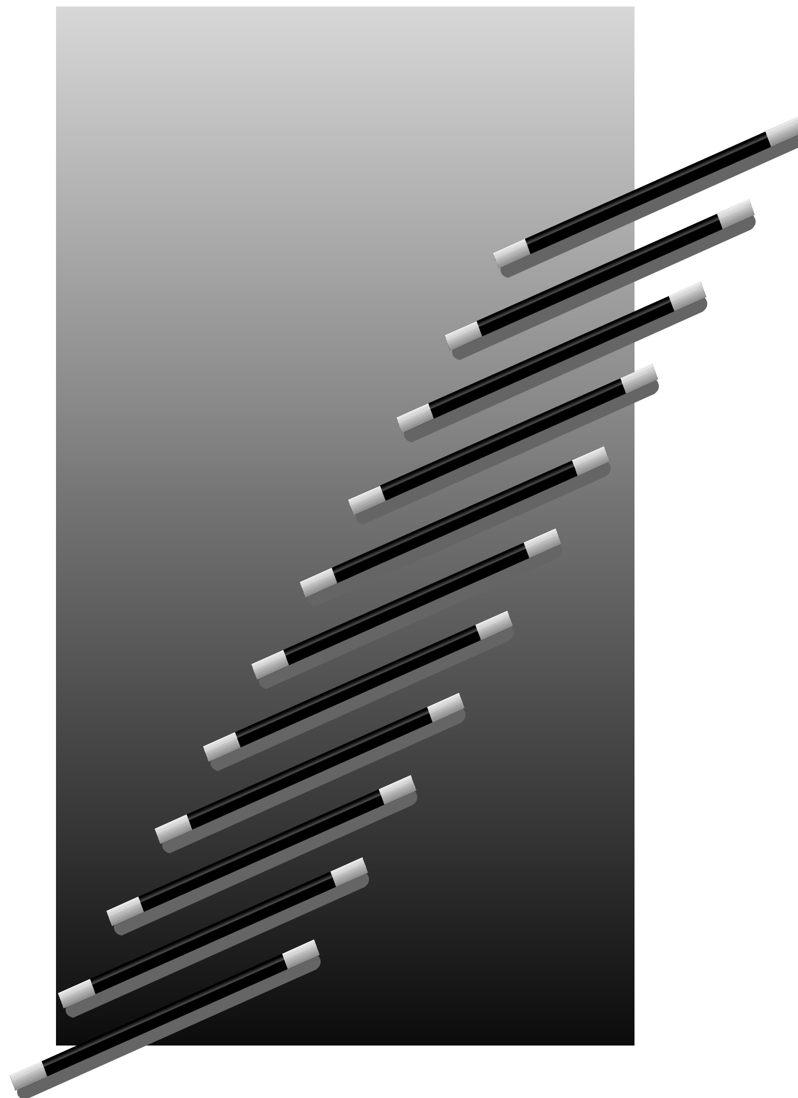
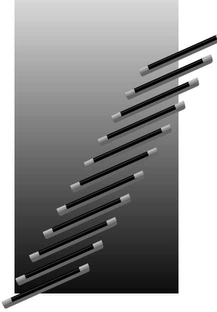
Part IV

Planning Courses

"If you are not sure where you are going, you may end up someplace else."

Robert Mager





Planning Courses

Course Planning and Design

Does just thinking about planning or re-designing a course make you feel tired? As scholar/teachers we are prone to spend so much time wrestling with subject matter that there is little time or energy left for the seemingly insignificant yet important details of course design. We are so overwhelmed by the responsibility of disseminating our vast knowledge to students that course planning becomes a chore rather than a creative challenge.

There is an ancient Chinese proverb that says even a journey of a thousand miles must begin with the first step. A less ancient, but equally applicable piece of advice about course planning and design comes from Bugs Bunny, who warned would-be travellers to "Watch out for that first step, Doc. It's a lulu!" Many times the "lulu" in course design is a looming deadline.

Some instructors envision course design as a means for mapping out the best route to guide students through unknown territory as safely and pleasurably as possible. Others plan for the construction of knowledge and use their course design as a kind of blueprint for building upon existing knowledge. Whatever your orientation toward course planning, maybe as a Master Chef starting from scratch, or as an old hand who haphazardly shuffles through last year's lectures, we offer, in this section, assistance in taking that first step. We have included a list of resources at the end of this section to get you through those days when the Muse needs a little coaxing.

