

Appraisal of Flash Cards and Students' Academic Performance in English Language in Senior Secondary Schools in Rivers State

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Abstract

The research work focused on the appraisal of the use of flash cards and student's academic performance in English language in senior secondary schools in Rivers State. The study was guided by the descriptive survey research design. Two research questions and two null hypotheses were formulated to guide the study. The population of the study comprised one thousand and two (1002) senior secondary II students and 64 English language teachers. A sample size of 300 respondents was used using Taro Yamene formula. The instrument for data collection was a self-structured questionnaire tagged "Appraisal of Flash Cards and Students' Academic Performance in English Language" (AFCSAPEL). The instrument was validated by two experts in English Language. The reliability of the instrument was established through pilot testing in which the scores were correlated at 0.80. Mean and standard deviation were used to answer the research questions while Pearson Product Moment Correlation Coefficient was used to test the hypotheses at 0.05 alpha level. Consequently, it was revealed that pictures, models, drawings, posters, were enthusiastically available for teaching and learning; flash cards facilitate students' learning ability and understanding. Lack of fund, unqualified teaching skill, intolerance by some teachers in the use of flash cards hamper effective teaching. It was recommended that there should be consistent use of teaching aids to make learning factual. Teachers should use teaching aids with appropriate method and skills, etc.

Key words: Appraisal, flash cards, students, academic performance, English language, senior secondary schools.

Introduction

English language is seen as the second language in Nigeria and has occupied a dominant place in the nation's educational, political, media and business environment. It is the language predominantly spoken all over Nigeria. The importance of mastery and proper usage of the language by both teachers and students cannot be overemphasized. Every other subject of study in Nigerian Schools, need a good command of English language, hence, the need to be taught thoroughly if it is to meet the educational and social standard. Like every other language, the secondary aim of teaching English Language in schools is to develop communication skills in the students (Agari, 2020).

Education which is a process of equipping students with the skills and knowledge needed for a desirable change makes use of some aids or teaching materials in order to achieve this optimal goal. Teachers of yester years relied on few or no aids in teaching because they believed that knowledge could be forced no matter how unpleasant it is into the supposedly empty brains of their children. They substituted the cane for teaching aids.

Flashcards are cards bearing information such as words or numbers, or questions and answers on either or both sides. They can be used in classroom or during private study. Flashcards can support learning of any subject matter. In the classroom, an immediate teacher overview of the learners' understanding of the topic at hand can be obtained by asking learners to display their answer to a specific question on a flashcard. Thus coloured cards can also be used for learners' self-assessment of their level of understanding (e.g. green card for "understood", yellow card for "need support", red card for "not understood"). For example, flashcards can be used question and answers *drills*, interactive education games, or the assess learners' progress. Flash cards otherwise known as teaching aids are non human resources which are helpful to the teachers and students for effective teaching and learning. They are teacher's helping hand in the process of teaching the students. Some learn better by one or more senses, to some seeing is believing, to others, the sense of hearing, touch, smell and taste dominate in acquiring knowledge. The utilization of teaching aids such as flash cards among others in teaching English language at all levels, helps the teachers in expanding the student horizon of experience. It also helps the teachers in providing meaningful information to the student. Kay (2015) noted that teaching aids are things which are intended to help the teacher use a working model outside the experience of the student's than if he relies on a verbal description of it. In order to achieve effectiveness and efficiency during instructional process between the teacher and the students, the classroom teacher must try as much as possible to illustrate the subject matter with appropriate instructional materials to the student.

This is done by using real things/object/technology to represent real life situations. In this regard Onwuka (2013) maintains that common sense taught us that in the present phases of development, the child will be faced with great difficulties if left unaided.

