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Constructing and Validating an EFL Hidden Curriculum Scale Using the Rasch Model

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Abstract: Whether acknowledged or neglected by educators, the hidden curriculum is present in every institute. Therefore, studying the hidden curriculum is essential to understand how it functions within an English language institute's setting and among those within it. The purpose of this study was to design and validate a scale to measure language teachers' perspectives on English as a Foreign Language (EFL) hidden curriculum by the application of the Rasch model. The review of the literature indicated the lack of sufficient research on the investigation of EFL hidden curriculum components in the view of EFL teachers. To fill the existing gap in the literature, a 40-item questionnaire was devised and validated, then 164 Iranian EFL teachers, teaching at different language institutes were asked to reply to the questionnaire. In this study, hidden curriculum components were based on Saylor, Alexander, and Lewis' (1981) perspectives. Accordingly, items were classified into three different constructs, namely the social atmosphere (including 15 items), the organizational structure of the English Language Institute (consisting of 14 items), and the interaction between teachers and learners (including 11 items). The results showed that the questionnaire items fitted the Rasch model after removing six items from the scale. Moreover, it was confirmed that the scale enjoyed suitable reliability. This proposes that the questionnaire is potentially valid and can be used as a measure of EFL hidden curriculum. One of the study implications is that the questionnaire designed and validated in this study can be used as a research tool in future research to assist policymakers and material designers, institutions' administrators, and language teachers to be considered for future decision making, and designing materials. It also can be used as a research tool to measure the relationship between EFL hidden curriculum and other variables in future research.

Keywords: Hidden Curriculum, Validity, Rasch Model, Scale Adaption, EFL Teachers.

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Introduction

In the educational process, the curriculum is generally reported as a set of pre-determined and prescribed courses of studies (Posner, 2004). It gives the basic lesson plan to be followed, including objectives, sequence, and materials. The education system of a society tries to convey clear norms and attitudes to students, and their curriculum is not limited to a set of pre-planned experiences and lessons or a formal curriculum (Hadad Alavi, Abdollahi, & Ali Ahmadi, 2008).

The application of educational programs identifies two sorts of curricula in schools. The first type prepared by official authorities contains a detailed description of objectives and activities and is referred to as the formal or official curriculum. The second sort of curriculum, the essentials of which are not clearly and definitively laid out, contains elements that are not included in the objectives and activities presented in the official curriculum, and are referred to as the hidden curriculum. The hidden curriculum does not exist in the form of a written document. It consists of the order and regulations of the school, its physical and psychological environment, and the non-official or implied messages that the administrators or teachers convey to students (Apple, 2014; 1996; Dreeben, 1968; Giroux, 1983; Giroux & Penna, 1983, Jackson, 1968; Snyder, 1971). According to the Blackwell Dictionary of Sociology (2000), the hidden curriculum generally refers to the subtle or not-so-subtle messages that are not part of the intended curriculum. In short, the term is used to "describe the unwritten, informal code of conduct to which children are expected to conform in the classroom" (Johnson, 2000, p. 102)

Numerous definitions and concepts proposed for the hidden curriculum allow for understanding this term under different circumstances and from different viewpoints. The definition that best suits this study is the one by Ausbrooks (2000) who states that a hidden curriculum consists of implicit messages in the social environment of an educational center that are unformulated but felt by everybody.

The study seems significant due to the fact that the review of the literature indicates the scarcity of research on EFL hidden curriculum components from EFL teachers' and learners' perspectives. Thus, this research intends to provide a clear insight into the concepts of the EFL hidden curriculum and its components from EFL teachers' perspectives in EFL communities with the aim of filling the existing gap in the literature. English language institutes as educational environments play a key role in teaching English in countries where English is a foreign language (Kalantari & Gholami, 2011); therefore, investigating aspects of the hidden curriculum or unintended learning seems beneficial. Thus, the researchers find it of value to conduct research in

the area of EFL hidden curriculum in English language institutes.

The purpose of this study was to design and validate a scale to measure aspects of the hidden curriculum in the Iranian EFL context. The content validity of the EFL hidden curriculum scale was determined by the experts in the field of curriculum studies and EFL teaching, and the construct validity of the scale was measured through the application of the Rasch model.

In line with the purpose of the study, the following research questions were designed:

1. What are the components of the EFL hidden curriculum to be included in the instrument?

2. Does the constructed instrument to measure EFL hidden curriculum enjoy construct validity and reliability?

Literature Review

Theoretical Background

Giroux (1983, p. 48–60) defined four approaches to the concept of the hidden curriculum: traditional, liberal, radical, and dialectical critique. The traditional approach (Dreeben, 1968; Jackson, 1968) accepted uncritically the existing relationship between schools and the larger society; the liberal approach (Anyon, 1980; Martin, 1994) which located the hidden curriculum in specific social practices, cultural images, or forms of discourse that reinforced discrimination and prejudice but could potentially be uncovered and eliminated; and the radical perspective (Bowles & Gintis, 1976) which focused on the political economy of schooling. This perspective regarded the social relations of the production process as the determining force in shaping the school environment. Giroux's fourth approach, dialectical critique grounded in the work of Paulo Freire (1973, 1982, 1994) and represented by authors such as Apple,1996; Giroux, 1983; Hooks, 1989; Freire & Macedo, 1987; McLaren, 2000), is closely associated with the radical approach in that it rejected the one-sided structuralism and pessimism of the political economy posture. It postulates that hidden curricula are plural and that contradicts open spaces for students and teachers to resist mechanisms of social control and domination and to create alternative cultural forms. This fourth approach sometimes is termed as the resistance theory. It becomes clear that not every author has the same definition of, or way of, thinking about the hidden curriculum. Cowell (1972) stated that one of the earliest uses of the hidden curriculum is that which the school teaches without, in general, intending or being aware that it is taught. About the concept of the hidden curriculum, various terms and phrases have been used, such as unstudied, covert, latent, unwritten, unintended, invisible curriculum, nonacademic outcomes of schooling, by-products of schooling, the residue of schooling, and

everything taught in school. Each of these phrases mentions some of the implicit implications and aspects of the hidden curriculum concept (Giroux, & Purpel, 1983).

According to Kelly (2009), the hidden curriculum refers to:

Those things which pupils learn at school because of the way in which the work of the school is planned and organized, and through the materials provided, but, which are not in themselves overtly included in the planning or even in the consciousness of those responsible for the school's arrangements (p. 5).

McLaren (2015) states that hidden curriculum deals with a figurative and guaranteed method which is used to produce skills and knowledge, that is, the things that occur out of the formally planned curriculum; it is also part of managerial-bureaucratic behavior of schools through which students have to follow dominating ideologies and social activities connected to the behavioral power. According to Pinar (2008), the hidden curriculum is a set of unintended but truly real results and aspects of the learning process. Apple (2004) states that the hidden curriculum is not usually discussed by teachers; it includes the transference of values and the induction of tendencies in students. Anderson (2001) describes the hidden curriculum as a formless, disorganized, and inappropriately-defined entity that has been introduced versus a clear curriculum in a latent way, leading to the disclosure of interactions in an educational environment.

Jerald (2006) noted that the hidden curriculum is an implicit curriculum that expresses and represents attitudes, knowledge, and behaviors, which are conveyed or communicated without aware intent; it is conveyed indirectly by words and actions that are parts of the life of everyone in a society. To address this issue, we should understand that the hidden curriculum plays a positive or negative role in the education system in school; therefore, teachers have to be aware of it and how it appears in the school. By definition Vang (2006) postulates that the hidden curriculum is the instructional norms and values not openly acknowledged by teachers or school officials but forms part of the elements in a school context. Besides, the hidden curriculum can be made explicit in higher education when the teacher recognizes and lives his/her teaching as a personal issue, not merely a technical one; and that the students' experience of the learning process is not merely individual but emerges through their interpersonal relationship with the teacher (Semper & Blasco, 2018).

