

The Influence of Constructivist Strategies in Writing the Foreign Language on the Learners Achievements at Higher Secondary Level

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Abstract

Ideas which are built without having any prior knowledge of the subject is not really wrong but called alternative, pre or original concepts. The present study was designed to diagnose alternative conceptions, to discover the best possible reasons behind those alternative conceptions and develop teaching learning constructivist strategies to overcome those alternative conceptions. Moreover, the effectiveness of proposed constructive strategies was found in writing the second language at secondary level. The present research used sequentially exploratory mixed method with the intervention of experimental research design. This research consisted on two phases. In phase-1 grounded theory was used to determine the alternative conception and their reasons in writing the second language at secondary level. The researcher used diagnostic test, diagnostic test interview as research tool in phas-1. In phase-11, pre-test post-test control group design was used. Furthermore, qualitative observation of experimental group was done. Test was used to diagnose alternative conceptions and how they develop. Qualitative data was analyzed by using Cresswell content analysis approach. Quantitative data was analyzed by using SPSS software. Findings of phase-1 were used to develop constructivist strategies to overcome those alternative conceptions. Findings of phase-11 proved that proposed constructivist strategies were effective to overcome the alternative conceptions in writing second language learning process.

Key words: Constructivist Strategies, Foreign language, Achievement, High Secondary School



Introduction

Constructivism is a doctrine of teaching which states that people construct knowledge with the help of experiences and interactions with the world. Basically, it says that learners learn through experience (Andang Suhendi, Purwarno, & Chairani, 2021). Furthermore Bruner's cognitive theory, which asserts that learning is an active process in which students construct new ideas or concepts based on their existing and prior knowledge, supports Piaget and Vogotsky's approach. He said that in order to acquire new information and knowledge, learners can choose and modify the material they use, establish hypotheses, and make decisions. Constructivist theory's fundamental tenet is that knowledge only becomes new to a person when they have used it in real-world situations. In other words, via experience, people develop their own meaning. Since the beginning of constructivism, pedagogy has undergone considerable modifications. In the middle of the 1990s, constructivism had an effect on intellectual learners (Yilmaz, 2011).

Additionally the theoretical foundation of constructivist strategies was the procedure of equilibration of Piaget with amendment of use of identified alternative conception. This research found that usage of identified alternative conception created discontent in second language learners. This dissatisfaction leads to integration and adaptation in schooling. The modification of discovered alternative ideas in expected and discrepant questions aided learners in assimilation and adaptation to the new proper conceptions. Vygotsky and social constructivism provided the second theoretical foundation for constructivist techniques. This research found that second language learners wrote intricate gratified linked terminology and practical words during existence of instructor or a well-informed patrician; therefore they felt themselves in Zone of Proximal Development. Furthermore, this mental representation stressed that language scaffolding should be given with words.

Over the past few decades, many researchers and scientists have explored the constructivism theory, demonstrating its evolution from behaviorism to cognitive thinking. The application of constructivism in language education and other disciplines presents new avenues for research. However, despite the integration of constructivism into language education through other pedagogical models, it has not been widely used in language pedagogy and teacher education. Language learning has employed various instructional approaches that indirectly align with constructivist thinking. This study seeks to determine whether the constructivism approach has

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altered the fundamental paradigm of learning and to identify the basic principles of constructivist learning, particularly in language teaching (Jia, 2010).

This passage suggests that language learning has employed various teaching methods depending on the learners' characteristics and their level of engagement in the learning process. Constructivism has played a role in shaping these approaches. The study aims to investigate whether constructivism has altered the fundamental principles of learning and to explore the key principles of constructivist learning, specifically in language education (Suhendi & ., 2018).

Various experts, including Dewey, Piaget, and Vygotsky, have differing views and concepts about constructivism, particularly in regards to its epistemology and ontology. Essentially, they have each understood constructivism based on their own perspectives. Consequently, it can be inferred that learners' knowledge is influenced by their own lives, personal styles, and experiences. Therefore, it is necessary for teaching and learning to be connected to real-world scenarios so that the classroom can be structured in a way that allows both teachers and students to actively share their knowledge and experiences (Mahmood, Akram, Ismail, & Zalli, 2023).

