Module O: Exam Preparation – Studying

Even though you may know exactly what and how you should be studying (which you have determined from doing the targetting exercises in Module N), you still must avoid the following pitfalls when you are actually studying:

1. spending insufficient time studying
2. using passive study techniques

1. Spending Insufficient Time Studying

Time management does play an important part in exam preparation, and fortunately, most of the study strategies presented in the modules are easily managed, since they are simple, short and straightforward – all you have to do is sit down and do them, so you will not get bogged down in planning. Now is a good time to re-read Module 3, When and How Much Should I Study).

Planning Study Time

When you are studying, you should spend some time on all courses but most time on the one you will be tested on soonest. Supposing you have a couple weeks to study, and then you will be writing four exams within a couple of weeks. Before the first exam, spend half your time studying for that course, and the rest of the time divided evenly among the others (one sixth of the total time for each). After you write the first exam, spend half your time on the next, and one quarter of your total time on each of the others; and so on. Also keep in mind:

- the relative value of the exams: an exam that is worth 70% of the course mark is worth spending more time on than an exam worth only 15% of the course mark
- how well you are doing in each course and how much you have to catch up
- the value of each course for your program – an elective may be less important than an essential prerequisite

Task 1 (Schedule Study Time)

Referring to your Term Calendar (on which you have entered the dates of all exams and other important deadlines), Schedule time for exam preparation in your Daily Activity Schedule, keeping in mind the factors listed above.

Managing Study Time

Practice self-management strategies. Sometimes you simply have to force yourself to get to work. Review Module A, Self-Control. Procrastinators are constantly telling us, “I have the cleanest apartment in town – I do housecleaning chores to put off studying.” One effective technique to counteract this problem is to say, “O.K., if I’m not going to study, then I’m not going to do ANYTHING ELSE for the next two hours (or as long a time as you have set aside to study). Then just sit in your chair, and do nothing. Don’t even have a cup of coffee: no snacks, no television no music, no telephone, NOTHING. Just sit and don’t move. Before too long, you will start studying.

Task 2 (Monitor Study Activities)

Keep track of exam preparation activities in your Study Log. Scheduling and monitoring activities will help motivate you to work effectively.

2. Using Passive Study Techniques

Boredom and Anxiety

Students often suffer from boredom or anxiety when they are studying. For example: you have read over the relevant material in your text a couple of times. Now you are reading it over again. You recognize it, so you decide that you must know it. And you can barely keep your eyes open. In fact you are starting to fall asleep. Time for a nap, right?

Another scenario: you have all your things to study laid out on a big table. There’s so much to do! – lecture notes, old assignments, the text, photocopied readings, handouts – you can feel an anxiety attack coming on. Better go for a walk or something and calm down . . .

The psychologist Mihaly Csikszentmihalyi claims that if you are doing a task that is challenging rather than simplistic, but not too challenging, then you will be interested and engaged in the task, and not bored or anxious (he calls this state “flow”) – and you will be learning effectively, because you will adjust the level of challenge of the activity to your learning needs. Applying this conceptualization to studying, if you are fully engaged in an activity, you will be learning effectively. If you use active study techniques, you will more likely experience engagement in the study activity, so you will learn effectively, and you will resist distractions.
Pay attention to your psychological state, and applying appropriate strategies.

If you notice that you are bored, do something more challenging, requiring more work from memory, greater speed. Some possible activities include: working through your Cornell Notes; running through your study cards, as fast as you can (time yourself); doing a mind map from memory of the material that will be on the test; making up an appropriate essay question worth 50 marks and answering it within a time limit (again, from memory).

If notice you are confused, anxious, and "overloaded," you are likely facing an overload of complex information. Reorganize and categorize your material until it starts to make sense. Review the Learning Skills Handout, "Tips for Exam Preparation and Exam Writing". Ask yourself (and write down answers), "What is the central theme or focus of this material?" "What is this all about?" "What are the basic underlying principles and how are they applied?" etc.

Distractions

To combat distractions, both in the exam itself, and when you are studying, aim for fluency. If you have "overlearned" material so that it has become automatic for you – i.e. you can recall the content or apply the processes without thinking about what you are doing – then you be able to resist distractions while working. How do you attain a level of fluency? Apply active study techniques to practice doing the activity that you want to raise to the level of fluency until you can do it accurately and quickly. For example, if you need to learn terms and definitions, learn them with study cards, then use the terms often and in appropriate contexts, without referring to your cards or notes.

One way to reduce distractions and use of passive study strategies is to work with others, drilling one another or exchanging questions. This has the added benefit that you will be exposed to questions that you have not composed yourself (this is particularly useful if you are practicing to write a multiple choice exam).

Inappropriate Reading Strategies

People waste a lot of time studying passively. The most dangerous activity is reading, which is inherently passive. It may take 5 times as long to learn something well enough to answer exam questions on it, as it does to simply read it. Although you have to cover the material, reading, by itself, is not an effective study strategy. Guard against the inherently passive nature of reading by applying the following guidelines:

- Research indicates that for optimum learning effectiveness, you should actually spend 80% of each reading session – whether you are reading your text or notes – not in reading, but in reviewing the material from memory – reciting, mind mapping, reorganizing, explaining, finding examples, applying the information, and so on.

- If you don’t recall at least 80% of what you read, when you test yourself by reviewing from memory, you are wasting your time by trying to read too much. Read less between review-from-memory activities, by initially focusing on more important material, such as subheadings. You are likely trying to cram in too much trivia at once. Follow the routine from the Learning Skills handout, “How to Read University Texts.”

