

FINAL 'ROUND - UP' DISCUSSION

Mr. Whitehouse explained that the purpose of the Conference had been to disseminate information about the various kinds of work going on at different universities; there had been no particular structure to the talks given, but he felt the most important aspect had been the participation of as many different representatives as possible. The natural step for the next conference would be to make it more along 'workshop' lines. He suggested the next one might be in 2 or 3 years, whilst in the meantime seminars for particular problems in particular places might be held. Mr. Nation observed that teaching demonstrations were useful for the underlying principles involved, but that this aspect tended to get lost among criticism of the more superficial sides of a lesson. Mr. Whitehouse agreed that a more practical, 'workshop' approach did present more problems, particularly of an organisational nature.

It was then suggested that as much of the material seen was untried, a workshop next year would be useful as much of it would have been tried by then. Mr. Kirk then reminded the Conference that its purpose was the exchange of ideas, so there was merit in looking at even unsuccessful materials; a workshop before next year would be useful.

Mr. Dunlop informed the representatives that KMIT was holding a workshop in the near future to look specifically at KMIT problems, and that each expert had been invited to look at an area in which he had special knowledge. He himself felt that workshops could become too general. Mr. Whitehouse agreed that an institution-oriented approach was interesting, and asked for suggestions as to who should take the co-ordinating role. It was pointed out that CULI was already trying to cope with this problem (indeed by helping to organise this Conference) in spite of the pressures of time that existed. Mr. Dunlop feared it would be inappropriate to have one expert travelling the country trying to solve different problems, but Dr. Panninee pointed out that this expert's role would be one purely of co-ordination, a role played most importantly by CIEL.

Mr. Whitehouse then asked for suggestions as to the next practical step to be taken. Mr. Cowin suggested a conference next year, and that meanwhile small workshops might be held to discuss particular 'local' problems.

Mr. Kutny expressed his disappointment at the absence of any specialists in fields such as Law, History, etc. Mr. Whitehouse said invitations had been sent to everybody, but that not everybody had replied, and Dr. Goldenberg observed that the concept of EAP was not yet widespread among Arts faculties.

Mr. Whitehouse then asked Mr. Bernard Coffey to give his thoughts about the Conference as an 'outsider' from Singapore. Mr. Coffey said that there was not time for him to describe all the aspects of the Conference that he had enjoyed – the insights, the practicality, the freedom of controversy, for example – so he would confine himself to areas where he thought improvements could be made.

He felt that not enough attention had been paid to evaluation. What criteria were involved? Who would be involved? What were the students' views on what was presented to them? Could we see examples of successful liaison between teachers and students? Secondly, he thought that more could be said about relations with teachers from other disciplines; thirdly, that although the informal teacher training that went on was obviously very good, it could perhaps be more formally organised; and lastly, that he hoped and expected that at the next conference there would be a much greater sprinkling of nationalities. He ended by thanking everybody for the excellent treatment he had received at the Conference.

When Mr. Whitehouse raised the problem of evaluation, Dr. Panninee said that CULI had a teacher training programme. It lasted 2 weeks in May. Due to the limited number of topics, the subject had not been mooted at the Conference.

Mr. Whitehouse then raised the subject of the exchange of information. Was there a structure existing whereby this could take place? He felt that it should not take place actually on a formal basis, as in a journal, but suggested it might be done informally so that information would be given only to those who wanted it. Dr. Frankel felt that some sort of clearing house would be useful, but that it should not concentrate only on what was happening in Thailand, but be more international in flavour. Also it should try to assemble any interesting articles (published or unpublished) that came to light. Mr. Coffey commented that such a centre had already been set up in Tehran by the ESP West Asia Conference, who would be glad to hear from Thailand. Dr. Frankel argued that people had already made plenty of contacts at the present Conference which would be extremely useful.

Mr. Whitehouse then thanked all the people without whom the Conference just would not have been possible; the ajarns, the librarians, the catering organisers, etc. and called upon Professor Toemsakdi Krishnamara, Director of CULI, to close the Conference.

Professor Toemsakdi emphasised the importance of students having a solid grounding in English, since it was the international medium of communication. But he also reminded representatives that any scheme for teaching THEM English had to be 'cost-effective'. Thailand had invested a huge sum of money in English language teaching. Of course it was natural that if Thailand wanted English, they should pay for it. But the experts who had been assembled to do the job would not be in Thailand for ever; and it was vital that native Thais should be prepared to

replace them when they left. Professor Toemsakdi welcomed the Conference as further evidence that the stage where universities squabbled amongst themselves, and concealed useful information from each other, had passed and that a spirit of cooperation now existed (though he hoped, not untinged with a healthy rivalry).

Lastly he warned against over-dependence on CULI, pointing out that CULI should not be the mainstay of the efforts to teach English, but rather a catalyst for all the institutions engaged in this type of work.

Thanking the British Council, Chulalongkorn University, and all the speakers and delegates present, Professor Toemsakdi ended the Conference.

