

# Making a Living

Upper primary  
Syllabus 2003

## Section 2

Learning outcomes  
and indicators



Papua New Guinea  
Department of Education

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The Making a Living Subject Advisory Committee as well as community members, teachers, inspectors, educators and representatives from government and non-government organisations have developed this syllabus through meetings, workshops and trialing.

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## Secretary's Message

The current reforms in education have been in progress since 1992. The Education Reform has emphasised community-based schooling, the use of vernacular languages in schools, the introduction of Elementary schools and the expansion of Primary schooling to grade 8 and increased access to Grades 9 and 10.

This syllabus is to be used by Upper Primary (Grades 6, 7 and 8) students in Primary schools throughout Papua New Guinea. This syllabus develops, extends, links and builds upon concepts, skills and attitudes flowing from Lower Primary (Grades 3, 4 and 5). This syllabus provides a sound foundation for further learning in the reformed school system.

Students' language abilities already gained in their home environments and during the previous years of schooling must be respected, built on and extended. Vernacular languages have a large part to play in our students' formative years and their first language should be used to promote a deeper understanding of difficult concepts when this is appropriate.

Making a Living is a new subject area that aims to empower students with the essential life skills and knowledge to participate actively in society, to be self reliant and to live sustainably now and in the future.

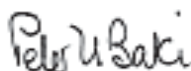
It combines the subjects of Commerce, Agriculture and Technology to promote useful and relevant life skills. It has been allocated 6 hours (360 minutes) per week to give you enough time to teach this very important subject.

Students will manage resources, promote better living and participate actively in community development. This subject depends on initiatives, dedication and commitment from teachers, students and the community. Its success will be evident through practical projects in the school and local community.

Making a Living is an important part of the reform curriculum that emphasises the need to teach our students to be enterprising and improve standards of living as called for in the Matane report; *A Philosophy of Education for Papua New Guinea*.

Students will investigate, create and design innovative ways of using available resources. They will make objects, cost them and evaluate the quality of their products and processes. This subject is relevant and useful for students leaving formal schooling after grade 8, as well as those who will pursue studies in higher learning institutions.

I commend and approve this syllabus as the official curriculum for Making a Living to be used in all Upper Primary schools throughout Papua New Guinea.



Peter M. Baki  
Secretary for Education

# Learning Outcomes

## Numbering of Learning Outcomes

Each Learning Outcome is numbered with three digits, such as 6.2.3. The first number refers to the Grade level. The second number refers to the Strand. The third number refers to the Outcome in the Strand. Thus, 6.2.3 refers to an Outcome at Grade 6, Strand 2 and Outcome number 3.

Strand	Grade 6	Grade 7	Grade 8
Managing resources	<p><b>6.1.1</b> Investigate the importance of land and water resources and apply appropriate ways of managing these to meet basic human needs</p> <p><b>6.1.2</b> Investigate the consequences when an element of the local environment is affected and apply environmentally friendly actions to care for it</p> <p><b>6.1.3</b> Share an understanding of the economical, cultural and nutritional value of crops and animals and compare the benefits of traditional and commercial crops and animal management</p>	<p><b>7.1.1</b> Investigate and compare consequences of mismanagement of land and water resources and plan, design and undertake a small project using appropriate management practices</p> <p><b>7.1.2</b> Investigate and undertake practical ways to reduce, reuse and recycle waste to benefit and improve the local environment</p> <p><b>7.1.3</b> Explain appropriate crop management and animal husbandry practices and demonstrate these through undertaking a practical project</p>	<p><b>8.1.1</b> Evaluate current practices of land and water resource management to design sustainable resource management projects to generate income</p> <p><b>8.1.2</b> Describe and reflect on economical, cultural and ecological values of natural, social and built environments and apply environmentally friendly ways of managing the environment</p> <p><b>8.1.3</b> Plan, design and implement a crop or animal project suited to local conditions and resources aimed at generating an income</p>

