Professional Development Strand

Unit 7: Teaching Methodology

Module 7.3 Multigrade Methods

Student Support Material

Acknowledgements

Unit outline

Unit	#	Modules
Unit 7	7.1	Introduction to Teacher Centred and Child Centred Approaches
	7.2	General Teaching Methods
Teaching Methodology	**7.3**	**Multigrade Methods**

Icons

📖	Read	or	research
✎	Write	or	summarise
☞	Activity	or	discussion

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Multigrade Methods

Rationale

This module is the third of three in the three-credit point unit **Teaching Methodology.** The actual break up of topics and time allocation is flexible, and to be decided upon by the individual college and the lecturer concerned.

The other modules which comprise this unit include:

Module 7.1 Introduction to Teacher Centred and Child Centred Approaches

Module 7.2 General Teaching Methods

Multigrade teaching is one of the important focuses in the Educational Reform program. By adopting a multigrade approach, access to education can be increased and teacher deployment can be more effective.

Multigrade teaching requires a focus on student centred methods and strategies, to cater for the variety of ages and abilities in the classroom. Multigrade teachers plan one program for their class, but use a variety of strategies to ensure individual students' learning is being catered for.

This module examines the essential methods or strategies which can be used in the multigrade classroom. Classroom organisation, routines, grouping and teaching strategies which allow for differentiated learning will be discussed.

Further information on managing, planning and teaching in the multigrade classroom may be found in the unit **Multigrade Teaching.**

Objectives

By the end of this module you will be able to:

- Describe ways of organising resources in the multigrade classroom
- Plan for effective group work
- Discuss different types of groups, and when and how to use groups
- Organise groups according to the outcomes of the teaching session
- Define, describe and plan for co-operative learning in groups
- Discuss effective use of routines in the multigrade class
- Demonstrate specific strategies such as differentiated learning, 'peeling off' and 'one input many outputs' which can be used in the multigrade classroom

How to use this material

This module is written as a series of topics, identified in the table of contents, and by their large sub headings. Each topic contains material that will support your learning, ie some readings and activities to complete.

As this material is provided as support material for this course, your lecturer may choose the particular topics to be covered. The introduction of trimester programs, and the variety of credit points allocated to any one unit will affect the time available to teach the unit. Lectures will develop this unit from the support material, but not all topics may be covered.

Assessment

Your lecturer will provide details of assessment requirements during the first weeks of the lecture program. These assessment tasks will provide the opportunity for you to show your understanding and apply your knowledge of theory to practical situations.

References

Whilst all the readings that you need are contained in these resource materials, additional references used in the writing of this module are included below.

Mannison, M. (1998) *Interactive Teaching Strategies.* NB Publications. Australia.

McClay, J. (1996) *The Multi-Age Classroom.* Hawker Brownlow. Australia.

Collingwood, I. (1991) *Multiclass Teaching in the Primary School.* Unesco.

Journal of the Multiage Association of Queensland *Free to Learn.* 2000.

Slavin, R. (1995) *Co-operative Learning*. Allyn and Bacon, Sydney.

What is Multigrade Teaching?

✎7.3 Activity 1

To check your knowledge of multigrade teaching, answer the following questions before you read further.

- *Write your own definition of multigrade teaching.*
- *How might the physical arrangements be different in a multigrade classroom?*
- *How might the way students work be different in a multigrade classroom?*
- *How might the teacher's program be different in a multigrade classroom?*
- *How might the responsibility for teaching and learning be different in the multigrade classroom?*

Write your answers in your workbook, as you will be reflecting on them at the end of the module.

Before we can explore appropriate teaching methods and strategies for the multigrade classroom, we must first define multigrade teaching.

It is important from the beginning to establish a common understanding of what multigrade teaching is, and what it involves. There are many different viewpoints and understandings of multigrade teaching at present amongst teachers in PNG schools. Availability of information is limited, so teachers may form their own ideas on what multigrade teaching involves, and they may not be consistent with each other.

A multigrade class is made up of students in several (two or three) grade levels with one teacher for an entire school year.

> Multigrade schools are those which have classes that combine students of different ages and different abilities in one classroom.

> A multigrade class involves students of different ages and developmental levels, with different skills and learning abilities learning together with one teacher.
>
> Multigrade should remain as a class for a minimum of two (2) years but often for three (3) years. They should have the same classroom teacher for all those years.

Organising the multigrade classroom

When you have a wide range of age, ability, maturity and interests among the class, it is very important that your classroom is highly organised and structured. Everyone needs to know where to find things, how to store things, where to sit for different activities, where to put completed work etc.

The multigrade classroom may look quite different to a traditional classroom. Instead of desks in lines, all facing the chalkboard, you may see:

- Desks organised into small groupings
- A space in the centre of the room, or perhaps some marked spaces around the room where groups can sit on the floor and work
- Workstations or learning centres, where individuals and groups may go to complete activities. These will be made by the teacher and could include maths, writing, language centres, or focus on the theme being taught.
- Resources kept on shelves around the outside of the room, in boxes which are labelled to help the group identify what they need
- Boxes or folders for student's work to be kept in
- Plenty of examples of individual and group work on display

Whatever the physical arrangement, multigrade teachers need to be flexible in their approach and their classroom space may be reorganised often.

General guidelines for classroom organisation

Display areas

Decide which parts of the classroom are appropriate for display of the students' work, charts, etc. Make the best use of the space available. It is not a good idea to block the light by covering the windows with posters and paintings. Display boards, soft boards painted white are very useful. You can pin or staple work on them and change displays easily.

Some points to consider:

- The classroom environment should be interesting for the whole range of students in it. All students should feel it is *their* classroom
- Students' work should be shown carefully and thoughtfully so they can see you value their efforts
- Students can learn something from discussing with the teacher which work should be chosen for display
- Ensure a balance of work is displayed, not just the best students' work
- Students like to see their name on their work. It makes them feel proud
- Use displays to reinforce thematic work that you are working on in the classroom

Making good use of display boards

Display boards should be **interesting**, **colourful** and **eye- catching**.