Peter Renner, in his book *The Instructor's Survival Kit* (1983), cautions readers not to depend solely on any simplistic planning models to fulfill all the necessary criteria for every course. However, experience has shown that Renner's trusty ten-step planning model, when used in conjunction with other sources of information and inspiration – like cornering a trusted colleague or attending a TLC workshop – can be helpful in getting a course off the ground.

First, some general, helpful hints:

- As you are completing each step in the planning process, try to see yourself and your students in the actual classroom in which you will be teaching. If you don't know how the room is equipped or what it looks like, go and look now.
- Remember, it is *your* plan and you can change it at any time. But without a plan you may not include everything that is essential; and with a plan you are free to indulge yourself in taking any side trips or detours that you decide are appropriate and worthwhile.
- Don't go too far in planning – and don't start to instruct – unless you have a clear picture of your overall objectives. Know what you are aiming for.

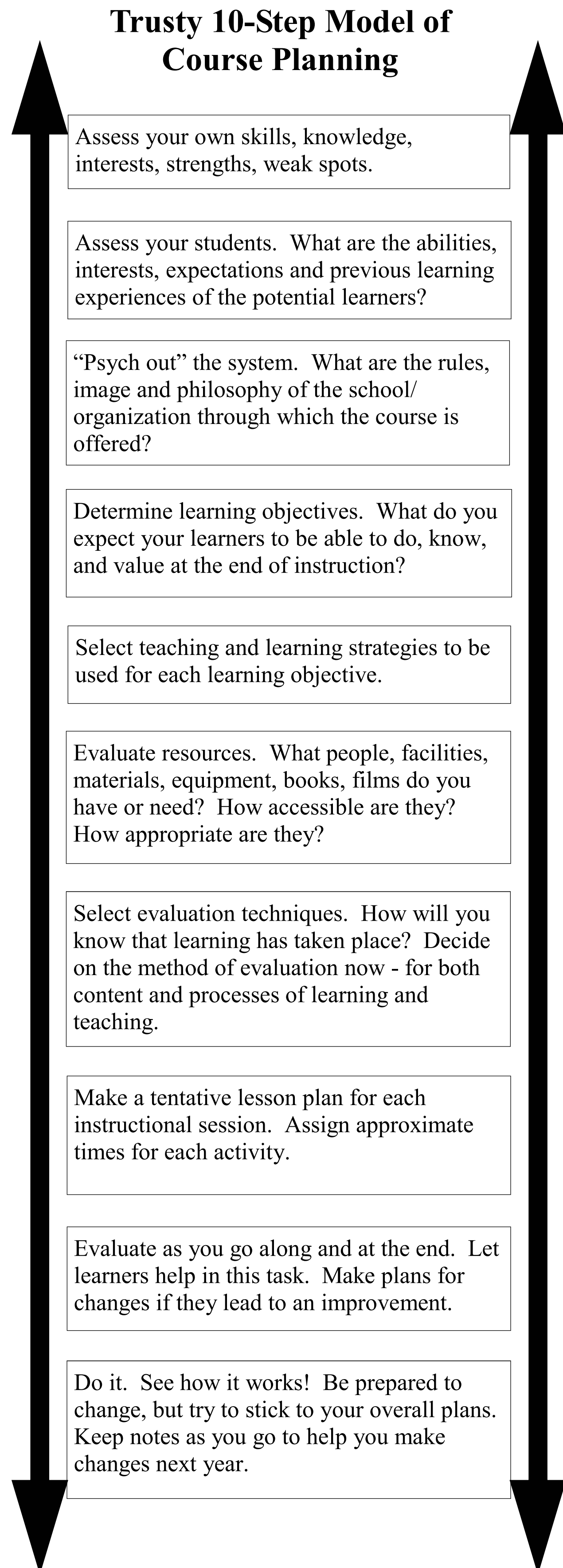
- Don't forget to consider the time of day the course is being held and be sure to include a break in any course session over 90 minutes – at least one break every 90 minutes.
- Beware of over-using your favourite teaching methods. Try to include something for those who do not cherish this method as much as you do.
- Don't forget to include in your plan a means for assessing students' learning.
- And always include in your plan a method for knowing on what basis and when you can pat yourself on the back for a well-instructed course.

