



CTM431: Chemistry Teaching Methods II

MODULE 1

*Leadership and Management of Natural Sciences
Department.*





Mukuba University
Kitwe-Zambia
Science Department

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Mukuba University
Science Department
P.O Box, 20382
Kitwe – Zambia

Phone: +260212239003
E-mail: cosetco@zamtel.zn

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EDITORS

Directorate of Distance Education (DODE)-
Lusaka

AUTHOR

Mweshi E : Lecturer CBUC

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About this Module

This module is structured as outlined below.

How this module is structured

The module overview

Welcome to the module on Chemistry Teaching Methods

This module is the first part of the CTM431 Course in the Bachelor of Education Science programme. The module discusses; leadership and management of natural sciences departments and aspects of effective communication. To complete this module successfully, you will need to spend three (3) hours per week studying the module, and make sure you work out all the activities in each unit. Don't move to another unit before you understand the previous unit. In case you need help contact the course tutors.

You are expected to do all the self marked activities and one tutor marked assignment which will accompany this module. You are required to submit the assignment to the nearest resource centre in your district. This module has five units.

We strongly recommend that you read the overview *carefully* before starting your study.

Module outcomes



Outcomes

Upon completion of this module you will be able to:

- Identify the key elements of effective science department management.
- Apply the principles of good leadership and management in your department as well as in your chemistry lessons
- Apply the aspects of effective communication interpersonal skills in your operation

Need help?



Help

Should you require help in the course of your studies, do not hesitate to contact the following course tutors

Mr Mweshi E Cell: 0955-881340 / 0969-218224

E. Mail: emweshi@yahoo.com

Getting around this Module

Margin icons

While working through this module you will notice the frequent use of margin icons. These icons serve to “signpost” a particular piece of text, a new task or change in activity; they have been included to help you to find your way around the module.

A complete icon set is shown below. We suggest that you familiarize yourself with the icons and their meaning before starting your study.

 Activity	 Assessment	 Outcomes	 Note it!
 Summary	 Help		

Unit 1

Leadership and Management of Natural Sciences Department

1.0 Introduction

You can agree with me that for any unit, department or an organisation as a whole to achieve its intended goals effectively and efficiently it requires sound leadership and management. In this unit we are going therefore discuss leadership and management, the departmental organisation structure and the leadership and management roles of Science Head of Department.

Thus upon completion of this unit you will be able to:



Outcomes

- Identify the types of leadership and management styles
- Apply the best leadership and management styles in your department, section and chemistry class.
- Discuss the roles and duties of the Science Head of department (HOD)

Before we discuss the roles and duties of an HOD, let us first discuss and understand the meaning of leadership and management as applied in the current organizational leadership and management

1.1 Leadership and Management

It is very difficult in practice to make a clear distinction between Leadership and management. These two concepts are often used interchangeably in every day speech. It could be difficult to tell which functions and actions could be labelled leadership and which ones is management. However, Law and Clover bring the different interpretations of the two concepts in general;

Leadership is frequently seen as an aspect of management, with 'real leaders' often characterised as charismatic individuals with visionary flair and the ability to motivate and enthuse others- even if they lack the managerial or administrative skills to plan, organize effectively or control resources. On this basis it is often argued that managers simply need to be good at everything leaders are not! (Cited in Coleman & Early, 2005, p.7)

*Thus, **Organisational leadership** can be defined as the ability of an individual to influence, motivate and enable others contributes toward the effectiveness and success of the organisation to which they are members.*

The key words in leadership are to influence and motivate.

Management on the other hand is an act of getting people together to accomplish desired goals and objectives using available resources efficiently and effectively.

Thus, management comprises planning, staffing, leading or directing and controlling an organisational resources and activities for the purpose of achieving a goal (Cole, 2004).

The head of the science department is both a leader and a manager in that he/she should have the ability to plan, mobilise and organise resources and control the department for the purpose of achieving the set goals. At the sometime he/she should influence, motivate and enable teachers to contribute toward the effectiveness and success of the department of which they are members. Thus departmental management is the act of getting science together to accomplish desired departmental goals and objectives using available resources effectively. Management comprises of planning, organizing staffing, leading or directing and controlling an organization (a group of one or more) or effort for the purpose of accomplishing a goal.

Let us now briefly look the differences between management and leadership though the two roles are identified with the person heading an organisation, unit or department, the two concepts are like the two sides of one coin

Table 1.1 Leadership contrasted with management

Manager	Leader
<ul style="list-style-type: none">• Does things right• Focuses on the present short term and the bottom line• Seeks order• Contains risks• Appeal more to reason than emotions	<ul style="list-style-type: none">• Does the right things• Focuses on the future, the long-term and the horizon• Relishes change• Takes risks• appeals to both emotions and reason

**ACTIVITY 1.1**

1. Elaborate on what we mean when we say that a manager does things right and a leader does the right things

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1.2 Leadership/ Management styles

Management style is a characteristic way of making discussions and relating to subordinates. The way managers make decisions and relate to the subordinates is explained by McGregor's theory X and Y

Table 1.2 McGregor's theory X and Y

Theory X People	Theory Y People
<ul style="list-style-type: none"> • Dislike work • Need control • Like to be directed • Lack ambition 	<ul style="list-style-type: none"> • Like to work • Can be self disciplined for objectives they are committed to. • Will accept responsibility

Management styles can be categorized into three leadership styles, these include;

- autocratic
- Laisser-fair
- democratic
- Contingency theory based styles

Autocratic management style

An autocratic management style is one where the manager makes decision unilaterally and without much regard for subordinates, as a result decisions will reflect the opinion and personality of the

manager. The manager views his subordinates using the X theory.

