TRAINING IN NOTE-TAKING SKILLS: AN EFFECTIVE STRATEGY FOR IMPROVING STUDENTS' LEARNING AT THE TERTIARY LEVEL

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ABSTRACT

Taking quality notes from lectures is vital to achieving academic excellence in tertiary institutions of learning. This paper focused on the importance of note-taking and the need for training students in note-taking skills. Note-taking skills involving what students should do before, during and after lectures were also highlighted. Some of these skills include sitting in a strategic position, listening actively, selecting what is relevant, recognizing and recording main ideas of lecture, using abbreviations and symbols. It was also recommended that note-taking skills workshops and conferences be organized periodically for teachers and students.

INTRODUCTION

Note-taking is important in learning. It is an essential study skill for a tertiary level student. It is a link between acquisition of information and retrieval of information in achieving high academic performance (Putnam, Deschler, & Schumaker, 1993). Many students complain that they have poor memories, but the problem is often that they fail to use effective memory strategies to help them remember information (Schoor, Mill, & Potgieter, 2010). One of such strategies is note-taking. According to Hyatt (2005), note-taking is a survival kit and yet many students do not take notes. Some express frustration at their inability to take efficient or quality notes.

Much of classroom learning at the tertiary level depends on understanding, retaining and retrieving information from lectures. Often times, students in higher institutions of learning are expected to take notes and use for subsequent review. Despite recent use of personal computers as learning technologies, note-taking with paper and pen remains indispensable in achieving learning goals (Kobayashi, 2006; Ryan, 2001). It is unlikely that electronic learning technologies will replace traditional note-taking in future. Instead, the two will be used simultaneously (Haas, 1999). Note-taking therefore is a necessary learning skill to be acquired by a student in achieving success.

However, students in tertiary institutions are often deficient in note-taking skills as they often capture only a small portion of a lecture's main idea. Kiewra (2005) affirmed that average note-takers record only 40% of important ideas in a lecture. This was further corroborated by Nilson (2006) when he submitted that an average student writes down only 500 (out of 5,000) words spoken in a lecture. The need has therefore arisen for students to acquire effective note-taking skills in order to enhance their performance. Training students at the tertiary level in effective note-taking skills is therefore the focus of this paper. The paper emphasizes taking notes during lectures.

CONCEPT OF NOTE-TAKING

Note-taking is a process used by students to listen to, encode, process and record information in written form in their note-books. Note-taking is a necessary learning skill for a student in order to be successful and to help his memory (Sarkisian, Toscano, & Bladt, 2006). In other words, note-taking enhances the retention ability of the learner. Herman Ebbinghaus (1885) pioneered experimental study of retention. He developed a curve of forgetting that pointed to the fact that forgetting was initiated soon after exposure to information if certain checks were not put in place. One of these checks is note-taking. Note-taking helps to slow down the rate of forgetting thereby enhancing recall.

Furthermore, note-taking is instrumental in encoding information for effective storage and subsequent recall. Encoding refers to the process of transforming information into meaningful modes and the storing of these as meaningful concepts in long-term memory. Encoding techniques promote information transfer to long-term memory. Taking notes during lecture aids encoding in that students are able to use encoding techniques or strategies like organizational and mnemonic devices. Examples of organizational strategies are making mental visualization of information (Pauk, 2000), grouping concepts according to their related characteristics and mental labeling of such, and imaginatively linking new information to old information. Examples of mnemonic devices are use of acronyms, acrostics and rhymes. The encoding skills of a learner come to play during note-taking.

Generally, notes are taken for various reasons. The values of taking notes in lectures as highlighted by scholars like Ellis (1994) and Randall (2004) are as follows. First, note-taking helps to develop a sense of listening and fosters understanding. It also helps to record the lecturer's emphases and perspectives. Note-taking helps the students to be focused on the lecture thereby enhancing encoding and retention. It encourages students' active participation in the learning process. It aids retrieval of information because students easily remember personally encoded information. Such notes serve as retrieval cues. Finally, the notes taken become study aids that can be used for review later.