In the study of Bown, Smith, and Talalakina (2019), researchers explored the effect of curriculum design on perceived L2 proficiency gains by examining students' self-perceptions of language gains. This study focused on the application of the American Council on the

Teaching of Foreign Languages (ACTFL) proficiency guidelines and standards to the design of teletandem courses in English as a Foreign Language (EFL) and Russian as a Foreign Language developed to promote Advanced and Superior-level language gains. The results indicated that such an approach can indeed yield significant perceived gains, especially for spoken language, for all the participants regardless of their target language and home institution. Özdemir (2018) stated that there was a positive relationship between hidden curriculum perceptions of the students and their university life quality perceptions. Ling-xin (2017) believed that through using the positive elements of the hidden curriculum, teachers would realize the improvement of teaching autonomy and teaching efficiency.

Velecká (2015) showed that the hidden curriculum had a considerable impact on the process of learning. This research proved that when the environment was not positive, and relationships were not functioning, as it was very difficult to achieve educational goals. Lee (2014) had focused on a hidden curriculum in English-to-Japanese books and stated that the hidden curriculum had positive impacts on the students' learning.

Furthermore, the results of the study done by Nami, Marsooli, and Ashouri (2014) showed that there was a positive correlation between student-teacher relations, student-student relations, and organizational structure of the university, social environment, and the appearance of the faculty members with the amount of academic achievement. But there was no relation between the physical structure of the university and academic achievement. Positively, Heidari (2013) concluded that the impact of the hidden curriculum on the dimensions such as regulations, social relations, physical environment, human resources, sports and training equipment, cultural variables, and social problems was significantly influential in the behavior of students. Concurrently in the same line, the study by Pashazadeh (2013) reported a significant relationship between the hidden curriculum and social adaptability.

Moreover, Ghaderi (2011) concluded that one of the most important curricula implemented in the education system was the hidden curriculum. The results indicated that there was a significant difference between open and closed school climates for girls and boys. Besides, the impact of hidden outcomes on students of closed and open school climate for boys and girls was considerably different.

Buyx, Maxwell, and Schöne-Seifert (2008) concluded that the major outcomes of the hidden curriculum in schools which had a closed social climate were: 1) increased spirit of obedience, emulation, and utter compliance, and decreased spirit of critical thinking and critical treatment of scientific subjects, 2) increased students' tendency to individually performing

learning activities and their negative attitude towards collective activities, 3) decreased students' trust and self-esteem and an increased sense of negative self-perception in them, 4) higher spirit of obedience and tendency towards individually performing learning activities in boys' schools than girls' schools; and 5) more decrease in self-esteem among students of girls' schools; and an almost equal decrease in self-esteem in schools with open climate.

The major dimensions of the hidden curriculum as stated by Saylor et al. (1981) are as follows:

Schools' Social Atmosphere: Although the schools' social atmosphere is an incisive factor in schools, it is rarely characterized by obvious actions. In the process of planning education, teachers must know about the complete set of informal conditions and the nature of interpersonal interactions existing between students and the education board. The culture existing between peers, especially between older school ages is an important factor in the education of youths. One of the attractive and serious matters is the effect of the school atmosphere and socializing processes on students from families that are financially and culturally underdeveloped. School employees may unconsciously try to transform students according to their lifestyle and attitude. As a result, children being exposed to schools' social atmosphere face adaptability challenges.

Organizational Structure: In an institute, the compressive set of regulations, methods, and the hidden curriculum are among the important elements of management systems. Retaining such a bureaucratic structure may be considered as a goal, which plays a role in the socialization of students. In each educational institute, there are regulations for the management of affairs; the regulations include classification system, evaluation methods, punishment and encouragement matters, group activities, and the participation of students in the management of affairs.

Interaction between Teachers and Students: The interaction between students and teachers in classes is affected by the structure of the institute and the social organization dominating it. These types of interactions can have a direct effect on learning. The effect of students' behavior on the responses of teachers has been indicated in several studies.

Much of what educators' address is the overt curriculum; however, there is a hidden curriculum that affects education in a very profound manner. As educators, we need to be aware of this social phenomenon that has such a great impact on the English language institutions and what we teach. Teachers need to be aware of this set of social constructions to guide students. An effective teacher is one of the most important factors in student achievement; thus, teachers

must somehow take it upon themselves to rise above the system and reach students on an individual basis and guide their students to succeed (Dickerson, 2007).

Theoretical Framework and Related Studies

The instrument devised in this study was validated through the Rasch model. Rasch techniques have greatly impacted the manner in which social science research makes use of tests and surveys (Panayides, Robinson, & Tymms, 2010). Moreover, the Rasch framework offers procedures for constructing and revising social science measurement instruments and documenting measurement properties of instruments (e.g., reliability and construct validity). It is known for its two incredible properties of invariance and interval scaling, which are achieved when the basic assumption of unidimensionality underlying the model is met (i.e. when the data fit the model). Winsteps (Linacre, 2015) is the most widely used Rasch software.

A range of statistical techniques such as factor analysis, calculation of Cronbach's alpha, point biserial correlations, and computing a total raw score is commonly used to develop instruments (tests, surveys) for educational research. The reason supporting the use of Rasch analysis comes from the fact that it is a psychometric technique that was developed to improve the precision with which researchers construct instruments, monitor instrument quality, and compute respondents' performances. Rasch analysis allows researchers to construct alternative forms of measurement instruments, which opens the door to altering an instrument in light of student growth and change. Rasch analysis also helps researchers think in more sophisticated ways concerning the constructs (variables) they wish to measure. Some life sciences education researchers are already using Rasch techniques (e.g., Reeves & Marbach-Ad, 2016), but some others continue to use instrument development and validation approaches that rely on the classical test theory.

The results of Schulz, Perlman, Rice, and Wright (1989) suggest that the Rasch model may be a more sensitive and reliable Differential Item Functioning (DIF) detection method for small sample sizes and equally achieving groups (p. 79). According to Halkitis (1996), an investigation of item fit is central to the selection of items. Item misfit to the Rasch model can be summarized in mean-square statistics. Associated with each mean-square is a significance level based on a test of the hypothesis: "Responses to this item fit the model perfectly". All significance tests, however, are sensitive to sample size. While power in significance testing can be worthwhile, "too much power" due to exceedingly large samples may lead to faulty conclusions about item fits (p. 227).

There are numerous studies using the Rasch model to validate the instruments. Ningrum, Evans, and Soh (2019) translated the Safety Attitudes Questionnaire into the Indonesian language and examined its capacity to adequately assess the safety climate in Indonesian health services using Rasch analysis. The results demonstrated that all six domains were unidimensional and that it is appropriate to sum individual items to obtain domain scores. Tabatabaee-Yazdi, Motallebzadeh, Ashraf, and Baghaei (2018) developed and validated a 40-items teacher success questionnaire by the application of the Rasch model. The Rasch rating scale model for polytomous data was used to examine the psychometric qualities of the scale. The results revealed that the Rasch model fitted the test after deleting eight items from the scale. The purpose of the study done by Tran, Dorofeeva, and Loskutova (2018) was to develop and validate the psychometric properties of a scale for measuring the quality of patient medication counseling by using the Rasch model. The results showed that all items had a positive point-measure correlation coefficient between 0.47 and 0.77. All items had infit and outfit values in the optimal range between 0.5 and 1.5 except for D5, but its value was within an acceptable range. Response category statistics found that there was a gradual increase in the difficulty level from category 1 to 5 and no presence of reversal.

In another study, Tabatabaee Yazdi (2017) examined the validity of a 49-item verbal analogies test by the application of the Rasch model and concurrent validation procedure. The results indicated that the Rasch model fitted the test after deleting eight items from the scale. Concurrent validation demonstrated that the test correlated significantly with other verbal and nonverbal fluid reasoning measures.

