Professional Development Strand

Unit 2: Human Development

Unit Guide

Lecturer Support Material
Acknowledgements

Materials written and compiled by Lynne Hill.

In consultation with:

Kautil Mileng
Sam Mariko
Joe Lipu

Incorporating suggestions from Professional Development strand lecturers:

Balob Primary Teachers College
Madang Primary Teachers College
Kabaleo Primary Teachers College
St Benedicts Primary Teachers College
Gaulim Primary Teachers College
Dauli Primary Teachers College.
PNGEI

Layout and diagrams supported by Nick Lauer

Date: October 2002

PASTEP

Primary and Secondary Education Project
Australian Agency for International Development (AusAID)
GRM International

Papua New Guinea-Australia Development Cooperation Program
## Unit outline

<table>
<thead>
<tr>
<th>Unit</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 2 Human Development</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Child Development</td>
</tr>
<tr>
<td>2.2</td>
<td>Educational Psychology</td>
</tr>
</tbody>
</table>

### Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Activity or Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>📖</td>
<td>Read or Research</td>
</tr>
<tr>
<td>🖋️</td>
<td>Write or Summarise</td>
</tr>
</tbody>
</table>
# Table of contents

Unit 2: Human Development...........................................................................................1
  Overview of Unit Topics ..........................................................................................1
  Rationale ..................................................................................................................2
  The Materials ...........................................................................................................2
  Objectives ................................................................................................................3
  Practicum and School Experience considerations ................................................3
  The Child Study ........................................................................................................3
    Child Study approaches ......................................................................................3
    Options for child study component ....................................................................4
  Task One: Child Study ............................................................................................5
    Task Guidelines ....................................................................................................5
    Stage Two: Physical (Psychomotor) Development ..............................................5
    Stage Three: Intellectual and perceptual development ....................................5
    Stage Four: Social-emotional and moral development ........................................6
  Part Two: Reporting and comparing data ...............................................................6
    Cultural considerations .......................................................................................7
  Teaching Strategies and Activities ..........................................................................7
  Assessment ..............................................................................................................8
  Inclusive Education considerations ........................................................................9
  Gender ....................................................................................................................9
  Language Considerations ......................................................................................10
  Multigrade Considerations ....................................................................................10
  Making Sense of the Readings .............................................................................11
  Unit Evaluation and Reflection ............................................................................14
  References .............................................................................................................15
Unit 2: Human Development

The Professional Development strand aims, like all strands, to contribute to the production of responsible, reflective and competent beginning teachers who can serve the current and future needs of pupils from Grade 3 to Grade 8 within the primary system of Papua New Guinea.

The particular aim of the Professional Development strand is to provide students with sound knowledge of the Papua New Guinea education system, and educational theories and practices, in order to be competent and effective in the work they will do as primary teachers in this country.

The aim of Unit 2 is for beginning teachers to:

- Apply their knowledge of child development and how children learn to their classroom practices.

Overview of Unit Topics

<table>
<thead>
<tr>
<th>2.1 Child Development</th>
<th>2.2 Educational Psychology</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is development?</td>
<td>Learning and learning styles</td>
</tr>
<tr>
<td>Shapers of development</td>
<td>Classical conditioning</td>
</tr>
<tr>
<td>Studying children</td>
<td>Operant conditioning</td>
</tr>
<tr>
<td>Characteristics of observation</td>
<td>Behaviourism</td>
</tr>
<tr>
<td>Using observation instruments for child study</td>
<td>Reinforcement</td>
</tr>
<tr>
<td>Physical growth and development</td>
<td>Stages of cognitive development</td>
</tr>
<tr>
<td>Language development</td>
<td>Constructivism</td>
</tr>
<tr>
<td>Moral development</td>
<td>Sociocultural theory</td>
</tr>
<tr>
<td>Play and social development</td>
<td>Gender theory</td>
</tr>
</tbody>
</table>

National Curriculum Guidelines. P.20
Rationale

The unit is written as a two-credit point unit for a twelve-week semester, however colleges will teach the unit in accordance to their program and credit point requirements.

It will be necessary to develop a semester course overview for this unit, selecting content according to the time available and credit points allocated.

The unit comprises two modules:

Module 2.1 Child Development

The study of child development attempts to provide students with a basic understanding of the characteristics of children’s growth, in order to cater for individual differences, and to facilitate optimal learning for all students. Physical, mental, social, emotional and moral development will be discussed.

