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The Effect of Using Station Rotation Model (SRM) on Enhancing EFL Secondary Stage Students' Writing Skills

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Abstract

This research investigated the effectiveness of using SRM program to enhance second year secondary stage students' EFL writing skills. Participants of the research were two groups of second year secondary students (one experimental and one control) at Aliman School in Bahrain. Instruments of the study were an EFL writing test. The experimental group was taught based on the SRM program and the control group received regular instruction. The test was post - administered to both groups after the program has been applied. Results showed that the experimental group outperformed the control one. This indicated that the program was effective in developing EFL writing skills. Therefore, it is concluded that using SRM is effective in developing EFL writing skills.

Key words: Station Rotation Model- EFL Writing Skills

Introduction

The current era, particularly with the onset of the Covid-19 pandemic, is marked by rapid changes that require the education system to adapt to emerging challenges. In response, various technological tools, including e-learning and hybrid learning (HL), have been developed to improve information delivery and create an engaging learning environment. Learning English as a foreign language in Bahraini schools poses significant challenges for students, especially when it comes to writing skills, which often hinder their learning and reduce their motivation to study English. Writing involves expressing one's thoughts and emotions clearly through text, making it a crucial yet demanding skill in language acquisition.

Theoretical background

Fortunately, new methods and tools have been introduced to enhance students' writing skills, such as the SRM approach. This method proves effective in education as it allows teachers to monitor students' writing progress individually or as a group, leading to more accurate and constructive evaluations. The implementation of SRM highlights the benefits of teacher-guided instruction combined with collaborative learning. It fosters students' engagement, critical thinking, and cooperation while

enhancing their writing performance. The SRM also integrates active teacher involvement with the use of technology, focusing on writing development, improved communication skills, and efficient content delivery, resulting in a more enriched classroom experience (Johnson, 2013).

Writing Skills:

In today's digital age, mastering English writing skills is crucial, as most scholarly resources, websites, and materials are available primarily in English. Writing is a key skill for expressing ideas and knowledge clearly and is highly valued in academic and professional settings. It involves much more than just grammar and sentence structure; effective writing requires the ability to construct cohesive and logically organized ideas. Writing proficiency allows students to articulate thoughts clearly, present arguments persuasively, and engage critically with their subject matter, leading to academic success.

Writing skills encompass various aspects such as vocabulary, coherence, and organization. Vocabulary is essential for conveying precise meanings and avoiding ambiguity, while coherence and cohesion are achieved through logical transitions and well-structured sentences. Mastery of these elements results in writing that flows smoothly, helping readers easily follow the intended message (Shin, 2023). In academic contexts, writing also requires adhering to formal conventions, such as using appropriate tone, terminology, and citation practices. Revising and editing are critical stages in the writing process that enhance clarity and accuracy. These stages include correcting grammar, punctuation, and formatting errors to improve overall readability (Walters, 2019).

Proficient writing is essential not only in academic settings but also in professional and personal domains. Strong writing skills enable students to express complex ideas, analyze information critically, and support arguments with evidence, leading to well-structured essays and research papers (Jackson, 2019). In professional settings, effective writing is vital for clear communication, whether drafting reports, creating presentations, or corresponding through emails. Writing is also a powerful tool for self-expression and creativity, allowing individuals to articulate their thoughts and emotions, contributing to personal growth (Thompson, 2021). Moreover, engaging in writing enhances cognitive skills like critical thinking and problem-solving, fostering intellectual development (Brown et al., 2017).

Various approaches to teaching writing skills have been developed, each with distinct advantages. The product approach focuses on the final written piece, emphasizing structure, grammar, and format. While this method is widely used, it can lead to formulaic writing if not balanced with other strategies (Munroe, 2021). The process approach, on the other hand, emphasizes the stages of writing—planning, drafting, revising, and editing—allowing for more creativity and in-depth content development (Anderson & Krathwohl, 2017). The genre approach teaches students how to adapt their writing to different academic and professional contexts by focusing on specific conventions and styles, although balancing genrespecific skills with overall writing proficiency can be challenging (Nedungadi, 2022).

