Professional Development Strand

Unit 2: Human Development

Module 2.1 Child Development

Lecturer Support Material

Acknowledgements

PASTEP

Unit outline

Unit	#	Modules
Unit 2 **Human Development**	**2.1**	**Child Development**
	2.2	Educational Psychology

Icons

    📖   Read   or   Research

    ✎   Write   or   Summarise

    ☞   Activity   or   Discussion

    ⓘ   Suggestions for lecturers

    ☝   Comments

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Module 2.1 Child Development

Introduction

This guide provides additional ideas for teaching and assessing Module 2.1, *Child Development.*

Please take note of the following:

- It is important to read through the module first, to decide what materials you will use, and what tasks and activities you will set for the students. It is also important to see how this module fits within the complete unit.

- It will be necessary to develop a course overview and determine topics to be presented which will take account of the time allocation given to this module.

- The material is written as a resource for the teaching of this module.

- Do not expect students to work through the total module alone. There may be too much material and they will need assistance in determining the tasks required.

- The activities: Many of the activities have a number of questions to discuss and tasks to do. They are included to provide some ideas and stimulus, not necessarily to complete every part of each activity.

- The activities provide a focus for learning, and some may be suitable for developing into assessment tasks, but the activities are not written to be used as the assessment program. Ideas for assessment tasks are provided in the unit guide support material.

- Suggested time allocations are provided to give some idea of how this module fits in with the others in this unit. Lecturers have the flexibility to select material and use it in a way that will fit within the lecture program.

- The Lecturer Support Material is based on the Student Support material, with additional notes in text boxes containing ideas for further exploration of topics.

- Additional readings, where included as an appendix, are included as additional information for lecturers. These may be photocopied for students where appropriate.

Rationale

This module is one of two in a two-credit point unit. The recommended time allocation for this module is approximately twelve hours of lectures. The actual break-up of topics and time allocation is flexible, and to be decided upon by the individual lecturer.

The remaining module which comprises this unit is:

Module 2.2 Educational Psychology

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.

Objectives

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

- Demonstrate an understanding of growth, and its role in overall development
- Explain the importance of observation to assist in measuring development and progress
- Explain and use a variety of observation instruments to gain information about development
- Describe necessary conditions for optimal growth
- Identify and discuss stages of physical growth in childhood and adolescence
- Identify and discuss stages of language development
- Identify and discuss stages of moral development
- Identify and discuss stages of play and social development
- Conduct a child study using appropriate child observation techniques
- Explain the implications for teachers to cater for individual differences and needs

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 includes some readings and activities to complete.
It is the lecturers responsibility to develop a course overview, according to the credit point loading and available time within the semester for each module. As this will vary between colleges running semester programs and those running trimester programs, lecturers will need to select topics which are most relevant to the needs of their students.

Major topics include:

- What is development?
- Developmental stages
- Shapers of development
- Studying children
- Characteristics of observation
- Using observation instruments for child study
- Physical growth and development
- Language development
- Moral development
- Play and social development

Child study: Practicum and school experience considerations

This module contains two main focuses:

- The development of observation skills and instruments to measure such observations
- The investigation of various theories of development growth

The development of a child study, carried out over the semester, will provide the opportunity for students to develop their skills in observation and explore the theories of development in a practical setting.

Lecturers should formulate a program for the child study based on time and resources available. Those colleges which have weekly school experience could design a program whereby students are introduced to a particular focus of developmental growth in the lecture period and then plan an observation during school experience time. Colleges which have limited school experience time available would require blocks of observation, or create other opportunities for observation in the local community. Many of the activities suggested could be used in the development of a child study project.

Assessment

Assessment tasks should be developed at the unit level, recognising the development of knowledge, skills and attitudes across the three modules that make up this unit.
The number of assessment tasks will be determined by the credit point loading given to the unit.

The child study requirements should be developed in conjunction with the course overview. This should form a major piece of assessment for this unit.

A Note about the readings

Due to the theoretical nature of this subject, there are quite a number of readings included in this module. Students should be supported wherever possible to gain meaning from the required readings. Lecturers should use a variety of strategies such as graphic organisers, interactive reading strategies and focused group discussion to assist the students with their understanding. See the unit guide for further ideas.

Students should be encouraged to keep a glossary of terms, as there are quite a number of terms specific to the study of developmental growth and psychology.

References

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

The material in this module has been adapted from:

Barry, K. and King, L. (1998). ***Beginning Teaching and Beyond (3rd Ed).*** Social Science Press: Australia

Banks, S.R., and Thompson, C. L. (1995). ***Educational Psychology for Teachers in Training.*** West Publishing Company: USA

Bleus, A. (1989). ***Psychology for Teachers in the South Pacific.*** Goroka Teachers College: PNG

Briggs, F., Potter, G. (1999) ***The Early Years of School; Teaching and Learning.*** Longman: Australia

What is development?

(i) Draw on the students' own experiences and those of their family to introduce the topic of child development.

Adapted from Bleus, A. (1989). 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

Banks, S. R. and Thompson, C. L. 'Educational Psychology for Teachers in Training.' West Publishing Co: MN, USA

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We are all aware that people grow. They are born as small babies and grow into adults. As a baby, they weigh about three kilograms but their weight expands, on average, to twenty times that by the time their growth pattern is finished. Growth involves change and is something that can be measured easily by standing on the scales, or making a mark on the wall. Growth can be **quantified.**

Development, like growth, also involves change. Is development the same as growth, or is it something else? Can you measure development as easily as you can measure growth?

✍ 2.1 Activity 1

Write down your thoughts on the questions above. Try to explain to your partner what you see as the difference between development and growth.

Categories of learning

Adapted from Barry & King, (1998) Beginning Teaching and Beyond. Social Science Press. Australia.

There are three major categories of learning - cognitive learning, psychomotor learning and affective learning.

Cognitive learning refers to learning that is primarily concerned with mental or intellectual processes. These processes might involve acquiring and recalling information, problem solving, learning of rules, concept learning and strategies for learning how to learn and think.

Psychomotor learning refers to learning concerned with the development of bodily movements. These bodily movements are often divided into gross motor skills and fine motor skills. Gross motor skills are associated with whole body or muscular movements such as

jumping, throwing and catching. Fine motor skills are associated with precise physical movements such as cutting, drawing and writing.

Affective learning refers to learning that is concerned with personal and social matters. This might involve the development of attitudes, beliefs, values and interests.

Whilst learning may be classified as primarily cognitive, psychomotor or affective, there is often a certain amount of overlap between two or three of these categories. For example, learning to drive a car requires cognitive learning in terms of a knowledge of the controls and the rules of the road, psychomotor learning to work the controls and affective learning to show an attitude of courtesy to others on the road.

☞ 2.1 Activity 2

1. Give some examples from your recent experience of cognitive, psychomotor and affective learning.

By using an example such as learning to play basketball or netball, explain the concept of overlap between cognitive, psychomotor and affective learning.

2. Give an example of learning from early childhood, primary and secondary which is:

- *Primarily cognitive*
- *Primarily psychomotor*
- *Primarily affective*

A combination of two or more of these activities

☞ 2.1 Activity 3

1. *Think back how you grew and changed in your childhood and adolescence. Reflect back over these years, talk to your parents and friends about them. Look back over any baby photos you may have. Try to answer the following:*

    - *When did you learn to crawl, walk, run, swim?*

    - *When did you learn to use a pencil, print, write, tie a shoelace, play a musical instrument?*

    - *When did you learn to say a meaningful word, say three and four word sentences, read?*

    - *What were your favourite games, hobbies or interests at different age levels?*

- *Who were your special friends or groups of friends at different age levels?*

2. *Look back over your list (milestones in your life) and classify them into the areas of physical development, cognitive development (including language) and social development. Then group your milestones into the age spans of 0-6, 6-12 and 12-17 years. A chart like the following may be useful.*

	Psychomotor	*Cognitive*	*Affective*
0-6 years			
6-12 years			
12 – 17 years			

3. *If you can, compare your milestones with someone else. Note the similarities and differences.*

4. *When you have done this, look back over your milestones and draw some conclusions about how you changed through childhood and adolescence. Some questions to help you:*

   - *What were the most important years for each kind of development?*

   - *What changes took place at each level of development?*

   - *In what ways did you build on, or progress further through each milestone?*

The study of development includes changes in behaviour, thinking, emotions, physical features and social relationships. Traditionally, the study of developmental psychology was only concerned with childhood. Adolescent development has now been included in many courses and interest in adult development or life span psychology has become popular.