Significance of the study

The most significant aspect of constructivism theory is that the learner should be given priority during the learning process. Learners, not others, must actively increase their knowledge. Learners must take ownership of their learning results. Their inventiveness and vitality will enable them to stand out in their cognitive lives. In line with the above definition, the essence of constructivist learning is that knowledge is non-objective, transient, ever-changing, and uncertain. The accumulation of information via tangible experiences, collaborative actions, and thoughts and interpretations is viewed as learning. Teaching entails creating an environment in which students are driven to explore meaning and value ambiguity. Based on his experience and the perspective utilised in interpreting, the learner will have a different comprehension of the information (Hopf, 1998).

Objectives of Study

The following were the research objectives of the present study.

1. To diagnose alternative conceptions in writing the second language at secondary level.

- 2. To prescribe constructivist teaching learning strategies to overcome the alternative conceptions in writing second language at secondary level.
- 3. To find out the effects of proposed constructive teaching learning strategies to overcome those alternative conceptions in writing the second language at secondary level.

Literature Review

The alternative conceptions are very important in the learning process of English as compare to merely providing incapable statements of questions. Learners developed their ideas in unconscious and subconscious mind as statements for the activeness, material possession and explanation they practiced. Their belief was those statements which were right because as statements developed awareness in words of perception of their material possession and hypothesis (Barkar, 2011). Constructivist tactics prioritise conceptual understanding over rote learning. We may conclude from this type of exercise that Piaget's constructivism theory promotes learners to be active, create plans, integrate, and finally adapt everything they learn. Teaching materials are being produced in this modern era of technology to meet the everchanging demands (Mahmood, Ismail, & Omar Fauzee, 2020). The lack of interest and motivation in science classes leads to low academic achievement (Akram, Javed, Niaz, & Mahmood, 2022).

Constructivism, a theory of education based on the teachings of Socrates, is being increasingly applied to various fields of study. This theory is not limited to education and encompasses both an epistemological theory and knowledge and learning approach. Constructivism is frequently mentioned in the educational literature as a framework for teaching and learning (Haney & Mcarthur, 2002).

In the constructivist approach to learning, individual information is not simply accumulated; rather, the learner contributes their own thoughts and ideas to build a foundation of knowledge. In this context, teachers play a crucial role as guides rather than information dispensers. Their goal is not to directly impart knowledge to students, but rather to assist them in discovering and constructing knowledge for themselves (Bryant et al., 2013). As intermediaries between students and educational materials, teachers facilitate learning and promote self-development (Holt-Reynolds, 2000). The use of a constructivist approach in teaching and learning creates a distinct environment compared to a traditional approach. In a traditional academic setting, students are provided information directly and there is a lack of opportunities for active learning. Conversely,

a constructivist learning environment involves activities and debates tailored to the interests and needs of learners, fostering uncertainty and collaboration to promote creative thinking (Fisher & Kim, 1999).

The new strategies intended to snatch problem of alternative conception, where instructor perform as an, "Instructional Doctor" and alternative conception stared as "Diseases. The outcomes of this research reinforced the part of an instructor as being an Instructional Doctor in identifying, proposing, curing and wipe outing the alternative conception. On the other hand, quality assurance has also been focused when used constructivism strategies in teaching methods (Ullah, Arshad, Akram, & Mahmood, 2023). The research-based strategies determined to meet both singular and bunch alternative conception. It approved the constructivism strategies for both singular and bunch cure. Similarly, English Language Learners are more successful when they can relate the new material they are learning to previous experiences, to social ground, or information of native linguistic communication. This track guides the success of English Language Learners. If this variation is renowned, embedded in class or teaching contented, English Language Learners go much endowed. Pupils understand substantial things which are presented regard of variation.

