Instilling Right Attitudes towards the Use of Lesson Plans in Chemistry Instruction in Mosocho Division of Kisii District, Kenya

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Abstract
This study was conducted in the six secondary schools of Mosocho Division of Kisii District. These are Cardinal Otunga, Mosocho Academy, Raganga, Kioge, Nyatieko and Nyabururu. The main purpose of the study was to review the general attitudes of the chemistry teachers, head of science department and head teachers towards the use of the lesson plan in teaching chemistry in the Division. The research tool used was the questionnaire. The respondents included the head teachers, the heads of science department and Chemistry teachers. Therefore, three types of questionnaires were administered. The chemistry teachers’ questionnaire solicited information regarding the teachers’ attitude towards the use of the lesson plan. The head of science department questionnaire solicited information regarding how much heads of science department liked their position and how they carried out their duties to ensure that the lesson plan was used. The head teachers’ questionnaire sought information on how they liked their leadership position, and how they carried out their duty of seeing that teachers prepared and used the lesson plan in teaching chemistry.

Keywords: instilling right attitudes, use, lesson plans, chemistry instruction, Kisii District, Kenya

INTRODUCTION
Planning for classroom teaching is a major prerequisite for successful teaching. A teacher who plans well ahead of time ends up communicating effectively to his pupils. The Ministry of Education Inspectorate (1988) comments that:

Insufficient planning of science lessons coupled with less practical work prepared for classes are evident in most schools and colleges

Teachers’ performance has been affected by their attitudes and interest in their profession. A good number of science teachers know how marketable they are; hence a few are committed in their profession. This situation is disturbing because the improvement of teaching science depends on the quality of the teachers. A good science teacher is capable of improving the standard of science teaching through innovation and dedication to his work.

SIGNIFICANCE OF LESSON PLANNING
Some amount of planning is necessary for a successful teaching. Sometimes this fact might not be immediately evident to many who observe an experienced teacher in action. The lesson may be seen to develop without any visible evidence of a lesson plan the observer first thinks that no special planning was involved. However, as the lesson progresses, one soon notices the following:
(i) The learning is taking place in a logical well-defined way
(ii) The material necessary for experiment are available at the right place at the right time
(iii) When references are needed to find information or check conclusions, the books or materials are readily available

One also realizes that this kind of teaching occurs only as a result of intensive planning and preparation. Lesson planning is therefore a device essential to economize time and to make the teaching systematic. It enables the teacher to aim at objectives appropriate to the lesson and suitable for the class and thus guides him in the attainment of those objectives. It makes the teacher fully confident because he is aware of the difficulties that may arise in the classroom and is prepared to deal with them. It reminds the teacher of the specific goals to be achieved through classroom teaching and gives him a picture of what is to be pursued and what is to be avoided.

According to Farrant (1980), the unprepared lesson is always recognized by some or all of the following features:
- Incomplete subject matter
- Incorrect facts
- Lack of detail and illustrative materials
- Disorderly presentation of material (p. 175-176)

ROLE OF VARIOUS PERSONNEL IN PLANNING
The Role of the Inspectorate Section of the Ministry of Education
According to Mbiti (1974), the Inspectorate Section of the Ministry of Education is responsible for the control of the quality of education at all levels
through inspection, guidance and advice to all schools in the country, such inspection and guidance includes visits to schools for the purpose of checking on facilities, equipments, administration and also the actual teaching by individual members of staff. During such visits, inspectors may give advice to the head teachers and his staff on such matters as is necessary to improve the quality of education in the school. Inspectors should first and foremost not be seen as fault finders using threats to make teachers work. They should be fair and ready to accept some useful suggestions from teachers by doing so they will be able to get new ideas useful in the improvement of educational programmes. They should also be able to give clear direction to teachers, i.e. they should be more knowledgeable than the teachers. Threat and fault finding invalidate the results of the inspection because teachers are not free and do not give the true results. According to Rowland and Birkett (1992), the person who is going to conduct the appraisal should know the teacher’s strengths and weaknesses very well and should have the closest interest in the performance and welfare of a subordinate.