There are two main questions that those who study development ask:

- What is the sequence of stages during development?
- How and why does change in a person come about?

(i) Encourage students to build a personal glossary during each lecture. Ensure that support is given to students when required to complete readings. See the introduction for further information.

Why learn about developmental stages?

There are a number of advantages to knowing about developmental stages. Knowledge about these stages is not 'common sense' nor is it possible to learn these complex factors through observation alone. One of the useful products of knowing about developmental principles is that we can get an idea of what is 'normal' for a child or adolescent at any given age. These age related norms give teachers, parents and others the standards needed to identify those students who are performing tasks well above or below average. Early identification of abnormal development along with appropriate intervention can help children reach their full potential.

By having data to show the range of behaviours typical for a certain age, inexperienced teachers and new parents may accept actions that might otherwise been seen as a problem. One example of this is when children who are beginning to learn to write reverse their letters and do mirror image copies at the ages of five or six. This behaviour is normal for this age group, but if it continued for a period of time after this, it may indicate a perceptual disability.

Teachers who know what developmental paths students are taking can better plan programs to meet their needs. Such programs are called developmentally *appropriate*.

Shapers of development

> *Adapted from Bleus, A. (1989).* 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

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Growth is only part of the developmental process. Unlike growth, development involves changes that are **qualitative.** It is not just a matter of a measurable change, but involves **transformations** into something quite different. Many developmental processes involve qualitative change. The child as an adult is quite a different person in many ways, not just bigger.

Many of the developmental changes occurring during a child's growth are not so obvious. There are important qualitative changes in the child's thinking during this development and sometimes they are hard to see if you don't know what to look for.

☞ 2.1 Activity 4

> *In your group discuss and list behaviours that you think are typical of a particular age. Think about your small brothers and sisters. Do you think they are typical of a particular stage of development?*
>
> *(One example would be when a child shows fear of separation from their parents)*

To sum up

- Development is not the same as growth
- Growth is part of development, but not all of it
- Although many aspects of development can be measured, it is not always easy because the changes are qualitative rather than quantitative

Studying Children

Adapted from Briggs, F. and Potter, G. (1999). 'The Early Years of School.' Longman

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This module focuses upon children's development, across a number of areas. To learn about the theory is important, but to put this learning into context is essential.

An in-depth study of a particular child, carried out over the course of this module will provide concrete examples of concepts being introduced. In order to measure and record this information, skills of observation and data collection are required.

This section of the module will focus on methods of observation and ways of gathering data to provide a 'snapshot' of a child's development.

The need to observe children as individuals

At the end of the school year, teachers spend considerable time writing children's reports. This can be difficult if they have not observed children routinely and recorded their observations. Parents have a right to information about their child's progress at school and the report must be based on factual evidence.

Whilst teachers are constantly observing children in the classroom, most of this is on a casual basis. Teachers demonstrate they have observed children's behaviour over a period of time when they appraise **progress** in reading, writing and other skills. The more carefully teachers observe children, the more accurate their impressions. These skills of observation then must be interpreted accurately and combined with a knowledge of curriculum, teaching strategies and child development.

What does child observation involve?

> "Child observation by teachers is a process of systematically looking at and recording the behaviours of children in relation to their own behaviour" (Briggs and Potter, (1999) p. 129)

It is an on-going day-to-day task, necessary for making decisions about all matters related to teaching. These decisions relate to:

- All aspects of the learning environment
- The abilities and needs of the learner
- The knowledge and skills of the teacher
- Other learners
- Others in school

The decisions relating to teaching include:

- What learning experiences to offer children

- When and how to offer them
- How to group children
- What materials and equipment to use
- How to evaluate their own performance and the responses of children

For teaching to be successful, teachers need to know about:

- The capabilities of individual children so they can be appropriately challenged
- What each child enjoys doing so interests can be catered for
- Which teaching strategies are most appropriate for individual learning styles

To cater for individual differences, teachers must note evidence of children's:

- Individual learning problems and understandings
- Attitudes and behaviour
- Responses to the teacher's behaviour
- Responses to teaching styles
- Developmental stages: social, emotional, physical and cognitive development

To individualise learning, it is necessary to observe and note each child's performance in order to plan appropriately and select the most effective learning materials.

Observation must be systematic, because teachers can find themselves noticing the same children repeatedly, usually those who make the most noise or demand the most attention.

Specific uses of child observation

- **Knowing individual children and understanding their behaviour**

  Unless teachers observe children carefully and understand the typical behaviour and responses of a child, they could label them inappropriately. A poor performance could be attributed to lack of ability, when in fact it could be an emotional problem at fault. Teachers must look for possible causes of the problem, but need to know the child well to do this.

- **Awareness of progress**

  Whilst we are looking at stages of development which are typical for children of a particular age, we also know that progress is not even across physical, emotional, social and cognitive development. Teachers need to observe and use their findings to provide learning opportunities relevant to the stage of development.

- **Evaluating the effectiveness of teaching techniques, resources and organization**

  When teachers constantly observe children, they become aware of individual reactions to different teaching strategies. Some children will respond well to problem solving situations, whilst others may want precise instructions for everything they do.

Successful observation depends on accuracy of interpretation that, in turn, relies on a theoretical knowledge of child development.

Characteristics of observation

Adapted from Bleus, A. (1989). 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

Many things that are taught in schools can only be evaluated through observations. Some skills which can't be evaluated through pencil and paper include the ability to read aloud, practical home economics and practical agricultural skills. Attitudes which can be best evaluated by observation include sensitivity to others and reactions to social issues. Likes, interests and study habits can all be observed.

It is important to set up planned observations for a number of reasons. One is that teachers are human too and are as subjective as anyone else. Their own judgements may be biased or may suffer from a **halo effect** or **the leniency phenomenon.**

The halo effect occurs when a teacher's judgement of a child in one situation flow over into a totally different situation, or one generalises from one characteristic of the child to all characteristics.

For example, if a student is quiet and always well behaved, this approval may generalise to other situations and the teacher may rate other skills and attitudes higher than they should be. If another student is a little rascal who is always in trouble, a lower rating may be given on his school work. In both cases, the teacher's assessment of the student's work is coloured by the broader feeling they have for them.

The leniency effect works in a slightly different way. It occurs when a teacher is generous in the evaluation of everyone's work. If there are real differences between students, then the ratings should reflect those differences. A high rating for everyone will obscure those differences.

There is much more to observing than just looking. There are different problems that lend themselves to observation, and different techniques to use.

First, we need to decide **when** to observe. Are we going to try to record every single instance of a behaviour in each child of our sample? This is often not possible, because too many things may happen at once. We need to systematically sample the occurrences.

- **Time sampling**

  In time sampling, we focus on just one child and record **all the instances of a given behaviour within a certain time period.**

- **Event sampling**

  In event sampling, we **record a behaviour every time it occurs.** As well we note other details such as which child was involved. If we can't record every instance of a behaviour, we may opt for recording every second or fifth instance. We need to be systematic or we would introduce our own bias to the observation.

  Event sampling is most useful when the behaviours we are interested in only occur every so often. If we are interested in behaviours that occur frequently, it is better to use sampling methods.

✎ **2.1 Activity 5**

Draw up a table to show behaviours which would be best measured by time sampling, and those best measured by event sampling. An example to get you started is given below.

Time sampling	Event sampling
On task / off task behaviour	*Raising hand to answer question*

What instruments can we use to measure our observation?

ⓘ At every opportunity, model the task required to be completed by the students. A joint construction of a checklist or rating scale will give the students confidence in developing their own.

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Checklists

A checklist is a very valuable instrument to use when observing behaviour. It is a list of things that you wish to measure. It does not require the observer to make any judgements about the strength of a behaviour, but simply to record whether it occurs or not.

In a classroom situation, using time sampling techniques of children observed in random order, quite an amount of useful data can be gathered using a checklist. Numerical information can be collected quite simply. Using time sampling techniques, we can tick a behaviour whenever it occurs, and add up the ticks to find out which children use the measured behaviours the most. We could also add a simple coding system which allows the observer to record the child who initiates each action.