There are two types of autocratic leaders

1. A direct autocratic make decision unilaterally and closely supervises the subordinates.
2. A pensive autocratic makes decision unilaterally but gives subordinates latitude in carrying out their work

Note: the manager find easy to make decisions, however, the quality of the decisions is low and needs a lot of close supervision to be implemented (difficult to implement)

Laissez-faire management style

This is the let it happen style management, the head of department (HOD) will sit back and allow anyone to do what they really want to do. The HOD may encourage innovations and creativity from his/her subordinates, however he/she does not provide leadership. This is the extreme view of theory Y. This management style does not instill teamwork and direction hence it is very difficult to achieve the departmental goals.

Democratic style management

The HOD allows the teachers to take part in decision making. Therefore everything is agreed upon by the majority. This management style incorporates *distributive leadership style* which distributes the power to make decisions throughout the department, sections and individuals. It is based on theory Y.

Note: The communication is extensive and the decisions made by the majority are of high quality and easy to implement because each member feels part of the team and responsible for

Contingency theory based styles

The management styles that fall under this theory view an organisation as an open system in a given environment. Thus the management of the organisation depends on the situation in terms of the competing values and other variables. The competing values in the management of an organisation or department are:

- Decentralization Vs centralization,
- Expansion and change Vs consolidation and continuity
- Development of human resource Vs maximization of outputs
- Maintenance of the system Vs creation of competitive position of the system.

Managers must adjust their styles accordingly to the above competing values. The appropriateness of managerial actions also varies according with the following key Variables

- **Size.** Problems of coordination increase as the size of the organization increases. Appropriate coordination Procedures for a large organization will not be efficient in a small organization, and vice versa.
- **Technology.** The technology used to produce outputs varies. It may be very routine or very customized. The appropriateness of organizational structures, leadership styles, and control systems will vary with the type of technology.

- **Environment.** Organizations exist within larger environments. These may be uncertain and turbulent or predictable and unchanging. Organizational structures, leadership styles, and control systems will vary accordingly.
- **Individuals.** People are not the same. They have very different needs.



ACTIVITY 1.2

1. In your own view which management style is the best in managing the natural science department? Justify your answer

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1.3 Management structure of a Natural Sciences Department

The management structure of a science department shows how science teachers are organized to achieve a set of goals. Thus, the structure facilitates the co-ordination of work and teachers in order to provide control over the resources and activities within the department (Coleman & Early, 2005).

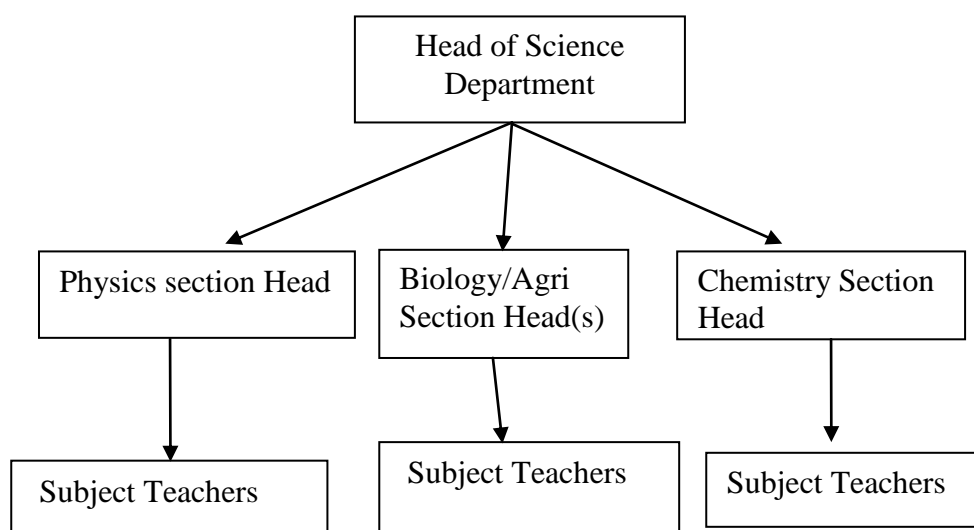


Figure 1.1 Science department management structures

The chart shows that structure is both vertical and horizontal. The vertical aspect of the structure from the HOD down to teachers represents the individual authority relationship which is referred to as line relationship or departmental hierarchy. This shows that authority flows vertically through the structure, the chain of command, from the HOD down to the head of sections and subject teachers. Horizontally it is organised into sections according to the subjects. The heads of section have lateral relationships. The heads of sections are on the same level and are there mainly to co-ordinate the activities in their respective sections.

