An Investigation of the Correlation of Scanning Information Skills in Text with Impulsive and Reflective Learning Styles of Pakistani Engineering Students

Asmara Shafqat[1], Muhammad Hassan Abbasi[2], Hamna Khalid[3], Huma Akhtar[4]

[1] Lecturer, Department of English Linguistics and Allied Studies, NED University of Engineering and Technology, Pakistan. Email: asmarashafqat@neduet.edu.pk

[2] Lecturer, Basic Science and Humanities-English, Dawood University of Engineering and Technology Karachi, Pakistan. Email: hassan.abbasi@duet.edu.pk

[3] Lecturer, Humanities & Social Sciences Department, Bahria University Karachi Campus, Pakistan. Email: hamnakhalid.bukc@bahria.edu.pk

[4] Assistant Professor, Education and Literacy Department, Government Degree College for Women, Nazimabad, Karachi, Pakistan. Email: humaakhtar526@gmail.com

ARTICLE INFO

ABSTRACT

Teachers' instruction receives immense impact from multiple factors and among them awareness of learning styles' preferences is significant. Shea (1983) found a strong relationship between styles of learning and reading comprehension. This study attempted to explore correlation between reflective and impulsive styles of learning and scanning information in text scores. 382 undergraduates engineering students (male and female) were selected from a Public sector Engineering University. Andrew D. Cohen, Rebecca L. Oxford, and Julie C. Chi's (2001) questionnaire was used to explore the patterns of learning styles along with its relevance with the role of gender. A reading test was also conducted along with the questionnaire based on scanning skills. Pearson product-moment correlation test was applied to ascertain the correlation between the variables. The findings will be useful for teachers to determine preferences of learning style of students which will impact educational policies and techniques in general.

Corresponding Author's Email: humaakhtar526@gmail.com

1. Introduction

Reading comprehension has an immense role in the performance and achievements of students when it comes to academic success or failure and researchers have tried to focus as to ways of enhancing reading comprehension skills to comprehend more information (Han, Park, & Combs, 2008). Research, however, has also showed that some characteristics of language learners and learning styles tend to impact language learning in multiple ways (Wang, Peng, Huang, Hou, & Wang, 2008). Oxford and Ehrman (1992) has pointed out that the style of a learner's learning will determine how that particular individual uses ways which consequently affects the language learning process. Kolb (2005) have also contended that once learning style is determined, there can be ways of channelizing instruction in classrooms which result in positive outcomes in terms of learners' performance in the class.

Xu (2011) contended that personality learning styles have immense impact on learning process as compared to the other styles such as cognitive and perceptual. Reflectivity and impulsivity are often discussed under personality learning styles. The learners conducive to reflexivity aim at seek accuracy and fluency. Impulsive learners, on contrary, have preference for thoroughness than precision. The reflective learners, according to researchers are less prone to make mistakes, while the impulsive learners are vulnerable to make errors. How

reflectivity and impulsivity affect learning process or some specific aspect of learning such as reading skills?

The main object of the research is to see if reflective and impulsive learning styles have an impact on reading comprehension, and scanning skills in particular, of undergraduates in engineering university in Pakistan.

1.1. Problem Statement

Despite the importance of reading and comprehension skills in engineering, there is limited research on the relationship between learning styles, scanning abilities, and reading comprehension in this demographic. This study aims to address this gap by exploring how impulsive and reflective learning styles impact the ability of engineering students to scan for specific information in texts and how this affects their overall reading comprehension. The problem is that engineering students often struggle with reading and comprehension skills, which can negatively influence their academic performance and future job performance. A better understanding of the relationship between learning styles and scanning abilities has the potential to inform the development of more effective reading strategies for this demographic and improve their overall reading skills. This, in turn, can lead to improved academic and professional outcomes for engineering students.

1.2. The objective of the Study

The aim of the research is to explore the correlation between styles of learning and scanning information test scores. In order to reach the objective of the research impulsivity and reflexivity, which are two eminent cognitive learning styles presented by M. X. Cohen (2014), were selected. The study also focused to explore the styles of learning of these two aspects with respect to gender.