Constructing your checklist

Most times teachers have to make their own checklists to make sure they suit their purposes.

Here are the steps to take in constructing a useful checklist of your own. These steps are taken from Bleus (1989):

1. **Identify the process to be observed.**

   Be specific about it. Ask yourself whether there is not some more appropriate method of studying the process. If not, move on to step two.

2. **Construct a list of behaviours which will reflect the process.**

Specify them precisely in behavioural terms so that everybody using your checklist can be sure of what you mean.

3. **Decide on the most appropriate method of observing these behaviours and arrange the items on the list so that it can be used under this method. Arrange your list of behaviours in some sort of logical order.**

   If you are making a checklist which will use time sampling, organise the page so the children to be observed appear in order i.e., Child A, Child B etc. Group the behaviours in a logical way, eg verbal behaviours in one group, non-verbal behaviours in another so they are easy to find on the page.

4. **Provide a simple marking scale with instructions on how to use it.**

   What type you use depends on what you want to do with the data. If you are more interested in how often children used a particular behaviour, you would only need to tick the occurrence. If you want to know about the outcomes of those interactions, you would need to use a different marking code.

5. **Select your assistants, or practice yourself using the checklist.**

   It is a good idea to practice using the checklist before you use it on a child. Practice on a peer, or during a lesson which will not be used for analysis.

✎2.1 Activity 6

Review the construction of a checklist and practice constructing one. Later in the unit, you will be asked to construct a checklist for use during the child study observations in the classroom.

Rating scales

A rating scale can give us slightly more information than can a checklist. A rating scale allows us to record information about the **quality** or **magnitude** of the event. Rating scales can be graphic, on which the teacher ticks or circles the appropriate category, or they can be numerical.

Constructing a rating scale

1. **Outcomes to be measured must be observable.**

   They must be things that we can see. We can see if a child gives another a hug, but we can't see if a child " appreciates good manners". If we want to measure feelings, attitudes and values they must be first translated into behaviours.

2. **Rating scales should contain positive and negative statements.**

This is to make sure that the person rating the behaviour focuses on the content of the statement and not on some favourite point on the rating scale. A positive statement, eg " allows peers take objects" is then followed by a negative statement eg" refuses to share materials with peers". This stops the rater checking " Always" down the page.

3. **Each item should measure a continuum or one thing only.**

Do not write broad statements that require ongoing observation to measure.

4. **Define the continuum on the scale as objectively as possible.**

If you use the term 'sometimes', you could give an indication of what sometimes is e.g., "one time out of two" or "half the time".

5. **Rating scales should include the most essential things only. Therefore, they should be kept short.**

They are not useful if they are time consuming. A teacher who is familiar with the content of a particular scale should be able to complete it no more time than it takes to score a classroom test. Teachers are busy people and the task should be brief. If the rating scale is too long, the ratings may be less than precise because of teacher fatigue and a desire to get the scale completed quickly.

Like checklists, rating scales are most useful for assessing behaviours than cannot be measured in other ways, such as testing.

☞ 2.1 Activity 7

As a group, design a rating scale and statements to measure student's satisfaction with the mess organization and food at your college.

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Anecdotal notes

The main purpose of keeping anecdotal records is to note the significance and ongoing evidence of children's development or growth through selected observations. Anecdotes showing children's development can provide the basis for future planning of both curriculum and support.

Anecdotal records for observational purposes are brief narrative accounts of events that are meaningful to students or teachers in relation to the education and behaviour of children. Anecdotal records are like 'word pictures' of incidents, behaviour or events that occur in certain circumstances. Anecdotes describe what happened in a factual, objective way; telling how, when and where it happened; and what was said and done. They are most reliable when made immediately after the event.

Anecdotal records are the most vulnerable to observer's biases. Observers must constantly monitor their feelings and biases to ensure that they are not directing their attention inappropriately.

Records must be factual descriptions of occurrences. Summaries and conclusions are drawn from a series of records over time. Conclusions should relate to developmental theory.

- Anecdotal methods are most useful for recording children's spontaneous and unexpected kinds of behaviour, for which checklists and charts are unavailable. Teachers need to be careful however, to ensure that the notes do not contain trivial information or subjective comments.

- Each anecdotal note should relate to one specific event. These events can build to provide valuable information on a child. When teachers can review several anecdotal records made over a period of time for the same child, they are in a better position to judge their importance and assess whether they represent typical or atypical behaviour.

Using Observation Instruments for Child Study

This module focuses upon an in depth study of child development. To assist in the understanding of the stages of development, observation of a particular child or a number of children will be carried out. This section, which has outlined methods of recording observations, should be useful when completing observation tasks in the classroom. Use the information in this section to assist you in designing appropriate instruments for child study observation.

ⓘ Ensure students understand the role of observation and methods of recording as they will relate to the completion of the child study.

Shapers of development

Growth is only one part of development, and there are three other important components.
- Maturation
- Learning
- Time

Maturation refers to a **biological** process which affects the time at which some developmental features change or emerge and the form they take. Common examples of maturation include the biological changes that enable a child to develop the ability to reach, sit, crawl, stand with support, stand alone and then walk.

These changes emerge in a sequence and the order is always fixed. These changes cannot be taught or promoted by training, so they must be biological in nature.

Learning is the most important aspect of development for teachers to understand. Learning can be defined as **the changes in behaviour which result from experience.** Teachers sometimes see learning as that which is supposed to occur as a result of being taught, but every aspect of the child's experience results in learning. Every experience teaches the child something about the world.

Time is an important shaper of development because of its link with maturation. Behaviours emerge at a pre-set time because of maturation, but time provides us with other information. Time is not only important in determining when behaviours will appear, but also **whether they will appear at all.** There are some times in the life of a child when learning will occur easily, even automatically, and there are other times when learning that same thing could be difficult.

Physical Development

> (i) It is important for students to be aware of the role of health and nutrition in promoting growth and learning. Poor health and hygiene will affect classroom performance.

Adapted from Bleus, A. (1989). 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

Physical development is mainly concerned with growth. Think about the following questions:

- What conditions are necessary for optimum growth?
- What environmental factors can retard growth?
- How does growth affect behaviour and particularly learning?
- What changes occur in the motor skills of children as they grow?
- How can schools assist in this process?

Optimal conditions for growth

Children have several basic physical needs for optimal growth. These include a balanced diet, including sufficient fluid intake, appropriate exercise, adequate fresh air and sunshine, cleanliness and freedom from infection or infestation. Many children in Papua New Guinea and the Pacific have problems in one or more of these areas.

Diet

An adequate diet is different from a diet that keeps the child's stomach full. A balanced diet requires a mix of certain types of foods that are critically important to growth and health.

Nutrients are ingredients in food which serve particular purposes in the body. There are seven essential nutrients for growth and development. These should be an everyday part of a balanced diet. These are **protein, carbohydrates, fats, vitamins, minerals, roughage** and **water.**

Protein is absolutely essential for growing children. It is the nutrient which is responsible for repairing damaged body tissues and building new ones. If a child has a diet low in protein, it will fail to grow and it will take a long time for the body to overcome any sickness. Protein is found in **animal foods,** such as meat, fish, eggs and milk. There is very little protein in commonly eaten foods such as kaukau, rice and taro.

The best form of meat protein comes from the coloured part of the meat. The fat of the meat contains very little, if any protein. Lamb flaps, although cheap, have little nutritional value.

Processed meat products such as tin mit have a quite low protein as they contain more cereal and fat than meat.

A child who lives on a diet mainly of kaukau and tinned meat is quite likely to grow poorly. Children in inland areas are most likely to have problems, as those who live near the coast have a plentiful supply of fish, which is a very good source of protein.

A growing child aged between four and six needs about 3 grams of high grade protein for each kilogram of body weight, every day.

Carbohydrates are found in sugary and starchy foods such as root and stem vegetables (kaukau, taro, tapioca, sugar cane) and rice. Carbohydrates are used by the body for **energy.** Many children in Papua New Guinea eat a diet based on carbohydrates. The problem is not a lack of carbohydrates, but not enough of everything else a growing child needs.

Fats, like carbohydrates are used by the body for energy. They also provide a feeling of fullness after a meal. Fats come from both animal and vegetable sources. They are found in milk, meat, eggs, peanuts, cheese and some cereal or grain foods. Too much fat is not good for you and can lead to heart disease.