The developmental stages of children’s growth will be examined through a series of observations culminating in a child study. This study will examine characteristics of growth across a number of areas and provide students with the opportunity to develop appropriate observation skills and recording methods.

Module 2.2 Educational Psychology

The study of educational psychology provides a theoretical basis upon which to build understandings of learners and learning. Understanding stages of learning development, the different types and categories of learning, and what can be expected during different stages of development will assist teachers to plan appropriate programs for the classroom.

It is important that students make the link between the theories of learning and their application and relevance in the classroom.

The Materials

The support materials for this unit include:

- Unit overview and support materials (unit)
- Lecturer Support Materials (module)
- Student Support Materials (module)

The unit overview provides an overall picture of the two modules which comprise this unit. It is necessary to view the unit in its entirety to plan a course overview and assessment tasks. The unit overview also contains statements relating to gender, inclusive education, language and multigrade considerations. These should be seen as important concepts which should be discussed and reinforced at appropriate times during the teaching of the unit. Strategies to improve the delivery of the unit are also included.
The Lecturer Support Material contains additional ideas and suggestions for teaching the content, in addition to raising awareness of inclusive education where relevant. These ideas can be found in text boxes throughout the module.

The Student Support Material is the same as the Lecturer material, without the additional information in the text boxes.

**Objectives**

Objectives for each of the modules may be found in the relevant Lecturer and Student Support material.

**Practicum and School Experience considerations**

Wherever possible, the content of the lecture program should be linked with school experience or practicum tasks. Weekly school experience would provide an ideal opportunity for students to try out the strategies as they are dealt with in the lecture program. This could also form part of the assessment for the unit.

From the available two hours per week, some time could be given to complete observations of children on a regular basis, either in the demonstration school, or using children of lecturers who are easily accessible on campus during the day.

**The Child Study**

This unit examines the developmental nature of children’s learning. Module 2.1 addresses the development of physical, social and emotional needs, whilst Module 2.2 examines development in cognition.

Both modules provide an excellent platform for an in-depth child study to be completed over the period of the semester. This child study could be a major focus for assessment of this unit.

It is important to link the theories introduced to real life contexts and practice in the classroom. The completion of a child study enables a student to explore theories introduced, to test these theories against children in their own community and cultural context, and reflect on children’s development in light of their findings.

**Child Study approaches.**

After reading through the unit and considering access and availability of children for a child study, lecturers will need to plan the presentation of this unit accordingly.

The support materials provided may be used in a number of ways, and organised to accommodate the context in which the unit is being taught.
Options for child study component.

1. Students could spend the first weeks of the lecture program gathering data on a specific child for analysis during the remainder of the semester. This portfolio of observations would be guided by clear requirements from the lecturer and focused around physical, social, emotional and cognitive indicators of development. After the majority of information for the child study has been gathered, the lecture program would then introduce the theoretical concepts of developmental learning, to which students would compare their data to that of the theorists. Critical reflection of their findings in terms of theories introduced would allow students to make the link between what they have observed and what they have learnt about stages of children’s development.

2. The lecture program could include time for the child study observations to be carried out as the semester progresses. As each topic is introduced, students would collect data which would either support or refute theories introduced.

Included below is an example of a child study task developed at Madang Teachers College.
Task One: Child Study

Task Guidelines

Child study is one of the major tasks you will need to do to pass the Human development unit. You will have to do a minimum of four visits on your chosen child to study him or her closely at various stages of his/her development. The study comes in four parts.

Part One: Data collection for Child Profile – Due during the last lecture of week 6
Part Two: Reporting and comparing data – Presentation begins in week eight.

Part One will be individual work and part two will be presentation in pairs.

Part One: The child study will be in four stages.

Stage One: General information of the child
- You will select a child between the ages of 3 years to 12 years old.
- Make an initial visit to the child and collect general information about the child. You might want to take a photo or request for a photo of the child, draw or paint the child and record any relevant information. (See chart for suggested information)
- You will need to observe him/her closely, interview, talk or even play with the child to gain trust and confidence. If possible, interview the parents, brothers or sisters.
- With the help of the child do a family tree.
- Write a page of observation report on this initial visit.

Stage Two: Physical (Psychomotor) Development
- Make your second visit to the child either at home or school to collect more information on the physical aspect of the child.
- You will need to prepare materials or instruments to measure the weight and height of the child. You will also need to think of some physical testing activities to test the senses and body co-ordination of the child. (See suggested activities on chart)
- You must do at least 5 activities to test the senses and motor skills.
- Write a page report based on information gathered on this stage.

