Initial Primary Teacher Education

Education foundation studies

Module 5

Malawi Institute of Education

Initial Primary Teacher Education

Education foundation studies

Module 5

Foreword

Education is the lifeblood of the nation. It is a prerequisite for individual, community and national development. Education prepares learners to play their roles effectively to promote and sustain a country's socio-economic development. Parents or guardians desire that their children develop into adults with sound minds and healthy bodies through the acquisition of appropriate knowledge, skills and desirable attitudes to enable them to live productive and happy lives.

Education should, therefore, help learners to develop high standards of conduct, attitudes, judgment and a sense of responsibility. Student teachers have to be well prepared in order to be able to take this responsibility of teaching children effectively.

The provision of quality education is based on many factors and a good quality of teachers is one of them. Teachers play a central role because they are the key source of knowledge, responsible for facilitating the learning process and act as role models for the learners.

The function of initial primary teacher education in Malawi is to prepare student teachers in their aspiration of becoming teachers of high quality. This is achieved by helping the student teachers to acquire the right knowledge, skills and competences to enable them to effectively teach children. In view of this, the Initial Primary Teacher Education curriculum has been reviewed to ensure that student teachers who graduate from this programme are well trained and prepared for their profession.

The process and implementation of this review has been guided by the Teacher Education Philosophy which states as follows:

"To produce a reflective, autonomous, lifelong learning teacher, able to display moral values and embrace learners' diversity."

It is therefore hoped that Teacher Training Colleges will find this curriculum effective in helping the student teachers to build a solid foundation in their teaching profession.

Executive Director
Malawi Institute of Education

Acknowledgements

Writers

Lillian Sankhulani (PhD)	-	Malawi Polytechnic
Rabecca Makanga	-	Blantyre Teachers' College
Edward K Kalua	-	Karonga Teachers' College
Sr Jaini Thomas	-	St Joseph's Teachers' College
Gentry Chipeta	-	Machinga Teachers' College
Foster B Magombo	-	St Joseph's Teachers' College
Hasten Zakeyu	-	Montfort Special Needs College
Valesi Gift Binali	-	Domasi College of Education

Contents

Introduction

The purpose of primary teacher education is to produce and continually develop competent and responsive teachers who effectively deliver quality education to all learners under the prevailing conditions and demands in primary schools and promote their desire for life-long learning. IPTE endeavors to educate teachers in sufficient numbers, continually develop their professionalism so that they are able to effectively and efficiently deliver quality and relevant education to primary school learners.

National goals for primary teacher education

The national goals of primary teacher education in Malawi are to produce teachers who are:

- academically well-grounded and professionally competent
- flexible and capable of adapting to the changing needs and environment of the Malawian society
- capable of adhering to and maintaining the ethics of the teaching profession, imaginative in adapting, creating and utilising locally available resources suitable for the needs of their learners.

Rationale

Foundation studies will equip student teachers with the necessary knowledge, skills and attitudes to carry out their role of facilitating learning of the primary school learner. To teach effectively, student teachers must study the origins and development of the primary school curriculum and understand their role in its implementation through appropriate management of the teaching, learning and assessment processes at school level.

Teacher education philosophy

The following has been the guiding principle during the design, development and implementation of the IPTE curriculum.

To produce a reflective, autonomous, life-long learning teacher, able to display moral values and embrace learners' diversity.

IPTE programme structure

The duration of the teacher education is two years. The general outlook of the two years is as follows:

Year 1			Year 2		
Term 1	**Term 2**	**Term 3**	**Term 1**	**Term 2**	**Term 3**
In college, learning subject content with a special focus on methods for lower classes	In college, learning subject content with special focus on methods for upper classes	Out in teaching practice schools, practising teaching mainly in the lower classes	Out in teaching practise schools, practising teaching mainly in the upper classes	In college, with special emphasis on reflection, inclusion and further practice on teaching methods	In college, with special emphasis on subject content, policies and frameworks

Unique features

The features of the reviewed curriculum are as follows:
- The curriculum design is based on reflective and practice principles.
- Early grade teaching methodologies are distinct.
- The delivery of the subject content follows the modular approach.
- Student teachers will be allowed to practise teaching both at the lower classes (Standards 1 to 4) as well as at the upper classes (Standards 5-8).
- Cross cutting issues such as Assessment for Learning, Information Communication Technology, Inclusive Education and Critical Thinking are integrated.

IPTE subject matrix

The new curriculum has adopted the reflective practitioner model of teacher education which connects practice and theory and integrates content and pedagogy in teaching and learning. In this structure, student-teachers will be in college for two terms of year 1 and be in primary schools for teaching practice in the third term of first year and then first term of the second year. Student teachers will be back in college terms 2 and 3 of year 2 to continue learning subjects content, reflecting on their experiences of teaching practice and then wind up their studies.

This curriculum is designed in a modular structure and contains eleven subjects. These are Chichewa, English, Mathematics, Education Foundation Studies, Agriculture, Social Studies, Life Skills, Science and Technology, Expressive Arts, Religious Studies and Human Ecology. In this modular design, a set of topics forms a module in a subject. A module consists of 40 hours of contact time.

Summary of topics for the term and time allocation

Term 1		
Topic	**Allocated time in hours**	**Core element**
Reflection on experiences in the use of teaching skills	7	Learning and teaching
Reflection on experiences of using a variety of teaching and learning methods	7	Learning and teaching
Reflection on development and use of teaching and learning resources during teaching practice	8	Learning and teaching
Reflection on own schemes of work, lesson plans and records of work	7	Learning and teaching
Teaching and Managing large classes	5	Learning and teaching
Cognitive child development	10	Learning and teaching
Reflection on assessment after teaching practice	5	Assessment for learning and assessment of learning
Accessing information from the internet for teaching, learning and assessment purposes	2	ICT as a tool for teaching and learning
Internet for communication in teaching, learning and assessment	2	ICT as a tool for teaching and learning
Teaching, learning and assessment using spreadsheet application	4	ICT as atool for teaching and learning
Teaching, learning and assessment using presentation application	3	ICT as a tool for teaching and learning
Total	60	

Time 7 hours

Introduction

Welcome from teaching practice where you had a chance to teach at lower and upper primary. The experience and knowledge gained will prepare you to become an effective teacher. In this term you will mostly be reflecting on the experiences you had during teaching practice. You will be reviewing, analysing and evaluating experiences in order to improve your teaching. In this topic you will identify your own strengths and challenges in the use of teaching skills, and ways of improving the challenges as part of reflection. The appraisal guides of each teaching skill will be used for the self-evaluation. You will share those experiences with each other as a way of life-long learning. The experiences and knowledge gained will prepare you to become an effective teacher.

Success criteria

By the end of this topic, you must be able to analyse own strengths and areas for improvement in the use of teaching skills at lower and upper primary.

Background information

During your teaching practice you used a number of teaching skills such as skills of planning, introduction, questioning, chalkboard use and reinforcement. As you reflect you need to consider how effectively you used the various teaching skills and how they contributed to the lesson delivery. It is important to evaluate yourself as a teacher as this will help you to grow personally and professionally.

Note that even qualified teachers with a lot of experience evaluate themselves. Therefore reflection is part of continuous professional development of a teacher.

Tasks

Task 1 Analysing own strengths and areas for improvement in the use of teaching skills at lower and upper primary

During teaching practice you applied teaching skills that you learnt in year 1 term 1 and 2. In this task you will evaluate own strengths and find ways of improving the challenges you experience.

Activity 1 Evaluating own use of teaching skills at lower and upper primary (1 hour)

1   Assess your own performance concerning the use of each teaching skill at the lower and upper primary in the table below:

Teaching skill	Level	Needs improvement	Satisfactory	Good	Excellent	Remarks
Planning	lower					
	upper					
Introduction	lower					
	upper					
Explanation	lower					
	upper					
Illustration	lower					
	upper					
Questioning	lower					
	upper					
Variation	lower					
	upper					
Chalkboard use	lower					
	upper					
Reinforcement	lower					
	upper					
Class Management	lower					
	upper					
Closure	lower					
	upper					

2   analyse your experiences at both lower and upper primary.
3   In pairs, share your experience on what you encountered.
4   Report in plenary.

Activity 2 Discussing the strengths and areas for improvement (1 hour)

1   From activity 1, select the skills which were most challenging to you.
2   Describe the challenges and ways of overcoming them.
3   Share your experience in pairs.

Activity 3 Searching information on teaching skills (2 hours)

1   Search information on teaching skills which you had challenges with during teaching practice using internet or the library.
2   Write a typed report on what you found.
3   Make a presentation from your findings.

Activity 4 Practicing teaching skills through micro-teaching (3 hours)

1   Develop a lesson plan and incorporate the challenging skills.
2   Practise teaching skills with a focus on the challenging skills.
3   Conduct feedback session on the micro-lessons to see how you have improved on the challenging skills.

Tips
- Teaching practise files, supervision forms and School Experience Journals should be available.
- Tell student-teachers to use the appraisal guides for each teaching skill and look at each element of the teaching skill when evaluating themselves.
- Explain to students on the importance of self-evaluation for continuous professional development.
- You could use walk around talk around or Authors chair for reporting the activities.
- Micro-teaching should focus at both lower and upper primary.
- Practising teaching skills could either be done by full lesson presentation or by demonstration of a specific teaching skill by student-teachers.

Reflection and assessment
Self-assessment
- If you were given another chance to teach, how different would you use teaching skills after reflecting on your experience from teaching practise?

Topic assessment
- What are the benefits of self-assessment on teaching skills?

References

Kyriacou, C (2007). *Essential teaching skills*. (3rd edition). Cheltenham: Nelson Thornes.

Malawi Institute of Education (2014). *Ways of teaching skills and ideas for student teachers*. Domasi: Malawi Institute of Education.

Ministry of Education (2009). *IPTE ODL Module for foundation studies.* Lilongwe: DTED.

Ministry of Education (2007). *Education foundation studies tutors book. Initial Primary Teacher Education.* Domasi: Malawi Institute of Education.

Ministry of Education (2007). *Education foundation studies students' book. Initial Primary Teacher Education.* Domasi: Malawi Institute of Education.

Reflection on experiences of using a variety of teaching and learning methods

**Time** 7 hours

Introduction

In year 1 terms 1 and 2, you learnt about teaching and learning methods. You applied what you learnt during teaching practise. In this topic, you will reflect on experiences about teaching and learning methods you applied during your teaching practise period. You will analyse strengths and areas that require improvement in using the methods. The knowledge you will gain in this topic will help you to increase your understanding in using different methods at lower and upper primary for effective delivery of lessons.

Success criteria

By the end of this topic, you must be able to evaluate teaching and learning methods used during teaching practise.

Background information

During teaching practise you had the opportunity to teach learners in real life situations. You had a two class experience of teaching at lower and upper primary. Your experiences are very valuable. You used several teaching and learning methods which you learnt during terms one and two that promote critical thinking in learners such as jigsaw, ball bearing and author's chair. Some of the methods were easy to use while others were challenging. Some of the documents that should help you to reflect on your experiences on the teaching and learning methods are schemes and records of work, lesson plans and your School Experience Journal.

Tasks
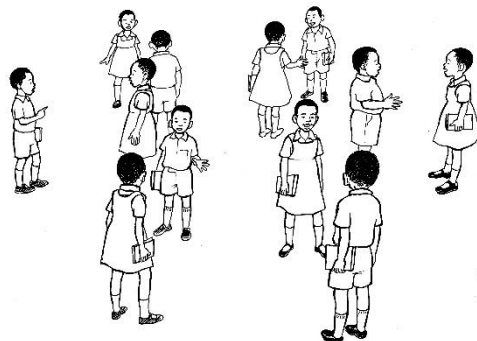
Task 1 Evaluating teaching and learning methods used during teaching practise

Teaching and learning methods provide means for content delivery. In this task you will evaluate the use of the methods during teaching practise.

Activity 1 Analysing own strengths and areas for improvement in the use of teaching and learning methods (1 hour)

1   Tick against the method you used during teaching practise.
2   Indicate which methods you used at lower and upper primary.
3   Give reasons for choosing the methods (You may include other methods not on the list).

Method	Tick	Level		Reason for choosing the method
		Lower	**Upper**	
Pair work				
Think-pair share				
Think ink pair share				
Role play				
Quick write				
Debate				
Jigsaw				
Explanation				
Question and answer				
Demonstration				
Games				
Mix freeze pair				
Walk around talk around				
Story telling				
Singing a song				
Ball bearing				
Brainstorming				
Card collection/ clustering				
Bus stop/work stations				
Group work				
Other methods				

4 Which methods were challenging you? Why?
5 Discuss with your partner how you could improve the challenging methods?
6 Share your work in plenary.

Activity 2 Discussing the appropriateness of the methods they used at lower and upper primary (1 hour)
1 Explain the method you considered suitable for use at:
   a) Lower primary.
   b) Upper primary. Justify.
2 Share in plenary.

3 How did you cater for diversity of learners in your teaching and learning methods?

Activity 3 Observing appropriate use of teaching methods used at lower and upper primary (2 hours)
1 Observe a lecturer teaching using the challenging teaching methods identified in activity 1.
2 Record your observations using the checklist below.
3 Share your observations during feedback session.

