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INTRODUCTION

The book has been designed primarily for students who have been away from full-time study for some time, and are anxiously wondering whether they have the necessary skills to embark on, and complete, their chosen course of study. For students more familiar with studying, this guide will provide some useful hints to help you study more effectively. This book covers study skills, ranging from reading and taking notes effectively, to examination techniques. Your earlier study experiences will have enabled you to develop many of these skills already but you will probably find that studying in a new environment requires some new or adapted techniques.

The book offers concise guidance on the main areas with which students often encounter difficulties and contains activities that highlight positive action that you can take to develop sound study techniques. Effective study leading to successful results is **not** a mystery and the purpose of the book is to show you just what skills you will need, and to help you start using them effectively.

The book is relevant to, but not designed exclusively for postgraduate students. You are therefore encouraged to be selective and spend more or less time on different sections, as you feel appropriate.

NOTE

If you are to get full value from this course of study it is very important that you take an active part. Have pen and paper ready. As you read through the book, you will come to a number of boxes marked **Activity** or **Think Point**. Each contains a question or exercise. Cover the print below the box and keep it covered while you attempt a **written** answer. When you have made a determined effort to set your thoughts down in writing, uncover the discussion that follows and read on.

A mock assignment is at the end of Lesson 2. Many students are nervous about tackling written assignments so you are recommended to try your hand at this to help refresh your writing skills.

Before starting Section 1, it would help if you have ready:

- 1) A note-pad and pen for doing the exercises
- 2) A calendar with room to make entries against each day
- 3) A notebook or desk diary.

SECTION 1 – THE BASIC REQUIREMENTS FOR EFFECTIVE STUDY

If the first thing to say about studying is that it is hard work, the second thing to say about it is that it can be among the most enjoyable and rewarding experiences of your life. The two things are closely connected: the more you put into your study time, the more you will get out of it. Isn't the truth of this confirmed when you think back, for instance, to your early school experiences: weren't those lessons you enjoyed the most those in which you concentrated the most and worked the hardest? A sense of achievement is an important result and stimulus of study, and I hope you will gain such a sense through your course of studies. The purpose of the Essential Study Skills course is to help this to come about by improving your study methods. Feeling confident about how you study is the important first step to achieving your study objectives and ensuring that studying is a positive experience for you.

Of course, one of the main requirements of effective study is the profitable use of time. Learning what not to read can often be as important as learning what to read, a point that applies also to your use of this course. The various ideas that are introduced in the different sections have been shown, by research and general experience, to be useful in the great majority of cases, and so each section aims to develop your study skills in these areas. However, you must not feel that you need to work through parts of the course that you consider to be unnecessary, irrelevant or unsuitable for you. Again, do not be afraid to 'skim' parts of it in your search for the main points of introduction. Though most of this course will undoubtedly be of the utmost value for your own effective study, parts of it might not be, and it would be counterproductive to spend too much time on these.

Effective studying demands that you have clear and definite answers in your mind to the following questions:

- What aspects should I study?
- Where can I study most effectively?
- When can I study most effectively?
- How can I study most effectively?
- Why am I studying?

You will find that Section 1 will concentrate on the questions beginning 'what', 'where', 'when' and 'why'; the other sections look at 'how' to study effectively. At the end of Section 1 you will find summarised in diagram form the main pieces of advice offered throughout the course. The purpose of this summary is to give you an overall idea of what you will be covering, in a form suitable for planning and revision. It would be very useful for you to have a look at this summary now, but do not be concerned at this stage if parts of the diagram are not clear to you. More extensive explanations and information will be given in the rest of the course!

By way of introduction to the remainder of the section, try the following exercise:

ACTIVITY 1

What do you anticipate as being your main study problems in the following areas?

- Finding the time for study
- Finding a suitable place
- Creating the appropriate attitude
- Dealing with the work.

Write very brief notes on these topics (take about ten minutes). Then put them on one side, and reread them at the end of the section. By then, you should have more idea about how to solve these potential difficulties.

For most students', excitement about beginning a course of study using the distance learning mode is mixed with understandable anxieties. A path of action has been decided that will disrupt the familiar pattern of your life. It is also possible that your only previous experience of study may have been within the formal structure of a school but others will have studied on a full-time course of higher-level study delivered primarily on a face-to-face basis. It is thus no surprise that you could be wondering how well you would be able to cope with the demands of that unknown quantity, independent study.

However, be determined to persevere and succeed! And take heart from the fact that many people in your situation have succeeded wonderfully well in the past.

Next we will examine some of the major sources of anxiety for new students, and how to cope with these.

EFFORT

Because studying takes place at a desk, it is easy to underestimate the effort, concentration and determination you have to summon up and sustain if you are going to learn effectively. To combine a course of study with a full-time job, it is particularly important that you recognise, and allow for, this first condition of learning. Studying effectively requires **commitment** and **energy**.

TIME

Studying effectively takes time. No matter how busy your life, time must be found and kept specifically for study. Moreover, the mature student, studying at home, must bear in mind that a new demand on his or her time almost always affects other people, while remembering that studying effectively requires **the consistent allocation of sufficient time**.

Since time and effort are the basic conditions for effective study, they are also the source of most of our initial anxiety. Do I have enough time for this new commitment? Can I find the energy and determination needed? We will look carefully at these questions in this section. By finding some possible answers to them, you can banish much needless anxiety.

FINDING THE DETERMINATION AND ENERGY

Almost all our activities require significant amounts of energy. Sometimes we are only too conscious of this; we have to will ourselves even to begin certain tasks, or find only too quickly that our initial enthusiasm has ebbed away. Other activities make no such demands. We start on them unthinkingly, and carry them through with what seems to be ease. Why do we find tackling some activities so much harder than others? What indeed is it about certain actions that make them so easy to perform?

A large part of the answer would seem to be that actions performed with the least apparent effort are those that are a matter of habit and/or those that we want to do because we find them enjoyable and in some way rewarding. Thus preparing an evening meal is likely to demand very little conscious effort if one or more of the following factors apply:

- ❑ We regularly prepare a meal at this time
- ❑ We are hungry
- ❑ We enjoy cooking.

How can students apply these facts of psychology to their own circumstances? If getting down to study can become a habit, a regular part of everyday life and if studying can become enjoyable and rewarding, you may be well on the way to finding the energy and determination that this new activity requires.

GETTING INTO THE HABIT OF STUDYING

We are all creatures of habit; much of our behaviour is a more or less automatic response to a given situation or stimulus. So, for example, habitual smokers trying to break the habit find to their dismay that at certain times (e.g. immediately after meals) and in certain places (e.g. the local pub) they cannot help reaching out for a cigarette; stimulus and response go hand-in-hand. The same rules apply when trying to acquire a desirable habit. Studying can become habitual if you establish a routine in which a regular time and a specific place are set aside and used for study day by day, until they become firmly associated with the desired activity. When this happens study becomes an accepted part of life, and nervous energy is no longer dissipated in planning study sessions that fail to materialise - or in self-reproach for wasted time. The problem is that acquiring a new habit requires a great deal of self-discipline in the early stages.

THE IMPORTANCE OF MOTIVATION

The second type of actions that seem to come easily are those that we find rewarding and want to do. Psychologists usually refer to the source of our energy, the drive that enables us to initiate action and carry it through, as motivation. Motives arise from our individual wants and needs. Psychologists distinguish between two kinds of motivation.

EXTRINSIC MOTIVATION

Extrinsic motivation is produced by a need or wish for something that can only be obtained by carrying out a particular set of actions. For example, the nourishment that will satisfy hunger as a result of preparing a meal; or the pay packet that will reward a week of hard, perhaps uncongenial, work.

INTRINSIC MOTIVATION

Intrinsic motivation is aroused by the satisfaction inherent in an activity, irrespective of outside reward; for example, the enjoyment experienced when cooking an imaginative meal, or the sense of achievement gained from work skilfully performed.

ACTIVITY 2

Before reading any further, write down all your reasons for starting on, or preparing for, your course of study. Think hard about this; you may find some that you have not consciously thought about before. It is important that you become fully aware of your reasons for studying, because these motives - and you will find that they all stem from a wish or need - are quite literally the sources of the nervous energy you will require to carry your project through. Make a list and then see if you can categorise each one as either extrinsic or intrinsic motivation. Talk to your family about your list of reasons. You need their co-operation and knowing your wishes and needs will deepen their understanding of what you are attempting to do.

SOME LIKELY REASONS FOR STUDY

- ❑ A desire to know more about the subject
- ❑ A wish to stimulate and improve mental ability
- ❑ A longing to widen one's horizons.

These are examples of **intrinsic** motivation. They involve recognising that study can be enjoyable, and the source of its own reward.

A desire to pass an examination in order to:

- ❑ Obtain a qualification
- ❑ Fulfil personal ambition
- ❑ Improve career prospects.

These are examples of **extrinsic** motivation. They are directed outwards, towards a reward that can be gained as a result of study. Sometimes called vocational needs, they include perhaps the commonest and most important reasons for studying.

INTEREST AND ENJOYMENT

When you find a subject absorbing and enjoyable it is easier to study and learn. Moreover, our interest in and enjoyment of the subject increases if we reflect upon its relevance in our everyday lives. So you should avoid restricting your subject to a separate little compartment of your life. Instead, try and integrate the interest into your life as a whole.

Family, friends and work colleagues are less likely to resent this new demand on your time if you talk to them about it and involve them in what you are doing. Making the subject interesting for them will clarify your own ideas and help you to learn and remember. Look consciously for connections between what you are doing and what you are learning. Watch out for television and radio programmes, or local meetings and events, which are relevant to your subject. Read a quality newspaper with your subject in mind, and wherever possible, link your study to situations that are occurring in the world. Read relevant book reviews; browse in the library or a bookshop and discover a book for yourself that will help to bring the subject to life. If you do this you will see possible connections between it and your work and everyday life, and the more your knowledge and ability to learn will increase. Moreover, when you settle down to study your textbooks, you are far less likely to have to struggle to concentrate your mind, because now your brain is already 'set' and alert for the subject.

LONG AND SHORT TERM GOALS

It is likely that you are embarking on this course of study because you wish to gain a particular qualification. We might call this your long-term goal. But at this stage in your studies the qualification is too far in the future to be a really effective motivating force and source of energy. For that you need a cumulative series of short-term attainable goals that will take you steadily towards realising your overall aim. In some courses of study, module certificates awarded as you pass each individual subject may help you here.

- 1) Plan to complete the specified sections of a module a good week before you are required to submit coursework, so that you have plenty of time to prepare it
- 2) Mark the coursework deadlines given in your programme of study very clearly on a calendar (the sort that has enough room to make entries against each day is best)
- 3) Concentrate on the first completion date - this will be your first short-term goal. If you complete your first assignment on time, you will be safely on the way to your overall aim. If you are thinking of taking a trip or making a purchase, time it to occur after submitting coursework, as something to look forward to and as a reward for the hard work that has gone into achieving your first short-term goal
- 4) Note examination dates on your calendar too where relevant. If possible plan to complete examined modules and submit the assignments well before the cut-off dates, so that you can get feedback in good time to guide your revision and exam preparation.

A study plan of this kind is of the utmost value. It provides a structure for your activity and an immediate focus for your effort. As each deadline is met and crossed from your calendar, the achievement and the knowledge that you are one step nearer your overall aim will boost your energy and determination to succeed.

FINDING THE TIME

You will have unique educational needs and circumstances. Whatever these may be, it is likely that your new study commitments mean that you are faced with the problem of accommodating them within the requirements of a busy life. An important part of planning is to decide what your priorities are and ensure that you have time to carry them out. In order to make time for your priorities, it is important to think about your preferred way of working. This includes understanding your own habits and characteristics as well as identifying the time of day when you are most productive/least likely to be interrupted/fall asleep or be tempted to do something else. Very few people are so highly organised that every moment is used to full advantage and, bearing this in mind, it is well worthwhile taking a long, cool look at how exactly your days are spent.

ACTIVITY 3

Record a week's activity on the timetable provided on the next page, including working hours, travelling time, time spent watching television, time spent with the family, etc.

Once you are aware of how you spend your time at present, you will find it easier to plan your time more effectively to ensure priorities are met.

You may quite quickly begin to see a pattern emerging of time that is fully utilised, and time that is relatively free. If this is not the case, consider whether it is possible to shuffle and rearrange various activities, in order to leave some spare usable space. At the same time, try to think very carefully about the value you place on the activities that fill your days. Remember that you want to study in order to achieve your goals, and as a consequence studying must necessarily be given a fairly high degree of priority in the pattern of your life.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6.00am							
7.00am							
8.00am							
9.00am							
10.00am							
11.00am							
12.00 noon							
1.00pm							
2.00pm							
3.00pm							
4.00pm							
5.00pm							
6.00pm							
7.00pm							
8.00pm							
9.00pm							
10.00pm							
11.00pm							
12.00pm							

ACTIVITY 4

If you have been working at this text for longer than 45 minutes, take a break of five minutes **now!**

RELAXATION AND FLEXIBILITY

Being realistic about the time you have available involves allowing time for relaxation and also means building a degree of flexibility into your plans. Everyone needs time just to relax, and family and friends are more likely to understand your overall endeavours if they see that you are saving more time to enjoy their company. With this in mind it is a good idea, wherever possible, to plan one day a week completely free of study.

This practice will also enable you to build flexibility into your timetable. There will be some occasions when the best-made plans must give way before unexpected occurrences. You may feel unwell, or relatives may arrive without warning, or you may be invited to a party too good to miss. It is important at such times not to submit to too much heart-searching and feelings of guilt. It is equally important that your carefully planned timetable is not just disregarded and allowed to fall by the wayside. Both these extremes may be avoided by trading a few hours of your free day for the missed study period. The result of this flexibility is that at the end of the week study objectives will have been achieved without incurring the negative feelings of resentment that allocating your time too rigidly can inflict.

A word should be said here about sleep. There is no doubt that if your brain is to remain active, and if your health is not to suffer, a full quota of sleep is essential.

Nevertheless, you can experiment with organising your study time around your sleeping habits, so that you work when you feel more alert. For many people, for instance, early morning work, though a difficult habit to introduce, is a most effective way of studying.

SPARE MOMENT STUDYING

I have said that 45 minutes is the shortest effective study period, and for concentrated study that maxim holds. Nevertheless, in addition to your regular scheduled sessions, it is a good idea to get into the habit of making use of odd moments for other purposes. Every subject includes a certain amount of rote learning, formulae to be committed to memory, definitions to be remembered. Try keeping a small note-pad in your pocket, and, if you find yourself waiting at the bus stop, or at the dentist, or in the canteen, use it to jot down one or two of these from memory. You might also find it useful to carry a textbook to glance at during the odd spare moment.

Travel time can be used also. A train journey permits useful study if you remember to take the necessary study notes and related textbooks with you. Or you can check out concepts and arguments mentally to see how much you've retained from a study session.

These brief intervals certainly cannot take the place of regular periods of concentrated study, but they are useful supplements and a way of keeping the brain constantly 'set' for information relating to your subject.

ACTIVITY 5

Look again at your timetable of a week's activities. In the light of all that has been said, allocate study periods for the week. You might enjoy drawing up a full timetable for this purpose, or like me, you may prefer to mark the times very clearly on your day-to-day study calendar. At this point, allocation of study periods and your overall plan should be brought together, the calendar clearly showing when you will study, together with your study objective - perhaps two sections, one from each of your current modules.

Regard the coming two weeks as a period of experimentation. Be as determined as you possibly can to observe the study commitments you have made, but at the end of a fortnight make a realistic appraisal of how well the plan has worked. Make any adjustments that seem sensible, perhaps adding an hour, perhaps taking one away, and look upon the final result as time definitely allocated to study, at least until your first short-term goal is reached. Only deviate from your plan within the flexibility you have allowed. In the case of a major mishap, however, such as illness, you will need to rethink your plan, and would be well advised to seek the guidance of your Oxford Brookes University Programme Director or Course Manager.

OTHER PEOPLE

Once you have established the number of weekly hours to be devoted to study and have scheduled these into your daily life, it is very important that you acquaint family and friends with your plans. Telling other people of your good intentions helps to keep you to your chosen path, since the possibility of losing face by admitting to a lack of resolve and willpower is something that most of us strive to avoid. The second reason why others should be kept in the picture is because study hours must become periods when you can expect to be left undisturbed. This is particularly difficult for the home student. Individuals, who would not dream of breaking into a classroom or lecture hall, would cheerfully demand the attention of someone who is sitting quietly studying. Friends should be tactfully asked not to call at study times, either in person or by telephone, while the family should be asked to try to act, as far as possible, as if you were not in the house.

The price of trying to cope alone with study decisions and of being secretive about your plans is that your study periods will inevitably be interrupted and there is then a tendency to react in one of two ways, both equally damaging. You may welcome the interruption as a heaven-sent excuse for relaxation and avoiding the hard demands that you have set yourself. Or, conversely, you may lose your temper, shout at the intruder and then waste the rest of the study period feeling selfish and guilty.

SUMMARY

- 1) Look closely at the way you spend your time and make some firm decisions about your **priorities**
- 2) Underestimate rather than overestimate time available
- 3) **Not** keeping to a plan is **worse than** not having one
- 4) Spread work **evenly** over each week
- 5) Shortest effective study period = 45 minutes. Longest = 3 hours
- 6) Take short breaks every 40-45 minutes
- 7) Allow time for relaxation and flexibility
- 8) Be flexible
- 9) Make use of spare moments and travel time
- 10) Experiment with your timetable before making final allocations of time
- 11) Once decisions have been made, tell other people, and then **keep to them**.