1.3. Research Questions

1. What are the preferences of the styles of learning with respect to the time for response of Pakistani engineering students at undergraduate level?
2. What are the preferences of the styles of learning with respect to response time of Pakistani engineering students at undergraduate level with respect to gender?
3. Is there any correlation between impulsive learning styles of Pakistani engineering students and scanning information test scores?
4. Is there any correlation between reflective learning styles of Pakistani engineering students and scanning information test scores?

1.4. Hypotheses of the study

H_{01}: There is no statistically significant correlation between the impulsive learning style and the scanning information test score.

H_{02}: There is no statistically significant correlation between reflective learning style and the scanning information test score.

1.5. The Significance of the Study

Zoghi and Alivandivafa (2014) has found that much target interest had been on the psychological characteristics and hurdles and on aspects such as anxiety, affective filter, motivation, etc., which do not correlate with classroom practices. The gap between theory and practice, and research and language classes can be filled if relevant results in the area are viewed. One way towards it is to beto understand learning styles. Lozanov (1979) suggested to consider language learners as 'whole person' (p.67). He contended that multiple perspectives of the learners should be kept in view. One of them is learning style. What learners prefer in their learning as style should be given heed in teaching.

The study of learning style can help teaches and material designers to design as per the needs of their learners. Language teachers can better adjust teaching methodologies keeping the learning styles of the learners in view which will be fruitful for the learners. In Pakistan there is dearth of research to help determine how different styles of learning affect learning and how reflective and impulsive learning styles have an effect on learning language. Farooq (2015) has explored the correlation between cognitive styles and academic performance of the students at Masters Level in a Pakistani university. Qanwal and Karim (2014) have explored the

relationship between instruction of reading strategies and comprehension of L2 text. There is need to explore the relationship between what learners perceive, prefer as their learning style and their consequent performance. At undergraduate level, particularly in engineering field, learners require reading for specific information in any form of material. It is, therefore, essential to explore the ways of how reflective and impulsive learning styles affect reading comprehension and scanning skills of learners.

1.6. Rationale
The rationale for conducting research on the topic of impulsive and reflective learning styles of engineering students and scanning in text reading skills is two-fold. Firstly, engineering is a highly demanding field that requires students to have strong reading and comprehension skills in order to succeed. As such, it is crucial to understand how different learning styles impact reading abilities in this demographic. Secondly, while there is existing research on learning styles and reading skills, there is a gap in understanding how these styles specifically impact scanning abilities. This research aims to fill this gap by providing a detailed examination of the relationship between learning styles, scanning, and reading comprehension in engineering students. The results of this study have the potential to inform the development of effective reading strategies for engineering students and improve their overall academic performance.

2. Literature Review
2.1. Learning Styles
Psychologists have found more than 70 learning styles but only some are relevant to language learning. Reid (1987) defines learning styles as "the variations among learners in using one or more sense to understand, organize, and retain experience" (89). Xu (2011) has presented three categories of learning styles, i.e., perceptual, cognitive and personality learning styles.

2.2. Perceptual Learning Styles
According to researchers perceptual learning styles pertain to the senses of the learners. Despite the fact that the researches done on cognitive styles outnumber research studies on perceptual learning styles, those carried out have attempted to explore the impact of perceptual learning styles on learning language (Wang et al., 2008). For Reid (1995), visual and auditory are one of the most important perceptual learning styles. According to Gilakjani and Ahmadi (2011) teaching methodologies adopted for language teaching ought to be based on interactive as they are effective for learners who are conducive to auditory, visual and kinaesthetic styles of learning. M. X. Cohen (2014) contends that language teacher should bear the responsibility of taking heed of individual learners' styles for learning in order to prompt learning process.

2.3. Cognitive Learning Styles
A lot of research has been carried out on the impact of cognitive learning styles on language learning. The most profusely discussed categories among them is field dependent and field independent (Xu 2011). The former (field dependent) look for meticulous details by analysing the given information while later (field independent learners) tend to adopt a broader and global outlook (Littlewood, 2002).

2.4. Personality Learning Styles
Another aspect of learning styles is personality and among them introverts versus extroverts are significant aspects. Reflexive and impulsive leaning styles are also significant ones adopted by and exhibited among language learners. Rastegar and Safari (2017) found out how reflexivity and impulsivity impact English vocabulary. The study of Mukundan, Hajimohammadi, and Nimehchisalem (2011) on Iranian EFL learners also concluded that introvert learners prefer self-correction when it comes to writing skills while extrovert learners fail in this regard. A study found correlation between learners' autonomy and their preferred learning styles. The results established that leaners' preferring visual and auditory styles claim for high autonomy level.

