in classroom.	16.8	1	.157		*
6	be flexible in class.	29.59	2	.02	*	
7	try to experience the unknowns, and guides the students to do so.	8.3	16	.405		*
8	have ideal thoughts and project them into the real world.	7.93	8	.790		*
9	show a curiosity to search for new knowledge.	6.56	12	.885		*
10	like to fantasize.	12.06	12	.74		*
11	not obey the routines.	25.71	8	.012		*
12	love what I am doing and I focus on the work rather than the potential reward.	7.82	12	.450		*
13	be eager to hear the students' perspective on their learning and let them choose their tasks.	6.28	8	.711		*
14	be able to handle different tasks, thoughts at the same time.	9.14	12	.166	*	
15	normally provide multiple answers to the student's questions.	31.94	6	.001		*
16	make connections between different subjects and concepts.	13.76	12	.316		*
17	deal with the whole process of teaching and learning rather than focusing on its parts.	13.83	12	.086		*

Table 11: Chi square results on the differences between teachers' perceptions of their Individual Differences and their observed classroom practice

According to the above table, the teachers' perceptions of their individual differences match the raters' observations in 3 items out of 17. As the results show, in most of the items, there is a disagreement between the teachers' perceptions and the observers' points of view.

NO	Statements	X2 value	df	Asymp. sig	Result	
					accept	reject
1	As an EFL teacher, I... have new information about the current topics.	8.25	8	.409		*
2	make use of his/her general knowledge to explain the subject matter.	14.26	8	.579	*	
3	make use of the students' ethical values to motivate them.	12.39	16	.415		*
4	be a friend of students.	11.17	12	.514		*
5	provide challenging topics and motivate students to think about the topics and express their critical views.	7.58	12	.271		*
6	teach some concepts while playing.	10.89	12	.538		*
7	modify the topics according to the students' cultural norms.	8.3	12	.761		*
8	make use of students' general knowledge and experiences to make the problems comprehensible.	10.46	12	.575		*
9	design team work tasks based on the real world problems.	10.46	8	.223		*
10	try to enhance student's self-esteem to set and achieve appropriate goals.	10.93	12	.535		*
11	use face-to-face interaction and communication as means of developing students' proficiency.	11.37	8	.181		*
12	try to transmit as much information as I can to the students.	14.72	12	.257		*
13	associate the current topics to the students' real life experiences for better learning to occur.	12.65	6	.049		*
14	let the students to feel free in the class, to talk, to express their own ideas in the classroom to use them in the learning process.	17.03	12	.148		*
15	provide complex learning situations to foster students' creative thinking.	12.56	9	.183		*
16	use several methods in teaching English.	4.5	9	.876		*
17	attend to students' feedbacks in the classrooms.	8.31	8	.403		*
18	give research-based activities to motivate them to explore the	14.12	12	.292		*

	unknown.				
19	provide gap-based situation and give them opportunity to solve their own problems.	13.63	16	.626	*
20	have good expertise in teaching English.	7.63	12	.813	*

Table 12: Chi square results on the differences between teachers’ perceptions of their Expertise and their observed classroom practice

Table 12, represents the teachers’ evaluation of their expertise match (i.e., the observers’ view in only one item). The results of the other items show disagreement between the teachers’ perceptions and their actual practice in the classroom.

NO	Statements As an EFL teacher, I...	X2 value	df	Asymp. sig	Result	
					accept	reject
1	welcome freedom and make no limit to the students, but use firm control over the teaching process.	10.14	9	.339		*
2	guide the students to find new ways of learning, make predictions, and solve problems.	13.4	12	.341		*
3	never bear silence in the classroom.	15.55	12	.212		*
4	provide a stress free situation to help students foster their divergent and creative thinking.	11.83	12	.459		*
5	easily manage the time devoted to instruction to teach all the components effectively.	2.67	4	.613		*
6	devote a part of the class time to students’ participation, authentic tasks, and discovery.	1.73	6	.943		*

Table 13: Chi square results on the differences between teachers’ perceptions of their Management and their observed classroom practice

The above table illustrates the differences between how teachers perceived their Management as a creative EFL teachers and how the raters observed them. The results indicated that there is a mismatch between the teachers’ and the observers’ views. Thus, this suggests that the participants’ perceptions of their creativity were almost different from their performance in the classroom.