Activity 4 Improving the use of teaching methods through micro-teaching (3 hours)

1   Prepare a mini lesson in which you will use challenging methods identified in activity 1.
2   Present the micro lesson.
3   Evaluate the lesson by using the checklist.
4   Give feedback to each other.

Stage of lesson	Method used	Clear instruction		Procedure followed		Remarks
		Yes	No	Yes	No	
Introduction						
Development of lesson						
Conclusion						

Tips
- For Activity 1, pairs should join and consolidate their work on flip charts for gallery walk.
- Make sure you prepare in advance on lessons that require practical work in class.
- Model the challenging methods at lower and upper primary.
- In activity 4, ensure that more students are involved in micro-lessons.

Summary
In this topic, you have reflected on teaching and learning methods. You have identified the methods which were easy to use and those that were challenging. You had a chance to analyse the methods that were challenging through discussions, observing modelled methods and you practised them to ensure that you understood them. This has helped you to improve on your teaching using different methods.

Reflection and assessment
Self-assessment
- Explain the factors that will make you to change teaching method in the process of teaching and learning.
- Many teachers do not reflect on their teaching during and after the lesson. What are the disadvantages of this practise?

6

Topic assessment

Which teaching and learning methods are suitable at lower and upper primary? Give reasons for your answer.

Reference

Malawi Institute of Education (2013). *Critical thinking sourcebook for Malawi*. Domasi: Malawi Institute of Education.

MacMillan, H (2008*). Student self-evaluation: the key to stronger motivation and higher achievement in education.*Horizons. Vol.87, pp40-49: available under http//files.eric.ed.goo/fulltext/EJ 815370.pdf

UNESCO (2006). *Practical tips for teaching large classes: a teacher's guide*. Bangkok: UNESCO.

TOPIC 3   Reflection on development and use of teaching and learning resources during teaching practise

Time 8 hours

Introduction

During teaching practise you used different teaching and learning resources at upper and lower primary. You developed an understanding on how to develop and use teaching and learning resources. In this topic, you will reflect on your experiences of developing and using teaching and learning resources. This knowledge will help you to improve use of teaching and learning resources effectively in meeting learners' diversity.

Success criteria

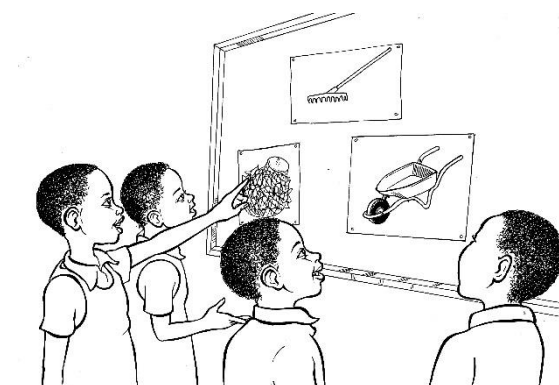By the end of this topic, you must be able to:

- analyse the appropriateness of the teaching and learning resources developed during teaching practise
- evaluate yourself on utilisation of teaching and learning resources

Background information

During the teaching practise, you were encouraged to demonstrate resourcefulness. You analysed your local environment and identified resources that you developed out of locally available materials and incorporated it into your teaching. Good resources make a difference in the nature and quality of lessons.

With this understanding in mind, you can recall your experiences while teaching at lower and upper primary. You have the idea about how the resources might have influenced your teaching and learning in meeting needs of all learners.

In this topic you will reflect on how you used different teaching and learning reosurces at lower and upper primary.

Tasks

Task 1   Analysing the appropriateness of the teaching and learning resources developed during teaching practise

During teaching practise, you developed and used different teaching and learning resources. This task requires you to analyse the teaching and learning resources you developed.

Activity 1   Reflecting on the teaching and learning resources used during teaching practise (1 hours)

1 Describe the resources that you developed during teaching practise at lower and upper primary.
2 Explain:
   (i) the strengths you encountered in developing the resources
   (ii) the challenges you encountered in developing the resource
3 How did you overcome the challenges?
4 Share your experiences to the class.

8

Activity 2 Analysing the appropriateness of teaching and learning resources developed during teaching practise (2 hours)

1 Display some of the resources you developed during teaching practise.
2 Categorise the resources displayed into those suitable at lower and upper primary.
3 Were the resources appropriate for the learning needs of children at lower and upper primary? Explain.
4 Share your exeperiences with the class.

Task 2   Evaluating own utilisation of teaching and learning resources

Developing teaching and learning resources is one thing and using them is another. In this task, you will evaluate yourself on how you used teaching and learning resources during teaching practise.

Activity 1 Analysing own strengths and areas for improvement in the utilisation of teaching and learning resources (1 hour)

1 Discuss with your partner how you used some of the teaching and learning resources that you mentioned in activity 1.
2 How did the teaching and learning resources you developed help you to achieve your success criteria?
3 What challenges did you encounter during the utilisation of the teaching and learning resources?
4 Explain how you overcame the challenges.
5 Share your ideas with the whole class.

Activity 2 Identifying own learning needs on development and utilisation of teaching and learning resources (1 hour)

Using different teachers' guides or learners' books at both lower and upper primary school:

1 Identify topics that were easy to find or develop teaching and learning resources on. Give reasons why it was easy.
2 Identify topics that were difficult to find or develop teaching and learning resources on . Give reasons why it was difficult.
3 Develop a resource for a topic that was difficult for you to identify its teaching and learning resource.
4 Prepare a micro-teaching lesson.
5 Conduct a micro-lesson using the developed resource.
6 Give feedback to each other.

Activity 3 Observing a lesson on the appropriateness of teaching and learning resources for learners with diverse needs (1 hour)

1 Develop a typed checklist focusing on learners' diverse needs.
2 Observe a lesson by your lecturer focusing on resources that cater for the learners diversity using a checklist.
3 Record your observations.
4 Discuss the observations with a partner.
5 Share to the whole class.

Activity 4 Analysing appropriateness of teaching and learning resources for learners with diverse needs (2 hours)

1 Identify a topic in any learning area at primary school curriculum.
2 Develop a resource that could be used to teach the identified topic in order to cater for learners with diverse needs.

3. Plan a micro lesson that caters for a class with diverse learning needs.
4. Demonstrate how the reasource could be used.
5. Discuss the appropriateness of teaching and learning resources for learners with diverse learning needs.

> **Tips**
> - Encourage students to make an in-depth assessment of their teaching practise on the use of teaching and learning resources.
> - Consultations may assist student-teachers in identifying the best resources that can accommodate learners' diversity.
> - Students should bring teaching and learning resources from the teaching practise.
> - Encourage students to choose different topics, activities and classes of primary school syllabus.
> - Give students time to develop resources.
> - The tasks can be done using methods such as: One stay three astray, individually, mix-freeze pair or in groups depending on available time.
> - Students should prepare mini lesson thoroughly
> - Some tasks may not only be done during class time. Encourage students to continue discussions out of class.
> - Modelling of a lesson for activity 3 could be done at a primary school.

Summary

In this topic, you made reflection and analysed the appropriateness of teaching and learning resources you developed and used during teaching practise. You were encouraged to use suitable teaching and learning resources that promote learning for diverse learners.You also analysed topics and learning areas that challenged you in identifying teaching and learning resources. You gave reasons for the challenges and provided solutions to them. This topic has helped you to improve your knowledge and skills in developing and using teaching and learning resources suitable for learners with diverse needs.

Reflection and assessment
Self-assessment

- What factors did you consider in preparing teaching and learning resources for teaching and learning at both lower and upper primary?
- How were different teaching and learning resources important to inclusive classrooms during teaching practise?

Topic assessment

- Why is development and utilisation of resources an important area in teaching profession?
- How can schools assist in development and provision of teaching and learning resources to support inclusive education?
- Why do some teachers fail to develop and use teaching and learning resources?What would be your advice to such teachers?

References

Cooper, R (2010). *Those who can, teach (12thed.)*. Boston, MA: Wadsworth, Cengage Learning.

Denham, SM (2015). *Teaching children and young people with special educational needs and disabilities*. London: Sage Publications.

DTED (2012). *Improved teaching and learning: using in learner centred concepts and methods*. Lilongwe: DTED.

Gagne, RM, Wager, WW, Golas, KC & Keller, JM (2005). *Principles of instructional design (5thed.).* Belmont, CA: ThomsonWadsworth.

Hatie, J & Yates, G (2014).*Visible learning and the science of how we learn.* London: Routledge

InWent (2008). *Learner-centred education: approaches to successful classroom teaching and learning.* Bonn: InWent.

Mayesky, M (2009). *Creative activities for young children (9thed.).* Belmont, CA: Delmar Cengage Learning.

McKeachie, WJ & Svinicki, M (2006). *Teaching tips: strategies, research and theory for college and university teachers.* Boston: Houghton and Mifflin Company.

MIE, (1987). *A handbook for teaching practise: a guide for student teachers and supervisors.* Domasi: Malawi Institute of Education.

MIE, (2007). *Initial primary teacher education programme handbook.* Domasi: Malawi Institute of Education.

MIE (2008). *Initial primary teacher education, lecturers book.* Domasi: Malawi Institute of Education.

MIE (2013).*Year two IPTE School Experience Journal for Term 3.* Domasi: Malawi Institute of Education.

MIE, (2014). *Ways of teaching: Skills and ideas for student teachers (1sted.).* Domasi: Design Printers.

Ministry of Education (2010). *Initial primary teacher education through Open and Distance Learning; Foundation studies, Module 2.* Lilongwe: Design Printers Ltd.

Ministry of Education (2014). *TTC management handbook.* Lilongwe: DTED.

MoEST (1998). *Malawi integrated in-service teacher education programme, student teacher Handbook 1.* Lilongwe: TDU.

Price, KM & Nelson, KL (2007). *Planning effective instruction (3rded.).* Belmont, CA: Thomson Wadsworth.

Reiser, RA & Dempsey, JV (2007). *Trends and issues in instructional design and technology (2nded.).* Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

TOPIC 4 — Reflection on own schemes of work, lesson plan and records of work

Time 7 hours

Introduction
In year 1, you learnt about schemes of work, lesson plan and records of work. During teaching practise you experienced preparing and using these records at lower and upper primary. In this topic you will reflect on your teaching practise experiences in writing and using schemes of work, lesson plans and records of work. This will help you to improve on the challenges you experienced.

Success criteria
By the end of this topic, you must be able to evaluate teaching documents and records of work produced during teaching practise

Background information
An effective teacher plans his/her work in advance. Some of the documents the teacher prepares are schemes of work, lesson plans and records of work. These documents are necessary because they guide the teaching and learning process. Schemes of work provides a framework on how the teachers guides and learners books will be distributed within a term. Lesson plan is drawn from the schemes of work and they remind the teacher on what to teach.

Activities in this topic will help you to reflect on these documents and share the strengths and challenges you experienced in order to improve your teaching.

Tasks
Task 1 Evaluating teaching documents and records of work produced during teaching practise

Proper preparation of teaching and learning records are essential for effective teaching. During teaching practise you prepared schemes of work, lesson plans and completed records of work. In this task you will evaluate schemes of work, lesson plan and records of work you prepared and you will improve on areas you had challenges.

Activity 1 Analysing the strengths and challenges experienced in writing schemes of work (1 hour)
1   Exchange your schemes of work with your partner.
2   Scrutinise the schemes to identify the strengths and challenges.
3   Share with the partner.
4   Share experiences in a larger group to come up with common strengths and challenges.
5   Discuss ways of improving the challenges.

Activity 2 Analysing experiences you had on lesson plans (1 hour)
1   Exchange your lesson plans with your partner.
2   Scrutinise the lesson plans of your partner to identify strengths and challenges.
3   Share with the partner.
4   Share the experiences to the whole group to come up with common strengths and challenges.
5   Discuss ways of improving the challenges.

Activity 3 Assessing records of work (1 hour)
1   Analyse lesson evaluations your partner wrote during teaching practise.

2 Were the lesson evaluations a true reflection of the successes and challenges of a lesson? Explain.
3 Evaluate records of work you produced during teaching practise.
4 Were the lesson evaluations helpful in drawing records of work.
5 Explain the successes and challenges you encountered when writing records of work.
6 Share your work

Activity 4 Developing schemes of work and lesson plans (3 hours)
1 Develop two weeks schemes of work from one of the learning areas you had challenges during teaching practise
2 Prepare lesson plans from the schemes of work you prepared.
3 Compare the schemes of work and lesson plans you developed in this task with the one you developed during teaching practise.
4 What have you learnt from the comparison?
5 Micro teach using the prepared lesson plans
6 Evaluate the lesson presented.
7 Complete the records of work.
8 Compare your records of work with your friends.
9 Share your findings.

Tips
- Teaching records (students' file with schemes, records of work and lesson plans) should be available in order to have fruitful discussions and learn from each other.
- You could tell student-teachers who taught the same topics during the teaching practise period to compare their records.
- You can use pair work, group work, author's chair for the activities.
- Sample schemes of work, lesson plans and records of work in different learning areas should be available during lesson presentation.
- Pairs could join to form groups before presenting to the whole class.

Summary
In this topic you have reflected on the schemes of work, lesson plans and records of work you used during teaching practise. You have also looked at the strengths and analysed challenges you encountered in developing and using the documents. This knowledge will help you to improve in writing schemes of work, lesson plans and records of work.