Inspection, as a mode of monitoring education, offers the following major benefits (Wilcox & Gray, 1994):
- It gives inspectors an opportunity to observe classrooms and, thereby, a better basis for discussing the development of the school with head teachers;
- It gives school inspectors an opportunity to learn about the schools, the head teachers, the teachers, the curriculum, and the students and indicates which way forward;
- It can be a potential learning experience for those involved;
- It should provide useful information for parents in their choice of schools;
- It leads to a better understanding of schools;
- It enhances staff cooperation and public recognition that the school is basically on the right track; and
- It boosts staff morale;

**Role of the Head Teacher**

He is the agent of the employer and has several members under his custody. The success of any school depends on how effective the head teacher is as an administrator. The head teacher’s function as relates to planning for teaching can be looked at in different ways. He is responsible for implementing policies covering broad educational programmes. He is also supposed to ensure that all aspects of the school curriculum are taught in schools.

He should have a way of assessing the extent to which instructional objectives are attained. He should further ensure that effective teaching and learning actually takes place. He is also to look at the tools the teachers are supposed to have, e.g. schemes of work, lesson plans, lesson notes and records of work.

**Role of the Head of Department**

The head of department works in coordination with the head teacher to ensure that effective teaching and learning take place in his department. He looks at the documents the science teachers are supposed to use in planning, ensures that laboratories and other resources needed are in good order and available when required by the science teachers.

**Role of the Teacher**

The Chemistry teacher is the key to excellence as far as Chemistry teaching is concerned. He should show competence and commitment to his work in order to be efficient and effective. He should be able to plan effectively for successful teaching.

**Need for Instilling the Use of Lesson Plans**

The KCSE results in the last few years indicated a rather unsatisfactory performance by school the science subjects. The 1989 KCSE was the first examination in the secondary cycle of the 844 system of education. From the 1989, KCSE report (1991) it was noted that:

Good performance was noted in Kiswahili, History and Government, Christian religious education, Agriculture, Technical subjects, German and Arabic. Considerable effort was, however, required towards improvement of physical sciences, Maths, Drawing and Design, Economics, English, Biology, Commerce and Music (p. 1).

The trend has continued up to the present. As such, planning for classroom teaching is a major prerequisite for successful teaching. One of the most essential documents used for planning for classroom teaching is the lesson plan. It is generally assumed that an experienced teacher does not need a lesson plan because he is already aware of how to teach. Nevertheless, planning for such teachers is still vital as each class or lesson is unique and may raise issues least expected even by the most experienced of teachers.

**MATERIALS AND METHODS**

The study was conducted in the six secondary schools in Mosccho Division of Kisii District. The sample consisted of chemistry teachers in the six secondary schools in the Division, the heads of science department and head teachers. This gave a total of about 30 respondents. The researcher carried out random sampling to obtain one division in Kisii District and then carried out purposive sampling of all teachers involved in teaching secondary school chemistry, heads of science department and head members under his custody.
teachers in the schools in the Division. Data was collected through the administration of questionnaires which were given to the teachers of chemistry, heads of science departments and head teachers. After collection of data, the percentages of chemistry teachers who responded to the items were calculated and the information presented-in tabular form. The heads of science department and heads teachers questionnaire were also analyzed item by item and the results were presented using descriptive statistics.

RESULTS AND DISCUSSION

Teachers' Attitudes towards the Use of Lesson Plans

The study investigated how much the teachers enjoyed planning for teaching chemistry. Results showed that most (83%) of the chemistry teachers enjoyed planning for teaching chemistry. A well trained teacher should be able to enjoy planning for teaching. In addition, the study wanted to know if the chemistry teachers were scared of making a chemistry lesson plan. Results showed that majority (89%) of the teachers were not scared of making lesson plan. This is very encouraging; to teach effectively, teachers are supposed to be able to plan without being scared. They should be confident in their work.

The study also investigated teachers’ interest in making the lesson plan. Results showed that majority (83%) of the chemistry teachers had interest in making the lesson plan. A few teachers (17%) had no interest in preparing the lesson plan. These are probably the untrained teachers.