SEAMEO Regional Language Centre, Singapore

Project: A Common-core course, English for Academic Purposes

Rationale

1. The project to be described in this paper aims to produce teaching materials to assist students in South-East Asia in their first year of tertiary studies. The 'target student' envisaged is one who, having completed a school course in the medium of his or her own language, now enters upon tertiary studies in which English is important as a medium of learning. This is still the common experience of students in our area. The degree to which English is important to the student varies from country to country, but at the very least English is essential as a 'library' language, for the consultation of specialist texts.
2. A wide range of disciplines has to be served. One of the basic difficulties of a common-core course is the wideness of this range, when set off against the limited time available for Service-English course teaching. An attempt has been made to limit and define the scope of discipline coverage, by identifying five main discipline areas. They are as follows:
 - Medical and Biological Sciences
 - Physical Science
 - Engineering/Technology/Technician Work
 - Economics/Commerce/Business Practice
 - Ecological and Environmental Sciences
3. The course is organised in twelve Units, each requiring about 10 hours of teacher-pupil contact = 120 hours.
4. The basic intention of the course is to revise, re-activate and re-order the English learnt at secondary or pre-University level, to make it available in the form of *Study Skills*. These give us the basic design structure of the course. The skills are identified as follows:

A. Reading**1. Comprehension**

- at sentence level
- at paragraph level
- at extended discourse level

2. Rapid reading skills**3. Reference operations****B. Writing****1. Note-taking** (information from single source)**2. Compilation** (information from multiple source)**3. Report**-- **Description**

- Static subject
- Dynamic or evolving subject

-- **Digest**

- Summary
- Conclusions

4. Projection

- Implication
- Prediction
- Persuasion

These complex skills can be analysed into *functions*, and this proved a useful guide in the ordering of the language work. The writing skill described as 'Prediction' above, brings in the functions of *cause and effect, condition, probability, possibility, certainty and uncertainty*. Further guidance was obtained from a 'structural' source—a knowledge of the chief common errors made by SEAMEO region learners.

The course can also be analysed in terms of the *learning strategies* utilised or devised to teach the study skills, and these learning strategies can be itemised as specific language exercises.

It can be seen that the course is eclectic in design—not dominated by any one particular linguistic or pedagogic approach, but making use of insights from many.

5. Course Organisation

A full breakdown is given in the Appendix to this paper, with details of testing and other ancillary elements. The following is an outline of the Unit structure, which is slightly variable, but basically common to all twelve Units of the course.

Section A: Language Preparation

1. Vocabulary

2. Structure

Section B: Main Reading Passage

Section C: Comprehension

Section D: Vocabulary Development

Section E: Language Development

Section F: Further Reading (Preparation for Writing)

Section G: Written work

Some of the work is done by oral methods, making use of specially-prepared cassette tapes.

6. Progression

The course is progressive and cumulative. It starts, as is implicit in the description of the target student given in the first paragraph, at a low level of challenge.

7. Some comments on specific approaches

1. Lexis

In an 'English for General Purposes' (EGP) course, the designer can work to a fairly leisurely rate of introduction of new vocabulary, usually following a guideline of so many new words per learning hour. This is not possible for the EAP course designer. His problem is that related clusters of new vocabulary must be acquired in a short time. A variety of methods is employed in this course, but the basic approach is unite dictionary work with the presentation of the word in context. An example of this occurs in the accompanying sample Unit One. (Exercise 1) Exercise 10 of the same Unit shows how a graphic approach is used to consolidate technical vocabulary learning.

Generally, the course identifies three kinds of new words:

(a) General

(b) Technical --- that is, discipline-specific

(c) "Special" --- a selection was made of words which seem to have a particular importance to technical discourse, and these were marked down for special treatment. (See Section D of the sample Unit.)

Other vocabulary work includes exercises on the recognition of new words through internal clues, operations with affixes, etc.

Several dictionaries were used, with adaptation of the entries selected, but the main one is the *Advanced Learner's Dictionary of Current English*, as this seems to have the widest distribution.

2. Reading

Since the use of technical texts is probably the main requirement of the student, it was considered necessary to involve him right from the beginning in work on fairly challenging passages, rather than precede the study of technical passages with a long period of work on language elements, it was thought better to look for strategies that would assist him in the tackling of reading matter similar to the kind that he has to study in his academic work. There is however a progression, in both length of passage and level of challenge. There are three main types of reading material in the course:

- (a) *The main reading passage*, Section B of each Unit. Here the selected 'authentic' passage is simplified. (Though progressively less so as the course goes on.)
- (b) *Further reading passages* (Section F) Shorter passages, from different sources, but related in theme to the longer passage in Section B. There is a strong link between these passages and the written work in Section G. They are not simplified to the same extent as in Section B.
- (c) *Mini-contexts*. Shorter passages, of about 6–10 lines, taken from authentic literature, and used to exemplify points of lexis, structure and interpretation wherever they are needed. In Section D of the sample Unit three such short passages are used to reinforce the teaching of the 'special' vocabulary.

8. Graphics

The course pays particular attention to the use of graphics in technical study. Very often in scientific reading comprehension is a dual process, involving the interpretation of both a written text and an illustration of some kind. Special attention is given to the kind of graphic aid that shows movement or development. A number of transparencies is provided, to help with this aspect of the course, and it is assumed that institutions using the material will have a projector.