HOD source of power and influence

It is clear from the management structure that the HOD is a formal leader; in that he/she is a member of the science department who has been given authority by virtue of his/her position to influence other members of the department to achieve departmental goals. Thus the HOD is officially bind to drive members towards departmental goals and is responsible for results or outcome of efforts at the end.

The figure below shows leaders or managers drives their power from authority, control over rewards, control over punishment, appealing personal characteristics and expertise.

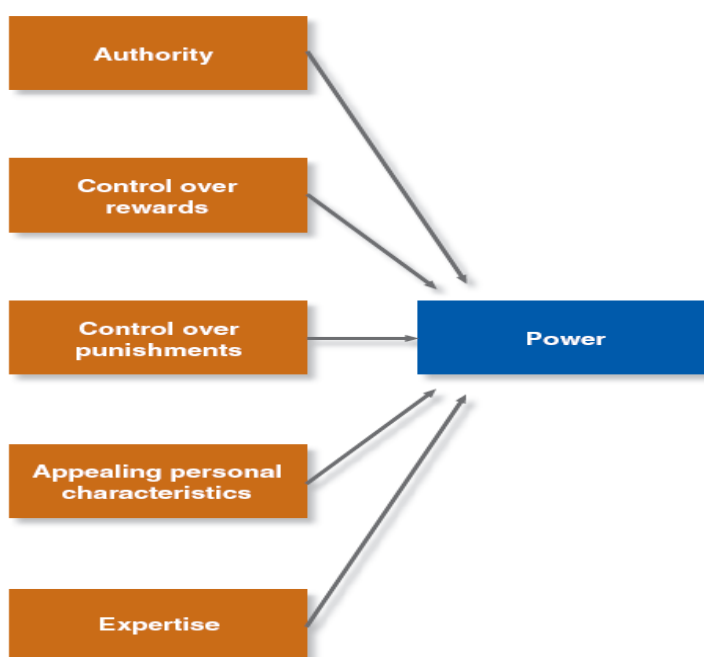


Figure 1.2 Leaders source of power and influence

An HOD is like an operations manager in an organisation his/her source power and influence should be mostly from their expertise than any other power source. This is because the HOD should have higher achievements, knowledge and skills in science in order for

him to plan, implement, control activities and inspire the science teachers to perform. He/she should lead by example.



ACTIVITY 1.3

Explain why it is important for the HOD to have his/her expertise as the main power source

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1.4 Responsibilities of the HOD of Natural Sciences

- S/he must ensure that up to date syllabuses are available in school. These are school certificate syllabi. Note that
- All primary school syllabus should be known so that they (teachers) know knowledge processed by grade 8
- S/he must ensure that teaching materials are available such as chemicals, reference materials, teaching aids etc.
- To ensure that good supply of exam materials, what a required for the exams.

- To ensure that tests, schemes of work are set/drawn on time.
- To ensure that 'marking of test is done appropriately
- To ensure that teachers write records of work.
- To chair the department meetings as often as its necessary and keep a record of such meeting in form of minutes (call for departmental meetings)
- To allocate classes to teachers.
- To supervise students on school teaching practice.
- S/he should also communicate information from pupils to teachers.
- To take care of the past exam papers (but making them accessible teachers).
- S/he also has to supervise laboratory technicians
- S/he is also responsible for the preparation of exam materials.
- Also ensures that the labs are safe.
- To take stock of equipment, chemicals textbooks at the end of the term.
- S/he ensures that repairs are done in the labs.
- The HOD liaises with other HODs in the school or with other science HODs in other schools.
- Formulate departmental policy and strategic plan on how the teaching of the subjects and other activities will be organized.
- Prepare annual report for the H/master, PED and the inspectorate.
- Carry out any other duties as required from time to time by the Headmaster.

1.4 How the HOD can develop leadership in the department

Leadership is the process of directing the behavior of another person towards the accomplishment of some objectives, it involves working with others toward achieving a shared vision, inspiring others along the way and taking personal responsibility to make things happen, the head of department can develop this in teachers through the following ways.

1. *Coaching/mentoring/guided experience.* The HOD should develop involvement plan in advising and aiding subordinate to develop effective job performance. The method involves discovery learning with support. This will be relevant to staff and it will improve collaboration between the H.O.D and subordinates, and it will also provide good feedback for H.O.D to be. This process should include action learning cycle.
2. *Delegation.* The H.O.D in the department should learn to give the subordinates specific responsibilities, authority and resources and just monitor performance. Individuals will be able to exercise real responsibility for results.
3. *Job rotation.* The H.O.D should develop a system of assigning members of staff certain positions, for a specific period of time. This will give valuable experience based on doing the responsibly assigned.
4. *Projects.* The H.O.D should learn to assign individuals or groups of individual's specific problems or opportunities with a view of producing concrete proposals in a given time span. This will generate high degree of commitment among staff, and they utilise problem solving and negotiation skills.
5. *Continuing professional development.* Provide opportunities for individuals to develop development plans

and performance bench marks, assessment tools as they develop their careers.

Delegation & Leadership

As HOD you are likely to be a more efficient leader of the natural sciences Department, if all your members of the department feel to be involved in the running of the department.

