

**Blueprints
for
Teaching**

Halynka Honczarenko
Teacher Development Officer
Fall 2001

Welcome!

During your orientation, you were introduced to the Five T's of Teaching. These are as follows:

1. Tell them what you are going to teach them.
2. Tell them why you are going to teach them.
3. Teach them.
4. Test only that which you taught them.
5. Tickle, trial, triumph – make sure your students (and you, too!) have fun during the learning process.

The following modules use the 5T system to give you quick and simple blueprints to help plan and organize your teaching. Good luck and welcome aboard!

Planning the Semester

- T1.** The next few pages will show you how to plan your semester.
- T2.** You need to have an overall plan in place for several reasons:
1. It allows you to plan a learning schedule for activities both in and out of the classroom over the next 16 to 20 weeks.
 2. It organizes the order and pace of your presentation.
 3. It keeps you and your students focussed on the objectives identified in the course outline.
- T3.** In order to do this, you need the course outline, a calendar, and a chart like the one that appears after these instructions.
- Step 1.** Make a chart for every course and section you teach. Even if you are teaching multiple sections of the same course, make a separate chart for each.
- Step 2.** Write in the dates on which the weeks begin and block off any scheduled holidays.
- Step 3.** Write in the date when midterm marks are due. You must have at least 25% of the final mark complete by then.
- Step 4.** Using the course outline, fill in the blanks in your chart. Make sure you include all stated objectives, but name only the main points at this time. The details will be worked out when you plan each lesson. Pay attention to the following:
- a. Present only one topic during each class session.

- b. Order your topics in such a way that they build on one another, from simple to complex.
- c. Write in the days during which you plan to give tests and review sessions.

Step 5. Remember that this plan may require revision as the semester progresses. One class may need more time to master the concepts while another may need less. Class may be cancelled or cut short because of a fire drill or your absence, thus requiring reorganization. School life is full of surprises, but if you have prepared in advance, you will find it fairly easy to adjust.

T1. Once you have completed writing out the learning schedule, you will be able to start planning each lesson. The chart on the next page describes a course which meets three times each week. (If you only meet once or twice weekly, then you will only need to fill in the first two columns under the Key Concepts heading.)

Make sure you have included everything named in the course outline. Remember, this is a contract, and it must be followed.

Template Example
(Blank templates are available on Staffnet)

w e e k	Date	Course Outline Objectives	Key Concepts to be covered in each class meeting:			Learning Outcomes
			First (___hrs)	Second (___hrs)	Third (___hrs)	
1	Aug. 27	Engine	Intro & overview	parts	practicum	theoretical & practical understanding of the engine
2	Sept 3	Digital Radiography	intro& comparison to conventional radiography	theory & application of the workings of digital	patient care	describe advantages, set parameters & perform operations
3						
4						
5						

Planning the Lesson

- T1.** The following pages will show you how to create a lesson plan. Each lesson plan is an expansion of the individual boxes under the Key Concepts column of your semester plan chart.
- T2.** A detailed lesson plan provides an outline for the day's activities, serves as a reminder of what resources need to be prepared in advance, sets up the out of class learning activities, and acts as a record of the material covered. This in turn will help you when you start to make up your tests and quizzes.
- T3.** You will need your semester plan and your references.

Step 1. Make a chart like the one at the end of this chapter. It must include the following:

- a. Key concept to be taught (**T1**).
- b. Corresponding unit number and/or page numbers in text.
- c. Objective(s) for the lesson (**T2**).

- d. Resources. (This is just for you.) What tools, hand outs, overheads, materials, etc. do you need to have prepared in order to teach your lesson?
- e. Method (T5). Which approaches will you use in class this day? How will you break up the lesson to keep your students interested? These options will be discussed in the next chapter.
- f. Learning Activities (T3 and T5). This is completely linked to the method(s) you choose. Of course, as you will see in the next chapter, the methods themselves are dependent on the subject matter.
- g. Evaluation (T4). A quick question and answer session at the end of each class can serve as a review of the material and a preparation for future quizzes and tests.
- h. Assignment for the next class (**T2, T3, T4**). The work assigned for homework should clearly tie in to the material covered in class and should prepare your students for the next lesson. If you take up the work they did the next time you meet with them, they will clearly see the importance of doing the assignment as well as the need to attend regularly.