9. The Design Future of the Course

In its present form it is experimental, and should be referred to as the 'Mainline Pilot Course'. After suitable trial, evaluation and feedback, it is proposed to produce a revised final form.

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APPENDIX**The Components of the Course**

Rationale

Pre - Test

Unit One

Unit Two

Unit Three

Progress Test One

Unit Four

Unit Five

Unit Six

Progress Test Two

Unit Seven

Unit Eight

Unit Nine

Progress Test Three

Unit Ten

Unit Eleven

Unit Twelve

Post Test

Instructor's Guide

Evaluation Material

Recorded cassettes

Visual Material for Projection.

Seameo Regional Language Center, Singapore

English for Academic Purposes: Mainline Pilot Course

Unit One

Section A: Language Preparation

1. Vocabulary

Exercise 1

Example :

Study the following sentences, paying close attention to the underlined word :

The therm is the unit used for measuring the energy value of the domestic gas supply.

Here are three dictionary definitions of the word domestic :

- i. having to do with the home or with household affairs.
- ii. of one's own country; not foreign.
- iii. (of animals:) accustomed to living with man and being cared for by man.

Which of these three meanings applies to the example sentence ?

(Answer: No. i)

Now do the following examples in the same way:

1. The therm is the unit used for measuring the energy value of the domestic gas supply.

Unit

- i. a single group or person.
- ii. an organised group of men in the armed forces.
- iii. a standard quantity or amount.

2. The energy requirement of a young man of moderate activity is about 3200 calories daily.

Moderate :

- i. calm, mild, reasonable
 - ii. not large or extreme
 - iii. to make or become less extreme or violent.
3. The body also uses energy to perform muscular activity.

Perform :

- i. to carry out, do
 - ii. to act (as in a play)
 - iii. to play, sing, do tricks, etc, in front of an audience.
4. We measure the energy value of a diet in calories.

Value :

- i. whatever makes a thing desirable or useful
 - ii. the cost of a thing in money
 - iii. to estimate the price of something
 - iv. to think highly of someone or something.
5. The body uses energy to carry on the processes of living, such as breathing, the circulation of the blood and the maintenance of bodily temperature.

Circulation :

- i. the act of sending or passing round from place to place
 - ii. use (e.g. of money)
 - iii. the number of copies of a newspaper, magazine, etc, sold.
6. If the intake of food provides more calories than the body expands the surplus is converted into fat.

To convert :

- i. to change from one state, use or purpose into another
 - ii. to cause a person to change his opinions or beliefs
 - iii. to take another person's money, property, etc, and use it as one's own.
7. The calorie is usually used as a measure of the energy value of a diet.

Measure :

- i. a unit of capacity, length, area, etc.
- ii. (e.g. politics) an action or decision.
- iii. an instrument used for calculating, such as a ruler or a container of known capacity.

Exercise 2

Match each word in the left hand column with its proper definition in the right hand column:

One example has been done for you.

1 <u>sedentary</u>	a Free from extremes of heat or cold – not too hot and not too cold.
2 obese	b <u>not physically active</u>
3 appetite	c a gas without colour, taste or smell, necessary for all life.
4 combustion	d capacity for doing work
5 relaxed	e the absorption of food
6 mental	f desire (e.g. for food)
7 temperate	g being too fat
8 digestion	h of the mind: done by the mind or brain.
9 energy	i the state or process of burning
10 oxygen	j not tight, tense or rigid.

Answers:

1-b
(etc.)

2. Structure

(a) *Present Simple Tense.* Making a general statement.

Study the following statements, paying close attention to the underlined verbs:

The use of food by the body is a kind of combustion.

The Calorie is a unit of heat.

Appetite is not a good indicator of need.

Children are more active than adults.

Sedentary workers are more likely to be obese than manual workers.

Games and exercises are not a cure for obesity.

The body combines food with oxygen.

The body uses energy obtained from food for two main purposes.

Body size tends to decrease slightly with increasing age.

Older men require 2000-2500 calories.

Colder weather adds to energy requirements.

Mental activity does not add to energy requirements.

Heavy exercise does not get rid of surplus fat.

A calorie-rich diet does not always protect health.

An empty-calorie diet has no protective value.

An empty-caloris diet does not have any protective value.

Exercise 3

Complete the following general statements by supplying the verb.

Two examples have been done for you.

Example One

Undernutrition and qualitative malnutrition....responsible for most of the disease in the world today. (be)

= Undernutrition and qualitative malnutrition are responsible for most of the disease in the world today.

Example Two

By combustion we....burning. (mean)

= By combustion we mean burning.

1. Heavy body weight... ..always .. obesity. (not/mean)
2. Energy requirement usually ... with advancing age; appetite often... .. (decrease; not/decrease)
3. Obesity often....serious effects on general health. (have)
4. The body...energy to maintain body temperature. (expend)
5. Loss of weight and lack of energy...the usual results. (be)
6. Quantitative malnutrition... ..very often.
7. Students... ..more food at examination times.
8. Water... ..nutritive value. (not/have)
9. Water... ..nutritive value. (not/have)
10. Water...necessary for digestion.