Delegation is assigning the responsibility and authority for work to others.

You should remember that

- Delegation is not participation.
 - Participation is sharing in decision making.
- Delegation includes decision making by employeehim / herself.
- Delegation is not abdication.

Delegation in six steps

After having decided what to delegate and to whom (capability, time and motivation)

1. Clarify the assignment

- What is delegated
- Expected results
- Time and performance constraints
- Subordinate decides on means, approach etc

2. *Specify the subordinate's range of discretion*
 - Agree on issues within subordinates authority and those outside
3. *Allow the subordinate to participate*
 - Allow employee to participate in determining what is delegated, responsibility, authority and accountability
4. *Inform others that delegation has occurred*
 - Create legitimacy
5. *Establish feedback controls*
 - Monitor progress
 - Early identification of problems
 - Determine controls at time of assignment
6. *When problems arise, insist on recommendations from the subordinate*
 - 'Monkey on the back'

Factors affecting delegation

- Organizational culture
- Managers characteristics
 - Perception of subordinates competences
 - Importance of the task / decision
 - Workload of the manager
 - Personal characteristics, eg afraid to give up control

What are the merits of delegation?

- Helps in reducing his/her work load so that he can work on other important areas such as planning.
- With the reduction of load, the HOD can now concentrate his/her energy on important and control issues of concern.

This way he or she able to bring effectiveness in his or her work unit.

- It enables the flow of authority throughout the department, sections and individuals. It fosters distributive leadership styles; everyone in the department feels he/she is a leader. Through delegation the supervisor – subordinate relationship becomes meaningful.
- It gives other teachers in the dept a feeling that they are part and parcel of the department. In this way, they tend to cooperate. They feel they are part of the management.
- Gives an opportunity for junior members of staff to learn how to do certain things. In this way can easily take over if the HOD is away.
- Delegation encourages creativity and innovation in that subordinates are given chance to carry out tasks in the best way they know how in order to achieve the results.

Demerits of delegation

- Some members of the department will not do the work: they either want to let the HOD down or they do not know.
- There is insecurity – if the HOD delegates the juniors might perform better. The subordinate may perform better than the HOD.
- Delegation might be wrongly done handover of power becomes quite difficult.

- Past examinations – paper
- Felt pens and marker for production of teaching aid
- Teaching aids etc
- Laboratories structure.

Human resource management

As regards to the human resource, you are expected to supervise all teachers in the science department. To be successful supervisor you should be an expert in science education with interpersonal, managerial and leadership skills that enables you to make use some the best management styles to get the best of your science teachers in achieving the departmental objectives.

Importance of teaching Practice

Teaching practice is special program designed for people training to become teachers and involves exposing the student teacher to the real classroom situation and the school as a whole. McCulloch and Fidler (1994:69), stressed; “the principle strength of school based teacher training is in the immediate and extended exposure of trainee teachers to the realities of life in school”. The main purpose of teaching practice is for the trainee to develop his/her professional competencies in terms of;

- Preparation of lesson plans
- Formulation of schemes of work
- Designing of lesson notes
- Preparing of teaching aids
- Designing and planning of laboratory and other leaning activities
- Class management
- Assessment and evaluation

In all these, the student teacher requires adequate supervision from qualified and experienced teachers.

Preparation for the Student Teacher

Preparation for the coming of the student teacher before his/her arrival involves;

- Preparation of the schemes of work
- Planning of the grade and number of classes
- Preparation for accommodation

On arrival

When the student teacher arrives, it is important that he/she is oriented properly. Orientation involves;

- Taking a tour of the school for environmental awareness
- Discussing lesson plans and teaching styles within the department
- Assigning of classes
- Discussing the departmental policy
- Arranging sessions for lesson observations
- Familiarization of the science department (laboratories, science teaching and learning equipment etc)

During Training

Before the student teacher is introduced to the actual teaching, he/she must observe other teachers' lessons. The supervision of trainees during the rest of the teaching experience has to do with helping them in a number of things that most student teachers face difficulties and these include;

- Presentation of lessons
- Preparing lesson plans
- Coming up with teaching and learning objectives
- Preparation and arrangement of apparatus/materials for practical activities
- Classroom dynamics (teaching, assessment and evaluation, discipline, gender issues etc)

Material Resources

As an HOD you are therefore, you must be aware of the number of the materials available and the conditions in which they are.

It is then, very important that you should from time to time take stock of the materials available in the department. In this vein, you are expected to answer questions of this nature; how many pieces of apparatus do you have? Do you need more? In order for you to answer these questions, there is need for you to conduct an inventory.

Here is an outline which you may use for stocktaking in your

Table 1.2 Sample of stocktaking form

Item	Quantity/Unit	stock count	comment
E.g. burettes	10	10	all in excellent condition

Keep a record of whatever book or item that has been received in the department. You should also ensure that you use separate books for different items. Use one book for chemicals/gas; one book for stationary; one book for instrumental resources; one book for breakages/loaned items such as books, past papers.

Location of materials

It is quite important for you to create different compartments; one compartment for keeping one type of chemicals. The next compartment for keeping another type of chemical or item. For chemical we use “chemical inventory system” where chemicals are classified in various categories.