Taasim and Yusoff (2015) developed a new instrument in measuring the validity of the questionnaire in technology banking applications using the Rasch model as an alternative method. Researchers obtained the high reliability of the test of the items, and they also indicated that the questionnaire is valid and reliable to measure e-banking. Also, the questionnaire was administered to the appointed time and enjoy the respondents; thus, no mismatch problem items and respondents (50% fit) were found during the process of data analysis.

In a study by Runnels (2012), a multiple-choice achievement test taken by EFL students at a private university in Japan was analyzed. The results showed very little misfit to the Rasch model and that the level of the test was appropriately targeted to the abilities of the test-taking population, covering a range of statistically distinct difficulties.

Whether acknowledged or neglected by educators, the hidden curriculum is present in every institute; the norms, values, beliefs, attitudes, and informal aspects of education are

transmitted to the learners, which are beyond the stated educational objectives of such institutions. Massialas (2009, p. 249) stated, "the hidden curriculum is responsible for as much as 90 percent of all learning taking place in school". Therefore, an understanding of the hidden curriculum is essential to understand how it functions within the English language institutes' settings and among those within it. Despite the many controversies surrounding the concept and function of the hidden curriculum in general, researchers such as Abdulsalam (2008), Ahola (2000), Jacobson (2008), Margolis (2001), Rennert-Ariev (2008), and Tarshis (2008) believed that the hidden curriculum heavily influenced by the context in which learning takes place. When deciding on the definition of the hidden curriculum, one has to take into consideration all the different contexts and settings in which the hidden curriculum may occur, as well as the different forms it may take. In this study, hidden curriculum components are based on Saylor et al. (1981) perspectives. According to Saylor et al. (1981), hidden curriculum components are schools' social atmosphere, organizational structure, and interaction between teachers and students.

As a result, since millions of people spend hours per week learning a foreign language, it was of interest in this study to develop and validate the hidden curriculum questionnaire of English language teaching as a foreign language in Iran. This scale was validated by the application of the Rasch model using Winsteps 3.73. The questionnaire was supposed to evaluate the social atmosphere of English language institutions, organizational structure, and the interaction between EFL teachers and learners.

Method

Participants

A total number of 164 Iranian EFL teachers teaching English in different language institutions participated in this study to provide us with their perspectives on the EFL hidden curriculum at English language institutions. EFL teachers were randomly selected from English language institutes, they taught English at the intermediate level and above. The teachers were selected based on a simple random sampling technique. There were 68 males (41.5%) and 96 females (58.5%) and from different age groups ranging from below 25 to above 50. Teachers' teaching experience was between below 5 years and more than 20 years. Participants were teachers with different academic degrees: Diploma degree 1.8%, Bachelor 31.9%, M.A. student 16.6%, Master 38.7 %, Ph.D. student 6.7%, and Ph.D. 4.3%. Also, 77.8% of teachers studied English as an academic major (Table 1). Participants' native language was Persian with

English as a foreign language.

Table 1. *The Demographic Profile of Respondents*

	Category	Frequency	Percentage
Gender	Male	68	41.5
	Female	96	58.5
Age range	Below 25	25	15.2
	26-30	49	29.9
	31-35	48	29.3
	36-40	25	15.2
	41-45	9	5.5
	46-50	3	1.8
	More than 50	5	3.0
Academic degree	Ph.D.	7	4.3
	Ph.D. student	11	6.7
	M.A.	63	38.7
	M.A. student	27	16.6
	B.A.	52	31.9
	Diploma	3	1.8
Major	English Language Teaching	69	42.6
	English Translation	25	15.4
	English Language literature	22	13.6
	Linguistics	10	6.2
	Other	36	22.2
Teaching experience	Below 5 years	44	27.0
	6-10 years	61	37.4
	11-15 years	38	23.3
	16-20 years	9	5.5
	More than 20 years	11	6.7

Instruments

A 40-item questionnaire that consisted of different items for evaluating EFL hidden curriculum was used to investigate EFL teachers' perspectives on hidden curriculum components. Forty items were selected to be included in the inventory based on previous studies. In this study, hidden curriculum components were based on Saylor et al. (1981) perspectives. According to Saylor, et al. (1981), hidden curriculum components are schools' social atmosphere,

organizational structure, and interaction between teachers and students. The questionnaire was developed according to the underlying theories, and the studies available in literature including Apple and Christian-Smith (1991), Auerbach and Burgess (1985), Canagarajah (1999), Fathi Vajargah and Vahed Choukdeh (2007), Giroux (1983), Giroux and Penna (1983), Giroux and Purpel (1983), Hafferty and Franks (1994), Heidari (2013), Jackson (1968), Jackson (1990), Lynch (1989), Margolis (2001), Pennycook (1994), Sheikhzade (2011), Shin-ying (2009), and Vang (2006). Based on Saylor et al. (1981) classification, items were classified into three different constructs: 1) the social atmosphere (including 15 items such as "appropriate class relations between EFL learners influences the thought, emotions, and behavior of EFL learners."); 2) the organizational structure of the English Language Institute (consisting of 14 items such as "the authority structure of the English language institute and its staffing patterns are among the factors influencing the thinking, emotions, and behavior of learners."); 3) the interaction between teachers and learners (including 11 items such as "how to assign the homework by the teacher and its accomplishment by the EFL learner is one of the factors influencing the thinking, emotions, and behavior of learners"). Items 1 to 15 introduced the micro-scale of the social atmosphere. Items 16 to 29 referred to the micro-scale of the organizational structure, and items 30 to 40 referred to the micro-scale of the interaction between EFL teachers and learners. Each item of the questionnaire was rated on a five-point Likert scale ranging from 'strongly agree' to 'strongly disagree'. The items of the questionnaire were in English (See Appendix A).

Procedure

The first version of the questionnaire was handed to some experts in the field. They were asked to express their ideas regarding the items included in the questionnaire. Afterward, the content validity of the questionnaire was determined by the experts in the field of curriculum studies and EFL teaching. A pilot study of this questionnaire was carried out in two institutes in Mashhad. The questionnaire was then submitted to a group of EFL teachers to see if there are any difficult points to understand, and also to use the data to measure the initial reliability of the instrument.

Table 2 shows the Cronbach's α internal consistency reliability coefficient of the scale.

Table 2. *Internal Reliability of the Scale*

Scale	Items	Cronbach alphacoefficients (α)
EFL hidden curriculum	1-40	0.83

The devised questionnaire was handed to a group of 164 Iranian EFL teachers. Data collection was approved by the supervisors of the language institutions. At the time of the administration of the survey, participants were told that their participation was voluntary and they were reminded not to put their name or any identifying information in the survey and that all data would remain anonymous and confidential. Thus, 75.7% of EFL teachers completed the written questionnaire, and 24.3% completed the electronic version of the questionnaire (google doc form) voluntarily. The written questionnaire was provided to the participants in English language teaching institutions by the first author. After making the necessary arrangements with the supervisors of the language institutions, the questionnaire was given to the language teachers who taught at intermediate and higher language proficiency levels, and they answered it individually. Some teachers took the questionnaire home and completed it more carefully. The distribution and completion of the questionnaires took three months. English language teachers working in English language institutes in other cities also completed the electronic questionnaire through cyberspace and social networks related to English language teachers.

Data Analysis

Following a careful construction of the measurement instrument, researchers collected the pilot data, conducted a Rasch analysis on the pilot data, and then refined the instrument, for instance, by adding or removing items or changing the rating scale to have more or fewer rating-scale steps. The data were analyzed using Winsteps Rasch software version 3.73 (Linacre, 2009) to confirm the construct validity of the EFL hidden curriculum questionnaire. In the area of social sciences, the Rasch model (Rasch 1960/1980) has been used widely for analyzing questionnaires and the construct validity (Baghaei, 2008). A test is said to be valid when the data fit the model, which indicates that a construct is underlying the covariance among the items and causes the item responses (Baghaei & Tabatabaee Yazdi, 2016; Borsboom, 2008). Therefore, the data consisting of 40 items and 164 participants were subjected to the Rasch analysis to estimate the fit of the data to the model. Item Response Theory (IRT) models and Rasch models require observing for two assumptions of local independence and unidimensionality (Baghaei, 2009). The fit of the data to the Rasch model is the evidence that

a latent construct underlies the responses and, hence, the test is valid (Baghaei & Tabatabaee Yazdi, 2016).

