Economics

Upper Secondary

Teachers Guide

Papua New Guinea
Department of Education

Issued free to schools by the Department of Education

Published in 2008 by the Department of Education, Papua New Guinea

ISBN 978-9980-9923-9-0

Acknowledgements

The Upper Secondary Economics Teacher Guide was written, edited and formatted by the Curriculum Development Division of the Department of Education. The development of the teacher guide was coordinated by Jennifer Sangga.

Writers from schools, tertiary institutions and non-government organisations across the country have contributed to the writing of this teacher guide through specialist writing workshops and consultations. Quality assurance groups and the Economics Subject Advisory Committee have also contributed to the development of this teacher guide.

This document was developed with the support of the Australian Government through the Education Capacity Building Program.

Contents

Secretary's message

This teacher guide is to be used by Economics teachers when implementing the Upper Secondary Economics syllabus throughout Papua New Guinea. The Economics syllabus identifies the learning outcomes and content of the subject as well as assessment requirements. The teacher guide gives practical ideas about ways of implementing the syllabus: suggestions about what to teach, strategies for facilitating learning and teaching, how to assess and suggested assessment tasks.

A variety of suggested learning and teaching activities provide teachers with ideas to motivate students to learn, and make learning relevant, interesting and enjoyable. Teachers should relate learning in Economics to real people, issues and the local environment. Teaching using meaningful contexts and ensuring students participate in appropriate practical activities assists students to gain knowledge and understanding, and demonstrate skills in Economics.

Teachers are encouraged, where appropriate to integrate Economics activities with other subjects so that students can see the interrelationships between subjects and that the course they are studying provides a holistic education and a pathway for the future.

I commend and approve the Economics Teacher Guide for use in all schools with Grades 11and 12 students throughout Papua New Guinea.

DR JOSEPH PAGELIO

Secretary for Education

Introduction

The purpose of this teacher guide is to help you to implement the Economics syllabus. It is designed to stimulate you to create exciting and meaningful teaching programmes and lessons by enabling you to choose relevant and purposeful teaching activities. It will encourage you to research and look for new and challenging ways of facilitating students' learning in Economics.

The teacher guide supports the syllabus. The syllabus states the learning outcomes for the subject and units, and outlines the content and skills that students will learn, and the assessment requirements.

The teacher guide provides direction for you in using the outcomes approach in your classroom. The outcomes approach requires you to consider assessment early in your planning. This is reflected in the teacher guide.

This teacher guide provides examples of learning and teaching activities, and assessment activities and tasks. It also provides detailed information on criterion-referenced assessment, and the resources needed to teach Economics. The section on recording and reporting shows you how to record students' marks and how to report against the learning outcomes.

The outcomes approach

In Papua New Guinea, the Lower Secondary and Upper Secondary syllabuses use an outcomes approach. The major change in the curriculum is the shift to what students know and can do at the end of a learning period, rather than a focus on what the teacher intends to teach.

An outcomes approach identifies the knowledge, skills, attitudes and values that all students should achieve or demonstrate at a particular grade in a particular subject (the learning outcomes). The teacher is responsible for identifying, selecting and using the most appropriate teaching methods and resources to achieve these learning outcomes.

Imagine the student is on a learning journey, heading to a destination. The destination is the learning outcome that is described in the syllabus document. The learning experiences leading to the learning outcome are to be determined by the teacher. The teacher uses curriculum materials, such as syllabus documents and teacher guides, as well as textbooks or electronic media and assessment guidelines, to plan activities that will assist students achieve the learning outcomes.

The outcomes approach has two purposes. They are:

- to equip all students with knowledge, understandings, skills, attitudes and values needed for future success
- to implement programs and opportunities that maximise learning.

Three assumptions of outcomes-based education are:

- all students can learn and succeed (but not on the same day or in the same way)
- success breeds further success
- schools can make a difference.

The four principles of the Papua New Guinean outcomes approach are:

1 *Clarity of focus through learning outcomes*
This means that everything teachers do must be clearly focused on what they want students to be able to do successfully. For this to happen, the learning outcomes should be clearly expressed. If students are expected to learn something, teachers must tell them what it is, and create appropriate opportunities for them to learn it and to demonstrate their learning.

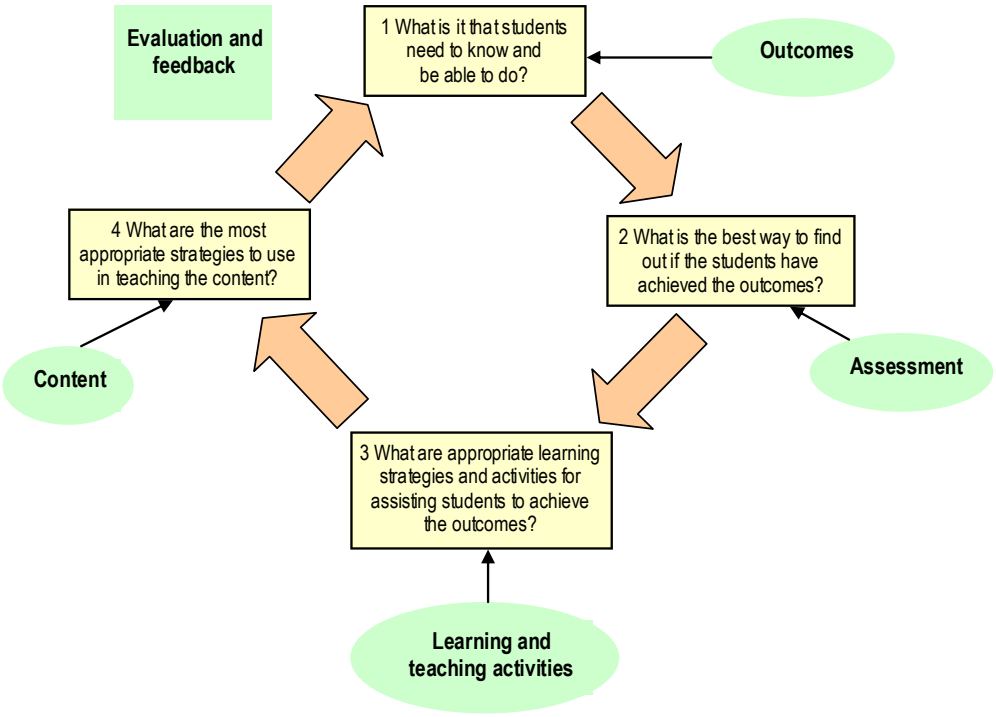
2 *High expectations of all students*
This means that teachers reject comparative forms of assessment and embrace criterion-referenced approaches. The ‘principle of high expectations’ is about insisting that work be at a very high standard before it is accepted as completed, while giving students the time and support they need to reach this standard. At the same time, students begin to realise that they are capable of far more than before and this challenges them to aim even higher.

3 *Expanded opportunities to learn*
This is based on the idea that not all students can learn the same thing in the same way in the same time. Some achieve the learning outcomes sooner and others later. However, most students can achieve high standards if they are given appropriate opportunities. Traditional ways of

organising schools do not make it easy for teachers to provide expanded opportunities for all students.

4 *Planning and programming by 'designing down'*
This means that the starting point for planning, programming and assessing must be the learning outcomes—the desired end results. All decisions on inputs and outputs are then traced back from the learning outcomes. The achievement of the outcome is demonstrated by the skills, knowledge and attitudes gained by the student. The syllabuses and/or teacher guides describe some ways in which students can demonstrate the achievement of learning outcomes.

Outcomes-based approach



Learning outcomes provide teachers with a much clearer focus on what students should learn. They also give teachers greater flexibility to decide what is the most appropriate way of achieving the learning outcomes and meeting the needs of their students by developing programs to suit local content and involve the community.

The outcomes approach promotes greater accountability in terms of student achievement because the learning outcomes for each grade are public knowledge; that is, they are available to teachers, students, parents and the community. It is not the hours of instruction, the buildings, the equipment or support services that are the most important aspect of the education process but rather, what students know and can do, as they progress through each grade.

The outcomes approach means that learning

- has a clearer purpose
- is more interactive—between teacher and students, between students
- has a greater local context than before
- is more closely monitored and acted upon by the teacher
- uses the teacher as a facilitator of learning as well as an imparter of knowledge.

Learning outcomes

The syllabus learning outcomes describe what students know and can do at the end of Grade 12. The level of achievement of the learning outcomes should improve during the two years of upper secondary study, and it is at the end of the study that students are given a summative assessment on the level of achievement of the learning outcomes. The learning outcomes for Economics are listed below.

Students can:

1. demonstrate an understanding and application of concepts, principles, models, skills, and terminology used in the study of Economics
2. demonstrate an understanding of the role of economic systems in providing solutions to economic problems
3. analyse economic events, past and present, using economic models and the skills of economic inquiry
4. predict and evaluate the impact of economic change in local, national and global settings
5. explain and reconcile the way economic decisions involve costs and benefits and have outcomes that may be inconsistent with social, moral and ethical values
6. describe and explain the way outcomes may be changed by individuals, community groups, business and government
7. identify the effects of interdependence at individual, local, national and global levels
8. communicate economic information, ideas and issues in a variety of ways.

Learning and teaching

How students learn

What I hear I forget.
What I hear and see I remember a little.
What I hear, see and discuss I begin to understand.
What I hear, see, discuss and do, I acquire knowledge and skills.
What I teach to another, I master.

('Active learning credo' statement, Silberman 1996)

In support of this are these findings: that we remember

20 per cent of what we hear
40 per cent of what we see
90 per cent of what we see, hear, say and do or what we discover for ourselves.

A student-centred approach to learning and teaching

Different students learn in different ways. Some students learn best by writing, others by talking and discussing, others by reading and others by listening. Most students learn by using a combination of these. All people learn skills through practicing and repetition. You need to use a variety of teaching strategies to cater for the different ways your students learn.

