

The Role of Teaching Methods and Learning Styles in The Effectiveness of Second Language Teaching

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Abstract

The present study studied the role of teaching methods and learning styles in the effectiveness of second language teaching. This study was applied in terms of its purpose and survey in terms of its method, and studied 384 male students of the second year of high school in Tehran in the academic year 1403-1404 as an available sample. In collecting data on the variable of teaching methods (including the components of specialist, official position, personal model, facilitator and delegate), the Giroux Teaching Methods Questionnaire (1994) was used. In collecting data on the variable of learning styles (including the components of exploratory style, group style, experimental style, structured style and observational style), the Towler & Dipboye Learning Styles Questionnaire (2003) was used. For the variable of effectiveness of second language teaching, the

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English course grades included in the students' first semester report cards in the academic year 1403-1404 were used. Structural equation modeling, Sobel test, and Smart PLS ver3 software were used to analyze the data. The results of the study indicate that teaching methods and learning styles play a significant role in the effectiveness of second language teaching. Also, learning styles play a mediating role in this model. Therefore, teachers can create harmony and compatibility between their teaching methods and students' learning styles by adopting flexible approaches in education, in order to increase the effectiveness of second language teaching and the level of student learning.

Keywords: Teaching Method, Learning Style, Teaching Effectiveness, Second Language, English Language.

Introduction

Second language education and teaching is one of the most important issues that is paid attention to in the field of education, and learning and teaching a second language is always one of the main concerns of learners and enthusiasts. A second language, as one of the most important communication and social tools, has gained special importance in the current conditions of globalization and extensive developments in the field of trade and industry; therefore, second language education and teaching should be carried out with a cognitive approach, based on the various differences between the first and second languages, and the use of diverse, up-to-date and efficient teaching methods can accelerate the improvement and progress of learners in learning a second language (Bagheri, Ghazi-Jahani &

Akhoundi, 2024). Many studies have shown that teaching style is a factor influencing learner success (Nushi & Ghasemi, 2021; Lee, Yeung & Ip, 2017; Ngware, Oketch & Mutisya, 2014).

On the other hand, paying attention to learners' learning styles and their determining factors is a necessity for the educational system and teachers. Because people have important individual differences in the field of cognitive and learning issues, and one of these important differences is the difference in their learning styles. In fact, people understand, organize, analyze, and process information and experiences in different and distinct ways (Soleymanpour, 2019). This different view of the world and the different interests and tendencies of second language learners affect their learning style and the effectiveness of education, and therefore, may also be related to second language teaching methods. In other words, a teaching method may be effective for some learners with learning style (A) but not for others with style (B) (Naderi & Nouri, 2023). This is the same issue that has led today's educational systems to pay attention to the individual characteristics of learners and personalize education (Eslamian et al, 2016).

Given the importance of a second language in the international community, developing individuals' language skills can contribute significantly to improving the social, cultural, economic, and security conditions of a country. Therefore, in this article, we examine the role

of teaching methods and learning styles in the effectiveness of second language teaching.

Teaching styles

A style refers to a person's preferred way of using their abilities and, as such, differs from their ability. Style is a very important factor in recognizing individual differences in how people think, learn, teach, or do different things (Fan & Ye, 2007). According to Giroux (1994), teaching styles represent those consistent individual characteristics and behaviors that are manifested in the way classrooms are managed. Teaching style is what describes teachers, guides their instructional processes, and influences learners and their abilities to learn.

According to Kazemi & Soleimani (2013), teaching style is “a reflection of the integration of teachers’ theoretical assumptions and teaching practice.”

Giroux (1994) identified five teaching styles based on the strategies and orientations that teachers typically employ in their classrooms:

- **Specialist:** The specialist teacher has the knowledge and specialist that learners need. He or she strives to maintain his or her position as a specialist among learners by demonstrating precise knowledge and challenging learners to increase their competence. In this style, the teacher’s role is to convey information and ensure that learners are ready.

- **Official position:** This teaching style is a teacher-centered approach in which teachers are responsible for presenting and

managing the instructional content. This teaching style has a special status among learners because of their knowledge and role as a faculty member. In this style, the teacher is involved in providing positive and negative feedback, setting learning goals, expectations, and ethical standards for learners.

- **Personal Model:** This teaching style is also a teacher-centered approach in which the teacher demonstrates the skills that learners need to learn. This approach helps learners and teachers to adapt their teaching to different learning styles. The private or designer style teacher believes in teaching by personal example. The teacher monitors, guides, and directs learners by showing them how to do things, encouraging learners to learn, and then imitating the teachers' approach.