Results

Individual Item Characteristics

The results of the Rasch analysis with Winsteps® for all the items are shown in Table 3 (See Appendix B). The items are arranged from the most difficult to the easiest. The first column, ENTRY NUMBER, corresponds to the test items (40 in total). 'TOTAL SCORE' indicates the total number of correct responses. 'TOTAL COUNT' is the total number of attempted responses, and the 'MEASURE' column is the Rasch measure for this item (the difficulty in logits) followed by the standard error. The infit and outfit statistics are in the next two columns, which show the MNSQ (mean square) and the ZSTD (standardized z-score). Point measure correlations are shown in the eighth column.

One technique to investigate the quality of a measurement instrument is to evaluate the fit of items to the Rasch model. One way to consider the topic of fit is that items at the more difficult end of the variable should be harder to correctly answer than items at the easy end of the continuum. This should be true for all students answering a set of items regardless of their ability levels. If items do not fit the model, they may measure more than one variable. It is critical to identify and possibly remove such items, as the goal of an instrument should only be to measure different parts of a single variable. In a Rasch analysis, the identification of items that do not contribute to useful measurement can be accomplished by reviewing fit statistics (e.g., MNSQ Item Outfit, MNSQ Item Infit) for each test item. If an item does not clearly fit, often it is best to remove the item from the test and replace it with a new item.

Following the criteria recommended by Bond and Fox (2007), the results indicated that 34 items fit the Rasch model, while six items (Items 2, 9, 13, 14, 19, and 23) have infit and outfit mean square (MNSQ), and outfit and infit (ZSTD) indices outside the acceptable range of 0.60 to 1.40, and -2 to 2, respectively, thus these items should be either deleted or modified because of lack of fit to the model (see Appendix B).

The sub-construct of the social atmosphere included items of 1-15; the organizational structure sub-construct of the English Language institute evaluated items of 16-29; the sub-construct of interaction between teachers and learners consisted of items of 30-40. The misfit

items of 2, 9, 13, and 14 referred to the social atmosphere sub-construct. Moreover, items 19 and 23 are involved in the interaction between teachers and learners sub-construct.

Table 3 shows the fit indices for the items. The items are set from difficult to easy. As it is shown the easiest item is item 40, and the most difficult item is item 29. It means that the difficulty of item 29 (the most difficult item) is estimated to be 0.83 logits with the standard error (SE) of 0.08, which means one can be 95% sure that the true value for the difficulty of this item lies somewhere between 0.67 to 0.99 logits (i.e. two SE's below and above the observed measure).

The analyses of the items yielded an item difficulty ranging from -1.18 to 0.83 logits with the separation reliability of 0.94. Person estimates ranged from - 0.31 to 3.51, with the separation reliability of 0.85. In Rasch analysis, the person separation index is used instead of reliability indices. Separation reliability indicates how well the person parameters are discriminated on the measured variable. A high separation reliability index shows that there is a strong possibility that persons with high-ability estimates have higher ability estimates than persons/items with low estimates (Linacre, 2009). It means that a higher reliability value specifies a strong relationship between the items of the test, while a lower value shows a weaker relationship between the test items. Therefore, the scale proved to have a high-reliability value.

Response Scale Analyses

The rating scale structure's properties were also studied. Table 4 shows the category statistics for the 5-point scale. As it is shown, a large portion of the response categories was categories of 4, 5, and 3, respectively.

The infit and outfit mean squares for each category level are the average of the infit and outfit mean-squares associated with the responses in each category, with an expected value of 1.0; values above 1.50 are problematic (Linacre, 2009). As shown in the table, all categories were within the accepted limits.

Table 4. *Category Statistics*

	Category	Observed		Observed average	Sample expect	MNSQ		Andrich threshold	Category measure
		Count	%			Infit	Outfit		
1	Strongly disagree	68	1	0.63	0.27	1.25	1.50	None	-2.68
2	Disagree	404	6	0.52	0.53	1.00	1.00	-1.38	-1.12
3	Undecided	967	15	0.77	0.79	0.96	0.93	-0.21	-0.13
4	Agree	3216	49	1.10	1.11	1.00	0.99	-0.26	1.05

5	Strongly agree	1904	29	1.60	1.58	0.98	0.98	1.85	3.04

In evaluating rating scales, the order of the thresholds for items should be studied. It is expected that threshold estimates increase with category values. Disordered thresholds show that the category is not defined clearly for respondents (Linacre, 1999). It means that respondents cannot clearly differentiate the options (Bond & Fox, 2007). To solve this problem, it is recommended to reduce the number of response options by eliminating the neighboring categories (Bond & Fox, 2007; Linacre, 1999). The threshold estimates in this study were shown to be not in order (-1.38, -0.21, -0.26, 1.85). The difference between the estimates for categories 3 and 4 is rather small and that this suggests conflating them although they are in the expected order. Therefore, it is better to combine categories 3 and 4 (undecided and agree) because their close thresholds (-0.21, -0.26) indicate that respondents could not decide which one to select (Baghaei & Cassady, 2014).

Figure 1 represents the Item-person map of the data. Numbers on the right indicate items and # on the left signify persons. Items and persons located on top of the scale are more difficult and more proficient, respectively. On the other hand, items down the scale are easier and less proficient. This figure depicts a Wright map that plots the items in an instrument according to their order of difficulty. On the right side of the Wright map, the 40 items of the test are presented from the easiest (item 40, bottom) to the most difficult (item 29, top). The items are plotted in terms of item difficulty computed using Winsteps and the Rasch model formula. A logit scale is used to express item difficulty on a linear scale that extends from negative infinity to positive infinity. For these analyses, item difficulties range from −1 logits to +3 logits.

A person-item map shows the location of item parameters as well as the distribution of person parameters. It is useful to compare the range and position of the item measure distribution to the range and position of the person to measure distribution. Items should ideally be located along the whole scale to meaningfully measure the 'ability' of all persons (Bond & Fox, 2007).

