

# The Influence of the Learning Styles on the Academic Performance of the Second Level Students of English Faculty of Education-Aden University of Aden

#### **Arwa Ahmed Motaher Motanna**

**Abstract:** This study attempted to investigate the influence of the learning styles on the academic performance of the second level students in the English department, Faculty of Education-Aden, University of Aden. The population of the study were the second level students. For this purpose, fifty students randomly selected to be the subjects of this study. For data collection, three research questions posed and the answers to these questions were discussed. The study aimed to use the teaching program of the VARK program (visual ,aural read-write and kinesthetic) in teaching short stories. The instruments for data collection were: (a) VARK Questionnaire (b) the teaching program of VARK Learning Style program (c) preand posttests. The results of the data indicated that there were diversity among the students' performance in their learning styles during the lectures.

# **Keywords:**

learning styles; VARK program learning styles; EFL teachers; Undergraduate students.

**Introduction:** Students' performance is enhanced when learning styles are considered, Doreen et al. (2009 p. 57) and Kolb (1984 p. 20) described learning styles as ways that students prefer to process a new information, which includes strategies that used in the learning process as well as experiential ties. However, the most simple way of describing 'learning styles' is to say that they are different methods of learning or understanding new information, the way a person takes in, methods of learning or understanding new information; the way a person takes in, understands, expresses and remembers information. Therefore, it seems important to know more about the importance of the learning styles and how they used by the students in learning short stories in the classroom.

# The Statement Problem of the Study

Kolb (1984) and Neil (1987) indicated that the teaching process needs new styles of learning (methods of teaching) in which students can improve their achievement. The authors also indicated that the lack of resources and visual aids are reasons for poor performance. Based on the previous studies recommendations as well as the researcher's experience, students need to implement targeted learning styles programs to reduce dropout rates and ensure more involvement and progress achievement in the learning process. In such a case, students need

different learning styles that may help them to adjust their learning achievement give more understanding and enormous benefits during his/her academic journey. Therefore, this study was an attempt to spot the light on the learning styles and their influence on the academic performance of the students in the second level English language students at Faculty of Education -Aden University.

# The Objectives of the Study

This study aimed to fulfil three main objectives:

- 1. To investigate the learning styles that second level English students' use in learning.
- 2. To identify the learning styles that the second level English students prefer in their learning.
- 3 . To examine the influence of the VARK Program learning styles on second level academic performance.

# The Questions of the Study

This study aimed to answer the following questions:

- 1. What are the learning styles that second level English students' use in learning?
- 2. What are the learning styles that the second level English students prefer in learning?
- 3. To what extent do the VARK Program learning's styles influence the second level English students' academic performance?

# The Limitations of the Study

This study devoted to investigate the learning styles, and their influence on the academic performance of the Second-level students in the department of English, faculty of Education, Aden University. Fifty Students selected randomly from 100 of the second level in the English department of the faculty of Education, University of Aden. The data collection scheduled between the first and second semester 2023.

#### The Significance of the Study

This study is significant in that it sheds the light on the learning styles and their influence on the academic performance of the Second level students. It attracts the attention of the students in the learning process as well as the potentials that learning styles could have in facilitating the learning of English language. Moreover, it relates the enormous interest that students have toward learning styles to their learning process. Such relation may tighten the connection between the students and the learning styles that used in learning. Using VARK Program learnings styles may promote and increase the students learning abilities. It may help students interact and give opportunities to engage students in interesting learning discussions context. The study suggested that these students should have different learning styles to be involved in the learning process in an interactive situation.

#### **Literature Review**

This study aimed at reviewing the theoretical background of the learning styles. the first section presents the definition of learning styles. the second part attempted to give the types of learning styles. Thirdly, it focuses on the theoretical models and instruments. The fourth part concentrated on the culture beliefs and values (Role of teachers). The fifth part was the students' Achievement, Finally, a review of some studies related to the scope of this study presented. Several researchers such as kazi Masud (2023), Didem Kardibak (2018), Mida Zhang (2017), Murat (2013) Charlie A. Dayon. (2018), and Josph .H (1993) reported and confirmed that the learning styles effect the academic performance of students.