You, as a teacher, must teach the knowledge that is included in the syllabus documents. You have to be able not only to teach what students should know, but also to interpret that knowledge for students in a way that makes it relevant to them, and enables them to begin to acquire skills of analysis and problem solving, which will support learning and teaching. You also need to give students some opportunities to apply their knowledge, to be creative and to solve problems.

Students who participate in guided instruction learn more than students who are left to construct their own knowledge (Mayer 2004). You need to employ a variety of learning and teaching approaches because all students do not learn in the same way. The 'auditory learner' prefers to use listening as the main way of learning new material whereas a 'visual learner' prefers to see things written down. Students should be actively involved in their learning and therefore you need to design appropriate practical activities or experiments, using resources that can be found in your location.

The most efficient and long-lasting learning occurs when teachers encourage the development of higher-order thinking and critical analysis skills, which include applying, analysing, evaluating and creating. Attention should also be paid to developing students' affective and psychomotor skills. To make sure that this happens, you should encourage deep or rich—rather than shallow—coverage of knowledge and understandings.

In Grades 11 and 12, students will already have had a wide variety of experiences. You need to make use of your students' experiences when designing and conducting learning in class, so that learning is connected to your students' world. There are many learning and teaching strategies described in the Lower Secondary teacher guides.

Learning and teaching strategies

To assist and encourage students to learn, you perform certain tasks. These are referred to as teaching strategies. You need to engage students directly in learning but there are times when you have to take charge of the learning in the class and teach particular concepts or ideas.

Teaching strategies include:

- group work
- role play/drama
- skills practice
- research/inquiry
- class discussions/debates
- problem-solving activities
- teacher talk, instructions, explanations, lectures or reading aloud
- directed question and answer sessions
- audio-visual presentations
- text books or worksheets
- directed assignments
- demonstration and modelling
- guest speakers
- field work
- classroom displays.

Developing Economics skills

Students need to develop skills to help them learn. Skills development should happen as a part of a student's learning experience and the learning and practicing of skills needs to occur in the context of the units being taught.

Principles and procedures

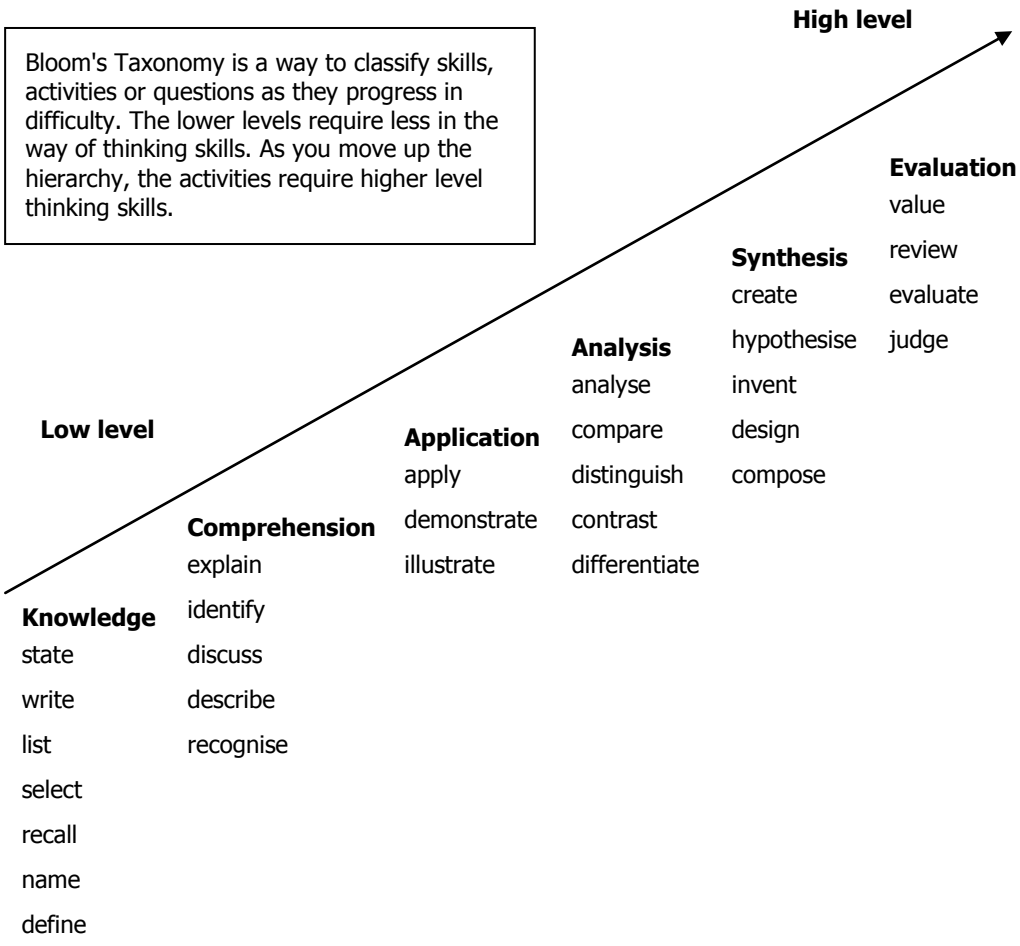
Skills learning tends to be most effective when:

- students go from the known to the unknown
- students understand why it is necessary to gain mastery of specific skills
- skills are developed sequentially at increasing levels of difficulty
- students identify the components of the skill
- the whole skill and the components of the skills are demonstrated
- there are frequent opportunities for practice and immediate feedback
- the skills being taught are varied in terms of amount and type, according to the needs of students
- the skill is used in a range of contexts.

To teach skills effectively you need to include learning activities that span the range from teacher-directed to student-centred learning, use groups of

different sizes ranging from the whole class to small groups and use a range of teaching strategies which use higher order skills as your students progress.

Bloom's taxonomy of skills



Learning and teaching strategies for Economics

Here are learning and teaching strategies which can be used to make learning more meaningful and interesting in Economics. You should vary your lessons by using different teaching strategies, making sure that the one you use for the lesson is suitable for your lesson outcomes. Many of these strategies work together, for example developing *consequence charts* during *class discussions* helps students make realistic *decisions*.

Brainstorming

This is a technique in which a class or group meets in order to record all the information already known on a topic, to develop new ideas or to stimulate creative thinking. Participants 'let the ideas come into their heads', write them down, sort them and decide which require further research. Brainstorming is a useful way of determining and activating prior knowledge of a topic. This could be used when students think of problem solving situations about the behaviour of consumers in the use of goods and services.

Classroom displays

A classroom display provides a way of focusing on the current unit. It stimulates learning, provides a record of learning as well as encouraging students to interact and to respond to learning.

Charts

Helping students to learn to chart, that is, to organise information in various groupings under different headings, is valuable. It not only helps them to make sense out of a previously unrelated mass of data, but it is a crucial step in the process of developing a store of concepts to use in making sense of their experiences. Charts (for example, of the kinds of occupations and people in those occupations in a particular locality) are a powerful organizing tool and of considerable help in getting students to think about data.

Consequence charts

A consequence chart is used to record what students believe to be the likely consequences of a decision or action. Charts can take different forms and enable students to explore cause and effect relationships, alternative consequences or the likely consequences of alternative actions or decisions, for example when making decisions about the use of personal money and constructing workable budgets.

Diagrams

Diagrams may be used to illustrate outlines and features of an object. They can show something complex like how a particular product is made from raw material. They can show the stages and/or process in the making of this product from a raw material into a finished good. The best diagrams are clear, with all necessary details, and labels to identify features and explain processes.

Flow charts

A flow chart is a diagram showing a series of step-by-step operations which make up a particular process. The main elements of the process are shown in picture form and are linked by arrows to indicate how one operation leads to the next. A flow chart can be used to show stages in the development of a product.

Current events

A valuable source for discussion and inquiry such as trade fairs, product launches, new laws.

Debates

Debates can be used in units 9.3 and 10.5. They are formalised discussions in which opposing points of view are advanced. They allow students to take a position on an issue and justify that position, perceive other points of view and analyse relative strengths of arguments. There are several debating formats which can be utilised in Business Studies classrooms.

- A round robin provides opportunity for each student to state a point of view and a supporting argument.

- Divide class members into two groups according to their chosen point of view. Each side alternately puts forward a persuading statement.
- Students adopt a point-of-view and develop supporting arguments. They present their arguments in a persuasive manner and counteract arguments in response to opposition.

Decision-making

Decision-making is the process of choosing from two or more alternatives. Decisions are best made after gathering information about the situation/event, considering possible alternatives then choosing between those alternatives. Part of the process is the analysis and evaluation of the possible outcomes of the decision.

- Be aware of problems/situations in the class/community which require decisions to be made.
- Prepare role-plays or simulations when decision-making is involved.
- Be prepared to allow students to make decisions with unexpected outcomes.

Evaluation

Evaluation involves weighing options, consequences and evidence in decision-making contexts in order to make decisions and take action in just, caring and effective ways. The evaluation process often requires us to make decisions between values which are in apparent or real conflict.

Discussions

Discussions provide opportunities to express ideas and feelings and listen to others, to look at issues from other perspectives. However it is not practical with more than 20 people. If class discussions are going to be used in a large class, the class should be divided into two or more groups.

Excursions

An excursion is a trip to a place to provide ideas and opportunities to respond to or interact with new environments or experience different activities, such as a visit to a trading store, bank, a small business or a factory.

Guest speaker or visitor

A guest speaker or visitor is a person who is invited to share his/her knowledge and skills with students. This may be a teacher from another class, a parent, a member of the local community or a representative from a group, organisation or business.