2.5. Scanning information skills
Scanning skill is one of the crucial reading skills and focuses on particular information (Dreher, 1992). Learners need to scan text due to multiple reasons and time constraint is

among the most important one (Guthrie, Seifert, & Kirsch, 1986; Kirsch & Guthrie, 1984; Mikulecky, 1982) Scanning skills hold their due place while teaching reading skills to learners (Brown, Fisher, & Brailsford, 2007).

According to Jordan (2017) maps, dictionaries, indexes, etc. are used for scanning material. It is among the frequently used activity task practiced by instructors in educational institutions, be they elementary, tertiary or graduation. Many researchers have established that where there exists plenty of research on reading skills, comprehension, etc, very little work has been carried out on scanning skills to extract information while reading(Guthrie, 1988; Kirsch & Guthrie, 1984). There have been three aspects of reading comprehension pointed out by Kirsch and Guthrie (1984) and they include scanning, comprehension and generating information and generating or extracting theme from the text.

The main aim of the research is to find correlation between reflexivity and impulsivity of the Pakistani engineering students with scanning information text. This will facilitate to add research in Pakistan regarding this area. In Pakistan the scarcity of effective reading programs create serious problems as these situations lead to poor reading skills of the learners. The need for bringing forth multiple effective teaching techniques, inclusion of modification in syllabus and curriculum and keeping the factor of learners and their needs is dire and must be given full heed (Scanlon, Deshler, & Schumaker, 1996). At undergraduate level, especially for engineering students reading skills and scanning skills in particular are crucial (Shafqat & us Saqlain, 2019).

3. Methodology
3.1. Procedures
The present research is cross sectional. The researchers used convenience approach for sampling, so the conclusions were drawn using data which is observable. For this study to collect data the quantitative methods were employed by the researchers.

3.2. Participants for the Study
According to Gray (2021), the population can be taken as the total possible number of students included in the research. The target population was undergraduate students from engineering Public Sector University. According to Creswell (2002), in probability sampling the investigator chooses participants who are representative of that population. In this form of sampling in the quantitative study the researcher can make generalisations to the population as the sample is representative of the population.

3.3. Sampling
Simple random sampling was employed for the present research as the sampling technique because in this context sample could easily represent the population and could draw the findings based on the hypotheses. Simple random sampling is, according to Creswell (2002), a form of probability sampling technique with the aim of selecting subjects to represent the population.

In this study, the formula given by Yamane (1973) was used to show the sample size which is:

$$n = \frac{N}{1 + (N \times e^2)}$$

Where N shows the size of the population, n is the size of the sample and e is the level of precision. The total population in this context was 8458 so the sample size 'n' was calculated at the 0.05 level of precision as follows:

$$n = \frac{8458}{1 + (8458 \times 0.05^2)}$$

Thus n = 382 sample was selected for this research.

3.4. Instruments for Data Collection
3.4.1. The questionnaire

This study adopted The Learning Style Survey questionnaire of(A. D. Cohen, 2003). It focused to explore aspects of learning styles in relevance to language learning. The plan of the survey, style dimensions and components were extracted from Oxford's Style Analysis Survey (1995 as cited in (Oxford & Ehrman, 1992). Some of the terms of items and other styles' dimensions were founded on Ehrman and Leaver's study (Ehrman & Leaver, 2003) The E&L Questionnaire, 2001as cited in Changju, 2011. The questionnaire was sub-divided into three main dimensions:

1.   Perceptual learning style
2.   Personality learning style
3.   Cognitive learning styles

They further organized into eleven parts, and every part contained two groups except the first part which included three groups of learning patterns.