A Study was conducted by Kazi Masud (2023) investigate the learning styles of college students and their influence on the educational outcomes and performance. The subject were selected from a sample of 270 college students in humanities and science disciplines. The participants were selected using stratified random sampling from five different colleges in the Hooghly district of west Bengal, India. The results indicated that the majority of students suggesting moderate proficiency in their preferred method of learning. Another Study was Conducted by Didem kardibak (2016) investigated the relationship between learning Styles and academic performance in Turkish physiotherapy students. The subjects were (184) physiotherapy Students were determined Using the Graska-Riechmann learning style Scales. The results indicated that there were a tight relationship between learning styles and academic performance and achievement. The Kruskal-Wallis test (1952) proposed by kruskal and Wallis for testing whether samples are originated from the same distribution was conducted to compare academic performance among six learning style groups (Independent, Dependent, Competitive, Collaborative, Avoidant, and Participant). It showed that the most common learning style was collaborative (34.8%). The academic performance of the participant learning Style group was significantly higher than of all the other groups.

Miao Zhang (2017) also conducted a study to find out more about the impact of learning styles on academic performance of 9<sup>th</sup> grade in middle school.140 students in two cities of guangdong province in China, were recruited. Learning style inventory and multi-administered group intelligence test for adolescence were also administered. The results indicated that the students who prefer to study through discussion with peers are more likely to achieve better academic achievement when controlling for other covariates.

Another study was conducted by Murat Gokalp (2013) focused on the effect of students' learning styles to their academic success. He studied the effect of students learning styles to their academic success of the student of Ondokus Mayis university faculty of education. The

subjects were 140, the results of first and the final applications of the subtests on learning styles and academic success; those subtests covered the items as learning, planned study, effective reading, listening, note taking, using the lib vary, getting prepared and taking exams, class participation and motivation.

Furthermore, Charlie A. Dayon (2018) in a study about learning styles and academic performance at determining the relationship between the learning styles of students in English of second year technology and livelihood education students (speech and oral communication). The result revealed that the dominant learning styles of students were participant and collaborative the least was independent.

Josph H. (1993) also conducted a study to find out about the relationship between learning styles, academic achievement, brain hemisphere academic dominance and academic performance in business and accounting courses. The subject of this study were (64 students) at Northeast Lowa community college. He used the Kolb learning Style inventory to determine their learning styles and the McCarthy's hemispheric mode indicator to discover whether students were right side brained, left side brained, or completely two sides brained. Academic achievement test was measured by the students' final grade point averages earned in the courses. The result appeared to be a direct tendency between converger learning style and high academic achievement in all courses under study.

Another Study conducted by Meera (2011), investigated the personality and learning styles of southern Illinois University students. The study aimed to play significant role in influencing academic achievement. The subject of the study consisted of (308) undergraduates completed the five factor inventory and the inventory of learning processes and reported their grade point average. Two off the big Five traits, conscientiousness and agreeableness, were positively related with all the four learning styles (synthesis analysis, methodical study, fact retention and elaborative processing). Whereas neuroticism was negatively related with all the four learning styles. The results revealed that a number of significant relationships between the Big Five personality traits, learning styles and academic achievement.