Reflection and assessment
Self-assessment
- How could your schemes of work, records work and lesson plans help you to develop future lessons?

Topic assessment
- What is the relationship between lesson-evaluation and records of work?

References

Ministry of Education, (2009). *ODL Foundation modulel 1*. Lilongwe: Department of Teacher Education and Development.

Ministry of Education, (2007). *IPTE education foundation studies tutors book.* Domasi: Malawi Institute of Education.

Ministry of Education, MIITEP (1998). *Student teacher's handbook 1*. Domasi: Malawi Institute of Education.

Teaching and managing large classes

Introduction

During teaching practise you might have experienced handling a large class. This might have caused a lot of challenges for you. In this topic, you will reflect on such experiences and learn about teaching and managing large classes. You will look at problems associated with large classes and ways of handling them. You will also learn about aspects and factors to be considered in classroom management. You will have the opportunity to try out some of the strategies that could be used when teaching and managing large classes and analyse how effective they could be. The knowledge you will gain in this topic will help you to develop an understanding of how you can manage, organise and teach a large class.

Success criteria

By the end of this topic you must be able to:

- analyse strategies for teaching and managing large classes
- apply strategies of teaching and managing large classes

Background information

Teaching large classes can be very challenging to teachers. In Malawi, teaching large classes are a common experience as school enrolments generally far exceeds the recommended teacher-learner ratio of 1:60. This situation is as a result of an increasing demand for primary education which has not matched with the provision of classrooms and teaching staff. Consequently, the large classes pose challenges to delivery of effective instruction. But what makes a class to be considered as a large class? A large class is the one with more learners than the teacher can prefer to manage and available resources can support. In addition, if the workload for a subject or learning area is higher than normal because of the number of learners in a particular class, then it could be considered as a large class. Such classes require special skills to be managed. Therefore, it is important for teachers to consider using appropriate strategies of teaching and managing large classes.

Teaching large classes on the other hand, helps you as a teacher learn how to manage a large class. You also improve your interpersonal skills while dealing with different learners with different experiences, ideas, behaviours and other issues.

Challenges in managing large classes

The following are some of the challenges of handling large classes:

- Classes are generally overcrowded
- It is difficult to give individual help.
- It is difficult to vary activities and manage groups.
- Most of the learners who are below average or average are usually passive in class activities.
- Marking and recording learners work is difficult.

- Textbooks and other teaching and learning resources are usually inadequate for learners.
- It is difficult to cater for ability ranges of all learners.
- Questions are not adequately spread to all learners.
- It is difficult to provide feedback to all learners.
- It is difficult for the teacher to know some of the learners' background knowledge.
- It is difficult to manage distractors eg late coming, noise making
- Classroom control and management is difficult resulting into indiscipline issues eg excessive noise.
- It is difficult to prepare teaching and learning resources adequate for a big number of learners.
- It is difficult to reach out and interact with all learners especially those with learning difficulties.
- Marking difficulties leads to less exercise for learners to reduce the burden of marking.
- Lack of affection for individual learners. All learners are viewed as a whole group and it is difficult to establish personal relationship with individual learners.
- A health hazard as there is limited space for a crowded classroom and it is easy to spread infectious diseases eg flue and cough due to overcrowding.

Some strategies for teaching large classes

1 **Creating a small class atmosphere in large class setting.**
In order to achieve this, the teacher has to do the following:
   - learn names of learners
   - move around the classroom
   - interact with learners freely
   - get feedback from learners in small groups.

2 **Encouraging class participation**
This can be achieved through the following activities:
   - Dividing the class into manageable groups.
   - Plan participation of learners by choosing appropriate methods.
   - Learners have to contribute resources for the lesson.
   - Award marks for participation.
   - Make proper use of group leaders.

Tasks
Task 1 Analysing strategies for teaching and managing large classes
During teaching practise you might have encountered a situation of teaching a large class. In this task you will analyse the strategies of teaching and managing large classes

Activity 1 Reflecting on the teaching of large classes (1 hour)
1 How large were your classes at:
   (i) lower primary
   (ii) upper primary
2 Explain the challenges you faced in teaching the classes.
3 How did you deal with the challenges?
4 How did you address diverse learning needs in your large classes?
5 Share in plenary.

Activity 2 Researching on appropriate strategies for teaching and managing large classes (1 hour)
1 Interview an experienced teacher at the demonstration school or any nearby school on how they teach and manage large classes
2 Record your findings
3 Search for more information from the internet or library for informantion on the appropriate

strategies for teaching and
managing large classes

4   In groups, prepare a typed
    presentation based on your
    findings.

Activity 3   Presenting research findings on teaching and managing large classes (30 minutes)

1   Present your research findings
    using an LCD projector.
2   Hold discussions on the
    presentations.

Task 2   Applying strategies of teaching and managing large classes

Teaching and managing large classes
requires application of a variety of
strategies. In this task you will apply
some strategies for teaching and
managing large classes

Activity 1   Observing lessons in large classes (1 hour)

1   Develop an appraisal guide that
    you will use to observe a large
    class.
2   Observe a video depicting a teacher
    teaching a large class.
1   Discuss the observations recorded
    on the appraisal guide.

Activity 2   Practising strategies for teaching and managing large classes at the demonstration school (1 hour 30 minutes)

1   Prepare a lesson plan in any
    subject/learning area to be used for
    teaching a large class at the
    demonstration school.
2   Present a micro lesson.
3   Discuss the observations made on
    the lessons with the rest of the
    class.

Tips
- Reference materials on large classes should be made available in the library.
- Teachers at the demonstration school and college lecturers should be aware in advance about the plans of interviews and teaching.
- Use of ICT should be incorporated in the activities.
- There is need to consider learner diversity when planning for the activities.
- The following methods could be used: peer observation, whole class discussion and jigsaw.

Summary

The issue of large class is causing
challenges to many primary school
teachers in Malawi. As a teacher, you
have realised the negative impact of
large class size on the quality of
teaching and learning. It is for this
reason that you have to use strategies
which have great potential to facilitate
meaningful teaching and learning in
large classes. Some of the strategies
that can be used include creation of
small class atmosphere in a large class
setting, encouraging class participation
and promoting active learning just to
mention a few. Therefore, there is need
to put to practise these strategies in
large classes for the benefit of learners.

Reflection and assessment
Self -assessment

- Using your experience at lower and upper primary, compare a large class at lower primary and upper primary in terms of:
    - teaching strategies
    - challenges
    - classroom management

Topic assessment
1 How can a teacher ensure learners' participation in a large class?
2 How can a teacher build good relationship with learners in a large class?

References

MIE (2008*). Initial Primary Teacher Education (IPTE) Foundation studies lectures book*. Domasi: Malawi Institute of Education

DTED (2010*). Initial Primary Teacher Education through Open and Distance Learning (ODL)*. Lilongwe: DTED.

DTED. (2006) *A training manual for mentor teachers*: Lilongwe: DTED.

Krause, BL, Bochner, S & Duchenes, S (2003). *Educational psychology for learning and teaching.* Australia: Thomson

Tan, OS, Parsons, RD, Hinson, SL & Sardo-Brown, D (2003). *Educational psychology: a practitioner-researcher approach*. Australia: Thomson

UNESCO (2006). *Practical tips for teaching large classes. a teacher's guide*. UNESCO: Bangkok. https://en.wikipedia.org/wiki/cl assroom_management -last accessed 19/04/17

ww.jet.org.za/publications/pei-research/001704Dachslargeclasst eaching.pdf – last accessed 15/04/17

www.stats.uis.unesco.org –last accessed 15/04/17

www.bobbijokenyon.com/crm/AEU_cl assroom_management.pdf -last accessed 04/05/17

Unesdoc.unesco.org/images/0014/0014 8867e.pdf- last accessed 15/04/17

www.deta.up.ac.za/.../school/%20admi nistrators%20views%200n%20h andling20/ar last accessed 15/04/17

unesdoc.unesco.org/008/000880/088046 e0.pdf- last accessed 15/04/17

www.ntu.edu.un/portals/96/.../teachin g/%20large%20classes%20(7)pdf - last accessed 15/04/17

uis.unesco.org/sites/default/files/schoo l-resources-and-learningenvironmet-in Africa-2016-en/school-resources-and-learning-environ - last accessed 15/04/17

Cognitive child development

Time 10 hours

Introduction
In year 1, you learnt about child development and learning at lower and upper primary. This was to enable you handle learners and prepare teaching, learning and assessment activities appropriate for their developmental stages. In this topic, you will learn about cognitive changes in children. You will not only be introduced to the theories of cognitive development, but also explore the implications of such theories to the teaching, learning and assessment. This knowledge will enable you to identify appropriate teaching methods and activities in relation to children's level of cognitive development.
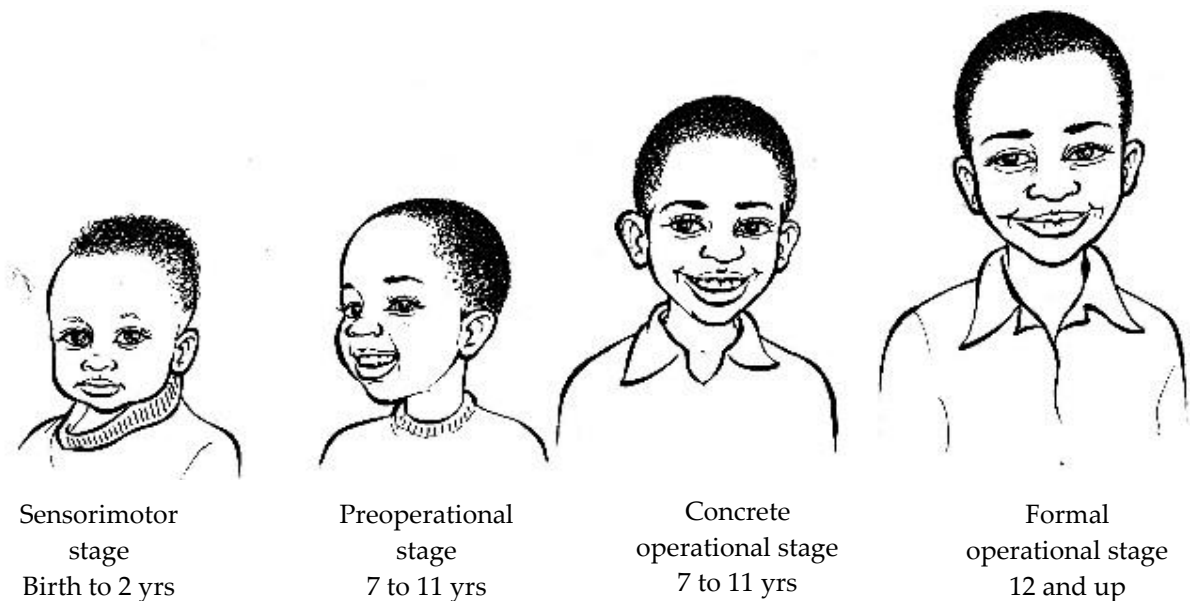
Success criteria
By the end of this topic, you must be able to relate knowledge of cognitive development to the teaching and learning at lower and upper primary.

Background information
Young children are not only growing physically but also mentally. They are always learning, thinking and exploring around their world. Cognitive development focuses on the way changes in the brain occur in relation to how children think and learn as they grow. Piaget's theory of child development assists in understanding how children develop intellectually so that parents, teachers and other stakeholders are able to handle them effectively. His theory, like Bruner's theory of cognitive development, is one of many theories on child development. However, Piaget's is widely used in education.

Piaget's stages of child development

| Sensorimotor stage | Preoperational stage | Concrete operational stage | Formal operational stage |
| Birth to 2 yrs | 7 to 11 yrs | 7 to 11 yrs | 12 and up |

Piaget's theory of cognitive development identifies several stages of cognitive child development. Table 1 summarises the stages.

Table 1 Piaget's stages of cognitive development

Stage	Approximate age	Characteristics
Sensorimotor	0-2 years	• begins to make use of imitation, memory, and thought • begins to recognise that objects do not cease to exist when they are hidden (Object permanence) • moves from reflex actions to goal-directed activity
Preoperational	2-7 years	• gradually develops language and ability to think in symbolic form • operates through logically in one direction • has difficulties seeing another person's point of view
Concrete-operational	7-11 years	• can solve concrete (hands-on) problems in logical fashion • understands laws of conservation and is able to classify and seriate • understand reversibility
Formal-operational	11-adult	• is able to solve abstract problems in logical fashion • becomes more scientific in thinking • develops concerns about social issues, identity

Teachers need to develop the understanding of the characteristics of the stages in order to determine the ability of the learners in relation to their age.

Tasks

Task 1 Relating knowledge of cognitive development to the teaching and learning at lower and upper primary

Knowledge of cognitive development is important to teachers as it helps to plan activities in relation to their intellectual ability. In this task you will relate knowledge of cognitive development to the teaching and learning at lower and upper primary.

Activity 1 Discussing own experiences with cognitive abilities of learners at lower and upper primary (1 hour)

1 Based on your experience of teaching atlower and upper primary, explain what differences you noted in terms of cognitive abilities of learners.
2 How did the knowledge of learners' cognitive abilities help you to prepare your lessons.
3 Share in pairs.
4 Share as a whole class.