Strand	Grade 6	Grade 7	Grade 8
Better Living	<p><b>6.2.1</b> Describe and demonstrate aspects of personal hygiene, nutrition and safety that promote a healthy lifestyle</p> <p><b>6.2.2</b> Develop an awareness of the importance of effective management skills in creating pleasant and safe environments at home and school and apply and make suggestions for improvement</p> <p>importance of effective money management, record keeping and budget planning and apply this to a practical situation at home or school</p> <p><b>6.2.4</b> Identify resources and a range of tools and equipment required for handcrafts and apply the skills in a familiar practical situation</p>	<p><b>7.2.1</b> Analyse aspects of a nutritious diet and suggest how and where they might obtain, preserve, process and prepare these foods to meet nutritional requirements</p> <p><b>7.2.2</b> Assess home and school buildings to identify areas that require maintenance, repair or other improvements and undertake appropriate actions</p> <p><b>7.2.3</b> Investigate consumer rights and responsibilities and demonstrate practical ways to be a wise consumer</p> <p><b>7.2.4</b> Initiate plans and apply appropriate techniques and processes to design and make an item that benefits the individual or the community</p>	<p><b>8.2.1</b> Investigate and implement practical ways to produce and prepare food for personal consumption or to generate an income</p> <p><b>8.2.2</b> Work collaboratively with others to select and undertake a project based on identified needs within the school or community</p> <p><b>6.2.3</b> Describe the</p> <p><b>8.2.3</b> Evaluate those goods and services that are provided by a range of organisations and make informed decisions about those that best meet their needs</p> <p><b>8.2.4</b> Investigate the appropriateness of materials for specific purposes and use their imagination to design, make and evaluate a product relevant to their needs</p>

Strand	Grade 6	Grade 7	Grade 8
Community Development	<p><b>6.3.1</b> Identify the common features of the local community and make suggestions as to how these may influence or benefit community life</p> <p><b>6.3.2</b> Investigate and practise practical skills of effective communication</p> <p><b>6.3.3</b> Participate in projects to meet identified needs and opportunities for improvement within the school</p>	<p><b>7.3.1</b> Reflect upon personal strengths and capabilities and consider how they might use these to contribute in a positive way within the community</p> <p><b>7.3.2</b> Identify and establish network partners within the wider community to promote more effective access to information</p> <p><b>7.3.3</b> Initiate and plan co-operative projects that encourages community and school participation</p>	<p><b>8.3.1</b> Apply an understanding of the local community to develop and undertake a co-operative plan that provides economic and social opportunities and benefits for their community</p> <p><b>8.3.2</b> Apply effective communication skills and mediums to facilitate awareness of an issue of concern to the community</p> <p><b>8.3.3</b> Plan and undertake an enterprising project to enable them to make a living</p>

# Learning Outcomes and Indicators

## Strand: MANAGING RESOURCES

Sub-strand	Grade 6	Grade 7	Grade 8
Land and Water	<p><b>6.1.1</b> Investigate the importance of land and water resources and apply appropriate ways of managing these to meet basic human needs</p>	<p><b>7.1.1</b> Investigate and compare consequences of mismanagement of land and water resources and plan, design and undertake a small project using appropriate management practices</p>	<p><b>8.1.1</b> Evaluate current practices of land and water resource management to design sustainable resource management projects to generate income</p>
<p>Indicators</p> <p>All Indicators are listed as bullet points after each Outcome. The list of Indicators always begins with the following statement: 'Students will be achieving this outcome when they, for example'.</p>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• describe basic human needs and how to meet them</li> <li>• identify a range of land and water resources in the school and local area</li> <li>• identify which crops are best suited to local environmental conditions</li> <li>• observe and describe different practices for farming, gardening, fishing or hunting</li> <li>• choose and apply the most appropriate practice for their context</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• observe and describe the cause and effect of mismanagement of land and water resources</li> <li>• gather appropriate information to develop plans and designs for food production</li> <li>• develop a small garden project</li> <li>• develop understandings related to improved gardening practice</li> <li>• choose and apply the most appropriate management practices based on investigation</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• compare and analyse current practice in the local area with that in other places</li> <li>• investigate alternative means of generating an income</li> <li>• discuss how people live in a cash society and compare with subsistence living</li> <li>• identify possible opportunities or needs for resource management projects</li> <li>• make suggestions for improvement to current practice</li> <li>• identify and explain sustainable practice</li> <li>• use findings to plan and design a sustainable income generating project</li> </ul>

Sub-stand	Grade 6	Grade 7	Grade 8
Environment	<p><b>6.1.2</b> Investigate the consequences when an element of the local environment is affected and apply environmentally friendly actions to care for it</p>	<p><b>7.1.2</b> Investigate and undertake practical ways to reduce, reuse and recycle waste to benefit and improve the local environment</p>	<p><b>8.1.2</b> Describe and reflect on economical, cultural and ecological values of natural, social and built resources and apply environmentally friendly ways of managing the environment</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify elements within an ecosystem</li> <li>• identify relationships and interdependence within an ecosystem</li> <li>• predict what will happen when an element of an environment is affected or mistreated</li> <li>• suggest possible solutions to an identified problem and take action to care for the environment</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify and describe the processes of reducing, recycling and reusing</li> <li>• describe how waste is generated in the community</li> <li>• identify methods of reducing, reusing and recycling a range of waste items</li> <li>• predict possible causes and effects of applying recycling processes to everyday life</li> <li>• initiate and undertake recycling, reusing or reducing to benefit or improve the local environment</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify the value of natural, built and social resources</li> <li>• develop criteria for evaluating a quality environment</li> <li>• identify and describe a range of environmentally friendly management practices</li> <li>• decide and apply the most effective way to conserve, protect, manage or sustain an environment</li> </ul>



Sub-strand	Grade 6	Grade 7	Grade 8
Crop and Animal Management	<p><b>6.1.3</b> Share an understanding of the economical, cultural and nutritional value of crops and animals and compare the benefits of traditional and commercial crops and animal management</p>	<p><b>7.1.3</b> Explain appropriate crop management and animal husbandry practices and demonstrate these through undertaking a practical project</p>	<p><b>8.1.3</b> Plan, design and implement a crop or animal project suited to local conditions and resources aimed at generating an income</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• discuss personal understandings of economic, cultural and nutritional value of animals in personal, local and national contexts</li> <li>• identify benefits associated with traditional and commercial crops and animal management</li> <li>• identify local environmental conditions that would influence the choice of crops and animals for that area</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• discuss the importance of food security to achieving sustainable living</li> <li>• identify and describe a range of appropriate management practices</li> <li>• make judgments about the consequences of mismanagement</li> <li>• investigate resources necessary for undertaking a practical project</li> <li>• plan and apply skills necessary for managing crops and animals and evaluating outcomes of a project</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• gather and collate information on a selected animal or crop suited to local conditions</li> <li>• develop effective plans and designs</li> <li>• implement plans and designs for the project based on an understanding of the importance of food security</li> <li>• consider possible methods of processing and preserving plants and crops</li> <li>• undertake appropriate record-keeping associated with the project</li> <li>• evaluate effectiveness of the project and make suggestions for improvements in a similar project</li> <li>• reflect on production to check if the project has achieved its purpose</li> </ul>

Strand: BETTER LIVING

Sub-strand	Grade 6	Grade 7	Grade 8
Healthy Living	<p><b>6.2.1</b> Describe and demonstrate aspects of personal hygiene, nutrition and safety that promote a healthy lifestyle</p>	<p><b>7.2.1</b> Identify aspects of a nutritious diet and suggest how and where they might obtain, preserve, process and prepare these foods to meet nutritional requirements</p>	<p><b>8.2.1</b> Investigate and implement practical ways to produce and prepare food for personal consumption or to generate an income</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• discuss effects of healthy and unhealthy lifestyle practices</li> <li>• discuss safety practices at home and school</li> <li>• identify a range of issues related to safety at home and school</li> <li>• suggest behaviour that promote a healthy lifestyle</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• describe what a nutritional diet consists of and compare this with their current diets</li> <li>• identify positive and negative aspects of their own diets</li> <li>• plan and prepare a nutritious meal to meet nutritional requirements for individuals from different age groups</li> <li>• make suggestions as to how they might improve their diet</li> <li>• identify local food sources</li> <li>• suggest and apply practical ways to produce, obtain, process and preserve food</li> <li>• use or adapt recipes to prepare, process and preserve food</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify a range of traditional and modern methods of food preparation</li> <li>• prepare food using a range of cooking methods and equipment for special occasions or for sale</li> <li>• plan and undertake a practical food preparation project</li> </ul>

Sub-strand	Grade 6	Grade 7	Grade 8
Care and Management	<p><b>6.2.2</b> Develop an awareness of the importance of effective management skills in creating pleasant and safe environments at home and school and apply and make suggestions for improvement</p>	<p><b>7.2.2</b> Assess home and school buildings to identify areas that require maintenance, repair or other improvements and undertake appropriate actions</p>	<p><b>8.2.2</b> Work collaboratively with others to select and undertake a project based on identified needs within the school or community</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• discuss personal ideas of what makes a pleasant and safe home and school environment</li> <li>• identify effective management skills and choose appropriate equipment for specific tasks</li> <li>• explain the consequences of poor management</li> <li>• outline ways to improve the appearance and management of home and school environments</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• list areas within the home and school that require maintenance and repair or other improvements</li> <li>• identify best methods for maintenance, repair or improvement of tools and equipment</li> <li>• participate in daily management routines to ensure maintenance of a pleasant and safe home and school environment</li> <li>• participate in action to carry out improvement</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• explain skills necessary for working effectively with others</li> <li>• identify members with the appropriate skills for the project</li> <li>• participate in democratic decision-making processes to identify needs within the school or community</li> <li>• develop a plan of action for a selected project</li> <li>• plan, implement and evaluate the project in terms of effectiveness and suggestions for future improvement</li> </ul>

Sub-strand	Grade 6	Grade 7	Grade
<p>Wise Consumer</p> <p><b>6.2.3 Describe</b></p>	<p>the importance of effective money management, record keeping and budget planning and apply this to a practical situation at home or school</p>	<p><b>7.2.3 Investigate</b> consumer rights and responsibilities and demonstrate practical ways to be a wise consumer</p>	<p><b>8.2.3 Evaluate</b> those goods and services that are provided by a range of organisation and make informed decisions about those that best meet their needs</p>
<p>Indicators</p>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• discuss the need for effective money management, record keeping and budget planning</li> <li>• list aspects of effective money management, record keeping and budget planning</li> <li>• identify a situation where they can apply these understandings in a practical way, such as making a personal or a school budget</li> <li>• evaluate the effectiveness of their actions and decisions</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify the difference between consumer rights and responsibilities</li> <li>• outline their rights and responsibilities as a consumer</li> <li>• describe features of a wise consumer</li> <li>• describe the link between consumer rights and responsibilities and being a wise consumer</li> <li>• apply knowledge and skills of being a wise consumer in a practical situation</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify the difference and similarities between goods and services</li> <li>• identify a range of organisations that provide goods and services</li> <li>• draw conclusions about their needs and which goods and services might meet these</li> <li>• critically evaluate the goods and services provided to make informed decisions about which are the most appropriate</li> </ul>

Sub-strand	Grade 6	Grade 7	Grade 8
Making Things	<p><b>6.2.4</b> Identify resources and a range of tools and equipment required for handcrafts and apply the skills in a familiar practical situation</p>	<p><b>7.2.4</b> Initiate plans and apply appropriate techniques and processes to design and make an item that benefits the individual or the community</p>	<p><b>8.2.4</b> Investigate the appropriateness of materials for specific purposes and use their imagination to design, make and evaluate a product relevant to their needs</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify materials that are used to make local products</li> <li>• discuss the importance of using local materials</li> <li>• use local materials to create a product demonstrate basic skills and equipment, such as basic stitches, woodwork</li> <li>• use appropriate tools and equipment</li> <li>• use appropriate methods of working with metal and wood to create a product</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify a need or an issue affecting individuals or the community and suggest possible ways to meet the need or issue</li> <li>• identify a product and apply knowledge and skills to create, adapt or modify a similar product</li> <li>• identify resources, make an action plan and implement it</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• analyse the characteristics of a range of materials and select the most appropriate for a specific purpose</li> <li>• identify possible ways to reuse and recycle materials to produce a product</li> <li>• evaluate and improve processes or techniques used in creating a local product</li> <li>• identify and develop a product to meet customer's need</li> <li>• produce objects to meet functional and aesthetic requirements</li> </ul>

## Strand: COMMUNITY DEVELOPMENT

Sub-strand	Grade 6	Grade 7	Grade 8
Knowing Communities	<p><b>6.3.1</b> Identify the common features of the local community and make suggestions as to how these may influence or benefit community life</p>	<p><b>7.3.1</b> Reflect upon personal strengths and capabilities and consider how they might use these to contribute in a positive way within the community</p>	<p><b>8.3.1</b> Apply an understanding of the local community to develop and undertake a cooperative plan that provides economic and social opportunities and benefits for their community</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• work with members of the community to identify common features of the community</li> <li>• discuss with community members how the community has changed over time</li> <li>• develop simple maps to represent physical features of the community including natural, human and built resources</li> <li>• discuss how the features may affect daily life</li> <li>• make suggestions on the types of improvements that could be made to the community</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• make a list of what they know and can do relevant to community development</li> <li>• identify and reflect upon their own strengths and weaknesses</li> <li>• develop a personal profile of another student in the class and emphasise their positive attributes</li> <li>• observe community activities to assist them in identifying how they might contribute to community life</li> <li>• approach the community to provide assistance where a need has been identified</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify and evaluate possible economic and social opportunities for the community</li> <li>• conduct a survey to establish what resources may be available locally, internationally</li> <li>• initiate a plan and collaborate with appropriate members of the community to gather their views</li> <li>• identify local or global issues and seek external financial assistance for solutions</li> <li>• work cooperatively with the community to implement a plan of action</li> <li>• approach community members to assist in reflecting upon the constraints and successes of the project and make suggestions for improvement</li> </ul>

Sub-strand	Grade 6	Grade 7	Grade 8
Communication	<p><b>6.3.2</b> Investigate and practice practical skills of effective communication</p>	<p><b>7.3.2</b> Identify and establish network partners within the wider community to promote more effective access to information</p>	<p><b>8.3.2</b> Apply effective communication skills and mediums to facilitate awareness of an issue of concern to the community</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify aspects of effective communication</li> <li>• consolidate skills of reading, writing, listening, collecting data and basic computer skills</li> <li>• participate in role plays, public speaking, debates, interviewing, writing</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify relevant and useful resource people</li> <li>• explain a range of strategies for developing networks</li> <li>• engage in discussions using persuasive language</li> <li>• identify needs within the community and select the most appropriate information and ways to access this</li> <li>• explain and demonstrate effective communication skills</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• identify and use a range of communication media most appropriate for the identified issue</li> <li>• identify an issue of concern and plan and facilitate an awareness campaign</li> </ul>

Grade 7		Grade 8	
Community Projects	<p><b>6.3.3</b> Participate in projects to meet identified needs and opportunities for improvement within the school</p>	<p><b>7.3.3</b> Initiate and plan cooperative projects that encourage community and school participation</p>	<p><b>8.3.3</b> Plan and undertake an enterprising project to enable them to make a living</p>
Indicators	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• describe personal attributes for effective participation</li> <li>• observe physical, economic and environmental aspects of the school and community to identify needs and opportunities</li> <li>• devise a range of strategies and actions to meet needs and opportunities</li> <li>• actively participate in a project</li> <li>• self and peer assess the project in terms of participation and benefits</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• develop a class list of effective cooperative skills</li> <li>• suggest ways in which individuals can contribute at school and in the community</li> <li>• brainstorm possible cooperative projects</li> <li>• develop an action plan involving school and community members</li> <li>• consider possible means of support for the project: financial and human resources</li> <li>• work cooperatively with the community to implement the plan</li> <li>• monitor and evaluate the progress of a project</li> </ul>	<p>Students will be achieving this outcome when they, for example</p> <ul style="list-style-type: none"> <li>• engage in brainstorming</li> <li>• consider the possibilities of long and short term projects</li> <li>• consider the viability and sustainability of a project</li> <li>• list associated costs, resources and projected income</li> <li>• identify possible sources of funding to establish and support the project</li> <li>• outline possible marketing strategies</li> <li>• predict possible constraints and suggest ways to overcome these</li> <li>• develop a management plan to monitor and evaluate the project</li> </ul>



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