WHERE TO STUDY

You may feel that you have little choice in the matter of where to study and the 'ideal conditions' sometimes prescribed in study handbooks represent for many students no more than an impossible dream. Nevertheless, much can be done with an imperfect study environment if we give the matter a little thought and apply some straightforward thinking to those aspects that are under our control.

The first necessity is a firm, upright chair and a table large enough to accommodate books and papers. Get into the habit of regarding the chair and table as your study corner. If you can keep it exclusively for that purpose, so much the better, since the place will then become associated with the activity in your mind and the mind of your household. For convenience, moreover, it will be the place where your study material will be at hand.

Stock your table with all the things you require, such as essential textbooks, ruled paper (A4 is the most convenient size), scrap-pad, highlighters, pens, pencils, eraser, ruler, ring-binders, all correspondence with Oxford Brookes University and so forth. Make a rule that the area is to be respected by the rest of the household and that nothing is to be touched or removed. If the table is required for other purposes and has to be cleared at the end of every session, you can keep everything together in a drawer or box. Have your study calendar prominently displayed above the table, where it will act as a constant reminder of study times and objectives.

LIGHTING AND TEMPERATURE

Poor illumination can affect your working efficiency and cause eyestrain and headaches. As many of you will be studying in the evenings when artificial lighting is essential, you should aim for adequate well-distributed illumination, free as far as possible from glare. This is best attained by a combination of indirect light and a desk or standard lamp angled directly over the working area. It is also important to be neither too hot nor too cold. Remember that you will be sitting still for a considerable length of time so pay attention to possible sources of draught and wear plenty of layers of clothing so that quick adjustments can be made as appropriate. A stuffy ill-ventilated room also affects your ability to remain alert and you should act quickly to guard against this.

DISTRACTIONS

A place of study is best free from distractions. You cannot concentrate fully on a task if your mind is being intermittently drawn to other sights and sounds. On the other hand most of us are probably conditioned to a degree of noise, and absolute silence may itself be disturbing, encouraging the mind to wander in search of the accustomed stimulus. This may be why so many students claim to work best to a background of familiar music. There may also be times when undemanding music can effectively mask more enticing sounds, such as people talking out of full range.

The answer once more seems to be: be flexible and experiment. Individuals do differ and the important thing is to discover the conditions most conducive to your particular turn of mind. I have known students who found it difficult to concentrate in what appeared to be ideal study facilities. Paradoxically, they found that being on their own actually lessened their ability to study. Such students seem to achieve more when they frequent the local reference library where, in a disciplined and quiet atmosphere, the presence of others silently working encourages their own endeavours. Those of you for whom a personal study area guaranteeing peace and quiet seems out of the question should also take heart from the knowledge that if you want to learn and are willing to find the time to study, you can achieve your aims in conditions that are far from perfect.

ACTIVITY 6

List as many ways as you can think of in which you could improve upon the physical conditions in which your studying is done.

You might have mentioned possibilities such as:

- 1) Finding a corner as free as possible from distractions and keeping it especially for study
- 2) Change from an easy to an upright chair
- 3) Making sure that you are well equipped with the necessary materials for study
- 4) Improving the lighting, perhaps by treating yourself to an angle-poise desk lamp.

Put improvements such as these into effect as soon as possible.

There follows now the summary of the main points of advice given in the course that was referred to at the beginning of Section 1. I hope that looking at this will reinforce your learning confidence as you revise the ground we have covered and see how the various pieces can fit together and contribute to effective study!

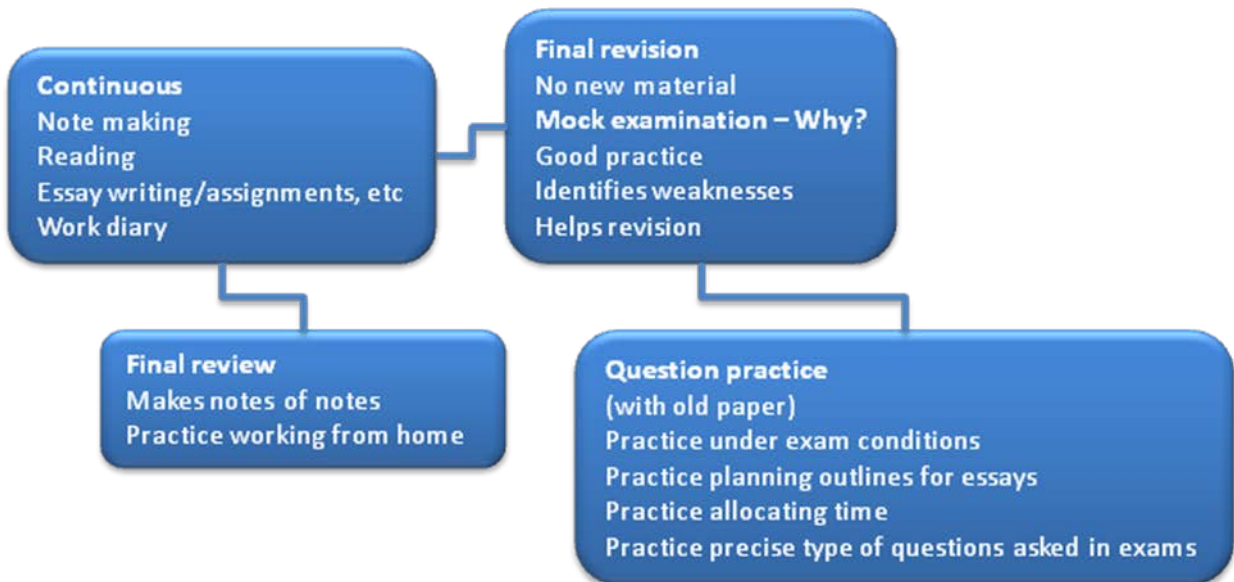
SUMMARY OF STUDY SKILLS ADVICE

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
<p>When Daily, but allowing for weekends, holidays, etc</p> <p>Timetabled Study periods of 45mins approx totalling above 2-3hrs a day on average</p> <p>Untimetabled Short moments or minutes during breaks, on public transport, etc</p> <p>Where Room Well lit Well ventilated Well heated</p> <p>Work area Undisturbed, with upright chair, reading lamp and desk area. Should be used as exclusively for work as possible</p>	<p>How All study tasks should be organised and recorded within a work diary</p> <p>Reading... Overviewing Cover, contents, skim, scan, sample Define object, overview, read, make notes, revise</p> <p>Learning Make notes if appropriate Own words Generic form Buzan diagram Hierarchy diagram Flow diagram Other</p>	<p>Memory How... Conditions Techniques Comprehension Reinforcement Mnemonics Rhymes Acronyms Acrostics Peg and link system</p>	<p>Thinking How... Organisation What is necessary? In what order? Imagination techniques Priority Possibility How can these be achieved? PMI Plus, minus, interesting AGO Aims, goals, objectives CAF Consider all factors</p>	<p>Essay writing What/how why... Requires: understanding, concentration and maintained effort of thought. Ensures: you develop independently of books and tutors. Allows: tutors a chance to assess and encourage you as well as criticise your weakness.</p> <p>How? Preparation Read title very closely, particularly for words like 'describe', 'explain' etc. Collect information and plan in light of the particular requirements and emphases of the question.</p> <p>Outline draft Main Essay Introduction, main body, conclusions. When Completed Revise and correct. Discuss with tutor. Use for exam revision.</p>

Lesson 6

Taking examinations: What/how

Examination preparation



SECTION 2 – THE BASIC TECHNIQUES FOR EFFECTIVE STUDY

“Regular study in digestible units seems to be the golden rule plus regular revision not leaving it until the end of a long course.”

E G Lock, Retired Senior History teacher London B.Sc. Econ.

INTRODUCTION

Section 1 had a great deal to say about the number of hours you should try to find for study but very little about how to make use of those hours. This section will consider some of the basic techniques you need to practise in order to make sure that the time you devote to study is productive and rewarding.

This chapter is divided into three sections. The first looks at problems that often arise in getting down to work. Sections two and three consider two of the activities that will occupy you during many of your study hours - reading and note taking.

GETTING DOWN TO STUDY

Students often find that they cannot get down to work despite having re-organised their lives for study. This is frustrating, and it is important to aid concentration by choosing a place for study as free as possible from external distractions, as we have discussed. Of course, it was implied, we are all distracted by different things, and by different things in different circumstances. When one is trying to fall asleep the ticking of a clock can become a major irritant; and whereas for some people a radio is conducive to study, for others it is a hindrance. We all have different ideas but, absorbed in our work, we can, and do, ignore much that is potentially distracting.

Being distracted owes a great deal to your state of mind. How do you prepare for study so as to minimise the chances that you will succumb to external distractions, or to internal ones such as daydreams, personal plans, and regrets?

PREPARING FOR STUDY

Your mind is probably at its most receptive during morning hours when there has been little opportunity to become preoccupied. But what if you can only study in the evening, when your mind is already full of the day's activity? One way to avoid being too preoccupied is this: treat the interval between finishing work and beginning study - travelling home, eating a meal, walking the dog - as a time of relaxation. Stop thinking about what has happened to you during the day and start to plan your evening's study. Look forward to the period of study as a quiet time when you will take definite steps towards your overall goal with all that this implies for your wishes and aims. If you are with other people, you can try and discuss your study with them.

If there are essential tasks on your mind, deal with any that can be dispatched quickly and write a reminder-note to carry out any others later. Just ensuring that they will not be forgotten should help to dismiss them from your mind. By the time you sit down at your study table, with books and papers invitingly spread out and waiting, certain processes highly conducive to getting down to study will have occurred. You will be mentally and physically relaxed and ready, with a clear and undivided mind ready and eager to start.

FOCUSING ATTENTION

DESK DIARY

Planning a session in advance is the surest way of quickly focusing your attention. For this you need a desk-diary - a notebook will serve perfectly well - in which to plan your next study tasks. The aim should be to set tasks that are attainable within the limits of the session but which will stretch you to the full. At the end of the study period tick those items that have been accomplished. If you have over-estimated, carry forward any outstanding work to the next study date, together with the new tasks to be tackled during that session.

Typical entries might look something like this:

Date	Time	Task	Accomplished
3.6.02	7-9 p.m.	Sec.3 Section 2 p23-28	'Intro. Sociology' p.23-25 p26-28 C.F.
4.6.02	7-8 p.m.	p.26-28 'Intro. Soc.'	Essay Outline

A study diary always planned one step ahead has several merits:

- ❑ You can start work immediately
- ❑ You are aware of your overall progress
- ❑ Reviewing past work is made easier
- ❑ Every session ends with an emphasis on what you have accomplished, so that your motivation is constantly reinforced.

TIME MANAGEMENT

It is important here to emphasise the idea of time management. When you start using a desk diary you will find there will often be a problem of priorities. Questions like the following will occur and may be a cause of anxiety: there is more than enough to do, what should I begin with? Or 'should I begin another piece of reading or begin writing my essay?' Elsewhere in this course handbook you will find detailed practical suggestions for particular study problems associated with time management. In the next paragraph or two I want to suggest some general principles which are useful if time is to be used more profitably.

Firstly, when you have decided on your priorities for a particular week, ensure you allocate them enough time and, as far as possible, time in appropriate slots. It is far better to draft an assignment one evening in an uninterrupted session beginning at six o'clock, than in three or four one-hour slots! Planning ahead will minimise difficulties here.

Secondly, when you feel there is too much to do, it is important to decide on the relative importance of your study tasks, and to list them in order of importance (not preference) where there is a simple choice. The next step is then to begin on this first priority and to use your study time wholly to concentrate on it until it is finished. Then move on to the second priority, and so on. You will find this method most appropriate for your weekly planning and a great aid to concentration. If you feel there is no alternative to the task in hand you will be much less likely to move about, butterfly-wise, between various tasks without completing any of them. Moreover, you will find that this method will improve your efficiency quite markedly, and that you are able to achieve far more than you had thought possible.

Thirdly, it is important to realise the worthwhileness of self-monitoring. When you have finished a study period, particularly if you felt it to be especially worthwhile or unworthwhile, try and assess the reasons for this, and resolve to use your time more efficiently next time. Fourthly, ensure you manage your time to include your free time. It is very conducive to working satisfactorily if you feel that you are earning your periods of recreation by achieving your study tasks.

READING

Reading around the subject of the module you are studying, as well as reading on specific topics within the module, is essential to enhance and enrich your understanding of the subject and its context. But where do you start?

SET TEXTS

Start with the set text book(s) and read the introductory chapters that set the scene. You may decide to skim through (see under strategies and techniques on p9) the rest of the book at this stage to establish for yourself what is there and in what areas you need to look for other sources.

READING LISTS

A long reading list may look intimidating but will become less so if tackled methodically. Scan the reading list provided in your study notes and decide which recommendations you will follow up; or you may feel confident enough to make your own decisions, on the basis of most recent publications, suggestions from colleagues or specific subject areas relating to particular topics or course work. Plan your reading, allowing time each week for it. Do not neglect journal articles, particularly recent ones that may contain more up-to-date information or an interpretation or approach of which you should be aware.

FURTHER READING

Whatever you read – text books, articles, items from the recommended reading list - check the further reading or references it gives and try to follow up any suggestions that look as though they may be relevant to your studies.

Your reading will be necessarily determined by availability but be as persistent and adventurous as you can in your search. And, do not forget that for business students there is **no substitute** for reading a quality newspaper - preferably the **Financial Times**.

ACTIVITY 1

Take the reading list for a module you are about to start.

Apply the method described under **Reading List**.

Rewrite your reading list, prioritise it and plan when you will carry out the reading.

HOW YOU READ

Students have to spend a great deal of their time reading, and it is not surprising that they often find it a source of difficulty. 'I can't keep my mind on the book.'; 'I have trouble remembering what I have read.'; 'I read too slowly and will never get through all the necessary texts' are expressions of concern which may well sound familiar.

It is important to realise that you can quite easily improve your reading speed. The ability to speed up or slow down in accordance with what and why you are reading can make a valuable contribution to effective study.

ACTIVITY 2

Read the passage below noting your starting and finishing time. Try to answer the questions that follow and check your comprehension by looking back to see how many you have right. A score of 7 out of 10 is satisfactory – understanding is always more important than sheer speed. Now divide the number of words (approximately 500) by the time taken to read the passage. This will give you an approximate guide to your reading speed. (For example, $500 \div 2$ minutes = 250 words per minute).

The Keeshond Club of Great Britain was formed in 1925 to encourage the breeding of pure Dutch Barge Dogs, known as Keeshonden, to promote the exhibiting of Keeshonden by providing prizes and recommending judges, and to spread information about the breed. In 1925 when the club was formed there was a growing number of kennels breeding Keeshonden, using dogs originally imported from the continent. A need was felt for a co-ordinating body to voice the interests of the breeders and owners. The main aims of the Club were to encourage the breeding and exhibition of Keeshonden, to distribute information about the breed, and to encourage the membership of three categories of owner.

The first category of owners keep a Keeshond as a pet, and are not interested in exhibiting the animal except perhaps occasionally when there is a show in their neighbourhood. For these members receiving information relating to the breed is the most important thing. In return for an annual membership fee they regularly receive a handbook and newsletter that keeps them in touch with fellow owners of Keeshonden and inform them of the activities of kennels and breeders. Their interests are thus served and they are very rarely inclined to take an active part in the organisation of the Club.

The second category of member covers those who are interested in exhibiting the dog, sometimes simply as a hobby, but more frequently because they own a bitch from which they occasionally breed. For this category the Club's activities in providing shows and guaranteeing classes at National Dog Show are of paramount importance. Since such facilities are regularly and efficiently provided, these members rarely attempt to affect the management of the Club. In fact, only about ten per cent of members attend Annual General Meetings and rarely more than 20 per cent of ballot forms for the election of the committee are returned.

The last category of member is the small minority who own commercial kennels, specialising in the Keeshond breed. It is to this group that the continued existence of the Club is of the greatest importance, and not surprisingly these are the members who are anxious to undertake the frequently arduous duties of the executive officers. Indeed, the composition of the committee has changed hardly at all in the last ten years. The financial viability of a dog kennel rests firmly on the prestige attached to winning in the show ring at championship level. Thus for any kennels to be assured of a market, especially in the lucrative overseas trade, it means owning dogs that have acquired fame in National Shows. These also bring the breed to the attention of a wider public thus promoting increased demand. The main decision-making of the Committee centres on the show ring. When, where and how much opportunity for showing will be promoted? How much of the resources of the club will be directed to this end? Who will be recommended to do the all-important judging?

ACTIVITY 2 CONTINUED

- 1) What breed of dog is the extract concerned with?
- 2) When was the Club formed?
- 3) Give one of the Club's main aims.
- 4) Give one reason why members join the Club.
- 5) What do members receive in return for a membership fee?
- 6) What percentage of members attends Annual General Meetings?
- 7) Do a majority of members return ballot forms for the election of the Committee?
- 8) What group of members is most willing to play an active part in the Club's organisation?
- 9) What factor is essential for financial success in dog breeding?
- 10) With what activity is the Committee mainly concerned?

Speeds vary considerably for a passage of this type, the average being about 230-250 words per minute (wpm). If you happened to finish reading in less than one minute and scored well on comprehension, your speed was over 500wpm and you are already doing extremely well. If your speed was below 200wpm a mixture of the following three common faults was probably to blame.