Interviews

An interview involves asking someone questions in order to find out more information about a subject. In this way, students can learn about things and peoples' opinions first hand. There are usually many people with special knowledge about a topic. Students can invite them to the classroom or meet them during fieldwork. To conduct an interview successfully students need to:

- prepare their questions beforehand
- make sure questions are simple and to the point and that they require more than a single word answer
- make sure they tell the interviewee their purpose and thank them at the end
- listen carefully to answers
- take notes if possible.

Investigating issues

Issues can be drawn from any field, e.g. society, economy, environment, culture, It must be stressed that the essence of an issue is that there are different, often opposing views, most of which are based on reason. Different opinions about an issue may be due to:

- conflicting value stances
- use of power
- humanitarian ethics
- benefits gained by different groups, e.g. resource development or conservation.

It is recommended that opportunities are provided for students to:

- discuss ideas, feelings and questions about activities regarded as right or wrong, good or bad
- examine the personal and community factors involved in defining beliefs about what is right or wrong, good or bad
- analyse how different contexts and situations influence personal values, attitudes, beliefs and behaviours
- critically analyse how groups justify particular actions and behaviours.

Examples of possible discussion questions

- What would happen if …?
- What is ‘good’ and ‘bad’ about …, ‘right’ and ‘wrong’ about ..., ‘fair’ and ‘unfair’ about ..., ‘just’ and ‘unjust’ about …?
- What are the rights and responsibilities of …, duties and obligations of …?
- What are the laws and rules about …, the sanctions and punishments for …?
- What should those with authority and power do about …?

When investigating business issues you may find it useful to use the following points to help students develop their knowledge and understanding of the issue:

- read or view the material dealing with the issue
- name and briefly outline the issue
- who are the main people involved in the issue?
- identify the scale at which the issue is relevant. Is it a global, national, regional or local issue?
- describe or map the area where the issue is relevant
- list the main sources of information about the issue

- state whether the sources used present different points of view on the issue. If so, list them.
- state whether the sources of your information are reliable
- outline the actions people could take to address the issue. What would be the likely outcome?
- consider how the media has influenced your study of the issue
- explain how the study of the issue has affected your own views on the issue.

Jigsaw groups

Jigsaw groups are a method of organising students so that the whole class can conduct an in-depth study of a topic or issue within a relatively short period of time. Topics are analysed and broken down into discrete research tasks or activities. These tasks form the pieces of an information 'jigsaw'. A group of students is allocated one of the jigsaw tasks to investigate. Each expert jigsaw group then reports the results of its findings back to the other groups, thus gradually building up a detailed and complete 'picture' of the topic.

Mind maps/concept maps

A mind or concept map is a way of recording information. It allows students to organise their ideas either as a class, small group or individually. A mind map is often associated with brainstorming and is useful for drawing connections between ideas and concepts, assisting in the further research of a topic.

Moral dilemmas

A moral dilemma depicts an apparent conflict between two or more courses of right action. The dilemma situation may be real or imaginary and should always be discussed in a supportive atmosphere. Moral dilemmas may be drawn from a range of student experiences, current social issues, stories or important events. The dilemma may be set in a past, present or future context – or a combination of these.

Photographs and pictures

Photographs and pictures are visual texts. They can be used to develop numerous skills, e.g. observing, classifying, grouping, comparing and contrasting. They also clarify and stimulate further inquiry. Students can take/use photographs as a means of gathering and recording information. Computer technology and digital cameras enable photographs to be stored and reproduced cheaply, in various ways. Photographs also allow for reinvestigation of first-hand experiences at a later date.

Problem solving

A particularly relevant learning and teaching strategy for Economics topics is problem solving. Students can be involved in identifying and working towards solutions to problems. The classroom, school grounds, community and home all contain problems which are appropriate starting points for investigation by students.

The purpose of learning through the application of problem solving skills is to link conceptual understandings with practical experiences. It is important that students be given opportunities to apply problem solving techniques to a range of issues. The teacher's role is to:

- assist students identify problems that are relevant and solvable
- organise learning that develops skills in problem solving
- choose learning activities which encourage responsible actions.

Questionnaires

A questionnaire is a set of questions aimed at getting the opinions of a number of people on a particular topic or issue. It can be left for people to fill out, or the questions may be asked directly in an interview situation. A questionnaire is really only useful if a large number of people take part.

Reflective learning

Reflection is the act of thinking about what has been learnt. It often involves putting learning into a new context, looking at experiences in a new light and interpreting what has been said or done. Teachers need to provide time both during and at the end of any learning experience for students to contemplate the content and processes in which they have been engaged. This time needs to allow for individual, small group and whole class reflection. As a result of reflective learning students may develop flexibility and creativity.

Research

One of the best ways to learn about Business Studies is to think of the questions you want answered or what you want to know and inquire about the things which interest you. This means doing your own research to find the answers. The same applies to your students.

There are a number of steps involved in doing research and the best results are achieved if students do things in the right order and ask the following questions.

Defining

- What do I want to find out?
- What is my purpose?
- What are the key words and ideas of this task?
- What do I need to do it?

Locating

- Where can I find the information I need
- What do I already know?
- What do I still need to find out?

Selecting

- What information do I really need?
- What can I leave out?
- How relevant is the information I have found?
- How reliable is the information I have found?

- How will I record all the information?

Organising

- How can I best use this information?
- Do I need to use all the information?
- How can I best combine information from different sources?

Presenting

- How can I present this information?
- With whom will I share this information?
- How does the audience affect my presentation?

Assessing

- What did I learn from all this?
- Did I achieve what I set out to achieve?
- How did I go with each step of the information process?
- How did I go with presenting my information?
- Where do I go from here?

Surveys

A survey is a method of gathering information for a specific purpose. It may take various forms, such as a traffic survey, values questionnaire or interview. Consider the following:

- Determine the purpose of the survey – what information needs to be obtained?
- Consider the form of survey most appropriate to gather the information needed on a topic/issue/problem.
- Be aware that if questions are used, they should be carefully formed to elicit the required information.
- The need to trial a questionnaire could be explored, as well as bias in sampling methods.
- Supervision, safety and student protection issues, need to be considered and discussed.

Decide with students:

- the purpose of the survey
- who/what will be surveyed
- how the information will be gathered, e.g. by questioning, observing, individually by students, in jigsaw groups etc
- when and where the information will be obtained, e.g. at home from parents, on an excursion, at recess in the playground, or in the classroom
- the collation and final format and presentation of the data.

Tables and graphs

Graphs are used to show how an item or items of information change over a given time.

Line graphs may take the form of a smooth curve or may consist of line segments that join places plotted on the graph.

Bar graphs are used to show totals of information. This information can be shown for one item over a number of time periods, or for a number of items over one time period. The height of the bars indicates clearly the total of the information being shown. Bar graphs can also be used to compare totals of one or more items.

A *circle* or *pie graph* is an accurate way of showing how each item of data contributes to complete a picture. The 'slices' of the 'pie' are drawn proportionally in a clear, colourful way to show the percentages they represent.

A *table* is also useful for organising information. Information in tables is usually presented in columns enclosed by a frame and including headings within the frame.

Task cards

Task cards are teacher-defined activities or pieces of research work presented in a written form and assigned to individual students or groups. They are a method of directing student learning. You can devise task cards to direct activities on an aspect of a topic.

Values reinforcement

Values reinforcement involves the class teacher in emphasising specific values within the class and school context. Such values should be consistently reinforced within the Business Studies course. The process of values reinforcement can assist students to:

- acquire a set of standards for developing business values
- understand and operate businesses by desirable community standards
- become more effective learners
- become more effective citizens.

Many strategies can be used to reinforce values, but both static and dynamic models are extremely important. Static models include such things as business conduct codes, democratic elections, rules for fair play. Dynamic models include people with whom children may interact, e.g. parents, relatives, friends, teachers, special visitors, community service workers, club leaders and business personalities.

Using groups as a learning and teaching strategy

Using groups is an important strategy in Economics as students learn from each other, not just from the teacher. Group work encourages students to participate in achieving a shared goal and collaborative learning. In deciding whether to use groups or not, you need to consider:

- your intended outcomes
- the extent to which the outcomes can be achieved by a group
- the lesson content
- the time allocated for the completion of the task
- the classroom setting
- available materials and resources

- the structure of the group based on gender, ability, cultural background and student preferences.

Groups work well when:

- the group decides upon their goal, timelines and tasks
- students realise that success depends on the achievement of the whole group, not individuals
- the task is broken into subtasks which must be finished to successfully complete the overall task
- the whole class is involved in the activity
- everyone has a role to play, e.g. implementing and managing a small business activity
- membership of small groups is changed regularly to provide a variety of learning experiences for all students.

Strategies for organising and managing groups

- *Mixed-ability groups* The more able learners in the group can help the others to master the work so that the teacher need not teach some parts.
- *Same-ability groups* The teacher can leave the groups of faster learners to get on with the work on their own. She/he can give extra help to individual learners in the slower groups.
- *Using group leaders/monitors* Some teachers appoint faster, more able learners as group leaders or monitors who can help slower learners.

What do teachers of Economics do?

The Economics teacher:

- is interested in and concerned about events and movements in the local, national and global economy
- actively seeks to keep informed while also maintaining a critical stance towards sources of information
- takes a principled stand, and supports others who do so, against injustices and inequalities relating to race, gender, class, physical or mental attributes
- informs himself or herself about economic issues as they impact upon his or her community and on communities and financial systems globally
- engages in some form of social action to support her or his beliefs.

As a teacher, she or he will:

- model democratic values of fairness, justice and equal respect
- use a range of teaching styles that foster both individual development and group cooperation and enable learners to make the best use of their differing learning styles
- encourage her or his learners to adopt a reflecting and questioning position in relation to economic knowledge
- teach the prescribed curriculum well with an emphasis on infusing issues dealing with financial rights, gender issues and finances, self-esteem and respect for diversity
- be a critical and thoughtful teacher.