The foregoing suggests that students need to personally take notes during lectures. This was also supported by Potts (1993) when he stated that it is valuable for students to participate in the note-taking process. Also, if notes taken in class will benefit the students, then they need to take "good" or quality notes. Students need to acquire note-taking skills and this requires training.

NOTE-TAKING TRAINING

Much of classroom learning at the tertiary level depends on retrieving information from lectures. Often times, students in higher institutions of learning are expected to take notes from lectures and use for subsequent review (Akintunde, 2012). However, notes taken by students are in various forms. Some take scanty notes while others take detailed notes. Some notes are disorganized in the sense that such notes are taken in bad or illegible handwriting, no clear demarcation between main points and illustrations or examples, sub-headings are not easily differentiated from main heading, and so on. Such

disorganized notes may make review difficult or even impossible. Again, different note-taking methods abound, such as outline, verbatim, mind-map, Cornell, and charting. Some note-taking strategies tend to be more effective in enhancing academic performance than others. To take quality notes, students need to have better tools (Vanderium, 2005). In line with this, Kinsman (2002) submitted that he was never taught how to take notes as an undergraduate student whereas good note-taking would have made his academic pursuits easier. Consequently, there is the need for students to be trained in note-taking skills so as to be effective in taking notes during lecture and subsequently achieve higher academic performance.

Training in note-taking skills can be done in various ways. One way is for teachers/lecturers to make deliberate efforts to teach students how to take quality notes. For example, the first lecture in a semester can be used for this. Another way is for students to make personal efforts in acquiring good note-taking skills by studying books and articles on effective note-taking skills and practicing them. Training involves practice and/or evaluation of note-taking skills. Boyle and Weishaar (2001) demonstrated the importance of training in note-taking skills when they reported that students' comprehension and recall were enhanced when their note-taking skills were improved through training.

In teaching note-taking skills to students, teachers may need to draw lesson plan for note-taking whereby behavioural objectives, presentation steps and evaluation questions are clearly stated. Two or three note-taking styles can be taught in a lesson. An example is given after discussion on note-taking skills.

NOTE-TAKING SKILLS

In taking effective notes at lectures, the leaner is vested with some responsibilities before, during and after the lecture. Each of these skills should be taught to the students.

Before the lecture:

The following basic rules should be noted and acted upon by the learner before taking notes:

- Be present in class and be punctual.
- Bring necessary writing materials to class e.g. biro, pencil, note books, ruler.
- Prepare different sheets of paper or note books for different courses.
- Date your notes and number the pages.
- Sit in a strategic position (e.g. in front of the class, if possible) where you can see and hear the lecturer well.
- Listen attentively and actively. Do not be distracted by friends. Concentrate on the lecture.
- Do not give up even in a very fast lecture. Write something, even if fragments.

During the lecture:

- Start taking notes immediately when the lecture starts.
- Write legibly
- Write the topic of the lecture at the top of the page

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- Use effective note-taking strategies in taking notes such as outline or paraphrase.
 Cornell or 2-column, or mind map.
- Take meaningful, complete notes and organized notes. Select what information in the lecture is relevant.
- Recognize and write the main ideas of the lecture. This is done by identifying signal words often used by the lecturer to point out main ideas in a lecture, such as:
 - * "This is very important..."
 - * "Therefore ... "
 - * "There are 3 methods of..."
 - * "For example..."
 - * "Remember that..."
 - * "In conclusion..."
- Take down examples used by lecturer.
- Leave a blank space if statement is missed and get it later.
- Use keywords and phrases
- Use abbreviations and symbols (especially in a fast lecture). Use abbreviations that you can remember easily, such as in Tables 1 and 2.