INADEQUATE EYE MOVEMENT

When you read your eyes do not glide smoothly along a line of print but progress in a series of jerks and pauses (fixations) during which a word or group of words are not taken in. Try fixing your eyes on one word of this sentence and you will notice that what you can see (your visual span) includes words to the right and the left of that word. Slow readers make many fixations per line of print whereas three or four are adequate if the visual span is fully used. Fewer fixations make for faster reading, especially if combined with quick rhythmic movements across the page.

REGRESSION

Another common fault is to allow the eyes to go back over words that have been taken in and understood. Try using a pen as a visual aid, moving it quickly and smoothly along the line of print as you read. This will check the tendency to backtrack, help reduce the number of fixations, and encourage a more rhythmic movement of the eyes.

VOCALISATION

Mouthing words as they are read is a habit that inevitably results in slow reading. The only sure cure is to try reading at a speed that makes those movements of the lips or vocal muscles impossible.

Awareness that you can read faster and regular practice at doing so is the only way to improve reading speed. If you have calculated that you are reading below 250-300 words per minute it would be a very good idea to practise regularly, perhaps ten minutes a day for the next few weeks. Even if your speed is well above average, time spent in this way will certainly not be wasted. This is a good opportunity to involve family and friends, as it is easier if two people work together, taking it in turns to time and test each other for comprehension. Use light reading material such as newspaper or magazine articles. Calculate your speed in words per minute by multiplying the number of lines read by the average number of words per line, dividing the total number of words by the number of minutes taken. At the end of the reading see how much you remember or, better still, ask someone to test you.

Do not become obsessed with speed for its own sake. Be aware that you can and must adjust the speed at which you read in accordance with the type of material and in the light of the purpose for which you are reading. Sometimes it is necessary to progress slowly and deliberately while on other occasions a much faster speed is desirable.

STRATEGIES AND TECHNIQUES

When studying always treat reading as a highly active process in which you must become totally involved. Two strategies can help you achieve this active involvement. Both require flexible reading speeds, and the practice of three techniques, sometimes referred to as **skimming**, **scanning** and **sampling**.

Skimming is unlike fast reading since it involves making full use of your visual span - up and down as well as across the page. To get some idea of your visual span, fix your eyes once again on one word of a sentence. This time notice that you can be aware of words above and below as well as to the right and to the left of the word chosen. When reading you normally narrow your attention to a single vertical line of print, but when skimming you must open your awareness to the five or six lines that fall within your reading span. This enables your eyes to move very rapidly down the columns of print. Skimming is an essential ability when your reading purpose is simply to get a general idea of what there is on the page.

Scanning proceeds in much the same way but here the purpose is the search for a particular item of information. The question you want answered must be fixed very firmly in mind before running your eyes as quickly as possible down the page. You must refuse to be diverted by anything but the information for which you are searching. The ability to scan material quickly for essential items can save you a great deal of time and energy.

Sampling is a way of getting an advance 'taste' of reading material. Information is usually concentrated at the beginning and at the end of any piece of writing. So, when sampling a text you should concentrate your attention on the first and last few sentences of a paragraph; on the first and last paragraphs of a chapter; and on the first and last chapters of a book.

FIRST READING STRATEGY – OVERVIEWING

Often you are not sure how much time should be given to a particular text or even whether it is worth your while reading it at all. The mere fact that a book is about your subject, or appears on a reading list, does not guarantee that time can profitably be spent studying the volume from cover to cover. When in doubt always submit the book/article/paper to an overview:

- ❑ Check the date of publication to see whether information is up to date
- ❑ Read what the publisher has to say on the book's cover and what the author has to say in the introduction. This will give you an idea of the book's general purpose and the author's attitude to his subject matter. Fast reading is fully appropriate for this task
- ❑ Read rather more slowly through the table of contents to get an idea of the book's scope and organisation
- ❑ **Scan** the index for a particular topic that you feel is important and check the number of page references listed
- ❑ **Skim** through the book glancing at words, headings, and illustrations that catch your eye in order to get an overall 'feel' for the book
- ❑ **Sample** any chapters that look particularly interesting by reading the first and last paragraphs together with summaries if supplied. Fast reading is again appropriate.

Overviewing, which with practice can be carried out very quickly, can save you a great deal of time by indicating whether the book or article is suitable for your purpose. You may, for example, decide that little will be gained from devoting time to it at this stage or that just one or two chapters will repay careful reading. You should also get into the habit of overviewing all prescribed reading for your course as a preliminary to careful study of these texts.

ACTIVITY 3

Take any textbook that you have to hand and carry out an overview, being careful to go through all the actions listed above. When skimming and scanning it is a good idea to use a pen as a visual aid. Fifteen minutes should be enough for this task.

SECOND STRATEGY – READING TO LEARN

This strategy is appropriate for all material such as study notes and set textbooks that you wish to grasp and retain. Always overview such material, in the way described above, as a preliminary to 'reading to learn'.

- ❑ Your study diary will remind you of your current reading task. Slip a bookmark into the spot that you aim to reach, then leaf through the pages, skimming and sampling as you go, and paying particular attention to headings and summaries and to all graphic material such as illustrations, tables and charts.
- ❑ Next, ask yourself what you already know about the topic that you are about to study. Take only two or three minutes, jotting down a few key words. This is an important step in the strategy because it is much easier to understand and retain new material when you can actively relate it to the knowledge you already have.
- ❑ Then ask yourself what you want to find out from your reading, again jotting down a few key words. If you have an assignment to write based in part on the material to be covered in a study session, check on the question before you begin reading. Once more you need only take a few minutes but it will be time well spent. Students who read with a specific purpose in mind are prepared for understanding and retention.
- ❑ Next, read through the entire section at a speed that permits comprehension. As you read, use a highlighter or make a straight mark in the margin against all material which seems important and a wavy line in pencil against any material you find difficult. If there are any words you are unfamiliar with and cannot understand from the context, underline them. I am of course assuming that the book belongs to you and that you are free to mark it in this way!
- ❑ Now read the entire passage again, paying careful attention to the sections you have marked. Make outline notes (see next section) as you proceed. It may well be necessary to go over the difficult parts very slowly, perhaps several times, before they are fully mastered. If the meanings of the words you have underlined are still unclear, check them by reference to a good modern dictionary that should be kept always on your table. Expanding your vocabulary is an essential part of increasing your reading skills.

- At the end of this concentrated reading jot down, using key words only, all the main points that you can remember. This must be done from memory. Do not look back at the text and do not refer to your notes, until you are ready to check the effectiveness of your recall. If you have remembered very little you need to read the material again. If, however, you have remembered most of the essential points you are ready to proceed to your next study task, assuming your notes are adequate. Finally, turn to your study diary and tick the appropriate task that you have now accomplished.

The merit of this strategy is that the emphasis throughout is on activity and involvement. If you follow it carefully your mind will be kept so busy that it simply will not have time to wander off into some private day-dream of its own devising. Furthermore, you are safe in the knowledge that you are using your study time effectively.

TAKING NOTES

From time to time you have been asked to stop and carry out an activity, and review or anticipate the material discussed. This may already have started you on taking notes. Knowing how to take notes arises from understanding why it is important to do so. For this you need to grasp the overall function that note taking plays in effective study.

ACTIVITY 4

Think of three good reasons why you might need to take notes.

Try writing these in note form.

AN AID TO CONCENTRATION

Unfortunately it is all too easy to lose the thread of a lecturer's argument, or find yourself nodding asleep over the book in your hands. If, on the other hand, you regularly take notes you will be giving the book or lecture your fullest attention.

AN AID TO RETENTION

The taking of notes helps the coding that must take place if information is to be successfully transferred from short-term to long-term memory. This point will be clearer when you have studied the next section that is devoted entirely to 'Memory'.

AN AID TO REVISION

Notes provide a record of the course you have followed to which you can refer back later in your studies.

They are also useful in revising for an examination at the end of a course of study.

Your reasons might have included three points: these are three good reasons for taking notes. Bear them in mind as we look at answers to the question: 'How should I set about taking notes?'

USE YOUR OWN WORDS

If note taking is to function effectively, there is one rule that must be carefully observed; **always convert the information you are recording into your own words**, except where the material must be learnt by heart (e.g. lists or formulae). If you do not use your own words, you will be passively recording information without making an effort to understand it and note taking will serve no useful purpose.

ORGANISE AND DISPLAY

If notes are to be suitable for revision purposes, they must be clear and concise. Imagine for a moment that someone gives you a story to read that you are required to retell the next day. How would you go about it? One thing is certain - you would not try to learn the words of the story by heart. Instead you would concentrate on the story's key points: the names of the characters, the outline of the plot. You would know that these bare bones would enable you to flesh out and reconstruct the story when it was your turn to tell it. The same principle applies when taking notes at a lecture or from a book. It is only necessary and desirable to note the key points and the outline of the information you are being given.

When making notes, use numerals 2, 3 and so on to indicate the main points; keep upper-case letters: A, B, C and so on, for subsidiary arguments, and lower-case: a, b, c and so on for supporting material. This should suffice to organise all but the most complex material into appropriate headings and sub-headings. If you find that you need still more divisions make use also of Roman numerals: I, II, III and so on or lower-case: (i), (ii), (iii) and so on. However, if the material is that complex it would almost certainly be preferable to use graphic representation in the form of tables, graphs and charts.

Make sure also that you have clearly noted the source - author, title, date, publisher - nothing can be worse than returning to pages of notes and wondering where they came from!

You should create a body of:

- ❑ Concise notes
- ❑ Relevant but not too copious photocopies
- ❑ Cross-references to other reading/lecture notes.

ABBREVIATE

Since notes should always be concise it is sensible to make use of standard abbreviations. The following are some of these:

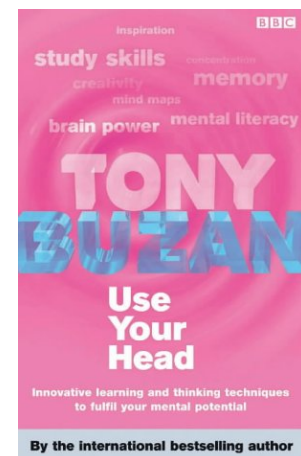
& - and; n.b. – note well; e.g. – for example; ∴ - therefore; i.e. – the is; > - greater than; cf – compare; < - less than; = - equals.

It is also worthwhile finding ways of abbreviating expressions and items that crop up repeatedly in your work. Good ways of doing so are by the use of capitals, by omitting syllables and by shortening endings.

'PATTERN NOTES'

One way of dealing with note taking has been suggested by the writer Tony Buzan in a series of television programmes (Buzan, T, (2003) *Use Your Head*, 6th edition, BBC Consumer Publishing). He recommends placing the topic of lecture or chapter in the centre of a radiating pattern of linked words and phrases, which enable the relationships between ideas to be grasped as a whole. Only key words, written in capitals, are used so that the process can be carried out quickly and easily. An example of this method is given below.

Students with strong visual imaginations certainly seem to benefit from this practice and it would be well worthwhile experimenting to see if you find it effective. 'Pattern notes' seem to me to be an inadequate substitute for well-organised outline notes when the purpose of note taking is to produce a permanent record for revision. They are, however, a useful supplement and a marvellous study aid. I particularly like to use them whenever it is necessary to jot down a number of key words and phrases; for example, at steps b, c and f of the 'Reading to Learn' strategy described earlier.

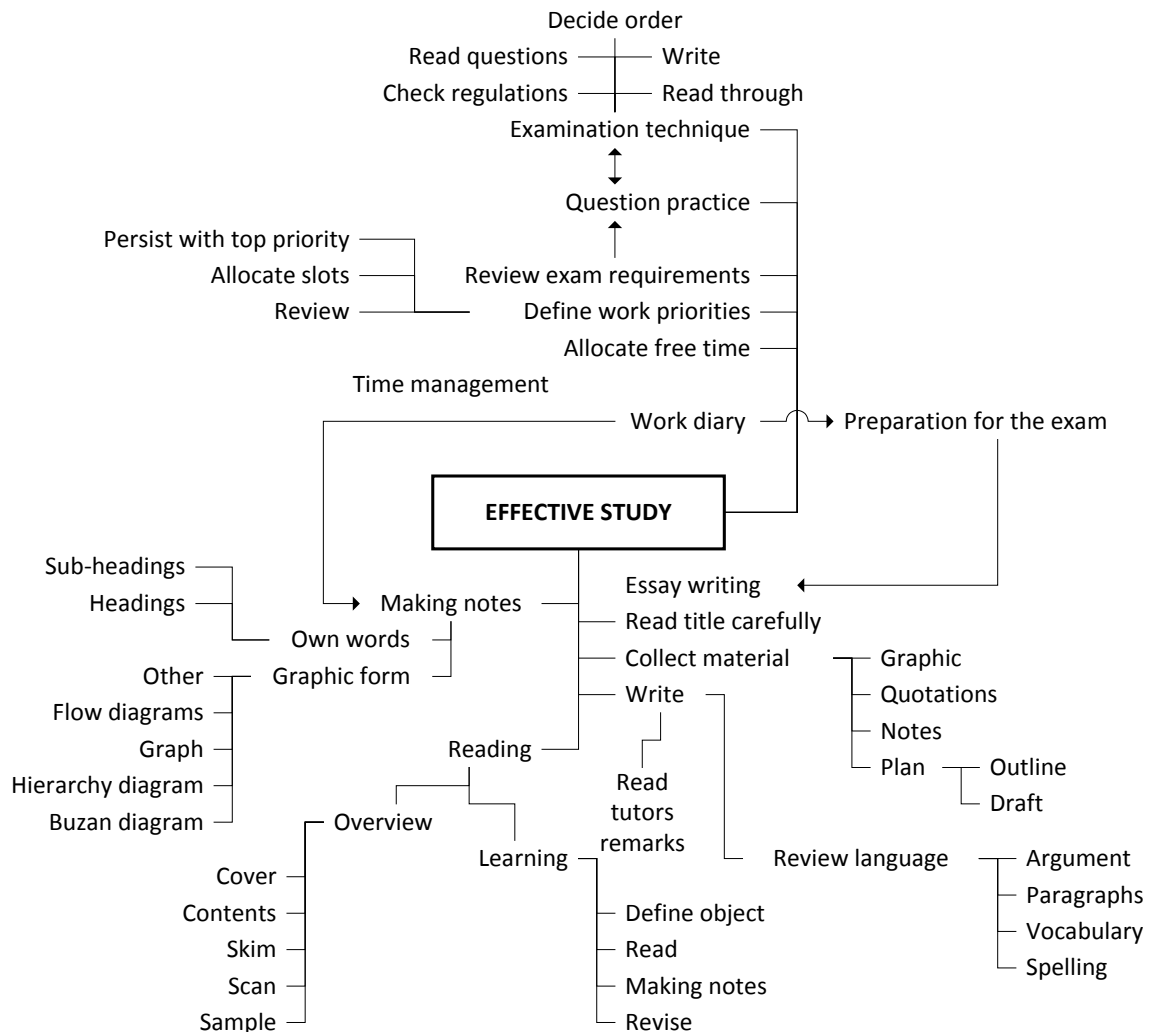


If you find the technique useful, why not practise when you listen to the news or a talk on the radio. You will soon discover the strengths and weaknesses of the method this way.

ACTIVITY 5

Try constructing 'pattern notes' that indicate you have understood and can recall the main points on note taking given above. Using my example as a model print the phrase **taking notes** as your centre point and structure your ideas on lines that radiate from this centre. Tony Buzan recommends working very swiftly in order give full rein to the mind's ability to generate and recall ideas.

(Do not continue until you have completed this activity.)



EQUIPMENT FOR NOTE TAKING

You do not need an elaborate filing system. The following items should be sufficient to enable you to take notes and to store them in an efficient and orderly manner.

- ❑ A good supply of standard A4 paper, punched at the side ready for filing. Always start a new set of notes on a new page, with a clear heading, the date and details of the source from which you obtained your information
- ❑ An A4 loose-leaf, hard-back ring binder for each subject you are studying. This is where you will keep your notes and essays. Stationers will supply you with tabulated paper-dividers to help you organise your work. The advantage of the loose-leaf system is that you can take out, add to, or rearrange your notes very easily when necessary
- ❑ Some A4 stiff-paper wallets, folders and envelopes for the storage of articles, leaflets and so on. Remember to label the outside of each one very clearly so that you have no difficulty in locating items quickly
- ❑ Plenty of ballpoints, pencils, fibre tips, including a variety of highlighters

- ❑ Small notebooks for miscellaneous items. Some students prefer to use cards (3" x 5" or 4" x 6") for the noting of small items for information. These can be useful when organising material in preparation for essay writing but remember to record the source of each item: Author, Title; Publisher; Date; clearly at the top of each card
- ❑ You may wish to 'colour-code' your materials. A mark in felt-tip pen in the top corner of a page of notes identifies the file colour of a particular subject. Your calendar can be marked in these colours, corresponding to the different subjects on your timetable.

TO BE ATTEMPTED AT THE END OF SECTION 2

I would like to use this Assignment to:

- 1) Help you clarify your wishes and difficulties with regard to study
- 2) Ensure you have understood the first two sections

Write between 500 and 1,000 words covering as many of the following points as you wish:

- 1) Why do you want to study?
- 2) How are the subjects you are planning to study related to your everyday life?
- 3) Describe your long-term plan of action for study.
- 4) Will 'finding the time' be difficult? If so, how do you intend setting about doing so?
- 5) How do you think your plans will affect other members of your family?
- 6) Where are you going to study? Does this present any problems?
- 7) Do you still have any study problems that the handbook has not yet helped to solve?