The display board should be a **teaching aid.** Use it to give information and reinforce lessons taught. Vocabulary lists are particularly useful; as students can go to a display to find a word they can't spell.

Students should be involved in the creation of the display boards, which can be a focus for display of their related work.
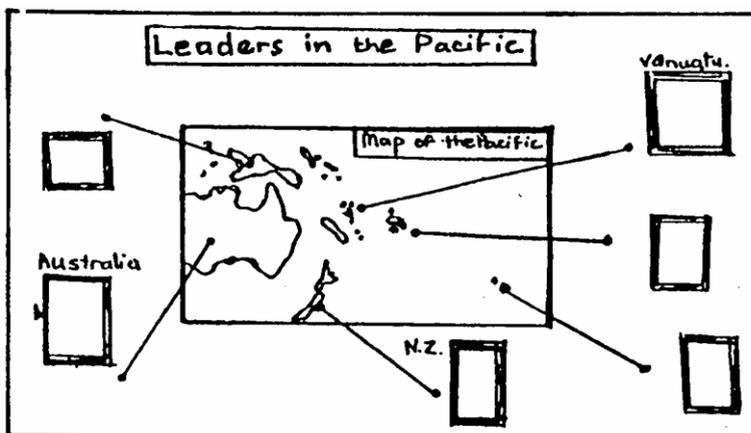
Materials: Map of the Pacific, coloured strings, drawing pins, information on cards surrounding the map. Join information to points on the map with pins and coloured string

Materials: Two pieces of paper for each student, scissors and glue. Draw a picture on one piece of paper. Use another piece to make a window. Stick it around the edges. Cut it so it will open.
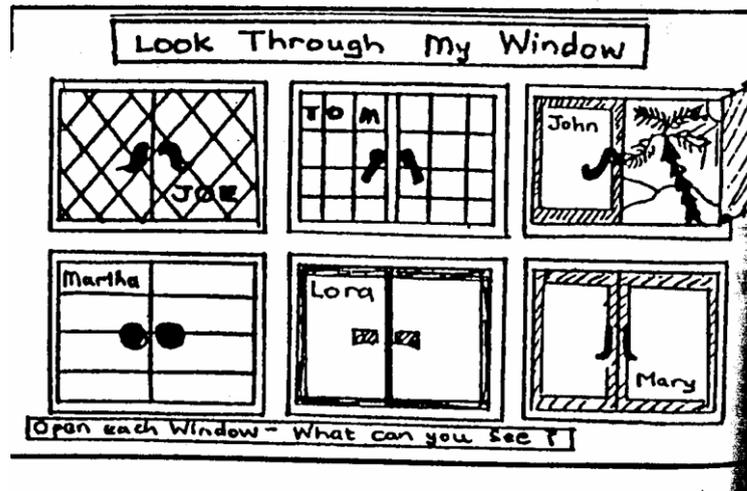
Other ways to display materials

- Drawings or paintings can be hung on strings above the students' heads. This is a good way of displaying a large print story for the whole class to read together.
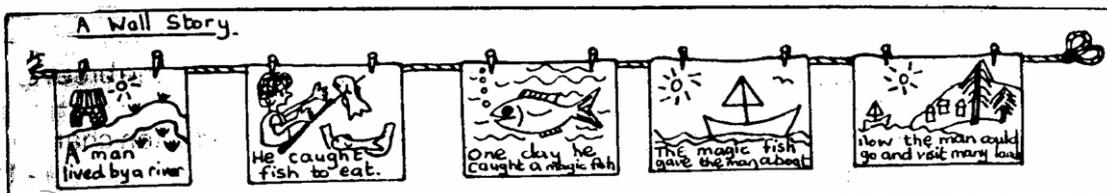
- Mobiles are an interesting way to display students' craft work, like wood carvings and small models. Words displayed in English on one side and vernacular on the other is a useful aid in the bridging classroom.

- Mats made of pandanus or coconut leaves are a good way to create display space. The displays can be attached to the mat, hung on a nail, and stored away later if necessary. Attaching a mat to a wooden frame also provides more display space. Work can be attached with pins, staples or tape.

- Where the wall space is unsuitable for display, attach a mat to the wall to create more display space. You could make a portable display stand using a wooden frame of soft wood or bamboo with a thick pandanus mat nailed permanently to it. This can be used as a divider in your room and is useful when small groups are working on different activities.

- Multigrade teachers may find it useful to have several blackboards in the classroom. They can be fixed to the wall, (maybe at a low level for smaller children) or mobile, so they can be moved around the room.
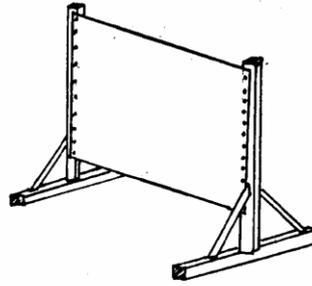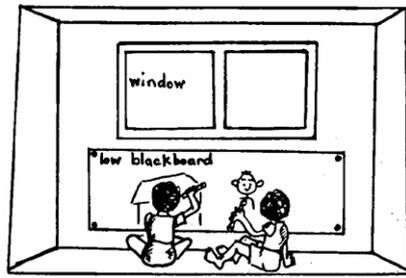
☞ 7.3 Activity 2

Choose one way of displaying students' work and make it. It will be a useful teaching aid when you are posted to a school.

Room to move

In the multigrade classroom, grouping students in different ways will require different seating arrangements.

In the traditional classroom, all desks are lined up facing the blackboard and the teacher works from the front of the room.