Water is essential. A starving person can last about three weeks without food before dying, but only three days without water. Children tend to drink when they need to, but extra water is needed for the child with malaria to counteract the effects on the body of fever. Drinking water should come from a clean supply.

Vitamins and minerals are found in fresh fruit and vegetables as well as in animal foods such as meat. Pineapples, paw paw and citrus fruits are good sources of some vitamins and minerals. Although fresh green vegetables are an excellent source of vitamins, if they are cooked too long they become a very poor source.

Roughage is necessary to regulate the body. Cereal foods and fibrous fruit and vegetables are a good source.

✎ 2.1 Activity 8

Design a poster describing a balanced diet for growing children. Make sure you include the essentials as described above. Decide upon your audience (students, parents, teachers) and make your poster attractive to them.

Cleanliness and infection

Many children growing up in developing countries can have their schooling interrupted by disease and infestation. Illness can cause constant disruptions to schooling, however many diseases and parasites that affect our children can be prevented or controlled by simple measures of personal or environmental cleanliness. Children who are vaccinated will not catch infectious diseases and children who receive a well balanced diet are less likely to catch any disease at all than those whose diet is poor.

Exercise and safety needs

Most children in Papua New Guinea get plenty of fresh air and all the sunshine they need. Due to the climate, much of the day may be spent outdoors and children have the opportunity to develop their gross motor skills readily. Children in Pacific countries are more likely to walk early and show advanced motor skills when compared with their colder climate neighbours.

Summary

Physical growth is part of overall development. Promoting physical growth requires meeting several basic physical needs. Optimal conditions for growth will allow children to enjoy a healthy lifestyle which promotes learning.

The normal sequence of physical development

Adapted from Bleus, A. (1989). 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

The following description of physical development by Bleus (1989) assumes that children are receiving an average diet under average circumstances and are in average health. Some children who may not be in this situation may show slower growth and developmental rates.

Physical growth in early childhood

The rapid growth rate of the infant begins to slow down as the child enters pre- school years. Up until the age of five years, the growth rate is about the same for boys and girls, although boys develop muscle tissue faster than girls.

Body proportions also change during the pre-school years. By the age of six, the proportions are almost the same as those of an adult. The growth of the head begins to slow down, as by the age of six the brain will have reached about 90 percent of its eventual size and weight. The arms and legs are growing the fastest, and a six year old's legs make up half the height.

During this period, the muscular, skeletal and nervous systems continue to mature. The bones are still hardening.

Large muscles develop earlier than fine muscles, so young children are much better at gross motor activities such as running and climbing than activities which require precise movements.

Control of fine muscles increases with age and the child is better able to paint and play with clay, pencils and crayons

Perception in early childhood

The physical and motor development of a child goes hand in hand with perceptual development. The child perceives the world only as far as he can manipulate it.

Perception refers to the **organization of information taken in by the senses** i.e. sight, hearing, taste, touch and smell. We do not just experience these things, but we must also interpret or make sense of them. For a three year old, it would not be possible to distinguish

between two similar but distinctive objects (eg a blue square and a blue triangle) but a five or six year old will. A preschooler will often pick out the prominent part of an object, ignoring the rest of it. Before the age of two, a child does not take notice of spatial relationships (for example whether the toy is upside down or right side up), but the preschooler will start to perceive objects correctly regardless of their position.

☞ 2.1 Activity 9

Observe a child at play (your brother or sister, a neighbour's child or visit the elementary classroom) Look for evidence of physical growth which matches the developmental stage (i.e. size, motor co-ordination, scribbling and drawing, perception of similar objects) Write about what you see.

Children's drawings

By studying the development of children's' drawings, it is possible to see how the child's perceptual abilities increase with age.

Scribbling usually gives way to representational drawing around the age of three or four years.

The first representational drawings of children everywhere are of human figures or faces. This trait is consistent across all cultures. In these early drawings, faces are drawn particularly large and detailed but bodies are small or absent and lack definition.

Compare the two pictures below. The first picture was drawn by an expatriate child. It shows the typical "trunkless figures" produced by children everywhere about this age. The second picture was drawn by a Papua New Guinean child of the same age. Even though the two children come from widely different backgrounds and cultures, note how similar the two pictures are.

> The drawings of pre-school children typically show the immaturity of perception of this age. Note the similarities in the pictures of the two children, even though they come from widely different cultures. Both pictures show the trunkless figures typical of the age.

Drawn by Sasha, Australian, aged four years.   Drawn by Juanita, from P.N.G., aged four years.

from Bleus, A. (1989) Psychology for Teachers in the South Pacific p. 59

As they get older, children begin to realise more that the whole is made up of different parts, and become better at recognising the parts.

☞ 2.1 Activity 10

*Collect some pictures drawn by six-year-old and nine year old children.
Compare the differences and discuss the development in perception.*

Perceptual ability is also modified by the environment in which the child lives. Eskimo children can distinguish between several different types of snow because snow is such an important part of their environment, so their language has words for each type. Papua New Guinean children, however, would not be able to make such a distinction, because they don't need to.

☞ 2.1 Activity 11

Can you think of an example where a PNG child's perception and language would be developed by the environment in which they live?

☞ 2.1 Activity 12

During school experience, visit Elementary 1, Elementary 3 and an older class. Ask one student to ' Draw the best person you can' (If you do not have access to an elementary class, use young children in your house or neighbourhood.) Bring your pictures to class and discuss in terms of perceptual development. Make sure you indicate the age of the student.

Middle childhood

Adapted from Bleus, A. (1989). 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

Middle childhood (6 to 12 years) is the period in which the child is learning the basic skills of the culture to which he/she belongs. Whether attending school and learning to read and write, or working in the village gardens, the child at this age is involved in the process of education. What a child learns at this age is also largely determined by what he can do.

ⓘ There are many characteristics of physical growth that can be observed and measured. Ask students to look for evidence of this development when carrying out the child study requirements.

The development of skills

Middle childhood becomes a time for skills learning as the child gains more fine muscle control.

The five to eight year old child has incomplete ossification of bones at their ends. Calcium is still being laid down in the bones to give them hardness. Children of this age are vulnerable to greenstick fractures. This is when the soft bone splits, rather than breaking, just as the stem of a green tree will split. Older children are more likely to breaks or cracks due to the hardening of their bones.

An increase in muscle tissue in the body and a decrease of baby fat occurs in this period of growth. Physical strength increases, especially in the arms and legs. Because of this, children need a large amount of vigorous large muscle activity, such as chasing, running, jumping and climbing.

The teacher should be aware of this need, as students will become fidgety and wriggly if they do not have the opportunity to move around. Muscles do tire quickly however; so short active periods are best.

Reaction time is slower in children than in adults, so the teacher needs some patience.

There is also unequal growth rate of organs at this time. The heart and lungs are proportionally smaller than other organs. Children will tire easily after bouts of exercise during this growth

period. Colds, flu and susceptibility to infection are common because of the imbalanced organ sizes.

Fine motor co-ordination is still being developed during middle childhood and the eye is not fully developed. Children cannot write small letters with precision, nor focus on small near objects. This is why a five year old is more comfortable using a thick pencil producing large letters. Children will learn to read from books with big letters. Writing and reading activities should be short so children will not tire.

After the age of eight

At around the age of eight years, the development of the heart, lungs and eyes catch up. Children who have been able to focus well may now become short sighted as the developing eyeball lengthens. The teacher should watch for changes and make sure that children who cannot see the blackboard from the back of the room are moved to the front.

Up until about ten years of age the skeletons of boys are more mature than those of girls. Then girls start to shoot ahead and by eleven years of age, girls are taller and heavier than boys are. Growth is rapid at this time, and many children are quite clumsy for a period. PE activities should aim to develop co-ordination, strength and endurance without making the child embarrassed.

Adolescence

Adolescence is marked by the onset of puberty. Puberty is the period which, due to internal hormonal changes in the body, the individual reaches sexual maturity.

One of the earliest signs is a sudden growth spurt. There is a marked increase in height and weight, with changes in proportion.

The changes do not occur uniformly throughout the body, so the developing child often feels clumsy. As puberty usually occurs around two years earlier in girls than in boys, there is a period where girls are taller and heavier than boys are.