The Trusty 10-Step Planning Model is shown on the right. It has been adapted from Peter Renner (1983), *The Instructor's Survival Kit (2nd edition)*. (Vancouver, BC: Training Associates).

You don't have to use the 10-step model in a linear fashion. Start anywhere. Use the steps in cyclical fashion. Just try to cover all the points outlined in the model.

And the Objective of All This Is . . . ?

The objective of all learning is change. In order to bring about change, there must first be some kind of action. The objective of course planning is to come up with a formalized plan for that action. No matter how animatedly you think you can verbalize course goals and objectives, don't even think about facing students on the first day without a list of clear objectives in your course syllabus. Your plan is like a treasure map and it is not fair to keep the treasure map to yourself. Even if you have found the perfect description of your objectives, take the time to discuss them with students at the first class session. By giving students access to this information, you are giving them valuable information about course selection and expectations.



Designing a Course (Abbreviated Version)

There was an instructor named Hyde
Whose courses the students decried.
Then he went from a zero
To Big Campus Hero,
Won the annual teaching prize

"My secret" he said with some pride,
"Is to plan with three questions in mind:
"Where are you going?
"How will you get there?
"And how will you know you've arrived?"
Author Unknown

The material in this section was developed to describe to new faculty the intricacies of course development as part of a one-hour workshop. The information provided is overly simplified. The topic could easily be expanded to fill a textbook. Readers who want more detailed information should consult the Sources and Resources list at the end of the section. The steps in designing and planning a course are described in six sub-sections.

1. Identifying the Course Purpose – Where Are You Going (General)?

Before you start, figure out what the overall purpose of the course is. Some possible purposes are that, by the end of the course, the students:

- will have been introduced to concepts to raise their awareness
- will know specific facts and concepts
- will understand concepts
- will have discovered relationships among concepts
- will be able to apply concepts
- will have learned skills, behaviours or strategies for doing something
- will have developed appropriate attitudes or values

Each of these overall purposes lends itself to a different course design. Your course may include two or three of these overall purposes – but it is unlikely to include all of them (Renner, 1988; 1993).

2. Identifying and Selecting Content: Where are You Going (Specific)?

Think of the content of the course as including both topics and concepts or skills. The "topics" are general themes to be covered in the course; "concepts" or "skills" are specific details within each topic. A topic could include a number of concepts and/or skills. There are two steps in identifying and selecting content.

In the **identifying step** you need to generate as many different ideas (topics, concepts or skills) as possible about what is going to be included in your course. Some strategies for doing this are:

- **Brainstorm** – set a timer for 10 minutes. Have plenty of paper and your favourite pen. List as many ideas as you can without pausing to judge these ideas in positive or negative terms.

  If you hit a pause in your thinking, give yourself a few minutes because your mind may be working on an idea that is really interesting but it hasn't risen to consciousness yet.

  Crazy ideas are good; so are repeated ideas. All the ideas you generate will be culled in the selecting step.

  Brainstorming works better when you have at least one other person working with you (Renner, 1988; 1993; Koberg & Bagnall, 1974).

- Develop a concept map (also called mind mapping), a visual depiction of ideas

which have already been brainstormed.

> Put the focus or overall purpose of the course in a circle in the centre of your page and develop a "branching tree" or "spider's web" in all directions to accommodate specific topics, concepts and skills. Topics would be placed nearest the purpose; concepts and skills might be branches off a topic or a branch off the purpose (Buzan, 1995).

- Develop a "wish list" – a "pie-in-the-sky" brainstormed list of things you would teach in a course given all A+ students and a perfect world in which you had nothing else to do (Renner, 1988).

In the **selecting step**, you will:

- Go through your lists, combining some ideas to create larger topics, dividing large topics into smaller ones, adding new ideas, eliminating ones which don't work or are inappropriate.

- Then write each of your selected topics on a separate piece of paper (e.g., a post-it note or a recipe card).

- Then sort the topics by putting the most important to the left of your work area and the least important to the right. Use a large work area to do this.

> Or you could sort the topics into three groups – the "essentials" on the left, the "nice-to-includes" in the middle, and the "use-only-if-there-is-time" on the right.

Then within each group, organize the topics by:

- importance – from the most important to the least.

- order of teaching – what should/must come first, what next, etc.

Note that a single class session may cover several topics or only one – or one topic might extend over two or more class sessions.

On the basis of your sorting activities, select a set of topics which represents a draft of the final set. You can revise this list as you go along.