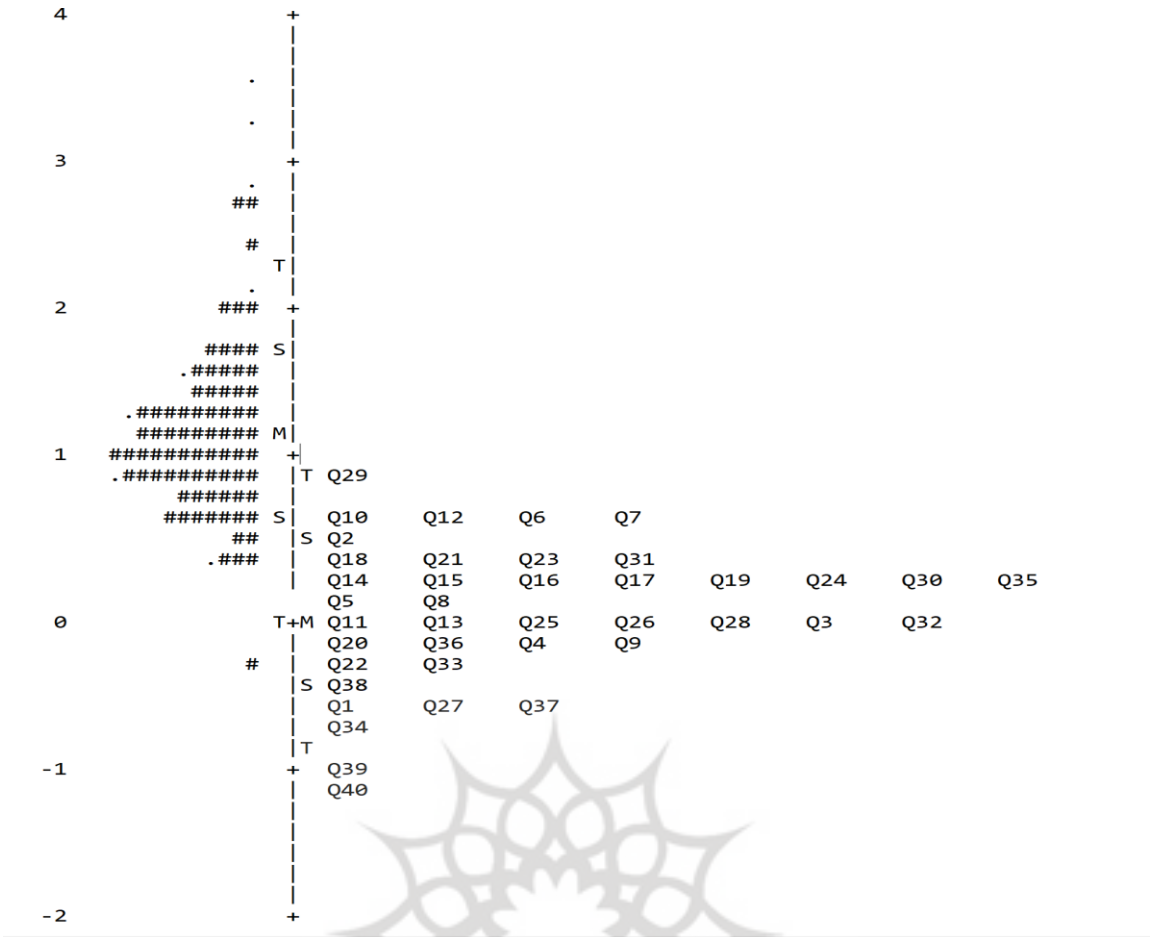

Figure 1. *Item-person Map*

The person-item map revealed that the items are mainly clustered toward the bottom of the scale. It means that the questionnaire does not cover a wide range of ability that is test takers endorse the items, or their level of agreement with the items is high. More difficult items with lower agreeability levels seem to be required.

Follow-up Analysis

In a follow-up analysis, items 2, 9, 13, 14, 19, and 23 were removed, and categories 3 and 4 in the response scale were merged into one category, then the scale was reanalyzed (Table 5, See Appendix C). The results showed that the 34 remaining items had an acceptable outfit and infit mean-square fit. Alternatively, a multidimensional Rasch analysis can be conducted to evaluate whether the misfitting items form a separate relevant dimension of the construct (Baghaei, 2012; Baghaei & Aryadoust, 2015).

Table 5. *Internal Reliability of the Scales, Cronbach Alpha Coefficients (α)*

Scale	Subscales	Items	Cronbach's α
EFL Hidden curriculum	Social atmosphere	1-3-4-5-6-7-8-10-11-12-15	0.69
	Organizational structure	16-17-18-20-21-22-24-25-26-27-28-29	0.72
	Interaction between teachers and learners	30-31-32-33-34-35-36-37-38-39-40	0.74
	EFL Hidden curriculum	1-40 except 2-9-13-14-19-23	0.83

Discussion and Conclusion

Teachers have a significant power to lead students to success through the hidden curriculum. To this aim, researchers constructed and validated an EFL hidden curriculum questionnaire using the Rasch rating scale model (Andrich, 1978). The items which do not fit the Rasch model are instances of multidimensionality and candidates for modification, discard, or indications that our construct theory needs amending. The items that fit are likely to be measuring the single dimension intended by the construct theory.

The components of the EFL hidden curriculum scale included three sub-constructs of the social atmosphere, the organizational structure, and the interaction between teachers and learners in the instrument. The findings of the study confirmed that the EFL hidden curriculum questionnaire fits the Rasch model after removing six items (i.e. items 2, 9, 19, 13, 14, 23) from the original 40-item questionnaire. This supports the internal validity of the test. An explanation for the misfit of the items could be the vague wording of the items in items 2, 9, and 19; in the case of item 14, related to the age, the problem might be due to the low age range and their parent's views; the complex structure of the item was the problem of item 13.

The thirty-four items of the hidden curriculum questionnaire had an acceptable person separation reliability of 0.85 and item separation reliability of 0.94. Moreover, threshold estimates that after deleting the six items and merging the categories 3 and 4 (agree and undecided) in response scale to one category, the threshold estimates were shown to be within the accepted range.

This study is considered to be among the few attempts to fill the gap of research in the construction of a scale for EFL hidden curriculum components (social atmosphere, organizational structure, and interaction between teacher and learners). Previous studies displayed the positive elements of the hidden curriculum with other variables such as university

life quality of students, improvement of teaching autonomy, teaching efficiency, learning process, and students' learning; However, the study of EFL hidden curriculum scale which is reliable and valid was not done. The results of this study are in agreement with prior researches of Tran et al. (2018) and Runnels (2012) that shown developing and validating questionnaires through the application of the Rasch model. Moreover, it is in accordance with the research findings of Tabatabaee-Yazdi et al. (2018), who developed and validated a questionnaire by the application of the Rasch model. The results revealed that the Rasch model fitted the test after deleting eight items from the scale.

Implications

The EFL hidden curriculum questionnaire designed in this study may be used to advance the existing body of knowledge in the field of curriculum development and planning. It may help to determine how hidden curriculum components are perceived by teachers to be one of the factors that correlate with their other latent variables. Individuals who are in charge of designing curriculum and curriculum planners should pay more attention to the various components of EFL hidden curriculum and their potential effects on learners. Furthermore, this study may offer institutions' administrators a better understanding of the perceived relationship between EFL hidden curriculum components and its probable effects on the learners which may assist them to move towards their teachers' and students' achievement.

Limitations and Future Directions

One of the limitations of this study is the fact that this study centered on institutional EFL teachers. Future research could validate the instruments within university settings and other contexts to enhance the generalizability of the findings or to find the differences. In this research, the three sub-constructs of EFL hidden curriculum were considered. The EFL hidden curriculum is an important issue that has the capacity for more extensive research. Another line of research could explore the EFL hidden curriculum components based on other hidden curriculum theories, especially from teachers' and learners' perspectives.

Furthermore, the present EFL hidden curriculum scale can be used as a research tool to considering the relationship between EFL hidden curriculum and other related latent variables (e.g. teachers' self-efficacy, burnout, learners' self-efficacy, etc.). The ideas and the concepts in EFL hidden curriculums are dynamics; thus, it would be developed with other participants and different statistical populations in various educational contexts.

This research study was an initial attempt to develop an EFL hidden curriculum scale. Given the results from this initial, future studies should delve more deeply into this topic to see if the results can be replicated in other places with similar students and with a larger population.

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References

Abdulsalam, A. G. (2008). *Saudi students' perspectives on their teachers' transmission of negative messages: A hidden curriculum* (Doctoral dissertation). University of Kansas, USA.

Ahola, S. (2000). *Hidden curriculum in higher education: Something to fear for or comply to?* Paper presented at the Innovation in Higher Education Conference, Helsinki, Finland.

Anderson, T. (2001). The hidden curriculum in distance education an updated view. *Change: the magazine of higher learning, 33*(6), 28-35.

Andrich, D. (1978). A rating formulation for ordered response categories. *Psychometrika*, *43*(4), 561–573. doi: 10.1007/BF02293814

Anyon, J. (1980). Social Class and the Hidden Curriculum of Work. *Journal of Education, 162*, 67–92.

Apple, M. W. (1996). *Cultural politics and education* (Vol. 5). New York: Teachers College Press.