Arrangement of materials in the Lab

Materials in the lab can be arranged according to alphabetical order. You can also classify your apparatus/chemicals according to sections. Better still, you can sometimes arrange your apparatus according to the topic under which they fall. As a way of an example, apparatus in the laboratory can be arranged according to topic as illustrated below:

- Apparatus used for *heat experiments* should be kept in one cupboard
- Apparatus used for *experiments concerning dissection* should be kept in one cupboard
- You should also have a separate cupboard for departmental text books, past papers, journals.
- And another separate cupboard/compartiment for confidential and examination issues. This cupboard/compartiment should be under lock and key.
- Elements and their compounds can be shelved according to the following: alphabetical order, type of reactions, groups e.t.c

Collection of materials through the laboratory technicians

As HOD you have to ensure that science teachers collect materials for their use in teaching through the laboratory technician. Why do you think so? Before you answer this question, it is important to remind ourselves that you as HOD should ensure that the department has, among others, the following items:

- a stock book that should indicate items received, from who? how many? and what type of items the department has?
- A record book for items loaned out such as books
- A record book for items broken by students

In order to foster accountability in the use of material resources in the laboratory, it's necessary for a Requisition Form. That is, a

form to be used by a teacher in requesting for apparatus, chemicals for their use in practical work. Once this form has been filled in, it should be submitted to the Lab. Assistant two days before teaching. It is necessary to give enough notice of the teacher's intention of using the items in question. This notice is intended to give the lab technician:

- Enough time to prepare the apparatus and chemicals needed for the lab.
- This will help the lab, technician know where the apparatus are.
- It will assist the lab technician to know which labs are being used.
- It avoids misplacement of apparatus/chemicals.
- Lab technician know what time, period and which teachers will chemical/reagents and available lab space.

What stock is taking?

Stocktaking is a process in which you will physically verify and record the amount and condition of science items that available in the laboratory at any given time. This means, identifying every item on hand, counting it and summarizing these quantities by item. This is important because of the following reasons:

- To find out what is missing and what can to be brought (It reveals which chemical or apparatus (resources) we should order).
- To see whether there is something that is expired
- To see/check what is there/not there
- To see/check items that have expired
- What is finishing or running out quickly and therefore to come up with what is urgently needed (when, how)?
- Who is stealing chemicals or apparatus?

- Ultimately are you able to account for everything missing?
- Management of change
- Change is a shift from the usual/current state of affairs.
- You should carefully manage change
- Adjust to change so to play an active role/part in facilitating or promoting it.
- To use his/her ability to change
- According to developing aspirations.
- For accurate inventory valuation,

Management of practical examinations

Management of practical examination is a very sensitive and involving aspect of management in the science department.

The head of the department should see to it that from the moment the advance copy has reached the school it should be treated with Confidentiality.

- The HOD should make sure that reagents, materials that are needed for the examinations are available and tested well in time to avoid inconveniences during the practical examinations.
- The HOD should carry out the experiments two days before the day of the examination so that they know if the reagents are okay.
- The HOD should be at the focal point in the preparation of the practical examination for they are subject specialists in their particular fields

Unit summary



Summary

In this unit we discussed the management of natural science department. The HOD is both a leader and a manager for the natural science department he/she should used the best management styles that encourages the participation of the science teachers in the running of the department. The Management the department involves managing human, material resources all academic activities

Assessment



Assessment

1. What is meant by "delegation of responsibilities"?
2. Discuss the merits of delegation in the running of science department
3. Discuss the three core roles of the head of science department

Unit 2

Communication

2.0 Introduction

Welcome to unit 2, in this unit we will discuss communication and the importance of effective communication in the management of the natural science department.

During and upon completion of this unit you will be able to:



Outcomes

- Define communication
- Discuss the characteristics of effective communication.
- Discuss the factors that affect communication
- Identify ways of communication within or outside the department.

2.1 Meaning of Communication

Communication is generally regarded as transmission or flow of information from one source to another, and is important in the management of the natural sciences department. The head of department needs to exhibit good communication skills for coordination and assigning of tasks, delegation of duties, reporting, etc, if the department is to work effectively. The HOD should know what, when to communicate, and to whom. Thus the communication process involves the following:

- Sharing information, ideas and attitudes in ways that produce an understanding between two or more people
- A relational process during which sources transmit messages using symbols, signs and contextual clues to express meaning, to have receivers construct similar understandings and to influence behavior

The main concepts in communication

- Sender (distributes the message)
- Message (cues or symbols representing ideas, information etc)
 - Verbal
 - Non-verbal
- Receiver (destination of the message)

The creation of meaning

- Words and other symbols do not have inherent meaning
- Meaning occurs when the receiver interprets the words and other symbols
- Process of meaning constructions is influenced by e.g.:
 - Stereotyping
 - Poor message construction
 - Past experiences
 - Attentiveness
 - Selective perception
- Feedback is response from receiver providing knowledge about meaning / impact and creates opportunity to correct any problems