Once you have a draft list, check it out with several colleagues including:

- those who could help you make decisions about what to include and what order to use; and

- those whose political/professional blessing you may need somewhere down the road.

Note of caution: You cannot, should not, need not teach everything you know in one course. Save something for the next course.

3. Writing a Course Syllabus

Title and Course Description: These are used for both PR purposes to entice prospective students to register in your course and to satisfy the academic expectations of the University.

> If you are teaching a utilitarian or required course, you don't need to worry about the title, but the course description needs to be accurate for every course. Never promise something that you can't or won't deliver (Renner, 1988).
>
> In the UNB Calendar, course descriptions are limited to 20-30 words. But your syllabus should provide an appropriate description which will allow prospective students to make an in-

formed choice.

The description should include:

- any prerequisites;
- the major topics to be covered;
- who the course is intended to serve if it serves a special group of students;
- general expectations about student participation in course activities especially if these include anything unusual such as participation by Internet or attendance at a day long session on a weekend; and
- any unusual equipment or resources which are essential to the course but are not provided by the University.

Course objectives: A list of the general objectives.

Course outline: A list of topics to be covered in each course session (for 3-hour sessions) or in each week (for 1 to 1.5-hour sessions). This list should reiterate any unusual sessions which may be required.

Course materials: A list of textbooks and manuals that must be purchased by the student; and a reiteration of any unusual equipment or resources which the student must provide.

Course assignments: A list of the tests, examinations, essays and other assignments which the student must complete to obtain a grade in the course. This list should indicate what percentage of the final grade is assigned to each item.

Other information: Such as when, where and how to reach the instructor; when and where to leave and pick up assignments.

4. Writing Objectives: How Will You Get There (General and Specific)?

There are many different ways to think about objectives. One way to assist you in your planning is to consider objectives as falling into three general categories:

- Those which state what the learner will learn – this set must be included in the course syllabus. It should cover the general topics, concepts and skills to be learned as a result of course participation.

- Those which state how the learner will learn – this set should be included in the course syllabus as a means for informing students about their expected participation in the course. These objectives may be more general than the first set.

- Those which state how the instructor will teach – this set is not generally included in the syllabus for most undergraduate courses. Such objectives will help guide your own activities throughout the course.

Clearly stated objectives help the student get a clear picture of what is expected in terms of both preparing for and participating in individual class sessions and preparing for assignments, tests and examinations. The objectives help the course instructor stay on topic and avoid wandering down the garden path to watch butterflies when harvesting the peas was intended. Watching butterflies is a nice break but should never become a steady diet.

A clearly stated objective is a sentence which includes (Mager, 1975):

- an action verb which follows the phrase “the learner will . . . “ (or “the teacher will . . . “); and

- an object which completes the verb.

To help you get an idea about suitable action verbs, you will find, on pages 54-56, three pages which outline verbs associated with

cognitive, psychomotor, and affective domains of learning (Burge & Roberts, 1998; Gronlund, 1991). Each domain of learning calls for very different instructional techniques as do the different levels within each domain.

A **cognitive objective** deals with recalling, understanding and using information and knowledge. Good *Jeopardy* players are comfortable in the cognitive domain of learning. This domain is divided into six levels of learning:

- recalling facts and concepts
- understanding concepts
- applying concepts
- analysing concepts
- synthesizing new or revised concepts
- evaluating concepts

A **psychomotor objective** deals with learning a skill (or observable behaviour). While learning in the cognitive domain cannot be observed directly and can only be assessed through testing and other classroom assessment techniques, learning in the psychomotor domain can be observed directly. This domain is divided into six levels of learning:

- perceiving a new way to develop a skill
- developing readiness to learn a skill
- developing initial responses under the guidance of a trainer or instructor
- refining responses and developing expertise under the guidance of a coach, mentor or supervisor
- adapting skills for use in new contexts
- creating new skill sets

An **affective objective** refers to planned changes in interests, attitudes and values. While cognitive learning can be tested and psychomotor learning can be observed directly, learning in the affective domain is assumed to have occurred if the student demonstrates related behaviours. This domain is divided into five levels of learning:

- developing an awareness of feelings, attitudes and values
- responding to the need to develop feelings, attitudes and values
- actively responding by doing something
- accepting responsibility for personal behaviour
- developing self-discipline, self-assessment and self-direction

A clearly-stated objective can include, in addition to an action verb and object:

- the conditions under which the learning and/or teaching will occur – sometimes called teaching points;

- the evaluative procedures to be used to assess whether the objective has been accomplished; and/or

- the materials, equipment and facilities to be used during related learning and teaching exchanges.