Step 2. Fill in the blanks.

Step 3. Assign estimated time necessary for each planned activity and add it up. Does it fill the scheduled class time? Does it allow for the time needed to set up activities? Even handing out papers takes time; include it in your time estimate.

Step 4. Gather and/or copy the materials you will need to teach your course. Reserve any equipment you will need.

Step 5. Prepare your method of evaluation/summary.

This plan should give you a good idea of how your class time will be spent. As you plan each learning session, consider the following factors:

1. This is all new to your students. Remember to include time to introduce new terms and to have good examples ready to illustrate your topics. (It's very hard to think them up on the spot!)
2. The more that students are involved in their own learning, the easier it is for them to

remember what they have been taught. Therefore, provide as many opportunities as possible for them to practice their new knowledge or skill.

3. Pacing the class requires good planning. At each step, ask yourself, “How much can my students cover in a single session?” A realistic answer is based on the following formula:

The average adult attention span is about 15 to 20 minutes long.

So, no matter how long your scheduled class time may be, plan on breaking down your instruction into short sections.

For example, start with a 15 minute mini-lecture. Then give a 5 minute individual assignment to actively involve your students in the new skill or concept. Next, return to the lecture format for an additional 20 minutes, and then break into groups for a longer activity. At the end, review the day’s work by asking for results from the group work and summarizing findings and key points.

3. Your organization of time and content should leave your students with a sense of accomplishment and enhance their ability to remember what they have learned.
4. Your assignment for the next class should build on what was learned this day and should prepare your students for what is next. Make the connection clear to your students so that they see how all the key pieces tie in to the whole -- show how the

objectives lead them to the desired outcomes.

5. Finally, remember that a well paced course moves along with purpose and direction, but not so rigidly that you and your students become enslaved by the schedule. If the students require more time to learn a concept, grant it; if they need less, move on.

T1. If you follow the steps in the planning process, you should have a well structured learning session. Remember, though, what works on paper doesn't always work in practice, so always have a Plan B. Make sure that you have enough flexibility to abandon something that is obviously not working. Also, make sure that you have your next lesson planned and ready to go in case the first one moves along more quickly than you had expected. Finally, remember that the more you do this, the easier it becomes.

LESSON PLAN

Key Concept:

Unit____, **pages**_____.

Objectives:

Resources:

Methods:

Learning Activities:

Introduction (____minutes)

Presentation (____minutes)

Application (____minutes)

Evaluation/Summary (____minutes)

Assignment:

Teaching Methods

- T1.** This chapter will introduce you to various teaching methods.
- T2.** Since some methods of instruction are better suited to certain objectives than others, it is important to know what options exist and how to use them. Having a repertoire of strategies will also enliven your teaching and make learning more fun (**T5**) for your students.
- T3.** Teaching methods are educational strategies which facilitate teacher-student communication. Your selection of a teaching method should be based on a variety of factors including the nature of the curriculum, the level of instruction, and your students' needs. Ultimately, however, your choice of teaching strategies will depend on your course objectives.

There are four categories:

1. teacher centred
2. interactive
3. individualized
4. experiential

Each can be an important part of your teaching.

In the following pages, you will find a brief overview of each category as well as some tips on how to plan each method.

Teacher Centred Instruction

This type of instructional strategy is the most common and is best suited for information transfer. Examples are the lecture and demonstration. Teacher centred instruction is used effectively in introducing material, providing an overview, summarizing, clarifying, etc. Good teaching can begin and end with a lecture, but it must not remain there throughout the lesson.

In order to plan an effective lecture, there are a few simple steps to follow.