The development of secondary sexual characteristics in both and girls is usually the next sign. The development of breasts in girls and body hair in both boys and girls are signs that the child's body is changing and preparing itself for reproduction (the ability to have children). The onset of menstruation for girls and the first ejaculation of seminal fluid for boys are signs that the individual is now sexually mature. The growth spurt, however, will continue throughout the next several years.

Although puberty is a process, which occurs in the same sequence for all people everywhere, there is a large variation in the age in which it starts. This timing is inherited from the child's parents.

Emotional reactions during puberty are heightened due to the enormous amount of hormones (chemicals) in the body which has an effect on moods and feelings.

Cultural considerations of adolescence

In many cultures where things are done in traditional ways, the child who has reached puberty is considered an adult. The passage into adulthood is often marked by ceremonies, such as initiation, which mark the child in their own eyes and in the eyes of others as being grown up.

Initiation, according to some, has a very useful psychological effect. It may give the young adult a sense of identity and worth. It can be comfortable to know and understand your place in society.

Summary of stages in children's growth and development

On the following pages, a summary table developed from Lee (1977) and found in Briggs and Potter (1999) is reproduced. It describes physical development, feelings, social behaviour and needs of children at each year of early childhood. This table refers to the development of children in western cultures.

Summary of stages in children's growth and development

Physical development at about 5 years
Weight about 19.5 kg (42 lb).
Height about 107 cm (42 in).
Is agile and energetic.
Can dress and undress self.
Can run, skip, climb, dance, jump, swing, throw a ball, and catch it fairly well, build with big boxes, planks, barrels.
Rides a tricycle very fast and can use a scooter skilfully.
Draws people, houses, aeroplanes and vehicles recognisably.
Sleeps about 10 hours in 24.

Feelings at about 5 years
Self-confident.
Boasts, shows-off, threatens but also shows friendliness and generosity.
Shows desire to excel and can be persistent and purposeful in learning a new skill.
Shows good degree of control of emotions and on the whole is stable.

At about 6 years
Vigorous and adventurous.
Uses body actively.
Enjoys using large apparatus for climbing, swinging by arms, hanging by knees.
Can somersault, skip with rope, run and jump, use climbing ropes.
Begins to use a bat adequately.
Moves to music with understanding.
Throws and catches more skilfully.
Loss of milk teeth begins.
Permanent teeth begin to erupt.

At about 6 years
More unstable than at five years
Swings from love to hate and back again rapidly.
Tends to be self-centred, obsessive, irritable, agressive rebellious, but can also be loving, fiendly, enthusiastic, cooperative.
Intensely curious.
Finds frustration and failure difficult to accept.

At about 7 years
Active and energetic.
All physical pursuits becoming popular.
Can walk along narrow planks, balance on poles, use bats and balls well.
Dances with pleasure.
Enjoys physical education periods at school.

At about 7 years
More stable than at six years.
Independent and may be solitary for short periods.
Self-critical.
May be moody and dissatisfied at times, but gradually becomes more self-reliant and steadier in all emotional expression.
Fact usually distinguished from fantasy.
Lacks control of own energy and will become overtired and irritable.

From eight years upwards
Period of great agility and vitality.
All physical activities carried out with grace, economy and co-ordination.
Games requiring exactness such as hopscotch, conkers, marbles, fivestones, jacks, complicated ball and skipping games, roller-skating, juggling, rounders, are increasingly popular.
There is a good deal of group wrestling and skirmishing.
Hiking, swimming, running, climbing hills are enjoyed.
General health is good.
Appetite sound and food is enjoyed.
Energy tends to flag suddenly but a short rest and more food restores it easily.

From eight years upwards
Emotionally independent of adults to great extent.
Need for acceptance by peers.
Deep satisfaction in intellectual pursuits.
Joy and delight in physical prowess and skill.
Usually good control of strong emotions, except in mob situations.
Anxiety aroused by ineffectual adult management of environment.

From

Briggs, F., Potter, G (1999) **The Early Years of School**. *Longman Aust.*

Social Behaviour at about five years

Vocabulary can be up to 3000 words.
Asks many questions.
Often content to play alone for long periods,
mastering a skill, but also plays with other children,
especially in building and imaginative play.
Prefers games of rivalry to team games.
Group games often need adults to arbitrate.
May be nervous of active older children in playground.
Basically dependent on adults—parents and teachers—
and needs their approval.
Enjoys stories about strong and powerful people
(e.g. Samson and Batman).

At about six years

Talks freely and is still interested in new words.
Is usually beginning to read.
Begins to move away from dependence on adults,
but needs unobtrusive help, and demands praise.
Is often quarrelsome with other children but shows
need of their co-operation in his play.
May have a particular friend.
Tenacious of own possessions.
Teacher's standards often accepted, rather than mother's.
Father's authority usually unquestioned.

At about seven years

Reads a good deal, enjoys writing his own stories.
Watches television with comprehension and appreciation.
Depends less on adults except for specific help in work.
Make-believe play becoming dramatic play.
Can plan and carry out projects with other children,
but still needs some arbitration by respected adults.

From eight years upwards

Membership of group of own age now important.
Individual desires submerged for benefit of group.
Weak adults and nonconforming children despised and ignored.
Mob violence may erupt if excited by irresponsible leaders.
Team games, camping, collecting are popular.
Boys and girls mix fairly well except for more masculine
boys and more feminine girls who tend to make their
own separate groups.
Towards the end of this period sexes tend to separate.
Rebellion against authority shown by rejection if adults, tricking
them, complaining, dodging unpopular jobs, jobs, verbal battles.
Competent adults are, however, respected.
Towards the end of this period the child is friendly,
matter-of-fact and co-operative with adults.

Needs at about five years

Calm, reasonable approach from adults
who can control rivalry, encourage
serious attitude to achievements
and counter his showing-off with
affectionate banter.
Play material as for four-year olds.
Books, stories, songs, music.
Support of parents on beginning school.
Skilful introduction to school life by
teachers.
Accurate answers to questions.

At about six years

Much patience from parents and teachers.
Firm control over daily routine within
which can be allowed much freedom
to enquire, experiment and explore.
Environment at school and at home rich
and stimulating.
Encouragement for efforts and praise
for achievements.
Play material which requires
skills—Meccano, Lego, train sets, dolls'
dressmaking, knitting, cooking, puppet-
making, drawing, painting, modelling.
Arrangements for adequate rest and sleep.

At about seven years

Same as for six-year-old.
Protection against overtiredness.

From eight years upwards

Opportunity to learn accurately about
real world.
Rich academic environment.
Books, music, creative materials.
Reliable, confident adults and reasonable,
consistent standards set and demanded.
Independence and trust.
Undemonstrative, steady affection at
at home.
Matter-of-fact, straightforward
information in reply to questions.
Opportunities for games and
physical activities.

Summarised from Lee, C. M. 1977, *The Growth and Development of Children*, 2nd edn, Longman, London.

☞ **2.1 Activity 13**

1. Draw up a progress chart showing development of physical development in early childhood, middle childhood and adolescence.

2. Edit the table "Summary of children's growth and development" to make it more reflective of PNG students. Which characteristics are the same, which need to be changed?

Language development

Adapted from Bleus, A. (1989). 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

📖

Just as children move through stages of physical and emotional development, language is developed in the same sequential way. It is important for teachers to understand these stages so they have realistic expectations of students at a particular age.

Papua New Guinea has more than seven hundred languages, so communication can be difficult. Students who are speaking English at school will be second, even third language learners.

Recently, teaching and learning in the vernacular in elementary schools has become a strong focus in the education reform. A solid foundation in the mechanics and usage of one language should make the acquisition of the second easier.

Despite the great differences in the content of the many languages of Papua New Guinea and other parts of the world, it is understood that the process through which children acquire language is known to be similar.

Similarities in first words

Although languages around the world are very different, there are similarities in the first words that children learn. According to Berger (1983), in nearly all languages, baby talk is made up of a small vocabulary of simple words that are accentuated by gestures. Many consist of single repeated syllables (eg "no-no" and "bye-bye") Difficult consonants such as "l" and "r" are not used early and hard to use words are given simple forms, often with a "y" ending (eg bunny, ducky)

The names children give their parents tend to be those used in babbling. These include consonants "m", "p", "b", "d" and "t" plus a vowel sound. Some are listed below

Words for mother and father in different languages		
	MOTHER	FATHER
English	Mama / mummy	Dada / daddy
Spanish	Mama	Papa
French	Maman	Papa
Italian	Mamma	Babbo / papa
Latvian	Mama	Tete
Hebrew	Ema	Abba
Korean		

Some Papua New Guinea languages		
Toaripi	**Lou**	**Oa**
Notchi	**Naga**	Mom
Tnaglamet	**Nana**	Tata
Bukawa	**Nenec**	Mamac
Oro Koro	**Lou**	Oa
Kuanua	**Nana**	Tata

☞ 2.1 Activity 14

Work in groups to develop a list of tok ples words for mother and father.