As a follow-up to the making of lesson plans, the study wanted to know if teachers were at ease using the chemistry lesson plan. Results showed that majority of the teachers (72%) were at ease when using the chemistry lesson plan. The remaining (28%) are probably the untrained teachers and the teachers who did not qualify well at college.

Furthermore, the study sought to find out if the heads of science department encouraged the chemistry teachers to make lesson plans. Results showed that 28% of the heads of science department encouraged the chemistry teachers to make lesson plans. The heads of science department in the schools need to be reminded of their roles in the school. Table 1 below shows the extent to which colleagues teaching chemistry encouraged one another to make lesson plans.

Table 1: Encouragement to Make Lesson Plans by Colleagues

<table>
<thead>
<tr>
<th></th>
<th>Very Little</th>
<th>They don’t</th>
<th>They do</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>%</td>
<td>27.8</td>
<td>38.9</td>
<td>33.3</td>
</tr>
</tbody>
</table>

This item was intended to investigate if the chemistry teachers were encouraged by their colleagues in making and using the lesson plan. Results showed that majority (38.9%) of the chemistry teachers were not encouraged by their colleagues to make and use the lesson plan. To teach effectively, teachers also need encouragement from their colleagues.

Role of Heads of Science Department

Of the heads of science department, 16.7% liked the position, although not so much, while 83.3% disliked the position much. None of the heads of science department disliked the position. These results showed that the heads of science department liked their position. To work effectively, individuals should like their positions.

In addition, 50% of heads of science department met with their chemistry teachers to discuss and review lesson plans, while 50% did not and needed to be reminded. A further 66.6% commented that the chemistry lesson plans reflected what was taught in class and it was necessary to discuss and review the lesson plan to ensure teachers teach the recommended material.

On the other hand, 16% commented that it was that year that the school had had more than one chemistry teacher. Nevertheless, 19.7% gave no comment. None of the heads of science department went through the chemistry teachers’ lesson plans very often. Only 50% went through the chemistry teachers’ lesson plans often while another 50% hardly went through the lesson plans. It is recommended that the heads of science department go through the teachers’ lesson plans often to see that the teachers are planning effectively for teaching and hence teaching well.

The Role of Head Teachers

Of all the head teachers, 33.3% liked their position very much, 50% liked their position much while 16.7% disliked their position. To work effectively, "leaders" should like their leadership position. Furthermore, 16.7% head teachers familiarized themselves with the chemistry teachers’ lesson plan very often, 66.7% head teachers familiarized themselves with the chemistry teachers’ lesson plans often, while the rest 16.7% hardly familiarized themselves with the chemistry teachers’ lesson plans. It is important that the head teachers familiarize themselves with the teachers’ lesson plans often.

Apart from that, 66.7% head teachers remarked that the work done by the heads of science department was adequate while 33.3% remarked that it was not adequate. A further 33.3% head teachers commented that the heads of science department neglected their duties while 16.7% commented that it was adequate because there were no complaints from their teachers.
and pupils and the examination results were relatively good. In addition, 16.7% commented that it was adequate because the head of science department supervises the teachers’ lesson plans And another 16.7% commented that it was adequate because there were enough science facilities and teachers were very determined while 16.7% gave no comment.

CONCLUSIONS AND RECOMMENDATIONS

The objective of the study was to find out the attitudes of the chemistry teachers, head teachers towards the use of the lesson plans. The following conclusions were drawn from the results:

- Very few head teachers, heads of science department and chemistry teachers have negative attitudes towards the use of the lesson plan
- Teachers in schools where great emphasis is laid on preparation and use of the lesson plans do their work with ease
- Majority of chemistry teachers are able to prepare a lesson plans, have interest and enjoy making lesson plans and only a few seem to have no interest and are in terrible strain while making the lesson plans
- Most head teachers and heads of science department like their positions

From the above conclusions, this paper recommends that more seminars workshops and in-service courses be organized for all science teachers to help train and boost their attitudes on the significance of lesson plans in teaching/learning of chemistry in schools.

REFERENCES


Rowland and Burkett (1992). Personal effectiveness for teachers, Hempstead; Simon and Schuster.