(b) *Comparison, unequal. More .. than, less .. than, fewer .. than.*

Look first at the following table:

Type of Individual	Daily energy requirement in calories (Average)
Young man	3200
Young woman	2300
Elderly man	2000
Manual labourer	4500
Growing child	2100
Hospital bed-patient on light diet	2000

Exercise 4

(a) From the table we can see that:

An elderly man requires fewer calories than a young man.

We can also say:

An elderly man requires less food than a young man.

Write similar sentences for the following:

1. Young woman/manual labourer
....calories....
....food
2. Young woman/hospital bed-patient
3. Hospital bed-patient/growing child
4. Elderly man/young woman
5. Growing child/young woman.

(b) *Complete the following sentences:*

1. A young woman needs...calories...an elderly man, but.....a young man.
2. A growing child needs...calories ...a hospital bed-patient, but..... a young woman.
3. A young man needs...calories...either a young man or a growing child.
4. A manual labourer needs...calories...anyone.
5. An elderly man needs ...food than a young man.

Section B: Main Reading Passage

The Amount of Food we Need

1. By digestion we mean the use of food by the body. Digestion is partly a kind of combustion, or burning. The body takes in oxygen, by breathing. It then combines the usable part of the food with this oxygen – in the same way as the carbon content of a piece of burning wood or candle combines with the oxygen of the air. So the calorie, which is usually used as the measure of the energy value of a diet, is a unit of heat, like the therm, which is the unit used for measuring the energy value of a domestic gas supply.

2. The body uses energy obtained from food for two main purposes. The first is to carry on the processes of living, such as breathing, the circulation of the blood, and the maintenance of body temperature. The second is to perform muscular activity. This may range from light activities such as sitting in a relaxed position to heavy work such as carrying a load uphill. The amount of energy used by an individual also depends partly on body size, and this tends to decrease slightly with increasing age. In general, men are larger than women, and so need a greater supply of energy from food. Children are smaller but they are more active. They need more energy in proportion to their body size.

3. The energy requirement of a young man of moderate activity, in a temperate climate, is about 3200 calories daily. A young woman, also fairly active, needs about 2300. Elderly men require 2000–2500 calories. Labourers doing heavy

manual work may need 4000-5000 calories daily, but an intake on this level is not common under modern working conditions. This is because muscle power nowadays is usually assisted by machine power. Mental activity does not add to energy requirements.

4. If the intake of food provides more calories than the body expends the surplus is converted into fat. A common cause of obesity is failure to adjust food intake to decreased activity, as an individual grows older. Sedentary workers are often more likely to be obese than manual workers. Appetite is not a good indicator of need.

(About 450 words)

Adapted from. *The Englishman's Food*,
by Sir Jack Drummond.

Section C: Comprehension

Exercise 5

(a) Answer the following questions as briefly as possible:

Example:

The body needs energy for two main purposes. Write them down.

(Answer: 1. To carry on the processes of living.

2. To perform muscular activity.)

1. How many different kinds of units of measurement are mentioned in the passage? Write them down.
2. Why are these units of measurement similar?
(Because they are.....)
3. What are (1) the highest and (2) the lowest daily calorie intakes mentioned?
4. Give *two* reasons why older people need fewer calories than young people.
5. Are the calorie requirement levels given in the passage correct for any part of the world? Answer *yes* or *no*. Write down one phrase from the passage that explains your answer.

(b) Look at the word *it* in line 3. It refers to the word *body* in line 2.

We could rewrite the sentence like this:

The body then combines the usable part of the food.....

What do the following words refer to?

1. line 6 : *which*
2. line 13 : *this*
3. line 15 : *this*
4. line 18 : *they*

Exercise 6

Here is one of the arguments from the passage, re-arranged in several statements or 'steps':

Energy requirement depends partly on bodily size.

Adults are bigger than children.

∴ Children need fewer calories than older people.

What is the missing step in the following argument?

Energy requirement depends partly on activity

.....

∴ Children expend energy faster than adults.

(Answer: *Children are more active than adults.*)

Now: Write out the missing steps in the following arguments:

1. One of the uses of energy is to maintain body temperature.

.....

∴ In a hot climate energy requirement tends to be lower.

2. You need less food as you grow older.

But your appetite may remain the same, or even increase.

∴

3. Digestion is a Kind of combustion.

For combustion, oxygen is necessary.

.....

∴ Breathing is part of the process of digestion.

4.

∴ Students do not need more food at examination time.

5. Labourers in earlier times had fewer machines to assist them

The work was done by muscle power.

This required more energy from food

∴

Exercise 7

Read again these sentences from the passage. (lines 17-18)

Children are smaller but they are more active. They need more energy in proportion to their body size.

This can be expanded as follows:

Children are smaller than adults

Energy requirement depends partly on body size

∴ the total number of calories needed is less than for an adult

BUT they are more active.

. They need more calories in proportion to body size.
 i.e., for example, a child who is half the size of an adult will need *more than half* the calorie intake of that adult.

Now: Expand the following sentences from the passage in the same way.

1. lines 29–30: *A common cause of obesity is failure to adjust food intake to decreased activity, as an individual grows older.*

(Begin like this:

Older people are less active. They expand less energy,

∴ They need less food.

BUT they oftenetc.)