Furthermore, Huy Phuong (2008) investigated the different theories of learning of (298) university students. Likert-response questionnaires were used and data were analyzed by means of latent variables approaches. The results provided moderate support for the hypothesized conceptual model. Achievement goals had no direct effects on academic performance, whereas study strategies and reflective thinking directly influenced deep processing and effort. Massa and Mayer (2006) reported a particularly informative and well-designed study of learning styles with a set of three experiments. They constructed a

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reasonably realistic computer-based electronics lesson. Two different sorts of help screens were customized for verbal or visual learners, providing either supplementary printed text or carefully developed diagrams and illustrations, respectively. A wide variety of preference-based and ability-based individual-difference measures were administered to sort visual from verbal learners in various ways. In general, the results, which the researchers replicated, showed no tendency for better performance for those who received help screens matched to their preferences. Critically, Massa and Mayer found no support for any of these interactions despite exhaustive analysis of nearly 20 individual-difference measures that spanned their three proposed facets of verbalizer-visualizer learning styles. The authors concluded that their results pro-vided no support for "the idea that different instructional methods should be used for visualizers and verbalizers" (Massa & Mayer, 2006, pp. 333-334).

Within a medical-education context, a recent study by Cook, Thompson, Thomas, and Thomas (2009) examined the hypothesis that learners with a "sensing learning style" would do better when given instruction in which the problem was presented prior to the content information used to solve the problem, whereas "intuitive learners would do better with the reverse. The authors noted that this learning-styles taxonomy is similar to Kolb's (1984, 1985) concrete-abstract dimension. Studying a sample of 123 internal medicine residents and presenting modules on four ambulatory medicine topics, they found no support for this prediction.

Another study reaching a similar conclusion, albeit using tasks with less direct correspondence to real educational activities, was reported by constantinidou and Baker (2002). These investigators used a laboratory task to ask whether self-reported preferences in information uptake predicted ability to perceive and store information in different modalities. They examined the relationship between adults' scores on the Visualizer-Verbalizer Questionnaire (VVQ; Richardson, 1977) to their verbal free-recall performance on a task that presented words through the auditory modality, the visual modality (as line drawings of the corresponding object), or both. The VVQ asks people a series of questions about their relative preference for taking in information through verbal versus visual means. VVQ scores were not related in any strong or clearly interpret- able way to relative levels of free-recall performance for different input modalities. Visual presentations produced better free recall than did purely verbal presentations, and the authors reported finding "no relationship between a visual learning style and the actual learning of verbal items that are presented visually or auditory" (Constantinidou & Baker, 2002, p. 306).

These studies, which we believe are methodologically strong, provide no support for the learning-styles hypothesis (or its popular specific version, the meshing hypothesis).

As mentioned previously, however, it would clearly be a mistake to label these negative results as a conclusive refutation of the learning-styles hypothesis in general. Further research modeled on the work of Massa and Mayer (2006) may bring to light assessments paired with interventions that do meet our criteria. But at present, these negative results, in conjunction with the virtual absence of positive findings, lead us to conclude that any application of learning styles in classrooms is unwarranted.

# The Methodology

This study adopted an experimental research method. The sample of this study were 50 students who randomly selected from the second level of the English department Aden University. The design of the study is an Experimental, and the data collection tools were the pre and posttests and the VARK questionnaire. Two groups were selected: a (1) control group and (2) an experimental group. In the control group, the traditional method of teaching was used, while in the experimental group the chosen VARK Program learnings styles was used in teaching short stories.

#### **The Data Collection Procedures**

For data collection, three procedures were used:

- 1. The VARK questionnaire (version 8.01) which should distribute to the students.
- 2. The VARK program (learning styles) used with the experimental group.
- 3 . Pre and post- tests used for 50 students selected randomly from 100 Students. The 50 students were divided into two groups, one, as an experimental and the other as a control group.

#### The Data analysis

For data analysis, the researcher used the statistical package for social science (SPSS) software program.

# **Learning Styles**

# Research design

This section includes the context of the study, the population, the samples, the instruments of the study, procedures of data collection, and procedures of data analysis, validity and reliability of instruments.



Group	No	Pre-test	Post test
Control	25		
Experiment	25		

**Table 3.1** 

The following questions formed the basis of study:

- 1. What are the learning styles that second level English students' use in learning?
- 2. What are the learning styles that the second level English students prefer in learning?
- 3. To what extent do the VARK Program learnings styles influence the second level English students' academic performance?