A teaching program outlines the nature and sequence of learning and teaching necessary for students to demonstrate the achievement of the learning outcomes. The content of the syllabus describes the learning context and the knowledge required for the demonstration of each outcome. The relevant learning outcomes for each unit or topic are stated at the beginning of the unit and the requirements of the outcomes are elaborated.

Teachers must develop programs that include appropriate learning activities to enable students to develop the knowledge and skills identified in the outcome statements.

The content prescribed in the units indicates the breadth and depth with which topics should be treated. The sequence of teaching is prescribed by the sequence of content. The learning outcomes and assessment, however, must be central to the planning of the teaching program.

Planning and programming units

The main purpose of planning and programming is to help you to arrange the presentation of the unit in an organised manner. This will help you to know what to teach and when to teach it. It is strongly recommended that you make plans with the other teachers who teach the same subject. By planning together, you will *all* have better lessons and make better use of your limited resources.

Points to consider when programming

- Which outcomes are students working towards?
- What is the purpose of this unit or topic or learning experience?
- Which learning experiences will assist students to develop their knowledge and understandings, skills, values and attitudes, in Economics?
- What are the indicators of student learning that you would expect to observe?
- How can the learning experiences be sequenced?
- How do the learning experiences in the unit relate to students' existing knowledge and skills?
- How are individual learning needs to be catered for?
- What are the literacy demands of this unit or learning experience?
- What authentic links can be made with the content of other subjects?
- How can school events and practices be incorporated into the program?
- Do the assessment methods address the outcomes and enhance the learning?
- How can the assessment be part of the learning and teaching program?

The planning process

In this teacher guide, ideas for programming and organising have been provided. These have been arranged in steps to help you teach the unit. The steps follow the thinking processes involved in the outcomes approach.

Step 1: Interpreting the learning outcomes

The first step is to read the description in the syllabus. Then study the learning outcomes and what students do to achieve the learning outcomes, in order to determine what students will know and be able to do by the end of the unit.

You need to look at the action verb, concept and context of each learning outcome. This will help you to see what skills and knowledge are embedded in the outcome.

Step 2: Planning for assessment

It is necessary to plan for assessment early to ensure that you teach the content and skills students need to achieve the learning outcomes.

You will have to decide when to schedule assessment tasks to allow yourself time to teach the required content and time for students to develop the necessary skills. You will also need time to mark the task and provide feedback. Practical tasks may, for example, be broken into a series of stages that are marked over several weeks as students progress with making their product. It is not appropriate to leave all the assessment until the end of the unit.

This teacher guide provides performance standards and examples of a marking guide. You should develop marking guides when you are marking tasks to ensure consistency in your assessment. You must also develop clear and detailed instructions for completing the task and make sure all students know exactly what they have to do.

Step 3: Programming a learning sequence

This step requires you to develop a program outlining a sequence of topics and the time spent on each topic. If the unit involves a project, for example, you may plan to teach some theory at appropriate stages during the project, rather than teaching all the theory before students start the project.

To develop your program you need to study the topics listed in the syllabus and to think about which learning activities will best provide students with the opportunity to learn the content and practise the appropriate skills, and how long the activities will take. You will have to think about some major activities that last several weeks and smaller activities that may be completed in a single lesson.

Step 4: Elaboration of activities and content

Once you have mapped out your program for the term, you must develop more detailed plans for each topic in the unit. All units require students to be actively engaged in learning, not just copying from the board. Make sure you develop a range of activities that suit all learning needs—some reading and writing, some speaking and listening, some observing and doing.

Browse through the textbooks and teaching resources you have access to and list the chapters, pages or items that you will use for each topic in your program. The textbooks should also provide you with ideas for activities related to the topic. You may have to collect or develop some resources for yourself. Once you have sorted out your ideas and information, you can then develop your more detailed weekly program and daily lesson plans.

This teacher guide gives some suggested learning and teaching activities for each unit and some suggested assessment tasks that you might like to use to ensure active learning.

Using the internet for classroom activities

Planning

- Where appropriate, incorporate computer sessions as part of planned learning experiences.
- Be aware that computers can be time-consuming and may require extra teacher support at unexpected times.
- Consider methods of troubleshooting, such as having students with computer expertise designated as computer assistants.
- Design activities that provide the opportunity for students to access, compare and evaluate information from different sources.
- Check protocols, procedures and policies of your school and system regarding the use of the internet.

Managing

- Ensure that all students have the opportunity to explore and familiarise themselves with the technologies, navigation tools, e-mail facilities and texts on the internet. It is likely that students will have varying degrees of expertise in searching for information and navigating the internet. Students will also have varying experiences of, and be more or less familiar with, the way texts are presented on the World Wide Web.
- Ensure that all students understand how to access the internet and how to perform basic functions, such as searching, sending and receiving e-mail.
- Students with more experience in using the internet may have information that will benefit the whole class. Provide opportunities for students to share their experiences, interests, information and understandings. As well as planning lessons to instruct students in these skills, pairing students and peer tutoring on the computer can enable more experienced students to assist other students.
- Ensure that students critically analyse Economics information gathered on the internet, just as they would for any other text. They should be aware that material posted on the Web is not necessarily subject to the conventional editorial checks and processes generally applied to print-based publications. When evaluating information, students might consider:
  - the intended audience of the site
  - bias in the presentation of information, or in the information itself, including commercial or political motives
  - accuracy of information
  - balanced points of view
  - currency of information, including publishing dates
  - authority of source or author (institution, private individual)
  - ownership of the website (such as corporate, small business, government authority, academic)
  - cultural or gender stereotyping.
- Ensure that software and hardware (computer, modem) are maintained in good working order.
- Ensure that all students are given equal opportunities to use the computer.

Assessing student work containing material from the internet

- Students can download large quantities of information from the internet. In itself, such information provides very little evidence of student effort or student achievement. Students must make judgements about the validity and safety of information when working from the Web. They must consider the purpose of the text, identify bias, and consider the validity of arguments presented and the nature and quality of the evidence provided.
- When assessing student work that includes material drawn from the internet, it is therefore important to recognise how students have accessed the information, what value they place on it and how they have used it for the topic being studied in class. It is useful to look for evidence of critical evaluation, and the development of students' capacities to access, manipulate, create, restore and retrieve information.

Economics requirements

Economics has five units which students must complete. There are three units in Grade 11 and two units in Grade 12.

Economics requirements

Grade	Weeks	Term	Unit	Essential resources for activities and assessment
11	10	1	11.1 Introduction to Economics and the Economic Problem	Unit 1 booklet: *The Economic Problem*
11	10	2	11.2 Growing the Economy	Unit 2 booklet: *Production* Unit 3 booklet: The Role of the Government in the Economy.
11	20	3	11.3 Managing the Economy: A Microeconomic Focus	*Economics for Developing Nations*, Books 1 and 2 *Fundamentals of Economics*, 1st and 2nd editions
12	20	1	12.1 Managing the Economy: A Macro-economic Focus	*Economics for Developing Nations*, Books 1 and 2 *Fundamentals of Economics*, 1st and 2nd editions *Foundations of Economics*
12	20	3	12.2 The Global Economy	*Economics for Developing Nations*, Books 1 and 2 *Fundamentals of Economics*, 1st and 2nd editions *Foundations of Economics*

Assessing Economics

Assessment is an important part of learning and teaching. It is used to:

- evaluate and improve learning and teaching
- report achievement
- provide feedback to students on their progress
- provide feedback to stakeholders.

Criterion-referenced assessment

Assessment in Economics is criterion-referenced and measures students' achievement of the learning outcomes described in the syllabus. In criterion-referenced assessment, particular knowledge, skills or abilities are specified as criteria that must be achieved. The extent to which they are achieved is assessed and facilitated by the teacher.

Criterion-referenced assessment often takes on a problem-centred orientation, rather than a knowledge-based orientation. To achieve an outcome means having to demonstrate the attainment of skills and attitudes, not just write about them. Assessment then becomes more than just a means of judging knowledge and performance—it becomes an integral part of the learning process itself.

Criterion-referenced assessment is:

- standards or criterion-referenced; that is, outcomes are judged against pre-defined standards (see below)
- direct and authentic, related directly to the learning situation. This has the potential for motivating learning, since students can see a direct relevance between what is learnt and what is assessed.

Norm-referenced assessment

'Norm-referenced assessment' makes judgements on how well the student did in relation to others who took the test. It is often used in conjunction with a curve of 'normal distribution', which assumes that a few will do exceptionally well and a few will do badly and the majority will peak in the middle, normally judged as average.

Example of a criterion-referenced test

The driving test is the classic example of a criterion-referenced test. The examiner has a list of criteria, each of which must be satisfactorily demonstrated in order to pass; for example, completing a three-point turn without hitting either kerb. The important thing is that failure in one criterion cannot be compensated for by above-average performance in others; nor can a student fail in spite of meeting every criterion (as they can in norm-referenced assessment) simply because everybody else that day surpassed the criteria and was better than him or her. Criterion-referenced assessment has the following characteristics:

- a syllabus that describes what students are expected to learn in terms of aims, outcomes and content

- a syllabus that provides a clear sense of the syllabus standards through its aims, outcomes and content
- tasks designed to produce an image of what students have achieved at that point in the learning and teaching process relative to the outcomes
- standards of performance at different levels: the 'performance standards'
- a report that gives marks referenced to predetermined standards
- assessment tasks that refer to syllabus outcomes, content, assessment components and component weightings
- external examinations that are based on syllabus outcomes and content. External markers use standards-referenced marking guidelines developed by the Economics Examination Committee.
- assessment that is better-integrated with learning and teaching.