Part 10: How I Deal with Response Time (Cohen, Oxford & Chi 2001)
1.   Impulsive
2.   Reflective

Part 10: HOW I DEAL WITH RESPONSE TIME

1.	I react quickly in language situations.	0 1 2 3 4
2.	I go with my instincts in the target language.	0 1 2 3 4
3.	I jump in, see what happens, and make corrections if needed.	0 1 2 3 4
		A - Total _____
4.	I need to think things through before speaking or writing.	0 1 2 3 4
5.	I like to look before I leap when determining what to say or write in a target language.	0 1 2 3 4
6.	I attempt to find supporting material in my mind before I set about producing language.	0 1 2 3 4
		B - Total _____

3.5. Scanning Information Test

The researchers adopted scanning information test from Reading for IELTS by Geyte (2011),1stedition (the test can be seen in the final version of the questionnaire in the appendix A). The test was adapted with the total score of 20 which were divided among three questions. These three questions were constructed to test the scanning skill of the students to locate the specific information. It comprised of 20 items in total which carried one score each. The first question asked to locate specific information for six items. The second question asked to scan the passage and locate the missing information to fill the diagram that required seven items. The third question asked to scan the passage for missing information and to fill the table with required information. The third question also had seven items to be located in the passage.

3.6. Validity and Reliability of the Test

The test was adapted from the IELTS (International English Language Test System). "The International English Language Testing System (IELTS) is a test that measures the language proficiency of people who want to study or work in environments where English is used as a language of communication" ("IELTS-IELTS Introduction", 2016). Therefore, there is no issue of testing the validity or reliability of this test. It is mentioned in "Ensuring the validity and fairness in international testing" (2015), IELTS is the standard English language test with over 2.5 million tests every year and is offered and recognised in more than 9,000 organisations in so many countries in the world. It is also used for selection purposes. Test is developed and created by the professionals of ESL from Canada, Australia, New Zealand, the US and the UK. According to "IELTS" (2016), this test is owned by IDP, British council, and the University of Cambridge.

3.7. Procedures

The procedures for collecting data for the present study lasted for two days. Firstly the consent of the participants was taken and they were given the questionnaire adopted for the study (Learning Style Survey questionnaire by Cohen, Rebecca Oxford and Julie Chi). For the next procedure IELTS reading test was taken by the participants so as to gauge the reading comprehension skills of them. In order to take the procedures at findings level, the results from the taken tests were used which would yield research answers.

4. Results
4.1. Exploratory Data Analysis
4.1.1. The Participants' Profile

The results represented here are based on the sample population of 382 that was used in this research. Table 4.1 has shown the gender profile of the participants. In the present study, there were 50.5% male and 49.5% female participants. There is not a huge difference regarding the percentage of gender observed in this sample.

Table: 1 Gender of the Participants

		F	%
Gender	Male	193	50.5
	Female	189	49.5
	Total	382	100.0

Research question: 1 The preferences of learning style of the engineering students

The tenth part: How do students deal with response time, shows that Impulsive learning style has dominated other style with the frequency of 205 (53.7%).

Table: 2 Learning Style Preferences

		F	%
How do students deal with response time	Impulsive	205	53.7
	Reflective	177	46.3
How do students literally take reality	Metaphoric	171	44.8
	Literal	211	55.2

Research question 2: The preferences of learning style of the engineering students with respect to gender

In the tenth part, male and female are more impulsive than reflective (male=53.7% vs. female=46.3%).

Table: 3 Learning Style Preferences with respect to Gender and Learning Style preferences

		Gender			
		Male		**Female**	
		f	%	f	%
How do students deal with response time	Impulsive	110	53.7	95	46.3
	Reflective	94	53.1	83	46.9

Research question 3: The test of hypotheses –Is there any correlation between learning styles and scanning information in text scores

H_{01}: There is no statistically significant relationship between the impulsive learning style and the scanning information in text score.

Table 4 showed the descriptive statistics of the Impulsive learning style with (n =205) and (SD = .82) and for scanning information in text score (Imp), (n=205) and (SD= 2.82).

Table: 4 Descriptive Statistics

	M	SD	n
Impulsive	10.78	.82	205
Scanning Information In text15.40 Score(Imp)		2.82	205

The researchers found by calculating a Pearson product-moment correlation coefficient to gauge the relationship between the Impulsive style of learning and the Scanning information in text score (Imp).Table 4.5 has shown that there is a positive correlation between the two variables, r = .938** , n = 205, p = .000. The significance value *(p* = .000) was less than the standard level of alpha (*p* = .05). Therefore, the findings concluded by nullifying the null hypothesis and accepting the alternative hypothesis. It was proved that a statistically significant correlation exists between Impulsive style of learning and scanning information in text scores.