SECTION 3 – MEMORY

'Take the opportunity offered by seminars to meet fellow under-graduates. This is important because it dispels the idea that one's own troubles and problems are unique - they rarely are.' Hilary Sagovsky, BA English 1st class Hon (London) through distance learning.

INTRODUCTION

Many students are concerned that their memories will let them down in preparing for an examination. Because of this it makes sense to spend a little time considering this vital subject. This section is divided into three parts. The first looks at how memory works.

WHAT IS MEMORY?

'Memory' is a general term for a capacity present from birth that shapes and gives meaning to our lives. Without memory you would have to respond to each and every feeling, sight and sound as if you had never experienced it before. The world would seem meaningless and chaotic. If you think of your memory only in terms of an annoying inability to remember faces, or names, or figures, you are doing it an injustice. Instead, think of memory as enabling you to lead a varied, meaningful existence. You should remember that your capacity for remembering is vast. Imagine having to write down even a fraction of the information stored in your brain and you will be aware of the extraordinary richness and power of memory.

THINK POINT

Select an incident that has happened to you recently, perhaps a party or a visit to friends. Try to remember as much about it as you possibly can - what you saw, what you heard, what you ate, what you felt, what you said and so on. Most people are surprised at how much detail they can remember when they really try.

There are at least three ways in which taking a more positive attitude towards your memory can help you as a student.

- ❑ You will have a greater expectation of what your memory can achieve. On the whole we accomplish those things that we believe we can do. If you constantly think of your memory as poor you are unlikely to use it fully
- ❑ If you believe that you can and will remember, you will be much more relaxed and confident. Tension and stress work against your ability to remember. If you are relaxed at your ease, you are more likely to succeed
- ❑ When you are confident about your ability to remember you are more likely not only to remember but also to look for ways to use and develop your memory.

HOW DO WE REMEMBER?

Basically, remembering consists of three main stages: registering, recording and recalling.

REGISTERING INFORMATION

When a number of people are asked to remember an event that they have experienced together - perhaps a street accident that they have witnessed - the accounts that they give rarely agree. This is because out of all the sights, sounds, smells etc., that constantly bombard our senses, we only register and remember those to which we consciously pay attention; and it is unlikely that any two individuals will focus attention on identical aspects of a scene. Thus the car enthusiast notices and remembers seeing an Alfa Romeo, the animal lover has no memory of the car but remembers seeing a small dog, and so on.

You pay attention most readily to those things that interest and excite you. Even someone who habitually claims to have a bad memory for faces will have no difficulty in remembering the face of someone they have long wanted to meet! We also find it easier to pay attention to information about which we already possess some knowledge. The more you know about a subject the easier it is to acquire still more information about it. If you are having difficulty with a completely new course of study, take encouragement from the fact that as you start to build up some basic knowledge of this new subject you will find it progressively easier to concentrate upon the material you are required to learn.

RETAINING INFORMATION

The evidence of psychological research is that we possess a short-term memory and a long-term memory.

The second phase of memory is the process of storing and retaining information. An example of a short-term memory is the telephone number that you only need to ring once. You remember it just long enough to dial the number and then promptly forget. An example of a long-term memory might be your own telephone number that you remember without difficulty for years.

SHORT-TERM MEMORY

All information that is fully registered passes first into short-term memory. However, short-term memory is limited in capacity.

ACTIVITY 1

Read the following numbers once. Cover the page and immediately write the sequence down from memory.

7 9 5 8 1 5

Now do the same with:

3 8 7 2 4 9 7 1 2 6 8 1

The first number is within the capacity of the average short-term memory and you probably recalled it spontaneously, although you may well have forgotten it by now! The second number exceeds that capacity and almost certainly proved difficult to remember. The average short-term memory has room for some 6 to 7 items of information. One trick when trying to remember a sequence of numbers exceeding that limit is to group the series as follows:

38 72 49 71 26 81

With practice you can even group in threes:

387 249 712 681

extending the storage power of your short-term memory considerably in the process!

Short-term memory, as the name suggests, is also limited in duration.

ACTIVITY 2

Read the following number once but wait two minutes before attempting to write it down. During that time you will find that you automatically try to rehearse the number by repeating it over and over in your head. Prevent yourself from doing so by thinking about something else or by reading on down the page.

5 9 4 7 6 3

If you managed to stop yourself from holding the numbers in short-term memory by mental repetition you probably failed to remember the sequence. This is not surprising since most unfamiliar material that is not rehearsed is lost from short-term memory in less than 20 seconds.

LONG-TERM MEMORY

Long-term memory is very different from short-term. Do not ever worry that there is not enough room in your head for all the material you are expected to learn! Your brain has an extraordinary ability to absorb and retain information.

How do you ensure that your memory will retain for a long period the information you wish it to? Here is an initial rule:

Do not try to memorise material that you do not understand.

Did you remember that this reference occurs in the section 'Taking Notes'? I suggested that when you take notes you should (a) use your own words; (b) search for and outline the key points; (c) organise these in a way that displays the structure of the material you are studying. Taking time to make sure you understand your study material in this way makes it much more likely that the information will be safely transferred to long-term memory for retention.

RECALLING INFORMATION

The third and final phase of remembering occurs when information that has been registered and retained is later recalled.

Understandably, this is the process that worries students most; there is little consolation to be gained from the notion that you have retained information if you cannot recall it when you need to! Two familiar examples illustrate how information can be present in long-term memory and yet evade attempts to bring it consciously to mind:

You call into the library only to find to your annoyance that you simply cannot think of the name of the author to whom you wish to refer. The name is 'on the tip of your tongue' but you cannot recall it. That evening, when you have long ceased searching your memory for the name, it suddenly pops into your mind.

This example suggests that memory traces of information you want to be able to recall need to be regularly activated and reinforced. You do this whenever you:

- ❑ Think about the material
- ❑ Try to relate it to knowledge you already possess
- ❑ Make use of it by applying it to other areas of experience.

An excellent way of making sure that reinforcement occurs is to carry out regular reviews of study material, plus deliberate attempts at conscious recall. So:

- ❑ Always start a study period by jotting down what you can recall from your last study task. (A quick glance at your study diary will remind you what this was.) If you concentrate on key words and phrases, you need only take a few minutes to do this. Then check your attempt at recall against your notes, correcting anything that is wrong and adding anything you have forgotten
- ❑ Always end a study task in a similar way by testing your recall of the material just studied and by making sure that the note(s) you have prepared are adequate
- ❑ Try, if you can, to do something similar at the end of each week, for instance, test your recall of the entire week's work. Again, jot down words and phrases, perhaps in the form of a 'Buzan pattern' (see Section 2). When you have tried your best to recall as much as possible, check what you have written against your week's notes, registering any omissions and mistakes. The whole operation need only take about fifteen minutes
- ❑ Travel time or occasional spare moments can be used too to run over in your mind the main points from a study session or a particular article you have recently read. Gaps and unclear issues often show up this way and you can check up on them later.

In my experience students find it difficult to summon up the self-discipline needed to carry out these short but regular tests and reviews. This is a pity because there is no doubt that they are the best possible aid to remembering the material you are studying and for making sure that it is kept at a level where it is available for speedy recall.

ACTIVITY 3

Make up your mind that you will get into the habit of practising active recall. Start now by jotting down as many key points as you can remember on the subject of 'Memory'. Then check your recall against my summary below.

- ❑ All human beings possess an extraordinary ability to remember, and recognising this will help you to make good use of your memory

- ❑ Memory has three phases – the 3 Rs of Remembering; Register; Recall
- ❑ Registering information involves paying full attention
- ❑ Retaining information occurs in two stages:
- ❑ Short-term memory – limited in duration and capacity
- ❑ Long-term memory – more or less unlimited
- ❑ If material is to reach long-term memory it must be worked at long enough and often enough for transfer to take place
- ❑ Do not try to memorise material that you do not understand
- ❑ Memories need to be constantly activated and reinforced
- ❑ Carry out regular reviews by testing recall of material at the start and end of every study task and at the end of every week.

MNEMONICS

‘Mnemonic’ (pronounced ni-mon’ik) is an awkward word with a simple definition:

Mnemonic = a device to help memory.

The practice of mnemonics has an ancient history. For well over 2,000 years there have been individuals who have startled their companions, and sometimes made their living, by demonstrating prodigious feats of memory. This ability rests on the mastery of a variety of mnemonic techniques. In addition to certain well-established and often intricate systems exploited by ‘memory men’ through the ages, there are some very simple memory aids that may well be familiar to you from childhood.

RHYTHM AND RHYME

I wonder if you still remember the number of days in each month by mentally chanting ‘30 days hath September, April, June and November...’ or avoid common spelling mistakes by murmuring ‘i before e except after c’. Rhythm and rhyme give material pattern and structure and are thus powerful memory aids. Think how easily we remember nursery rhymes and the lyrics of popular songs.

ACRONYMS AND ACROSTICS (ABBREVIATIONS AND WORD-PUZZLES)

The first letters of words that you are having difficulty in remembering can act as prompts helping the words to be recalled in their entirety. Acronyms and acrostics are memorable codewords and phrases that take advantage of this fact. Here are two examples:

Harry Haigh Likes BBC News on Friday Nights - are Acronyms for the first ten elements of the periodical table in Chemistry: Hydrogen; Helium; Lithium; Beryllium; Boron; Carbon; Nitrogen; Oxygen; Fluorine; Neon.

ASSASSIN - an Acronym for: A System for the Storage And Subsequent Selection of Information.

Richard Of York Gave Battle In Vain - an acrostic for the colour of the spectrum in sequence: Red; Orange; Yellow; Green; Blue; Indigo; Violet.

Devices such as these are fun to construct and very effective memory aids.

ACTIVITY 4

Try creating your own acronym or acrostic to help remember the following capital cities:

Amsterdam; Oslo; Copenhagen; London; Stockholm.

If the cities have to be remembered in that particular order an acrostic would probably work nicely - perhaps something like: Any Old Cats Like Sprats - I expect you would have thought of a better one! If the order is not important I would suggest COALS - which has the advantage of brevity; instead of five cities you only have to remember one word!

Troublesome facts that elude your memory can often be 'fixed' quite easily by inventing a simple mnemonic. 'Spring forward fall back' is an aid to remembering which way to wind the clock for daylight saving. 'The Principal is a pal' helps to avoid confusing the spelling of principal and principle. Can you see how 'Stalagmites grow from the ground but stalactites grow from the ceiling' works as a memory aid? Something you already know - the spelling of ground and ceiling - is made use of in order to remember something new. This is a principle often exploited by mnemonics.

In addition to specific purpose mnemonics of this kind there are a number of more general systems that can be applied over and over again to different sets of material. I am going to describe just two of these: the Link System and Number-Rhyme, which is a Peg System. These two are particularly easy to master. They also illustrate very well the principles upon which all mnemonic systems are based. But first I would like you to try a simple memory test. Follow my instructions carefully.

THE LINK SYSTEM

This system attempts to make memorable connections between separate pieces of information. When using it you must (a) form each item into a vivid mental image; (b) link each image with the image that follows creating a composite picture. In this way you forge a visual link between items one and two; then between items two and three; then between items three and four; and so on. Take, for instance, the following ten words:

- | | | | |
|-----------|-----------|------------|-----------|
| 1) Flower | 2) Sea | 3) Foot | 4) Piano |
| 5) Table | 6) Horse | 7) Feather | 8) Window |
| 9) Egg | 10) Child | | |

Were we to use the system to remember these, we might associate the words in some way like this, for instance:

- | | | |
|-----------|----------|--|
| 1) Flower | 2) Sea | Picture a huge scarlet flower floating on a bright blue sea. |
| 2) Sea | 3) Foot | Picture yourself by the sea, dipping your foot, which is twice its normal size and still growing, into the water. Notice the salty smell of the sea and the tingling coldness against your skin. |
| 3) Foot | 4) Piano | Picture a grotesque foot thumping on the keys of a massive piano - hear the noise it makes. |
| 4) Piano | 5) Table | Picture a black grand piano, balanced precariously on a small pink table. |
| 5) Table | 6) Horse | Picture yourself climbing onto a rickety table in order to mount a colossal white horse. |

If you use this method, be sure to make your images clear, simple and bizarre. Now that the list is structured into a pattern of related images notice how easily you can run through it in your mind getting every item in its correct place.

PEG SYSTEMS

Peg systems take longer to master than the simple link system but they are also more versatile. There is one variation that assists recall of over a thousand items, as well as numbers and dates. We will be content, however, with the Number-Rhyme System that can be mastered in about five minutes and illustrates very nicely how all Peg Systems work. First you need a list of peg words. Once these are memorised they act as mental hooks on which to hang the items that you wish to remember. In other words you remember new information by associating it with what you already know. The pegs remain the same and can be used over and over again to help memorise any list of ten items in sequence.

NUMBER-RHYME SYSTEM

In this system each number from 1 to 10 is associated with a rhyming object, as follows:

- | | |
|-----------|-----------|
| 1) BUN | 2) SHOE |
| 3) TREE | 4) DOOR |
| 5) HIVE | 6) STICKS |
| 7) HEAVEN | 8) GATE |
| 9) VINE | 10) HEN |

Commit these to memory, seeing each object very clearly in your mind's eye as you do so. You will find that because number and word rhyme, you can memorise them very quickly. Do you know the nursery rhymes: 'One, two, Buckle my Shoe' and/or 'This Old Man, He Played One'? If so, you have very little to memorise.

The next step is to take the list of arbitrary words you wish to remember and this time form clear, mental pictures that create a strong visual association between each item and the appropriate rhyming word/number.

Taking our original list, this would give:

- 1) Bun - Flower See a huge red tulip sprouting from a giant currant bun.
- 2) Shoe – Sea
- 3) Tree – Foot
- 4) Door - Piano and so on.

If you get into the habit of forming really vivid mental images you will find that any list of items can be memorised in sequence with ease. The advantage over the link system is that items can also be recalled correctly out of sequence without having to run through the complete list. If you are asked for item 8, for example, the rhyming word 'gate' will spring immediately to mind, together with its associated image of the word to be remembered.

With a very little practice you will find you can memorise ten items effortlessly and recall them with ease. Most people are intrigued by memory systems, so try introducing the Link and Peg techniques to family or friends, and experiment with them together.

MNEMONICS AND STUDY

I wonder if you are thinking 'How can all this help me? Surely mnemonics are amusing tricks that have little to do with serious study?' It is true that when you attend seminars and study your books much of the information you have to master is abstract and complex. For material such as this mnemonic techniques are certainly inappropriate. But almost every subject of study also includes straightforward facts that you need to memorise, for example; different motivational theories; rules for good market research questionnaires; the layout of a Balance Sheet; and so on. First, always make sure that you understand material of this type and can see how it fits within the overall structure of your subject. Then select the least tedious and most effective method of coping with your learning task. If you can make use of one of the systems described, or can invent a mnemonic device to suit your particular learning problem, so much the better.

LEARNING PRINCIPLES

Mnemonics, long thought of as mere tricks, do in fact use well-attested principles of learning, such as we have discussed in earlier parts of the Handbook. Here are some of these:

Attention and interest: when work is interesting and rewarding it is easier to pay attention and remember. Mnemonics, like note taking, can put the learning material in an interesting and memorable form.

Association: your brain remembers things better when they are integrated into a large whole or linked to other items of information. So always look for links, and try to associate new material with knowledge you already possess.

Visualisation: you will often have to learn material that you cannot visualise in this case mnemonics, or other means of relating the material to your visual memory, can be useful.

Meaning and understanding: always try to understand. You can do this by:

- ❑ Thinking, talking and asking questions about the material
- ❑ Relating it to the knowledge or experience you already have
- ❑ Writing about it, and using it to answer questions and problems.

Organisation: your memory works best when it is well-organised, so always try to discuss the logical structure of ideas that shapes the material you are trying to read. This will help you to understand and remember.

SECTION 4 – THINKING AS A SKILL

Most people have an idea of themselves and of other people as thinkers. We think of so and so as a prudent, cautious type. What we reflect upon less often is whether and how far we can change and improve the ways in which we think. Instead we tend to accept certain labels. However, consider this analogy: if a tennis player has a weak forehand he will practise consistently, and, with good coaching, will improve. Similarly, with thinking: to a large extent effective thinking is a skill that can be acquired and practised like the other skills that this handbook deals with. This section takes a close look at how you can improve your effectiveness as a thinker.

THINKING AND INTELLIGENCE

The physicist Albert Einstein once remarked that what distinguished his thinking capacity from that of other people was that the average person probably used only 10% of his or her intelligence most of the time, whereas Einstein reckoned that in his case the figure was nearer 20%! His remark aptly illustrates the difference between potential and performance. The problem of underachieving, of not realising one's full potential, is made worse by the widespread confusion over the relationship between intelligence and thinking. In fact thinking is the practical application of our intelligence for a particular purpose. Many people never realise their full thinking potential because they assume it is fixed, so, for instance, intelligent people persist in poor, undisciplined habits of thought, whereas people who are thought of as less intelligent never develop their ability. In both cases the reason is the same: they have not learnt how to use their intelligence, and have assumed they cannot improve how they think.