A systematic use of audio-visual materials can make the subject matter clear and appealing to the students of diversified background and different abilities. Thus audio visual materials can foster effective learning not only for the student who reads and writes easily but also for the student who is not verbally gifted. Audio-visual materials encourage active participation, give needed reinforcement, widens the horizon of student's experience, ensure order and continuity of thought as well as improve effectiveness of other materials. In addition, visual materials like, diagram, charts, photographs, slides etc. present more realistic approach in education delivery and equally provide opportunity for class participation in groups or individually and when used correctly, appeal to many senses which will result to increase in the students' performance. Some of these materials such as flash cards are very good for the preservation of records and other documents. The use of flash cards is an eye opener to the teacher and promotes better planning and scheduling, providing the teacher more guidance, co-ordination, supervision and more time for correction. Underprivileged academic performance in English language could be linked to many factors among which teacher's strategy itself was considered as an important factor. This implies that mastery of English language concepts might not be fully achieved without the use of instructional materials. Conspicuously, not even one school in Rivers State could boast of being well equipped with necessary flash cards. Where some of these materials exist, the rate at which school administrators and classroom teachers use them is to say the least disappointing.

Bielinski and Davidson (2011) defined academic performance as the display of knowledge attained or skills developed by students in the school subject. It is the level of performance in the subject as exhibited by a student. Academic performance is the exhibition of knowledge attains or skills developed by learners in the school subject usually designed by test scores or by marks assigned by teachers which can be low or high. Salami (2018), noted that Academic performance is frequently defined in terms of examination performance. It refers to what skills the student has learned as is usually measured through assessment like standardized test, performance assessments and portfolio assessment.

Flashcards are cards with either pictures or words, as used by Mathura and Zulu in 2021 and Sartika in 2020 (Farida, Dian, Hasna, and I, 2019). These cards can either be printed or hand-drawn by students. Flashcards improve teaching materials through engaging activities and help students understand their teachers' explanations. They can also be used to introduce new vocabulary, grab students' attention with colorful pictures, and provide additional meaning based on the teacher's native language if necessary. Repeating words during the learning process can help students recognize and memorize English words through the use of pictures. Students can store words in their memory more effectively due to repeated exposure. Flash cards have borne several nomenclatures from colonial concepts of an apparatus to teaching aids, teaching aid to education media, educational media to instructional technology, instructional technology to curriculum materials, curriculum materials to its current nomenclatures teaching aids. Each of these conventional stages depicts the scope of its usage and application in classroom setting. Studies have shown that instructional materials are indispensable in the teaching and learning process at all levels of educational system. They are referred to as a veritable channel through which instructions can be impacted in the classroom.

Laival in Agari (2020) affirmed that both instructional aid and approaches occupies the highest level of idealization as they cover a long term of attainment and implementation respectively. This implies that a teacher must first understand the broad and specific objectives of his/her teaching, what to be taught (subject), component of curriculum, approaches and method of instructional materials to be used in his/her teaching because these factors form the basis with which to accomplish the predetermined goals of secondary education. Similarly, Ogundele (2007) considered flash cards as an essential part of teaching methods which helps the teacher to express its subject concept to the learners thus promoting students' academic performance. That, such materials, should be the responsibility of the English teachers. Olaitan (2004) stated that flash cards are normally used during instruction to enhance proper or effective learning and to encourage retention. They reduce the workload of the English teacher in the classroom, reinforce and add clarity to learning. Ajayi (2009) observed that flash cards are versatile tools that are used in different ways for effective teaching and learning of English Language. These aids convey facts and ideas in all forms of communication. They offer quite an easy way of presenting information.

From the foregoing, it can be deduced that flashcard is the media that use a picture to show the students about the meaning from the picture in English. Flash card is very contemptible because we can make by our own from printing the picture on a piece of the paper, and we can make it whenever we need the flash card. They have ideal size in order to be able to see the whole students in the class and be easy to handle them. Flash cards can assist the learners to be perceptive on the meaning of the words, pronunciation and spelling, memorizing the new words, practicing the structure and word order among others. Materials for lesson are gathered and prepared ahead of time as students are not expected to sit diligently while waiting for the teacher to collect and prepare the materials for the lesson. Accessibility depends upon your available storage and upon your own usage habits Abdullahi (2012). Consider how much space you have for storing relevant instructional material for the activity to be carried out in teaching and learning English Language, and the location(s). Material that you need to refer to more frequently should be kept closer to hand, whether they are the materials from one or two previous terms or key reference materials you use during the teaching. Some instructors frequently refer back to previous terms when preparing classes, and others do not (Baganzi in Agari, 2020). The quality of the education and training on participation given to Secondary Schools Learners depends greatly on the availability and adequacy of instructional materials. School Administrators should adjust their educational content to the changing skill requirements of the nation.