Discussion and Conclusions

In today’s pedagogical context in general, and in English language pedagogy in particular, creativity has become an asset for being successful. In fact, it is difficult to imagine successful teaching without considering teacher’s creativity. As such, researchers and practitioners alike have been interested in understanding ways to enhance creativity. Since, creative capacity is a multifaceted construct and several variables may affect it, it can be improved in many ways (Sak & Oz, 2010). Accordingly, the extent to which creativity can be improved seems a controversial issue in the literature. One way to improve creativity is to educate creative teachers. Effective teachers are often creative ones, though an examination of creative teachers is largely invisible. And, to the authors’ knowledge, there has been little research that has focused on the creativity index of EFL teachers. Thus, this study was conducted to assess how creative Iranian EFL teachers are. To achieve the goals of this study, a total of 36 EFL teachers were observed in three sessions by two observers. They also were asked to fill in the checklist prepared according to a validated EFL Teachers’ Creativity Profile.

Concerning the subcategories of Individual Differences, the teachers identified Thinking Style to have a higher mean than Personality traits, while the observers' perceptions were different. From the observers' perspective, the mean obtained from the data related to Management was higher than Thinking Style. Moreover, the results of Individual Differences showed that the teachers overestimated the level of individual differences factors. Among the components of Expertise section, teachers' skill in teaching obtained the highest mean from the observers' point of view, while the teachers perceived their teaching style as the most prominent factor. In addition, it was evident that teachers have mostly overestimated their abilities as a creative EFL teacher, while the observers' estimation was a little different. Regarding the management section, although the obtained means were not very much different, the results indicated that the teachers underestimated their skills in managing the classrooms. According to the means obtained from the overall results, the means of the three main components of the Creativity profile were not high. Consequently, it should be concluded that the Creativity index of the Iranian EFL teachers under study was around average.

Detecting the differences between the results obtained from teachers' perceptions and the observers' views, it was revealed that how the teachers' viewed themselves was different from what was observed by the raters. These differences may be the results of misconceptions that teachers had with regard to the concept of creativity that could be due to the inappropriate education they received. This result is also in line with what Morais & Azevedo (2011) found. Accordingly, a well-designed EFL teachers' education program seems necessary to train more creative teachers.

On the basis of the obtained results from the teachers' perspective, it was evident that Management, with the lowest creativity index, was viewed as the most problematic component of the creativity among the subjects. On the other hand, Expertise was identified as the least problematic component of creativity, followed by Individual Differences. But the observers' view was different and they identified Individual differences as the most problematic area of the subjects. Supported by Sternberg (2006) who identified individual differences as the main factor affecting individuals' creativity, it is suggested that teachers training centres try to identify the creative characteristics of teachers in order to enhance creativity in them. Furthermore, we should also bear in mind that being a creative teacher is not merely a matter of having a creative mind. A creative teacher should be aware of the creative methods of teaching and management and be able to employ them to teach effectively. This could signal a requirement for raising the awareness of Iranian EFL teachers of the components that identify them as creative to enhance their creativity in the classrooms. Overall, the findings of this study have some pedagogical implications for foreign or second language teaching. Analysing Iranian EFL teachers' creativity index can lead to development a specific profile of the problematic components to help the teachers identify their weaknesses and enhance their creativity. Additionally, the results of this research will be useful to those university instructors who want to help students/researchers to achieve an acceptable level of creativity in their teaching. At the practical level, the current Creativity profile can be modified and used in other fields of study to assess the creativity index of teachers that can help educating more creative teachers.

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