ORGANISATION

The prerequisite of effective thinking is organisation. We must think in an appropriately organised way.

ACTIVITY 1

Suppose that you have been asked by friends who are planning to marry in three months' time to organise their wedding. Giving yourself five minutes, quickly jot down everything you will need to think about, no matter how important or trivial. Simply make a note of whatever comes into your head.

Now we can set about structuring the thinking involved. Divide your list into three categories, headed 'Essential', 'Important' and 'Desirable'. What is to be the guideline for deciding which item in your list falls under which heading? In this case the answer seems straightforward. 'Essential' items include everything without which the wedding cannot take place: booking the venue, for example, and ensuring that the bride and groom actually arrive there at the appointed time. Under 'Important' would come, say, the printing and despatch of invitations.

Now you can proceed to the next stage, that of making a timetable. Since time is comparatively limited, you will have to start attending to the arrangements within the next few days. So, first decide in which order you are going to take them. (Give yourself two minutes this time).

You will probably find that, broadly speaking, you have decided to give your attention to the items in the order of their importance (i.e. what is essential gets dealt with first). If your thinking is directed towards a practical end, then sorting out your priorities is often the crucial first step to ensuring you are an effective, efficient thinker. The task of organising a wedding, however, will not be disposed of within a few days. In many cases, the arrangements will take the form of a number of stages that need to be followed and monitored carefully.

Take a large sheet of paper, and outline a calendar for the next three months. Then take three pens, each of a different colour, and assign each of your first categories (Essential, Important, Desirable) a different colour code. Now, allowing yourself ten minutes, take each arrangement in turn and work out what is going to be involved in ensuring that it is seen through to a successful conclusion. In the case of the invitations, for example, several stages, spread out over a number of weeks, will be involved. You will have to find a printer; choose a style; agree it with the bride and groom; pay for the cards (and make sure you get reimbursed); collect them; send them; and keep yourself up to date with the number of replies accepting, so that you will be able to inform the caterers of any dramatic change in the total number of guests expected. As this is a hypothetical exercise - except for any of you who have actually been involved in organising a wedding - you will have to use your judgement and imagination regarding the length of time you think will be required to get things done.

When you have finished, you will have produced the schedule that will form the starting point of your task. You will also have discovered why most couples like to have a minimum of six months in which to make their wedding preparations!

IMAGINATIVE THINKING

As you will have observed, the above exercise involved little more than applied common sense. But in order to begin the task in hand, you needed to organise your thinking. You cannot think effectively to a specific purpose without fully appreciating what is involved. If your overall aim is to organise a wedding, your immediate objectives will be the 101 things required to realise that aim. And each one of these needs to be carefully thought through. Thus organisation should be the keyword in the forefront of your mind before you embark on any project that is at all complex or demanding. What is necessary in a particular case is that the form of the organisation chosen should be appropriate to the purpose of the task. Here we need imagination. It is important, though, that this term is not misunderstood. Using one's imagination is not to be confused with waiting for inspiration, which may or may not turn up.

We can actively aid our imagination by defining the objects inherent in the task: first, by deciding what is significant about the information in question, and, second, by isolating those features that will draw attention to that significance. If we can successfully highlight these, we will have achieved our overall objective.

ACTIVITY 2

There follows a series of data, presented at random, all of which are related to one central idea. Your task is to determine how each piece of information relates to every other and to the whole, and then to display the pattern of relationships in such a way that another person can quickly grasp the overall picture. Try to devise at least two modes of representation, and allow yourself a maximum of ten minutes to complete the exercise before turning to the back of this section to look at the models suggested.

Data: egg, organism, beak, robin, vulture, vertebrate, feathers, bird, kingfisher, chick.

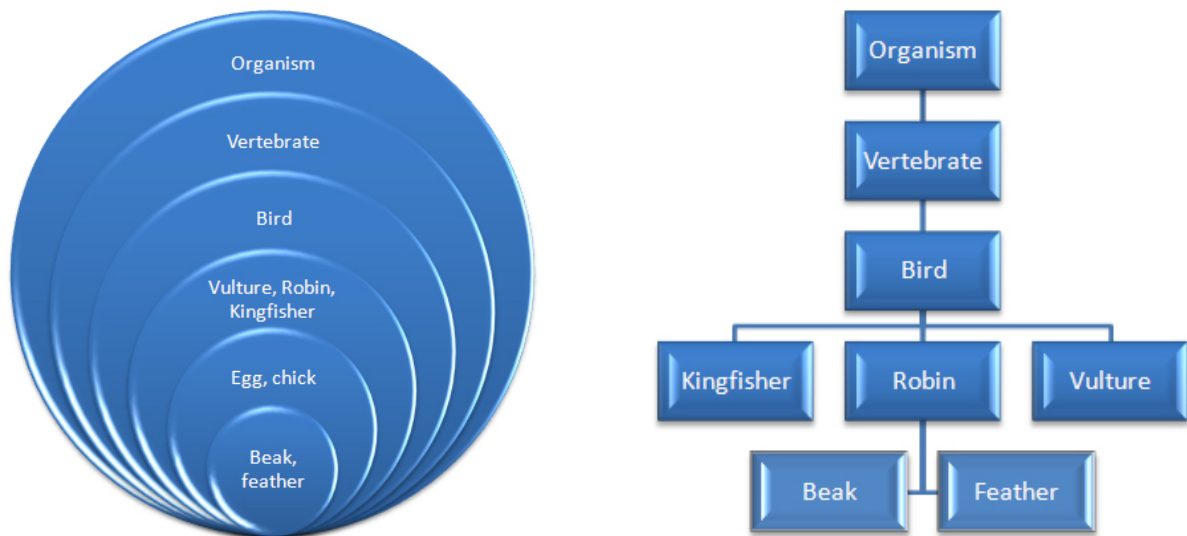
There are of course, other ways of presenting this material. If you were familiar with computer programming you might choose something like a flow diagram as your mode of representation. In this instance that would not be particularly appropriate, since the purpose of a flow diagram is primarily to indicate sequence (i.e. the order in which things are carried out).

In our example time in this sense is not a significant element. The relationships revolve about the concept of sets, or groupings.

You might say that it doesn't matter whether the chick came before the egg, or vice versa! 'Egg' and 'chick' fall inside a set of attributes (the early stages of bird development) all shared by robin/vulture/kingfisher, which in turn all fall within the category of birds - and so forth. The two paradigms (model answers) suggested are probably the simplest representational devices for conveying this.

There remains the question of the relative merits of their different approaches. Figure 1 in fact does no more than illustrate the 'setting' feature, in a very uncomplicated form. Figure 2, on the other hand, represents this feature as a hierarchical structure. Its superiority over Figure 1 would lie in its value as a tool for comparison. If we were now given a comparable set of unrelated material about fish, by using a similar kind of representation - a hierarchy - we could draw up two diagrams for comparison that would be quickly and easily understood.

FIGURE 1 AND FIGURE 2



So we use different forms of representation to enable ourselves or other people to gain an overall picture of something quickly. We would judge the success of our mode of representation by asking a) does it pick out the significant connections? b) does it highlight those connections to make them stand out from any other information present? c) could the information be used conveniently for comparative purposes? d) can the complete picture be grasped quickly?

ANALYSIS AND SYNTHESIS

The tasks in this unit so far could be seen as examples of analysis and synthesis. Analysis is the ability to see something in terms of its consistent parts. Synthesis is the ability to see how a variety of parts can make a whole! So, for instance, the exercise on the wedding preparations that you did earlier was concerned initially with analysis: with isolating the different features involved in a complex set of affairs, and determining what their relations to one another were to be over a certain period of time. The setting exercise, by comparison, was directed towards synthesis: the task being to present information in a coherent, intelligible form so that the significance of the whole could be appreciated. These are ways of thinking, then, of great importance, which we can practise and improve.

Firstly, it is crucially important for you to use significance as an idea to guide you when analysing texts and constructing answers. Using your mind effectively when studying is not actually very different from employing it effectively when playing a sport, say, or solving a practical problem. To perform well, you must ensure you do not lose sight of your aims: be certain from the beginning you know what your aims are, and what is necessary to achieve them. These priorities will determine the significance of what you read and give a purpose to your reading. Similarly, when you present information, the idea of significance - of selecting and emphasising what is most important for your purposes - should be uppermost in your mind.

THINKING TECHNIQUES

The techniques that this second section of the section examines are thinking tools developed by Edward de Bono, pioneer of the now widely familiar concept of Lateral Thinking.

There is considerable confusion in many people's minds over what exactly Lateral Thinking is, so a few words had better be said about Edward de Bono's approach to thinking before we look at the selected techniques in detail. We tend to possess routine habits of thought, and our responses become instinctive, rather than reflective.

'PMI' is a technique named by de Bono, and it stands for Plus, Minus, Interesting. Like the two other techniques we shall be looking at, PMI is a tool designed to direct your attention, to sharpen up your thinking towards a specific object. The techniques are easily acquired, and can be applied to a wide variety of everyday situations.

ACTIVITY 3

Consider the suggestion that public transport in the major cities of all EC countries should be subsidised to the point where it is free to all users. Giving yourself three minutes, first write down all the positive aspects, the plus points, for the suggestion. Do not allow yourself to dwell on anything apart from the benefits of the idea, and simply note them as they strike you. Then, for a further three minutes, consider the minus points and the drawbacks in the same way. Finally, spend two minutes noting any thoughts or questions prompted by the suggestion that strike you as interesting, but do not immediately seem to be either plus or minus features. When you have finished, and not before, read on.

No two persons' lists will be identical. All the same, you may probably have included under the Plus heading 'reducing traffic congestion': 'lowering pollution levels': 'making more efficient use of oil'; and under the Minus heading 'the funding of this idea would be bound to cause trouble!': 'the residents of these cities would resent visitors receiving the same privilege.' Under the Interesting heading you might have asked 'how would you define what counts as a 'major' city?' and 'would taxicabs count as a form of public transport?'

The fact that each person's list will differ is not important. What matters is that the PMI forms a constructive starting point. Ask yourself frankly whether you followed the instructions, or whether you thought about the proposal, noted down whatever came into your head, and then put each item under the appropriate title. That is not the point of PMI. The point is to scan, to look first in one direction, then in another, and so on. To start by assigning each point a category as you think of it is to defeat the object of the exercise. If a minus point occurs to you while you are thinking of plus points, banish it from your mind. It is a pity if you cannot then remember what it was when you come to list the minus points, but that is less important than doing the exercise correctly.

The underlying aim of PMI is to give a more clear-sighted picture of an idea by exploring it more thoroughly. If you simply jot down a list of pros and cons you are liable to reinforce your existing thoughts on a subject, and not give it your full consideration. Doing a PMI ensures that your ideas do not merely reflect your emotional or subjective attitudes. It is a simple and effective means of approaching a new idea, or a subject or suggestion that you have not previously given any real thought to. You can apply it to matters of importance, or to relatively trivial day-to-day concerns. Its main advantage, then, is that it enables you to reach conclusions based on a thorough exploration of the ideas and facts, not merely on your first or perhaps more characteristic responses.

AGO

Unless you know what you are trying to achieve, even a comparatively simple task can become muddled or confused. So, a second thinking tool is called AGO, which stands for Aims, Goals, Objectives. Using three words that convey the same idea emphasises the question that should be uppermost in your mind if you are to think effectively: What is the point of my thinking at the moment?

De Bono has argued that there are three important reasons for giving ourselves precise objectives in our thinking:

- 1) If we know exactly where we want to go, it is much easier to find our way there
- 2) Without an objective we cannot set priorities
- 3) The objective allows us to evaluate alternative courses of action.

The need for getting clear exactly what one's objectives are could be illustrated by taking the case of a typical small publishing company. The editors are there to find suitable authors and commission books that they feel confident will appeal to the personnel's aim to sell sufficient copies of the books at a price that ensures the company is operating at a profit. The Managing Director of the company is concerned with the overall steady stream of new books appearing and being sold at a profit (i.e. supervising the activities of the editorial and marketing staff), but looking to the company's position in two, three, perhaps ten years' time; deciding how and when it should expand or contract; reviewing the calibre of the employees and planning for their future promotion or replacement as they leave; examining the internal structure of the company, and whether it can be improved; and innumerable other considerations.

In practice, unless the person at the top has a clear conception of what his or her objectives are, subordinates will inevitably be frustrated in achieving their own objectives effectively; and, in turn, unless they know clearly where they are going, their boss cannot depend on the overall future plans working successfully.

Objectives can be broken down into different types. To start with, there are **broad objectives**, long- or medium-term goals. These vary enormously from person to person, and will change as you grow older. If 'being independent of my parents' was a broad objective at the age of 18 and has been achieved by the age of 25, it will be replaced by another: a Masters degree by the age of 33 perhaps.

Second, there are **sub-objectives**, the intermediate points we have to aim for in order to achieve the broad goals. To acquire independence from my parents (to take our example further), I had to move away from home. You might think of sub-objectives as a series of stepping-stones that are there to assist your crossing from where you are now to where you would like to be.

And then there are **moment-to-moment objectives**. Actually to move out of home I need a van and a couple of friends to help me with my possessions. Moment-to-moment objectives are what occupy most of our purposeful thinking, since they are concerned with the here-and-now, the bricks and mortar of constructive action.

CAF

The techniques we have looked at, PMI and AGO, have been concerned with focusing our thoughts on specific objects. The third thinking tool, CAF, is designed to direct our attention in a scan around the matter we are thinking about. CAF stands for Consider All Factors, and like PMI, it encourages us to explore a situation before making a judgement or decision. De Bono suggests the exercise be performed in four stages.

Suppose that a terrorist squad is threatening to blow up an embassy building, together with the staff they are holding hostage, unless their demands are met. How are we to deal with them? In the **first stage** of CAF make an 'open' list - that is, writing down whatever comes to mind about the situation. Every so often, stop, review your list, and see whether what you have already written prompts any additional ideas. In our example such a list might be:

- ❑ The character of the terrorists
- ❑ Their mental condition
- ❑ Their reasons
- ❑ The reaction of the government concerned
- ❑ The supplies of food available
- ❑ How tired the terrorists are
- ❑ The weaponry the terrorists possess
- ❑ The state of the hostages.

These are just a sample of the factors involved. No doubt you can extend the list considerably.

Stage two involves grouping the items in your list under broad headings. We go through each item and as a result jot down some headings, to see how well they work. If some of the factors do not conveniently group together, we can put them under a 'miscellaneous' heading. Thus in the example above, we might draw up the following broad headings:

- ❑ Mental state of terrorists now
- ❑ Mental state of terrorists in the future
- ❑ Physical condition of the terrorists
- ❑ Means of bargaining with them
- ❑ Possibility of attack
- ❑ World opinion

and so forth. Add any further broad headings you can think of, and group all the items you first listed under your headings.

You are now in a position to scan in any given direction - to explore the possibilities embraced by any one of the broad headings. In the case of 'possibility of attack', for instance, the following factors might come under close scrutiny: the location of the embassy; the internal layout of availability of the right type of troops; the firepower of the terrorists; how quickly the operation could be mounted; and so on. At this **third stage**, we are able to start appreciating all the aspects of a situation, and to get some idea of the likely consequences of our decisions.

Choose any **three** of the broad headings you made, and scan the items listed carefully, making notes as you do.

The **fourth stage** is concerned with 'what might have been left out'. The thinking goes through the various stages in an attempt to see if there is any omission. This is a very difficult task because you cannot tell what has been left out until after you have noticed it. Imagine that someone else has provided the lists and that your task is to point out what has been omitted. This often helps you to pick out gaps and omissions.

By now you should be in a position to take a clear-sighted view of the landscape. Like PMI and AGO, the purpose of the tool is to provide you with a basis for constructive action and to minimise the chances of your having neglected to consider important factors. None of these thinking techniques - or anything else, for that matter - will make you a genius. On the other hand, mastering and practising these skills will unquestionably sharpen up your thinking. Since they are easily learnt, and can be used in a wide range of everyday situations, you will have no shortage of opportunity for practising them. Their greatest benefit is the feeling of far greater alertness, and the knowledge that you can focus your thoughts quickly and effectively - which is the key to achievement.

SECTION 5 – REPORT WRITING AND TACKLING CASE STUDIES

The ability to write concise, accurate and logically structured reports is a core skill for managers. For this reason, many of the forms of assessment used in the Faculty of Business will ask you to 'write a report'. This guide will help you understand these requirements.

The Guide is in the format of an open learning self-teach pack to enable you to learn at your own pace, and also to be available as a source of reference throughout your studies. Report writing conventions vary between organisations. **The approaches recommended in the guide, however, follow widely-recognised best practice, and should be followed when writing reports for all course assignments.**

As a result of completing the guide, you should be able to:

- ❑ Plan and gather data for a report in a systematic way
- ❑ Set out a report in a structured manner
- ❑ Write a report concisely and clearly
- ❑ Review and evaluate a report you have written
- ❑ Reference accurately.

The guide is divided into the following sections:

- a) An introduction to report writing
- b) Report structure

- c) Preparing to write the report
- d) Presentation and layout
- e) Writing style
- f) Drafting and completing the report
- g) Appendix 1 – A guide to referencing and citing
- h) Appendix 2 – Report writing checklist

There are a number of activities to complete in each section. It is important that you complete the activities as you work through each section of the Guide if you are to develop your skills. Consequently, it is recommended that you complete activities in the Guide over a number of sessions, perhaps one or two sections at a time, rather than trying to complete it in one long session. A number of the activities require you to review existing reports. These may be ones you have written or ones written by others. You may want to look at the activities now so you can have the necessary papers to hand when you come to each section.