Apple, M. W. (2004). *Ideology and curriculum.* New York. NY: Routledge Falmer.

Apple, M. W. (2014). *Official knowledge: Democratic education in a conservative age* (3rd ed.). New York: Routledge.

Apple, M. W., & Christian-Smith, L. K. (1991). The politics of the textbook. In M. W. Apple, & L. K. Christian-Smith (Eds.), *The politics of the textbook* (pp.1-21). New York: Routledge.

Auerbach, E. R., & Burgess, D. (1985). The hidden curriculum of survival ESL. *TESOL Quarterly, 19*(3), 475-495.

Ausbrooks, R. (2000). *What is the school's hidden curriculum teaching your child?*. Retrieved from http://www. Parenting teens. Com/curriculum. sthm>.[8 Aug 2001].

Baghaei, P. (2008). The Rasch model as a construct validation tool. R*asch Measurement Transaction*, *22* (1), 1145-1146.

Baghaei, P. (2009). *Understanding the Rasch model*. Mashhad: Mashhad Islamic Azad University Press.

Baghaei, P. (2012). The application of multidimensional Rasch models in large scale assessment and validation: an empirical example. *Electronic Journal of Research in Educational Psychology, 10*, 233–252.

Baghaei, P., & Aryadoust, V. (2015). Modeling local item dependence due to common test format with a multidimensional Rasch model. *International Journal of Testing, 15*(1), 71-87.doi:10.1080/15305058.2014.941108

Baghaei, P., & Cassady, J. (2014). Validation of the Persian translation of the cognitive test anxiety scale. *Sage Open, 4*(4), 1-11. doi:10.1177/2158244014555113

Baghaei, P., & Tabatabaee Yazdi, M. (2016). The logic of latent variable analysis as validity evidence in psychological measurement. *The Open Psychology Journal, 9*(1), 168-175. doi:10.2174/1874350101609010168

Bond, T., & Fox, C. (2007). Rasch modeling applied: Rating scale design. In T. Bond, & C. Fox, *Applying the Rasch model: Fundamental measurement in the human sciences* (2nd ed., pp. 219–233). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Borsboom, D. (2008). Latent variable theory. *Measurement: Interdisciplinary Research and Perspectives*, *6*(1–2), 25–53. doi:10.1080/15366360802035497

Bowles, S., & Gintis, H.(1976). *Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life*. New York: Basic Books.

Bown, J., Smith, L. C., & Talalakina, E. (2019). The Effects of an EFL and L2 Russian Teletandem Class: Student Perceptions of Oral Proficiency Gains. *Journal of Language and Education, 5*(3), 35-55. doi:10.17323/jle.2019.8953

Buyx, A. M., Maxwell, B., & Schöne-Seifert, B. (2008). Challenges of educating for medical professionalism: who should step up to the line? *Medical education, 42*(8), 758-764.

Canagarajah, A. S. (1999). *Resisting linguistic imperialism in English teaching*: Oxford: Oxford University Press.

Cowell, R. N. (1972). *The hidden curriculum: A theoretical framework and a pilot study* (Doctoral dissertation). Harvard University, USA.

Dickerson, L. W. (2007). *The Postmodern view of the hidden curriculum* (Doctoral dissertation). Georgia Southern University, Statesboro.

Dreeben, R. (1968). *On what is learned in school*. Reading, Mass: Addison-Wesley.

Fathi Vajargah, K., & Vahed Choukdeh, S. (2007). Identifying damages of civic education in the hidden curriculum, the system of theoretical high school from the viewpoint of women teachers in the city of Tehran, and proposing solutions for improvement of its situation. *Quarterly of educational innovation, 17*(5), 93-132. [in Persian]

Freire, P. (1973). *Pedagogy of the Oppressed*. New York: Seabury Press.

Freire, P. (1982). *Education for Critical Consciousness*. New York: Continuum.

Freire, P. (1994). *Pedagogy of Hope*. New York: Continuum Publishing Company.

Freire, P., & Macedo, D. (1987). *Literacy: Reading the Word and the World*. South Hadley, Mass.: Bergin and Garvey.

Ghaderi, H. (2011). *A study of the relationship between hidden curriculum and disciplinary behavior of the third-grade students of junior high schools of Sanandaj in the educational year, 2011-12.* Unpublished Master Thesis, Teacher Training University of Tehran, Iran.

Giroux, H. A. (1983). *Theory and resistance in education: A pedagogy for the opposition*. New York: Bergin & Garvey.

Giroux, H. A., & Penna, A. N. (1983). Social education in the classroom: The dynamics of the hidden curriculum. In H. A. Giroux, A. N. Penna & W. F. Pinar (Eds.) *Curriculum and Instruction. Alternatives in education* (pp.209-230). Berkely: McCutchan Publishing Corporation.

Giroux, H. A., & Purpel, D. E. (1983). *The hidden curriculum and moral education: Deception or discovery?* California: Mccutchan Publishing Corporation.

Hadad Alavi, R., Abdollahi, A., & Ali Ahmadi, A. (2008). The hidden curriculum: A research on perceived learnings at school (scientific stimulus). *Journal of Education*, *23*(2), 33-66. [in Persian]

Hafferty, F. W., & Franks, R. (1994). The hidden curriculum, ethics teaching, and the structure of medical education. *Academic Medicine, 69*(11), 861-871. doi: 10.1097/00001888-199411000-00001

Halkitis, P. (1996). Report: Mean square significance and sample size. *Rasch Measurement Transactions, 6*(3), 227-228.

Heidari, R. (2013). *A study of the impact of hidden curriculum on the behavior of students of physical training vocational schools and students of Zanjan high schools.* Unpublished Master Thesis, Al Zahra University, Iran.

Hooks, B. (1989). *Talking Back: Thinking Feminist, Thinking Black*. Boston: South End Press.

Jackson, P. W. (1968). *Life in Classrooms*. New York: Holt, Rinehart, &Winston.

Jackson, P. W. (1990). *Life in classrooms.* New York: Teachers College Press.

Jacobson, J. A. (2008). *The gendered processes of the hidden curriculum and cultural capital within two teacher preparation programs* (Doctoral dissertation). Arizona State University, USA.

Jerald, C.D. (2006). *School culture: The hidden curriculum*. Washington, DC: The Center for Comprehensive School Reform and Improvement. Retrieved from www.centerforcsri.org.

Johnson, A. G. (2000). *The Blackwell dictionary of sociology: A user's guide to sociological language* (2nd Ed.). Wiley-Blackwell.

Kalantari, R., & Gholami, J. (2011). Factors behind the inefficiency of English language teaching in Iranian public educational system and a comparison between public schools and private language institutes. *Journal of language and translational studies*, *44*(3), 51-81.

Kelly, A. V. (2009). *The curriculum: Theory and practice* (6th ed.). London: Sage Publications Ltd.

Lee, J. F. (2014). A hidden curriculum in Japanese EFL textbooks: Gender representation. *Linguistics and Education, 27*, 39-53.

Linacre, J. M. (1999). Investigating rating scale category utility. *Journal of outcome measurement, 3*, 103-122.

Linacre, J. M. (2009). *A User's Guide to Winsteps-ministep: Rasch-model computer programs. Program Manual 3.68. 0*. Chicago, IL.

Linacre, J. M. (2015). *Winsteps Rasch Measurement computer program (Version 3.90. 0)*. Beaverton, OR: Winsteps.com

Ling-xin, G. (2017). The autonomy of foreign language teachers and the hidden curriculum. *Science Journal of Education, 5*(4),153-157. doi:10.11648/j.sjedu.20170504.15

Lynch, K. (1989). *The hidden curriculum: Reproduction in education, a reappraisal*. London: The Flamer Press Ltd.

Margolis, E. (2001). *The hidden curriculum in higher education.* New York: Routledge.