A precious or crucial element; mostly education is bound with culture. This factor is critical for professional person to retrieve, it does not step-down the actual reflectivity of constructive in the comprehensive English language learning class. Instructors might be conscious differences of culture; it is their responsibility to educate their learners that have different background of culture or lingual. With using learners' former cognition or permitting them for developing on their experiences, knowing or for improving their cognition, instructors may give honor the variation the pupil or linguistic context that they want to learn. Further, there are a large number of ideas or methods that might be helpful for constructive classes, especially English language learning classes. For instance, collaborative work has heighten their perceptive substantial is a way where learners of various ground may observe novel visual aspect, use various references, cognition or exercise the ability when they are learning to work on a group (Akram et al., 2022). Meanwhile, commutative work, independence or independent education may be exceedingly assist able for helping learners in an comprehensive of activity in their stride, discovery content which will applicable for them, place in the education or give more chances of English Language

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Learners for flourishing during construction on their former information or social discourse (Mahmood et al., 2023).

Constructivist method of English Language Learning class might not be useful of the whole learners. Yet, utilizing constructivist investigation or teaching method might be a means for making stuff applicable of learners which may be different with respect of culture or language. Developing upon former information, devising stuff applicable or providing progressive reasoning is necessary for both constructivist or direction of English Language Learners or might be a useful instrument for helping English Language Learners much thriving in constructive class.

Research Methodology

The researcher used pre-test post-test control group design and qualitative observation of experimental group as research tool. The quantitative data gathered by pre-test and post-test both groups was analyzed by applying t-Test for independent samples and means scores were calculated Moreover, learners of experimental group were investigated after the experiment. T-test of experimental group was applied by using a list. The activities of the experimental study were persistently noted by the unanimity of the teacher. The results proved that proposed constructivist strategies were effective for writing the second language.

Achievement test was taken from the lesson "Three days to see "written by Halen Keller. The achievement test for the present study was consisted on thirty questions which were MCQ type and every question consisted on four responses for checking achievement of learners in writing the second language. The researcher constructed achievement test himself. The content validity of this test was confirmed by pilot testing and with discussion of five expert English teachers.

Discussion and Analysis

To complete whether two means were significantly different at a designated probability level, ttest for independent samples was used. Independent sample t-test was suitable when samples collected randomly and researcher wanted to adopt whether there was perhaps a significant difference in means of two independent samples (Gay, 2000).

The control group and experimental group were randomly made through confidence that they were basically like from begin of a research by respect for performance on the dependent



changeable. Therefore, if they were proved likewise on conclusion of research, the null hypothesis was undoubtedly true, if they were different at conclusion of study, the null hypothesis perhaps was not correct. The information gathered through the experiment was analyzed using an independent sample t-test to evaluate the null hypothesis. Additionally, the mean scores for both the control group and experimental group were computed.

Table 1

Mean Scores of pre-test of Control and Experimental Groups

| Groups | N | Mean Pre-test | Std. Devia | ation Std Error Mean |
|--------------------|----|------------------|------------|----------------------|
| control group | 50 | 3.64 | .85601 | 0.501 |
| experimental group | 50 | 3.62 | .74673 | 0.314 |

Table 1 showed the outcomes of mean scores of control and experimental groups got in pre-test. The mean scores of control and experimental groups were 3.64 and 3.62 separately. Standard deviation of control group was .85601 and experimental group was .74673. This showed that H_02 was accepted.

Table 2

Mean Scores of post-test of Control and Experimental Groups

| Groups | N | Mean Post-test | Std. Deviation | Std Error Mean |
|--------------------|----|-------------------|----------------|----------------|
| control group | 50 | 3.82 | .93321 | 0.501 |
| experimental group | 50 | 4.06 | .89034 | 0.314 |

The second table presented the average scores obtained by the control and experimental groups on the post-achievement test. Specifically, the mean score for the control group was 3.82, while that of the experimental group was 4.06. The standard deviation of the control group was .93321, and that of the experimental group was .89034. As a result, the null hypothesis (H_o3) was refuted.

Table 3

Independent Samples t-test of control and experimental groups

| Marks | Levene's Test Factor Equality of Variances F | Sig. | t-test Equality Meanest | Sig.(2- tailed) | df. | Mean Difference | Std.Error I |
|----------------------|--|-------|-------------------------------|--------------------|-----|--------------------|-------------|
| Marks in posttest of | 9.856 | 0.000 | -17.679 | 0.000 | 48 | -9.640 | 0.545 |

control and experimental groups

The third table pertained to the first null hypothesis (H₀1), which stated that there was no significant disparity between the post-test outcomes of the control and experimental groups. This table presented the findings of the independent sample t-test, which indicated a significant difference between the groups with a value of -17.679, significant at the $\alpha = 0.00$ level. Consequently, the null hypothesis (H₀1) was rejected. Furthermore, the p-value was lower than 0.05, suggesting that the results of the experimental research could be considered effective.