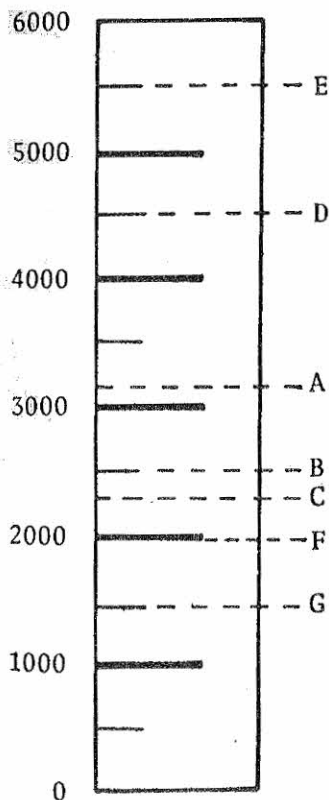
2. line 31: *Appetite is not always a good indicator of need.*

(Begin like this:

People often feel hungry, or *want* food.

But)

Exercise 8



Daily rate of calorie intake

The column on the left is a scale of daily calorie intake rates. A number of sample intake rates are marked by dotted lines on the right of the diagram. Some of the sample intake rates are taken from the main reading passage; others are added.

Read the following descriptions:

1. A young man of moderate activity in a temperate climate.
2. A young woman of moderate activity in a temperate climate.
3. An elderly man.
4. A labourer, not assisted by machinery, in heavy manual work.
5. A labourer doing very heavy outdoor work in a cold climate.
6. A badly undernourished adult.
7. A hospital bed patient on light diet.

Mark each of these seven sample intake rates with its correct letter from the diagram. One example has been done for you:

1. A.
- etc.

Exercise 9

The main reading passage (page 6) is written in four paragraphs, numbered 1 – 4. We have given each paragraph a title. Here are the titles, but they are not in the correct order:

- Average energy requirements
- The measurement of energy values
- The uses of energy
- Some causes of obesity.

Write out these titles against the correct paragraph number:

- Paragraph 1:
- Paragraph 2:
- Paragraph 3:
- Paragraph 4:

(For discussion: Do you agree with these titles? Are they a correct and complete guide to the contents of the paragraphs? What changes would you make?)

Section D: Vocabulary Development

Introduction

1. Key Words

to adjust (to); content (n), to expend, indicator, intake, measure (n), process (n), surplus, unit, value.

nutrition, etc; *nutrient*

quantitative and *qualitative*

Read the following passages carefully:

Context A

Nutrition and Calorie Intake

Nutrition means “feeding” – the study of humans (or animals) and their food. Food contains nutrients. These are substances which can be used by the body. There are several different kinds of these nutrients.

We measure the energy *content* of food in calories, or kilocalories or joules. All these are *units* of energy. We know how many calories, etc. different

people doing different kinds of work need every day. But the right number of calories in a diet does not mean that the diet is perfect. Energy intake is only one *measure* of a good diet. The food must also contain the right amount of the different kinds of nutrients, especially protective nutrients, which keep disease away. If the calorie *intake* is correct but the protective nutrients are missing, we call those calories 'empty calories'. The diet is bad, and the result will be *malnutrition*.

Context B

Malnutrition

One kind of malnutrition is called *undernutrition*. There are two different kinds:

(i) If the right kinds of nutrients are present, but the amounts of them are not enough, we call this *quantitative* malnutrition. There is something wrong with the amount of food, or *quantity*. In this case the calorie intake will probably also be too low.

(ii) If the diet is bad because some of the necessary nutrients are missing or insufficient, we call this *qualitative* malnutrition. There is something wrong with the *quality* of the food. In this kind of bad diet the calorie intake may be sufficient. Qualitative malnutrition is more common than quantitative. It is a chief cause of disease.

Context C

Overnutrition

Overnutrition is another kind of malnutrition. It is more common in prosperous developed countries. There are different causes, but the most common cause is simply eating too much food. This is measured by the calorie intake. If the calories intake is greater than the body needs to carry on the *processes* of living and to do muscular work, there is a surplus. The body does not *expend* these calories in the form of energy, and it then converts the surplus into fat. The result is obesity, and this can also cause disease. The only way to avoid obesity is to change the diet—to *adjust* the food intake to energy needs. In plain words, to eat less.