Activity 2 Exploring cognitive changes in children (2 hours)

Observe two different classes at lower primary and two different classes at upper primary, eg Standard 2 and 4; and Standard 5 and 7.

1   Compare changes in cognitive abilities of learners at lower with those at upper classes.
2   Share the changes you have noticed.
3   Differenciate the cognitive abilities of learners with special needs and others in the same class.
4   Share your observations to the whole class.

Activity 3 Researching on theories of cognitive development (Piaget, Brunner) (3 hours)

1   Conduct a research on Brunners' theory of cognitive development and Piagets' theory of cognitive development.
2   Compare the stages of cognitive development in both theories.
3   Share your findings in plenary.

Activity 4 Exploring implications of knowledge about child development to teaching and learning at lower and upper primary (4 hours)

1   How can the knowledge of Piaget's and Brunner's cognitive development help you to prepare for teaching and learning at lower and upper primary?
2   Share in plenary.
3   Observe a lesson at a demonstration primary school at both lower and upper primary and take note of how the teacher is considering the cognitive developmental stages of learners in teaching and learning.
4   Share your findings.

Summary

In this topic you have learnt some of the theories of child development, Piaget and Bruners. You have related the knowledge of cognitive development to the teaching and learning at lower and upper primary. You have also explored the implications of knowledge about child development to the teaching and learning at lower and upper primary. The knowledge gained has helped you to understand the child's cognitive abilities in relation to learning.

Reflection and assessment
Self-assessment

How might teachers support learners who are mentally challenged?

Topic assessment

Discuss how you would plan lessons for a Standard 6 class where some learners were at the concrete level of thinking, and others, at the formal operational level.

References

Fancher, RE (1996). *Pioneers of psychology, 3rd ed*. New York: Norton.

Gerrig, RJ, Zimbardo, PJ, Desmarais, S & Ivanco, T (2009). *Psychology and life.* Pearson: McGraw-Hill.

Hallahan, DP, Kauffman, JM, McIntyre, LJ & Mykota, D (2010). *Exceptional learners: an introduction to special education.* Toronto: Pearson.

Piaget, J (1977). Gruber, HE, Voneche, JJ eds. *The essential Piaget.* New York: Basic Books.

Piaget, J (1983). Piaget's theory. In P Mussen (ed). *Handbook of child psychology.* 4th edition.

Santrock, JW (2008). *A topical approach to life-span development (4 ed.).* New York City: Wiley. Wadsworth, BJ (1996). *Piaget's theory of cognitive and affective development* (5th ed.). Boston: Allyn & Bacon.

Woolfolk, AE, Winne, PH & Perry, NE (2009). *Educational psychology*. Toronto: Pearson.

TOPIC 7 — Reflection on assessment after teaching practise

Time 5 hours

Introduction
One of the experiences you had during teaching practise besides teaching was administering assessment. This is one of the key components of any curriculum implementation. In this topic you will share experiences of administering assessment during teaching practise and analyse assessment items and tools used. You will also practise to develop assessment items and tools to improve on areas you experienced challenges. This will provide you with knowledge and skills of evaluating your own performance concerning assessment for learning and assessment of learning in the classroom.

Success criteria
By the end of this topic you must be able to:
- evaluate your own assessment items and tools used during teaching practise
- identify areas for self-improvement in the use of assessment based on the teaching practise experiences

Background information
During teaching practise you used assessment to assist the learning process. You also used assessment to get feedback on how well your learners understood the instructions. These two areas of assessment are what are refered to as assessment for learning and assessment of learning. Part of your reflection in this topic is to look back and determine how you faired with assessment in a classroom situation at both lower and upper primary. As a reminder, below is a brief description of assessment for learning and assessment of learning.

Assessment for learning (AFL) is used to determine learner's progress during the teaching and learning process and is more commonly known as formative and diagnostic assessment. It helps the teachers' to adjust their teaching strategies. The learners are also helped to identify weak areas and improve on them. It is an assessment done during teaching and learning and it is necessary for both the teacher and learners.

Roles of the teacher in assessment for learning
During assessment for learning, the teacher needs to:
- identify particular needs of the learners
- select and adapt resources to suit the learning environment
- create different teaching strategies and learning opportunities for helping individual learners to move forward in their learning
- provide immediate feedback and direction to the learners

Assessment of learning (AOL) is used to measure learner's level of achievement in regards to specific learning expectations. These are often known as summative assessments and usually come at the end of the topic, term or a course.

Roles of a teacher in assessment of learning
Teachers have the responsibility of reporting students' learning accurately and fairly, based on evidence obtained from a variety of contexts and applications.

Effective assessment of learning requires that the teacher provides:
- a rationale or basis for undertaking a specific assessment of learning at a particular point in time
- clear descriptions of the intended learning
- processes that make it possible for students to demonstrate their competences and skills
- a range of alternative mechanisms for assessing the same outcomes
- public and defensible reference points for making judgments.
- transparent approaches to interpretation
- descriptions of the assessment process
- strategies for recourse in the event of disagreement about the decisions

Assessment for learning and assessment of learning are guided by Blooms Taxonomy in order to vary the level of questions. The following are the levels from the lowest to highest: **knowledge**, **comprehension**, **application**, **analysis**, **synthesis** and **evaluation**.

Note: There is a revised Blooms Taxonomy which has the following levels: remembering, understanding, applying, analysing, evaluating and creating.

Tasks

Task 1 Evaluating own assessment items and tools used during teaching practise

Duuring teaching practise, you constructed different items and tools for assessment. In this task you will evaluate your own assement items and tools used during the teaching practise.

Activity 1 Sharing experiences on assessment during teaching practise (1 hour)

1 What were your experiences of assessment as regards to the administration of:
(i) assement for learning
(ii) assessment of learning
2 How different were your assessment experiences at lower and upper primary classes that you taught?
3 Explain how assessment for learning and assessment of learning enriched or facilitated your teaching process?
4 Share in plenary

Activity 2 Analysing assessment items and tools used during teaching practise (2 hours)

Refering to the assessment items and tools in the Teaching Practise files for your partner:
1 Analyse the assessment items in relation to levels of Blooms Taxonomy.
2 How effective were the questions in supporting learners to develop higher order skills?
3 How did the assessment items and tools accommodate learners' diverse needs?
4 Share your observations in plenary.

Task 2 Identifying areas for self-improvement in the use of assessment based on Teaching Practise experiences

Using different assessment items and tools requires some skills. In this task you will evaluate yourself by focusing on the strengths and challenges you had on using assessment items and tools and devise the way forward.

Activity 1 Evaluating strengths and challenges experienced with assessment of learning and assessment for learning (30 minutes)

1 How did the use of assessment for learning and assessment of learning help you improve your teaching?
2 How did you use self-assessment in assessment for learning and assessment of learning in your classroom while in teaching practise? Give evidence.
3 What would you indicate as successes and challenges in relation to the use of assessment for learning and assessment of learning?

Activity 2 Discussing ways of dealing with challenges experienced with assessment during teaching practise (30 minutes)

1 Using the challenges identified in Activity 1, discuss ways of dealing with the challenges experienced with assessment during teaching practise.
2 Share your suggestions in pairs and then in plenary.

Activity 3 Practising development of assessment items and tools (1 hour)

1 Develop assessment items and tools on challenges you experienced during teaching practise.
2 Display your items and tools for comments.
3 Conduct a mini lesson in which you will use some items developed.
4 Give feedback to each other.

Tips
- Students to bring their assessment tools used during TP for discussions.
- Test items should be typed and in line with Blooms Taxonomy.
- In activity 3, you may use gallery walk.

Summary

In this topic you have shared experiences on assessment during teaching practise and that you have analysed the assessments items and tools. You have also evaluated strengths and challenges experienced with assessment of learning and assessment for learning and discussed ways of dealing with the challenges. Lastly, you have practised developing the assessment items and tools. This will help you to develop appropriate items in order to improve assessment for learning and assessment of learning in the classroom.

Reflection and assessment
Self-assessment

What are the challenges of using assessment for learning and assessment of learning?

Topic assessment

1 Why is assessment *for* learning important in the teaching and learning process?
2 Explain the importance of using assessment *of* learning when teaching?
3 How important is it to consider levels of Blooms Taxonomy when developing assessment items?

References

Anderson LW (2001). A *taxonomy for learning, teaching and assessing: a revision of bloom's taxonomy of educational objectives*. New York: Pearson, Allyn & Bacon.

Hattie, J (2011). *Visible learning for teachers.*UK: Cambridge University Press.

Stakes, R & Hornby, G (2000*).Meeting special needs in mainstream schools.* Britain: David Fulton Publishers.

TOPIC 8 — Accessing information from the internet for teaching, learning and assessment purposes

Time 2 hours

Introduction

A professional teacher must be a life-long learner. As such, you will need to search for information on your own. The aim of this topic is to support you to understand the internet and how to use it to access information which you can apply in the process of teaching, learning and assessment. You will also learn and practise using the internet for research that would be helpful in your teaching profession. This topic will provide a general overview of search engines with advanced search features and Uniform Resource Locators (URLs) which will help you to acquire the knowledge and skills to use internet for research activities.

Success criteria

By the end of this topic you must be able to find appropriate and useful information on the internet quickly using common browsers.

Background information
Internet and its uses

The internet is a huge network which links many different types of computers all over the world. ''It is a network of networks, which share a common mechanism for identifying computers and a common set of communication protocols for communications between two computers on the network'' (Sinha, 2003).

Some of the important current strategic uses of the internet are listed below:
- accessing information for educational purposes
- on-line communication
- software sharing
- exchange of views on topics of common interest
- product promotion and feedback about products
- on-line shopping
- customer support service
- on-line journals and magazines
- worldwide video conferencing

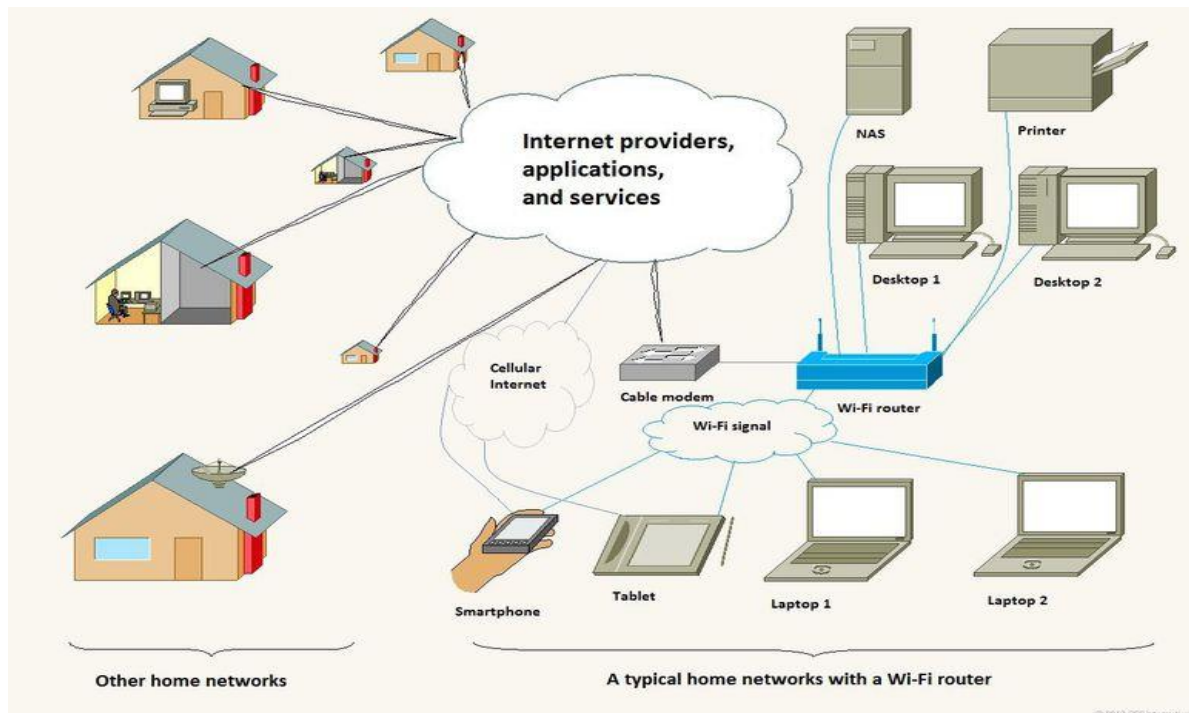The following is an illustration of the internet concept.

Figure 1 Internet- the network of networks (Dong, 2016)

Use of the internet in teaching, learning and assessment

As you conduct research using the internet, you will be able to access relevant information for use in your teaching, learning and assessment. You can develop knowledge in different learning areas and various topics by accessing the information from the internet. You are also able to access and download text, graphics, audio and video clips for use in teaching. You can also use online quiz programmes to assess your learners. Moreover, the internet is valuable for ongoing individual learning which is very important for your life-long learning.