Stages in language acquisition

ⓘ Young siblings or relatives could be used to carry out observations on language acquisition.

The similarities in these earliest words result from the similarities in the sequence of language acquisition in all children everywhere.

All children everywhere show two distinct steps in language acquisition. These are the **pre-speech** stage and the **speech** stage.

The pre-speech stage

The pre speech stage lasts from birth to about the end of the first year and ends with the utterances of single sounds. During this stage, the child engages in three types of communication behaviours. The child **cries,** develops a repertoire of **gestures** and practices **babbling.**

Normal babies are born being able to cry in several ways. There is a hunger cry, a pain cry, an angry cry, and so on. These cries are the earliest attempts at communication.

At about five weeks of age, children will make cooing noises (repetitious vowel sounds) at the sight of a human face. By twenty weeks, several consonants have been added, and babbling begins.

Babbling consists at first of continual repetition of the same sound (eg "ba-ba-ba-ba", or "ma-ma-ma-ma"). During the babbling stage, children will reproduce every sound of every

language in the world. Even children who are born deaf babble, showing that this ability is biological and built into the first stages of language acquisition.

The speech stage

Somewhere around the end of the first year, the first meaningful words are produced, and words are acquired continuously at a great rate throughout the second year.

Most of the child's first words are nouns. Then, in order come verbs, adjectives, adverbs and prepositions. These are not put together in meaningful sentences until near the end of the second year.

The most rapid increase in vocabulary occurs in the third year of life and the rules of grammar are beginning to be used.

During this time, two features of children's speech are notable. The first is **telegraphic** speech. The child will construct sentences in shortened form, much like a telegram would read. Some examples are "Daddy go" "Mummy shoe". When children talk like this, they are concentrating on the **content** of their message, but leave other information out. Parents need to use the context of the message to assist them in gaining meaning.

Over-regularisation is when a child understands a rule of grammar but then uses it incorrectly. There are many grammatical inconsistencies in English, and children of this age don't have full control of the language. When a child says "I goed" instead of "I went", the child is using the rule that most verbs become the past tense when "ed" is added.

Gender differences in language development

Girls often learn to speak earlier than boys, can articulate better and have less speech problems than boys in general. Some theorists believe this is due to the fact that girls in many cultures spend more time with their mothers and so are more exposed to examples of language. By the time students come to school however, both sexes are competent with language skills.

Conversational skills

Young children are not good conversationalists, due to their **egocentric** behaviour. Children at pre-school or early elementary may spend a lot of time talking to themselves or to others without expecting a reply. This is known as a **monologue.** Even when two children are talking to each other, they may not be talking with each other. This form of conversation is known as a **collective monologue.** The children take turns to speak, but each is speaking about his or her own topic and the contents of the speech seldom connect.

There are particular years in the developmental period which are best for acquiring languages. Lenneberg (1967) believes that the years before puberty and particularly the pre-school years are the sensitive period for language learning. The years between one and five are the best.

☞ 2.1 Activity 15

Listen to a conversation between some pre-school age children. Write down their speech and look for evidence of monologue or collective monologue speech. Try the same activity with Elementary One children.

## Learning to read and write

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Readiness for learning to read and write is seen at a particular point during the developmental process. This depend s on the child's **cognitive** (thinking) development, but **perceptual abilities** are also important. Perception refers to the way the child organises information coming via the senses.

At the beginning of pre-school, the child can often only discriminate between open and closed letters (eg C, U) but all open letters look alike. Around the age of four, the child still confuses letters with straight and curved lines. The child gains the ability to perceive the differences by age five. Children of four or five years also have problems with letter rotation and reversal (eg, p, q, b, d) and confuse the order of the letters within words. This ability is developed by age seven or eight. Until the child has mastered these perceptions, they are not ready for true reading.

Learning a second language

Countries which have many languages, such as PNG, or other countries which have deliberately adopted a particular language as the medium for instruction in schools, often find that the children who do not speak the language naturally experience difficulties as they try to learn.

In PNG, the education reform has removed English as the medium of instruction in the first years of school. Elementary teaching is now carried out in the vernacular for the first two years, with a gradual transition to English in the third year. The bilingual program continues through primary school until English becomes the language of instruction by the end of grade six.
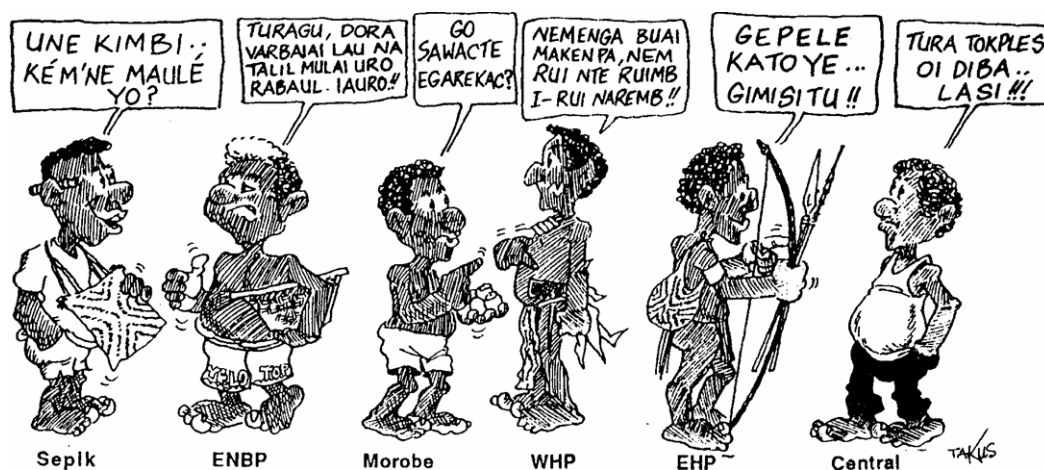
An awareness of the stages of language acquisition and common patterns of development should assist teachers in meeting the needs of their students. More information on language acquisition can be found in units developed by the Language strand at your college.

(i)

Observing children's speech in elementary classrooms would provide data for analysis back in the lecture room. Does the Papua New Guinean child follow the same patterns of language development? Are perceptual abilities similar to those described in the literature? Ask students to explore some of these questions.

Moral Development

📖

In the 1920's, two researchers set about trying to find out if teaching morals actually worked. They tested the cheating behaviour of two groups of children. One group had received moral training, the other none. They found no difference between the groups. None of the children who had been through character education experiences nor through religious education programs had a higher level of moral behaviour than other children. Even when these children said they believed in honesty and not cheating, what they did was often the opposite of their stated beliefs. The researchers concluded that moral training did not work.

Research carried out since the 1920's shows that there are differences between children of different ages. Moral thinking seems to emerge in response to an age-related **developmental** process.

Kohlberg's theory

Lawrence Kohlberg (1963 –) researched the development of morality and concluded there are three levels that can be identified. Children have to pass through the first level to reach the second, and through the second level to reach the third. In addition, **each level** has **two stages.**

Kohlberg's stages

According to Kohlberg, each of the levels of moral reasoning is differentiated by the **source of values** the child holds (that is **physical well-being, harmony with society** or **justice.** The two stages within each level emphasise different aspects of the value. For example, physical well being can be viewed in terms of physical punishment or rewards or (in the second stage) in terms of satisfying personal needs.

The pre-conventional level

Children at the pre-conventional level focus on **themselves** as sources of values. Rules are followed to avoid punishment in the first stage. Then develops a " what's in it for me" orientation, in which rules are followed for what they can achieve in the second stage.

The conventional level

This level characterises the moral reasoning of many adolescents and most adults who focus on **social harmony** as a source of values. In the third stage, there is a stereotyped image of 'goodness' for the approval it brings. This has been called the 'good girl / good boy' stage. In the fourth stage, people maintain law and order to preserve the institutions of society.