Communication skills

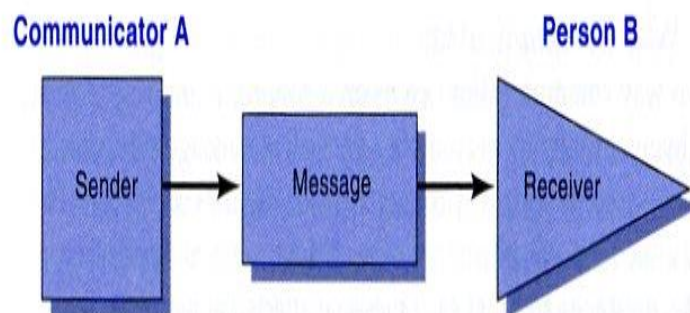
- Sending skills
 - Explicit awareness of goals of communication
 - Design of communication strategy
 - Being able to use and combine different media
 - Knowledge about the subject of the message
 - Verbal and non-verbal skills (language, self-control)
- Listening skills
 - Attending
 - Questioning
 - Encouraging
 - Paraphrasing
 - Reflecting feeling
 - Summarizing
- Feedback
 - Combination of sending and listening skills
 - Be open for feedback
 - Explicitly seek feedback

Other factors influencing effectiveness of interpersonal communication

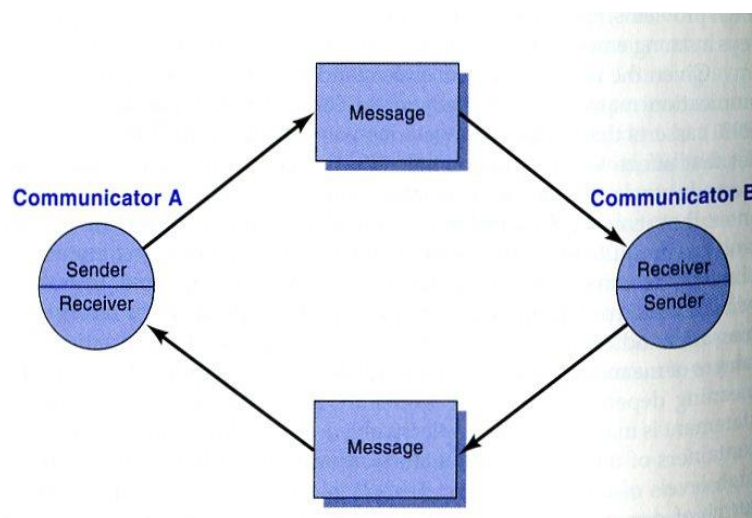
- Congruence of verbal and nonverbal messages
- Credibility of the source
- Cognitive capacities
- Noise or barriers in the context

Communication might be one way or two way process

One way communication



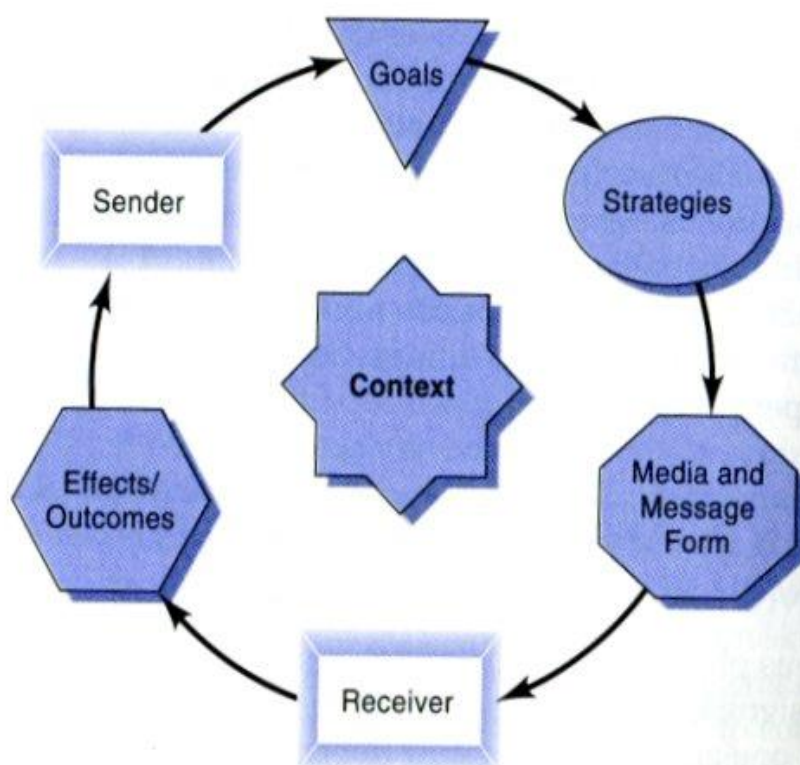
Two way communication



Two way forms of communication

- Conversation (face to face, phone call, meeting etc.)
- Inquiry
- Debate
- Instruction

Elaborated model of communication process



- *Goals (objective of the sender)*
- *Strategy (how, when, context etc)* There are three basic modes of communicating; verbal, written and sign language. The content, recipient, context and medium dictate the mode to be used. However, the nature of content to a high extent determines the mode of communication to be used. For instance, ‘written’ mode of communication should be used when dealing with sensitive information. Cole (2004:223), also argued on the same that “written forms of communication are less susceptible to misinterpretation and, being visible, are less easy to deny, or qualify than oral”
- *Media (channel used for transmitting the message)* This involves the means of transmitting information, and they

include meetings-both formal and informal-, notice boards, pigeon holes, minutes of meetings, phones, emails, reports and many others. Meetings can be held for review, planning, discussion or decision making.