In a multigrade classroom, it is difficult for the teacher to organise group work if the classroom is set up like this. There are many different ways to arrange your classroom, but you should consider the following:

- You will need a floor space where the whole class can gather for activities led by teacher
- Desks can be grouped together, (2 or 3) facing each other for group work. The students are facing each other to encourage them to talk together and work co-operatively
- Divide your classroom up into areas, eg, whole class area, library corner, learning centres, small group work and individual work areas. Every classroom will be different and the space you have will be dependent on the number of students in your class, so there is no one way to go about this task. If you're not sure, try it out and see.

- The use of a low cupboard, or bookshelf, or a partition (perhaps one made of bamboo) can help divide the room into different sections. Be sure that you can see all the students if you do this
- Be prepared to change your room arrangement when necessary

☞7.3 Activity 3

In your group, draw two classroom plans. The first one should show a traditional classroom you are familiar with. Show how the room is organised and where resources are kept. On your second plan, design a multigrade classroom. Show how you might organise things differently.

Managing the Teaching in a Multigrade Classroom

When you have a wide range of abilities, and often ages, all together in the same room, it is not always effective to try to teach the class as a whole in all subjects and all the time.

There are a number of teaching strategies that a multigrade teacher could use. These strategies are equally as useful in a traditional classroom of one grade level.

- **WHOLE CLASS TEACHING**
- **SMALL GROUP TEACHING**
- **INDIVIDUAL TEACHING**

Whole class teaching

This is the simplest approach for the teacher. There is only one lesson to prepare and the lesson is aimed at the average ability in the class. It is easier for you to keep an eye on the students and keep good discipline

BUT

There are disadvantages for the multigrade situation if you use this way of teaching all the time.

- The whole class teaching is often very teacher centred
- The lesson is aimed at the average student and in the multigrade classroom, there will be a wide range of abilities. Low achievers may get frustrated and high achievers may get bored.
- Discipline can become a problem with students who are not interested because the work is too hard or too easy

Whole class teaching is still important in the multigrade classroom, but student centred activities should be presented most of the time. Some activities where whole class teaching works well are:

- Story telling and reading by the teacher
- Students' news
- Introduction to lessons, where the whole class works together with the teacher, then breaks into groups to complete activities
- Modelled reading and writing by the teacher to introduce the language lesson
- Physical education, music, drama

Individualised teaching

The teacher works on a one-to-one basis with a student. The student may be working on the same task as others, or may have special work to suit the level of the student's ability.

The rest of the class must be engaged in purposeful activity if the teacher is to focus on one student only. This can be hard to organise if you have a lot of students in a crowded classroom.

One of the common ways teachers spend individual time with students is hearing the student read aloud. You can organise to hear every student read over a period of a week if you schedule the times when the rest of the class is working independently.

You must be sure that all students at some time get your individual attention, not just the ones who may be experiencing difficulties.

Small group teaching

This is the most effective way of allowing for student centred learning at a level to meet the needs of the student.

What is the role of the teacher in this picture? How are the students organised?

✎7.3 Activity 4

Think of your own examples of lessons best taught by

- *whole class teaching*
- *small group teaching*
- *individual teaching*

Grouping students in the multigrade classroom

Adapted from Mannison, M. (1998) **Interactive Teaching Strategies.** *NB Publications, Qld.*

In the multigrade classroom (and also the traditional classroom), there will be students of different ages, abilities, needs and interests. If we are catering for the needs of students in the class, we can't give everyone the same work to do all the time. A variety of activities, requiring different outcomes can better cater for the individual student.

Working in groups is one way to enable students to engage in different activities at the same time.

Grouping students enables students to work on tasks suitable to their needs, and the teaching and learning are focused on the student, not so much the teacher.

The aim is to transform students from **passive recipients** to **active constructors** of knowledge. The teacher creates the conditions under which students agree to **take charge of their own learning,** both individually and collectively.

Co-operative learning in the multigrade classroom

Co-operative learning involves more than just working in groups together. Co-operative learning skills and structures are based on several important co-operative learning principles:

- **Positive interdependence**

  This occurs when learning activities are structured so that everyone has a role to play. Positive interdependence also occurs when the activity cannot take place unless everyone is engaged. A play is a good example of this: all group members have acting or production roles and all are essential. In partner work, dividing roles into listener and speaker makes positive interdependence because both are needed.

- **Common group goals**

  When academic and co-operative goals are clear and agreed upon, groups work more effectively. Often the best we can do is to have broad, general goals that are close or similar. For example, in a class, play at the end of the year the class may have one broad goal of putting on a great performance, but individual members may have goals varying from pleasing the teacher to impressing parents or being a valued member of a team.

- **Mixed ability groups**

Mixed ability groups encourage members to use cooperative skills when working together. Friendship groups can mean that sometimes students don't work as productively as possible. If groups are always comprise students of the same ability, the less proficient students do not have academic and social role models, which can be beneficial.

- **Shared leadership**

  By breaking down the leadership roles into different areas, eg timekeeper, recorder, reporter, etc, more people have the opportunity to practice leadership skills.

- **Frequently changing group membership**

  Because co-operative skills are called on more when working with others we do not know well, frequently changing group membership is essential. Changing groups within the classroom promotes co-operation and class cohesion, and strengthens the idea that we are all working together.

- **Group and individual responsibility**

  When a group works on a task, everyone in the group is responsible for contributing and not relying on other people's efforts. Group members can support each other's contributions and provide feedback on how they worked as individuals and as a group.

✎7.3 Activity 5

Reflect on your learning experiences in groups. Did working in a group assist your learning? How? What is your experience with group work in classrooms you have visited?

Making group work a success

Sometimes beginning teachers experience problems in establishing group work and making it work effectively. Students can spend much of the time unproductively, and can become disruptive and bored.

The problem arises because students have not been taught how to work in groups and teachers don't know how to structure and manage group work.
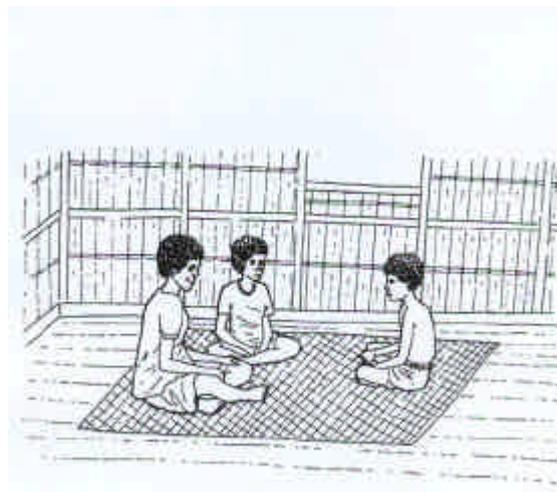
Forming groups

There are many different ways to form groups, and your choice should be related to the objectives you are trying to achieve.

- Random groups
- Interest based groups
- Ability groups
- Grade groups
- Cross age tutoring groups
- Mixed age groups
- Friendship groups

Which grouping should I use?

Random groups

Random groups are desirable in the multigrade classroom to enable students of differing ability levels and ages to work together. These groupings are good for discussing, sharing information, and completing tasks that are suitable for the whole group, eg a thematic health activity. In these random groups you should have a mix of ability, gender, cultural groups, etc.

You need a system to randomly assign students to groups. If you just ask students to make five groups, what do think will happen? Try it one time and you will see.

- After you have decided on the group size, the simplest random grouping method is to ask students to count off to the number of groups required to create the size of group you want.

  For example, 24 students in the class, you want four students per group, so divide 24 by four. Ask students to count off to 6, eg 1, 2, 3, 4, 5, 6, 1, 2, 3…
- When they all have a number, ask students with the same number to gather together in a part of the room indicated by you.

If you count off when students are already seated, they may be reluctant to get up and move to a new seat. What you can do is use a method to send them to a small group as they enter the room.

Random formation of groups avoids feelings of having been selectively placed in a particular group, and if you make it clear that group size and membership will be changed around regularly, the wish to work with friends won't be so important. Once students start to work on the task, the discomfort of working with a 'stranger' fades.

Interest based groups

When each group is about to work on a different topic within a theme, you may wish to give the students a chance to choose the one of most interest to them. With the furniture arranged for small group work (desks turned around to face each other, or a mat area marked out) place pictures, descriptions of the activity, or topic headings at each set of tables or area on the floor. Students walk in a line past all the activities to have a look. Put the class in the

middle of the room or outside and ask them to write down their first and second choice, then ask them to move to the selected topic. If there are too many people in one area, form two groups, or ask some to make a second choice. If there are too few, ask them to move to a second choice.

Ability groups

There will be times when you require students to work in ability groups. This may commonly occur during language and maths lessons, or where the group work is clearly structured around particular objectives.

Ability groups allow students to work on tasks most suited to their learning needs. In the multigrade 4/5 classroom, you may have some Grade 4s and some Grade 5s in each of three ability groups, depending on their level of understanding. You may have some very capable Grade 4 students working in the most challenging Maths group, and you may have Grade 5 students in the group with less challenging outcomes.

Grouping students according to ability must be done by the teacher, who has a clear understanding of the individual student's capabilities in a particular area. The teacher needs to collect information on the student's abilities in the area in order to make an informed decision. Observation, the results of previous tests, and analysis of work samples would help the teacher to place the student in the correct group.

It will take the first few weeks of the school year to gather this information, so at first, it may be best to group students in other ways, (eg grade groups) until you can see who is coping well and who requires further assistance.

Grade groups

At times in the multigrade class, your grouping might be based on the grade levels you are teaching, eg . you may have a 4/5/6 multigrade, and if using an activity where students are working in their grade levels, you would have three groups. These could be uneven due to the numbers in each grade. If you have specific objectives for each grade in a particular activity, you could use this method of grouping.

Cross age tutoring groups

In the multigrade classroom, you can take advantage of the range of abilities to assist you with your teaching. Using older students to assist younger students provides benefits to both. The older students reinforce their learning by having to explain to the younger student. The younger student is supported in their learning by the older class member.

Once again, students need to be taught how to do this. The older students need guidelines for assistance. You don't want them doing the work or giving all the answers to the younger student, so the teacher must be clear on what is required from the tutor. If you spend a little time outlining the tutoring task, it will save time later and make these group sessions more effective. Reading aloud is a common cross age tutoring activity. It allows one-to-one teaching, and the older student can assist with difficult words as well as being a role model.

Mixed age groups

In the multigrade class, this will probably occur in all grouping structures. If you have a wide range of classes, or combinations such as a 3/5/6, then mixed age groups will be a natural part of your program. As with the cross age tutoring, there are advantages in having a range of ages in the group.

Friendship groups

Asking students to form their own groups will not result in mixed racial, cultural background or ability groups. It tends to separate the boys and girls. It can also be damaging to some students' self –confidence. Some students are shown to be unwanted and some are self conscious about approaching others. Friendship groups have been shown to not perform as well as other group combinations. They are not as task oriented. Once students realise that they will be changing groups often, their desire to work with their friends will not create a problem.

☞ 7.3 Activity 6

Look at the following activities and decide which type of group(s) would be most suitable. Discuss your answer with your partner.

- *Big book shared reading lesson*

- *Reading aloud/ buddy reading*

- *Art activity*

- *Maths activity covering different levels of objectives*

- *Morning talk / show and tell*

- *Story writing*

- *Role play of a story*

- *Word building/vocabulary activities*

- *Problem solving in Mathematics.*

How do you get the attention of the groups once they are working?

When people are actively engaged with each other, it will be difficult to gain their attention. They may be unable to hear you; they may feel too involved in what they are doing to shift the focus of their attention.

An agreed upon signal which means ' quiet' needs to be established and practiced before the group work commences. With young students, you will need to practice this a few times.

Ask the class for suggestions and select one which sounds most workable. Typical suggestions would be that you raise a hand (with the class raising their hands, and stopping conversations, in recognition of the signal), ringing a bell, writing a word on the blackboard. Changing it every once in a while will help to keep the students responsive.

Distributing and collecting materials and work

Groups make distribution and collection of materials much easier. One person in the group can have the job of collecting for all members of the group. It cuts down on the number of people moving around the room and allows the teacher to observe and assist, rather than running around and handing out all the materials. Group work can be organised in folders which may be different colours, or have a picture to distinguish each group. The same folders can be used over and over again.

Working in groups: structuring the group

The difference between successful group work and disorganised, unproductive group work is **structure.** There are two important parts of group work to structure:

1. Structuring the group process
2. Structuring the task

Structuring the group process: roles in groups

There are several reasons why teachers assign specific tasks to individuals in a small group to:

- Keep the group organised
- Optimise the chances of using higher order thinking skills
- Stop outgoing members dominating the group
- Help shy students participate
- Give easily distracted students something to do

The roles you choose for a particular lesson will depend on the nature of the task and how well the teams are working together.

The following table lists a number of roles that teachers have found useful. You probably won't use all these roles in one activity, but choose the ones that best match the objectives of the lesson

Role	Definition
Recorder	*Keep notes and running records*
Coordinator	*Keeps time, keeps the group on task, makes sure guidelines are adhered to*
Researcher	*Checks suggestions against notes and text*
Reporter	*Summarises to class at end of the session*
Questioner	*Questions assertions and assumptions; uncovers range of opinion*
Clarifier	*Makes sure everyone understands, probes if meaning is unclear*
Encourager	*Asks people what they think; praises good ideas*
Caretaker	*Communicates with teacher on questions agreed upon by the group; gets materials for the group; returns folders and assignments*
Summariser	*Summarises what has been accomplished*
Evaluator	*Critiques treatment of topic and spread of participation; leads discussion of group functioning*

Making groups aware of their roles

You might spend a lesson to raise awareness the way each role contributes to the group by discussing with students before they complete the activity. You could discuss what kinds of jobs a reporter, coordinator, encourager, etc should do. Record the answers on the chalkboard or on some butchers paper and display these when required. At the end of the session, you ask teams to discuss which behaviours students observed that were attached to each role, and how these roles helped the group.

Another way to develop role awareness is to ask everyone who performed the same role in each group , eg. all the coordinators, to meet briefly at the end of the lesson to talk about how they carried out their role.

☞ 7.3 Activity 7

> *Work in groups of eight. Your lecturer will give each member of the group a card with your role outlined on it. The roles include recorder, co-ordinator, reporter, questioner, encourager, runner, summariser and evaluator. Play your role as you complete the task.*

Materials needed: Paper, felt pens.

Task: To construct a descriptive pamphlet for your peers advertising your college to potential students. Present your pamphlet to the class.

Structuring the task

Roles and turn taking alone do not make a successful collaborative learning episode. The group needs **shared knowledge**, a **challenging problem**, and a **clear idea of the final product** required. These three factors will vary in importance according to the nature of the activity.

Team presentations

The outcomes of group work often take the form of a presentation or summary of main points to the whole class. In this way, teams learn from each other and share ideas. Presentations can occur at the end of lesson, at the end of a thematic unit of study, or at the end of the semester.

The most obvious, and simplest, but least interesting way for small groups to report back to the whole class is by way of an oral summary. Here are some suggestions for other ways to report back.

- Provide materials that will make it possible to illustrate the oral presentation
- Ask the group to plan a drawing, cartoon, poem or story that represents the main points of the topic. They can then explain it to the class, or ask the class to discuss it.
- The group could plan a role play or mime to demonstrate their findings
- An informal debate or panel discussion would be a suitable way to report back if discussing opposing views on an issue, or a range of possible positions
- One member of the group could assume an identity and be interviewed by the rest of the team in front of the class
- The group could invite the class to interview them about their topic

Concluding activities

When learning occurs through talking, and when teaching is not limited to the transmission of information and the associated memorising, students don't realise they are learning or that they have been 'taught'. A concluding activity which asks the students to reflect on the meaning of what they have been doing will help to bring about an understanding of the outcomes of group work.

One way of sharing perceptions is to put a list of sentence beginnings on the board. Seat students in a circle, and going around the circle, ask each student to select one of the sentence starters, and complete it in some way.

- Today I learned that …

- I thought it was interesting when …
- I'd like to know more about …

☞ 7.3 Activity 8

Plan a group activity suitable for a Community Living lesson in Grade4/5.

Make sure you include :

- *the objective of the lesson (use the syllabus documents to help you)*
- *how you have structured the group process (what roles have you given?)*
- *how you have structured the task*
- *what concluding activity that you will use.*

Classroom Routines

Adapted from Collingwood, I. (1991) ***Multi class Teaching in Primary Schools*** *UNESCO.*

Classroom routines are those rules and procedures, set up by the teacher and understood by the students, which set the pattern for every day behaviour and actions.

Having clear rules and everyone knowing what they should be doing is essential in a multigrade classroom. Because students are required to do different things at different times, and take responsibility for their learning, routines that are understood by the students in the classroom are vital.

Time at the beginning of the year getting the rules right and routines firmly established will be time very well spent.

Teacher's routines

As well as the students having routines, the teacher should also have some routines which should be followed daily.

- Planning – Apart from being planned well ahead, adequate preparation time should be allowed either before the students come to school in the morning, or after school.

- Preparation – Blackboards should be prepared with the tasks and various groups listed and all teaching and learning resources should be organised for the day.

- Effective routines allow the students to start work quickly and purposefully in the morning. They know if the teacher is properly organised.

- Try to plan your day's work so you have some time for individual help (marking, discussing, reading, etc) to a variety of students in the different groups within the day.

The students' routines

Students need to know how the classroom operates and what they are responsible for doing. Clear routines assist students in developing responsibility for their learning.

- **Students should know what work they should be doing at any one time.** The teacher needs to establish the ways in which work will be set. It may be for the whole class, for a group or for an individual. Blackboards, verbal and / or written instructions, worksheets, etc can be used.

- **Students should know how books and other learning materials are distributed, collected and stored.** The individual or group should be responsible for returning teaching and learning materials to their correct place.

- **Students should know what to do when they need help but the teacher is unavailable.** If a student is having difficulties with the instructions or the task, they should know who they can ask for help, eg the group leader, their partner, etc, before they approach the teacher.

- **Students should know how to have work marked or checked.** Teachers should avoid long queues at their desk of students waiting to have their work marked. They quickly get bored and restless. It is good to have other activities they can carry on with on their own. Many teachers find it better to actually leave their desk and move around the room to the students. They can sit beside the student to help them and to check their work. Other ideas include letting students mark their own work, or make self-check work cards with answer keys.

- **Students should know what to do when they are finished.** When students are working in small groups or individually, they must know what to do when they are finished so they will not cause disruption to the teacher and the class. The students who finish early should know what they can carry on with without the teacher's help. They should know where to go, what to do and why they are doing it. A list of activities could be put on the board, they might go to the learning centre, finish incomplete work, play some games prepared by the teacher for such times, read etc.

- **Students should be given responsibility.** Multigrade teachers can help themselves and at the same time help their students by giving them real responsibility in the classroom. They should tell them which tasks and duties are the responsibility of the students. The use of monitors, or helpers for particular jobs is most useful. These students should be rotated so that different students have an opportunity to develop responsibility.

✎ ## 7.3 Activity 9

Make a list of jobs that students could take responsibility for in your classroom. Think of a way that you can display this changing list ((remember you need to rotate the students)

Student centred learning in the multigrade classroom

All classrooms are made up of students with different developmental levels and possibly different ages. Multigrade classes may have a larger spread of abilities due to the various ages combined together. The multigrade teacher must use strategies to make the learning appropriate and relevant for all the students in the class.

Teaching to the 'average', ie teaching one lesson aimed at the average student does not cater for the needs of those who do not fit this group. There will be students who need more of a challenge, and those who need additional teaching to achieve competency in the task.

The multigrade teacher can use groups as the basis for providing different instruction to class members. Each group will be working towards a different outcome or objective, according to their abilities. Even though the class may be working on the same topic, each group will be

completing the task at a level determined by the teacher as appropriate to that group. One strategy that can be used is one called 'differentiated instruction'.

The following strategies are taken from MG.3 Teaching in the Multigrade Classroom. If you have already completed this unit, you will be familiar with the strategies. Your lecturer may omit or adapt these materials.

Differentiated instruction

Adapted from PASTEP National Workshop presentation by Dr. Steve Pickford.

What is differentiated instruction?
- Differentiated instruction is a STRATEGY used in multigrade classrooms
- Differentiated instruction is a STUDENT CENTRED strategy
- Differentiated instruction provides MULTIPLE approaches to assessment, teaching and learning processes, and learning outcomes to meet students' needs and abilities.

How do you prepare for differentiated instruction?
- Shift the teacher focus from teaching to learning
- Explore what each student is capable of doing independently and in groups
- Provide tasks of varying difficulty
- Provide each student with a choice of learning outcomes

How is differentiated instruction organised?
- Plan to provide different students with different levels or kinds of content, or
- Organise different ways that students can learn, understand and use content, or
- Design different learning outcomes for different students.

Differentiation occurs through adapting lesson content, teaching and learning processes, and learning outcomes to meet the differing needs of students.

1. Differentiating lesson content

Students in different grades can be given different content or the same content but be asked to use it differently. Bloom's taxonomy is sometimes used to differentiate lesson content.

Knowledge:	Requires memory only in order to repeat information
Comprehension:	Requires rephrasing or explaining information
Application:	Requires the application of knowledge to determine answers
Synthesis:	Requires making predictions, producing original communications or problem solving with more than one possible solution
Evaluation:	Requires making judgements or offering supported opinions.

2. Differentiating teaching and learning processes

This means providing varied activities or strategies to support different students learning. It is important to give students alternative pathways to understanding ideas, For example, students may use graphic organisers, maps, diagrams or charts to differently demonstrate their comprehension of the concepts covered. The following are examples of differentiated teaching and learning strategies

Flexible grouping

> Students move between independent work, pair, small and large group work depending on their purpose. Flexible grouping allows students to be appropriately challenged and supported. Students should not be kept in the same groups all the time.

Learning preferences

> Students can be assigned tasks according to their learning preferences, eg:

> - Auditory (students who learn best by hearing information)
> - Visual (students who learn best through seeing information in charts or pictures)
> - Active (students who learn best by using concrete examples, or need to move around while learning)
> - Putting students in a preferred learning environment quiet or noisy, sitting at the desk or on the floor, inside or outside the classroom)

Anchoring activities

> These are activities that a student may do at any time. For example, when they have completed assignments or for a short period at the beginning of each class as students organise themselves. They may include problems to solve, journals to write, project work, etc. These activities may also provide the teacher with time to provide additional specific help and instruction to students.

Tiered activities

> Tiered activities are a series of related activities that increase in difficulty. The activities are linked to key understandings and skills students need to acquire. Teachers organise different activities around the same objectives, different ways of reaching the same goals.

Adjusting oral and written questions

> During large group discussion activities, teachers adjust questions for students with different needs. In written tests, the teacher may assign specific questions for different grades or groups of students.