Institutional training should aim to equip learners with useful skills and to improve their knowledge and capabilities in their participation in the classroom, National Policy on Education (2014). Awobodu (2011) has noted that availability and adequacy of instructional material in teaching facilitates learning and enhances pupil achievement because every learner is involved in the activity given.

In a research work by Momoh (2015) on the effect of instructional materials on student's performance in West African School Certificate Examinations (WASCE) in Kwara State. He collated materials resources with academic achievement of students in ten subjects. Data were collected from the subject teachers in relation to the resources employed in the teaching. Student performances in WASCE for the past five years were related to the instructional materials available for teaching each of the subjects. Momoh concluded that materials resources have a significant impact on student's performance in each of the subject.

Popoola as cited by Agari (2020) investigated the impact of use of flash cards in teaching-learning on the academic performance of students in five Secondary Schools in Ogun State. Questionnaires were design to elicit responses on instructional materials that were available for teaching and learning each of the three school subjects he examined. He collated WASCE results for five years and compared performance of students in schools with inadequate materials resources to students in schools with adequate materials resources. Finding showed a significant difference in the performances of the two sets of students. The students in schools with adequate instructional materials (especially flash card) performed far better than those with inadequate instructional materials. All available researches have concluded that effective and efficient use of appropriate instructional materials on any subject, English Language significantly improve the academic performance of students. Therefore, the use of flash cards as improvise should be encouraged hence it leads to academic performance of students.

Statement of the Problem

Every year, when the results of public examinations are released, there has always been mass failure in English language. Employers of labor during interviews for job seeker have always complained of graduates of higher institutions not being able to communicate or express effectively and efficiently in either written or spoken English. The reason for this could be ascribed to the fact that teaching English language as a second language in Nigeria poses serious problems of comprehension to students. The effect of mother tongue interference equally poses challenges to many students, leading to the assertion that this subject cannot be taught effectively and efficiently without the use of relevant instructional materials, in order to make the learning practical rather than purely theoretical.

We learn and remember 10% of what we hear, 40% of what we discuss with others and as high as 80% of what we experience directly or practice. Despite the consensus on the importance and place of instructional materials in teaching-learning of English Language, there is glaring absence of these materials and poor utilization by teachers leading to fatal consequences. Appraising the impact of use of flash cards in the academic performance of Senior Secondary Schools Students in Rivers State gave rise to the entire problem of this study.

Aim and Objectives of the Study

The study appraised the use of flash cards in teaching and learning and students' academic performance of English language in Senior Secondary Schools in Rivers State. Specifically, the objectives of the study included to:

1. examine the availability of flash cards and students' academic performance in English Language in Senior Secondary School in Rivers State.
2. determine the impact of flash cards on students' academic performance in English language students in secondary schools in Rivers State.

Research Questions

For the purpose of the study, the following research questions guided the study:

1. How available are the flash cards and student's academic performance in English Language in Senior Secondary Schools in Rivers State?
2. What are the impacts of using flash cards on student's academic performance in Senior Secondary Schools in English Language in Rivers State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

- Ho₁: There is no significant relationship between availability of flash cards and student's academic performance in English Language in Senior Secondary Schools in Rivers State.
- Ho₂: There is no significant relationship between impacts of flash cards on student's academic performance in English Language in Senior Secondary Schools in Rivers State.