- *Form* (actual content of the message as transmitted)
- *Transmission* (actual sending and receiving of message)
- *Communication* effects (outcomes or results of the message)
- *Feedback* (providing the original sender with knowledge about the effect of the message)
- *Context*



ACTIVITY 2.1

Discuss why a two way is more effective than one way communication

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2.2 Methods of Communication

Before we discuss some of the methods of communication available its better we discuss briefly how the information flows in the departmental structure vertically and horizontally

Vertical Communication

This is the flow of information in an upward or downward direction. From the structure of the department, this describes information flow from the HOD to the subject teachers through subject section heads and vice versa.

Lateral Communication

This is flow of information across the departments. Cole 2004 regards it as important for coordinating the efforts of more than one department, across section, within sections and between subject teachers. This may be formal through professional meetings or informally through interaction and peer review.

Methods of communication in the department

You should note that the importance of good communications in your department is to put the message across to the target audience. The best communication methods succeed in putting across the right message in a clear, unambiguous way to the target audience. The following are some common methods of communication in Natural Sciences department:

- Verbal
 - Oral communications
 - Written communications
 - Face-to-face communications

➤ Online communications

- Non-verbal
 - Body language or gestures
 - Physical items or artifacts with symbolic value
 - Space
 - Touch
 - Time
 - Other non-verbal symbols (intonation, accent, intensity etc)

Oral communication; Exchanging information verbally through briefings, meetings and interpersonal interaction (face-face) or through electronic device. Let us now look at some of the advantages and disadvantages of this mode of communication.

Merits

- As cost effective, very cheap
- May lessen tension (allows most misunderstandings to be resolved immediately)
- You know the face – expression of the people receiving the message (whether the message is popular) except if one communicates orally by phone).
- You get the feedback.

Demerits

- It depends on the way the message is communicated.
- Those who will not be around at that time will not get the message.
- Teachers may not remember the entire message for future reference.
- Members of staff may not pay attention to what's being said.

- HOD must have good communicate, skills.
- Human beings have a great capacity for hearing what they wish to hear as contrasted with what was actually said.
- HOD must have good communication skills.
- Human beings have a great capacity for hearing what they wish to hear as contrasted with what was actually said.
- Words must be articulated clearly and words be chosen carefully.
- Words must be spoken slowly than in personal conversation.

Written communication: This when the HOD shares the information through written text through memos, notices, minutes of the meetings. He or she may pass this information by physically passing on the written text to the members of the department, make use of the notice board, online or cell phones/tabulates.

Merits

- The information is easily stored by the members for future reference
- The sender of the information has humble time to think through the message to be communicated
- Written circulars, Memos, Newsletters have the advantage of providing clear statements that is likely to reach its intended recipient



Note!

The written message must be simple, clear, brief, relevant and related to the vocabulary of the recipient. (Whatever type of communication the school has adapted, it must be clear to all concerned if it is to enhance the efficient running of the department)

Demerit

- You need time to write the message
- the recipient does not get the instant clarification if the message is not clear
- the sender does not get the feedback immediately as the recipient might decide to read the message later or send the feedback at his or her convenient time
- the recipient might not see the message in time



ACTIVITY 2.2

1. What type information that usually follows vertically and horinzotally in the department

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2. Discuss the strength of face to face communication

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Let us now discuss the departmental meeting, as manager you need to plan and conduct departmental meetings.

2.3 Departmental Meetings

Departmental meetings are formal meeting in which the department discusses the management and academic issues concerning the department. The meeting, therefore, serves to:

- Inform teachers
- consult teachers
- Review a policy or departmental strategic plan
- Discuss a programme of actions.

Some staff meetings are scheduled. That is, they are planned at the beginning of the term, while others are called at short notice, if they are emergency cases. Meetings generally imply a planned arrangement for staff to get together to exchange, to solve a problem at hand. Meetings are for the purpose of good communication.

Purpose of departmental meetings

As HOD, you will hold meeting for various reasons. Below are some of the reasons:

- Meet to discuss performance issues in the department.
- Avenue to review examination results
- Planning of schemes of work and departmental strategic plan
- Class allocation, time tables, discussion etc
- The coming together of a group of people may serve to confirm their existence as a team and indeed may strengthen staff unity.