Assessing writing skills requires a comprehensive understanding of the writing process and the use of effective evaluation tools. Rubrics offer objective criteria, but they may not capture the full range of students' abilities. Meaningful feedback, whether through peer review or personalized teacher comments, is essential for improving writing skills (Yancey et al., 2019). Technology, such as automated essay scoring, is also increasingly utilized, though it has limitations, particularly in diverse EFL contexts (Bloch, 2017).

Teaching writing to EFL students presents specific challenges, including low proficiency levels, cultural differences, and limited resources. Students often struggle with grammar, coherence, and adapting to English academic standards (Lee, 2018). Additionally, instructors must accommodate various learning styles while overcoming the constraints of under-resourced classrooms (Brown & Chen, 2021). Despite these challenges, effective teaching strategies and thoughtful assessment methods can significantly improve students' writing proficiency and overall academic achievement.

Station Rotation Model

The Station Rotation Model (SRM) is a hybrid learning approach that involves dividing students into smaller groups and rotating them through various learning stations, each offering distinct activities to cater to diverse learning styles. This model, as Lim & Kim (2018) describe, personalizes instruction, addressing individual learning needs and fostering an inclusive learning environment. SRM blends traditional classroom teaching with online learning, incorporating fixed stations for teacher-led instruction, independent learning, and technology-based activities. The integration of technology in SRM enhances student engagement,

personalizing the learning experience and allowing teachers to provide individualized support.

The theoretical foundation of SRM is rooted in several educational theories, including social-constructivism, Vygotsky's learning theory, cognitivism, and connectivism. These theories emphasize the social nature of learning, the importance of processing information for cognitive development, and the role of technology in modern education. According to Cahill (2020), SRM incorporates these theories to create a more adaptive and engaging learning experience tailored to each student's unique needs.

The SRM offers numerous benefits, including increased student engagement, improved academic achievement, and flexibility in learning. It promotes active learning, critical thinking, and collaboration among students, particularly in STEM subjects. The model's integration of technology creates an interactive learning environment, making abstract concepts more relatable. However, SRM also faces challenges, such as reduced teacher-student interaction, the need for significant resources, and the potential for student disengagement due to the model's emphasis on self-directed learning (Crouse & Maushak, 2019). Implementing SRM requires comprehensive teacher training, adequate resources, and careful consideration of student preparation.

Assessing the effectiveness of SRM is crucial for its successful implementation. Various evaluation strategies, including quantitative measures, classroom observations, formative assessments, and qualitative research, are employed to gauge student engagement, academic progress, and the overall impact of SRM. These assessments help educators refine and optimize the model for improved learning outcomes (Tucker, 2019). Studies have shown that SRM can significantly enhance educational outcomes, but its success depends on overcoming the challenges related to resource availability, teacher training, and student preparation.

Background of the problem

This research's problem is that secondary stage students in Bahrain have poor writing skills. Thus, this research is an attempt to enhance EFL writing skills through station rotation model.

The researcher conducted a pilot study to assess the current level of EFL writing skills among second-year secondary students. A randomly selected sample from Aliman Private School was examined during the first term of 2023 to evaluate their proficiency in writing. The primary objective of the pilot study was to gain insights into the instructional methods used for teaching English writing skills. To achieve the study's objectives, a writing

test was administered. The test items were systematically presented and categorized in alignment with the specific purposes of the study.

Table 1: Pilot Study Writing Skills' Test Results

	N	Mean	Std. Deviation	%
Main Idea or Thesis and Support	25	1.3000	1.12858	65
Organization	25	1.4000	1.04630	70
Style	25	.8000	.95145	40
Syntax/Grammar	25	1.1500	.98809	57.5
Accuracy	25	.8500	.81273	42.5
Meaning Construction	25	.8500	.74516	42.5
Total	25			52.9

Results in table (1) indicate that the participants' total mean score on the writing test was low. This means that the students had difficulties in writing skills.

Statement of the problem:

Based on a literature review, pilot study results, and the researcher's 20 years of experience as an EFL teacher, it was found that students struggle with key writing sub-skills such as structure, Cohesion, coherence, vocabulary, and mechanics of writing. Consequently, the researcher recommends implementing the Station Rotation Model (SRM) to enhance students' writing skills.