Conclusion and Recommendation

The present research used in developing constructivist strategies to meet the second language alternative conception, in writing the second language. This study concerned to Vygotsky constructivist theory in information the content related new vocabulary or terminology. Development of constructivist strategies was an effort to recognize how identified the alternative conceptions and their causes. Furthermore, how we could meet the alternative conception while developing the concepts in second language. The results showed that there was significant difference between post-test result of control group and experimental group. This proved that new strategies were enhancing achievement of learners.

References

- Akram, M., Javed, H. M. A., Niaz, S. F., & Mahmood, W. (2022). The Availability, Use, and Issues of Secondary Schools Teachers towards E-Learning. *Journal of Social Sciences Review*, 2(4), 90–96. https://doi.org/10.54183/JSSR.V2I4.60
- Barkar. (2011). Constructivist-Based Asynchronous Tutorial to Improve Transfer between Math and Chemistry Domain, 2(August), 1–8.

Bryant, F. B., Kastrup, H., Udo, M., Hislop, N., Shefner, R., & Mallow, J. (2013). Science Anxiety, Science Attitudes, and Constructivism: A Binational Study. *Journal of Science Education and Technology*, 22(4), 432–448. https://doi.org/10.1007/S10956-012-9404-X

Fisher, D. L., & Kim, H.-B. (1999). Constructivist Learning Environments in Science Classes in Korea. *PUB TYPE Reports Research*, (143).

Gay. (2000). RESEARCH METHODOLOGY Research Design.

Haney, J. J., & Mcarthur, J. (2002). Four Case Studies of Prospective Science Teachers' Beliefs Concerning Constructivist Teaching Practices. *Science Education*, 86(6), 783–802. https://doi.org/10.1002/SCE.10038

- Holt-Reynolds, D. (2000). What does the teacher do? Constructivist pedagogies and prospective teachers' beliefs about the role of a teacher. *Teaching and Teacher Education*, *16*, 21–32.
- Hopf, T. (1998). The Promise of Constructivism in International Relations Theory. *International Security*, 23(1), 171. https://doi.org/10.2307/2539267
- Jia, Q. (2010). A Brief Study on the Implication of Constructivism Teaching Theory on Classroom Teaching Reform in Basic Education. *International Education Studies*, 3(2). Retrieved from www.ccsenet.org/ies
- Mahmood, W., Akram, M., Ismail, S. N., & Zalli, M. M. M. (2023). A Comparison Of Overall Quality Management Methods In Public And Private Schools In Pakistan's Southern Punjab, 7(3), 667–680.
- Mahmood, W., Ismail, S. N., & Omar Fauzee, M. S. (2020). The influence of total quality management, school climate and job satisfaction on school performance in government schools in Pakistan. Retrieved from https://etd.uum.edu.my/id/eprint/8900
- Suhendi, A., & . P. (2018). Constructivist Learning Theory: The Contribution to Foreign Language Learning and Teaching. *KnE Social Sciences*, 3(4), 87. https://doi.org/10.18502/KSS.V3I4.1921
- Suhendi, A., Purwarno, P., & Chairani, S. (2021). Constructivism-Based Teaching and Learning in Indonesian Education, *2021*, 76–89. https://doi.org/10.18502/kss.v5i4.8668
- Ullah, H., Arshad, S., Akram, M., & Mahmood, W. (2023). Factors influencing Quality Assurance through Semester System at University Level. *Voyage Journal of Educational Studies*, *3*(2), 17–30. https://doi.org/10.58622/VJES.V3I2.48
- Yilmaz, K. (2011). The Cognitive Perspective on Learning: Its Theoretical Underpinnings and Implications for Classroom Practices. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 84(5), 204–212. https://doi.org/10.1080/00098655.2011.568989