Criterion or standards-referenced assessment in Economics

Learning outcomes performance standards					
Learning outcomes	**Very high achievement**	**High achievement**	**Satisfactory achievement**	**Low achievement**	**Below minimum standard**
1. Demonstrate an understanding and application of concepts, principles, models, skills, and terminology used in the study of Economics	Demonstrates extensive knowledge, understanding and application of a wide range of complex concepts, principles, models, skills, and terminology used in the study of Economics	Demonstrates broad knowledge, understanding and application of a range of concepts, principles, models, skills, and terminology used in the study of Economics	Demonstrates knowledge, understanding and application of some concepts, principles, models, skills, and terminology used in the study of Economics	Demonstrates limited knowledge and application of some concepts, principles, models, skills, and terminology used in the study of Economics	Has failed to meet the minimum standard required
2 Demonstrate an understanding of the role of economic systems in providing solutions to economic problems	Demonstrates extensive knowledge and understanding of the complex role of economic systems in providing solutions to economic problems	Demonstrates knowledge and understanding of the complex role of economic systems in providing solutions to economic problems	Demonstrates an understanding of the role of economic systems in providing solutions to economic problems	Demonstrates limited understanding of the role of economic systems in providing solutions to economic problems	Has failed to meet the minimum standard required
3 Analyse economic events, past and present, using economic models and the skills of economic inquiry	Independently and proficiently analyses and interprets a wide range of economic events, past and present, correctly using economic models and the skills of economic inquiry	Proficiently analyses and interprets a range of economic events, past and present, using economic models and the skills of economic inquiry	Analyses economic events, past and present, using an economic model and the skills of economic inquiry	Identifies economic events, past and present and an economic model	Has failed to meet the minimum standard required

Learning outcomes performance standards					
Learning outcomes	**Very high achievement**	**High achievement**	**Satisfactory achievement**	**Low achievement**	**Below minimum standard**
4. Predict and evaluate the impact of economic change in local, national and global settings	Gives logical and detailed predictions, and reasons to explain the impact of economic change in local, national and global settings	Gives logical predictions and reasons to explain the impact of economic change in local, national and global settings	Predicts and provides some reasons to explain the impact of economic change in local, national and global settings	Provides limited reasons to explain the impact of economic change in local, national and global settings	Has failed to meet the minimum standard required
5. Explain and reconcile the way economic decisions involve costs and benefits and have outcomes that may be inconsistent with social, moral and ethical values	Describes in detail and gives comprehensive logical explanations of the different ways economic decisions involve costs and benefits and have outcomes that may be inconsistent with social, moral and ethical values	Describes and gives logical explanations of the ways economic decisions involve costs and benefits and have outcomes that may be inconsistent with social, moral and ethical values	Describes and gives explanations of the way economic decisions involve costs and benefits and have outcomes that may be inconsistent with social, moral and ethical values	Gves limited explanations of the way economic decisions involve costs and benefits and have outcomes that may be inconsistent with social, moral and ethical values	Has failed to meet the minimum standard required
6. Describe and explain the way outcomes may be changed by individuals, community groups, business and government	Identifies and describes in detail and gives comprehensive logical explanations and a range of examples of the way outcomes may be changed by individuals, community groups, business and government	Identifies, describes and gives logical explanations and some examples of the way outcomes may be changed by individuals, community groups, business and government	Describes and provides some explanations of the way outcomes may be changed by individuals, community groups, business and government	Describes and gives limited explanations of the way one outcomes may be changed by individuals, or community groups, or business or government	Has failed to meet the minimum standard required
7. Identify the effects of interdependence at individual, local, national and global levels	Identifies a wide range of complex effects of interdependence at individual, local, national and global levels	Identifies a wide range of effects of interdependence at individual, local, national and global levels	Identifies some effects of interdependence at individual, local, national and global levels	Identifies one or two effects of interdependence at individual, local, national and global levels	Has failed to meet the minimum standard required
8. Communicate economic information, ideas and issues in a variety of ways	Clearly communicates complex economic information and ideas effectively using an extensive range of appropriate written and/or oral, and graphic forms	Clearly communicates economic information and ideas effectively using a range of appropriate written and/or oral, and graphic forms	Communicates economic information and ideas using appropriate written and/or oral, and graphic forms	Communicates economic information and ideas in a limited way using written or oral or graphic forms	Has failed to meet the minimum standard required

Assessment *for* learning

Assessment *for* learning is often called 'formative assessment' and is assessment that gathers data and evidence about student learning during the learning process. It enables you to see where students are having problems and to give immediate feedback, which will help your students learn better. It also helps you plan your program to make student learning, and your teaching, more effective. Often it is informal—students can mark their own work or their friend's. An example is a quick class quiz to see if students remember the important points of the previous lesson.

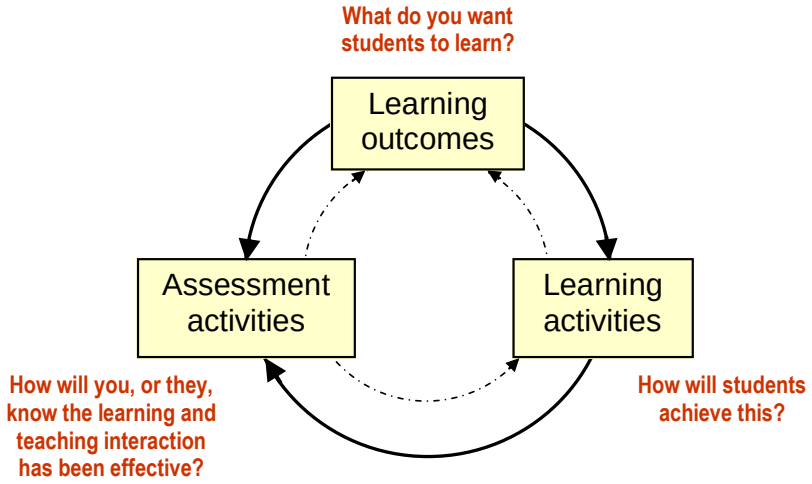
Assessment *of* learning

Assessment *of* learning is often called 'summative assessment'. Summative assessment is used to obtain evidence and data that shows how much learning has occurred, usually at the end of the term or unit. End-of-year examinations are examples of summative assessment. It is usually done for formal recording and reporting purposes.

Assessing Economics units

In Economics, the learning outcomes are assessed using the range of assessment methods specified in the syllabus. In deciding what to assess, the starting point is: 'what do you want students to do and/or learn?' and following from this: 'how will the students engage with the material?' which in turn leads to the design and development of learning tasks and activities. It is crucial that at this point the assessment tasks clearly link back to the learning outcomes and are appropriate for the learning activities. The assessment can be used for formative and summative purposes. Assessment can be represented as follows:

Assessment process



Once it is clear what needs to be assessed and why, then the form the assessment will take needs to be determined. There are many types of assessment tasks that can be implemented; the factors that will determine choices include:

- the students—how many are there, what is expected of them, how long will the assessment task take?
- the learning outcomes of the subject and how they might be best achieved.

During the year you must set assessment tasks that ensure that all the learning outcomes of the subject have been assessed internally. Each task you set must include assessment criteria that provide clear guidelines to students as to how, and to what extent, the achievement of the learning outcomes may be demonstrated.

Marking guides and assessment criteria help you with the marking process and ensure that your assessment is consistent across classes. It is important that marking guides and assessment criteria are collectively developed.

Students must complete the assessment tasks set. Each task must provide clear guidelines to students for how the task will be completed and how the criteria will be applied.

When you set a task, make sure that:

- the requirements of the task are made as clear as possible to the student
- the assessment criteria and performance standards or marking guides are provided to the student so that they know what it is they have to do
- sources or stimulus material used are clear and appropriate to the task
- instructions are clear and concise
- the language level is appropriate for the grade
- it does not contain gender, cultural or any other bias
- materials and equipment needed are available to students
- adequate time is allowed for completion of the task.

Assessment methods

Although assessment components and weightings are stipulated in the syllabus, you decide which assessment method to use when assessing the learning outcomes. You should use a variety of assessment methods to suit the purpose of the assessment. Assessment can be classified into four categories:

- tests
- product or project assessments
- performance assessments
- process skills assessments

Because each has limitations, maintaining a balance of assessment methods is very important.

Tests

A ‘test’ is a formal and structured assessment of student achievement and progress, which the teacher administers to the class. Tests are an important aspect of the learning and teaching process if they are integrated into the regular class routine and not treated merely as a summative strategy. Tests allow students to monitor their progress and provide valuable information for you in planning further learning and teaching activities.

Tests will assist student learning if they are clearly linked to the outcomes. Evidence has shown that several short tests are more effective for student progress than one long test. It is extremely important that tests are marked and that students are given feedback on their performance.

There are many different types of tests. Tests should be designed to find out what students know, and also to find out about the development of their thinking processes and skills. Open questions provide more detailed information about achievement than a question which has only one answer.

Principles of designing classroom tests

Tests allow a wide variety of ways for students to demonstrate what they know and can do. Therefore:

- students need to understand the purpose and value of the test
- the test must assess intended outcomes
- clear directions must be given for each section of the test
- the questions should vary from simple to complex
- marks should be awarded for each section
- the question types (true or false, fill-in-the-blank, multiple-choice, extended response, short answer, matching) should be varied.

Tests should:

- be easy to read (and have space between questions to facilitate reading and writing)
- reflect an appropriate reading level
- involve a variety of tasks
- make allowance for students with special needs
- give students some choice in the questions they select
- vary the levels of questions to include gathering, processing and applying information
- provide enough time for all students to finish.

Product or project assessments

A ‘project’ can be an assessment task given to an individual student or a group of students on a topic related to the subject. The project results in a ‘product’ that is assessed. The project may involve both in-class and out-of-class research and development. The project should be primarily a learning experience, not solely an assessment task. Because a great deal of time and effort goes into producing a quality product from a project assignment task, you should allow class time to work on the project. A product or project:

- allows the students to formulate their own questions and then try to find answers to them
- provides students with opportunities to use their multiple intelligences to create a product
- allows teachers to assign projects at different levels of difficulty to account for individual learning styles and ability levels
- can be motivating to students
- provides an opportunity for positive interaction and collaboration among peers

- provides an alternative for students who have problems reading and writing
- increases the self-esteem of students who would not get recognition on tests or traditional writing assignments
- allows for students to share their learning and accomplishments with other students, classes, parents, or community members
- can achieve essential learning outcomes through application and transfer.