- Step 1.* Ask yourself what question you want your students to be able to answer at the end of the lecture. This will provide the core (main topic) of your presentation.
- Step 2.* Choose three or four main points to answer the question. This gives you an outline for your lecture.
- Step 3.* Expand your outline by finding relevant and appropriate examples and anecdotes to illustrate your points.
- Step 4.* Restate and emphasize important points and key principles throughout the lecture in several ways to accommodate all your students.
- Step 5.* Find or create learning activities to give your students a chance to practice that which you have taught them.
- Step 6.* Summarize your lecture.

Interactive Instruction

This is a very effective teaching strategy because it actively involves students in their own learning and encourages higher level thinking processes (analysis, synthesis, and evaluation) thus helping to develop critical thinking. As you learned in your orientation, these skills are built on a continuum and must be developed gradually. Examples of the interactive mode are questioning, group projects, peer teaching, debate, and discussion.

The preparation for the interactive mode requires more work than in the teacher centred method. Also, the skills involved in leading an interactive classroom are different from those needed in the traditional lecture format. But good planning will result in a lively class with students taking responsibility for their own learning. Be aware that many students will feel reluctant to begin, and it may take a while to get things going. Others may try to monopolize the discussion, silencing those who are slower to get started. Your job is to facilitate the process and find a way to include the entire class.

The following plan will help you organize and lead a discussion class.

- Step 1.** Follow the plan for preparing a lecture. Write out your objectives and key points. This is where you need the students to end up.
- Step 2.** Using your lecture outline, write open-ended questions which will guide your students to this information.
- a. Ask for opinions. This way students are required to explain their positions.
 - b. Ask questions which have multiple answers or multiple-part answers. This way, many students can become involved in answering.
 - c. Ask students to compare and/or contrast two or more concepts. The synthesis of information necessary will force them to think carefully before answering.
- Step 3.** Prepare a summary. At the end of the lesson, your goal will be to connect the students' answers to the original questions posed. While you cannot know for sure what the students will say, you can anticipate the direction in which the discussion will lead. (You are, after all, guiding your students to those points.) When you close the discussion, you take back full control of the class and demonstrate for your students what they have accomplished and the relevance of their findings.

These steps should provide you with the lesson plan necessary for a discussion. When you are actively engaged in the class, keep these tips in mind:

1. Ask one question at a time.
 2. If the class is silent, wait. Silently count to 20. Do not add to the question; wait. This allows the quieter students to join in and shows the class that you are not going to take over.
 3. Allow for opposition. Since you are not giving information directly, but allowing your students to discover it for themselves, you will find that the route is not always straightforward. If students can back up their stated positions, then they are doing exactly what they should be. Just remember to maintain order:
 - a. Ensure that only one person speaks at a time. You can do this by insisting that people wait to be called on before they speak.
 - b. Demonstrate and maintain a respectful environment. If a discussion becomes heated, make sure that the debate stays focussed on the issues and not on the individuals expressing divergent views.
 - c. Maintain the focus of the stated questions and goals. If the dialogue starts to veer off course, bring it back.
 - d. As key points come up, write them on the board for the students. This will help them stay focussed and will act as a review at transition points.
- T1.** If you plan ahead, the interactive mode of teaching is fun (**T5**) and inspiring. As you get to know your students over the semester, you will find this teaching strategy more and more easy to employ. Remember, too, that it does not need to take up the entire class period. You can use this method along with another in the same learning session.

Individualized Instruction

This teaching strategy is based on the belief that students learn at different speeds and that regular immediate feedback facilitates the learning process. There are two forms of this method: programmed instruction (as in the upgrading and distance education modules) and independent projects. If you use this method in your classes remember two things:

1. Write a contract with the students so that all expectations are clear.
2. Establish regular meeting times for review and ongoing support.

Experiential Instruction

This teaching method is most common in nursing courses, teacher training, and counselling programs. In a real or simulated setting, students practice the activities they learned in the previous three approaches. The specific activities used are drill, games, role playing, and simulations. Experiential teaching strategies are wonderful tools to use with students who are more advanced and preparing for placement courses. They allow student participation in the application of rules and principles to various situations while remaining in a safe, supervised environment. Traditionally, experiential teaching is used to build confidence in students before sending them out to the field. Here the teacher acts as a coach, fine tuning that which has been previously learned.