Methodology

The study adopted a descriptive design. It is considered appropriate for this study because it dealt with events that are currently happening. The population comprised of 1,196 (64 teachers and 1,132 students) (Source: Rivers State Ministry of Education, 2019-2022). The sample size consisted of 300 teachers and students using Taro Yamene. The instruments for data collection consisted of structured questions tagged "Appraisal of Flash Cards and Students Academic Performance in English Language" (AFCSAPEL). The questionnaire was modified on a four point-likert scales of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD).

The instrument for data collection was validated by two experts. The reliability of the instrument was determined through pilot testing. The scores were correlated using Pearson product moment correlation in which 0.80 reliability coefficient was obtained. The questionnaire was administered directly to the teachers and students by the researcher. Mean and standard deviation was used to answer the research questions while, Pearson's Product Moment Correlation was used to test the hypotheses at 0.05 level of significance.

Results

Research Question 1: How available are the flash cards and students' academic performance in senior secondary school in Rivers Sta **Criteria mean = 2.5**

S/N	ITEMS	Frequencies (f)				Total (N)	Mean (\bar{x})	Std.	Remark
		SA	A	D	SD				
		4	3	2	1				
1	Flash cards are available for teaching and learning English in school	30 (120)	50 (150)	80 (160)	130 (130)	300 (560)	1.87	0.40	SD
2	Government has provided sufficient flash cards for learning English Language	50 (200)	60 (180)	90 (180)	100 (100)	300 (660)	2.20	0.30	SD
3	Flash cards are simple and adequate for learning	150 (600)	100 (300)	30 (60)	20 (20)	300 (980)	3.27	0.85	SA
4	Poster, computers, pictures, drawings and modes are available for use in schools	120 (480)	110 (330)	50 (100)	20 (20)	300 (980)	3.10	0.80	SA
5	Appropriate models, drawing and pictures are used for illustration and promotion of knowledge.	140 (560)	100 (300)	30 (60)	20 (20)	300 (940)	3.13	0.82	SA
Grand mean							2.714		SA

Table 1 showed that items (3, 4, and 5) were strongly accepted since their mean criteria were above 2.5. This shows that the items were strongly accepted, while items (1, 2) were strongly disagreed rejected since their criteria mean was below 2.5. Again, the grand mean was 2.714. Therefore, it indicated that the items were strongly accepted as available flash cards for academic performance of English language.

Research Question 2: What are the impacts of using flash cards on student's academic performance in senior secondary schools in Rivers State? **Criteria mean = 2.5**

S/N	Questionnaire Items	Frequencies (f)				Total (N)	Mean (\bar{x})	Std	Remark
		SA	A	D	SD				
		4	3	2	1				
11	Teaching and learning are improved by the use of flash cards	170 (680)	100 (300)	25 (50)	5 (5)	300 (1035)	3.45	0.92	SA
12	It saves time, promote retention and enhance academic performance of students	140 (560)	100 (300)	30 (60)	20 (20)	300 (940)	3.13	0.82	SA
13	It arouses student's interest and makes them concentrate on lesson.	135 (540)	110 (330)	45 (90)	10 (10)	300 (970)	3.23	0.84	SA
14	It promotes fast understanding of students and reduces burden of teachers	165 (660)	105 (315)	25 (50)	5 (5)	300 (1030)	3.43	0.90	SA
15	It simplifies and clarifies complex difficult concept	157 (628)	130 (390)	10 (20)	3 (3)	300 (1041)	3.47	0.94	SA
Grand mean							3.342		SA

Table 2 revealed that items (11, 12, 13, 14, 15) indicated Strongly Agreed since their criteria mean was above 2.5. Again, the grand mean of 3.342 was obtained which was above 2.5 the mean criterion. Therefore, the items were strongly accepted as impacts of flash cards on students' academic performance.

Testing of Hypotheses

H0₁: There is no significant relationship between availability of flash cards and student's academic performance in English Language in Rivers State.