Objectives which include such statements have the added benefit of stating or implying the most appropriate instructional strategy or technique, how the learning, as well as the course, can be evaluated, and what materials, equipment and facilities will be required (Gronlund, 1991; Mager, 1975; Renner, 1988; 1993).

Course objectives relevant to the work required of students should be shared openly with them at the start of the course. A parallel set of objectives could be written for the course instructor. These objectives do not necessarily need to be publicly shared with the learners.

An Example

An example might be helpful at this point. A cautionary note to the reader: This example comes from a very detailed course for which

the written objectives have evolved over a period of about ten years. Your first attempts at writing objectives do not need to be this detailed.

In a course entitled *Program Planning in Adult Education*, one of the course objectives states:

> *By the end of this course, the learner will know how and be able to carry out each phase of the program planning process.*

This version of the objective states an action verb – "will know and be able to carry out" and the object of the verb, "each phase of the program planning process."

The objective continues . . .

> . . . *as a result of attending and actively participating in class sessions, preparing a draft plan for a program, presenting this draft plan to other class members for feedback, revising this plan on the basis of feedback, and submitting the revised plan in written form to the course instructor for assessment.*

This enlarged version of the objective tells the student what is expected, under what conditions the action verb will be carried out, and implies what will be evaluated for a course mark. It also implies that the material to be worked on comes from the students themselves and that the physical set-up for the class must accommodate small group consultations.

Objectives for specific topics follow the same format. For example, in the program planning course,

> *In relation to the topic "Writing Objectives," the learner will:*

- ► *read, in the textbook and other materials provided, about objectives and how to write them;*
- ► *write at least one objective for his/her program plan prior to coming to class;*
- ► *revise this objective in class on the basis of feedback from the course instructor and other class members; and*
- ► *develop a set of objectives (at least four) for his/her program plan.*

This set of specific objectives tells the learners, as well as the course instructor, what is expected in terms of preparation and follow-up assignments; and implies how the teaching and learning will occur. For example, the third item in the list indicates that this class session will include work activities in which students will share their written objectives with others, will receive (helpful) feedback, and will then revise the objective. This class session clearly does not lend itself to a lecture. More likely the activities will include large and small group discussions, peer consultation, and consultations between individual students and the course instructor.

The Cognitive Domain of Learning

Objectives that require the learner to recall or recognize knowledge, understand and apply knowledge, and develop intellectual abilities and skills related to analyzing, synthesizing and evaluating.

<table>
<tr><th colspan="6">Lower levels of learning (simple) ◄──────► Higher levels of learning (complex)</th></tr>
<tr><th>Knowledge</th><th>Comprehension</th><th>Application</th><th>Analysis</th><th>Synthesis</th><th>Evaluation</th></tr>
<tr><td>(Recall or recognition of specifics and universals, methods and processes, patterns, structures, and settings or contexts)</td><td>(Understand and express in own words)</td><td>(Use in actual context; solve problems by selecting among and using techniques, principles, theories and/or ideas)</td><td>(Break down material into constituent parts and detect relationships of parts and the way they are organized)</td><td>(Put together parts and elements to form a new whole)</td><td>(Make judgments on the basis of distinct criteria)</td></tr>
<tr><td>define
describe
identify
label
list
locate
match
name
outline
quote
recall
recite
recognize
repeat
restate
select
show
select</td><td>convert
defend
distinguish
discover
explain
generalize
exemplify
inquire
locate
paraphrase
predict
summarize
understand</td><td>apply
calculate
code
compute
demonstrate
draft
dramatize
draw
estimate
manage
manipulate
operate
practise
prepare
produce
schedule
solve
use</td><td>categorize
compare
contrast
diagram
differentiate
discriminate
dissect
distinguish
illustrate
select
separate
sort
subdivide
take apart</td><td>adapt
combine
compose
create
design
devise
generate
hypothesis
imagine
improve
infer
integrate
invent
organize
plan
reorganize
revise</td><td>appraise
assess
compare
contrast
conclude
critique
dispute
evaluate
judge
justify
prove
recommend</td></tr>
<tr><td>Repeats another's definition of a principle</td><td>Explains a principle, using example of its use elsewhere</td><td>Personally applies principle to procedures in a real or simulated situation</td><td>Can separate a fact from an assumption within a principle</td><td>Combines several principles into a new operating strategy</td><td>Judges the use of the new stratgey</td></tr>
</table>

The Psychomotor Domain of Learning

Objectives that emphasize some muscular or motor skill, some manipulation of material and objects, or some act that requires neuromuscular coordination.

Lower levels of learning (simple) ◄——► Higher levels of learning (complex)						
Perception	**Set**	**Guided Response**	**Mechanism**	**Complex Overt Response**	**Adaptation**	**Origination**
(Gets cues to guide action; awareness of objects, qualities and relationships through the senses)	(Readiness for a particular kind of action)	(Early learning of skills; learner able to use criteria to self-evaluate performance under guidance of instructor)	(Habitual responses; apply and combine previously known responses to appropriate situations)	(Smooth, efficient and expert performance of complex motor acts)	(Adapts motor responses when meeting demands of new, problematic situations)	(Cretes new motor acts for manipulating materials out of existing psychomotor knowledge and skills)
choose detect differentiate distinguish feel identify isolate link listen observe select separate smell taste touch	display explain point to proceed react respond show volunteer	adjust assemble build calibrate close construct dismantle dissect	disconnect draw duplicate fasten grind heat load loosen	manipulate mend open organize replace rotate select sort	adapt alter change modify rearrange revise reorganize vary	arrange combine compose construct create design devise originate
Sees how a technical procedure is set up	*Shows correct handling of can instrument*	*Practises a simple procedure*	*Consistently and correctly carries out a simple procedure without supervision*	*Easily and correctly handles more complex tasks*	*Adjusts use of instruments and procedures according to different contexts*	*Creates a new procedure of skill set*

The Affective Domain of Learning

Objectives aimed at assisting a learner to change interests, attitudes, and values, and to develop appreciations and adequate adjustments.

Lower levels of learning (simple) ◄────► Higher levels of learning (complex)				
Receiving	**Responding**	**Valuing**	**Organizing**	**Consistency of Reacton**
(Become aware of situation, phenomenon, object, or state of affairs; be willing to tolerate given stimulus, not avoid it; and control one's attention so that favoured stimulus is selected and attended to, despite competing and distracting stimuli)	(Willingness to comply, respond and find satisfaction in response)	(Internalizing values; accepting, prefeering and/or having commitment to a value)	(Relating new values to already existing values; and bringing values already held into new and ordered relationships)	(Develop a persistent and consistent response to a family of related situations or objects; and develop an internal consistency among encompassing objectives)
ask choose describe follow give identify listen locate name observe question request select use	answer assist attempt comply discuss help perform practise read respond select volunteer	accept appreciate commit complete concern demonstrate describe differentiate distinguish explain express initiate invite join justify report share suggest	arrange change combine compare contrast explain generalize identify integrate organize recognize synthesize	act defend demonstrate display influence maintain mediate perform practise question revise show solve verify
Listens carefully	*Voluntarily does something*	*Actively shows concern about something*	*Accepts responsibility for own behaviour and personal strengths*	*Shows self-discipline and initiative in a variety of contexts*

Sample Course Plan

Course Name: Program Planning in Adult Education

Class Session: Session 4 (of 12), 3-hour session, 4 readings provided plus 2 chapters in text

Topic	Objective	Teaching/Learning Points	Teaching Techniques
Writing Objectives	Read materials on writing objectives	• discus major points raised in reading materials and identify three criteria to keep in mind when writing objectives	• Work on small "Buzz" groups • Provide example of poor objective for program planning course • Each group to develop criteria and critique objective • Share comments with large group • May need brief lecturette to clarify issues • Small groups to rewrite objective and share results
	Write at least one objective	• Have learners read objective or write it on visual aid • Other learners to provide feedback based on criteria developed under first objective • Instructor to help clarify feedback	• Continue work in small groups • Instructor to circulate to provide assistance and additional feedback • Re-convene large group to share common problems
	Revise written objective	• Have learners revise written objectives in relation to feedback provided	• Continue to work in small groups • Instructor to circulate
	Develop set of objectives for program being planned	• Learners can begin this task during class session and complete it at home	• Instructor to remind students to write at least 4 objectives for their plan

5. Selecting Teaching Techniques: How Will You Get There (Details)?

By now you will have lists of topics and objectives which can be integrated into a single course plan. A sample plan for one course session is provided on page 57. It is far more detailed than you are likely to need. It is based on the objectives previously described for the session on Writing Objectives, from the *Program Planning in Adult Education* course.