#### The Instruments of the Data Collection

In this study, the researcher used three instruments:

- 3.5.1 VARK Questionnaire (Version 8.01).
- 3.5.2 Pre and post test.
- 3.5.3 The program of VARK (learning styles) was used with the Experimental group.

#### **Procedures of Data Collection**

Regarding the process of data collection for the first instrument, the researcher conducted the pre-test for all the 50 students as mentioned before. Then the subjects were divided into two groups (control and experimental group). Then the teacher of the experimental group used the program of VARK (learning styles), which takes into account the students' mental and absorptive needs in receiving the knowledge and information of the lesson represented by

visual, reading/writing, aural and kinesthetic learning styles. Here, the students were given the opportunity to choose the method that enable them to understand the lesson very effectively away from the traditional stereotype of being only a listener. the teacher of the control group used the traditional stereotype process

The Pretest was conducted at the first semester 2023 for the selected 50 students in the second level students of English. The target students asked to choose from multiple choices about the elements of the short story of a haunted house and a ravine because they are the main short stories that planned for level two. The purpose of this stage was to evaluate their academic performance before using VARK (learning styles) method in order to have a clear idea about their performance. Next, after dividing the 50 students into two groups (control and experimental group), one that used the traditional learning styles method while the other used the VARK program learning styles. Then a posttest conducted near the final week of the first semester for both groups, in order, to know the extent of the experimental group students' improvement in their academic performance after taking the program of VARK learning styles. In the last step, the VARK Questionnaire Version 8.01 was distributed to the fifty students.

# **Procedures of Data Analysis**

The data was processed for the analysis using the SPSS (Statistics Software Program).

Assessment (multi choice) pre + posttest criteria and procedure.

For analyzing the data of the (pre-post) test in order to answer the research questions in this stage, the researcher provided a stem that identifies the questions or problems. The response choices contain the correct answer and several distractors; this guide provides some general strategies and tips for designing stems and distractors. See appendix (1&2). The checklist of two scores done which is indicated by (1) and not(done), that is indicated by (O), multiple choices questions may provide students with direct feedback about their learning progress. Furthermore, they significantly increase the chances to answer the question correctly by eliminating throw any options. In addition, the researcher can grade their answers easier and quicker without rater bias. Students' assessment result of 7 items. Of multiple questions for pre and post tests which involved evaluating the outcome of the Second level students of English.

#### The Results

This study attempted to investigate the learning styles influence, preference and the effect of the VARY program learning styles on the academic performance of second-level English students at the department of English, Faculty of Education-University of Aden. Two instruments were used to collect the data: pre and post tests and the VARK Questionnaire as well as the VARK (learning styles) program that used as tool of teaching. The first part of this

chapter provided the analysis of the pre and posttest samples of elements of short story. This section based on pre and post test results that used as tools of data collection, while the second section focused on the results of the of the (VARK) Questionnaire that aimed to know the styles of learning that the students follow during their learning process. The results of the pre and posttests indicated that the students in the pretest had a weak performance rate because they are not allowed to use the learning methods that suit them to acquire and understand the content of the lesson. They are restricted in performing only learning styles, in which the teacher was in control while the students were only inactive listeners. Nearly, the students follow just what the teacher says.

The performance of students in the experimental group who used the VARK Program learnings styles had the opportunity to use the learning styles they prefer. The VARK learning styles made them active and provided them a satisfying learning outcome that enable them to know the best way to acquire the content of the lesson effectively. The results showed that the students in the experimental group have higher test scores than those in the control group. From the results, it is seen that the experimental group responded actively to the learning styles in the VARK program. This means that students need new ways and styles to perform actively in the learning context.

# **Discussion**

This Section presented the outcome discussions of the data collected from the analysis of the results of the study. The general results of the data collection of the pre and posttests in relation to the first question of the study: (1) What are the learning styles that second level English students' use in learning? Showed that second level students do not given the opportunity to use the learning styles that raise their level of performance. The results of the pretest showed that teachers followed the traditional learning styles in their teaching.