Assignments

'Assignments' are unsupervised pieces of work that often combine formative and summative assessment tasks. They form a major component of continuous assessment in which more than one assessment item is completed within the term. Any of the methods of assessment can be set as assignments, although restrictions in format, such as word limits and due dates, are often put on the assessment task to make them more practical.

Negotiated tasks

Negotiated assessment involves agreements between teachers and students on issues associated with learning and assessment. The most common negotiation method is to develop a written learning contract that outlines the conditions of assessment.

Computer-based tasks

Using computers to administer student assessment can provide flexibility in the time, location or even the questions being asked of students. The most common type of computer-based assessment is based on multiple-choice questions, which can assist teachers to manage large volumes of marking and feedback.

Types of assessment tasks

Using different assessment tasks is the way to make sure that students are able to demonstrate the range of their abilities in different contexts. Each category has advantages in assessing different learning outcomes. For example, a selected response assessment task, such as a series of multiple-choice questions, is able to assess all areas of mastery of knowledge, but only some kinds of reasoning.

Assessment ideas for individual students or groups

Tests	Products or projects	Performances	Process skills
Essay	Ads	Activities	Anecdotal records
Multiple-choice	Books	Commercials	Checklist observations for processes
Matching	Brochures	Conferences	Concept mapping
Short answer	Cartoons	Cooperative learning group activities	Conferences: teacher and peer
True or false	Case studies	Debates	Debriefing interviews

	Databases	Discussions	Debriefing questioning for lesson closure
	Directories	Explanations	Interactional analyses
	Displays	Field trips	Interviews
	Graphs, charts, diagrams	Interviews	Journal entries regarding processes
	In-class group essays	News reports	
	Journals	Reports	
	Portfolios	Role plays	
	Projects	Simulations	
	Proposals	Speeches	
	Questionnaires	Surveys	
	Research papers		
	Results of surveys		
	Tests		
	Videotapes		

Feedback

When you assess the task, remember that feedback will help the student understand why he or she received the result and how to do better next time. Feedback should be:

- *constructive*, so students feel encouraged and motivated to improve
- *timely*, so students can use it for subsequent learning
- *prompt*, so students can remember what they did and thought at the time
- *focused on achievement*, not effort. The work, not the student, should be assessed
- *specific to the unit learning outcomes*, so that assessment is clearly linked to learning.

Types of feedback

Feedback can be:

- *informal* or *indirect*—such as verbal feedback in the classroom to the whole class, or person to person
- *formal* or *direct*—in writing, such as checklists or written commentary to individual students, in either written or verbal form
- *formative*—given during the topic with the purpose of helping the students know how to improve
- *summative*—given at the end of the topic with the purpose of letting the students know what they have achieved.

Who assesses?

Teacher assessment

Assessment is a continuous process. You should:

- always ask questions that are relevant to the outcomes and content
- use frequent formative tests or quizzes
- check understanding of the previous lesson at the beginning of the next lesson, through questions or a short quiz
- constantly mark or check the students' written exercises, class tests, homework activities and so on
- use appropriate assessment methods to assess the tasks.

Frequency of assessment

You should schedule the specified assessment tasks to fit in with the teaching of the content of the unit that is being assessed. Some assessment tasks might be programmed to be undertaken early in the unit, others at the end of the unit. You should take care not to overload classes with assessment tasks at the end of the term.

Judging student performance

Student achievement is recorded and reported against standards. You must use performance standards or marking guides, examples of which are provided in this teacher guide, when making a decision about the achievement of your students in relation to the learning outcomes. The performance standards describe the level at which the student has to be working to achieve a particular standard or mark.

Students should always have access to a copy of the assessment criteria and the performance standards, so that they know what it is they have to know and be able to do to get a good mark in a particular task. The performance standards will help you in your marking and will help your students improve their performance in the future. They are useful when providing feedback to students, as they explain what it is the student needs to do to improve.

Moderation

To make sure that you are interpreting the performance standards correctly when assessing your students, it is important to undertake Economics moderation of student work within your school and with teachers of nearby schools.

To moderate student work, a common assessment task must be used and a marking scheme developed so that all students complete the same task under the same conditions, and all teachers use the same marking scheme. Teachers can then compare (moderate) the students' work and come to a common understanding of the performance standards and the requirements for a particular mark or level of achievement.

Moderation enables you to be sure that your understanding of the required standards for levels of achievement is similar to the understanding of other teachers and that you are assessing students at the appropriate level.

Self-assessment and peer assessment

Self-assessment and peer assessment help students to understand more about how to learn. Students should be provided with opportunities to assess their own learning (self-assessment) and the learning of others (peer assessment) according to set criteria.

Self-assessment and peer assessment:

- continue the learning cycle by making assessment part of learning
- show students their strengths and areas where they need to improve
- engage students actively in the assessment process
- enable students to be responsible for the learning
- help to build self-esteem through a realistic view of their abilities
- help students understand the assessment criteria and performance standards.

Managing assessment tasks for Economics

Usually, the marking of assessment tasks is done by the teacher. To reduce the amount of work it is necessary to develop a strategic approach to assessment and develop efficiencies in marking.

In Economics there are some assessment tasks that may be new to teachers and students. Below are suggestions on how to manage some of these tasks to minimise marking or presentation time.

Develop efficiency in marking

Clarify assessment criteria

Plan the assessment task carefully, and make sure that all students are informed of the criteria before they begin. Discuss the task and its criteria in class, giving examples of what is required. Distribute a written copy of the instructions and the criteria, or put them on the board. Making the assessment criteria explicit speeds marking and simplifies feedback.

Supply guidelines on what is required for the task

Supplying guidelines reduces the amount of time wasted evaluating student work that is irrelevant.

Use attachment sheets such as marking guides

An assignment attachment sheet, which is returned with the assessed work, rates aspects of the task with a brief comment. Such a system enables each student's work to be marked systematically and quickly. This strategy can be applied to posters, presentations and performances.

Assess in class

Use class time to carry out and to assess tasks. Presentations or projects that are marked by you or the students enable instant developmental evaluation and feedback. Brief assessments of projects, stages of the design process, or practical work take less time to mark and are useful because they give immediate feedback to students on their progress and allow you to mark the project in stages with minimum effort.

Feed back to the whole class

Giving feedback to the whole class can cut down on the amount of individual feedback required. On returning assessed work, emphasise the criteria for judging the work, discuss the characteristics of good and bad answers, and highlight common strengths and weaknesses.

Set group-work alternatives

Assess one performance per group. The student's mark is the group mark, but may include a component based on the contribution of the individual. A strategy for allocating an individual mark includes each member of the group using criteria to evaluate the relative contributions of individuals, with the marks averaged for the individual.

Set clear deadlines

Set aside a time for marking. Be careful about extending this period (by allowing students to hand in work late).

Shift the responsibility

Introduce self-assessment and peer assessment

Develop in students the skills to evaluate their own work and that of their peers. With the students, use the assessment criteria against which work is judged, highlighting strengths and weaknesses. Self-assessment increases the amount of feedback students get. It can supplement or replace teacher assessment.

Treat each task differently

Every piece of work need not be evaluated to the same degree; a mark need not be the outcome in every case; and every piece of student work need not contribute to the final grade. Assessment is designed to enhance the learning and teaching experience for the teacher and the learner, not just to give marks.

Presentations

Presentations are very important in Economics. They provide opportunities for students to develop skills and confidence when presenting to an audience. When presentations are used for assessment purposes, how the students present is important as well as what they present.

The best approach is to allocate or allow students to choose from a variety of topics, to develop clear criteria for presentations, and to require the rest of the class (audience) to take notes, identify key points or write an evaluation to enhance their learning.

Spotlighting uses individual student checklists. This method can be used to focus on a few selected aspects of student outcomes. It is best to focus on five to six students at a time, systematically working through the class over time. Focused questioning is a technique often used in conjunction with spotlighting. With focused questioning teachers can gain a deeper awareness as to whether or not students understand the concepts or skills being taught.

Portfolios

Portfolios provide evidence for judgements of student achievement in a range of contexts. Portfolios contain a specific collection of student work or evidence. This collection of work should provide a fair, valid and informative picture of the student's accomplishments.

- Specify the pieces of work and keep the number of items selected by students low. Two to three samples of the students best work is enough for you to give a valid assessment of their achievement
- mark as you go. Ask that one of the pieces of work be completed at the end of week three and mark it then. Do not leave the assessment of the whole portfolio until the end of term
- use self-assessment. The student can self assess some of the samples of work.

The portfolio does not have to be a folder or binder, it can be in the form of an exercise book with the student marking the pages they want to have marked as part of their portfolio, or art works that are contained in an art folder the student has made.

Sample assessment tasks

All assessment tasks must test whether or not the student has achieved the outcome or outcomes. Each task must have clear and detailed instructions. Students must know exactly what they have to do. You should develop marking guides when you are marking tasks to ensure consistency of your assessment. Examples of assessment tasks and marking guides follow.

Grade 11

Sample task: Research project or case study

Undertake a research project/ case study on the operations of a local industry and its contributions to the local economy.

Learning outcomes

Students can:

1. demonstrate an understanding and application of concepts, principles, models, skills, and terminology used in the study of Economics
3. analyse economic events, past and present, using economic models and the skills of economic inquiry
6. describe and explain the way outcomes may be changed by individuals, community groups, business and government
8. communicate economic information, ideas and issues in a variety of ways.