The post-conventional level

The third level is reached only by a small minority of adults. It involves the recognition of the rights of individuals over the rules or laws of institutions and is an important foundation of 'ethical thinking'.

Age ranges

Kohlberg suggested age ranges for each of the levels. The first level (the pre-conventional level) is characteristic of most children under 9 years of age. The second level (the conventional level) is reached by children in western cultures between the ages of 10 and 13 years. The third level (the post-conventional level) begins between the ages of 15 and 19 years. Kohlberg therefore sees moral development occurring during the school years. These ranges are only approximate due to a number of factors, one being that some cultures may promote the earlier development of higher stages than others.

Kohlberg's theory recognises the importance of both the cognitive **process** which sets the potential for moral development and the cultural and social **context** in which the individual operates. The following pages summarise the stages of moral development.

KOHLBERG'S SIX STAGES OF MORAL DEVELOPMENT

LEVEL ONE : PRECONVENTIONAL LEVEL.   Predominant value : *Self-interest*
(Preconventional moral values reside in outside physical happenings or bad acts rather than in persons or standards)

STAGE ONE

"MIGHT MAKES RIGHT"
(punishment and obedience orientation)
Concern about self. Behaviour is determined by obedience to a powerful authority to avoid punishment. Avoidance of punishment is a more powerful motive than seeking reward. One sees oneself as dominated by other forces. Actions are judged in terms of their physical consequences (e.g. getting into trouble).

LEVEL TWO : CONVENTIONAL LEVEL.   Predominant value : *Harmony in Society*
(Conventional moral values reside in performing good or right roles, maintaining order and meeting expectations.)

STAGE THREE

THESE ARE FOR YOU MISS ... (TEACHER)

"NICE GIRL / GOOD BOY"
(approval orientation)
Good behaviour is behaviour that pleases other people and wins their praise. There is concern about groups of people and conformity to group norms. There is a two way relationship (we are nice to each other). Approval and affection is more important than any specific reward. Motive is to be accepted.

LEVEL THREE : POSTCONVENTIONAL LEVEL. Predominant value : *Universal Justice*

STAGE FIVE

"FOR THE GREATER GOOD"
(social contract orientation)
The rules of society exist for the benefit of all and are established by mutual agreement. What is right is what the whole society decides. There are no legal absolutes. Society can change standards if everyone agrees to the change. Changes are usually made for reasons of the greatest good for the most people. If the rules become destructive, or if one party doesn't live up to the agreement, the contract is no longer binding.

Predominant motive *"The carrot and the stick"*

"WHAT'S IN IT FOR ME?"
(instrumental and hedonistic orientation)
One way concern about another person (what he/she can do for me). The basic motive is to satisfy my own needs and "look out for number one". The reason for being nice to other people is so they can be nice to me. I do not consider their needs unless I will get something out of it. "You scratch my back and I'll scratch yours".

STAGE TWO

Predominant motive *"Sticking to the rules"*

"THE LETTER OF THE LAW"
(law and order orientation)
Right means obeying the laws set down by those in power, being a good citizen, doing one's duty. The emphasis is on preserving the society, not just obeying it as in earlier stages.

STAGE FOUR

Predominant motive *"maintaining moral principles"*

"THE RIGHTS OF MAN"
(individual ethical principles orientation).
General universal principles determine right and wrong. What is right is a decision of one's own conscience, based on ideas about rightness that apply to everyone (all nations, all people). Values such as "life is sacred" are established by individual reflection and may contradict the egocentric or legalistic principles of earlier stages. An ethical principle is different from a law. A law is specific (e.g. "thou shalt not kill'), but an ethical principle is general (e.g. "all persons were created equal") The most important ethical principles deal with justice, equality and the dignity of all people. These principles are higher than any given law.
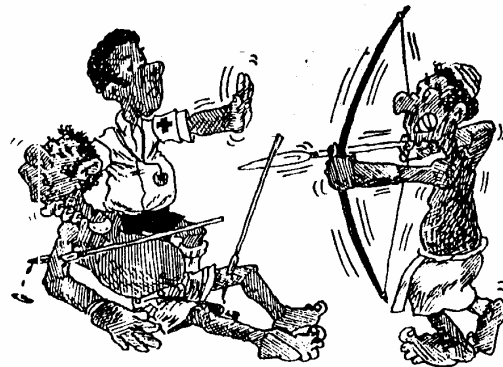
STAGE SIX

One way Kohlberg studied the levels of moral development was to tell a story and examine the types of responses given.

Here is a story that was given to a group of Papua New Guinea student teachers. Since the theory focuses on the **reasoning** not the **judgements** students could answer either yes or no to the question and then give their reasons.

) 2.1 Activity 16

Read the following story as told in Bleus (1989). After reading, give your answer to the problem. Discuss your answers with your friends and then try to classify them into one of Kohlberg's stages of moral development.

> An old lady and her pikinini were walking down the road towards their village. The village was a long way out in the country. The old lady had a heavy load of wood carried in a bilum on her head and she was very tired. Suddenly she stumbled over a big rock and the heavy load slipped from her head. It fell right on her pikinini, who got a great big cut on her leg which started bleeding very badly. The old lady tried to stop the bleeding but could not, and blood was running everywhere. She was afraid that if she did not get her little girl to the haus sik, she would bleed to death. But the haus sik was miles away in town.
>
> Just then a car came down the road, and it stopped when it saw the old lady and the pikinini in the roadway. "Please take my pikinini to the haus sik before she dies," said the old lady. "No," said the driver. " I'm going the other way, to the plantation. This is the bosses car, and if I don't get back straight away, I'll get into trouble."
>
> So the old lady picked up a lump of wood and hit the driver very hard to try to make him do as she asked.
>
> Should she have done that?

Here are some of the answers given by the student teachers.

Stage 1   (punishment and obedience)

Yes: Yes she should, otherwise her little girl might die, then her husband will beat her up.

No: She might get caught and go to jail or she might get payback if she hurts the driver.

Stage 2   (What's in it for me?)

Yes: The pikinini will bring a big bride price, so the lady needs to keep her alive

No: The pikinini will probably die on the way to hospital anyway, so the lady shouldn't bother.

Stage 3   (nice girl / good boy)

Yes: People will say what a good mother she is to try so hard to save her pikinini.

No: She will bring shame on her family if she gets caught and goes to jail.

Stage 4   (law and order)

Yes: Because otherwise she will be responsible for her child's death. She should not kill people.

No: Because it's against the law

Stage 5   (social contract)

Yes: Yes she should, because the law was not meant to lead to someone losing their life

No: No, she should not hit him, because there are better ways to get the driver to help.

Stage 6 (ethical principles)

Yes: Yes she should, otherwise she would not live up to the standards of her conscience if she lets her child die.

No: No, she should not, because she would not be living up to the standards of her conscience if she hurt another person.

Cross cultural studies of Kohlberg

Kohlberg believed his stages of moral development were a **universal process,** so should appear in the same sequence in people of all cultures. However, people from different cultures would give answers with different content, reflecting the **norms and values of their own culture.** The example above shows the answers given by the PNG student teachers could be classified into Kohlberg's stages, but the **content** of many of the answers (eg discussions on payback, brideprice, etc) reflects the society in which they live.

Kohlberg's theory has been attacked in recent years as being **ethnocentric.** The lower stages may be universal, but the higher three stages appear to reflect western values rather than those found in collectivist cultures. The " systems" approach found in Stage 4, for example, is argued to be irrelevant to people who live in a traditional village based life. As populations become more urbanised, the "higher" stages emerge.

This suggests that we can expect to find a range of levels of moral thinking in Papua New Guinea. Levels one to three would predominate in rural areas, and the higher levels may emerge in response to the organised systems of the towns.

(i)   Provide students with the opportunity to discuss moral development. How were their values shaped? What role does the church play in influencing moral development?

Promoting moral development

Children's moral development can be encouraged, provided that the right strategies are used.

It has been shown that a child at a certain level of moral reasoning, if exposed to reasoning **one stage higher**, will actually **show a preference for and adopt the higher level.** This perhaps suggests that if children are encouraged to discuss moral dilemmas in the classroom, moral development will be promoted.