- Always test yourself by reviewing material from memory at least twice, even if you are positive you can remember it, and even if you are in a hurry. It is better to consolidate your learning of important material than to attempt to cover a large amount of trivial material ineffectively.

✔ Task 3 (Practice Active Study Techniques)

Record all study sessions in your study log, and include in the “other” column a rating for “passivity/activity” level of study, with reading at the lowest, then highlighting or transcribing, summarizing, reorganizing, and so on, with the most active strategies being those most similar to the activities you expect to have to perform on the exam: no reliance on the text or notes, and working within a time limit, and perhaps developing answers to unfamiliar questions, by applying principles and methods learned in the course.

The following anecdotes provide examples of how students have modified or applied study strategies to their own unique requirements.

Creative Applications: Tips on Specific Study Strategies for Levels of Bloom’s Taxonomy

Knowledge and Comprehension Levels

A History in Art Student had to memorize information related to works of art, slides of which would be shown during the exam. On one side of her study cards (Module E), she put the relevant information; on the other she drew a
brief sketch of the work of art – just enough to bring it to mind.

An Anatomy student used the Link and Substitute Word systems (Module F) to memorize anatomical terms. Then instead of using a photocopied pictures of the parts of the anatomy she would be tested on, with the parts unlabelled (she would be provided with this in the exam), she drew those parts and labelled them from memory.

A Statistics student used study cards for terms and definitions in the following way: he sorted his cards into two piles – ones he knew (studying from both sides), and ones he didn’t know. Then he picked up six from the pile he didn’t know, studied (from both sides) until he learned one, set that one on the pile of cards he knew, and replaced it with one from the pile he didn’t know. In this way, he worked through all his cards. This provided frequent exposure to unlearned material, but ensured that terms and definitions would not be stored only in short term memory, which can only hold about 7 items (it would be easy to retain one definition long enough to parrot it immediately after reading it, just as one remembers a phone number long enough to dial it). Then to prepare for his exam, he made a large mind map (this took a couple of hours) of all the terms and definitions, completely from memory. This moved his recall-level practice into the comprehension level, because the mind map required him to see the relations among all the items he had learned.

**Application Level**

Many students reorganize their notes. This is especially good if the professor has a disorganized lecture style. Reorganizing forces you to devise and apply your own categories to the material. When doing this, remember that, although the short term memory can handle 7 or so units of information, each unit may be a “chunk” composed of two or more related items. Research has shown that the optimum number of items in a “chunk” is four. So if you have more than six or so items in a list you want to remember, you may want to categorize these into groups or “chunks,” according to characteristics that are meaningful. For example, a student taking an Education course on how to compose exams had to memorize twelve characteristics of a good multiple choice question. He noticed that four of the items dealt with stylistic characteristics of the question, four dealt with characteristics of the content, and four dealt with level of difficulty. By reorganizing the items into these three new categories, he increased the order of the material and increased the number of associations among the items, thus reducing its overall complexity: this actually decreased the memory work he had to do.

In problem-solving courses, no matter what techniques you need to use to help you learn to solve problems, remember – you must be able to do the problems from memory, within a time limit, in the same way you will have to do them in the exam. Do not trust your feelings – when someone explains a problem to you, and works through it with you, you may feel that you understand it and can do it by yourself. This feeling is probably wrong. Work through the problem by yourself, from beginning to end, with no prompting or hints. And – be able to do this well within the time you will be allotted for it in the exam. Then review by doing it again, within a day, a week, and before the test. Some students keep a file of questions that exemplify principles and procedures from each part of the course; then they work through these when they are studying (Module M).

Members of a study group for a math course practiced doing questions quickly from memory. At first, they took an average of fifteen minutes each to do each question. By the time they wrote the exam, they were able to do each question in only five minutes. One student (who received 100% on the test) reported that he was able to finish early enough to spend extra time on a difficult question, which he finished just as the exam ended.

**Critical Thinking Levels – Analysis, Synthesis, and Evaluation**

To think critically, one must have a solid grasp of the material covered in the course, at the knowledge, comprehension, and application levels. Then one must be able to process this material in ways appropriate to the requirements of the course. What follows is a procedure to give you practice in doing this, by reorganizing it in a way that makes sense to you, and then asking questions about it.

1. Mind map the topic from memory. Odds are, you are starting with material that is vaguely organized, at best, as far as you are concerned. A mind map will allow you to set down all the material on one page, without forcing it into any organizational pattern. Of course, you can include lists, grids, hierarchies, lines of reasoning, and so on, as you see fit, in a mind map. The main thing is to get down everything you know from memory, and to start working on fitting it together.

2. Follow through the procedure of asking questions about the material in your mind map.
from the top three levels of Bloom’s Taxonomy, to foster critical thinking.

3. Since essay questions are commonly used to test for critical thinking skills, you should practice writing essays, based on questions you have made up, addressing major themes or objectives of the course. If you have one big essay to write in your exam, it will likely be on one of these major themes. Refer to the Learning Skills Handout, “Simplified Plans of Action for Common Types of Question Words.”

**TASK SUMMARY**

To complete this module, you should do the following:

1. Plan for study time to be spent preparing for your exams, by doing a Daily Activity Schedule that covers the period of time until your exam.

2. Design a program of study that incorporates active strategies appropriate to your needs.

3. Monitor your study activities on a Study Log.

4. Apply self-management strategies as necessary.

**REFERENCE**