Assessment criteria

Students will be assessed on the extent to which they:

- collect and categorise information
- demonstrate knowledge and understanding of geographical concepts and processes
- analyse information and issues
- communicate information in a variety of ways.

Grade 12

Sample task: Essay

Discuss, in an essay, the impacts of globalisation on the economy of Papua New Guinea.

Learning outcomes

Students can:

4. predict and evaluate the impact of economic change in local, national and global settings

7. identify the effects of interdependence at individual, local, national and global levels
8. communicate economic information, ideas and issues in a variety of ways.

Assessment criteria

Students will be assessed on the extent to which they:

- clearly define globalisation
- identify positive impacts of globalisation on Papua New Guinea
- identify and describe negative impacts of globalisation on Papua New Guinea
- draw a conclusion supported by evidence about the positive and negative impacts of globalisation on the Papua New Guinea economy.

Examples of marking guides

Marking guides like those below should be used to assess the tasks you set. You can tick the appropriate box, look at the performance standards and the students' overall achievement and give an on-balance assessment. If, for example, the students gets two ticks in the 'Very high achievement' (VHA) column, most of their ticks in the 'High achievement' (HA) column, several ticks in the 'Satisfactory achievement' column and one tick in the 'Low achievement' column, then on balance you would give the students a 'High achievement' and a mark between 70 and 89.

Sample marking guide for assessment task for Grade 11

Learning outcome Using the micro-economic approach, describe and analyse a selected local industry in terms of its contribution to the local economy.

Assessment task for activity Students undertake a research project/ case study on the operations of a local industry and its contributions to the local economy.

Marking guide: Research project or case study				**50 marks**
Assessment criteria	**Very high achievement (all)**	**High achievement (most)**	**Satisfactory achievement (some)**	**Low achievement (few)**
10 marks Identify and describe the type of industry	**9–10 marks** Correct identification of types of industry and accurate description of types of goods and services involved	**7–8 marks** Correct identification and some accurate description	**5–6 marks** Correct identification but lacking accurate description	**0–4 marks** Incorrect identification and no description of industry types
15 marks Analyse the contribution (benefits) to the local economy	**14–15 marks** Analyse all costs and benefits to the local economy	**11–13 marks** Analyse most costs and benefits to the local economy	**7–10 marks** Analyse some costs and benefits to the local economy	**0–6 marks** Analyse few costs and benefits to the local economy
10 marks Collect, organise and analyse economic data	**9–10 marks** Collection and organisation of all relevant information and detailed analysis of economic data	**7–8 marks** Collection and organisation of most relevant information and detailed analysis of economic data	**5–6 marks** Collection and organisation of some relevant information and detailed analysis of economic data	**0–4 marks** Collection and organisation of few, relevant information and detailed analysis of economic data
15 marks Report information through written reports and group presentations	**14–15 marks** All information is written and reported clearly and accurately	**11–13 marks** Most information is written and reported clearly and accurately	**7–10 marks** Some information is written and reported clearly and accurately	**0–6 marks** Few information is written and reported clearly and accurately

Sample marking guide for assessment task for Grade 12

Learning outcome Describe the positive and negative impacts of globalisation on the economy of Papua New Guinea.

Assessment task for activity (unit 12.2) The students will discuss, in an essay, the impacts of globalisation on the economy of Papua New Guinea.

Describe the positive and negative impacts of globalisation on the economy of Papua New Guinea				**20 marks**
Assessment criteria	**Very high achievement (all)**	**High achievement (most)**	**Satisfactory achievement (some)**	**Low achievement (few)**
3 marks Define 'globalisation'	**3 marks** Very clear and well-defined meaning of globalisation	**2 marks** Clear and well-defined meaning of globalisation	**1 mark** Fair definition of globalisation	**0 mark** Poor definition of globalisation
7 marks Identify the positive impacts of globalisation on Papua New Guinea	**6–7 marks** Identify and describe all positive impacts of globalisation on Papua New Guinea's economy	**4–5 marks** Identify and describe most positive impacts of globalisation on Papua New Guinea's economy	**2–3 marks** Identify and describe some positive impacts of globalisation on Papua New Guinea's economy	**1 mark** Identify and describe few positive impacts of globalisation on Papua New Guinea's economy
7 marks Identify and describe the negative impacts of globalisation on Papua New Guinea	**6–7 marks** Identify and describe all negative impacts of globalisation on Papua New Guinea's economy	**4–5 marks** Identify and describe most negative impacts of globalisation on Papua New Guinea's economy	**2–3 marks** Identify and describe some negative impacts of globalisation on Papua New Guinea's economy	**1 mark** Identify and describe few negative impacts of globalisation on Papua New Guinea's economy
3 marks Draw a conclusion supported by evidence about the positive and negative impacts of globalisation on the Papua New Guinea's economy	**3 marks** Very strong supported opinion of its impact on Papua New Guinea either positive or negative	**2 marks** Strong opinion of its impact on Papua New Guinea, either positive or negative	**1 mark** Some support with no particular emphasis on either impact	**0 mark** Nil support on either positive or negative impact

Examples of learning activities and assessment tasks

Examples of learning activities and assessment tasks for each of the Economics units are provided in the following sections. Some examples are explained in detail.

Grade 11 units

11.1 Introduction to Economics and the Economic Problem

Suggested activities

- Investigate and apply the economic method to solve a given economic situation. (Applied Economics exercise)
- Identify and evaluate the type of economic system in Papua New Guinea in relation to its effectiveness in answering the four fundamental questions in Economics: what, how, for whom and how much to produce.
- Compare and contrast the economic systems of Papua New Guinea and an emerging nation such as Fiji, Vanuatu, Indonesia, etc.

Suggested assessment tasks

- Applied economic problem/problem scenario
- Exercise on survival in an isolated place, such as a desert, island, etc.
- Analyse the economic problem
- Demonstrate how to solve the economic problem using the economic method
- Short written tests.

11.2 Growing the Economy

Suggested activities

- Explain economic growth and discuss possible indicators of economic growth in Papua New Guinea.
- Source relevant documents and evaluate the trend of economic growth in Papua New Guinea using graphs and other data sources.
- Discuss relationships between resources availability, economic growth and the well-being of its citizens.

Suggested assessment tasks

- Short written tests.

- Research media information – collect and analyse data.
- Report writing on trend of economic growth in Papua New Guinea.

11.3 Managing the Economy: A Micro-economic Focus

Suggested activities

- Construct a concept/mind map to show your understanding of the price mechanism.
- Conduct a case study of a local industry (evaluating its contribution to the local economy).
- Write an essay discussing the positive impacts of the use of microeconomic tools to support particular industries in Papua New Guinea.

Suggested assessment tasks

- Short written tests
- Using graphs/charts to illustrate microeconomic models and concepts

12.1 Managing the Economy: A Macro-economic Focus

Suggested activities

Applied economics exercise

- Illustrate sales tax, price control, price support and minimum wages using graphs.

Writing task

- Identify and use the major macroeconomic policies of the Papua New Guinea government and compare the effectiveness of each policy.

Portfolio of current issues

- Collect and analyse current newspaper articles and other media materials , for example, TV, radio, internet etc. and identify one current economic issue and identify and explain appropriate policy strategies to address the issue.

Suggested assessment tasks

Assignment: Problem solving

- Apply appropriate macro-strategy (Monetary and Fiscal policy)

12.2 The Global Economy

Suggested activities

Applied economics exercise

- Collect a range of statistical data about Papua New Guinea Trading relationships over the last three years, identify and describe the trends using Balance of Payment, Terms of Trade and Exchange in different groups.

Visual presentation

- Illustrate direction, volume and relationship of Papua New Guinea trade in a visual manner.

Suggested assessment tasks

Essay

- Essay on positive and negative impacts of globalisation on Papua New Guinea's economy.

Recording and reporting

All schools must meet the requirements for maintaining and submitting student records as specified in the Grade 12 *Assessment, Examination and Certification Handbook*.

Recording and reporting student achievement

When recording and reporting student achievement you must record the achievement of the students in each unit and then, at the end of the year, make a final judgement about the overall achievement, or progress towards achievement, of the learning outcomes. To help you do this, descriptions of the levels of achievement of the learning outcomes are provided in the 'Learning outcome performance standards' table.

When reporting to parents, the school will determine the method of recording and reporting. In an outcomes-based system, student results should be reported as levels of achievement rather than marks.

Remember that the final school-based mark will be statistically moderated using the external exam results. The students' overall level of achievement may change.

Levels of achievement

The level of achievement of the learning outcomes is determined by the students' performance in the assessment tasks. Marks are given for each assessment task, with a total of 100 marks for each 10-week unit, or 50 marks for each 5-week unit.

The marks show the students' level of achievement in the unit, and hence their progress towards achievement of the learning outcomes.

There are five levels of achievement:

- Very high achievement
- High achievement
- Satisfactory achievement
- Low achievement
- Below minimum standard

A **very high achievement** means overall that the student has an extensive knowledge and understanding of the content and can readily apply this knowledge.

In addition, the student has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.

A **high achievement** means overall that the student has a thorough knowledge and understanding of the content and a high level of competence in the processes and skills.

In addition, the student is able to apply this knowledge and these skills to most situations.

A **satisfactory achievement** means overall that the student has a sound knowledge and understanding of the main areas of content and has achieved an adequate level of competence in the processes and skills.

A **low achievement** means overall that the student has a basic knowledge and some understanding of the content and has achieved a limited or very limited level of competence in the processes and skills.

Below the minimum standard means that the student has provided insufficient evidence to demonstrate achievement of the learning outcomes.