- **Facilitator:** This teaching style is learner-centered, with the teacher acting as a facilitator. The learner is responsible for achieving results for various activities, leading to independent and collaborative learning. In this style, the teacher usually develops group activities that require active learning, collaboration between learners, and problem solving.

- **Delegate:** This teaching style also has a learner-centered approach in which the teacher delegates responsibility and control of learning to the learners. In this teaching style, the teacher focuses on increasing the ability of learners to learn independently. Learners work on their assignments independently or as part of independent

groups. The delegating style often gives learners the choice to design and implement complex learning projects, while the teacher plays the role of a consultant.

According to Giroux (1994), there appears to be a compatibility relationship between the personal model and delegating teaching styles with different learning styles.

Learning styles

Learning is often defined as a useful process in which the learner actively receives information, relates it to his/her prior knowledge, and processes and draws conclusions (Rezaei, 2008). Accordingly, learning styles include the individual's preferred ways of studying and learning, such as using pictures and tapes instead of books, working with others and participating in a group instead of working alone, etc. Therefore, learning style can have significant effects on the amount of learning of learners (Rashidi & Moghadami, 2017). Towler and Dipboye (2003) identified five different learning styles:

- Exploratory: In the exploratory learning style, all activities of learners are independent and self-directed, and instead of following a structured curriculum or explicit instructions, they are provided with a set of resources, tools, and a supportive environment, and then they must investigate the issues and find the appropriate answer on their own.

- Cooperative: In the cooperative learning style, several algorithms predict the output in parallel, and the final output is the output that has the most repetition among the predicted outputs.

- **Experiential:** In the experiential learning style, the learning process is through experience and is more narrowly defined as “learning by reflection in doing.”

- **Structured:** Structured (output) learning is a general term for supervised machine learning techniques that involve predicting structured objects, rather than discrete or real numerical values.

- **Observational:** Observational learning style or visual learning is learning that occurs through observing the behavior of others. Observational learning is a type of social learning that takes different forms based on different processes.

Understanding learners’ learning styles is not only important in their education and learning and helps to improve their learning ability, but also determines each individual’s career path based on their individual differences and helps to better match their personality with their job and life (Khankjan, 2006).

Method

This research was applied in terms of purpose and survey in terms of method. The statistical population of the study consisted of male students of the second year of high school in the academic year 1403-1404 in Tehran, numbering 140,000 people, and the sample size was determined based on the Cochran formula to be 384 people, who were sampled from 22 public schools using the convenience sampling method.

In collecting data on the teaching methods variable, the Giroux Teaching Methods Questionnaire (1994) was used. This questionnaire consists of 40 questions and five components (including specialist, official position, personal model, facilitator, and delegate). Each component has 8 questions and each question is given a score between 1 (completely disagree) and 5 (completely agree). The validity of this questionnaire was confirmed by Giroux (1994) and its reliability was measured as 0.96 in the research of Nushi and Ghasemi (2021). In the present study, the Cronbach's alpha coefficient of this questionnaire was calculated as 0.917.

Towler & Dipboye's (2003) Learning Styles Questionnaire was used to collect data on the learning styles variable. This questionnaire consists of 54 questions and five components (including exploratory style with 14 questions, group style with 7 questions, experimental style with 13 questions, structured style with 11 questions and observational style with 9 questions). Each question is given a score between 1 (strongly disagree) and 7 (strongly agree), and the scoring of questions 12, 14, 18, 19, 20, 27, 31, 34, 43, and 45 is inversely. The validity of this questionnaire was confirmed by Towler & Dipboye (2003) and its reliability was reported to be above 0.90. In the present study, the Cronbach's alpha coefficient of this questionnaire was calculated to be 0.841.

For the variable of effectiveness of second language teaching, the English language course grades included in the students' first semester report cards in the academic year 1403-1404 were used.

In order to analyze the data, structural equation modeling, Sobel test and Smart PLS ver3 software were used.

Findings

Based on the results of structural equation modeling, the internal consistency of the research model is as shown in Table (1).