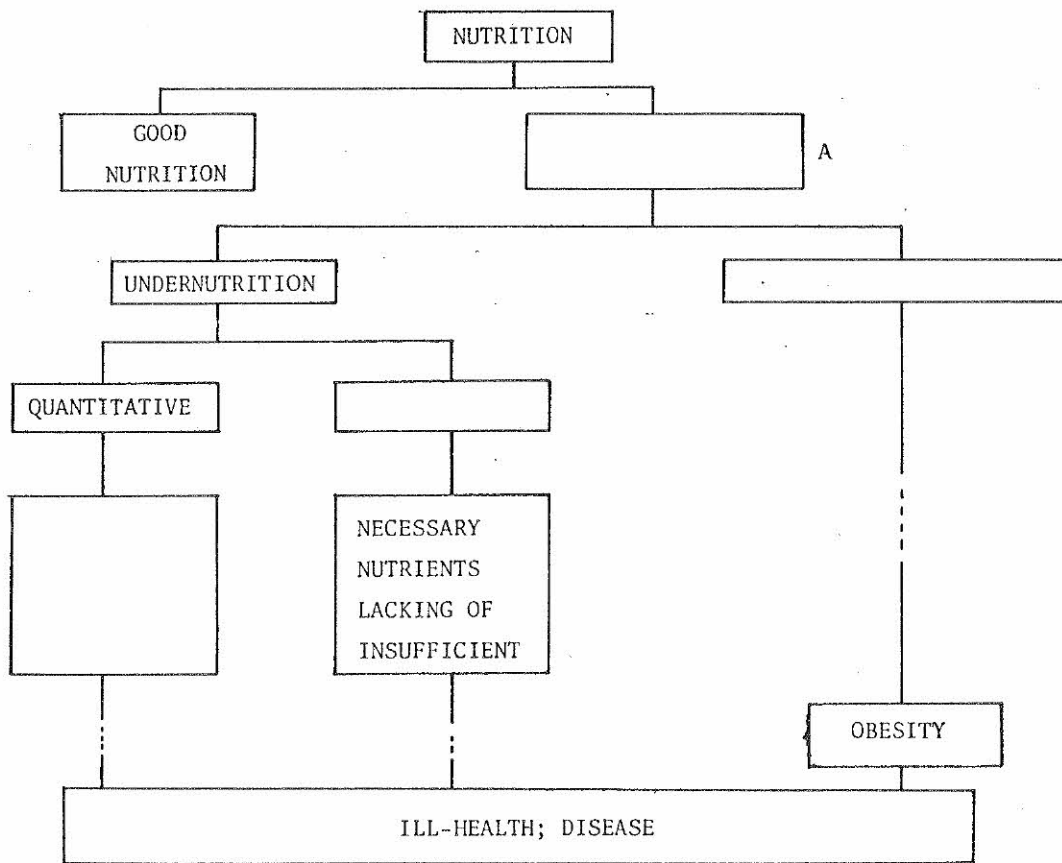
Context D

A last word on Energy and good diet

Energy content is only one indicator of the quality of a diet. We study the calorie *values* of different quantities of different foods, but we must also study other indicators. Most of these show the presence of necessary nutrients. Without these nutrients, the calories are "empty calories", and the diet is bad.

Exercise 10

Complete the following diagram by labelling the empty boxes.



Exercise 11

Fill in the gaps in the following passage by choosing from the list of words given below it.

A favourable balance of trade was once considered to be the chief..... of a country's economic success. If there was a..... of exports over imports, the country was doing well. We no longer think that this is the main..... of economic health. A..... can become too large, and in that case other countries will take steps to reduce the quantity of goods they buy from the 'successful' country. Import and export should be..... between countries so that no country remains permanently with a huge trade surplus.

adjust; indicator; measure; surplus

Exercise 12

Fill in the gaps in the following passage by choosing from the list of words given below it.

Water is an important part of the body's..... It is nutritionally 'neutral' -- that is, it has no nutritional..... . But it is essential for many of the of living, including digestion itself. One of its functions is the control of body temperature. If the body becomes too hot, water is lost in sweating, and this.....the body temperature at a safe level. A great deal of water is in this way. We take in water by drinking, of course, and also from foods like fruit and vegetable with a high water.....

content; expend; intake; process; value; maintain

Section E: Language Development**1. Proportionate to****Introduction**

Look first at these sentences. They are based on the work we have done already in this Unit.

- A. Energy requirement depends partly on body size, to some extent.
- B. Energy requirement depends also on the level of muscular activity.

We can make these statements in another way:

Aa: Energy requirement is *proportionate to* body size.....

Bb: Energy requirement is also *proportionate to* the level of muscular activity.

Exercise 13

Change the following sentences to make use of *proportionate to*, as shown in the introduction above:

1. Energy requirement does not depend on the level of mental activity.
2. Energy requirement depends partly on body size and partly on the level of muscular activity.
(...is partly.....body size and.....)

2. Varies with**Introduction**

Look first at these sentences:

- A. The amount of energy needed to maintain body temperature depends on the climate.
- B. Energy requirement depends considerably on age.

We can make these statements in another way:

- Aa: The amount of energy needed to maintain body temperature varies with the climate
- Bb: Energy requirement varies considerably with age.

Exercise 14

Change the following sentences to make use of *varies with*, as shown in the Introduction above:

1. The energy value of a diet depends on the number of calories present.
2. Energy requirement depends partly on sex.
3. Calorie need depends on the level of muscular activity.
4. Appetite depends on the individual concerned.

Exercise 15. More on Comparison

Look first at these sentences, adapted from ^{the} the main reading passage:

Men are larger than women.

Children are smaller than adults.

Complete the following sentences in the same way, using the word given in brackets:

1. Sedentary workers tend to be.....manual workers. (fat)
2. A kilocalorie is.....a calorie. (big)
3. If you are obese, eating less is.....taking lots of exercise. (good)
4. Energy requirement is....in old age....in youth. (low)
5. Undernutrition is.....overnutrition. (common)

Section F: Further Reading
(Preparation for Writing)

Read the following passages carefully. They will help you to prepare for your writing exercises in the next Section.