Table 1. Abbreviations Common in Note-Taking

Abbreviation	Meaning
There/4	Therefore
Psych	Psychology
Ques	Question
e.g	for example
dept	Department
etc	and so on
NYSC	National Youth Service Corp
cos	Because
b/4	Before

Table 2. Symbols Common in Note-Taking

Symbol	Meaning
=	is equal to
+	plus
&	and
<	less than
>	greater than
SS	supply
dd	demand
f	Frequency
<i>:</i> .	therefore

After the lecture:

- Fill in the missing information after lecture and clear up illegibilities in writing. Do
 these while the lecture is still fresh in your mind.
- Review your notes immediately after lecture or within 24 hours to aid retention.
- Review your lecture notes at least once a week and before the next lecture.

MODEL LESSON PLAN FOR NOTE-TAKING TRAINING

Presented below is an example of a lesson plan for teaching the outline method of notetaking.

Topic: Outline note-taking method

Class: 100 Level
Sex: Mixed
Date: 2013

Duration: 60 minutes **Course:** Education

Objectives: At the end of the lesson students should be able to:

- a) Describe the outline note-taking method
- b) Record main points of a lecture in notes
- c) Use indentation to distinguish between major and minor points
- d) Use numbering, underlining and abbreviations
- e) Take outline notes during a lecture.

Introduction:

Teacher introduces the lesson by telling students that note-taking is a skill that will contribute to their learning and aid memory. One note-taking method to be considered is outline note-taking method.

Presentation:

Step 1- Description of outline notes

Teacher describes outline note-taking method as one that requires recording of main points and sub-points in a lecture. The notes are not crowded and main points are underlined for emphasis. It also involves the use of indentation to distinguish between major and minor points. It is also referred to as paraphrased note-taking.

Step 2 - Recording main points

Teacher explains how to identify and record main points in a lecture. The first main point in a lecture is the lecture topic. Other key words, phrases, facts and meaningful statements that are very important are to be recorded using their own words. Teacher explains that, to identify main points of a lecture, lecturers often give clues about what is important by using phrases like:

- · For example...
- There are 3 factors affecting...
- First...Second...Third...
- One major cause...
- Furthermore...
- Therefore...
- · On the contrary...
- In conclusion...
- Now, this is important...
- Finally...
- Remember that...
- However ...etc.

Step 3- Indentation

Teacher explains how to use indentation in taking outline notes. Indentation is used for orderliness and to show relationship between the different parts. Main points should be indented, sub-points are further indented. An example of indentation is given below, using the topic, "Factors affecting learning."

Topic: Factors affecting learning

Factors affecting learning include these 3:

- i) Sensory defects
 - a) sight
 - b) hearing
 - c) smell
 - d) taste
 - e) touch
- ii) Poor learning environment such as -poor ventilation, noise, inadequate seats.

iii) Fatigue

- a) Physical e.g reduction of bodily energy
- b) Mental e.g wearied or depressed mind.

Step 3 - Numbering, underlining and use of abbreviations

Teacher explains that ideas, key words and main points can be underlined and numbered as shown in the example "Factors affecting learning." Abbreviations like There/4, e.g., dept, cos, b/4. can also be used.

EVALUATION:

- Students are allowed to ask questions.
- b) Teacher asks students the following questions:
 - i) What is outline note-taking?
 - ii) How do you identify "main points" of a lecture?
 - iii) Why do you use indentation in outline notes?
 - iv) Teacher gives a lecture of about 5 minutes (on any topic) and students are asked to practice by taking outline- notes.

RECOMMENDATIONS

Based on the discussion so far, the following recommendations are made:

- Students should value note-taking and be determined to take quality notes at lectures.
- Teachers/Lecturers should encourage and train students in note-taking skills that will enhance students' performance.
- Teachers/Lecturers should use cues that will signal main ideas of the lecture while teaching, to enhance good note-taking.
- Note-taking workshops /conferences should be organized periodically for teachers and students to equip them with effective note-taking skills.

CONCLUSION

Taking effective notes from lectures is an essential skill of a tertiary level student. Acquisition of note-taking skills requires training or practice. When students are adequately trained in note-taking skills as discussed in this paper, their encoding, retention and retrieval will be enhanced. Ultimately, the academic performance of the students will be enhanced.

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