Browsers

A web browser is a software application used to display the contents of online web pages. The following are some of the commonly (at least by the time of developing this manual) used web browsers in computers and mobile phones: Opera, Mozilla Firefox, Safari, Google Chrome and Internet Explorer. There are also other browsers such as UC, Dolphin, Firefox focus, Opera mini for Android mobile devices.

https://www.bing.com/images/search?q=common+web+browsers&FORM=HDRSC2
Table 1 Top 5 Common browsers by July, 2017

Regardless of the browser you use, you can enter the URL that corresponds to desired website in the address bar or window. Address bars can typically be found at the top of a Web browser's window. Address bars are different from search boxes in which the latter does not require the exact internet address of a website as shown in figure 3. Some sites may allow you to access a second web page by way of an embedded hyperlink. Such an action will direct the browser to access the hyperlinked URL, and at the same time, update the URL inside the browser's address window and reflect the new page. The following show pages of browsers.
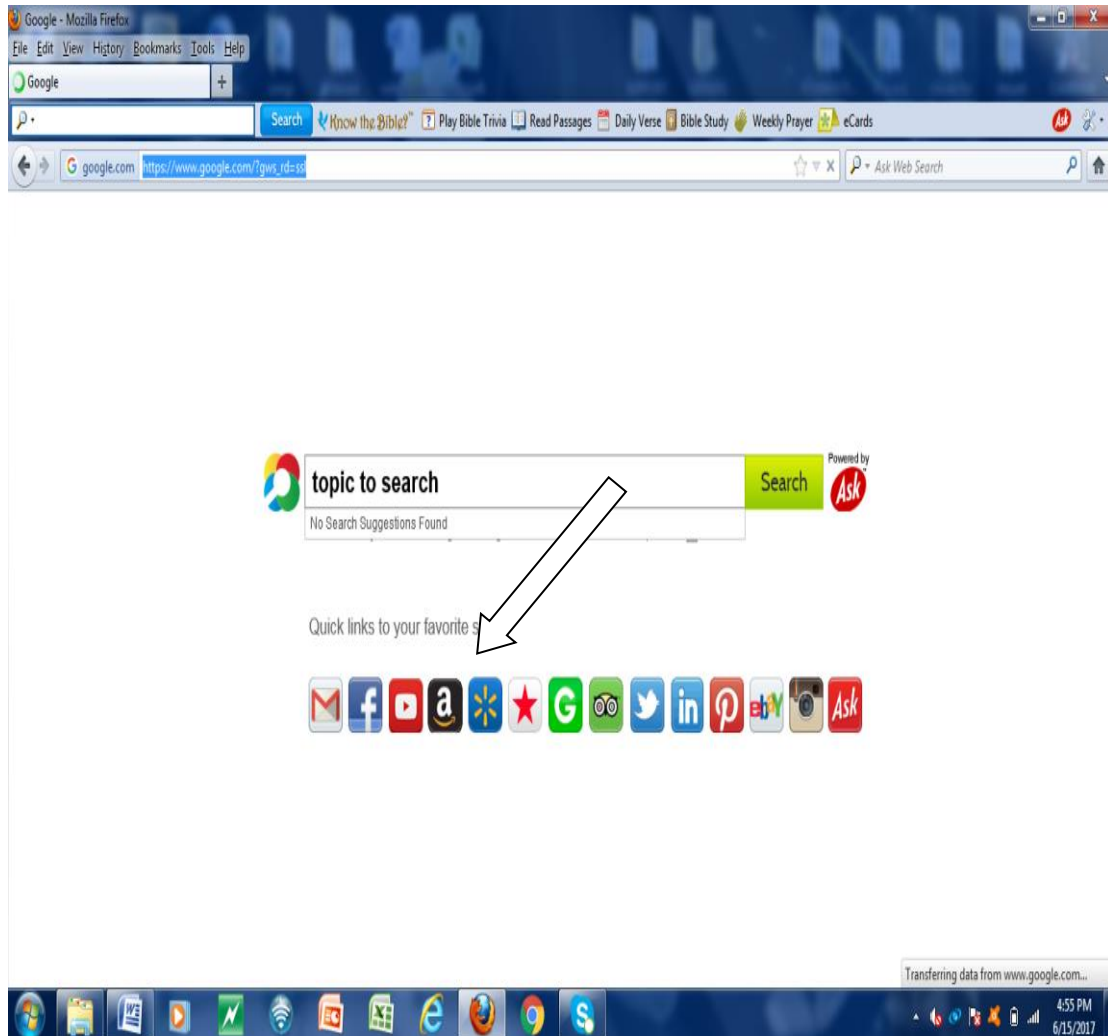
Figure 3 Address bar and search boxes

Use of URLs

''A **uniform resource locator (URL)** is a type of uniform resource identifier (URI). Entry of the URL and accessing a Web page is accomplished by using a Web browser'' (Beckert, n.d). For example, Full URL: http://www.cnn.com/world

The *'http'* stands for Hypertext Transfer Protocol. The *'www'* refers to the World Wide Web, an information system of computer programs or servers that provide access to audio, document, graphic, and video files. The *'cnn'* is the name of the domain or

the location of a website. In this case, the name of the domain is the Cable News Network (CNN). The *'com'* indicates that the website has some kind of commercial purpose. Other URLs with an educational or governmental intent might use *'edu'* or *'gov'* at the end of their Web address. Eg. *http://www.malawitourism.com* , *https://www.malawi.gov.mw*

The World Wide Web (www) is the most popular and promising method of accessing the internet. The main reason for its popularity is the use of a concept called hypertext. Hypertext is a new way of information storage and retrieval, which enables authors to structure information in several ways.

Use of search engines

Online research has become an essential skill for individual learners. What typically took place in libraries, by phone calls or visits to experts in the field is being changed because of the internet. Experts can be contacted by email and information can be accessed on the World Wide Web. ''Search Engines have become the most important tools in locating this information, so it is important to know how to use them effectively. Search skills can be developed through practise in using the search engines and by reading the help pages provided by the search engines themselves. You must know which search engine is good for pulling out what kind of information'' (Knollberg, 1998).

Major search engines and directories

There are many search engines and internet directories. Some of the examples of search engines are Yahoo, Google and Bing. Refer to figure 4 for a screen shot of their symbols.
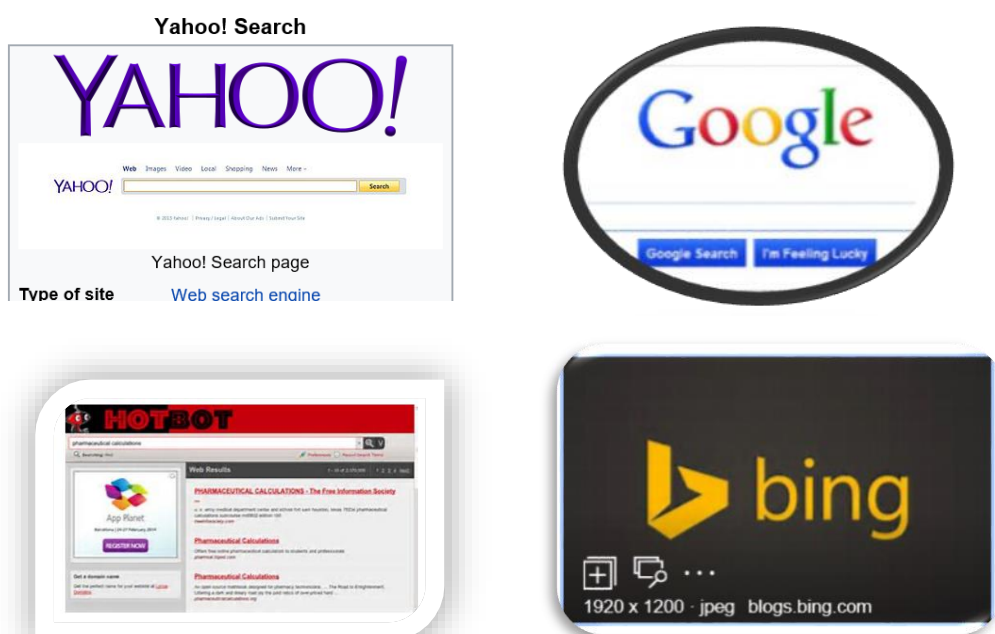

Figure 2 Examples of common browsers

LookSmart and Yahoo are actually large directories rather than true search engines. Even these large commercial search engines and directories have been found to search only a small portion of the Web; however, this is enough to help you getting to the right webpage that contains the information you are looking for or to a website that contains links to other sites containing information on your subject or a specific topic which you are looking for that can be used in your research activities.

Basic steps in undertaking an internet search

When searching, there are some simple rules to keep in mind. Generally, the more keywords you use in your search the more specific and accurate your results will be. Therefore, try to use additional keywords that you think would be mentioned in the article or website you are looking for; this will help to eliminate unwanted results. You may follow the steps like:

- Open a common browser eg Internet Explorer
- Type the keyword or word you want to search in the search box
- Press enter key on the keyboard

An easy way to simplify a search on many of the search engines is to place quotes around the topic, for example "Kamuzu Banda" or "Anti-colonialist" or "Republic of Malawi" This way, the search will focus on the word combination and not bring up all the pages that contain the word 'Kamuzu' or the word 'Banda' or 'Malawi'. Some search engines will also perform this same function when you place a + sign in front the keywords such as +Kamuzu+ Anti-colonialist.

In addition to searching text, search engines will also allow you to search for graphics, sounds and other kinds of files. Search engines will also search through the latest news stories from recently released press to news stories in national newspapers which are very useful if you are looking for the absolute latest information on your search topic.

Browsing correct and relevant information

Searching for original and reliable information sources on the internet is becoming a complex and time consuming task because of the load on the search engines, web pages containing the most relevant information are not necessarily the most visible. It's quite a challenge for professionals seeking reliable information to support an argument, make presentations, seminars and training courses or make strategic choices specifically in teaching and assessment. Therefore, it is necessary for you to search and use relevant information from reliable internet sources and have a critical look at it.

Some points you may keep in mind when you are browsing the information from the internet are:

- Use academic sources eg Google scholar
- Locate useful information from primary (research, literary, historical autobiography articles) or secondary sources (magazine articles, biographical books)
- Check the author credentials- Who is writing the article you are reading?
- Look for the statistics- How many are reading the article you are reading?
- Evaluate the website- How many agree or disagree with the article you are reading?

Uploading and downloading information to and from the internet

Accessing information from the internet involves downloading the relevant information for you to use. Uploading means data is being sent from your computer to the internet. Examples of uploading include sending email, posting photos on a social media site and using your webcam or your phone camera. Even clicking on a link on a web page sends a tiny data upload. Downloading means your computer or mobile phone is receiving data from the internet.

Transfering information from the internet to different applications or storage devices

When you have identified the relevant information for a certain topic, you download or transfer it to certain applications or storage devices.

For example, you can transfer your information from the internet to an application like, Microsoft Word and PowerPoint. You may need to use the options like copy and paste. However, you must not forget to acknowledge the copyrights of the owners of the information.

It is also possible to transfer information from the internet to storage devices like CDs, DVDs, phone memory cards, flash disks and External Hard Disk Drives(HDD). For example, you can download and transfer a text or video clip to a DVD or your phone memory card and later use it in your classroom teaching.

Tasks

Task 1 Finding useful information on the internet using common browsers

The tasks below will enable you to get more knowledge and skills on the use of internet for accessing information that can be used in research, learning, teaching and assessment.

Activity1 Familiarise with search engines to access and download information for teaching and learning (30 minutes)

1 Conduct a research on 'uses of internet for students' using the various search engines.
2 Type 'uses of internet for students' in the search box and click search
3 Have a critical look at the information gathered.
4 Share your information.

Activity 2 Browsing for correct and relevant information (1 hour)

1 Undertake a search using the internet to access information on '*Learner centred methods*' with a specific search engine of your choice. For example, 'Google search' or 'Yahoo Search'.
2 Download the correct and relevant information on the above topic to your computer.
3 Transfer the information to a 'Microsoft Word page' or any other text editor by using copy and paste options.
4 Share your procedure.

Activity 3 Transfering information from internet to local storage devises (30 minutes)

1 Search for critical thinking methods.
2 Choose relevant information from the list and open it.

3   Download the information and save it.
4   Transfer the same information to a storage device like CDs, DVDs, phone memory cards, flash disks and External Hard Drive.
5   Explore how you can share the information you have downloaded electronically.
6   Share the procedure with your classmates.

Tips
- You are free to use your mobile phones or any other sources to access the internet.
- If data is off, your mobile device will not access internet
- If data bundle is finished, your mobile devise will not have access to internet
- For mobile devises, downloads are stored in a folder labelled downloads.
- If your memory card is full, create space by deleting unnecessary information.
- Consider diversity and gender in all the activities.
- Practise could be done outside teaching hours

Summary

In this topic you have developed an understanding of how you can use internet for teaching, learning and assessment. Information from internet provides opportunities to the user to be competent in using it for research, teaching, learning, and assessment. You have also acquired knowledge and skills in using the internet for research purposes as well as to access it even using mobile devices.

Reflection and assessment
Self-assessment
- Accessing correct and appropriate information may be a challenge. How can you make the internet using easier?
- In what ways can internet be a tool for teaching, learning and assessment?

Topic assessment
- How can you keep the accessed information from the internet for future use?
- Using the internet, search and download information on the topic 'Technology in Transportation and Communication'.