William, drago, and Richard (2004) discussed the four physiological learning styles of visual, aural, read-write and kinesthetic as they apply to education. Findings suggested that students are more likely to have stronger visual and read-write learning styles. Further, read-write learners and students that were strong across all four learning styles were likely to evaluate course effectiveness lower than other students while aural/read write learners and students that were not strong on any learning style were more likely to evaluate course effectiveness higher than other students.

In relation to the answers of the second research question (2) What are the learning styles that the second level English students prefer in learning? The results revealed that the students prefer the new learning styles that raises there level of understanding and ways that improves

their performance as well styles and strategies that emphasis and make them get value of the new learning styles.

In reference, to the third research question, (3) To what extent do the VARK Program learnings styles influence the second level English students' academic performance? The results showed that the second year students in the department of English, Faculty of Aden, academic performance is affected by the VARK Program learnings styles. The posttest of the experimental group results showed that their academic performance was improved after using such program styles. The students got chances to do the styles that they like to follow in their learning. The results revealed that the experimental group involved in the learning process actively because they have the choice to follow the ways they like. The results of the analysis of the VARK questionnaire were the next step in examining the learning styles that the Second-level English Students prefer. The analysis of the VARK questionnaire indicated that, there was diversity among the students' preferences of their learning styles during the lecture, and this is what the statistical percentages indicated in the previous chapter. This indicates that the students did not use the same learning style while receiving the lesson content from their teachers, because each student has a learning style that distinguished him from others, this may be the best style to absorb and understand what the teacher explains to him during the lecture.

# **Conclusions and Major Findings**

The findings of this study highlighted the influence of the learning styles on the Academic Performance of the Second-level students of English-Faculty of Education -Aden University. Based on the findings of the study, the researcher has made the following conclusions regarding the problem of the study. The major aspects of the study include the following:

- 1. Learning styles that students use
- 2. Learning styles they prefer
- 3. The VARK program Learning styles and its influence on the students' performance.

The sample of the study were 50-second level students, semester one, 2023 at the department of English, Aden, of Aden University. The study used three data collection procedures:

- 1. Pre and posttest with (control and experimental groups
- 2. The learning styles in VARK program with (experimental group)
- 3. The VARK questionnaire (version 8.01)

Comparing the results of the groups (control and experimental group) there are some differences between the students' academic performances and their outcomes during the classroom activities. Mostly, the ways the teachers teach short stories may not develop the students' performance; this was clearly marked from the results of the tests. Mostly, the

students did not use the learning styles that they prefer during the lesson. This is due to that students do not given the opportunity to use their own learning styles, it seems, that the teacher imposed on them in one way or another a narration method, where he is the only speaker during the explanation of the lesson and the students only have to listen to him without any kind of participation. It was worth mentioning, that students should be encouraged to discover their learning styles or even a new learning styles that could have a positive result to their academic performance.

The results also indicated that the students in the control group their segmental scores was low. Moreover, the results revealed that the levels of the control students was found to be low, this is due to the ways that students taught, this means that the class is a teacher control and students are just doing what they are asked to do.

In contrast, the experimental group students performed better than those in the control group, therefore the experimental group achieved significantly because they got the chance to do the learning styles they are interested in the learning context. This shows that the learning styles in the VARK Program Learning Styles, which was used by the experimental group, directed the students' attention toward the learning context. It seems that the poor learning performance of the control group seem be influenced by the ways short stories are taught.

In short, the findings of the study provided evidence that the present learning styles of learning short stories in the second level students at the department of English Faculty of Education, Aden needs to be improved. To sum up, the study findings indicate that VARK Program Learning Styles for teaching short stories improved and encouraged the students' learning. The pretest and posttest results of the control and experimental groups proved the difference between the two groups.

The effectiveness of the VARK learning program learning styles assessed on the following aspects:

- 1. The good performance of the experimental group proved that students need to be trained appropriately to develop their ability to be good learners and achieve successful performance.
- 2. The implementation of active learning styles improved the students understanding.
- 3. Using pictures, charts, sketches and diagrams created a dialogue between the teacher and the students in the experimental group.