Ouestions

The research seeks to answer the following main question that was derived in view of the literature review and the theory of hybrid learning: What is the effectiveness of using SRM in improving EFL secondary stage students' writing skills?

This main question elicits the answer to the following sub-questions:

- What are the writing skills necessary for EFL secondary stage students?
- What are the features of a proposed treatment based on SRM to improve writing skills?
- What is the effectiveness of using SRM in improving the writing skills for EFL secondary stage students?

Purpose:

The purpose of this research is to determine the impact of using station rotation model program to develop secondary stage students' writing skills.

Significance:

The goal of the study is to create a hybrid learning environment that includes collaborative activities as well as differentiated instruction.

Given the preceding considerations, it is intended that the current investigation will:

- **For students**: The study underlines the value of taking a critical approach to learning. The students will be exposed to a variety of resources, which they must evaluate and use.
- **For instructors**: The suggested model and activities can be used to help instructors enhance their students' writing skills.
- For Curriculum Developers: When creating activities or assignments for students, they can consider the findings of the research.
- **Researchers:** This study motivates researchers to seek out, create, and use cutting-edge learning methodologies, particularly in light of the Covid-19 pandemic and its significant impact on the learning process

Delimitations:

This research was delimited to:

- -Participants: A group of EFL 50 students enrolled at Aliman Private School in Bahrain.
- Place: Aliman Private School in Bahrain.
- -Time: The first semester of the school year 2023
- -Skills:

The following writing sub skills; structure, cohesion, coherence, vocabulary, and mechanics of writing.

Hypotheses:

The following hypotheses are made in terms of the research questions:

- There is a statistically significant difference at the 0.05 level between the mean score of the experimental group and the control group on the EFL writing skills posttest in favor of the experimental group.
- There is a statistically significant difference at the 0.05 level between the mean score of the experimental group in the pre- and post-administration of the writing skills pre/posttest in favor of the post administration.

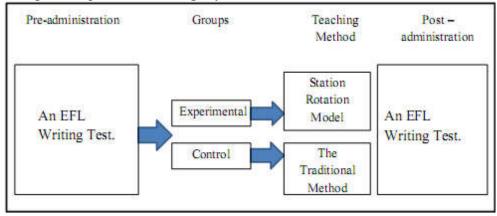
Methodology Participants:

A group of EFL second year secondary stage students (N=50). They were randomly selected from Aliman Private School in Bahrain. Those participants were divided into two groups: the experimental group and the control group.

Design:

The current research adopted the quasi-experimental design in terms of dividing the sample into two groups (experimental and control) that aimed to investigate the impact of using a station rotation model program on developing EFL writing skills of second year secondary stage students. The experimental group was trained using the station rotation model program while the control group was taught using the traditional method. A pre-post writing test was conducted to assess their writing skills. The pre-post EFL writing test was administered to both groups before and after the program. The results of the pre-post EFL writing test were analyzed by using t- test for independent samples. This was to find out whether there was any significant difference between the mean score of the two groups after the implementation of the program. Figure (1) illustrates the quasi-experimental design of the research.

Figure 1
The Quasi-Experimental Design of the Research



Instrument:

For the purpose of the research, the following instrument was designed:

• An EFL Writing Skills test (pre-post) for assessing EFL second year secondary stage students' writing skills.

Definition of Terms:

Writing: Writing is the act of communicating what we hear, think, plan, see, and live through writing on the one hand, and the description of feelings, ideas, desires, and events with a certain number of symbols in accordance with certain rules, on the other (Ozbay, 2007). Writing is to express one's feelings, wishes, opinions, and ideas in a certain order,

discipline, and harmony (Avci, 2006). In addition, writing has always been considered as the most complicated and challenging skill among the other skills including listening, reading, and speaking; since it requires a comprehensive knowledge of several aspects of the language, such as the language lexicon, syntax, style and so on to structure an accurate writing (Tangpermpoon, 2008). In addition, it is a productive language skill which involves multiple and interconnected processes in order to obtain the final product (Harmer, 2013).