As you become comfortable at the head of the class, you will be able to try new things. The following list is provided as an idea generator to be used at your discretion.

Instructional Techniques and Activities

Audiotapes	Dramatizations	Panels
Brainstorming	Drill/Practice	Problem solving
Bulletin boards	Exhibits	Projects
Buzz groups	Field trips	Questioning
Case studies	Films	Resource people
Chalkboards	Games	Role playing
Committees	Group work	Simulations
Community study	Independent study	Slides
Debates	Investigation	Team teaching
Demonstrations	Laboratory work	Television
Diagnostic sessions	Library	Transparencies
Discovery	Models	Videotapes
Discussions	Oral recitation	Work-study

Classroom Management

- T1.** Classroom management is an area which covers everything other than curriculum content. It means establishing and maintaining appropriate dynamics within your class so that everyone can learn and participate freely.
- T2.** This section is based on the concept that prevention is the key to avoiding difficult situations. As always, planning ahead and anticipation are the keys to success.
- T3.** Maintaining a well run classroom depends on several factors. Of course, your organization of the learning session will go a long way in ensuring that your class proceeds smoothly. But that alone is not enough. Perhaps the most important thing to remember is that you must make your expectations clear from the very first day. When the ground rules are established, both you and your students can get on with the business of teaching and learning. Because the first day of class is so important in setting the tone for what is to come, you must also be aware of how you present yourself to the class. Finally, take nothing for granted; explain everything.

Therefore, your first day of class should be spent on introductions.

Step 1. Introduce yourself to your students.

Step 2. Introduce your course.

Step 3. Introduce your policies and expectations.

Step 4. Introduce your students to each other and to yourself.

The following is a checklist to help you get started.

Day One

1. As soon as you enter the classroom, write the course name and number on the board so that the students know that they are in the right place.
2. Write your name, office number, extension and email address on the board.
3. When it's time to start the class, spend a few minutes introducing yourself and establishing a rapport. Remember that first impressions last a very long time, so your tone of voice, your level of formality, your energy level, even the way you dress will help your students form an opinion of you. The trick is to find the balance which shows your professionalism as well as your approachability. A confident and friendly manner will help achieve that balance.
4. Tell your students how to get in touch with you. Call attention to what you have written on the board and make sure that everyone can see clearly. Let them know if you have office hours or if you prefer to make appointments at mutually convenient times. Encourage your students to see you if they have concerns.
5. Go over the course outline thoroughly.
 - a. Point out the objectives and learning outcomes.
 - b. Note how grades will be earned.
 - c. Explain how much time students will need to spend on your course outside of class.
 - d. If you know them already, announce the dates of major tests and assignments.
 - e. Tell your students how to prepare for your tests and quizzes.
 - f. Let them see your enthusiasm for your area of expertise and invite them to join in.

6. Introduce your policies and expectations. Some are included in the course outline and as such are non-negotiable.
 - a. Review carefully the rules regarding absence, late work, missed tests, and academic dishonesty.
 - b. If you have additional expectations not specified in the course outline, explain them now.
7. Take attendance. This is a good way to lead into the introductions amongst the students. Some options are:
 - a. Have a sign-in sheet at the start of class. From this record, do a roll call identifying each student.
 - b. One at a time, have all students state their names and one interesting fact about themselves.
 - c. Pair your students and have them interview each other. Then have them introduce their partners to the rest of the class. Take notes so that you, too, will remember.
 - d. Have students write down (and then share) questions they would like to have answered about your course.
 - e. Form groups of three or four students and give them a pre-test. Have each group try to answer the questions collaboratively and then compare results with other groups. This activity not only introduces students to each other, but also involves them right away with the course. It prepares them for what is to come.
8. Set up a buddy system. Have each student exchange contact information (phone number and/or email) with at least one other student. They must not travel to school together. This way, when students are absent, they have someone from whom to get missed notes and assignments, and thus will be ready for the next class despite having missed a session.
9. At the end of class, summarize what was done and tell your students what to expect in the next class.