Martin, J. R. (1994). What Sould We Do With a Hidden Curriculum When We Find One? In *Changing the Educational Landscape: Philosophy, Women, and Curriculum* (pp.154–69). New York and London: Routledge.

Massialas, B. G. (2009). The "new social studies"—Retrospect and prospect. *The Social Studies, 100*(6), 246-250.

McLaren, P. (2015). *Critical pedagogy: A look at the major concepts.* Critical Quest.

McLaren, P. L. (2000). *Che Guevara, Paulo Freire, and the Pedagogy of Revolution*. Lanham, Md: Rowman and Littlefield Publishers.

Nami, Y., Marsooli, H., & Ashouri, M. (2014). The relationship between creativity and academic achievement. *Procedia-Social and Behavioral Sciences, 114*(21), 36-39.

Ningrum, E., Evans, S., & Soh, S. E. (2019). Validation of the Indonesian version of the safety attitudes questionnaire: A Rasch analysis. *PloS one, 14*(4). doi: 10.1371/journal.pone.0215128

Özdemir, N. (2018). The relationship between hidden curriculum perception and university life quality in sports education. *Universal Journal of Educational Research, 6*(4), 742-750. doi:10.13189/ujer.2018.060417

Panayides, P., Robinson, C., & Tymms, P. (2010). The assessment revolution that has passed England by: Rasch measurement. *British Educational Research Journal, 36*(4), 611-626.

Pashazadeh, E. (2013). *A study of the relationship between hidden curriculum and social adjustment in high school students of Maku town*. Unpublished Master Thesis, the Teacher Training University of Tehran, Iran.

Pennycook, A. (1994). *The cultural politics of English as an international language.* New York: Routledge.

Pinar, W. F. (2008). Curriculum theory since 1950. In F. M. Connelly, M. Fang He, & J. Phillion, *The sage handbook of curriculum and instruction* (pp.491-503). Los Angeles: Sage Publications.

Posner, G.J., (2004). *Analyzing the curriculum* (3rd ed.). NY: McGraw-Hill.

Reeves, T. D., & Marbach-Ad, G. (2016). Contemporary test validity in theory and practice: A primer for discipline-based education researchers. *CBE—Life Sciences Education, 15*(1), 1–9. doi:10.1187/cbe.15-08-0183

Rennert-Ariev, P. (2008). The hidden curriculum of performance-based teacher education. *Teachers College Record, 110*(1), 105-138.

Runnels, J. (2012). Using the Rasch model to validate a multiple-choice English achievement test. *International Journal of Language Studies, 6*(4), 141-155.

Saylor, J. G., Alexander, W. M., & Lewis, A. J. (1981). *Curriculum planning for better teaching and learning* (4th ed.). New York: Holt, Rinehart & Winston.

Schulz, E. M., Perlman, C. P., Rice, W. K., & Wright, B. D. (1989). An empirical comparison of Rasch and Mantel-Haenszel procedures. In: *annual meeting of the American Educational Research Association, Boston, MA*.

Semper, J. V. O., & Blasco, M. (2018). Revealing the hidden curriculum in higher education. *Studies in Philosophy and Education, 37*(5), 481-498. doi:10.1007/s11217- 018-9608-5

Sheikhazade, M. (2011). *Intended, applied, and experienced null curriculum*. Unpublished Master Thesis, Islamic Azad University, Orumieh Branch, Iran.

Shin-ying, H. (2009). Global English and EFL learners: Implications for critical pedagogy. *Journal of Asia TEFL, 6*(3), 327-350.

Snyder, B. R. (1971). *The hidden curriculum*. New York: Alfred A. Knopf.

Taasim, S. I., & Yusoff, R. (2015). Rasch measurement theory in validation instruments for electronic financial technology in Malaysia. *Journal of Human Capital Development (JHCD), 8*(1), 47-58.

Tabatabaee-Yazdi, M.(2017). Development and validation of a Persian verbal analogies test using the Rasch model. *North American Journal of Psychology*,*19*(3), 561-572.

Tabatabaee-Yazdi, M., Motallebzadeh, K., Ashraf, H., & Baghaei, P. (2018). Development and validation of a teacher success questionnaire using the Rasch model. *International Journal of Instruction*, *11*(2), 129-144. doi:12973/iji.2018.11210a

Tarshis, D. (2008). *Measuring what's hidden: How college physics courses implicitly influence student beliefs.* Unpublished Doctoral Dissertation, Colorado University, USA.

Tran, V. D., Dorofeeva, V. V., & Loskutova, E. E. (2018). Development and validation of a scale to measure the quality of patient medication counseling using the Rasch model. *Pharmacy Practice (Granada), 16*(4). doi:10.18549/PharmPract.2018.04.1327

Vang, C. T. (2006). Minority parents should know more about school culture and its impact on their children's education. *Multicultural Education, 14*(1), 20-26.

Velecká, R. (2015). *Classroom community and hidden curriculum in English language classes* (Bachelor thesis). Masaryk University, Czech Republic.

Appendix A

EFL Hidden Curriculum Questionnaire at English Language Institutions

The present questionnaire is designed to survey EFL teachers' ideas about the hidden curriculum. The hidden curriculum refers to factors that are not part of the curriculum and are hidden from the viewpoint of planners and practitioners of education, but affecting thoughts, emotions and behavior, and even in most cases act more effective than formal curriculum. The social atmosphere of the English Language Institute, the organizational structure of the English Language Institute and the interaction between teachers and learners are among the key factors. The information you provide would be kept confidential and would be used only for research purposes.

Many thanks in advance for your cooperation in filling out this questionnaire.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1. Appropriate class relations between EFL learners influence the thought, emotions, and behavior of EFL learners.					
2. EFL learners' economic situation influences the thought, emotions, and behavior of EFL learners.					
3. Familiarity with some ideologies through international language textbooks influences the thought, emotions, and behavior of EFL learners.					
4. The proper relationship between EFL teachers influences the thought, emotions, and behavior of EFL learners.					
5. Transferring cultural values and norms to EFL learners is among the factors influencing the thinking, emotions, and behavior of learners.					
6. The existence of a social gap (distance) among EFL learners influences the thought, emotions, and behavior of EFL learners.					
7. In case of appropriate relations between parents and staff at the Language Institute, thinking, emotions, and behavior of learners might be influenced.					
8. Friendly and informal communication (relationship) between English teachers can be a factor influencing the thinking, emotions, and behavior of the learners.					
9. Appropriate interaction patterns among EFL learners influence the					

thought, emotions, and behavior of EFL learners.					
10. Transferring the predetermined norms existing in international textbooks of English language education in Iran is one of the factors influencing the thinking, emotions, and behavior of learners.					
11. Acquiring a specific approach and attitude towards life, education, and learning by EFL learners through participating in English classes influences the thought, emotions, and behavior of EFL learners.					
12. Collaboration between EFL teachers and parents is one of the factors influencing the thinking, emotions, and behavior of learners.					
13. The cultural status of parents influences the thought, emotions, and behavior of EFL learners.					
14. Parents' desire to have their children learn English is one of the factors influencing the thinking, emotions, and behavior of learners.					
15. Transferring cultural contents through internationally published textbooks influences the thought, emotions, and behavior of EFL learners.					
16. In case of the existence of an appropriate system of evaluation methods (tests, scoring), thinking, emotions, and behavior of learners might be influenced.					
17. The authority structure of the English language institute and its					

staffing patterns are among the factors influencing the thinking, emotions, and behavior of learners.					
18. The incorrect ways of assessing the teachers' performance by the English Language Institute influences the thought, emotions, and behavior of EFL learners.					
19. The inappropriate system of encouragement and rewards for English teachers can be one of the factors influencing the thinking, emotions, and behavior of the learner.					
20. Considering the EFL teachers' competencies (qualifications) is one of the factors influencing the thinking, emotions, and behavior of learners.					
21. The managerial structure of the English language institute can be among the factors influencing the thinking, emotions, and behavior of the learner.					
22. Regularity and discipline rules of the English Language Institute and classroom are among the factors influencing the thinking, emotions, and behavior of learners.					
23. The formal communication (relationship) between the teacher and EFL learner influences the thought, emotions, and behavior of EFL learners.					
24. The proper use of the managerial authority of the Supervisor at the English Language Institute can be a factor influencing the thinking, emotions, and behavior of the learners.					