There are also a number of 'Think Points' that will normally be asking you to relate some aspect of the Guide to your own workplace or experiences.

A) AN INTRODUCTION TO REPORT WRITING

WHAT IS A REPORT?

Reports vary widely in purpose, length, layout and style. Within organisations, there are a range of different styles and views of what constitutes a 'good' report. Academic writing can also be presented in different forms. In the Faculty of Business, the requirement is that you use a report style and format to write your assignments.

What should be common to all is that a report is a structured form of written communication, in which information or findings are presented, and a set of conclusions drawn. It will also commonly include a set of recommendations or proposals. A report should present its findings in a clear and concise way, and any conclusions should derive clearly from the findings presented.

PURPOSE

The purpose of reports will vary; the purpose could be one or more of the following:

- To inform
- To provide a basis for discussion and debate
- To sell or persuade.

As with all forms of written communication, before writing any report, it is vital to be clear about purpose.

THINK POINT

What was the purpose of the last report you wrote? If you have not written a report recently (or ever written one), consider a report you have read recently. Was the purpose one of those listed above or something different?

REPORTS FOR ACADEMIC OR BUSINESS PURPOSES

Confusion may arise because you will be using a report format and style to produce your assignments, which are an academic form of assessment. Normally, a report would be used in organisations for non-academic purposes. The issues being reported on are likely to be the same, as your assignments will be dealing with business and management issues.

The reports written as part of your coursework are likely to:

- ❑ Cite sources of information in a reference list, which must follow the Guide to Referencing and Citing (Appendix 1)
- ❑ Describe and justify the approaches to information gathering that you used.

B) REPORT STRUCTURE

The recommended structure for reports is shown below.

TITLE PAGE

The title should clearly convey to the reader the nature of the report. It should also include the name of the author, date written and, if appropriate, details of confidentiality.

CONTENTS PAGE

This should show a list of the sections or chapters with page numbers in the sequence in which they appear. Generally, it will be in this order:

- 1) Executive summary
- 2) Terms of reference
- 3) Background/introduction
- 4) Information-gathering activities
- 5) Findings
- 6) Conclusions
- 7) Recommendations

- 8) References
- 9) Appendices.

EXECUTIVE SUMMARY

This should always be included. The purpose of the executive summary is to enable the reader to get an overview of the main contents of the report without having to read the whole document. The summary should be no more than a page (about 300 words) in length and briefly cover:

- The purpose of the report
- The information gathering methods
- An overview of the conclusions and recommendations.

As what you are doing is summarising all the work you have done and the conclusions you have reached, logically, the Executive Summary cannot be written until the rest of the report has been completed.

TERMS OF REFERENCE

This should provide the purpose/aims/objectives, as well as the scope and limits of the report as specified by the assignment brief.

You may find that as your understanding increases, your original objectives change. In this case, make sure that you revisit the first mention of your objectives and rewrite them in the light of your new knowledge.

BACKGROUND/INTRODUCTION

Background or events leading up to the request for the report and important contextual information e.g. information on the organisation and its management structure (again, this can be written as a separate section if it is necessary to include quite a lot of background detail).

INFORMATION-GATHERING ACTIVITIES

You need to provide a clear description of all the methods used in undertaking the investigation for the report.

FINDINGS

You have two activities to undertake here – the first is to provide the findings, and the second is to discuss the meaning or significance of the findings, using your references as a way to compare and contrast what you have found and what the other authors have said about the issues you have discussed.

Please take care to give clear headings throughout the report, and especially here. These provide a logical structure and help the reader to understand what you are trying to convey.

Please note that describing or stating what you have found (e.g. most of the employees were motivated by money) is not sufficient. You need to show that you understand the implications of this statement (e.g. this contradicts Herzberg's (1968) two factor theory).

Herzberg, F. (1968) 'One more time: How do you motivate employees?' *Harvard Business Review*, Vol.46, No 1, January-February, pp.53-62.

CONCLUSIONS

The final portion of your report is the place where you draw all the threads together, the points arising from the findings section, and further discussing the most interesting or unexpected findings and trying to account for these. **There should be no new data introduced in this section – the conclusion is a drawing together of the information already presented.**

RECOMMENDATIONS

Normally, a report contains recommendations for further action. There are circumstances where you may find this inappropriate for your study. In this case, it will probably be sufficient to state that there are no concrete further actions that you recommend to be taken. It could be that you recommend further study of the issue, which you have been unable to resolve. If you do make recommendations, then these should be realistic and specific; clearly stating what should be done, by whom and in what timescales. Along with the recommendations, an implementation plan may be written which gives details of exactly what should happen and when if the recommendations are agreed. Comments about the costs/benefits of recommendations should be made, if possible.

APPENDICES

Appendices are separate from the report and should be used where:

- ❑ There is information that is too lengthy or detailed to be included in the main body of the text, e.g. detailed statistical tables
- ❑ There is information which is relevant and to which the reader may want to refer, but is not directly necessary in reading the text, e.g. a policy document.

All appendices should have a number and title. Any appendices included should always be referred to in the report and the numbering of the appendices should be consistent with the order in which they are referred to in the text. Only information that is relevant and necessary should be included in the appendices. The longer the report, the less inviting it will look to read. Although appendices are not included in the word count, they should never be used as a way of getting around word limits for reports - this is easily spotted!

REFERENCES

Whenever you are directly quoting or referring to one of your sources, you must acknowledge this in the text as you compile your report. References should be clearly set out using the 'Guide to Referencing and Citing'. This is the method you must **always** use.

ACTIVITY 1

Get hold of two or three reports, ideally of varying lengths. These may be reports produced at work or ones from the library. Look at how the reports have been structured. The contents page is the best indicator of this, if the report has one. Identify ways in which the structure of these reports differs from that given above.

NOTE IT

Report 1 comments:

NOTE IT

Report 2 comments:

NOTE IT

Report 3 comments:

ACTIVITY REVIEW

Why did the reports you looked at differ in structure from the structure given in this guide? Do you have a particular 'house style' for reports you use at work? What benefits/limitations does this have compared with the structure above? For those in 'technical' environments, you may have noted some clear differences.

C) PREPARING TO WRITE THE REPORT

Writing reports can seem daunting especially if you are new to this type of activity. However, taking a systematic approach to planning and preparation can help to reduce anxiety and means that once you actually come to putting pen to paper you are already part way there.

THINK POINT

What should be the starting point for any report?

What do you need to do before starting to write?

DATA GATHERING

Having decided on the objectives of your report, you then need to consider how you will gather the necessary data and information. It is beyond the scope of this guide to look in any detail at research methods but you need to think carefully what information or data already exists.

These data will be in the form of books, journals, previous reports, or policy documents, and this form of information is called secondary data. The data you have to generate for yourself by means of surveys, questionnaires, or interviews is called primary data. (You need to remember that 'data' is plural, so you will write 'the data were collected', not 'the data was collected'. If you want just one item of information, then this is a datum.)

You should write down the information to be collected, the methods or sources you will use, and the timescales or staging posts to provide the mini-deadlines you require clarifying when you will collect and analyse your information, and when you will write your first and final drafts.

OUTLINE REPORT

Before starting to write the report, you should always start with a structured outline. This basically involves taking the standard structure identified in Section 2 and thinking through what type of information will go where. In particular, identify how many sections will be used for the main body of the report, and what sort of information will go into each section. It is almost like producing the contents page.

ORGANISING INFORMATION

One of the most difficult aspects of report writing can be deciding exactly what should go into the body of the report and in what order. The key questions to ask are 'what information is essential in meeting the report objectives, and what information is relevant but could be left out?'

Two ways of organising material are horizontal plans and mind maps.

HORIZONTAL PLANS

An example of a horizontal plan (concerning a report to a Managing Director, seeking approval for the introduction of flexible working hours) is shown below (Figure 3.1). To use this approach:

- 1) Turn a large sheet of paper sideways and work across it so that you can see the whole plan of your report on one page
- 2) List what you think are the major topic headings for your main sections along the top. In the example given, four main headings have been chosen
- 3) Think of all the information you have and points that may be relevant and have a first go at putting them under the various headings. Any points which do not seem to fit under any of the headings could go into an 'Other' column at this stage or you could identify another topic heading
- 4) Once you think you have listed all your points, you can then look through and decide the points which must be included and, say, mark these with a tick as shown in Figure 3.1. Alternatively, you could use different coloured highlighter pens. Then put a cross against any points that are not really central or necessary in meeting the objective. You may then put question marks against points you would like to include but which could be left out
- 5) You should then be able to take each topic heading and decide the order in which you should cover each topic. If one heading seems to contain a lot of points you may subdivide it. You can then look at the essential points for each section and decide an appropriate order for them.

MIND MAPS

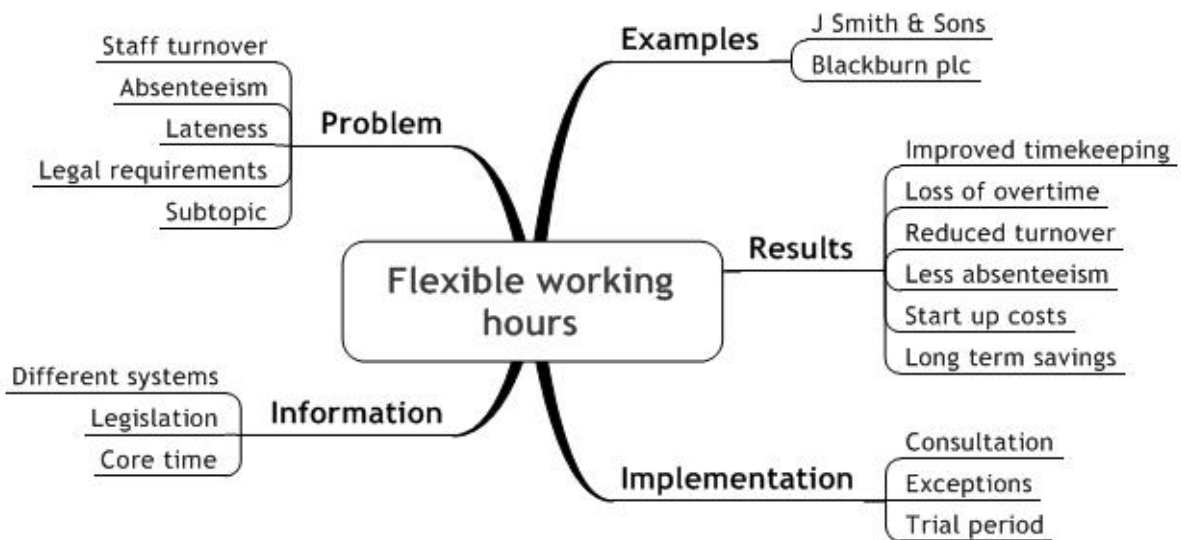
An alternative to the horizontal plan is the 'Mind Map' (Figure 3.2). Start at the centre of the page with the theme of the report and branch out from this putting down each topic. The branches can be sub-divided into the elements of each theme. You can use the same technique as shown in the horizontal plan in deciding which elements are 'critical, possible or unwanted.'

FIGURE 3.1 – FIRST DRAFT OF A HORIZONTAL PLAN

A simplified example showing the breakdown of a subject into sections and each section into points.

	PROBLEM	INFORMATION ON FLEXIBLE WORKING TIME	RESULTS	IMPLEMENTATION
OBJECTIVE... To persuade the MD to authorise a proposed system of flexible working hours	✓ Staff turnover } records some idea of costs ✓ Absenteeism } ✓ Lateness } Reasons: ✓ Travelling difficulties } ✓ Married women } ✓ Domestic ties } X Morale } Interviews with leavers }	X Theory X versus Theory Y History ✓ Outline } ✓ Core time } diagrams ✓ Choice of periods } Debits and credits } Overtime Appendices } Holidays and sickness } Salary admin } ✓ Controls	✓ Reduced turnover and absenteeism } quote other firms ✓ Improved timekeeping } Initial opposition to: ✓ Clocking in and out } ditto ✓ Loss of overtime } ✓ Loss of direct supervision } ✓ Initial costs versus overall savings }	✓ Consultations } ✓ Exceptions } ✓ Trial period } Equipment } Stationary Appendices } Procedures } ✓ Starting date } ✓ Evaluation } ✓ Budget allocation }

FIGURE 3.2 – MIND MAP



ACTIVITY 2

Construct a mind map or horizontal plan for the following report:

- ❑ You are asked by your manager to write a report making recommendations for cost savings in your department
- ❑ Alternatively, if you have been asked to write a report as part of your job, you may use this topic.

ACTIVITY REVIEW

How easy did you find it to use the method adopted? If you did not find it easy you may like to try the other suggested method. There is no single best way to organise your material. In the end, what is important is finding an approach that works for you.

D) PRESENTATION AND LAYOUT

The report must look inviting to read. A number of aspects will influence this.

CHAPTERS AND SECTIONS

It is unhelpful to the reader to have to confront large blocks of text. Use headings and sub-sections to break up the text into easy-to-follow sections.

PARAGRAPHS

These should be kept relatively short, e.g. of around 6-8 sentences each. It is much more inviting to see a page with short paragraphs with white space in between than a whole page of solid text.

ADVICE ON FORMAT

Use Arial font size 11, double line spacing, and aligned left, with top and bottom margins set at 1" (2.5cm) and left and right margins set at 1.25" (3.17cm) and the page numbers at the bottom of the page.

HEADINGS AND SUBHEADINGS

These are important signposts to readers as they go through the report. Headings should be brief and should stand out from the rest of the text.

NUMBERING (OPTIONAL)

All pages should be numbered for easy reference. You could, if you wish, also number chapters, sections and subsections. It is the practice in some organisations also to number paragraphs. This is not recommended unless an organisational requirement (sometimes used in official documents for referencing purposes) as it can make the report look too 'busy'.

There are many different numbering systems. One common way is using decimal points to indicate sub sections e.g. Section 1, Subsections 1.1, 1.2, 1.3 etc. Diagrams and tables contained in the text should be given a title and numbered consecutively in the same way e.g. if in Section 2: Figure 2.1, Figure 2.2.

REPORTING DATA

TABLES AND FIGURES

A table is a list of information in columns, and is made up of text and/or numbers, and not diagrams. A figure is a diagram or picture. You need to refer to the table or figure in the text, above the point where you place them. For instance, 'see Table 1.3 below' or 'Figure 6.4'. Always give the table or figure a title which goes above, and number them according to the section you have placed them in, so that Table 1.3 is the third table in section 1.

QUESTIONNAIRES AND SURVEYS

If you have collected your data by means of a questionnaire or survey, then you need to place a blank copy of it as an appendix so that the reader has a complete idea of what you asked and how you asked it.

GRAPHS AND CHARTS

Information presented in a graphical format or as a chart can be easier to interpret and is likely to have more impact. There are many different ways of representing data, and it is sometimes necessary to see which format works best. Some of the most commonly used ways of presenting data are:

- Graphs
- Bar charts
- Flow charts
- Pie charts
- Histograms.

You will find the Brookes Guide on Getting Started with Charts in Excel at

https://www2.brookes.ac.uk/services/cs/documentation/win98/getting_started/ExcelChartsXP.pdf

ACTIVITY 3

Try to find examples of different ways of presenting data by looking at the broadsheet newspapers, business journals or reports. Get examples of ones that have most impact and are most easy to interpret. You may find it is useful to keep cuttings or take photocopies and retain with this guide to give you some ideas when you are writing reports that need to include numerical data.

E) WRITING STYLE

This section looks at some key issues in terms of writing style. The main point to bear in mind is your target audience and the type of style that will be most appropriate for them. Some useful points to bear in mind in terms of getting your message across in a report are:

- ❑ 'Jargon' is language used by a particular set of people that has a tendency to exclude outsiders. For example, 'learning outcomes' is specific to academics, and has little meaning outside an educational context. You therefore need to avoid jargon. Consider your audience and ensure that you use language they will be familiar with or explain any 'technical' or unusual terms used
- ❑ You may include a 'glossary of terms' in the appendices. If you use abbreviations, make sure you explain the abbreviation in full the first time it is used. For instance, write 'the Confederation of British Industry (CBI)' the first time you use this, and thereafter, you can use just CBI
- ❑ Try to keep sentences short rather than having long, complex sentences
- ❑ It is not recommended to use the first person (I) in writing business reports. There are two ways to get round this – either you can use the passive voice, and you can write 'The information was collected' instead of 'I collected the information', or you can use 'the report writer' or 'the author', but this should be kept to a minimum because it tends to get very irritating to the reader
- ❑ If you wish to include direct quotations from another source these should be clearly referenced. You will find clear instructions on how to do this in [Appendix 1](#)
- ❑ Do not underestimate the impact of a poorly presented report on the reader. Errors are a distraction, resulting in a negative impression of what might otherwise be a good report. Take care to use correct grammar, punctuation and spelling, and always proofread the final draft to ensure the version you hand in is error free.

F) DRAFTING AND COMPLETING THE REPORT

THE FIRST DRAFT

Once the main sections and outline content have been determined, you should then produce the first draft. Sometimes it can be difficult to put pen to paper. Certainly, it will be easier if you have a plan to work from. However, it is better to get something down even if you have to amend it later. If in doubt, include rather than exclude material. It is easier (though more painful) to take out sections than to add content. It can be helpful to regularly check the word count, particularly if you find editing your work difficult. Remember, the executive summary should be written after you have drafted the main report.