Stage Three: Intellectual and perceptual development
- You will make the third visit to your child in the school or at home
- If possible ask the parents about what things the child can do at this stages and record the information
- Prepare at least 5 mental or intellectual and perceptual activities for your child including materials and objects that you will need. Prepare a recording sheet to enter your information (refer to chart for suggested activities)
- Conduct the activities for the child and record your observations
- Write a page report based information gathered on this stage
Stage Four: Social-emotional and moral development

- Make the fourth and last visit to your child at home or at school
- Think about areas you are going to observe and prepare beforehand some observational instruments such as checklists, rating scales or questionnaires that will allow you to record information at this stage (see chart for suggested areas for observation)
- Observe your child from a distance while at play or at work with friends or by him or herself and record what you see from his/her behaviour, his/her relationship with others. If possible do a sociogram (see chart for model)
- Interview your child on moral issues such as the importance of school rules, helping mother, father, and others, listening to teachers, going to church, stealing, lying, cheating, hurting friends etc...
- Do a page report based on information gathered on this stage.

Part Two: Reporting and comparing data

- You will work in pairs to draw up a comparative chart for presentation to the whole class.
- You will find a partner and compare the two children you have studied
- In order to do that you will need to examine your individual child profile carefully and prepare your comparative summary chart based on the four stage of the child observation.

Note: 1. You may want to show photos of the child, work of the child, you have collected from the scrap book
2. Presentation will be done in pairs and the time limit is 10 minutes.
Cultural considerations

Much of the research and readings dealing in child development and educational psychology have originated in western countries. It is made clear, however, that culture influences the type and rate of development across a wide range of areas in human development.

Lecturers should make clear to students that theories should be viewed in light of the local context. The child study will provide a rich source of data directly related to the cultural context of the learner and will make for interesting analysis and comparisons.

Teaching Strategies and Activities.

Within the student resource materials for the modules, there are suggested activities for each topic. These activities are focused upon student centred tasks, and where possible, involve group work and practical application.

By providing examples of student centred and student led activity and learning, beginning teachers will develop skills and strategies which in turn will be taken into their classrooms.

Activities should focus upon maximising student involvement and interaction between peers and the lecturer.

The following strategies may be incorporated into lectures, and some may provide ideas for assessment strategies.

**Brainstorming** – gathering, organising and appraising all the facts known by the group to generate ideas and stimulate thinking.

**Displays** - Students can display information on charts which can then be displayed around the room. Information can be presented in a variety of ways, not always as a written assignment.

**Diagrams** - Diagrams can provide an alternate way to present information. Students can be actively involved in the creation and portrayal of information through the use of diagrams.

**Discussions** - provide opportunities for students to express ideas and feelings and listen to others.

**Flow Charts** - Visual text that provides a symbolic method of explaining and recording a sequence.

**Group Work** - provides students with the opportunity to participate in achieving a shared goal, and allows students to value each member’s contribution.
**Guest speaker or visitor** – A visit from an experienced teacher, inspector, etc allows a sharing of knowledge and skills.

**Jigsaw groups** – this task involves breaking up a topic into discrete tasks or activities. These tasks form the pieces of the jigsaw. Each expert group then presents their ‘piece’ to form a complete picture of the topic.

**Matrix** – a table which classifies information (numbers, words or symbols) into a grid layout to facilitate analysis and prediction. Presenting information about theories of development and learning would be most suitable in matrix form.

**Mind Maps** – are a way of recording information. A mind map is often associated with brainstorming and is useful for drawing connections between ideas and concepts.

**Presentations** – can be spoken, written or multimedia. It gives students the opportunity to organise, plan and present information and material to a particular audience.

**Role Play** – involves taking on and acting out roles in varied, non-threatening situations. This is a good strategy to allow students to try out ideas on their peers before taking them into the classroom.

### Assessment

For students, assessment and evaluation can serve such purposes as:

- enhancing learning, especially when tasks are set that encourage the use of learning strategies, understanding, or real life applications.
- Providing feedback about progress and thereby help guide future learning
- helping to stimulate motivation, especially through confirming learning and goal setting.
- building confidence and self-esteem.
- developing skills in evaluation through self and peer assessment.