These activities should fill your time allotment. However, if you have time left over, start

teaching! Give your students their money's worth!

Once you have established the ground rules, you need only to maintain your students' expectations. The following is a list of tips for managing your classroom on a daily basis. It is intended to help you keep up a productive classroom and a respectful relationship with your students.

Every Day

1. Start class on time. If students arrive late several days in a row, say something before it becomes a habit.
2. End class on time. If you begin letting students out early, they will expect it; if you go over time, your students (and the next class scheduled) will resent it.
3. Be available. This can prevent many problems, so remind your students regularly how to reach you and make sure to return their calls promptly when they do reach out.
4. Deal with disruptive students individually, not during class where your credibility is on the line. Wherever possible, allow the student a face saving way out; aim for a win-win situation.
5. Deal with disruptive students in person, not by phone or email.
6. When talking to a disruptive student, focus on how the behaviour affects you and the other students.
7. When asked a question to which you don't know the answer, don't bluff. Instead, admit it and offer to find out for the next class.
8. Maintain the policies you set in the course outline and verbally.
9. Do not deal with students when you are emotional.
10. Do not deal with students when they are emotional.
11. Be conscious of signs of harassment. Make it clear by your words and actions that derogatory comments about any group for any reason are not acceptable.
12. Refer students with psychological, emotional, academic, or financial trouble to the appropriate counsellors.
13. Know your students names. This is your homework!
14. Demonstrate respect for others and your love of learning.
15. Take attendance.

16. Mark and return tests and assignments quickly. Include enough information in your comments for students to know how to improve.

Perhaps the most difficult of all of these is learning your students' names. Here are some suggestions to make it easier:

1. Have the students sit in the same seats for the first few weeks until you are able to match names with faces.
2. Have students give their name each time before they speak.
3. Use students' names as often as possible; the repetition will help you remember.
4. Use name tags until everyone knows everyone else's name.
5. Take individual pictures of your students and write their names on the back of each picture.
6. Associate students with the same names as your friends with those people.
7. Pair students and have them interview each other. Then have them introduce their partners to the class. The more you know about your students, the easier it will be to remember their names.
8. Ask your students to help you. They are generally happy to do so.

T1. This chapter has covered the aspects of classroom management which have a direct impact on you and your students. A little foresight goes a long way in making the classroom a comfortable learning environment for all.

Evaluation and Grading

- T1.** This section will help you write tests which accurately gauge student achievement and allow you to assign grades. Because the lesson plans all include formative evaluation which gives students feedback to help them learn, this section focusses only on summative tests, that is those which measure achievement and result in grades.
- T2.** There are two reasons why accurate evaluation is important:
1. It provides a means by which you can ensure that your students are meeting stated objectives.
 2. It ensures that all students are judged fairly and equitably. This will help you maintain the teacher-student relationship that you have worked so hard to build.
- T3.** The tests must be constructed only from material which was taught, and the questions must reflect the emphasis given in class to various aspects of your course.

Step 1. Analyse what was taught.

- a. First, return to your daily lesson plans.
- b. As you go through each one, note the terms, concepts, and skills which you covered in each class. Next to each, record how much time was spent on it.
- c. Finally, match these up with the objectives identified for your course.

You now have a framework from which to write your test as well as an excellent review for your students.

Step 2. From the complete list in front of you, choose which items to test. This decision should be based on several factors:

- a. The amount of time you devoted to this in class.
- b. The importance of this concept, skill, etc. to future work. (Consider this in terms of your own course as well as subsequent courses in the program.)
- c. Make sure all the major sections that you taught have representative questions. (Test all that you taught.)
- d. Finally, group your questions into sections.

Step 3. Decide how much each section will be worth. This will help you write the test (steps 4 and 5), give the students an indication of how to spend their time, and make for easier grading (step 6).

Step 4. Decide which of the levels from Bloom's Taxonomy you will use.

Remember: As you learned in your orientation, Bloom's Taxonomy categorizes and places in a hierarchy the level of abstraction demonstrated. The lower levels require basic memorization, and the higher levels require the student to apply knowledge.