Teachers can easily create moral dilemmas suitable to the student's culture. The only thing to remember is that the problem should be one which is able to tap thinking at all stages and it must ask people to **decided between doing a bad thing for the sake of a good thing.**

☞ 2.1 Activity 17

Write a story which contains a dilemma which would be suitable for primary school aged children. Present the dilemma to the students in the class and ask them for their responses (either written or verbal)

Analyse the responses in terms of Kohlberg's stages.

Play and Social Development

Adapted from Bleus, A. (1989). 'Psychology for Teachers in the South Pacific.' *Goroka Teachers College: PNG*

What is the purpose of play?

Young animals of all types play. Why? Play is a feature of juvenile behaviour of all animals, even those quite low on the evolutionary scale. If all animals behave in a similar way, it is argued by the theorists that the behaviour must have **adaptive significance.** This behaviour has evolved across millions of years to help perpetuate the survival of the species. Play then, serves a purpose and that it to help the young animal **learn** the skills it needs to survive as a member of its own kind.

Play is a **universal process** common to all young members of the animal kingdom.

The lessons learnt in play

Read the following extract from Bleus (1989) about the learning in play.

> Here is Joseph, aged seven months, sitting on the floor and banging away with the lid of a rice pot. What lesson is he learning from play? This type of circular activity is essential for his cognitive growth. Here comes Dorcas, aged six years. She's fashioned a doll from an old coconut. She has bundled it up in leaves and she's carrying it around and talking soothingly to it. It's easy to see what she is learning from that. And up on the hill, behind the village there are a whole swarm of little boys aged eight, nine and ten years old. They're busily keeping the girls away while they fashion catapults. Look out birds! A great game, but what are they learning? Why strength, skills, power relationships and who's the boss, getting on with others … And down on the flat a bunch of seventeen year olds are busily trying to out-star each other in a game of football.

What learning is evident in each of these descriptions?

(i) There are a number of gender issues raised in the story above. Encourage students to discuss not only learning from play, but to discuss the roles of boys and girls as described in this article. Ask students to rewrite this story portraying the girls in a more equitable way.

The development of play

Because play is a universal process, the play of children everywhere shows similar features and develops in similar ways.

Sensorimotor play

Sensorimotor play begins in infancy, with children enjoying kicking and banging for the sensations it brings. This form of play continues on into childhood. Pre-schoolers love paddling in puddles and playing in mud. Older children enjoy the excitement of riding bicycles down hill, or sliding down a grassy hill on a piece of cardboard. All these activities are fun because of the sensations which come with movement.

Mastery play

Mastery play in young children is mostly physical. Hanging upside down from a tree feels great, but a great deal is also learnt about muscle co-ordination and orientation in space. Young children want to master many physical skills and practice them over and over to perfect them. Older children are interested in mastering activities of the mind, such as puzzles and word games.

Rough and tumble play

Rough and tumble play was named from studying the rough-house activities of young monkeys. Like monkeys, children everywhere enjoy lots of chasing, wrestling, rolling around together and mock fighting. You can tell that rough and tumble play is fun, rather than serious fighting by the expressions on the children's faces.

The purpose of rough and tumble play is **social.** Through this sort of play, kids learn about their place in the general pecking order of their peer group. As they get older, children use increasingly sophisticated methods of maintaining their social rank. Rough house tactics give way to verbal and subtle non-verbal behaviours such as giving orders, making suggestions and facial expressions.

Dominance play goes through pretty much the same sequence of development in widely different cultures, although children from different cultures may emphasis particular sets of behaviour eg, verbal compared with non-verbal strategies.

Pre-school and social play

At the beginning of pre-school, the child is very egocentric and unable to see the point of view of others. Towards the end of pre-school, the child begins to mellow and develops the ability to fantasise and imagine. This stage of development matches Piaget's pre-operational stage.

The earliest play of the pre-operational child is **solitary**. Even though there may be other children present, there is no interaction between them during play. They are absorbed completely in their own activity.

The next stage is **onlooker behaviour**. While two or more children play together, another child stands on the outside and watches, hesitating to join in, and not really knowing how to.

Then children begin **parallel play.** Children sitting alongside each other have an obvious awareness of the other's activities but they still do not interact. If one child changes activities, the other is likely to follow.

During **associative play**, children finally begin to interact, sharing materials but not working to the same set of rules.

Co-operative play is when children really start playing together, helping each other or taking turns.

The main changes to the child's ability during these stages are **social.** Children become more willing and able to interact with other children and less egocentric as their play moves from solitary to co-operative play. Children who attend kindergarten or pre-school are likely to advance to the co-operative stage of play earlier than those who do not.

Dramatic play provides learning opportunities for **cognitive development**. Dramatic play begins as the child begins to think symbolically. Whereas before, a doll was simply something to provide comfort, now dolls and toys are used by the child as expressions of imagination. Children love to dress up in anything they can find and use both toys and other materials to create social episodes. A block of wood may be a plane or a car and the child will rehearse what they know about these objects as they play.

Middle childhood

As children progress into middle childhood, their games take on a qualitative change. **Rules** begin to be introduced into games, and become more and more a part of children's play. At the same time, social behaviour changes. The **group** becomes the **gang,** and eventually **the team.**

During the early years of primary school, children start to show interest in group games, and games more oriented to reality than to fantasy. "Hide and seek" and " statues involve more cognitive complexity, more physical skills and more rules than earlier games.

Group games involve **rules.** The rules are structured and not invented by themselves. They are usually simple enough for the child to be able to use them without the need for an adult to decide who won or lost. Winners are usually individuals, and though children play together, they play for themselves and not for teams.

Group games also serve an important social function. They give the child a chance to experience **changing roles.** To develop a less egocentric view of the world, it is important to be able to be both the hider and the seeker, the hitter and next the catcher.

Through group play, children have the chance to experience the **reciprocal** nature of role relationships.

The child at this age starts to be regulated more by the peer group than by other norms. Children will often become joiners at this age and like to join local groups, or form them with their friends. Conforming and belonging during middle childhood years is very important. **Best**

friends are an important part of this stage of development and they serve a very useful purpose. According to some, it gives children the chance to practice the **mutuality** and intimacy that will be a part of future heterosexual relationships, with a child of the same sex.

Team sports

Group norms become important shortly before adolescence, when "team" games become important. Games now have a complex set of rules and usually need a referee.

There are three stages to becoming a useful team member.

1. Personal goals must be put behind group goals. To be able to subordinate personal goals to group goals, children need to be able to appreciate the norms of the team, and to resist the temptation to want to be the 'star'. The need for approval from peers is vital at this stage.

2. Learning about the **division of labour,** children come to recognise that each team member has a unique function. No single team member can do everything. Children start to realise what they are good at and the part they play in the team.

3. Finally, children need to learn about **competition.** The nature of competition includes the ideas of sportsmanship and not winning at any cost.

Teachers need to think about the characteristics of each stage of play development, and recognise the value of play as an important tool for learning.

☞ 2.1 Activity 18

Design an observation task related to the development of play.

Choose an age group to study. If you choose young children, observe a group of children to determine which stages of play development is evident eg parallel play, co-operative play etc.

If you choose an older group, design an observation around the characteristics of team play.

Summary

This module has looked at some of the **universal processes** of child development. Physical, social, moral and language development have been explored, along with the developmental processes associated with play.

Using observation techniques carried out in classrooms and neighbourhoods, it is hoped that you have translated the theories into evidence which either supports or negates the theorists. Understanding typical behaviours in children at particular stages of growth and development will assist in providing appropriate teaching and learning opportunities.

Glossary and key terms

Quantitative:	Measured or measurable by quantity.
Qualitative:	Concerned with, or depending upon quality.
Universal process:	Processes of development which occur in sequence are evident in children of all cultures around the world.
Child observation:	The process of systematically looking at and recording the behaviours of children in relation to their own behaviour.
Halo effect:	When a teacher's judgement of a child in one situation flows over into a different situation.
Leniency effect:	When a teacher is generous in the evaluation of all students' work.
Time sampling:	Recording all the instances of a given behaviour within a certain period of time.
Event sampling:	Recording of behaviour every time it occurs.
Maturation:	A biological process which affects the time at which some developmental features change or emerge.
Learning:	The changes in behaviour which result from experience.
Perception:	The organisation of information taken in by the senses.
Egocentric:	Behaviour centred on oneself.
Cognitive development:	Development of thinking skills.
Ethnocentric:	Evaluating other races and cultures by criteria specific to one's own.