GETTING TO THE FINAL DRAFT

Depending on the nature and importance of the report, you may go through one or more drafts. When it comes to the final draft, you should be asking questions both about content and about presentation. You should concentrate on key questions:

- 1) Does the report meet the objectives and terms of reference set out?
- 2) Is the report easy to read?
- 3) Is the information in the report clear and accessible?

ACTIVITY 4

Now you have worked through the guide, you should be able to produce a competent report. Before trying to put all the guidance points into practice, you may find it useful to go back and criticise a report you have already written or, if you do not have one of your own available, get hold of a report written by someone else. Use the checklist in [Appendix 2](#) to assess the effectiveness of the report. Once you have reviewed the report, identify three ways in which the report could be improved.

NOTE IT

Three ways the report could be improved...

- 1)
- 2)
- 3)

FINAL COMMENT

Report writing, as with most management skills, will only be developed through practice. You should now be able to produce a competent report, but do seek and take account of feedback on your reports to improve.

H) REPORT WRITING CHECKLIST

	Yes	No	Unsure
Purpose			
Is the purpose of the report clearly stated?			
Structure			
Is the title page complete and well laid out?			
Is there a summary?			
Is there a contents page?			
Is the nature of the report clear from the contents page?			
Are there conclusions and recommendations?			
Does the structure look an appropriate one?			
Is any detailed information contained in appendices?			
Content			
Does the body of the report contain all the necessary information?			
Are the methods by which data was gathered clearly identified?			
Are there any ambiguous or unsupported statements?			
Do conclusions and recommendations follow logically from the facts?			
Style			
Is the style clear and easy to read?			
Is there an absence of jargon?			
Are technical terms and abbreviations explained?			
Are spelling, grammar and punctuation accurate?			
Is the report free from typographical errors?			
Layout			
Are sections, tables, figures and appendices correctly numbered?			
Do headings stand out and adequately convey meaning?			
Is the visual appearance of the report attractive and inviting?			
Are paragraphs short?			
Reporting Data			
Are tables and figures used to communicate data?			
Are tables and figures clear and easy to interpret?			
Referencing			
If references are made, are they cited correctly?			
Is there a list of references?			
Other comments			

TACKLING A CASE STUDY

The use of case studies should help you as an individual to develop your own analytical and communication skills and creative problem solving abilities, all within time constraints. When case studies are tackled in seminars they require the development of the abilities and skills required for team working.

No case study ever gives all the information you feel you would like but in that they are regarded as reflecting real life situations, perfect knowledge remains an ideal. Equally there is no one single right answer to a case study; it is important, however, to explore all the options.

Individual case studies differ in style, content and length but key stages in an approach have been identified and are embodied in the diagram on the next page.

Simplifying these:

- ❑ Read and understand the case
- ❑ Gut the case, extract all the information you are given, summarise it and restructure it into a form you can use
- ❑ Identify the problems
- ❑ Create alternative strategies and evaluate them
- ❑ Choose your preferred strategy and review its advantages and disadvantages
- ❑ Prepare your presentation, whether verbal or written. Make sure that your presentation is clear and that you do not disguise either your analysis or your solution with too much detail.

After the exercise is completed, it is useful to review the process you went through, whether as an individual or as a member of a team.

A FRAMEWORK FOR CASE STUDY MANAGEMENT

- ❑ Read and understand the case
- ❑ Analyse and define the problems
- ❑ Restructure data
- ❑ Develop alternative solutions
- ❑ Eliminate least suitable solutions
- ❑ Eliminate to final proposals
- ❑ Test preferred solution

- ❑ Appoint presenter
- ❑ Prepare presentation
- ❑ Present → Report back
- ❑ Review others' situations.

ACTIVITY 5

Take a case study:

Using the box framework above, tick each activity as you complete it.

At the end, review the process. Identify any overlap between the stages.

Most importantly, ask yourself what you have learnt from completing the case study. Have you enhanced your analytical skills, communications skills, and creative problem solving skills? If not, why not?

SECTION 6 – PREPARING FOR EXAMINATIONS

Most people dislike the thought of examinations, but students do vary in the way that they approach the situation. Some undoubtedly find it a truly miserable time, fraught with stress and anxiety. Others are more relaxed, treating the experience as a necessary evil and merely breathing a sigh of relief when it is over. Yet others, while unlikely to admit that they 'like' examinations, experience a feeling of exhilaration as the day draws to an end and, as long as no mishap occurs, find the process of working under pressure a stimulating one. No matter what your particular response to examinations may be, there is no doubt that you can improve your performance: a) by preparing constructively and b) by adopting sound examination techniques. These are the two issues we shall be looking at in this section. Study it now but also make up your mind to return to it for a second reading as an examination draws nearer.

Once again the section is divided into a number of sections, dealing with the point of examinations; the value of preparation and revision; exam nerves; and the taking of the exam itself. Not all modules may be examined in your particular course of studies. However, you are likely to have some examinations at least, so the following discussion may well be of help in preparing you for those occasions.

WHY TAKE EXAMINATIONS?

Are there any benefits to the student from taking examinations?

Two possible reasons for entering an examination:

- 1) **Motivation** - An examination - looked upon as a long-term goal - can act as a focal point giving aim and purpose to your efforts. Without that long-term goal there is a much greater likelihood that good intentions will 'fizzle out'. Having an examination to aim at can transform a desultory, superficial interest into serious, determined study. Thus even students not in search of qualifications may find it advantageous to pursue their subjects of interest within a course carrying an examination requirement
- 2) **An all-round view** - The second good reason for taking an examination is that it helps you to view your subject as an integrated whole, rather than as a series of unrelated facts. The importance of doing so has been emphasised from time to time throughout this Course.

In Section 3 it was emphasised that we are poor at remembering isolated items of information and it advised a persistent search for association and pattern. However, even when this is done consistently throughout a course, it is often not until final revision time that students have the pleasure of seeing how everything they have studied comes together in a satisfying structure of interrelated ideas. Without the pressure exerted by the approaching examination, it is unlikely that you would settle down to revise your course work in its entirety and thus you would miss the understanding of your subject that an overall view entails. Try to bear in mind, then, that final revision has a value over and above the importance of helping you to obtain a respectable grade!

To sum up, there are at least two good reasons, easily overlooked, for taking an examination:

- 1) The examination acts as an incentive - a goal to work towards
- 2) Looking back on a course from the perspective of a period of final revision helps to unify and consolidate your studies.

THINK POINT

How long before the examination do you think a student should start to revise?

I hope you have not replied 'The night before'! But there does seem to be a widespread view among students that revision is something to be put off for as long as possible: a view that usually results in last minute panic and anxiety. I suggested in Section 1 that you should avoid this possibility by constructing a plan, aiming to complete your study of the module syllabus, with several weeks in hand for revision. If you are working towards a diet of examinations at the end of your course of study, plan your programme to leave at least a month for revision. We will call this month the 'final revision period' and consider it in detail after Section 2.

A CONTINUING PROCESS OF PREPARATION

ACTIVITY 1

What qualities do you think examinations in general set out to test? Write down some characteristics that examiners might be looking for, as they mark the answer pages.

Some of the claims made by defenders of the examination system might surprise you. It is sometimes said, for example, that examinations test for initiative, insight and imagination. What do you feel about this? Perhaps as you look back on your school or university days you might be more inclined to view examinations as a test of nerves and stamina! However I want to focus on just three characteristics that are not in the least controversial. No-one is likely to challenge the view that examinations aim to test for:

- ❑ An overall understanding of the syllabus studied
- ❑ An ability to recall facts and ideas covered by the syllabus
- ❑ An ability to marshal those facts and ideas and to express them within an allotted time.

This course has attempted to prepare you for these requirements, aiming to introduce you to study skills such as the following, so that you can:

- ❑ Read for understanding rather than sheer speed
- ❑ Take notes regularly **in your own words**
- ❑ Do not try to memorise anything you do not understand
- ❑ Review work regularly and in the process practise active recall
- ❑ Try to develop the ability to think clearly
- ❑ Improve powers of written expression by making constructive use of your tutor's advice and guidance.

In other words, learning to study effectively can be looked upon as a way of steadily preparing not only for a final, summative assignment but also for any examination that may lie ahead. It would, however, be misleading to suggest that a course of study is always plain sailing. There will undoubtedly be times during the long journey when you feel your resolve slipping. The strategies suggested throughout this course are demanding and it is all too easy to relax your efforts. Gradually you may find that you are ignoring your carefully prepared study calendar; getting behind with assignments; and lapsing into careless, passive reading of texts.

In traditional education the academic year is split into three terms, each culminating in a burst of activity followed by a spell of relaxation. I would like you to aim for something similar in your plan of action. Every few months try to allow yourself a breathing-space, when no new work is attempted and any study time is devoted to looking back at what you have so far achieved and forward to your plans for the future. This will emphasise the 'short-term' goals that make study possible.

You could end your three or four-month period of study by carrying out a review of all material studied to date. Adopting the same procedure as you use for daily and weekly reviews you could start attempting active recall of key issues. You could do this by constructing 'Buzan Patterns', if that method suits you, or by writing brief summaries if you prefer a more linear approach.

This is also an excellent time for going through your notes, checking to see if they need amplifying, rearranging them into the best possible order. Remember as you do so that you are looking for associations and connections, for pattern and for structure.

Making an effort to view the course as a whole helps to develop the overall understanding of the syllabus that the examination will require you to show. When you have carried out your end-of-term review it is time for a period of well-earned relaxation. Even if you only have time for a week's intermission, you will find that a strategy of this kind pays rich dividends, by refreshing your staying power and pushing you forward towards your long-term goal.

FINAL REVISION

If at some time during the course or examined module you find that you are falling seriously behind schedule, do not let things go from bad to worse. Contact your tutor for advice. He or she may be able to suggest parts of the course that in an emergency can be glossed over or even omitted. Above all try to avoid a situation where the examination is almost upon you with substantial parts of the syllabus still to be covered.

Let us assume that all has gone well and you have managed to keep to your plan of completing the course material with two or three weeks to spare for final revision. From that point on you should resolutely refuse to be sidetracked into reading new material. Instead all your efforts should be concentrated on a systematic review of the entire course together with practice for the examination itself.

THINK POINT

Think back to the last examination in which you were involved. How did you tackle the business of revising for it? Do you feel that your revision served you well in the examination? Or was there room for improvement? Compare the way in which you set about preparing for that examination with the suggestions that follow.

With only one month to go it is worth making a last determined effort, but it is also important not to neglect your health. Make sure that you get enough mental and physical relaxation and in particular that you get enough sleep. The traditional picture of the harassed student 'burning the midnight oil' is definitely one to be avoided!

The key word throughout the period is 'organisation'. If you really want to do yourself justice in the examination, revision should be carried out with the precision of a military campaign. There are three major strategies: (a) the mock examination (b) the final review and (c) question practice.

THE MOCK EXAMINATION

If you have been provided with a mock examination paper, be sure to work through it. Some students fear that the experience will be too demoralising. They prefer to push the approaching day from their thoughts: 'I know it is going to happen - but I just don't want to think about it' is a plea often heard.

Here are some reasons why sitting through a practice examination is worthwhile:

- ❑ Working through a sample paper helps to take the tension out of examination day. It is easier to cope with the familiar than to be suddenly confronted with the unexpected
- ❑ Experience of the procedure you have to follow allows you to concentrate all your attention on answering the questions to the best of your ability
- ❑ A mock examination demonstrates more clearly than any other method the areas of weakness that require special attention during the final revision period. For this reason it should be the first of your three strategies to be undertaken.

When you tackle the mock examination try to simulate as closely as possible the conditions of the official examination:

- ❑ Do not look at the paper in advance
- ❑ Allow exactly the prescribed time. Persuade someone to act as watchdog, keeping callers away and making sure you are not disturbed
- ❑ Work through the paper following all instructions to the letter
- ❑ On no account refer to books or notes. Do not even have them in the room and then you will not be tempted. The only exception to this rule would be for preparation for an 'open-text' examination in which the examinee is allowed to take certain books into the examination room for reference
- ❑ If you smoke, it is a good idea not to allow yourself cigarettes, since schools and colleges invariably operate a 'No Smoking' rule
- ❑ At the end of the prescribed time - stop working! Do not allow yourself extra moments to finish
- ❑ Where these are provided, check your answers carefully against the specimen answers to determine gaps and weaknesses you still need to work on.

THE FINAL REVIEW

The final review is the second revision strategy and should be carried out during the final revision period. It consists of going systematically over the ground you have covered. Prepare a revision timetable in order to make sure that you achieve this in the time you have available. Decide how much time you can allow and divide the syllabus so that all sections receive adequate attention. The student who has consistently kept notes and carried out regular reviews is now in a very strong position. The Notes constitute your revision material: recall and review the techniques to be practised (see Sections 2 and 3).

There are two possible lines of attack. The sort of notes you have kept will determine which one you choose. If you are a student who takes copious notes, your aim should be to strip these down to bare essentials. At each step test your recall in the usual way. If your notes are relatively sparse, you should work in the opposite direction. Take the main points and work them up into brief summaries, once more testing your ability to recall in the process. You may find it necessary to turn to your texts occasionally in order to amplify a point, but do not fall into the trap of starting on extensive reading. Instead, make use of skimming and scanning in order to extract the essentials that you need.

The commonest mistake made by students is to spend hours of revision time passively reading and rereading notes and texts. Very little is achieved in this way. Instead be sure to keep active: write things down, rehearse them mentally, say them aloud, draw diagrams and make use of mnemonic techniques and so on. Above all, constantly activate your recall mechanism by working as much as possible from memory.

QUESTION PRACTICE

For your third strategy you will need a set of past examination papers if these are available. Avoid studying the questions in advance but calculate carefully how much time should be devoted to each. Deduct about 20 minutes for the total examination time and divide the remainder between the numbers of questions to be attempted. For example, a three hour examination in which you are required to attempt four equally weighted questions would work out as follows: $180 - 20 = 160 \div 4 = 40$ minutes. Thus no longer than 40 minutes should be spent on any one question.

At regular intervals throughout your final revision period attempt a question from one of the past papers. If no past questions are available, try devising appropriate questions yourself, based on the mock/specimen examination paper and your assessment of key issues in the course.

Work strictly to the time you have calculated, and write without the help of texts. This will give you practice at working from memory to a set time limit and will combat the fear of working under pressure that afflicts most students. It will also keep you up to date on how well your revision is progressing and indicate those areas that need most attention. It is a good idea to increase confidence by listing on a piece of paper anything you might need to learn for your answer, and committing it to memory before beginning to write.

Keep back one or two past papers for practising the selection of questions and for planning how each might be tackled. Read through the paper, deciding which questions you would attempt under examination conditions. Write outline plans for each of these. Then work once more through the entire paper, studying each question and asking yourself how it fits into your course as a whole. As you do so, attempt an outline plan for each one, even those previously dismissed as too difficult. Finally, reconsider your original choice of questions in the light of the outlines you have prepared. You may well find from this experience that an alternative selection would work to your advantage.

These three revision strategies demand a high degree of organisation and self-discipline. It is undoubtedly easier to drift towards the examination, passing the time in passive spasmodic reading. If, however, you adopt the methods described you will have the consolation of knowing that you are using every moment constructively, and as a result will stand the best possible chance of doing yourself justice in the examination.

EXAMINATION NERVES

Active revision of the sort suggested leaves little time for brooding over the coming examination. But it would be wrong to imply that you can be sure in this way to avoid all feelings of anxiety when the day finally arrives. Feeling slightly keyed up can work to your advantage, helping to carry you through a period of unusually intensive effort. Excessive stress on the other hand is to be avoided. It does nothing to help and can quite easily detract from your performance. Thorough preparation is the best way to minimise tension. Planning for every possible contingency ensures that all your nervous energy can be channelled into the act of taking the examination. Here are some tips that can help:

- ❑ **Check very carefully the location of the examination centre.** If possible investigate in advance to see exactly where you have to go, how to get there, and the time you will need to allow for travelling. This is particularly important for distance learning students, who may have the added strain of having to enter a completely unknown environment in order to sit the examination. Work out your method of transport. If you are going by car - where are you going to park? If you will be using public transport - how far will you have to walk from the terminus? Plan to allow yourself plenty of time; remember trains can run late, traffic jams and parking difficulties often arise. It is much better to arrive too early - you can always go and get a cup of coffee - than to have a nail-biting last minute panic, with the risk of missing the start of the examination. Organise your household so that there will be no unexpected demands made upon you at the last moment. This is particularly important for parents of small children. If at all possible, enlist a friend or relative to deputise for you in the home on examination day. Then if a minor emergency does occur (e.g. one of the children wakes that morning feeling unwell and unable to go to school) you will have the situation well in hand
- ❑ **Carefully check the examination regulations.** The most important thing here is to find out what you can and cannot take into the examination room. For example, some but not all examinations allow students to bring a dictionary; some encourage the use of calculators and so on. Get together everything you need in the way of pens, pencils, rulers, erasers and so on and have them ready the night before
- ❑ **Remember to take your student card to prove your identity to the invigilator**
- ❑ **Work out what you have to do about fitting in a meal.** It is unwise to eat a heavy meal immediately before an examination, but equally unwise to attempt some three hours of intensive mental effort on an empty stomach. Aim for a sensible compromise and have some glucose tablets or barley sugar in your pocket to top up your energy half way through
- ❑ **The day before the examination, you should do little or no revision.** If you find it impossible to keep away entirely, just browse through your notes or check you remember your facts, definitions, quotations and diagrams. Do not attempt to read or learn new material in the mistaken idea that topics not previously covered can somehow be mastered. Relax during the evening - watch television, go for a walk, try to have an early night. If you have to make an early start make sure that there is no risk of oversleeping. Then go to sleep, secure in the knowledge that you have done everything possible to ensure a trouble free day.