References

Beckert, K (n.d). *What is a URL?- definition & examples*. Retrieved from http://study.com/academy/lesson/what-is-a-url-definition-examples-quiz.html

Dong, N (2016). *Home networking explained part 4; WiFi Vs internet*. Retrieved from https://www.cnet.com/how-to/home-networking-explained-part-4-wi-fi-vs-internet/

Knollberg, G (1998). *The effective use of search engines-the internet writing journal*. Retrieved from http://www.writerswrite.com/journal/may98/effective-use-of-search-engines-5987

Sinha, KS (2003). *Computer fundamentals-third edition*. New Delhi: BPB Publications.

Time 2 hours

Introduction
In the last topic you learnt how to access and save information from the internet. In this topic, you will learn how to upload information to the internet for others to use. You will learn how to use the internet for communication purposes particularly in teaching, learning and assessment using the electronic mails. You will be able to upload or download information using e-mails as you get the skills to send or retrieve the attached files. Besides, this topic will also assist you to use social media to communicate in and out of the classroom. You will know how to create a community with your learners and their parents using social media.

Success criteria
By the end of this topic you must be able to
- use internet to send and receive e-mails
- exploit internet to communicate using social media in classroom and outside

Background information
Electronic mail
You may all be familiar with courier or postal mail service. That is a non-electronic mail service because it does not rely on electronic technologies like mobile phones, internet and computers but uses motor vehicles or cycles. The electronic mail (known as e-mail in short) service has many similarities with the postal mail service. Many internet users have an e-mail address, just like all colleges may have a postal address. When you were applying for admission into this college, probably, you wrote the postal address of the receiver in the postal mail system. Similarly, when sending e-mail to another user, the sender specifies the e-mail address of the receiver. The receiver can either save, delete, forward to someone else or respond by sending another message back.

The e-mail service allows you to send an email or message to another internet user or receive email from any part of the world almost instantly. The message takes anywhere from a few seconds to several minutes to reach the destination, because it must be passed (routed) from one network to another, until it reaches its destination'' (Sinha, 2003).

Examples of an e-mail address
You can create your personal e-mail address or can have one for your organisation as in the examples below.
blantyrettc@yahoo.co.mw
stjosephsttcshn@yahoo.co.uk
chigoba2004@gmail.com
jonathan.billy@qq.com
miedirector@sdnp.org.mw

Advantages of e-mail
As compared to paper mail, telephone, and fax, e-mail is preferred by many people because of its advantages over those and many others.
- It is faster than paper mail.
- Sent and received messages and attachments can be stored safely, logically and reliably.
- It is very easy to communicate effectively with anybody within the office or anywhere in the world regardless of where they are situated.
- It is easy to prioritise your mail.

- You can send the same message to any number of people.
- E-mailing saves paper and printing costs.
- Emails can be responded to in your own time, when it is convenient for you'' (Sinha, 2003).
- Enhance sharing information and resources among learners.
- More immediate feedback and faster assignment return.
- Straight forward model of queries with greater perceived reliability.
- Increased interaction with teacher and students.
- Extended learning experiences beyond the classroom learning.

NB If one is to integrate email communication in the face-to-face or distant classroom in the hopes of delivering timely and valuable feedback to students, one needs to understand the concept of feedback and communication as a learning tool.

When is e-mail the appropriate form of communication tool to use?

You do not always need to use email for communication. Sometimes other options can serve you better. Nonetheless, e-mail can be very helpful when:
- You need to get in touch with a person who is hard to reach via telephone, does not come to campus regularly, or is not located in the same part of the world.
- The information you want to share is not time-sensitive.
- You need to send someone an electronic file, such as a document for a course, a spreadsheet full of data, or a rough draft of your paper.
- You need to distribute information to a large number of people quickly
- You need a written record of the communication. (Saving important

e-mails can be helpful if you need to refer to what someone said in an earlier message to provide some kind of proof).

When is e-mail not an appropriate form of communication tool to use?

You may not opt to use e-mail when:
- Your message is long and complicated or requires additional discussion that would best be accomplished face-to-face.
- The information is highly confidential as e-mail is never private (Keep in mind that your message could be forwarded to other people without your knowledge. A backup copy of your e-mail is always stored on a server where it can be easily retrieved by interested parties, even when you have deleted the message and think it is gone forever).
- Your message is emotionally charged or the tone of the message could be easily misunderstood.

Composing and sending an e-mail

To compose and send an e-mail to somebody, you need to do the following:
- Open your e-mail address and click on compose.
- Enter the e-mail address of the receiver.
- Write your message.
- Click on send button.

Social media

The term social media describes platforms and applications that enable users to create and share content or to participate in social networking.

Types and examples of social media

The social media world consists of two segments: people and the media. To optimise your experience with each

type of social media, it's good to participate regularly in the communities or groups you choose to join. There are different types of social media as listed in Table 1. As a teacher you are required to determine which types of social media would best benefit your work.

Table 1 Some types and examples of social media

Type	Description	Examples
Social Networking Sites	Focus on building relationships among people with similar interests and activities.	Facebook, Whatsapp, Skype, MySpace, Friendster
Blogs	Blog is a type of social media which is more like an online diary updated and maintained by the owner.	WordPress.com, TypePad, Blogger
Social Q&A	Users can submit or answer questions	Answers.com, Yahoo! answers
Video Sharing	Users can upload and comment on videos	YouTube, Vimeo
Social Search	Users can create profiles and interact through email groups.	Google, Yahoo!
Professional Networks	This type of social media site is a virtual card index system with names and addresses enabling business professionals to recommend one another.	LinkedIn, Plaxo

Social media in teaching, learning and assessment

Many teachers and learners these daysuse social networks. Thus, social networks can be used to improve the education of students since they are already familiar with its use. ''Instead of constantly trying to get students to put their phones away, you as an educator can use the devices to their advantage'' (Chadband, 2015). The main advantage is that students can further explore topics that they are interested in by using online social networking since they may have limited resources and time in school. As teachers you can exchange or share ideas with each other.

As teachers you can take advantage of social networking abilities to create discussion forums.

Commonly used social media in education

Some examples of common social media at work in the classroom are: *WhatsApp, Facebook, Twitter, Skype, and Blogger*.

Tasks

Task 1 Using internet to send and receive e-mails

Internet has several uses. In this task, you will familiarise yourself with the internet to send and receive emails.

Activity 1 Familiarising yourself with the internet for communication (30 minutes)

1 Study the following email address and identify its parts:
   chisomobanda@gmail.com

37

2 Which part represents:
   a) the username (name of the mail box)
   b) The dormain name (where mail box is kept)
   c) what does .com represents"
4 Search for other email clients apart from gmail.
5 Share your findings to the whole class.

Activity 2 Creating an email account (15 minutes)
1 Observe the demonstration done by your lecturer on how to create an e-mail account .
2 Create your own e-mail account.
3 Write down the password for your email account.
4 Share the process in plenary.

Activity 3 Composing, sending and receiving e-mails (15 minutes)
1 Share your email addresses with your friends
2 Compose an email with four lines to him/her
3 Send the email to your friend with a copy to your lecturer.
4 Send the checked and edited mail to your friend with a copy to your lecturer.
5 Open your inbox and receive your mail and then open it to read the message.
6 Share the process in plenary.

Task 2 Exploiting internet to communicate using social media in the classroom and outside
The purpose of this task is to enable you to communicate in class using social media.

Activity 1 Attaching assignments/documents (15 minutes)
1 Type a test item in a specific learning area using a Microsoft Word document and save it with the name "Internet" on the desktop.
2 Compose an e-mail and attach the above saved document to that e-mail.
3 Send your e-mail with attachment to your lecturer.

Activity 2 Using different social media to enhance teaching and learning (15 minutes)
1 Find the file you saved on the desktop as "Internet" on the desktop.
2 Send the file to your lecturer using WhatsApp.
3 Share the procedure to the whole class

Activity 3 Using blogger (15 minutes)
1 Access information on the topic "Effects of social media in teaching, learning and assessment."
2 Prepare a one paged essay on the above topic.
3 Publish your essay on the classroom blog.
4 Conduct a peer evaluation on the published essay and make comments on it.
5 Share with your friends the achievement and the future reward of online publications.

Activity 4 Discussing strengths and challenges of ICTs in everyday life and in teaching and learning (15 minutes)
1 Search online for information on the advantages and the disadvantages of ICTs in daily life.
2 Analyse the positive impact of social media over the negative impact in a classroom situation.

3   Save your information on your computer
4   Discuss your research findings with your friends.

<div style="border:2px solid black; background:#e8175d; border-radius:20px;">

Tips

- The students should bring some USB data cables for file transfer.
- These activities need access to the internet.
- Remind the students to write down the password, and the security questions together with the corresponding answers for their e-mail account and keep them at a safe place and never share with anyone.
- Some of the tasks might be done outside lessons.
- Some activities need mobile devices such as smartphones (eg whatsApp).
- Consider learner diversity and aspects of gender in all activities.
- Familiarise yourself with types and examples of social media.
- If mobile devise cannot be accessed by a computer, check the memory card in the phone.
- If the phone number cannot be accessed on whatsapp, search for it first.
- Some activities could be done outside teaching time.

</div>

Summary

This topic enabled you to acquire the knowledge and skills in using electronic mail to communicate in and outside classrooms. You are able to send and receive mails and attach documents. Furthermore, this topic introduced you to a range of social media that can be used to enhance interactive learning both within and outside the classroom.

Reflection and assessment
Self assessment

- What factors did you consider before you sent an e-mail message to your classmate?
- How do you develop your classroom teaching, learning and assessment strategies in order to promote interactive learning using social media?
- How can social media promote life-long learning?
- Explore the use of Skype, facebook and twitter in teaching, learning and assessment.

Topic assessment

- What could be the relationship between internet and e-mail?

References

Ahmad, B (2016). *10 advantages and disadvantages of social media for society*. Retrieved from https://www.techmaish.com/advantages-and-disadvantages-of-social-media-for-society/

Blanchard, O (2011). *Social media ROI: managing and measuring social media efforts in your organisation.* London: Que Publishing.

Chadband, E (2015). *Social media made simple*. Retrieved from http://www.nea.org/tools/53459.htm

Hicks, K (2015). *6 creative ways to use skype in the classroom*. Retrieved from http://www.edudemic.com/skype-in-classroom/

Huett, J (2004). *E-mail as an educational feedback tool: Relative advantages and implementation guidelines.* Retrieved from http://itdl.org/Journal/Jun_04/article06.htm

Noon, C (2006). *The problem with e-mail.* Retrieved from https://www.forbes.com/2006/09/21/cisco-skype-communications-cx_cn_0921email.html

Schaffer, N (2013). *Maximise your social: a one stop guide to building a social media strategy.* New Jercy: Wiley Publications.

Sinha, K (2003). *Computer fundamentals.* New Delhi: BPB Publications.

Time 4 hours

Introduction

In the previous topic, you explored how the internet could be used as a tool for communication related to teaching, learning and assessment. You can send and receive files on social networks. Such files could be in various formats such as document type (Word which is part of open office). In this topic, you will be introduced to the spreadsheet using Microsoft Excel application that can be used in assessment to compute the grades of your learners systematically. Such programmes are very useful for keeping school records in an orderly manner. In addition, it is very important for you to know how to apply formulae and functions in spreadsheets as it is an easy way to process numeric data.

Success criteria

By the end of this topic, you must be able to utilise spreadsheet applications in teaching, learning and assessment.

Background information
Spreadsheets

A spreadsheet is a computer application program that simulates a physical spreadsheet by capturing, displaying and manipulating data arranged in rows and columns. An electronic spreadsheet is an electronic document that stores various types of data. A spreadsheet is generally designed to hold numerical data and short text strings.

Examples of Spreadsheet packages

''There are many other spreadsheet applications on the market today; however, Lotus 1-2-3 and Microsoft Excel continue to be the most popular''. On mobile devices, you can also download and use google sheet, WPS office and poloris office as spread sheets.

Key terminologies used in spreadsheet application

There are many terminologies used in spreadsheet applications. The key terminologies include:
- cells
- rows
- columns
- worksheets
- workbooks

A spreadsheet comprises of lines that run vertically and horizontally creating a regular grid of boxes. There are vertical **columns** and horizontal **rows.** Refer to the figure 1 in which A represents first **column** and 1 represents first row. These spaces or boxes hold items of data and are called **cells**. Each cell is labeled according to its placement (for example, A1, A2, A3...).

A cell is where the column and row intersect. There are 65,536 rows and 256 columns in the Excel spreadsheet which adds up to over 16 million cells into which you can store data (Poole, 2000). A cell can contain data and can be used in calculations of data within the **spreadsheet**. An Excel spreadsheet can contain **workbooks** and **worksheets**. The workbook is the holder for related worksheets. Consider figure 1 for an example demonstrating how to name cells. In this case, the highlighted cell is B3.
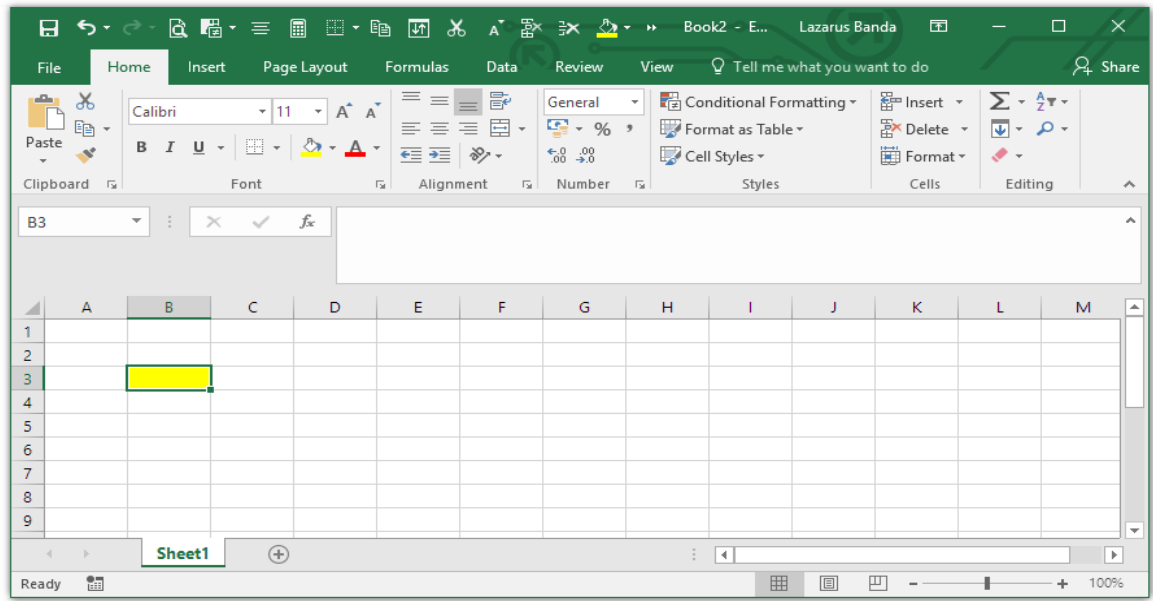
Figure 1 A demonstration of how to name cells

For a pictorial explanation of some basic terminologies in spreadsheets please refer to figure 2.
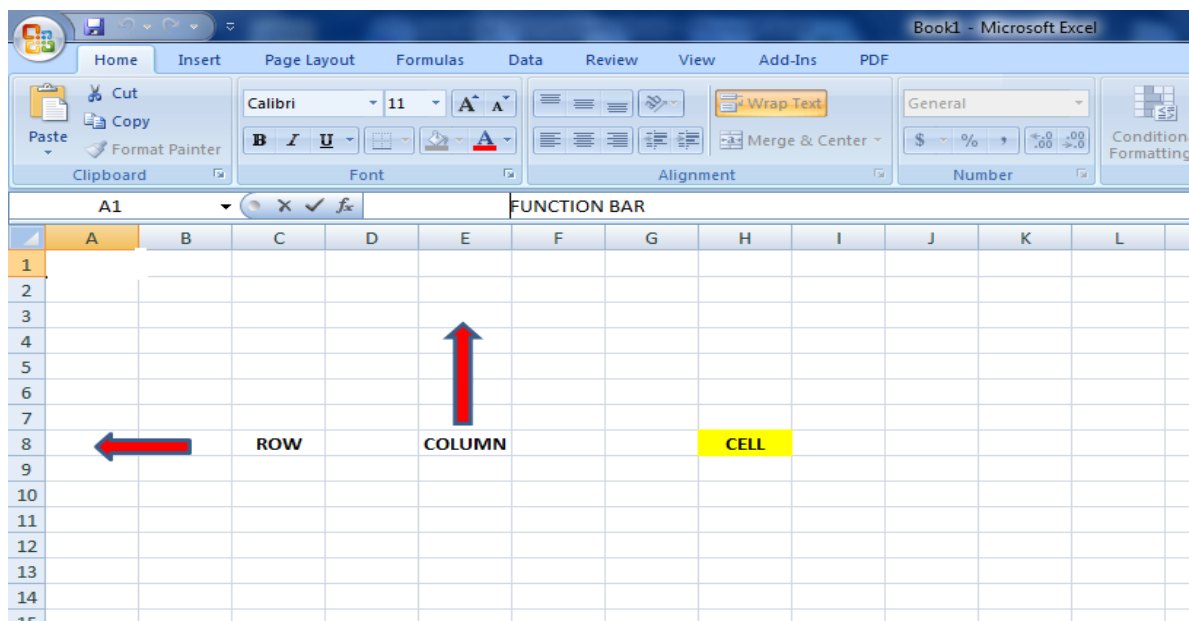

Figure 2 Pictorial explanation of basic terminologies in spreadsheets

Features of a spreadsheet window

There are many features which are common and some are advanced in spreadsheets depending upon the type of spreadsheet which you are using. It is very important for you to familiarise yourself with the tool bars and other facilities on the spreadsheet window like:

- Formatting bar
- Standard bar
- Formulae bar
- Scroll bar
- Help facilities

42

Editing, formatting and applying formulae and functions in spreadsheets to use it for data handling and interpretation

Microsoft Excel is one of the electronic spreadsheet programs that can be used for storing, organising and manipulating data. It is then a simple matter for the user to specify formulae in the spreadsheet that manipulate these numbers in various ways. It's also easy to change various fields in the program that correspond to different aspects of the operation of a business and have it then instantly update the totals. For example, if the grade of a particular learner is not entered correctly and the error is identified later, it's simple for you then to change the field to the new grade while automatically updating the whole file. Just as Microsoft Word, it also provides editing and formatting tools as well as allow you to apply formulae and functions as given below:

Editing and printing
It involves:
- checking spelling
- reviewing page breaks
- previewing layout
- changing page setup and settings
- setting print options

Formatting
It involves:
- changing: column width and row height
- inserting: rows, columns and cells
- deleting: rows, columns and cells
- merging and centre
- merging cells
- texting wrap
- cell alignment

Applying formulae
It involves:
- constructing formulae using operational signs such as addition (+), subtraction (-), multiplication (*) and division (/)
- Inserting simple and complex formulae eg = A2+(C3-C2)+(D2/2)

Applying functions
It involves constructing functions such as average, auto sum, percentage etc.

Data interpretation in Microsoft Excel
Microsoft Excel lets you store and manipulate data for various purposes. Learners can be advised on their performance as it is very easy and quick to assess their performance by interpreting the data in the learners' grade worksheet. Data interpretation in Microsoft Excel can potentially involve a variety of activities including: collating, processing, filtering and visualising.

Collating
When you compile data in schools, for example, the class register, progress records or staff returns, it is good for you to use spreadsheets as they can effectively organise information in a systematic order.

Processing
As you prepare the totals for continuous and summative assessment grades, make sure to enter the data correctly before processing it. Then apply formulae in the specific Excel cell to get the totals. It will ease your job as a teacher than calculating the learners' grades one by one.

Filtering
Data handling in schools can also become easier if you use the filtering options in the spread sheets. For example, if you want to sort your data

to find out the learners who need more assistance in different learning areas, you filter the grades in a specified range in the spreadsheet and it will give you the required information quickly.

Visualising

You can represent the learner's performance graphically transforming the numerical data to a chart or graph. So, it would be a very good way of appraising the learners by drawing their performance.

Use of spreadsheet applications in school

Spreadsheets can help you to perform the following:

- Analysing data
- Performing complex calculations
- Exploring possible outcomes
- Producing high quality charts
- Useful in assessment to record learners' performance
- Used for producing assessment tools like checklists and rubrics
- Used as digital class registers for learners' particulars and attendance

Tasks

Task 1 Utilising spreadsheet applications in teaching, learning and assessment

Spreadsheets have many uses such as organising and processing data, and reporting information. To use these features effectively, you need to be familiar with some terminologies. In this task, you will become familiar with the Excel workbook and its basic terminologies.

Activity 1 Familiarising with the common concepts and related terminologies in Spreadsheet packages (30 minutes)

1   Open Microsoft excel in your computer

2   Observe your lecturer saving a screenshot of an excel window
3   Make a screen shot illustrating a cell, a roll, and a column in excel
4   Share to the whole class

Activity 2 Creating and saving a worksheet (30 minutes)

1   Open a new workbook.
2   Enter given learners' progress records data into the worksheet with column headings
3   Column A must be headed *student name*, while B must have the heading *assignment 1 grade*, column C *assignment 2 grade*, and *average grade* for Column D.
4   Save your workbook in a folder as *'Learners Assessment Grades'*.
5   Peer-assess the work done.

Activity 3 Using formulae and functions in a worksheet to calculate the continuous assessment and summative grades (30 minutes)

1   Open the worksheet you saved as *'Learners Assessment Grades'* in activity 2
2   Rename the sheet as *'Standard 5 Learners Assessment Grades'*
3   Enter relevant numerical data for ten fictitious learners in the worksheet under the headings:. *student name, assignment 1 grade* and *assignment 2 grade*
4   Observe the lecturer as s/he calculates the average in the column D using formulae and function for average
5   Complete your work by calculating average using the demonstration by the lecturer
6   Share the process with the class
7   Save the work in your lab for the lecturer to check.

Activity 4 Interpreting data from students' scholastic records (30 minutes)

1   Observe the lecturer as s/he sorts the data in activity 3 based on alphabetical order
2   Sort your data based on students with highest average grade
3   Share with the rest on the highest and lowest averages
4   Send your work to the lecturer using a class WhatsApp group.

Activity 5 Editing and formatting data (15 minutes)

1   Open the excel file you saved above.
2   Make the headings **bold**
3   Add data for two more fictitious students
4   Change the print lay out from portrait to landscape.
5   Display your work to the class.

Tips
- The lecturer should prepare in advance on how to do these activities.
- The lecturer should ensure that appropriate data is available for the students to input during the different tasks.
- The tasks need time to practise.
- Students could practise outside the lessons.
- In activity 1, you may use a projector for sharing.

Summary

This topic enabled you to become familiar with Microsoft Excel by practising its different features. This knowledge and skills will be valuable when you are preparing your school records especially the records of learners' assessment and the class registers. You also practised different ways of editing and formatting your spreadsheet document. You have also learnt how to use formulae and functions in complex calculations. In addition, you are able to visualise your data using charts or graphs. This makes data analysis and interpretation easier.

Reflection and assessment
Self- assessment

- Do you think activities in task three needed more time than allocated?
- What did you find interesting in these activities?
- With the experiences you have had in these activities, do you think Microsoft excel could be a better option when manipulating students' scholastic records?

Topic assessment

- Explain the characteristics of a good spreadsheet and their use in educational record keeping.
- Explain the challenges of creating a summary sheet on assessment grades manually.
- What would be the advantages of using spreadsheets in assessment grading?
- What challenges would you associate with electronic spreadsheets?
- What mitigation strategies would you employ to prevent these challenges?

References

Cashman, S (2007). *Microsoft Office 2003: Introductory concepts and techniques.* Course Technology.

Evance, K (2017). *The disadvantages of spreadsheets.* Retrieved from https://www.techwalla.com/articles/the-disadvantages-of-spreadsheetshttps://www.amazon.com/Microsoft-Word-Excel-PowerPoint-Beginners/

House, D (2015). *Microsoft Word, Excel, PowerPoint: Just for Beginners.* Retrieved from

Krieger, S (2007). *Advanced Microsoft Office Documents 2007 Edition Inside Outside*. Microsoft Press.

Poole, BR (2000). *Essential Microsoft office 2000: Tutorial for teachers*. Retrieved from www.pitt.edu: http://www.pitt.edu/~edindex/OfficeTutorials/Lesson3.pdf

Richa (2014). *Data Analysis and Interpretation made easy with Excel*. Retrieved from https://blog.udemy.com/data-analysis-and-interpretation/

Rouse, M (2006, January). *Spreadsheet*. Retrieved from www.whatis.com: http://whatis.techtarget.com/definition/spreadsheet

Teaching, learning and assessment using presentation application

Time 2 hours

Introduction

You are already familiar with Microsoft Word and Microsoft Excel from the previous topics. These applications form part of the Microsoft Office Suite. Others include Microsoft Powerpoint, Microsoft Access and Microsoft Publisher. Microsoft Office Suite can be of benefit to everyone who becomes familiar with it. It is important to learn about different functions and practise using them. In this topic, you will develop knowledge and skills in using presentation applications. The knowledge gained will help you to make classroom presentations using presentation applications.

Success criteria

By the end of this topic, you must be able to exploit presentation application for teaching, learning and assessment.

Background information
Presentation software

A presentation application is a software package used to display information in the form of slides show. It can be made into slide shows, and photo albums with music or narrations thereby appealing to multiple senses. It can also be used to create great presentations for your own personal use, the classroom use or the business world. Examples of presentation applications include: Microsoft power point, Microsoft sway, google slides and Zoho.

Importance of presentation applications in classroom

Presentation applications are an excellent medium for use in teaching activities because they are easy to create, use, copy, store and transfer. Presentation software makes the ability to communicate messages to a group of people much simpler than any other delivery methods'' (House, 2015). ''PowerPoint has become very popular because it's easy to learn and is widely available. This enhances the students' abilities to retain what they learn as they use different senses in the learning process.

The Powerpoint program enables teachers and students alike to prepare presentations. It is a program that allows teachers to present their lessons in a more dynamic way than simply lecturing and writing on the chalkboard. Teachers can focus on the class and interacting with the students instead of writing on a chalkboard because the text and the entire presentation are already there in the form of slides.