For teachers / lecturers, assessment and evaluation can serve such purposes as:

- providing information about the whole group and individual students. In turn, this information can be used in a variety of ways to enhance and report on the learning program.
- providing background information about student abilities, needs and interests.
- helping diagnose strengths and weaknesses of students to ascertain a starting (or follow up) point for planning and teaching.
- helping compare the performance of class members.
- identifying strengths and shortcomings in teaching.
- enhancing curriculum programming and planning.
- reporting to students and college administrators information about a student’s progress and the learning program.
Assessment tasks should be developed at the unit level, recognising the development of knowledge, skills and attitudes across the two modules which make up this unit.

It is the role of the lecturer/strand to determine assessment tasks relevant to the materials taught. The assessment tasks should provide information on the quality of student learning and the ability of the student to apply the theoretical concepts introduced in a relevant context. Where possible, each task should measure more than one objective. The number of assessment tasks will be determined by the credit point loading given for the unit.

Some suggested assessment activities are listed below. These are provided as samples only, and are not a prescriptive list. They do not cover all topics, are not presented in any particular order, nor are they weighted.

- Complete an in-depth study of a child, focusing on physical, social and emotional development. (See previous example)
- Develop a bank of data gathering instruments which could be used in the classroom to gather information about individual students. Use two of these instruments to gather information during an observation of a student. What did your evidence tell you about the child?
- Choose one area of development, e.g., physical development. Discuss the development stages and changes which occur during such development. Illustrate your discussion with practical examples from your observations.
- Complete a test of conservation as outlined by Piaget on a selected student. Measure for conservation of number, length and area. Test two or three children of varying age. Discuss your findings in terms of Piaget’s stages of development, and cultural considerations.
- Discuss reinforcement and motivation theories and the role they play in student’s learning.

**Inclusive Education considerations**

Inclusive education is educational systems, activities and materials that accept, celebrate and respond to the many differences that occur in students. Inclusive education is ensuring that no person is discriminated against on the basis of gender, ability, ethnicity, race, religion or social grouping. Rather, inclusive education recognises the particular or special needs that individuals or groups may have, and develop approaches, techniques and resources to address such need. Inclusive education aims to ensure that all students are given the opportunity to attain optimal educational outcomes. Naturally, the provisions required by particular individuals or groups will differ according to their particular needs.

This unit provides a wealth of opportunities for examining individual differences. The comparative child study allows students to examine an individual student’s development across a range of areas and compare the development with another student of a similar age or stage of development. When individual students’ needs are recognised, the development of a more inclusive curriculum is possible.
Gender

A gender inclusive curriculum is defined as a curriculum which by its content, language and methods gives value and validity to girls and women, their knowledge and experience, equally with boys’ and men’s knowledge and experience. Gender inclusive curriculum content reflects the reality that women play an active role in all realms of human endeavour.

Teachers need to provide learning experiences that will ensure the inclusion of women and girls in the curriculum does not reinforce stereotypes. Women and girls should be depicted in a whole spectrum of roles: making decisions, initiating ideas and actions, being adventurous and brave as well as sensitive and caring, being physically active, occupying positions of responsibility and taking risks. The educational experiences of all students needs to adequately explore and reflect the changing roles of men and women in a rapidly changing technological society.

Module 2.2 introduces the ideas of gender, it’s construction and it’s relationship to ways of thinking. Throughout the teaching of the unit, look for topics and examples where gender may be a consideration.

Language Considerations

Lecturers will need to consider how best to incorporate bilingual teaching ideas where appropriate in this unit.

Module 2.1 discusses language development, and an exploration of early language use, ie tok ples, pidgin, etc would enrich the student’s understanding of this area. The opportunity to investigate whether language acquisition is varied in different cultures and the reasons why would provide an avenue for some interesting research.

Multigrade Considerations

The study of physical and cognitive development is the focus of this unit. Through examining ways children grow and develop, students should be aware of individual difference, in both physical stages of development, and development of thinking skills.

Multigrade classes support the recognition of individual difference, both in age and ability. The multigrade teacher provides teaching and learning suited to the needs of the students in the class. Differences in growth and development are recognised and catered for.
Whilst studying this unit, consider how the theories introduced can best help teachers understand differences in development. Multigrade classes provide a way to organise for teaching and learning according to levels of development.

**Making Sense of the Readings**

The modules are arranged in topics, comprising a short reading and usually followed by an activity.

The study of child development, and in particular educational psychology introduces students to new vocabulary and new concepts, many of which they may have no prior knowledge or experience to draw from.