Learning centres

> Learning centres may contain both differentiated and compulsory activities. However, a learning centre is not differentiated unless the activities take into account different students' abilities and level of readiness. It is important that students understand what is expected of them at the learning centre and encouraged to manage the use of their time. The degree of structure that is provided will vary according to student and independent work habits.

Independent and shared study projects

Independent study projects are research projects where students learn how to develop skills for independent learning. The degree of help and structure will vary between students depending on their ability. Shared study projects are where two or three students work together on a project. All students share the research, analysis and organization of the information but each student must complete an individual project to demonstrate learning has taken place.

How to prepare for differentiated instruction

Shift the focus from teaching to learning

Explore what students are capable of doing independently

Provide tasks of varying difficulty

Encourage learners to work on tasks with a partner

Help learners to analyse tasks

Provide the learner with choices for the outcome of what they are doing

Help learners verbalise the strategies they are using, asking them, "How did you do this?"

Help students to engage and remain engaged in small group and whole group situations

Explore ways of putting learners in control of their learning

Explore ways of working with individual students in one-to-one teaching situations and then in small group and whole class discussions.

☞7.3 Activity 10

Choose one of the differentiated learning strategies from the reading above. Show how you could use the strategy in a Maths lesson in the multigrade classroom.

A model of differentiation in a multigrade class

Adapted from a presentation by Dr Steve Pickford, 3rd PASTEP National Workshop, Lae.

Setting: Multigrade 7 –8

Activity: Combining a Grade 7 unit on Location, and a Grade 8 unit on Culture

- Identify and select **key objectives** and **major concepts** for both units

- Identify the **focus skills** for each grade: summarising for Grade 7 and classifying and comparing for Grade 8

- Provide opportunities for independent learning in which students engage in developing concepts, achieving objectives and practising skills for their specific grade level

- Organise students into flexible groups that combine students from both grades, and plan projects that integrate learning about location and cultures of the world

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Group #1—Grade 7-8
Major concepts: Location (Grade 7) and Culture (Grade 8)

Large group (6 students, both grades)
- *Have the group select three different cultures for exploration. These may include cultures of the neighbouring countries.*
- *Explain the project and what is expected for both independent and group learning activities.*

Assessment and evaluation
- *Provide opportunities for student self-assessment, and for teacher assessment of students' independent and group work.*
- *Provide students with assessment criteria, based on objectives, prior to their work*

Small group #1A *(three grade 7 students)*	***Small group #1B*** *(three grade 8 students)*
1. *Give this group a project that requires them to explore the concept of location through the three chosen world cultures.*	1. *Give this group a project that requires them to explore the concept of culture through the three chosen world cultures.*
2. *Have students select the parts of the assignment that can be done independently and those that can be accomplished best as a small group*	2. *Have students select the parts of the assignment that can be done independently and those that can be accomplished best as a small group.*

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3. Provide instruction for students about the five components of geography: location, place, region, human-environment interaction, movement and communication.	3. Provide instruction for students about the patterns of culture (economics, politics, kinship, art, religion, education and recreation)

Independent learning
- *Have individual students self-select interest areas through which they will apply and extend their understandings*
- *Have individual students from each grade work independently to gather information and complete their part of the project in preparation for returning to small groups.*
- *Provide instructional support for individuals as needed (eg. How to summarise or compare information, how to use resources*

Small group #1A	**Small group #1B**
Have this group meet to share the information they have gathered, summarise what they have learned and decide how they will share and connect this with the information gathered by the other small group	*Have this group meet to share the information they have gathered, summarise what they have learned and decide how they will share and connect this with the information gathered by the other small group*

Large group

Have both small groups gather to share and learn from each other. Have the large group combine information into a project that gives a complete picture of each culture according to its location (including maps) and its patterns of culture. The students should present information in a variety of ways: oral, written and visual.

☞7.3 Activity 11

Your lecturer should model the process of completing this task on the chalkboard with the group before asking you to complete the activity.

This activity would be suitable for assessment.

1. *Study the model and note the sequence of instruction, the different group organizations and the various roles for teachers and students*

2. *Using the model and skills list from the Upper Primary documents, design a differentiated multigrade unit for Grade 6/7*

3. *Differentiate any activities using Blooms taxonomy*

4. *Try to differentiate outcomes and assessment criteria.*

5. *Present your unit to the group.*

Peeling off: a strategy for the multigrade classroom

PEELING OFF - COMMON INPUT WITH LAYERED OUTCOMES

Peeling Off is a strategy which allows for a common input with 'layered' outputs; that is the whole class begins with a concept being taught by the teacher in a direct teaching method.

After the teacher has completed the first part of the teaching, one group 'peels off' or leaves the teacher to complete an activity. This group will complete an activity at the simplest level of outcomes. The activity should be designed so the group can complete the task without the assistance of the teacher.

Direct teaching again takes place with the students remaining. The teacher will continue to build on and extend the outcomes for this group. When the teacher has completed teaching to the level of outcome expected, a second group will 'peel off' and leave the teacher to complete an activity which is more challenging than the first group's activity.

The teacher will remain with the last group of students who will be working on more difficult concepts or outcomes. After some direct teaching, this group will 'peel off' to complete activities at the most difficult level.

The teacher concludes the lesson by bringing the groups together to share their work and summarise the main teaching points.