Passage 1. Malnutrition

Undernutrition and qualitative malnutrition are responsible over the world as a whole for a great deal of disease and disordered health. Rapid increases in population make this problem considerably worse, particularly in tropical countries. In tropical countries, also, it is easier to produce food with a high calorie content than food with the proper amounts of protective nutrients. A poor diet is the result, and this increases the damage done by tropical disease and tropical parasites. The human results are: bodily weakness, heavy infant and child mortality, and a short life for adults.

We can greatly increase food production, and this is being done. The real problem is to share out the food in proportion to need everywhere. This needs better international cooperation than we have at the moment.

(Adapted from article on *Nutrition*, the
Encyclopaedia Britannica.)

Passage 2. Obesity

By far the commonest effect of overconsumption of calories is obesity, meaning surplus fat on or in the body. Surplus fat on the body lies just beneath the skin, and can be seen; surplus fat *in* the body lies around the internal organs, such as the heart, and we cannot see it so easily.

Obesity is becoming more and more of a problem in developed countries and prosperous communities. Doctors and other experts do not on the whole agree about its causes. In the simplest terms, obesity occurs when an individual, over a long period, consumes more calories than he or she needs to meet energy requirements. But there are many reasons why this can happen. Some people, it seems, get fat more easily than others. Perhaps this is because they are more interested in food than other people and expend less energy. We call this the "greedy and lazy" theory. But it does not explain all cases of obesity. People may over-eat because that is the custom of their community, or because they may be in a job where food is available all the time, or because of a school or hospital diet, or because they are bored or unhappy. Heavy consumption of alcohol is sometimes a cause, as alcoholic drinks contain many calories.

The cure for obesity, however, is known more certainly than the causes. Obesity can only be controlled or cured by eating less. Heavy exercise is not the answer. Weight lost in exercise is mainly liquid, lost in sweating. Exercise causes thirst, and the lost liquid—and weight—is very quickly replaced by drinking. The only way to lose surplus weight is to reduce the calorie intake, by following a careful diet

(Adapted from the article on *Nutrition*:
The Encyclopaedia Britannica.)

Section G: Written Practice

Exercise 16

Read again Main Reading Passage (Section B)

Context passages A, B and C (Section D)

Further Reading Passage 1 (Section F)

— and also use your corrected diagram from Exercise 10

You are going to write an answer to the following question —

What is malnutrition?

— in three paragraphs. Here are the clues for your answer:

Paragraph 1:

Good nutrition — this needs:

calories, for energy

but also

protective nutrients

If anything is missing, we get malnutrition. This can be
undernutrition or overnutrition

Paragraph 2:

Undernutrition — this can be:

quantitative or qualitative

Qualitative malnutrition is more common

Paragraph 3:

Effects of malnutrition

Can be very bad in tropical countries

Increasing food production does not solve the problem. (Why?)

The only real answer is to.....

Note: Paragraph 1 could be written out like this;

For good nutrition, an individual needs a proper supply of calories, to give energy. The body uses this energy for the processes of living, and for doing work. But food must also contain other things, especially the protective nutrients. Malnutrition is bad nutrition, or bad feeding. It can be either overnutrition or undernutrition. When important things are missing from an individual's food, or diet, he suffers from undernutrition. (etc.)

Exercise 17

Read again: Main Reading Passage (Section B)

Context passages A and C (Section D)

Further Reading Passage 2 (Section F)

You are going to write an answer to the following question --

What is obesity?

- in three paragraphs. Here are the clues for your answer:

Paragraph 1:

obesity = being too fat

We cannot always see surplus fat (Why not?)

Obesity happens when we take in more calories than we need.

Body does not expend calories in doing work. Surplus converted into fat.

Paragraph 2:

Why does obesity happen?

Greedy and lazy? People fail to adjust intake to requirements

(Examples)

Not the only reason --

Other reasons.

Paragraph 3:

Cure?

Heavy exercise no good. (Why not?)

The only cure is.....

SEAMEO RELC EAP COURSE, 1978

(To follow Unit One, Exercise 10)

Professor : so that, I think, covers the topic of malnutrition.

Student : Not quite.

Professor : I beg your pardon?

Student : I wanted to ask about the column on the right of the diagram, please.

Professor : You mean something concerning overnutrition?

Student : Yes.

Professor : Go ahead.

Student : Well, I notice there's a dotted line, just opposite the boxes for 'quantitative' and 'qualitative'. It looks as if the Overnutrition section of the diagram is not complete.

Professor : You're right. It isn't.

Student : So you can have *quantitative* overnutrition and *qualitative* overnutrition - just as you can for undernutrition?

Professor : That's right.

Student : Can you say a little more about that, please?

Professor : Certainly. To begin with, qualitative overnutrition is very simple. It just means that if you eat too much you get fat.

Student : The result is obesity?

Professor : Yes, that's the technical word. And there it is, in the box on the diagram. You become overweight and fat, and this can have bad effects on your general health and efficiency.

Student : Thank you. But what about *qualitative* overnutrition?