Writing is defined in this study as the process of building and reflecting ideas in writing through activities and tasks that students complete throughout their time at each learning station.

Station Rotation Model

According to Christensen Institute (2013), SRM is "one in which within a given course or subject, students rotate on a fixed schedule or at the teacher's direction between learning modalities, at least one of which is online learning" (P. 26). A SRM includes "fixed schedules in which all students rotate to all learning stations" (Maxwell & White, 2017, p. 4). Thus, in the current study, the SRM is a learning setting where students rotate among an online station, teacher-led station, and collaborative station under the teacher directions.

Statistical Analysis and Results

Testing the first hypothesis of the research:

The first hypothesis stated "There is a statistically significant difference at the 0.05 level between the experimental group and the control group in the mean score of the EFL writing skills test in favor of the experimental group". To verify this hypothesis, t- test for independent samples was used to compare the mean scores of the two groups. Results are presented in table (2):

Table 2:Comparing the Performance of the Control and the Experimental Group on the Post Administration of the Writing Skills Test

Skills	Group	N	Mean	SD	T	<i>Df</i> (n1+n2-2)	Sig. (2-tailed)
Total	Exp.	25	43.1600	3.23625	4.99	48	Significant at 0.05
Total	Cont.	25	37.0800	5.15526	4.99	40	

Note: Significant at 0.05 level

Table 2 shows that the mean scores of the experimental group in the writing skills and in the total were higher than those of the control group. The table illustrates also that the estimated t-value (4.99) is significant at 0.05 level and degree of freedom was 48. This indicates that there are

statistically significant differences between the experimental and control groups in all the writing skills and in the total score on the post-administration of the test. These significant differences are in favor of the experimental group. In other words, the experimental group outperformed the control group in their EFL writing skills. These results confirm the validity of the first hypothesis. The researcher attributes these results to the effects of SRM program.

Testing the second hypothesis of the research:

The second hypothesis stated that ""There is a statistically significant difference at the 0.05 level between the mean scores of the experimental group on the pre-and post-administration of the writing skills test in favor of the post administration".

In order to test this hypothesis, a t-test for dependent samples was used. Table 2 shows the results.

Table 3Comparing the Performance of the Experimental Group on the Pre and Post Administrations of the Writing Skills Test

skills	Measure-ment	N	Mean	SD	T	D. f (n-1)	Sig. (2-tailed)
Total	Pre	25	33.7200	4.97092	12.1	24	Sig.
Total	Post		43.1600		12.1	24	Sig.

Note: Significant at 0.05 level

The results in the above table illustrate that the estimated t-value (12.1) is significant at 0.05 level and degree of freedom was 24. This reflects that there are statistically significant differences between the mean scores of the pre-post-administration of the writing skills test in in all the skills investigated and in the total score. These significant differences are in favor of the post-administration. The researcher attributes these results to the effect of the SRM program.

Table 4 illustrates the effect size of the proposed SRM program concerning the difference between the pre- and post-administration of the writing skills test on the experimental group.

Table 4Value of $(\eta 2)$ and Levels of Effect Size of the Experimental Group on the Pre and Post Administrations of the Writing Skills Test

skills	Т	D. f (n-1)	Value of Eta –square (η2)*	Level of effect size
Total	12.1	24	0.86	high

Table 4 illustrates the effect size of the proposed program on the academic achievement of the experimental group students in all the writing skills investigated. Results indicated that the effect size is high in all the writing skills investigated. This difference between the pre- posttest reveals that 95% of the total variance of the overall EFL writing skills can be attributed to the independent variable (the proposed SRM program).

Results in tables 3 & 4 prove that the statistical differences between the pre- post administration of EFL writing skills test are in favor of the post-administration. In addition, the effect size of these differences fosters the positive effect of the program on students' achievement. Therefore, the second hypothesis of the study is proved and accepted.

The increase in the students' level in writing skills after applying the SRM program was due to using various stages and stations of the program as means for practicing writing skills such as activities that promote critical thinking and interactive discussion. Most of the students liked SRM activities because they helped them sharpen their thinking, work together, and gave them the chance to be self-dependent learners. In addition, many students reported that the SRM activities were much fun.