Table: 5 *Pearson's Product Moment Correlations for Impulsive with Scanning Information in In text Score*

		Impulsive	Scanning Information In text Score(Imp)
Impulsive	Pearson Correlation	1	.938**
	Sig. (2-tailed)		.000
	N	205	205
Scanning Information In textPearson Correlation Score(Imp)		.938**	1
	Sig. (2-tailed)	.000	
	N	205	205

*** p < .01*

Research question 4. Is there any correlation between reflective learning styles of Pakistani engineering students and scanning information test scores?

$H_{02:}$ There is no statistically significant relationship between the reflective learning style and the scanning information in text score.

Table: 6 showed the descriptive statistics of the Reflective learning style with (*n* =177) and (*SD* = .85) and for scanning information in text score (Ref), (*n*=177) and (*SD*= 2.67).

Table: 6 Descriptive Statistics

	M	SD	N
Reflective	10.74	.85	177
Scanning Information In text Score(Ref)	15.39	2.67	177

The researchers calculated a Pearson product-moment correlation coefficient to gauge the correlation between the Reflective style of learning and Scanning information in text score. Table 4.7 has shown that there is a positive relationship between the two variables, r = .962**, n =177, p = .000. The significance value (*p* = .000) was less than the standard level of alpha (p = .05). The conclusion drawn is that the null hypothesis has to be nullified while the alternative hypothesis has to be accepted, which proved that a statistically significant correlation exists between the Reflective style of learning and scanning information in text score.

Table: 7 Correlations

		Reflective	Scanning Information In text Score(Ref)
Reflective	Pearson Correlation	1	.962**
	Sig. (2-tailed)		.000
	N	177	177
Scanning Information InPearson Correlation text Score(Ref)		.962**	1
	Sig. (2-tailed)	.000	
	N	177	177

*** p < .01*

5.   Discussion and Conclusion

The first objective of this study was to find out the learning styles preferences related to specifically impulsive and reflective learning styles. The researchers also attempted to explore the gender differences in learning style preferences. Another purpose was to investigate relationship between learning style preferences and scanning information in text scores to highlight significance of comprehending learning styles for learners but also for teachers.

The information gathered in the first section of the study will help all the instructors and teachers in not only identifying but also accommodating different learning styles of the learners for designing their instructional plan. According to the findings, it was presented that there are multiple styles of learning and preferences of students in different aspects given in the questionnaire. A correlation between learning styles of engineering students and scanning information in the text was found. Moreover, gender also plays an important role in preferences of learning style.

The results of this research exposed that there is a strong relationship between the styles of learning and scanning information in the text. Another aspect is how students deal with response time which the tutors often overlook. In accordance with the findings of the research, most of the engineering students are impulsive, which defines the response and reaction of the learners in high speed with which they process information or material with low correctness; often guesses and take risks. These learners often do not wait but respond and share as soon as the teacher explains anything they want to guess and confirm by speaking that have they understood the concept. Many teachers discourage this attitude of the learners they believe that once they finish or complete the chapter then students should be allowed to speak no matter he has any confusion or needs any encouragement while lecturing. The teacher must offer chances to speak out without preparing everything in advance. Engineering students' classroom is based on multiple learning styles.

The present research serves two purposes. In the first place it intended to attract the attention of the tutors towards individual learning style of students. Secondly, it aimed to show that learning styles are important for the instruction of reading skills. The teacher must teach scanning skill separately and guide the students to enhance their scanning skill in order to be successful in all the subjects no matter is it English or any other subjects. It should be practised by the teacher to inquire and explore the learning styles of his or her class before beginning the teaching sessions so that teaching style could be accommodated to the students' learning style as closely as possible to enhance the learning and to achieve desired objectives.