Preparations for a meeting

A large part of what makes a meeting successful occurs in the preparation phase. As HOD you have to do the following before holding a departmental meeting:

- You must be convinced there is need to hold a meeting (what do you hope to achieve at the end of the meeting?)
- You should create/make an agenda for the meeting. A good staff meeting should have a well prepared agenda.
- You must circulate the agenda at 24 hours before the meeting. This is necessary to give members time to consider the business under review and possibly consult those they may represent
- You should always circulate supporting materials to participants in advance of the meeting (Provide enough information before the meeting so that would be attendants arrive with a general familiarity and framework of the issues to be discussed. It is a good idea to allow the members to contribute to the agenda of the meeting)
- Communicate the duration of the meeting. How long will the meeting take and the time the meeting will start should be known
- Ensure that room arrangements (including refreshments) are made. Room arrangements can make a big difference in how well a meeting goes or doesn't go. Most important is that participants can see and hear each other.
- Determine who should attend the meeting



Note!

An agenda is a list of items or issues to be addressed during the meeting. Agendas are like roadmaps, blueprint or plan that guide and support the meeting. They help attendants to stay focused during the meeting so that the desired outcomes are achieved at the end of the meeting. It can therefore be noted that a good agenda items provide focus and structure for a meeting

Sample of agenda.

Agenda for Natural Sciences departmental meeting

- Adoption of the agenda
- Apologies for absence
- Opening remarks the chairperson (HOD)
- Approval of minutes from the previous meeting
- Reports
- New business (Issues to be addressed in the meeting) e.g. review of grade 9 and 12 performance at final exams.
- AOB.
- Date and time of the next meeting
- Closing remarks by the chairperson (HOD)

Meeting rules: Phone on silent mode; No audio or video recording allowed by attendees. If attendees become disruptive, they may be expelled from the meeting and fined.



ACTIVITY 2.3

Discuss the pros and cons of allowing the members of the department to contribute to the agenda of the departmental meetings

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Chairing a meeting

From experience, you might have observed that effective chairing will ensure that a meeting achieves its aims and objectives. As a Chairperson you will be expected to facilitate, encourage, focus and clarify issues at the meeting (Convince members of staff by giving them adequate reasons.) The success of a meeting, therefore, largely depends on the skills of the HOD (chairperson).

Responsibility of a chairperson

One of the most important roles of the Chairperson is to ensure that the objective(s) of the meeting are achieved. A good Chair will be mindful of the following basic points:

- Appoint a secretary to take down the minutes.
- When presiding at a meeting, the chairperson is responsible for its conduct and it's up to him or her to see to it that the meeting is properly conducted and that order prevails.
- His or her authority is almost absolute, so it would be appreciated that s/he would know how to use the authority to the best advantage of the department.
- Ensure that every member of staff contributes to the discussion. (The extent to which the staff will participate in the discussion or contribute towards the meeting will depend on the manner the HOD chairs the meeting).
- S/He would have respect for views of the staff even if some may have different point of view.
- Ensure that one topic does not take a lot of time. (Once the agenda is drawn. It should be followed so that the meeting ends in time for the others to attend to other duties)
- Long and boring meetings are a waste of time and only reflect badly on the HOD's performance as time manager. Meeting should therefore be brief, purposeful and conclusive.
- Protect weak members of the dept.
- Summarize decisions taken during the meeting.

Minutes

Minutes are an official accurate but condensed record or summary of the key discussion points that occurred during a meeting and any conclusions stated, or decisions made at a meeting or hearing. That is, they typically describe the events of the meeting, starting with a list of attendees, a statement of the issues considered by the participants, and related responses or decisions for the issues. And it's the duty of the secretary to make this record.



Note!

*Once there is good communication, in the department, the staff will know what they are supposed to do, where to do so, why and how to perform their duties.
This should enhance staff discipline a great deal.*

FILING

The importance of record-keeping and filing systems is very important in the management of science department. A well-planned system contributes significantly to efficiency running of the department. Whether records are filed in a computer or in a steel cabinet, they have to be readily accessible. As HOD you will be getting corresponding form the Headmaster and from other departments within the schools.

Filing systems utilize one of the following methods:

- Alphabetical
- Numeric
- Geographic
- Subject
- Chronologic

Types of filing

We should familiarize ourselves with the types of following filing:

- Confidential filing
- Open file

Confidential filing

These are files which contain confidential information such as recommendations, disciplinary action against a teacher. They also include Advance information for exam. (issues related to the exams). These documents must kept under lock and key. Therefore, only the HOD must have access to them.

Open file

These are files which contain non confidential materials. This file may have documents such as:

- Past papers
- Stock taking
- Repair
- Correspondence from other departments
- Issues on lab (lab issues).
- Minutes of the department meeting

Unit summary



Summary

In this unit we discussed that Communication is generally regarded as transmission or flow of information from one source to another, and is important in the management of the natural sciences department. The head of department needs to exhibit good communication skills for coordination and assigning of tasks, delegation of duties, reporting, etc, if the department is to work effectively. The HOD should know what, when to communicate, and to whom. Communication is a key component of management without it is very difficult to achieve team work.

Assessment



Assessment

1. State the things you need to observe for communication to be effective
2. Describe at least 3 directions of communication
3. discuss how non verbal communication compliment the face-to-face communication
4. Why is it that communication is very important in the delegation process

Answers to Activities and Assessments

- **These have NOT been provided due to the descriptive nature of most the answers in this module**
- **If you are not sure of the answer go back and study the section of the unit where the question came from, You will definitely find the answer there.**

Readings

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