Professor : Hm. Well, as you know, qualitative undernutrition is very common. The diet may have enough calories, or *joules* as we should say nowadays, but it is lacking in some essential nutrients. These are *protective* elements - they help you to resist disease. Without them, you become liable to catch diseases. There are also some chronic conditions which develop over a long period of time,

Student : And what about *overnutrition*?

Professor : Qualitative overnutrition? I was just coming to that. First of all, you needn't worry about it. It's a very rare condition. Almost the only kind we know about is protein poisoning. It happens when there is a sudden heavy intake of concentrated protein. There is a temporary condition of intoxication.

Student : You mean getting drunk?

Professor : Yes, exactly that. But remember that the word *intoxication* comes from the word *toxic*, and that means....?

Student : Poisonous,

Professor : Good. Anyway the symptoms of this kind of overnutrition are just like being drunk on alcohol. And they're also very temporary. Is that clear now?

Student : Yes, thank you. But why can't it happen here? You said we needn't worry about it.

Professor : Because as far as I know, the only way you can catch it is by eating the liver of a polar bear. So if anyone offers you some polar bear's liver, I advise you to refuse, politely.

Student : Thank you. I will.

Paper 4

(Mrs. Rosemary Khoo)

The Place of Graphic Aids

Introduction

1. The status of graphics is one of the criteria by which EAP/ESP material is fundamentally differentiated from EGP material. EAP reading comprehension is very often a dual-media operation, in which comprehension depends on a parallel understanding and interpretation of not only the printed text, but also of a piece of graphics as well. The two complement each other, and both are essential.

2. There are of course many different kinds of graphic illustration - map, chart, graph, diagram, tabular presentation, etc - and many different conventions for aiding the student in their application - colour coding, flow symbols, etc. EAP material should make as wide a use as possible of these different kinds. We would like to make special note here of the importance of making the illustrations used *dynamic* - that is, capable of showing movement and change of state. This kind is most central to EAP purposes. I would like first, however, to refer to some simpler kinds, taking my examples mainly from the Sample Unit of the RELC course.

- (1) *Unit One A* The teaching of a structure from a tabular presentation; information presented in a table.
- (2) *Unit One D* Comprehension by blank-filling, concept diagram. Also useful in lexis in the treatment of categories of greater and lesser generality.

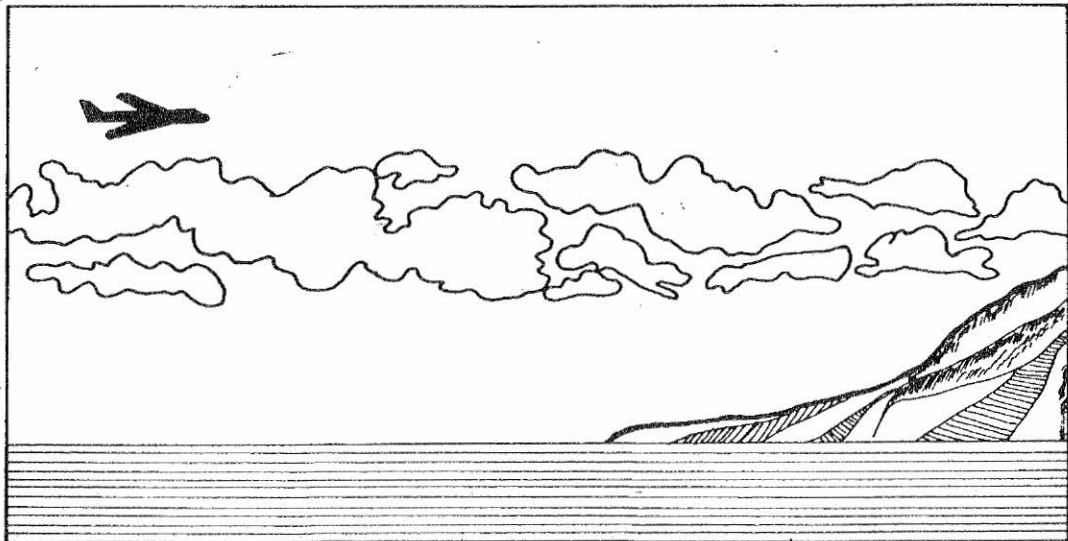
(3) *Other Sources* The use of single-picture illustrations in, for instance, the *Nucleus* course, to deal with the vocabulary of the properties of material - hardness, ductility, transparency, etc. This is the only effective way of teaching such topics without use of realia.

(3) Graphics that show Change of State

We take for illustration a pair of diagrams provisionally selected for use in Unit XI. The Unit concerns itself with the topics of position, direction, and change of position. One of the reading passages is derived from fiction, deals with the following situation:

An aircraft is approaching land over the sea, and also over a low cloud ceiling. The pilot believes he is approaching the landing shown in the top centre of diagram (b), but is in fact following the course marked (authentically) by the thick black line marked with crosses. The pilot finds out when he takes a series of radio bearings on the ship approaching him down the channel. As the relative bearing of the ship remains constant, the pilot can deduce that he is off course. He is running into a number of hazards, one of which can be interpreted from the diagram.

APPENDIX (a) (Lyall excerpt : 6.3)



APPENDIX II (b) (Lyall excerpt : 6.3)