The example on the next page is based on a Mathematics lesson developing the concept of area, using the context of gardening. You will see that the first group are required to explore area using common units, the second group, square metres and the third group square metres and parts of square metres.
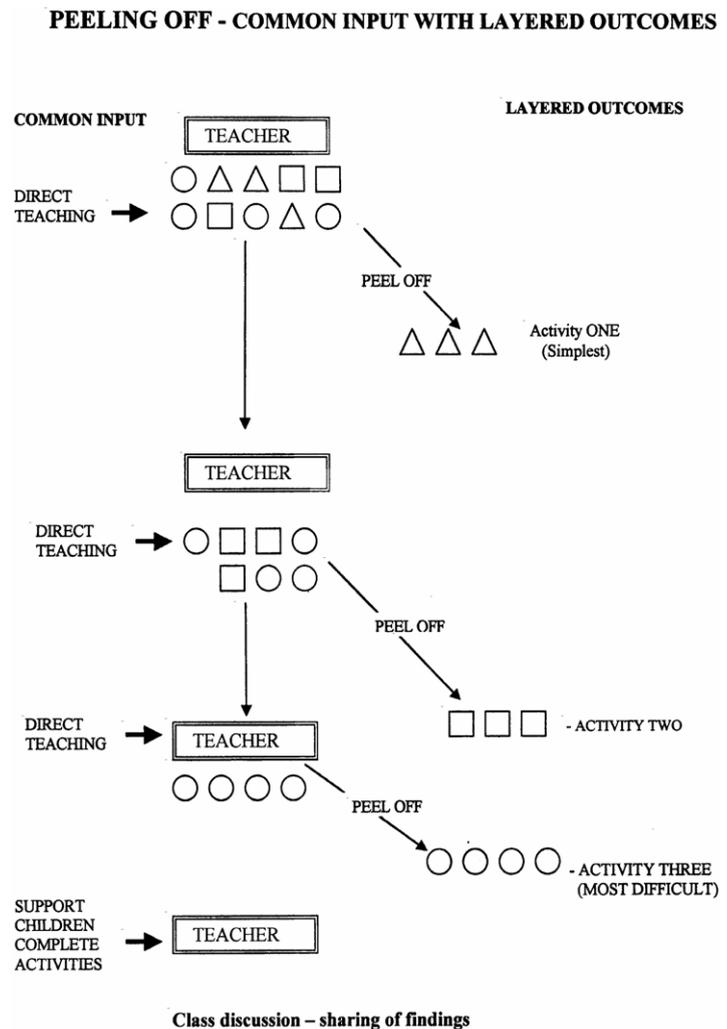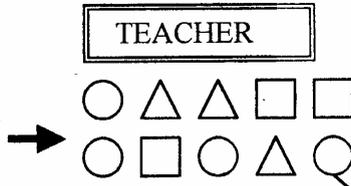
MATHEMATICS – GRADE 3/4/5

TOPIC – AREA   **CONTEXT: GARDENING**

COMMON INPUT   **LAYERED OUTCOMES**

TEACHER

- Visit to Garden
- Discus what area is.
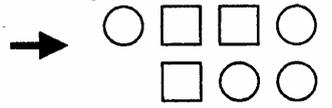- Demonstrate using common units to find area.

PEEL OFF

Find area of plots using common unit.

TEACHER

- Discuss need for standard unit – square metre, demonstrate use.

PEEL OFF

Find area of plots using square metres.

TEACHER

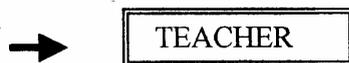- Discuss need for accurate measure. Demonstrate using square metres / part squares.

PEEL OFF

Find area of plots using square metres and part square metres.

- Teacher supports children to complete activities.

TEACHER

Class discussion – sharing of findings.

✎7.3 Activity 12

You are teaching measurement skills in Mathematics to your 4/5 multigrade class. Using the Mathematics syllabus documents, design a peeling off activity for three groups requiring different outcomes.

One input, many activities, shared output

This is a strategy that teachers can use in a multigrade setting. Teachers plan for a shared experience with the whole class, for example, the experience could be shared reading with a Big book or an excursion to an interesting venue. The experience is used as a springboard to develop different learning activities. The activities are designed to meet the learning objectives identified by the teacher for the multigrade; ie they will cover more than one grade. Students work in groups on different tasks, which meet different outcomes. Representatives from each of the groups come together and share their completed work. Each representative talks about the work that has been done and how it was completed. The unit may be completed by bringing all groups together for a shared output, where students create a 'class' piece of work representative of all groups in the classroom.

A simple example of this strategy could be when a teacher reads a story to the 3/4 class; group one draws a picture from the story, group two writes the story in vernacular, or in their own words, group three creates a different ending for the story. The level of difficulty and outcomes expected are varied for each group.

Language activity: Grades 3/4

Step 1:

Teacher reads the story to the whole class, discussing features of the language.

Step 2:

Students work in mixed groups assigned by the teacher on a number of different activities. The activities cover a range of objectives in Language which the teacher wishes to cover.

Step 3:

Each group presents their work to the whole class, the teacher promoting discussion and focusing on the language feature being taught.

✎7.3 Activity 13

*Design an activity using one input (eg a story, an excursion, a picture)
and design three group activities wi th different outputs. Identify an
objective for each group, and differentiate the activities to provide a range
of tasks for different abilities.*

Multigrade methods: summary

Student centred learning is important to promote in multigrade classrooms. Teachers can use a
variety of strategies or methods to ensure students are working at a level appropriate to their
experience and ability. Students need to take an active role in their own learning, and the
strategies selected by the teacher will play an important part in developing these skills.

Methods or strategies deal with the '*how'* of teaching and this module has addressed some of
those questions; how to organise the classroom, how to group students, how to get students
into routines which will assist you and them, and how to use strategies effectively to promote
student centred learning.

Detailed information on programming, planning and assessing in the multigrade classroom can
be found in the unit *Multigrade Teaching*.

Key Terms and Glossary

Multigrade classroom
Class made up of students in several (two or more) grade levels learning together with one teacher, using one teaching program.

Structuring the group process
Assigning or giving specific tasks to individuals in small groups.

Structuring the task
Providing a challenging problem and a clear idea of the final requirements of the group to complete the task.

Differentiated instruction
Providing varied activities or strategies to support the different levels of learning in the classroom.

Add to this list to make a personal glossary.