There is no doubt that reading to locate or scan in documents and texts play a significant role not only in academic but also in professional life. Scanning skill is the strategic reading, which is much needed and integral in the world where information is available and increasing at a startling rate. Yet scanning information in texts appears to have diminutive importance in teaching and instruction, not unpredictably, evidence shows that efficiency in all but the least difficult reading to scan information in the text is noticeably less than optimal. By examining the scanning skill of the engineering students at undergraduate level, the problems and the solutions given by them, the researcher came to the conclusion that the students were not fully aware of this strategic reading to locate information. There may be many other factors, but weak teaching and instructional strategies related to scanning skill might be one of them.

5.1.   Pedagogical implications and recommendations for the instructors

The findings of the study have multiple implications for the instructors. The teacher should act as a researcher in the classroom and should not only identify the students' individual preferences of learning style, but also to know ways of adjusting the styles of learning in teaching. The purpose is not just to administer the questionnaires of learning styles indiscriminately, but being cognizant of every measure taken and think an objective for conducting it.

The instructor must utilise the results to implement the suitable ways of teaching and results should not be put away. Accommodating all the learning styles of all the learners would not be feasible, but it can be possible for teacher's being thoughtful in his or her learners'

learning style teacher will be able to balance and manage their instructional or teaching plan by integrating a variety of tasks or activities in the classrooms this way he might be able to cater the majority of the students in the classroom. The teacher must not stop, rather a constant vigilance over the learner will inform for any change in the learning profile of the learners. Counselling sessions should be done if a change has been observed.

As far as scanning skill is concerned, it is recommended to employ more use of textbooks for a variety of purposes that would facilitate scanning skill. Scanning performance could also be improved by requiring instruction that must be based on inefficient or unresponsive scanners. The role of eye movement is also fundamental to be taught for the scanning skill. Teachers must know what needs to be taught for teaching scanning skill. There is a model given by Guthrie et al. (1986) in which suggested a model for scanning comprised of five components: First the teacher must teach to frame objective or goal of action ; then instruct how to select an appropriate text area or a category or a section for example : heading or table of contents, particular text paragraph or pages for scanning; after this, must teach them how to extract or scan required information from that area; the second last step is to teach how to incorporate the scanned information with the prior understanding; and lastly reprocess through the above steps until the scan task is accomplished.

The present study is limited to the results obtained from undergraduate engineering students at the Public Sector University. The researcher could not study various variables that may influence preferences of learning style and the scanning information in text due to the time constraints, but the study has significant recommendations for future researches.

## 5.2.	Implication of the Research / Contribution of the study
The implications of this research on the topic of impulsive and reflective learning styles of engineering students in scanning in text reading skills are numerous and far-reaching. Some of the key implications of this research include:

- Improved understanding of learning styles: This research will deepen our understanding of how different learning styles impact reading skills and specifically scanning abilities in engineering students.

- Improved reading strategies: The results of this study will inform the development of more effective reading strategies for engineering students, which can improve their overall academic performance.

- Improved educational outcomes: By improving reading skills, engineering students will be better equipped to succeed in their studies, leading to improved educational outcomes.

- Better equipped future engineers: By improving the reading skills of engineering students, the future workforce in this field will be better equipped to effectively read and comprehend technical documents, leading to improved job performance.
- Overall, the results of this research have the potential to have a significant impact on the academic and professional success of engineering students.

References
Brown, E., Fisher, T., & Brailsford, T. (2007). *Real users, real results: examining the limitations of learning styles within AEH.* Paper presented at the Proceedings of the eighteenth conference on Hypertext and hypermedia.
Cohen, A. D. (2003). The learners side of foreign language learning: Where do styles, strategies, and tasks meet? doi:https://doi.org/10.1515/iral.2003.013
Cohen, M. X. (2014). *Analyzing neural time series data: theory and practice*: MIT press.
Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative* (Vol. 7): Prentice Hall Upper Saddle River, NJ.
Dreher, M. J. (1992). Searching for information in textbooks. *Journal of Reading, 35*(5), 364-371. doi:https://www.jstor.org/stable/40032124
Ehrman, M., & Leaver, B. L. (2003). Cognitive styles in the service of language learning. *System, 31*(3), 393-415. doi:https://doi.org/10.1016/S0346-251X(03)00050-2

Farooq, M. S. (2015). Cognitive Styles and Quality of Learning: A Case of Language Learners. *Journal of Elementary Education, 25*(1), 19-37.

Geyte, V. E. (2011). Reading for IELTS. In: HarperCollins.