Table 3: Pearson Product Moment Correlation results of availability of flash cards and student's academic performance in English Language

Variables	Mean	Standard	n	Alpha	r-value	P-value	Decision
Availability of flash cards	2.714	0.634					
Academic performance	2.550	0.50	300	0.05	0.750	0.021	Significant

Table 3 revealed that the r-value of 0.750 with a corresponding P-value 0.021 < 0.05 (which is lesser than) the chosen level of significant was obtained. Therefore, this indicated that there is significant relationship between the availability of flash cards and academic performance of English language students. This implied that the null hypothesis was rejected, while the alternate hypothesis was accepted. Therefore, there is a strong relationship between flash cards and academic performance of students in senior secondary schools.

H0₂: There is no significant relationship between the impacts of flash cards on student's academic performance in English Language

Table 4: Pearson Product Moment Correlation results of impact of flash cards on student's academic performance of English language

Variables	Mean	Std	n	Alpha	r-value	P-value	Decision
Problems hindering effective use of flash cards	3.342	0.884					
Academic performance	2.550	0.50	300	0.05	0.790	0.037	Significant

Table 4 reveals that r-value of 0.790, with its corresponding P-value of 0.037 < 0.05 (which was less than) the chosen level of significant. This therefore shows that there is a positive significant relationship between the impacts of flash cards on academic performance of students in English language. It indicated that the null hypothesis was rejected, while the alternate hypothesis is accepted.

Summary of Findings

- 1) There is significant relationship between availability of flash cards and academic performance of students in English language, since ($r = 0.750, p = 0.021 < 0.05$).
- 2) There is significant relationship between impacts of flash cards on academic performance of students in English language, since ($r = 0.790, p = 0.037 < 0.05$).

Discussion of Findings

Research question one hypothesis one revealed that available flash cards are adequate to enhance academic performance of English students. This is in line with Abullahi (2012) who said that the use of available flash cards by teachers promote academic performance of students. This is supported by Awobodu (2011) who noted that when teachers use flash cards for teaching, the student's academic performances are increased. He encourages the modern teachers of secondary schools to always use flash cards so as to concretize learning. The result of Pearson Product Moment Correlation revealed that ($r = 0.750, p = 0.021 < 0.05$) the chosen level of significant was obtained. Therefore, the null hypothesis was rejected, while the alternate hypothesis was accepted. This implies that there is significant relationship between adequate use of flash cards and academic performance of students. This study is in agreement with the study of Anderson (2009) found significant relationship between the availability of flash cards and academic performance of students. He noted that flash cards make learning, fast and simple for students.

Research question two hypothesis two revealed that teaching and learning are improved by the use of flash cards; it saves time, promotes retention of information, arouses student's interest and concentration during lessons, reduces the burden of teachers, simplifies and clarifies complex difficult concepts. The study is in agreement with the study of Oladipo (2011) who asserted that flash cards are important tools for enriching, visualizing, simplifying, transmitting and accelerating the teaching and learning processes, thus enhance students' academic performance in English language. He further said that, effective instruction with flash cards in the classroom requires careful planning by the English language teacher. The result of Pearson product moment correlation revealed that ($r = 0.790, p = 0.021 < 0.05$), the chosen level of significant was obtained. Therefore, the null hypothesis was rejected, while the alternate hypothesis was accepted. This indicated that there is significant relationship between impacts of flash cards on academic performance of students. This finding is in agreement with the findings of Popoola in Agari (2020) who noted that flash cards have direct impact on students as teaching and learning are made real, fast, meaningful, interesting and also enhance academic performance of students.

Conclusion

Consequently, the study concluded that flash cards are necessary to improve students' academic performance in English language. Flash cards facilitate students' learning ability and understanding. Flash cards have direct impact on students, as it makes instructions fast, simplify, clarify, interesting and real.

Recommendations

The following recommendations were made based on the findings of the research.

1. Teachers should use flash cards with appropriate method and skills in teaching students in senior secondary schools.
2. There should be consistent use of flash cards in the classrooms to make learning real, meaningful and retention of information by students

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