Table 1: Construct reliability and validity

	Reliability				Validity
	rho-A	CR	Average Variance	Cronbach's Alpha	AVE
Teaching Methods	0.952	0.929	0.585	0.917	0.344
Specialist	0.924	0.933	0.635	0.918	0.298
Official Position	0.941	0.939	0.659	0.926	0.280
Personal Model	1	0.964	0.770	0.958	0.194
Facilitator	0.998	0.959	0.744	0.954	0.215
Delegate	0.946	0.951	0.710	0.941	0.241
Learning Styles	0.977	0.731	0.579	0.841	0.152
Exploratory	0.994	0.994	0.922	0.994	0.072
Group	0.981	0.974	0.844	0.969	0.130
Experimental	0.984	0.984	0.829	0.983	0.155
Structured	0.996	0.982	0.834	0.980	0.148
Observational	0.987	0.988	0.902	0.986	0.086

The rho-A value is greater than 0.7; therefore, the homogeneous reliability of the model is confirmed. The CR value is greater than 0.7; therefore, the composite reliability of the model is confirmed. The average variance of all variables is greater than 0.5 and is within the normal range. The Cronbach's alpha value is greater than 0.6; therefore, the reliability of the model is confirmed. The AVE value is greater than 0; therefore, the convergent validity of the model is confirmed. Table (2) shows the divergent validity of the model.

Table 2: Discriminant Validity, Fornell- Larcker Criterion

	Dele gate	Effectiven ess of Training	Exper iment al	Expl orato ry	Faci litat or	Gr ou p	Learn ing Styles	Obs ervat ional	Officia l Positio n	Person al Model	Spe ciali st	Stru ctur ed	Teachin g Method s
Delegate	0.843												
Effectiveness of Training	0.714	1											
Experimental	0.087	0.135	0.91										
Exploratory	-0.24	-0.285	-0.16	0.96									
Facilitator	0.304	0.207	-0.62	0.459	0.863								
Group	0.687	0.636	-0.43	0.063	0.784	0.919							
Learning Styles	0.04	0.185	0.8	0.867	-0.771	0.65	0.615						
Observational	0.001	0.305	0.67	-0.527	-0.556	-0.281	0.894	0.95					
Official Position	0.258	-0.062	0.02	-0.227	-0.31	-0.131	0.106	-0.117	0.812				
Personal Model	0.501	0.704	0.31	-0.52	0.049	0.417	0.497	0.649	-0.337	0.878			
Specialist	0.679	0.36	-0.35	-0.08	0.355	0.582	-0.317	-0.377	0.683	-0.048	0.797		
Structured	0.268	-0.056	0.01	-0.242	-0.3	-0.149	0.112	-0.119	0.955	-0.335	0.676	0.913	
Teaching Methods	0.935	0.658	-0.15	-0.189	0.452	-0.777	-0.142	-0.137	0.39	0.391	0.862	-0.387	0.534

According to Table 2, the relationship of each variable with its own components is stronger than its relationship with other components; therefore, the divergent validity of the model is confirmed. Next, the research hypothesis is tested.

Research hypothesis: Teaching methods and learning styles play a role in the effectiveness of second language teaching.

Table 3: Path Coefficients

Variables	Original Sample	T Statistics	P Values
Learning Styles & Effectiveness of Training	0.384	2.917	0.005
Teaching Methods & Learning Styles	0.142	2.417	0.009

Teaching Methods & Effectiveness of Training	0.698	3.154	0.000
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According to the test results in Table 3, there is a moderate direct and significant relationship between learning styles and the effectiveness of second language teaching. This means that strong learning styles increase the effectiveness of second language teaching to students. There is a relatively weak direct and significant relationship between teaching methods and second language learning styles. This means that strong learning styles improve the results of teachers' teaching methods. There is also a strong direct and significant relationship between teaching methods and the effectiveness of second language teaching. This means that strong teaching methods increase the effectiveness of second language teaching to students. The t-value is greater than 1.96 and the p-value is less than 0.005, which confirms the significance of the test results.

The R Square values in Table 4 show the degree of correlation between the variables.

Table 4: R Square

	R Square	R Square Adjusted
Delegate	0.873	0.872
Effectiveness of Training	0.512	0.499
Experimental	0.634	0.629
Exploratory	0.449	0.441
Facilitator	0.204	0.193
Group	0.216	0.205
Observational	0.799	0.796
Official Position	0.152	0.14
Personal Model	0.153	0.141

Specialist	0.743	0.739
Structured	0.013	0.001
Teaching Methods	0.02	0.007

According to Table 4, there is a correlation between all variables; therefore, the research model has a good fit. Therefore, the research hypothesis based on the role of teaching methods and learning styles in the effectiveness of second language teaching is confirmed. Next, the role of variables is examined using the Sobel test.