Depending on the level of the course you teach and the point during the semester that the test is given, your balance of basic and advanced questions will vary.

Ask yourself: Which type of questions will accurately gauge student learning?

To answer the question, return to your objectives for each lesson and for the course as a whole and write the test so that it matches your intended outcomes.

Step 5. Choose which kind of test will be best suited for your purposes. You have three basic choices: essay and short answer tests where students generate the answers, multiple choice and matching tests where students choose answers from supplied options, and performance tests which are used to test hands-on skills.

1. Essay tests are considered the easiest to write and the hardest to mark. In order to make sure that these types of tests accurately demonstrate student learning, do not allow students to choose which questions to answer. If all questions must be answered, you will have a clearer picture of overall learning.
2. Multiple choice tests are very common and effective if well written. First see if any tests are provided with the teacher's manual. If prepared tests are available and if they reflect the way you taught the material, then use them! If the tests do not match your focus, then see if you can adapt them to your purposes.
3. Performance tests are used in many fields such as music, welding, nursing, etc. Here the students must demonstrate their ability to do something. Since criteria are standard and exact for each discipline, we won't discuss these tests further.

Step 6. Write the test in such a way that it accurately reflects both what went on in the class and what will be expected of the students upon completion. Make sure the directions are clear and complete. (Write so that additional oral instructions are not necessary.) Include point values for each question.

a. Essay tests

1. Write the questions in such a way that the students understand both the limits of the topic and the level of specificity you expect.
2. Be aware of the time limits during the test. Write only as many questions as can be answered.
3. For each question, write a point form response as a guide for your own marking. (Remember to grade by key concepts rather than key words or catch phrases.)

b. Multiple choice tests

1. Writing an effective test requires that you follow the same basic rules as with all other tests, but avoid the following common problems (adapted from Pratt, pp. 236-240):

1. Internal clues

These clues help the aware test takers even if they do not know the correct answers. One such example is the grammar clue:

A polygon of eight sides and eight angles is called an

- a. *octagon*
- b. *pentagon*
- c. *hexahedron*
- d. *cube*

Correct this by rewriting the question this way:

A polygon of eight sides and eight angles is called

- a. *an octagon*
- b. *a pentagon*
- c. *a hexahedron*

d. a cube

Another unintended clue is found when the correct answer is much longer than the wrong ones.

2. Overlapping answers

All the choices provided should be mutually exclusive. For example:

Which of the following groups is likely to support protectionist policies?

- a. businessmen*
- b. consumers*
- c. foreign industrialists*
- d. manufacturers*

Since *a* and *d* overlap, either could be correct.

3. Confusing questions

Questions should be written and arranged for easy readability and comprehension. You are not trying to trick the students.

4. All of the above

The problem with this type of question is that the student only needs to see that two of the three options are correct to realize that the correct answer is All of the above.

5. Items based on opinion

Questions which rely on values that may not be universally shared are inappropriate. For example:

Which of the following is the greatest threat to schools as transmitters of culture?

- a. progressive education*
- b. behaviourism*
- c. the demand for relevance*
- d. student militancy*

Step 7. Mark the test and assign a grade. (Remember that you must be able to justify whatever mark you give.)

There are three guidelines for grading:

1. The grading system should reflect the relative importance of the objectives. The most important objectives should carry more weight than the less important ones.
2. As far as possible, acknowledge any student attainment. Especially in essay tests, it is important that you write comments to indicate your reasons for taking off marks or granting credit. Don't forget that students will compare results!
3. It should be possible to attain 100%. This mark should demonstrate that the student has met all identified objectives to the standard you have specified.

Once you have marked all the tests, record the marks and return the tests to your students. Use the review to explain to the students what answers you had expected. This way, the test becomes a tool in teaching them how to study for and take your tests. Try to do this as soon as possible; the students are anxious to see how they have done and need an indication of how they are doing in your class.

T1. If you follow these steps in the test writing process, you should have a test which will evaluate the level of learning your students have attained. Over time, you'll find yourself identifying potential test questions as you write your daily lesson plans. The process does get easier.