Achievement level					
Total marks	**Very high achievement**	**High achievement**	**Satisfactory achievement**	**Low achievement**	**Below minimum standard**
600	540–600	420–539	300–419	120–299	0–119
500	450–500	350–449	250–349	100–249	0–99
400	360–400	280–359	200–279	80–199	0–79
300	270–300	210–269	150–209	60–149	0–59
200	180–200	140–179	100–139	40–99	0–39
100	90–100	70–89	50–69	20–49	0–19
60	54–60	42–53	30–41	12–29	0–11
50	45–50	35–44	25–34	10–24	0–9
40	36–40	28–35	20–27	8–19	0–7

Sample format for recording Economics assessment task results over two years

Student name:

Grade 11 assessment task results			
Unit	**Assessment task**	**Mark**	**Student mark**
11.1			
11.2			
11.3			
	Total marks Grade 11	**300**	

Student name:

Grade 12 assessment task results			
Unit	**Assessment task**	**Marks**	**Student mark**
12.1			
12.2			
	Total marks Grade 11	**300**	
	Total marks Grade 11 and 12	**600**	

Learning outcomes and levels of achievement

Levels of achievement in Grade 11 and Grade 12 are recorded and reported against the learning outcomes. The performance standards for the levels of achievement are described on pages 22 and 23.

Steps for awarding final student level of achievement

1. Assess unit tasks using unit performance standards and assessment criteria.
2. Record results for each task in each unit.
3. Add marks to achieve a unit result and term result.
4. Add term marks to get a year result.
5. Determine the overall achievement using the achievement level grid.
6. Report results using the learning and teaching learning outcome performance standards.

The following is an example of reporting using the learning outcomes performance standards descriptors.

Using the learning outcomes performance standards descriptors for reports

Student	**Lena**
Subject	**Economics**
School-based assessment	**High achievement**
This means Lena:	
Demonstrates broad knowledge, understanding and application of a range of concepts, principles, models, skills, and terminology used in the study of Economics	
Demonstrates knowledge and understanding of the complex role of economic systems in providing solutions to economic problems	
Proficiently analyses and interprets a range of economic events, past and present, using economic models and the skills of economic inquiry	
Gives logical predictions and reasons to explain the impact of economic change in local, national and global settings	
Describes and gives logical explanations of the ways economic decisions involve costs and benefits and have outcomes that may be inconsistent with social, moral and ethical values	
Identifies, describes and gives logical explanations and some examples of the way outcomes may be changed by individuals, community groups, business and government	
Identifies a wide range of effects of interdependence at individual, local, national and global levels	
Clearly communicates economic information and ideas effectively using a range of appropriate written and/or oral, and graphic forms	

Resources

Economics becomes more interesting and meaningful when you use a variety of resources and local materials in your teaching. You should be always trying to adapt, improvise, make, find or write material that will be useful for lessons.

Economics can be taught without expensive equipment by making use of what is around you, though there are some equipment and materials that are essential to teach the Economics syllabus.

Types of Economics resources

Materials and equipment for Economics

- text books, reference books
- magazines
- diagrams, charts, posters
- worksheets, information sheets
- television and radio broadcasts,
- computer software
- newspapers

General guidelines for selecting and using resources

How effective a resource is depends on whether it is suitable for the knowledge or skill to be learned and the attitude of the students. Classroom organisation is the key to using resources successfully. You need to:

- prepare thoroughly. Make sure that you are familiar with the resource so that you use it with confidence and assurance. If equipment is involved, check that it is in working order, make sure that you know how to operate it and that it is available when you need it.
- use the resource at the right place and time—it should fit in with the flow and sequence of the lesson and serve a definite teaching purpose.
- (if the resource is radio, film, video or television), introduce the program by outlining the content. You might also set some questions to guide listening or viewing. Follow up after using the resource, by discussing and drawing appropriate conclusions.

Useful resource books

References

Unit 1 booklet: *The Economic Problem*

Unit 2 booklet: *Production*

Unit 3 booklet: *The Role of the Government in the Economy*

Economics for Developing Nations, Books 1 and 2

Fundamentals of Economics, 1st and 2nd editions

Economics for Developing Nations, Books 1 and 2

Fundamentals of Economics, 1st and 2nd editions

Foundations of Economics

Economics for Developing Nations, Books 1 and 2

Fundamentals of Economics, 1st and 2nd editions

Foundations of Economics

Gregory Mankiw, N *Principles of Economics,4th Edition (Student edition)*

Dixon, T 2002, *The Market Economy*, 2nd edn, Leading Edge Education, Sydney.

Dixon, T 2001, *The Market Economy – Workbook,* Leading Edge,Education, Sydney.

King, D 2000, *Economics Year 11 Study Guide – the Economic Framework,* Academic Associates, Perth.

King, D 2000, *The Stock Market*, Academic Associates, Perth.

Kirkwood, L et al. 1999, *Economics for the Real World, Book 1*, Longman, South Melbourne.

McConnell, J 2000, *Economic Activity, Book 1, 2nd edn*, McMillan Education/VCTA, South Yarra.

Morris, R, 2000, *Economics Down Under, Book 1, 4th edn*, Jacaranda/John Wiley & Sons, Melbourne.

Tibbit, A 1998, *Economic Insights, Book 1*, Longman, South Melbourne, Units 3 and 4

King, D 2000, *Economics Year 12 Study Guide*, 4th edn, Academic Associates, Perth

L et al. 1999, *Economics for the Real World, Book 2*, Longman, South Melbourne.

Mayer, R 2004, 'Should there be a three-strikes rule against pure discovery learning? The case for guided methods of instruction', *American Psychologist*, vol 59, no. 1, pp. 14–19.

McConnell, J & Nailon, K 1999, *Economic Activity, Book 2*, 6th edn, McMillan Education/VCTA, South Yarra.

McKee, M & Nailon, K 2002, *500 Multiple Choice Questions*, Indigo Publishing, Abbotsford.

Morris, R 2000, *Economics Down Under, Book 2*, 3rd edn, Jacaranda/John Wiley & Sons, Melbourne.

Journals, Periodicals and Magazines

PNG Economic Indicators

PNG Budget Overview and Economic Outlook

PNG Budget Papers

PNG Budget Speech

PNG Treasury Round-up

Australian Economic Review

Business Review Weekly

CEDA Bulletin

Choice

Compak

EcoDate, Warringal Publications

Economics Update Newsletter, Leading Edge Publications

New Internationalist

RBA Annual Report

RBA Monthly Bulletins

The Bulletin

The Economist

The Student Economist, South Pacific Publications

Websites

At the time of publication the URLs (website addresses) cited were checked for accuracy and appropriateness of content. However, due to the transient nature of material placed on the web, their continuing accuracy cannot be verified.

National Council on Economic Education (USA) 2002 www.nationalcouncil.org

Asia-Pacific Economic Cooperation group (APEC) www.apecsec.org.sg

Association of South-East Asian Nations (ASEAN) www.aseansec.org

European Union www.europa.eu.int

International Monetary Fund (IMF) www.imf.org

North American Free Trade Agreement (NAFTA) www.nafta-sec-alena.org

Organisation for Economic Cooperation and Development (OECD) www.oecd.org

United Nations www.un.org

World Bank www.worldbank.org

World Trade Organisation www.wto.org

ANZ www.anz.com.au

Commonwealth Bank www.commbank.com.au

Reserve Bank of Australia www.rba.gov.au

Westpac www.westpac.com.au

Asia-Pacific Economic Cooperation (APEC) Globalisation Guide www.globalisationguide.org

The Australian Broadcasting Commission (ABC) www.abc.net.au

The Australian Council of Social Services (ACOSS) www.acoss.org.au

The Australian Council of Trade Unions (ACTU) www.actu.asn.au especially www.worksite.actu.asn.au

The Business Council of Australia www.bca.com.au

AusAid Global Education http://globaled.ausaid.gov.au

Austrade www.austrade.gov.au www.budget.gov.au

Newspapers and Magazines

The Australian www.theaustralian.news.com.au

The Australian Financial Review www.afr.com.au

Business Review Weekly www.brw.com.au

Glossary for assessment

Syllabus outcomes, criteria and performance standards, and examination questions all have key words that state what students are expected to be able to do. A glossary of key words has been developed to help provide a common language and consistent meaning in the syllabus and teacher guide documents.

Using the glossary will help teachers and students understand what is expected in response to examinations and assessment tasks.

Glossary of key words for assessment

Account	Account for: state reasons for, report on. Give an account of: narrate a series of events or transactions
Analyse	Identify components and the relationship between them; draw out and relate implications
Apply	Use, utilise, employ in a particular situation
Appreciate	Make a judgement about the value of
Assess	Make a judgement of value, quality, outcomes, results or size
Calculate	Ascertain or determine from given facts, figures or information
Clarify	Make clear or plain
Classify	Arrange or include in classes or categories
Compare	Show how things are similar or different
Construct	Make; build; put together (items or arguments)
Contrast	Show how things are different or opposite
Critically (analyse, evaluate)	Add a degree or level of accuracy, depth, knowledge and understanding, logic, questioning, reflection and quality to (analysis or evaluation)
Deduce	Draw conclusions
Define	State meaning and identify essential qualities
Demonstrate	Show by example
Describe	Provide characteristics and features
Discuss	Identify issues and provide points for and/or against
Distinguish	Recognise or note or indicate as being distinct or different from; to note differences between
Evaluate	Make a judgement based on criteria; determine the value of
Examine	Inquire into
Explain	Relate cause and effect; make the relationships between things evident; provide why and/or how
Extract	Choose relevant and/or appropriate details
Extrapolate	Infer from what is known
Identify	Recognise and name
Interpret	Draw meaning from
Investigate	Plan, inquire into and draw conclusions about

Justify	Support an argument or conclusion
Outline	Sketch in general terms; indicate the main features of
Predict	Suggest what may happen based on available information
Propose	Put forward (for example, a point of view, idea, argument, suggestion) for consideration or action
Recall	Present remembered ideas, facts or experiences
Recommend	Provide reasons in favour
Recount	Retell a series of events
Summarise	Express, concisely, the relevant details
Synthesise	Putting together various elements to make a whole