It is essential that students are supported in making sense of the readings contained in this unit.

It is important that students fully understand what they are reading, and additional strategies may assist in developing a deeper understanding of the content presented.


Use these activities to assist and support the students in their understanding of the readings given.
**Interactive Reading Breaks**

This strategy divides reading material (text or articles) into digestible bits and calls for pauses during which readers raise points for discussion.

Students work in pairs. Simply invite them to find a comfortable place to sit next to each other. They will have only one copy of the reading between them, so they need to sit side-by-side, or near the corner of a desk/table.

*Learning Environment*

*Materials*

Select the material to be read, and divide it into sections for discussion purposes. Mark the sections, ‘Reading Break 1’ ‘Reading Break 2’ etc. Look for a short provocative reading and provide breaks frequently, especially the first time you introduce this strategy to students. Provide one copy for each pair.

Select the material to be read, and divide it into sections for discussion purposes. Mark the sections, ‘Reading Break 1’ ‘Reading Break 2’ etc. Look for a short provocative reading and provide breaks frequently, especially the first time you introduce this strategy to students. Provide one copy for each pair.

*Procedure*

1. Read the next segment (until you have both reached ‘Reading Break 2) 
2. Turn the reading face down and discuss with your partner. 
3. Continue until the reading is completed.
Reading and Summarising Pairs

By reading short segments of text in anticipation of summarising it to someone else, students become more focused on the content.

Learning Environment

Comfortable space for students to work in pairs. They will have only one copy of the reading between them, so they need to sit side-by-side, or near the corner of a desk/table.

Materials

One copy of the reading material for each pair. Mark off small reading segments, or use already existing subheadings, in a textbook for example.

Procedure

1. Divide the class into random pairs; ask pairs to call themselves A and B.
2. Give students the following instructions: - Read together silently one segment of the text at a time.
3. Ask someone from each pair to collect one copy of the material to read, and explain the following steps of the strategy (one copy per pair emphasises the joint nature of the endeavour… and saves paper):
   - Read the segment (up to the point where it says “Reading Break 1”) in silence
   - While you are reading, think of a point you’d like to discuss with your partner.
   - When you have both reached ‘Reading Break 1’, turn the reading face down and discuss your questions

When finished reading each segment, put the material out of sight.

A summarises the reading to B as completely as possible.

B adds, amends, or clarifies the summary in discussion with A until they are both satisfied the meaning of the passage is clear.

Move on to the next segment.

4. You may wish to specify the length of time each discussion break should take.
5. Conclude in a whole class circle, asking each pair to relate which discussion point they found most interesting, and why
   - A and B check the original segment.
   - When finished, A and B change roles, and repeat the same process with segment #2, and so on.
   - When the end of the article is reached, partners construct a review summary of the whole reading.
6. Keep your eye on the time (some pairs may need to be hurried up, others told they have plenty of time.
7. Try to organise the pairs so that they all finish at roughly the same time.
8. Ask what strategies and skills they learned from each other and how their pair reading and summarising could be improved next time. Students could be given a minute to think about these questions in silence before sharing with their partners.

**Unit Evaluation and Reflection**

An evaluation of the unit should be carried out each time it is taught. This provides important feedback on the effectiveness of the program presented.

When reflecting on our teaching the areas we should consider are:

- The content of the unit
- The methodologies used in delivering the unit
- The assessment activities
- The co-ordination of the unit.

**Focus questions for lecturer reflection**

**Content of the unit**

- Did the content support the objectives of the unit?
- Were the activities sequenced logically?
- Was the content relevant? Did the content help the students to become competent primary school teachers?
- What recommendations can you make?

**Methodology**

- How did you deliver the content to the students? Were these strategies effective?
- Were the students aware of the strategies you were modelling and how they could use these strategies in their own teaching?

**Assessment of the Unit**

- How clear were the assessment tasks?
- How many tasks were given to students? Was this sufficient/ too few or too many?
- Did you give students enough time to complete each assessment task?
- Do the students’ assessment results display what you expected of the course?

**Unit Co-ordination**

- How well did you co-ordinate this unit?
- Did you produce any materials for students? Were these appropriate?
- Did you communicate well with the other lecturers who were teaching the same unit?

After considering these questions, recommendations may be suggested to further enhance the effectiveness of the unit.
References

The student support materials contain all the readings necessary to complete the unit. These readings have been adapted from the following texts:


