

Making a Living

Upper primary
Syllabus 2003

Section 1

Curriculum Information



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.

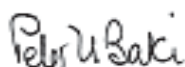
It combines the subjects of Commerce, Agriculture and Technology to promote useful and relevant life skills. It has been allocated 6 hours (360 minutes) per week to give you enough time to teach this very important subject.

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

Introduction

This syllabus makes explicit the knowledge, skills, attitudes and values that students should achieve for Grades 6, 7 and 8 in Making a Living. These are expressed as learning outcomes and indicators.

The learning outcomes are student centred and written in terms that enable them to be demonstrated, assessed or measured. The outcomes are written to show a progression from one grade to the next.

Each learning outcome is illustrated with a list of examples of the kinds of things students should be able to do, know and understand if they are achieving an outcome. These are called indicators.

The learning outcomes and indicators will:

- give teachers, individually or collaboratively, the flexibility to write programs and units of work. These can be developed to suit local conditions and individual student needs,
- help teachers assess and report students' achievements in relation to the learning outcomes,
- allow student achievement of the outcomes to be described in consistent ways,
- help teachers to monitor student learning,
- help teachers plan their future teaching programs.

Making a Living has the potential to extend its application and relevance beyond formal schooling. Skills and knowledge developed through Making a Living will enable students to support other initiatives, as well as develop and maintain networks and liaison with individuals and organisations from the wider community, non-government organisations and international organisations.

Making a Living integrates relevant practical skills and knowledge of Agriculture, Basic Technology and Commerce. Making a Living makes clear links with and highlights the relevance of other subjects: Maths, Science, Language, Social Science, Arts and Personal Development as well as applying relevant skills and processes from these subjects.

The focus in education is changing from one that meets the needs of the formal workplace to one that fosters Integral Human Development. The Reform curriculum must be relevant for students to participate meaningfully in their respective communities when they leave school and to meet the future challenges of society.

Making a Living provides practical learning experiences linking head, heart and hands and provides opportunities for students to develop skills for a productive and a fulfilled life.

As this subject is based on the development of practical skills and knowledge, it requires adequate time for undertaking practical projects.

Making a Living is to be timetabled for 360 minutes per week in all Upper Primary schools.

Rationale

Today it is becoming increasingly difficult to find jobs in the formal economy. Students must develop knowledge and skills to manage their limited resources to achieve set goals and to successfully make a living in their community.

Making a Living equips students with practical knowledge, skills and attitudes that will enable them to contribute meaningfully to their local community and society. Making a Living encourages students to use their head, heart and hands to become active and informed citizens capable of achieving a sustainable way of life.

The subject:

- encourages self-reliance through teaching students to think critically and to become effective problem solvers,
- promotes a student-centred approach to learning and an understanding and appreciation that learning is a lifelong process,
- develops concepts and processes designed to build upon the learning outcomes from Elementary and Lower Primary schools,
- prepares students for advanced aspects of technology in the community and Secondary schools.

In Making a Living, students:

- work in creative, innovative and enterprising ways to produce their own products to meet their needs in a variety of contexts,
- develop the skills and knowledge to generate and maintain an income,
- actively participate in community development,
- learn to effectively implement specific techniques and processes to enable them to manage resources of land, water and time,
- undertake practical and real-life projects that focus on becoming economically independent,
- work towards improving their quality of life.

The implementation of Making a Living will enable schools to:

- develop innovative school-based programs relevant to students' needs, resources and facilities,
- grow their own food and generate income through sales of items that students produce,
- become a real-life example of self reliance,
- build good working relationships with members of the community: exchanging ideas, facilities and expertise and demonstrating an attitude of cooperation, teamwork and sharing,
- contribute to the social and economic well-being of the school, community and the nation.

This subject will contribute directly to improving the quality of life and standards of living. Through the development of skills and knowledge, parents and communities can recognise and appreciate that education provides value for money, while preparing students to live in, contribute to and participate in their world now and in the future.

Curriculum Principles

The Making a Living Syllabus develops a continuum of learning from Grades 6 to 8. The curriculum principles of Our Way of Life and Integral Human Development are reflected in this continuum of learning.

Bilingual education

At all times, students are encouraged to communicate orally and in writing in vernacular and English to develop information that can be shared with their community.

Nation building and national unity

The subject promotes national identity by encouraging the production of homegrown products. Students investigate opportunities for farming traditional and indigenous crops and animals, producing local handcrafts and participating in cultural activities within the community.

Sustainability

This syllabus has a clear focus on social and environmental sustainability and Integral Human Development. Papua New Guinea possesses an immense diversity of natural environments and cultures. It is essential that students develop an appreciation of this diversity and a sense of the importance of the need to protect and conserve them.

Catering for diversity

Making a Living caters for the needs of all students. It is important for teachers to consider the needs of all students, both girls and boys, when developing learning experiences, including students with special needs. This syllabus promotes the principles of equity through providing a diverse range of learning experiences and assessment practices.

Developing networks and partnerships

Making a Living relies heavily upon schools establishing a range of networks and partnerships within and outside of communities. The development of these sound working relationships is essential to the effective implementation of this subject.

Teaching and Learning

Making a Living provides students with the opportunity to work independently in small and large groups, inside and outside of the classroom and, where appropriate, to negotiate the curriculum.

This approach provides students with the opportunity to be involved in decisions about their learning, such as the selection of projects, areas of interest to them and assessment tasks. It is essential that students have the opportunity to actively participate in a range of learning contexts both school based and community based.

Inclusive curriculum

An inclusive curriculum caters for the needs of all students. Making a Living promotes the principle of inclusive curriculum by ensuring that all students are provided with opportunities to reach their potential. This subject encourages students to understand and appreciate diversity and value and respect all people and environments. Making a Living provides opportunities for all students, regardless of gender, ability, disability, ethnicity, socio-economic circumstance or location to participate in aspects of the teaching and learning process.

Relevance

A key focus of Making a Living is to provide all students with real life and relevant learning experiences. There is a clear emphasis on the development of practical skills and knowledge that will ensure students are able to achieve and maintain a sustainable way of life beyond their school years. Learning in Making a Living should provide students with the opportunity to make connections and draw from their cultural, linguistic and everyday knowledge, skills and attitudes and apply this to what is being learnt in their classroom. It is essential that students are aware of and value community and local knowledge and realise that learning takes place inside and outside the school context.

Student-centred learning

In Making a Living a student-centred approach to learning views learning as an active construction of meaning and teaching as the act of guiding and facilitating learning. Students learn in different ways and therefore must be given the opportunity to learn and be assessed in a variety of ways. A student-centred approach provides students with the opportunity to practice and develop critical and creative thinking, problem solving, decision making as well a range of practical skills and knowledge.

Lifelong learning

This subject aims to assist students develop the necessary knowledge and skills to effectively manage, improve and sustain their lives and become self-reliant. Making a Living provides students with the opportunity and skills to become a lifelong learner. A lifelong learner is:

- a knowledgeable person,
- a problem solver and creative thinker,
- an effective communicator,
- an active and informed participant in a complex world,
- a self-directed, self-reliant and reflective learner,
- able to develop and apply a range of practical skills to meet diverse contexts and needs.

Integration

Making a Living promotes integration across the strands of the subject as well as making links and incorporating outcomes from other subjects where appropriate.

Integration of different aspects of the curriculum provides students with the opportunity to make links, draw conclusions and deepen understanding. By connecting a learning experience from Making a Living to issues, concerns and events outside this subject, students are provided with the opportunity to deepen their understandings and apply knowledge and skills in broader contexts.

Teachers may choose to develop units of work that focus specifically upon outcomes from a strand or strands within this subject or alternatively develop a unit of work that incorporates outcomes from this subject and other subject areas.

Many teachers may consider new themes as opposed to themes that they have undertaken previously. When planning units of work it is essential that the focus be placed upon the learning outcomes.

The syllabus will require flexible programming and time tabling. It is necessary to provide enough time for students to develop skills to appropriate levels of competence. The Teachers Guide will provide options for timetabling.

Aims

Students :

- understand and appreciate a wide range of indigenous and introduced ideas of managing resources, healthy living and community development,
- develop safe techniques to use the available local resources sustainably to improve the quality of life for themselves and others,
- embrace innovation and take the initiative to plan, implement and evaluate changes relevant to the needs of the society,
- identify relevant economic opportunities and be able to generate and sustain income for themselves and their immediate family,
- develop positive attitudes towards work and take responsibility for their own learning and actions,
- promote self respect and respect for others and their property at school, home and within the wider community,
- become critical thinkers and problem solvers,
- know how and where to access and manage information,
- establish and maintain a sustainable way of life,
- appreciate and value the diversity and uniqueness of Papua New Guinea's environments and manage this in a sustainable way,
- promote the development of skills for life and self-reliance,
- develop the ability to investigate, design and implement projects,
- promote language skills through the use of vernacular and English.

Content Overview

The syllabus content is organised into three Strands, each with three or four Sub-strands. A Strand such as Managing Resources is a useful and convenient way of organising the learning outcomes for a subject. Each Strand identifies a particular aspect of a subject or a particular theme such as a set of processes.

Each Strand displays a typical progression of learning from one grade to the next. Each Strand is further organised into Sub-strands to allow the content to be specified and described as learning outcomes.

Making a Living has the following Conceptual Strands: Managing Resources, Better Living and Community Development.

Managing Resources has three Sub-strands: Land and Water Management, Environment and Crops and Animal Management.

Better Living has four Sub-strands: Healthy Living, Care and Management, Wise Consumer and Making Things.

Community Development has three Sub-strands: Knowing Communities, Communication and Community Projects.

In addition to the conceptual Strands, Making a Living incorporates a set of five Processes and Skills: investigating, planning and designing, making or producing, marketing and evaluating. These processes are not viewed as a separate Strand, but are applied in each Strand.

Managing Resources

People depend on the environment for food, water, shelter and clean air. Students understand the value of these natural resources and learn ways of managing land and water resources in a sustainable way that benefits people and the environment. Students learn principles and techniques of using land to increase the quality and quantity of food production for their own consumption or for sale.

There is a clear focus upon concepts of ecological and economic sustainability. Students undertake environmentally friendly activities to protect and conserve the environment.

Better Living

Students learn practical ways to meet their basic needs and improve their quality of life. They learn to be creative and use their imagination to create things for themselves or for a home. Students learn how to prepare nutritious food and develop the necessary skills to be able to care for themselves or for a home.

Students select and use appropriate technology to produce a product or service to meet a basic need. Students develop an awareness of the range of services that are available to them and make informed decisions about those that best suit their needs.

Community Development

Students learn how to contribute to and live and work with the community. They apply what they learn in their community through projects and good working relationships.

Students bring awareness to the community about the services available to them and assist in democratic decision-making processes which are the most appropriate for the community. They learn to care for and value school property and develop a sense of ownership. This strand ensures students have opportunities to learn skills to liaise with and actively participate in community-based projects and to build good working relationships.

Processes and Skills

Practical skills and processes are the essence of Making a Living. This course encourages the development of both critical thinking processes and practical skills. These processes and skills encourage students to think critically and be creative in what they produce. Students organise and manage their limited resources in achieving a set goal or purpose. These processes do not exist in isolation but are integrated across and within the strands.

Making a living — processes



When **investigating**, students assess the nature and circumstances of problems or needs and determine the process or the product. The problems or the needs should be realistic and worth solving and also relevant to the needs of the students and their community. Students gather information to analyse the nature of problems and explore social, economic, technological, ecological or aesthetic factors that have a bearing on the kind of product or the use of particular techniques.

When **planning and designing**, students adapt or create original designs to produce a product. They generate plans and proposals for creatively solving problems. They consider options, identify priorities and constraints, experiment with different ways to achieve their aims, as well as calculate and predict consequences. They choose appropriate resources and equipment, and appraise plans and actions. They develop criteria to assess how well their intended techniques and products meet the requirements of the problems. Graphical representations and technical languages are used to explain design concepts and production processes.

When **making or producing**, students translate designs and plans into products and processes. They work alone or cooperatively to produce quality products. They apply techniques and use equipment, manage time and resources, monitor and control quality in creating products and processes. They adapt ideas and plans in response to constraints and difficulties.

When **marketing**, students use marketing strategies to market their products. They also calculate costs and keep records of sales.

When **evaluating**, students measure and test products using developed criteria and report on their findings. This involves determining whether the products and processes match design requirements, provides satisfactory solutions and have social, economic or technological effects. In the light of their experience, they may reflect on and reconsider their intentions, plans and actions to modify and improve the process and quality of their products.

Table of Strands and Sub-strands for Making a Living

Strand	Grade 6	Grade 7	Grade 8
Managing Resources	<ul style="list-style-type: none"> • land and water management • environment • crops and animal management 	<ul style="list-style-type: none"> • land and water management • environment • crops and animal management 	<ul style="list-style-type: none"> • land and water management • environment • crops and animal management
Better Living	<ul style="list-style-type: none"> • healthy living • care and management • wise consumer • making things 	<ul style="list-style-type: none"> • healthy living • care and management • wise consumer • making things 	<ul style="list-style-type: none"> • healthy living • care and management • wise consumer • making things
Community Development	<ul style="list-style-type: none"> • knowing communities • communication • community projects 	<ul style="list-style-type: none"> • knowing communities • communication • community projects 	<ul style="list-style-type: none"> • knowing communities • communication • community projects

Assessment and Reporting

Assessment and reporting practices described here are detailed further in *The Assessment and Reporting Policy for Papua New Guinea* and in other support materials produced by the Department of Education.

Assessment

Assessment is the ongoing process of identifying, gathering and interpreting information about students' progress towards achievement of the learning outcomes described in the subject syllabuses.

Teachers record evidence of students' learning and use it to make judgements about students' achievements of the learning outcomes. To ensure that assessment is fair and balanced, teachers should use a range of assessment methods including:

- observing and recording details of students' demonstration of process skills and/or their performance on particular tasks,
- setting written assignments, projects and practical work,
- setting and marking written tests and/or examinations,
- keeping portfolios of students' work.

Teachers should provide opportunities for students to assess their own learning (self-assessment) and the learning of others (peer assessment) according to set negotiated criteria. The purpose of assessment is to improve student learning.

Assessment in Making a Living

Within an outcomes framework, assessment focuses on students' demonstrations of learning outcomes. When assessment focuses on learning outcomes, students should be aware of what is being assessed, the assessment task being used and the criteria by which their demonstration of outcomes will be judged.

Effective assessment:

- focuses on students' demonstrations of learning outcomes,
- is culturally appropriate,
- is manageable and supported by a collaborative approach,
- is fair and equitable,
- is reliable and valid,
- is compatible with curriculum teaching and learning approaches,
- develops students' capabilities to monitor their own progress.

Each learning outcome consists of a knowing and doing component: knowledge and process. Teachers need to ensure that they use a variety of methods that will cater for students' diverse learning styles and needs and the practical nature of this subject.

Possible strategies for teachers in Making a Living are:

- observation, such as checklists, anecdotal records,
- portfolios, such as samples of students work,
- performances, demonstrations and exhibitions, such as products, models, oral reports,
- concept maps, such as cause and effect, brainstorming, consequence maps,
- written test, such as multiple choice, short answer, selected response, response to stimuli,
- writing and work samples, such as journals, learning logs, case studies, research and field study reports,
- self assessment, such as practical projects: creating or producing a product, such as planning and growing vegetable garden, sewing a bag,
- Making a Living is assessed internally using criteria-reference assessment.

Reporting

Teachers must keep accurate records of students' achievement of the learning outcomes and report these achievements in fair and accurate ways to parents and guardians, teachers, students and others. Recording methods will include the following:

- journal, diary or anecdotal notes,
- portfolios,
- progressive records,
- checklists,
- work samples with comments written by the teacher.

Student reports should be based on assessment information collected from ongoing assessments and where appropriate, from external examinations (Grade 8). Schools will decide on how reports will be presented to best suit the needs of their communities.

Evaluation

Teachers will use assessment information to evaluate the effectiveness of their teaching, learning and assessment programs and to make improvements to their teaching practice in order to improve student learning.

Schools may use whole school assessment data to evaluate the effectiveness of teaching and learning in a particular subject or at particular grade levels and make decisions on how to improve student learning.