Sobel's formula is:

$$t = \frac{a * b}{\sqrt{(b^2 * s_a^2) + (a^2 * s_b^2)}}$$

where:

a= The value of the path coefficient between the independent and mediating variables

b= The value of the path coefficient between the mediating and dependent variables

Sa= The standard error of the path between the independent and mediating variables

Sb= The standard error of the path between the mediating and dependent variables

$$t = \frac{0.142 * 0.284}{\sqrt{(0.284^2 * 0.005^2) + (0.142^2 * 0.047^2)}} = 5.910$$

According to the results of the calculations, the Sobel test statistic is greater than 1.96; therefore, the mediating role of learning

styles in the impact of teaching methods on the effectiveness of second language teaching is confirmed.

Conclusion

The findings of the study indicate that teachers' teaching methods play a positive and significant role in the effectiveness of second language teaching to students, and the more teachers use stronger teaching methods, the more students learn. On the other hand, the effectiveness of second language teaching, or in fact, students' learning, is also influenced by the learning styles they use. Students who use stronger learning styles perform better in second language acquisition. In addition, there is a significant relationship between teachers' teaching methods and students' learning styles, and the fit between teaching methods and learning styles can increase the effectiveness of second language teaching. Therefore, while choosing new and efficient methods in second language teaching, teachers should identify students' learning styles and, by adopting flexible approaches in teaching, create coordination and compatibility between their teaching methods and students' learning styles, in order to increase the effectiveness of second language teaching and the level of student learning.

References

- Bagheri, E., Ghazi-Jahani, A., & Akhoundi, F. (2024). Principles and methods of second language education and teaching. *14th International Conference on Management and Humanities Research in Iran*, Tehran, <https://civilica.com/doc/1895011>
- Eslamian, H., Jahanbakhshi, M., Mirmobin, F.S., & Nikpour, M. (2016). *Learning and teaching styles; theory and research*. Tehran: Aristotle Publications. First Edition.
- Fan, W., & Ye, S. (2007). Teaching styles among Shanghai teachers in primary and secondary schools. *Educational Psychology*, 27(2): 255-272. <https://doi:10.1080/01443410601066750>
- Giroux, H. A. (1994). Doing cultural studies: Youth and the challenge of pedagogy. *Harvard Educational Review*, 64(3): 278-308. <https://doi:10.17763/haer.64.3.u27566k67qq70564>
- Kazemi, A., & Soleimani, N. (2013). On Iranian EFL teachers' dominant teaching styles in private language centers: Teacher-centered or student-centered? *International Journal of Language Learning and Applied Linguistics World*, 4(1): 193-202.
- Khnikjan, A. (2006). *Evaluation of cognitive learning styles of students*, Master's Thesis, Shiraz University. (In Persian)
- Lee, C., Yeung, A. S., & Ip, T. (2017). University English language learners' readiness to use computer technology for self-directed learning. *System*, 67(2): 99-110. <https://doi.org/10.1016/j.system.2017.05.001>

- Naderi, K., & Nouri, S. (2023). Types of learning styles and the effect of each on the academic status of fourth grade elementary school students at Shokoofehae Enghelab School for Girls. *Quarterly Journal of Modern Research in Psychology*, 4(1): 195-202.
- Ngware, M. W., Oketch, M., & Mutisya, M. (2014). Does teaching style explain differences in learner achievement in low and high performing schools in Kenya? *International Journal of Educational Development*, (36): 3-12.
<https://doi.org/10.1016/j.ijedudev.2014.01.004>
- Nushi, M., & Ghasemi, F. (2021). Teachers' teaching styles and their beliefs about incorporating technology into l2 instruction: the case of Iranian EFL context. *Foreign Language Research Journal*, 11 (3): 511-539.
- Rashidi, Z., Moghadami, M. (2017). The relationship between learning styles with Academic Achievement and Creativity of students senior Department of Education, *Psychology and Social Sciences, Islamic Azad University Roudehen Branch.*, 7(2), 1-38.
- Rezaei, A A. (2008). *Investigating the relationship between background related and background-independent learning styles in humanities and mathematics students*, MSc thesis, Allameh Tabataba'i University. (In Persian)
- Soleymanpour, J. (2019). The relationship between learning styles and language skills of secondary school students. *Quarterly Journal of Education Management and Perspectives*, 1(1): 45-62.

Towler, A. J., & Dipboye, R. L. (2003). Development of a learning style orientation measure. *Organizational Research Methods*, 6(2): 216-235.