#### **Contribution**

The present study attempted to study the influence of the learning styles on the academic performance of the second-level students of English-Faculty of education Aden-Aden University.

It is hoped, that the results obtained from this study may contribute to the field of theory and pedagogy in many ways:

There are many learning styles, that students prefer to use inside the classroom learning, but the teachers as well as students do not use them. Therefore, It is a fact, that the students using of learning styles lead to deeper interaction and understanding of the text.

As learning differ from one student to another, this study will serve the teachers to assess for new styles and ways that help students to involve in the learning process. It is felt that arrangement of the **VARK** program learning styles contribute to revealing which styles students prefer. It is also hoped that the results of this study would be a good reference for teaching through the VARK learning styles program in raising and improving the academic performance of the students.

The conclusions clearly demonstrated the importance of the learning styles and how to allow the students to use their preferring learning styles to be more make more active, because students differ in understanding and receiving the information provided to them.

#### Recommendations

This study investigated the influence of the learning styles on the academic performance of the second-level students of English, faculty of education Aden- University of Aden. The study come up with some recommendations:

- To enhance the validity and reliability of the findings a larger study for active learning styles would be needed and cross-checking of the results by experts raters would also be necessary.
- 2. Another study might consider examining aspects of students' learning styles, such as Solitary learning style, social learning style, logical mathematical learning style etc.
- 3. Two instruments were used for data collection (1) Pre and Post test and (2) VARK questionnaire in order to investigate the Second-year student's learning styles Preferences. Another study could use an interview, classroom observation to get deeper insights into the student's perception of that own learning styles preferences and their attitude during the learning process.
- 4. Another study that investigates other types of learning styles students prefer while learning to improve their academic performance should be carried on.
- 5. Using new learning styles to improve the students' academic performance, the results showed the value of the teacher diversity in methods of delivering lesson content and its positive impact on the extent to which students understand better and faster. Therefore, another study that measures the teachers teaching styles is needed.

Other studies might like to investigate the kind of learning styles that teachers use in teaching students to improve their learning style performance. The Findings of such studies may provide the field of Education with valuable results.

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# تأثير أساليب التعلم على الأداء الأكاديمي لطلاب المستوى الثاني في قسم النعة الإنجليزية بكلية التربية \_ جامعة عدن.

# اروی احمد مطهر مثنی

الملخص: هذه الدراسة تبحث تأثير أساليب التعلم على الأداء الأكاديمي لطلاب المستوى الثاني في قسم اللغة الإنجليزية بكلية التربية - جامعة عدن. طرح الباحث ثلاثة أسئلة بحثية وتم تقديم الإجابات على هذه الأسئلة ومناقشتها. جمع الباحث بيانات الدراسة من خلال ثلاث أدوات: (1) استبانة (2) اختبار قبلي وبعدي (3) ونموذج VARK تدريسي. كما استخدم برنامج SPSS الإحصائي.

تشير نتائج تحليل البيانات أولاً إلى وجود تنوع بين أداء الطلاب في أساليب تعلمهم أثناء المحاضرة وهو ما تظهره الأداءات الإحصائية. ثانياً تظهر النتائج أيضاً أنه كان هناك تحسن في أدائهم بعد استخدام البرنامج التدريسي وذلك من خلال نتائج الاختبار البعدي بعد إجراء الاختبار اللاحق حيث كانت خيارات إجاباتهم أكثر دقة وإرضاءً. وتختتم الورقة ببعض التوصيات والاقتراحات التي يمكن أن تشارك في هذا الجزء الهام في مجال أساليب التعلم.

# الكلمات المفتاحية:

أساليب التعلم؛ أساليب التعلم لبرنامج الفارك VARK ؛ معلمو اللغة الإنجليزية كلغة اجنبية؛ طلاب المرحلة الجامعية.