Gilakjani, A. P., & Ahmadi, M. R. (2011). A study of factors affecting EFL learners' English listening comprehension and the strategies for improvement.

Gray, D. E. (2021). Doing research in the real world. *Doing research in the real world*, 1-100.

Guthrie, J. T. (1988). Locating information in documents: Examination of a cognitive model. *Reading research quarterly*, 178-199. doi:https://doi.org/10.2307/747801

Guthrie, J. T., Seifert, M., & Kirsch, I. S. (1986). Effects of education, occupation, and setting on reading practices. *American Educational Research Journal, 23*(1), 151-160. doi:https://doi.org/10.3102/00028312023001151

Han, Z., Park, E. S., & Combs, C. (2008). Textual enhancement of input: Issues and possibilities. *Applied linguistics, 29*(4), 597-618. doi:https://doi.org/10.1093/applin/amn010

Jordan, P. (2017). *The academic library and its users*: Routledge.

Kirsch, I. S., & Guthrie, J. T. (1984). Adult reading practices for work and leisure. *Adult education quarterly, 34*(4), 213-232. doi:https://doi.org/10.1177/0001848184034004003

Kolb, A. Y. (2005). The Kolb learning style inventory-version 3.1 2005 technical specifications. *Boston, MA: Hay Resource Direct, 200*(72), 166-171.

Littlewood, W. (2002). Foreign and Second Language Learning. Beijing. *Foreign Language Teaching and Research Press and the Press of the University of Cambridge, Cambridge.(25)*.

Lozanov, G. (1979). Accelerated Learning and Individual Potential. *Prospects: Quarterly Review of Education, 9*(4), 414-425.

Mikulecky, L. (1982). Job literacy: The relationship between school preparation and workplace actuality. *Reading research quarterly*, 400-419. doi:https://doi.org/10.2307/747527

Mukundan, J., Hajimohammadi, R., & Nimehchisalem, V. (2011). Developing an English language textbook evaluation checklist. *Contemporary Issues in Education Research (CIER), 4*(6), 21-28. doi:https://doi.org/10.19030/cier.v4i6.4383

Oxford, R. L., & Ehrman, M. (1992). Second language research on individual differences. *Annual review of applied linguistics, 13*, 188-205. doi:https://doi.org/10.1017/S0267190500002464

Qanwal, S., & Karim, S. (2014). Identifying correlation between reading strategies instruction and L2 text comprehension. *Journal of Language Teaching and Research, 5*(5), 1019. doi:https://doi.org/10.4304/jltr.5.5.1019-1032

Rastegar, B., & Safari, F. (2017). Output-Based Instruction, Learning Styles and Vocabulary Learning in the EFL Context of Iran. *International Journal of Education and Literacy Studies, 5*(2), 101-111. doi:https://doi.org/10.7575/aiac.ijels.v.5n.2p.101

Reid, J. M. (1995). *Learning styles in the ESL/EFL classroom*: ERIC.

Scanlon, D., Deshler, D., & Schumaker, J. (1996). A strategy for students in inclusive classrooms to organize and represent content. *Learning Disabilities Research & Practice, 11*, 41-57.

Shafqat, A., & us Saqlain, N. (2019). Relating perceptual learning styles of engineering students with scanning information in text scores. *International Journal of English Linguistics, 9*(5), 257-266. doi:https://doi.org/10.5539/ijel.v9n5p257

Wang, Y., Peng, H., Huang, R., Hou, Y., & Wang, J. (2008). Characteristics of distance learners: Research on relationships of learning motivation, learning strategy, self-efficacy, attribution and learning results. *Open Learning: The Journal of Open, Distance and e-Learning, 23*(1), 17-28. doi:https://doi.org/10.1080/02680510701815277

Xu, W. (2011). Learning styles and their implications in learning and teaching. *Theory and Practice in language Studies, 1*(4), 413-416. doi:https://doi.org/10.4304/tpls.1.4.413-416

Zoghi, M., & Alivandivafa, M. (2014). EFL Reading Anxiety Inventory (EFLRAI) factorial validity and reliability. *Journal of Psychoeducational Assessment, 32*(4), 318-329. doi:https://doi.org/10.1177/0734282913513686