25. Suitable mechanisms for encouraging and punishing EFL learners is one of the factors influencing the thinking, emotions, and behavior of learners.					
26. The informal communication between the teacher and EFL learner influences the thought, emotions, and behavior of EFL learners.					
27. The effect of the physical environment (seating arrangement, light, color, equipment, pictures, etc.) of the English Language Institute can be a factor influencing the thinking, emotions, and behavior of the learners.					
28. Freedom of action granted to teachers by the academic supervisor of the English Language Institute influences the thought, emotions, and behavior of EFL learners.					
29. The formal communication between the teacher and the academic supervisor at the English Language Institute can be a factor influencing the thinking, emotions, and behavior of the learners.					
30. EFL learners' inability to communicate with each other is one of the factors influencing the thinking, emotions, and behavior of learners.					
31. Informal education (cyberspaces) influences the thought, emotions, and behavior of EFL learners.					
32. EFL learners' Speech disabilities (inability to talk and speak to teachers and classmates) can be a factor					

influencing the thinking, emotions, and behavior of the learners.					
33. Lack of EFL learners' participation in classroom activities is one of the factors influencing the thinking, emotions, and behavior of learners.					
34. The development of creative thinking in EFL learners influences the thought, emotions, and behavior of EFL learners.					
35. EFL learners' disobedience to the teacher's demands can be a factor influencing the thinking, emotions, and behavior of the learners.					
36. How to assign the homework by the teacher and its accomplishment by the EFL learner is one of the factors influencing the thinking, emotions, and behavior of learners.					
37. Teacher's authority in the classroom influence the thought, emotions, and behavior of EFL learners.					
38. Appropriate educational equipment can be a factor influencing the thinking, emotions, and behavior of the learners.					
39. Creating a sense of responsibility, respect, and patience in learners can be among the factors influencing the thinking, emotions, and behavior of learners.					
40. The appropriate method of teaching influences the thought, emotions, and behavior of EFL learners.					

Appendix B

Table 3. *Item Measures and Fit Statistics for the Hidden Curriculum*

Entry number	Total score	Total count	Measure	Model S.E.	Infit MNSQ	Infit ZSTD	Outfit MNSQ	Outfit ZSTD	PT- measure CORR.	PT- measure EXP.	EXACT OBS%	MATCH EXP%	ITEM
29	553	163	0.83	0.08	1.25	2.4	1.27	2.4	0.39	0.43	31.9	37.4	Q29
10	591	164	0.58	0.09	0.93	-0.6	0.96	-0.3	0.26	0.41	40.2	42.9	Q 10
12	593	164	0.57	0.09	0.94	-0.5	0.95	-0.4	0.36	0.41	43.9	42.9	Q 12
7	597	164	0.54	0.09	0.86	-1.3	0.88	-1.1	0.33	0.41	49.4	43.7	Q 7
6	598	164	0.53	0.09	0.87	-1.2	0.85	-1.4	0.38	0.41	45.7	44.0	Q 6
2	604	164	0.48	0.09	1.21	1.8	1.27	2.2	0.30	0.40	44.5	46.0	Q 2
31	620	164	0.35	0.09	0.69	-2.9	0.74	-2.3	0.43	0.39	52.4	48.1	Q 31
21	622	164	0.34	0.10	0.90	-0.9	0.91	-0.8	0.46	0.39	47.6	48.5	Q 21
23	630	164	0.27	0.10	1.25	2.0	1.30	2.3	0.33	0.39	48.2	49.5	Q 23
18	631	164	0.26	0.10	1.06	0.6	1.09	0.8	0.35	0.39	55.5	49.5	Q 18
8	637	164	0.21	0.10	1.21	1.7	1.22	1.7	0.28	0.38	48.8	50.7	Q 8
14	643	164	0.15	0.10	1.18	1.4	1.28	2.1	0.36	0.38	46.3	51.5	Q 14
16	643	164	0.15	0.10	0.92	-0.6	0.92	-0.6	0.36	0.38	56.1	51.5	Q 16
19	644	164	0.14	0.10	1.30	2.3	1.33	2.5	0.40	0.38	43.9	51.6	Q 19
30	644	164	0.14	0.10	1.18	1.4	1.14	1.2	0.39	0.38	50.0	51.6	Q 30
24	646	164	0.12	0.10	0.96	-0.3	0.99	0.0	0.44	0.37	53.7	51.9	Q 24
15	648	164	0.10	0.10	0.89	-0.9	0.95	-0.4	0.32	0.37	56.1	51.9	Q 15
17	648	164	0.10	0.10	0.97	-0.2	0.96	-0.3	0.35	0.37	53.0	51.9	Q 17
35	649	164	0.09	0.10	1.05	0.5	1.01	0.1	0.46	0.37	52.4	52.1	Q 35
5	650	164	0.08	0.10	0.77	-2.0	0.77	-2.0	0.35	0.37	51.8	52.1	Q 5
26	652	164	0.06	0.10	0.94	-0.4	0.98	-0.1	0.41	0.37	51.8	52.3	Q 26
11	655	164	0.04	0.10	0.63	-3.4	0.65	-3.2	0.40	0.37	62.8	52.7	Q 11
32	658	164	0.01	0.10	0.93	-0.5	0.90	-0.8	0.44	0.36	54.3	52.7	Q 32
3	660	164	-0.02	0.10	0.83	-1.4	0.92	-0.6	0.19	0.36	60.4	52.7	Q 3
13	662	164	-0.04	0.10	1.49	3.4	1.49	3.4	0.33	0.36	45.7	53.4	Q 13
28	664	164	-0.06	0.10	1.12	1.0	1.14	1.1	0.45	0.36	44.5	53.5	Q 28
25	665	164	-0.07	0.10	0.95	-0.3	1.00	0.1	0.31	0.36	54.9	53.6	Q 25
9	666	164	-0.08	0.10	0.63	-3.2	0.67	-2.9	0.36	0.36	65.2	53.7	Q 9
20	667	164	-0.09	0.10	0.93	-0.5	0.94	-0.4	0.50	0.36	50.6	53.6	Q 20
36	669	164	-0.11	0.10	0.97	-0.2	0.97	-0.2	0.37	0.36	53.0	53.9	Q 36
4	673	164	-0.15	0.10	1.16	1.2	1.14	1.1	0.36	0.35	51.2	53.9	Q 4
33	682	164	-0.26	0.11	1.28	2.0	1.23	1.7	0.40	0.34	49.4	53.9	Q 33
22	683	164	-0.27	0.11	0.91	-0.7	0.84	-1.3	0.50	0.34	59.8	53.9	Q 22
38	699	164	-0.47	0.11	1.28	2.0	1.24	1.8	0.35	0.33	51.2	53.3	Q 38
27	703	164	-0.52	0.11	1.13	1.0	1.10	0.8	0.41	0.32	47.6	53.3	Q 27
37	707	164	-0.57	0.12	1.17	1.2	1.20	1.5	0.31	0.32	54.9	53.1	Q 37
1	712	164	-0.64	0.12	0.66	-2.9	0.74	-2.2	0.31	0.31	63.4	53.4	Q 1
34	714	164	-0.67	0.12	0.89	-0.8	0.89	-0.8	0.29	0.31	59.8	53.3	Q 34
39	734	164	-0.99	0.13	0.89	-0.8	0.82	-1.5	0.44	0.29	61.0	55.7	Q 39
40	745	164	-1.18	0.14	1.06	0.5	1.05	-0.8	0.33	0.27	61.6	58.7	Q 40