THE EXAMINATION

Students are usually admitted to the examination 15 minutes before starting time. When you sit down the paper will often already be on the desk. Sometimes students are asked to fill in name and examination number before the examination begins, but at this stage you will not be able to see the questions. Arrange everything you need ready to hand. If anything is worrying you (e.g. if you appear to have the wrong paper!) speak to the invigilator at once - she or he is there to help you. Take a few, good, deep breaths to steady your nerves. At the signal, open your paper and you are on your way.

If you have done your preparatory work on past papers, the format of the examination will be reassuring - there should be no surprises. Nevertheless you must carefully read **all** the instructions. There is always a possibility that the examination board may have made a slight variation in their approach. Check on the following points:

- ❑ How many questions must you attempt?
- ❑ Do they have equal weighting or should you spend longer on one than on another?
- ❑ Is the paper divided into sections?
- ❑ If so, how many questions must be answered from each? Watch out for phrases like **at least** and **not more than** - countless students lose valuable marks at this point through careless reading.

Check also whether your advance calculation of time to be spent on each question needs to be reassessed in the light of any new instructions. If some questions are more heavily weighted (i.e. carry more marks) than others you must of course spend proportionately more time in answering them. The spare 20 minutes you have allowed should be spent more or less equally in reading through the paper at the beginning (ten minutes) and checking your answers at the end (ten minutes). Even experienced students sometimes make the mistake of spending too long on one or two questions for which they are particularly well prepared, leaving insufficient time to attempt the full quota of questions. But two partly completed answers will almost invariably score higher marks than one alone, no matter how good that one answer may be. So always attempt the full number of questions. If in spite of everything you **do** run out of time, **write brief notes on the final question**. Always assume the examiner wants to help you, and by outlining a new answer you are likely to get far more marks than by completing an earlier one, or by writing more than is necessary. This may make the difference between a pass and a fail.

Read through all the questions, marking with a cross those you do not wish to attempt. Reread the remaining questions, ticking your final choice as you go. Check once more that you have selected the right number of questions and that they correctly cover all the necessary sections of the paper. Mark against each the time at which you should begin an answer.

ACTIVITY 2

Work out a timetable for a three-hour examination (starting at 9.00am) in which you are required to answer five equally weighted questions. Check your answer against my calculations below. All times are, of course, approximate.

08.45	Arrive at the Examination Room and take your seat
09.00	Read instructions and all questions, select questions to answer
09.10	Draft an answer plan for each selected question
09.30	Attempt first Question
10.00	Attempt second Question
10.30	Attempt third Question
11.00	Attempt fourth Question
11.30	Check answers and add supplementary details if required.

Advice on this varies. I would advise you to do your 'best' question second and your 'second best' question first. So, if you have a good start you will be confident enough to capitalise on it, whereas if you find it initially difficult to get into the swing of being in an examination you can recover. However, if there is one question about which you feel **far more** confident, do that first.

As you read the question, remember to concentrate on looking for the following:

- Instruction words
- The true subject of the question
- Any technical or ambiguous words that need defining.

When you have studied and analysed the question, note down the main headings with which you intend to deal. Then start the essay with a brief introduction that interprets the question, defines terms where necessary, and states your intentions. An introduction of this kind helps to focus your mind on the essay's subject. In an examination you must be particularly careful to keep to the point and answer the question set. Irrelevant material will merely waste valuable time. As you proceed, glance back at the title from time to time to make sure you are not wandering from the question. Keep your style crisp and clear.

No matter how well you know the topic you will only receive marks for information that you actually manage to convey to the examiner, and that information must be relevant to the question asked. All of the suggestions made in the section on Report Writing apply equally to your work in the examination, but you will need to think and write more quickly. This is why practice at answering questions within an allocated time is such an important aspect of final revision. Aim to round the question off with a short conclusion but do not exceed the time you have allowed. When you reach your deadline move resolutely on to the next question. Leave a space, so that if you find yourself with time in hand you can return later to add a little more.

Keep an eye on the time - do not spend more time on any question than you have allocated; you will not earn extra marks and can only lose marks from other questions through shortage of time.

If all goes well you will find that you have tackled all your questions with some five to ten minutes to spare. Use these moments to check through your answers and to make any obvious corrections. Watch for punctuation, spelling and general legibility. Examiners are only human. If a paper is a pleasure to read they will at least be in a well-disposed frame of mind. One word of caution: **do not be distracted by the behaviour of your fellow examinees**. It is futile to waste time wondering why someone has made an early departure. You can rest assured that it is **not** because they could answer every question perfectly in record time!

Similarly, do not start to agonise if other students request more writing paper at a time when your answer book is only half full. They may have wasted half of theirs in false starts! Act as if you are alone in the room and concentrate your undivided attention upon the task in hand.

OBJECTIVE TESTS

I have assumed so far that the examination will consist of essay-type questions. Many examinations, also, will include an Objective Test Paper that concentrates wholly on your ability to recall specific items of information.

There are many different types of Objective Test, but most have in common the presentation of a sentence (known as 'the stem') which students are expected to respond to in some way. For example:

In the *Short-Answer Form* - the stem is followed by a blank that the student is expected to complete e.g. No study period, including short breaks, should be longer than...

In the *True/False Form* - the stem consists of a declarative statement and the student is required to indicate whether that statement is True or False e.g. Short-term memory is limited in duration but unlimited in capacity. Answer T or F.

In the *Multiple-choice Form* - the stem is usually an incomplete statement or question followed by two or more responses that represent possible completions of that statement or suggested answers to that question. The student is required to select the best response e.g. Mnemonic systems have been in use a) for less than 100 years or b) for over 2,000 years. Tick a) or b).

You will almost certainly be given details of what to expect in your particular examination, together with the opportunity to practise what is required. There are, however, some general hints for taking Objective Test or Multiple Choice Papers that we can usefully look at here.

- ❑ Take time to read the instructions (which may be quite detailed) very carefully and follow them exactly
- ❑ Read quickly through all the questions before starting to answer
- ❑ If you are required to answer on a separate sheet, make sure that you are entering your answers against the appropriate question number
- ❑ Work quickly (speed is usually important with this type of test) through the entire paper, answering all the questions that you are sure of
- ❑ Go through again, spending a little more time on questions that you find more difficult
- ❑ Unless the instructions state that you will be penalised for incorrect answers, answer **all** questions. A good guess can be worth some valuable marks
- ❑ When uncertain of the correct answer to a multiple-choice question, it is a good idea to work by eliminating all responses that you know to be wrong. This will at least narrow your selection
- ❑ When undecided, do not be too keen to change your initial answer since first response often turn out to be the best
- ❑ Keep alert as you work; quite often one test question will give some indication of the correct response to another
- ❑ When you have finished, check through your answers to make sure you have not made obvious errors.

These are the answers to the Sample Objective Test questions above:

Short-Answer Form: The complete statement should read: No study period, including short breaks, should be longer than three hours.

True/False Form: The statement is False, since short-term memory is limited in both capacity and duration.

Multiple-choice Form: The correct response is b), since mnemonic systems were first used in ancient Greece over 2,000 years ago.

AFTER THE EXAMINATION

When the examination is over, relax and put it out of your mind. Do not allow yourself to get caught up in the depressing post-mortems of the 'If only I had...' variety. How you feel at the end of the examination is a very poor guide to how well you have done. The most confident student can be disappointed when the results arrive. On the other hand those who feel sure they have done badly may receive a pleasant surprise.

Examinations are valuable for obtaining qualifications and for giving structure to a course of study but they should never be seen as an end in themselves. Now is the time to look to the future. How can you develop and make use of the knowledge you have gained? Are there books encountered during the course that you at last have time to read at leisure? Is there a society or class in the neighbourhood that you could join in order to meet other people interested in your subject? Could you consider starting on a more advanced course in order to deepen and extend your knowledge? Or would you rather branch into a related subject?

There are so many possibilities to explore. Learning to study effectively can open the door to a lifetime's adventure. I hope this course has helped to show the way - Good Studying!

SECTION 7 – USING THE LIBRARY

As a student you would be well advised to get to know your library and to make full and regular use of the facilities on offer.

The Business Studies Library of Oxford Brookes University is based at the Wheatley Campus in the charge of the Subject Librarian. Some books and journals are also available in the library at the Gipsy Lane Campus.

When first visiting a library you are advised to check the following:

- 1) The hours of opening - you may find the reference section is open for longer hours than the department from which books may be borrowed. You should note that the library at Oxford Brookes University has restricted opening hours during vacation periods and is closed on Saturdays at these times.
- 2) The procedure for borrowing books - how many are you allowed? How long may you keep them? Can they be renewed by telephone? What fines are imposed if books become overdue?

- 3) How to reserve books belonging to the library, but not immediately available on the shelves. In Britain, for example, the public library may also have borrowing arrangements with other libraries in the county and may have access to books held nationally in the British Library Lending Division at Boston Spa. If you can provide full details of the book you want, library staff will do their best to obtain it for you upon payment of a small fee.

The Inter-Library Loan Service at the Oxford Brookes University library enables items to be borrowed from other UK libraries and sometimes abroad, including specialist libraries and institutions. There is a charge for this service.

The Oxford Brookes University Library is also a member of the London Plus Scheme that gives reference to facilities to all registered students, and borrowing facilities to part-time students, in several university libraries in the southeast of Britain. Further details on this are available from the library enquiry desk.

Allow plenty of time for your first visit in order to learn your way around. You will find that the staff are very willing to help, especially if you explain that you are a student. If you are lucky enough to live near a large city library, you may find that there is a printed guide to assist you in your exploration.

The borrowing section of a library is normally divided into fiction and non-fiction. The former is arranged alphabetically by author's name and will present few problems. The layout of non-fiction books is more complex. You may find it bewildering at first and wonder how you can possibly find the books you need among so many. In order to do so you need to get to know the library's method of classification and to become familiar with the library catalogue.

In order to bring books on the same subject together on the shelves, libraries make use of a classification system. The one most widely used, and also used by Oxford Brookes University, is the Dewey Decimal Classification Scheme. This attempts to group all books into ten main classes, each identified by a three figure code:

- | | |
|---------|--|
| 000-099 | General works: bibliographies, information technology, and communication. |
| 100-199 | Philosophy: metaphysics, psychology, logic, and ethics. |
| 200-299 | Religion: Bible, theology, and Christian churches. |
| 300-399 | Social Science: sociology, politics, economics, and education. |
| 400-499 | Philology: comparative philology, English language, and various languages. |
| 500-599 | Pure science: mathematics, physics, chemistry, and biology. |
| 600-699 | Applied science: medicine, engineering, and agriculture. |

- 700-799 Arts and recreation: architecture, sculpture, and painting.
- 800-899 Literature: American, English and other literature.
- 900-999 History: geography, biography, ancient history, and modern history.

Each class is then subdivided to give a more precise location. Your first task, therefore, is to discover the appropriate classification for the discipline you are studying. For example: if Psychology is your subject you will find the main grouping is at 150-159, which are subdivisions of the general class 100. Once you have found the shelves devoted to that category, you can go immediately to that location and be sure of finding books dealing with your subject. If, however, you are looking for a book on a particular topic, things are not quite so simple. The book you want may well be located elsewhere in the classification scheme that forms a complex interlocking structure. For example, Social Psychology is classified at 301.1, a subdivision of Sociology at 301, which is in turn a subdivision of the general Social Science classification at 300.

An added complication arises in that books too large for the normal shelves are usually grouped together on deeper shelves away from the main classified sequence. Thus in addition to knowing the code number for your subject you will also need to make use of the library catalogue which is the key to the exact location of the library's entire stock.

Catalogues vary from library to library. They may take the form of small cards filed in cabinets, or loose-leaf binders, or printed books, or, increasingly, computer output on microfiche or microfilm. Ask an assistant to show you how the catalogue for your library works.

You will find that with a little practice you can operate the system quite easily and save yourself a great deal of aimless wandering among the shelves.

For instance, if you know an author's name and wish to check whether his or her books are available, you can use the author index to the classified catalogue. If on the other hand you wish to find any relevant books on a particular topic, you can use the subject index. This is an alphabetical list of subjects, giving all the relevant classification numbers for each. Look these numbers up in the classified catalogue to discover authors and titles in stock. The books you decide upon may of course already be out on loan and consequently absent from the library shelves. It is however usually a simple matter to reserve such books and when they are returned to the library you will be notified that they are being held for you.

Try to get into the habit of regularly calling in at your library. There are two types of visit, both are equally useful.

- 1) You are researching material for a project or essay, go to the library well prepared with authors' names and titles gleaned from your course reading list or from the bibliographies of your set texts. Make good use of the classified catalogue to locate material quickly and efficiently.
- 2) If you have some odd moments to spare, perhaps during your lunch hour, they can be profitably spent in browsing among the library shelves. Go to the location for your subject and select any books that catch your eye. Practise the skimming, scanning and sampling techniques described under 'Overviewing' in Section 2. Be sure to have notebook with you so that you can jot down details of any real 'finds' for future reference. Remember to include the classification number on the spine of the book so that you can find it again quickly if needed.

Regular visits to the reference section of the library are also an excellent idea. Here books can only be used on the premises but desks or tables to work at provide an added attraction if you have a little more time at your disposal. There will always be staff on duty ready to help you make full use of reference resources. In addition to the classified subject-matter areas, you will find many different reference books of a general nature such as Dictionaries, Encyclopaedias, Yearbooks, Atlases, Gazetteers, and so on. There will also be access to periodicals, journals, newspapers, pamphlets, Government publications and archive material.

In larger libraries you may well also find a variety of audio-visual material such as films, slides, filmstrips, records and tapes. These may be available on loan or there may be a viewing/listening area on the premises.

Public libraries are storehouses of interest and information and offer a marvellous learning resource for the student. Make sure that you use them fully and in the process enliven and enrich your studies.

THE INTERNET

The Internet, the 'information highway', has become increasingly famous. Internet Explorer, although not the only means available, is probably the best software to use to exploit the Internet. Apart from searching the world wide web, and finding addresses, it is possible to gain direct access via menus to information services provided by a number of organisations. This service uses menus to route users to a wide variety of information sources, including the full text of the Times newspaper back to 1993, an extensive collection of maps, Websters dictionary, and many other reference works and news sources. It also gives access to the catalogues of many other libraries.

A GUIDE TO ON-LINE DATABASES

The Oxford Brookes Library subscribes to a suite of databases available to all Staff and Students both on, and off campus. Many academic journals in management and economics in full text, and huge amounts of company and industry information are available.

Access is via the Internet. Although the data emanates from the USA response times are rapid. Information Access has a dedicated link to the UK, and many other parts of the world, and there are none of the long delays that can occur, particularly in the afternoon, with other American Internet services.

Please read the details and instructions below carefully to obtain the best results. Many users search in inappropriate databases, and guess the operating commands!

Examples of some of databases are:

- ❑ **European Business ASAP** contains the full text of over 100 mostly UK and European management journals at least from 1994 onwards and sometimes from 1982 onwards. The great majority are academic journals, although there are some more general titles such as the Economist and Forbes, and some trade journals, such as Flight International and the Grocer. This is the best database in which to begin a literature search on any aspect of management. Over 240,000 articles are available. A list of the titles covered (not the database) may be obtained at: <http://library.iacnet.com/jl/acl00.txt>
- ❑ **Business Index ASAP** contains all journals in European Business ASAP, also, 350 titles more in full text, and abstracts from a further 550 (an abstract is a paragraph about the article to help you to decide whether to obtain the original, and is not a substitute). However, there is a strong bias towards American trade and regional journals, and it is necessary to sift through many more articles. For the serious searcher, the extra number of more academic management and economics journals available does make this worthwhile. Over 2,750,000 articles are available. Some date back to 1982. A list of the titles covered (not the database), may be obtained at: <http://library.iacnet.com/jl/sb5003.txt>
- ❑ **Business and Company ASAP** has exactly the same contents as Business File ASAP above.
- ❑ **Predicasts PROMT** replaces F&S Index on CD-ROM, which was previously known as Predicasts. It contains abstracts (which are in this instance are substitute for the original), and increasingly the full text of news items on companies, industries, and markets from over 1,000 world business and trade journals, and newspapers. Unlike the CD-ROM, which covered the whole world except the USA, it now covers the whole world, including America. Over 1,600,000 articles back to 1995 are available.

- **Investext** contains reports from 300 world stockbrokers (30 Asia Pacific, 59 European, 46 UK etc.). These all provide recommendations on whether to hold or acquire shares in quoted companies. They vary from brief reports in response to particular developments, to in-depth analysis of annual reports, and all company activities, sometimes including a SWOT and PEST analysis. Over 90,000 reports are available.

Instructions on how to use the databases are available in hard copy from the Library counter. Librarians also offer regular training for students on how to make the best use of the Libraries facilities. Databases are accessed through the web via the Library home page.