Terminologies and features of presentation application

Features of a presentation application include:
- slide show
- slide transition
- slide sorter-showing views as normal or outline
- tool bars
- various presentation view modes

Creating, editing and formatting presentations

You can create a presentation using different methods before you edit, format and print your work at a later stage. The following steps will help you to practise this:

- Creating a presentation using templates and auto content wizard (Poole, 2000).
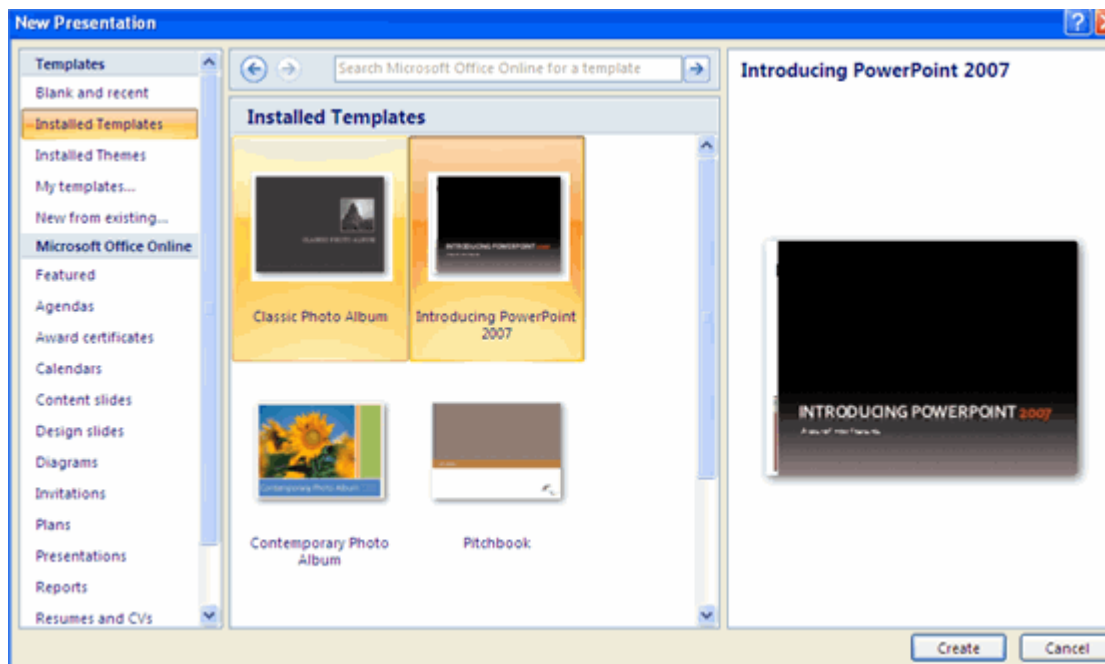

Figure 3 Creating presentation from a template

- Editing text and image inputs in presentation: spell check, adding notes pages, adding comments, deleting repeated words and unwanted slides. Add worth to your presentation by inserting objects and pictures in it as shown in figure 2. You can do this in different ways such as taking pictures or downloading them from the Internet, scanning them, copying and pasting them from another file or even taking them from clip art.

Figure 2 Inserting objects, images, clipart and pictures

 "Formatting a presentation: changing text appearance (such as font size and type), applying text formatting (**bold**, *italics* and <u>underline</u>, text case cHAnGes), applying different colours and shadow effects to text, aligning text (left, right, and centre) in a slide and adjusting line spacing before and after bulleted numbered points"(Poole, 2000).

To make your presentation more attractive you can customise your presentation by applying the following as indicated in figure 4:
- animation effects: define and test time periods between slides presentation
- transition effects
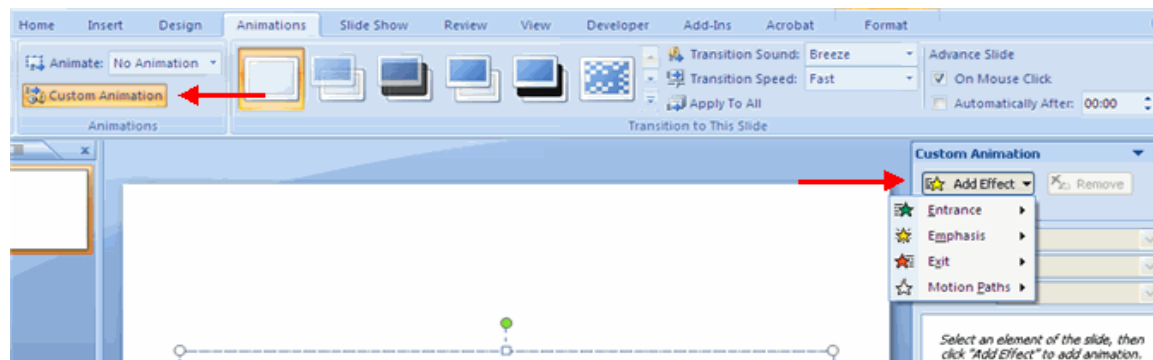- preset text, image animation effects to slides
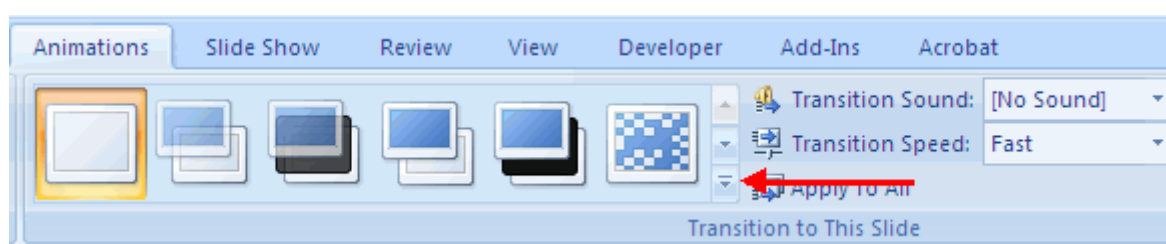
Figure 5: Adding transition effects

Figure 6 Adding animation effects

Tasks

Task 1 Exploiting presentation applications for teaching, learning and assessment

The use of presentation applications has many advantages. To appreaciate these advantages, you need to be familiar with some basics. In this task, you will be introduced to some of the terminologies and guidelines you need to know to produce quality presentation.

Activity 1 Familiarising with the different terminologies in a presentation application
(15 minutes)

1 Open a blank presentation application with three slides using, PowerPpoint.
2 Give the first slide the title "My first presentation show".
3 Add the following subtitle to the first slide: "Practicing creating a presentation"
4 Add the following content to the second slide

- slide show
- slide transition
- tool bars
- various presentation view modes
- views -slide, slide sorter, normal and outline
- slide sorter showing normal or outline

5 Add the following content to the third slide

Importance of presentation applications in classroom
Digital presentations are an excellent medium for use in teaching activities, easy to create, use, copy, store and transfer. Presentation software is used to enhance language learning. ''The use of presentation software encourages use of all four language skills: Reading, Writing, Speaking and Listening. Presentation software makes the ability to communicate messages to a group of people much simpler than any

48

other delivery methods'' (House, 2015). ''PowerPoint has become very popular because it's easy to learn and widely available. It provides the ability to equip your presentations with different types of media - including images, sounds, animations, and much more'' (House, 2015). This enhances the students' abilities to retain what they are being taught, especially those who are visual learners. Seeing the presentation while hearing about it, helps both visual and auditory learners to get the information more easily.

6 Apply a different slide transitions to each slide
7 Apply a different animation to each line in each slide

Activity 2 Discussing guidelines for producing quality presentations (15 minutes)
1 Evaluate the slides that you created in your presentations above
2 Ask your friends which one they would like to use for a big audience.
3 Justify your answer to your friend.
4 Discuss other qualities of a presentation applications
5 Verify with online sources your discussion
6 Share your findings with the class

Activity 3 Observing a lecturer presenting a lesson using a presentation application (30 minutes)
1 Observe your lecturer presenting a lesson using a presentation application.
2 Record your observation using guidelines in activity 2.
3 Share your observation.

Activity 4 Producing a presentation from microteaching (15 minutes)
1 Prepare a lesson from any learning area.
2 Prepare a presentation of the lesson.

Activity 5 Staging a micro lesson using a presentation application (15 minutes)
1 Present the lesson you prepared in activity 4.
2 Discuss the presentations.
3 Share your observations .

Activity 6 Enriching the saved presentation to fit both visually and hearing impaired students (15 minutes)
1 Visit a resource centre and inquire how presentations are made to accommodate learners with visual and hearing impairements.
2 Using information gathered, edit your presentation in activity 5 to suit those with visual impairments and those with hearing impairments.
3 Present your work to class for critique.
4 Improve your presentation using feedback from your peers.

Activity 7 Discussing the strengths and challenges of using electronic presentations in teaching and learning (15 minutes)
1 Discuss the strengths and challenges of using electronic presentations in teaching and learning.
2 Discuss ways of overcoming the challenges.
3 Share your findings to the class.

Tips

- Students should be allowed to bring smart phones to class.
- The activities need time to practise.
- Students can practise outside the lessons.
- You can use a M-chart for activity 7.
- Prior arrangements should be made with the resource centre for activity 6.
- Familiarity with other presentation applications is needed, apart from Microsoft power point.

Summary

This topic enabled you to become familiar with presentation applications by practicing using its different features. You discovered that a slide need not to contain too much content. Each slide must just comprise points and not prose for readability. Too much fancy animation slows down your show. Presentations should be prepared with consideration of learners diversity.

Reflection and assessment
Self-assessment

1 Which activity was more challenging for you in this task?
2 What made the activity so challenging?

Topic assessment

1 Prepare a presentation using other presentation applications.

2 What recommendations would you make for someone who wants to design an electronic presentation for teaching?

References

Cashman, S (2007). *Microsoft Office 2003: Introductory concepts and techniques.* Course Technology.

Evance, K (2017). *The disadvantages of spreadsheets.* Retrieved from https://www.techwalla.com/articles/the-disadvantages-of-spreadsheetshttps://www.amazon.com/Microsoft-Word-Excel-PowerPoint-Beginners/

House, D (2015).*Microsoft Word, Excel, PowerPoint: Just for Beginners*. Retrieved from

Krieger, S (2007). *Advanced Microsoft Office Documents 2007 Edition Inside Outside*. Microsoft Press.

Poole, BR (2000). *Essential Microsoft office 2000: Tutorial for teachers*. Retrieved from www.pitt.edu: http://www.pitt.edu/~edindex/OfficeTutorials/Lesson3.pdf

Richa (2014). *Data analysis and interpretation made easy with Excel*. Retrieved from https://blog.udemy.com/data-analysis-and-interpretation/

Rouse, M (2006, January). *Spreadsheet*. Retrieved from www.whatis.com: http://whatis.techtarget.com/definition/spreadsheet

Glossary

accommodation : altering existing schemes or creating new ones in response to new information

adaptation : adjustment to the environment

adolescent egocentrism : assumption that everyone else is interested in one's thoughts, feelings and concerns.

assimilation : fitting new information into existing schemes

classification : grouping objects into categories

collective monologue : form of speech in which children in a group talk but do not really interact or communicate.

concrete operations : mental tasks tied to concrete objects and situations.

conservation : principle that some characteristics of an object remain the same despite changes in appearance.

delegate : give somebody part of your authority or responsibility.

disequilibrium : in piaget's theory, the "out-of-balance" state that occurs when a person realises that his or her current ways of thinking are not working to solve a problem or understand a situation.

enact : endorse, ratify, pass.

equilibration : search for mental balance between cognitive schemes and information from the environment.

execute : do something

flexible : not rigid or not conservative.

formal operations : mental tasks involving abstract thinking and coordination of a number of variables.

gender biases : different views of males and females, often favouring one gender over the other.

gender schema : organised networks of knowledge about what it means to be male or female.

gratuity : financial award granted for long or meritorious service.

guarantee : warranty, pledge, promise, provides.

guidance : organised effort to help a client to understand themselves and the world around them

humility : recognising one's limitations and their failings.

impair : reduce or weaken in strength, quality.

influence	:	something or someone that may have an effect or impact on another person.
initiative	:	effort made to start something
insubordination	:	not submissive to authority; disobedience, rebellious.
leadership	:	process that involves influencing others' actions in achieving desirable goals
management	:	set of activities directed towards efficient and effective utilisation of organisational resources in order to achieve organisational goals, skillful use of resources
misconduct	:	any act or omission contravening regulation
morale	:	being motivated to perform a task
nature	:	way things happen in the physical world when it is not controlled by people
nurture	:	care and protection of somebody, while they are growing and developing
object permanence	:	the understanding that objects have a separate, permanent existence
operations	:	actions that a person carries out by thinking them through instead of literally performing them.
organisation	:	ongoing process of arranging information and experience into mental systems or categories.
organogram	:	organisational structure
policy	:	plan, strategy, course of action.
pre-operational	:	stage of development before a child learns logical mental operations.
reversible thinking	:	thinking backward, from the end to the beginning
schemes	:	mental systems or categories of perception and experience
school improvement plan	:	unique plan, refined annually, that describes a school's targeted work to raise achievement for its students
semiotic function	:	ability to use symbols- language, pictures, signs, or gestures – to represent actions or objects mentally
sensorimotor	:	involving the senses and motor activity
seriation	:	arrangement of objects in sequential order according to one aspect, such as size, weight, or volume.

subversive	:	liable to overthrow a government, legally constituted institution.
teaching records	:	documents kept by the class teacher.
trait	:	characteristic or quality that one may possess.