Discussion and results

The research's findings revealed a statistically significant difference between the two groups under investigation, favoring the experimental group. Specifically, the experimental group demonstrated improved writing skills following the post-administration of tests. This improvement can be attributed to the impact of the experimental treatment, which utilized the suggested program based on SRM.

The success of the program may be linked to the specific activities included, which encouraged participants to engage with and communicate using targeted skills. These activities facilitated authentic interactions in writing, allowing students to express themselves and practice English language competencies. Remarkably, the innovative teaching approach employing SRM for teaching EFL writing skills to second-year secondary stage students resulted in enhanced writing skills.

The use of SRM fostered enthusiasm among students, particularly due to its alignment with their interests and the stress-free learning environment it provided. Collaborative group work within the SRM program allowed students to accomplish tasks, access essential materials (such as PowerPoints, worksheets, and videos), and progress smoothly through different stages. Importantly, during training sessions, students felt empowered to make mistakes and self-correct without fear of negative

feedback, actively participating in discussions and contributing to the learning process.

Comparing the experimental group to the control group, which adhered to traditional teaching methods, the former achieved higher proficiency in EFL writing skills. Although both approaches were effective, SRM proved more impactful.

In summary, students who participated in the SRM program demonstrated improved EFL writing skills. Additionally, their familiarity with modern technology, including the SRM program, increased. English sessions conducted using SRM were well-received by students, emphasizing the program's positive impact.

The results of the present research are compatible with the results of the research conducted by Sands (2017) which emphasized that the station rotation model improves flexibility and customization, making learning enjoyable and engaging. Students benefit from exposure to different instructional approaches, such as collaborative discussions, independent reading, and interactive writing activities. As they move through stations, they develop critical literacy skills, including comprehension, vocabulary acquisition, cohesion, coherence, and mechanics of writing. The SRM's adaptability ensures that students receive targeted support based on their individual needs, fostering growth in writing skills.

Conclusions:

Based on the analysis and results, it can be concluded that the SRM program significantly improved EFL writing skills. The success of the SRM program was attributed not only to the program's design but also to the positive learning environment, autonomous learning strategies, and a learner-centered approach. The diverse exercises, resources, and learning stations provided ample practice, while collaborative activities and communicative pair and group work were highly effective.

Hybrid learning models, particularly SRM, offer a valuable approach for engaging students, reducing classroom boredom, and fostering a stress-free learning environment. These models encourage teamwork, rewards, competition, and motivation, leading to skill development and enjoyment in learning.

Recommendations:

Based on the study's findings, the following recommendations are proposed for teachers, students, course designers, and EFL researchers:

For EFL Teachers:

• Ministries of Education should train EFL teachers in technological

- approaches, especially hybrid learning, to enhance students' writing skills.
- Teachers should encourage the use of classroom resources to create an enjoyable learning environment.
- Incorporating hybrid learning models, such as SRM, should be prioritized.
- Teachers should foster active participation in interactive tasks and activities.
- Pre-service and ongoing professional development programs should include training on teaching writing skills.
- Emphasizing technology use in classrooms should be a top priority.

For EFL Students:

- Students should focus on developing their writing comprehension skills during their secondary stage.
- Students should embrace enjoyable learning strategies and be active participants in communicative-oriented classes.
- Utilizing available technology for language learning is crucial.
- Schools should be equipped with the latest technological facilities to support the teaching-learning process.

For EFL Course Designers:

- SRM should be included in EFL course development, particularly at the secondary school level.
- New techniques, methods, and strategies for improving writing skills should be explored and implemented.
- The use of technology, especially SRM, should be emphasized due to its proven effectiveness.

For EFL Researchers:

- Researchers should build on the insights of this study to apply SRM in other areas of English language teaching and to improve various student attitudes.
- Investigating different trends in technology and innovative teaching methods to enhance writing skills is recommended.

Suggestions for Further Research:

The following areas are suggested for further research:

• Conduct a follow-up study to assess SRM's influence on other language skills (reading, listening, and speaking).

- Apply SRM and hybrid learning programs at different educational stages (i.e., primary and preparatory).
- Replicate the experimental treatment with larger sample sizes.

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