In selecting instructional techniques, some points to keep in mind are:

- If your overall purpose is to have learners develop a skill, then you must provide activities in which the skills can be used and feedback provided.
- If your overall purpose is to have students understand concepts, then you must provide activities in which they can demonstrate and discuss their understanding and receive feedback.
- If your overall purpose is to have learners apply, analyse, synthesize or evaluate concepts, then you must provide activities in which they can apply, analyse, synthesize and evaluate and then receive feedback.
- If your overall purpose is to have students develop appropriate attitudes or values, then you must provide activities in which such attitudes and values can be experienced and used and reflected on.

Instructional techniques can be considered in terms of the learning domain they serve best (ie., cognitive, psychomotor or affective) and in terms of their relative advantages and disadvantages. In the appendicy of this Handbook, you will find a long table which outlines selected techniques that have been found to be useful in university and college contexts. We will return to Instructional Techniques later in this section.

6. Building in Evaluation: How Will You Know You've Arrived?

Evaluation plans should be built into the course plan well before the plan is ever implemented and the course begins. Evaluation asks "how well" you did in attempting to reach your objectives. So to develop an evaluation plan, you need to go back to your objectives and develop a means for assessing progress on each one. The evaluation can address three concerns:

- How well the student is progressing toward accomplishing the objectives. Such an evaluation results in a grade for the course. The most typical method for assessing student progress at UNB involves testing at the undergraduate level and essays at the graduate level.
- How well the instructor is doing in guiding the student toward accomplishing the objectives. Such an evaluation results in feedback to the instructor about the quality of his/her teaching. At UNB, the most typical method for conducting such assessments is through a student opinion survey which is administered in the second to last class session. Other forms of assessment involve peer observations and videotaping.
- How effective the planned activities are in reaching the objectives. Such an evaluation results in feedback to the planners about the quality of their plan. At UNB such assessments are not mandatory. Individual instructors may obtain such feedback through developing and administering their own investigation.

There are two types of evaluative processes:

Formative evaluation is carried out periodically throughout the course and allows the in-

structor and students to assess their progress while the course is still in session. Changes can be made by the students or instructor or within the plan to correct any perceived problems.

Summative evaluation is carried out at the end of the course – during or immediately after the last session – and focuses on what the learner learned, how well the instructor taught, and how effective the plan was.

In universities, the most traditional form of evaluation is testing. The fine art of testing students is covered in a wide range of textbooks available in the UNB Library or through the Teaching and Learning Centre. We will not attempt to cover the same material here.

However, our experience suggests some practical ideas:

- If you want to find out how well a student learned a skill, then you must provide a situation in which the skill can be used. This might involve a simulation which has never been used before in the classroom.

- If you want to find out whether a student understands and can apply concepts, then you must provide a situation in which the learner can describe what he/she understands or in which the student can apply what he/she has learned. Contrary to popular opinion, testing and examinations rarely support this type of assessment. A better bet is to give the student a case study and ask for a written essay in which the student applies learned concepts.

- If you want to find out if a student has developed a specific attitude or value, then you must provide a situation in which the attitude or value can be demonstrated. This might include a simulation or role play or might involve observing the learner doing something in the real world, such as engaging in a work-study program.

- If you want to find out if the teaching techniques you selected for use in the course were useful and motivating, you should ask the students directly. You can also develop a series of criteria which you can use to observe your own teaching as the course is in progress. For example, motivation is often shown through question-asking behaviours or through willingness to participate in planned activities.

There are some basic DO's and DON'T's about evaluation procedures:

- Allow the students sufficient time to complete any evaluation form.

- Do the evaluation while memories are still fresh.

- Include only one "thing" to be evaluated in each question.

- Don't let the students take an evaluation form home – subsequent returns are always minimal.

- Process the responses as soon as possible. The sooner evaluation results are known, the greater their impact.

- Don't ask students to write their name or student number on any evaluation form – such a requirement is unethical.

- Do periodic, on-the-spot assessments about how the course is progressing – but avoid doing such assessments every class session.

- Don't just do one mammoth evaluation at the end of the course – you will be vastly disappointed in the results.

- If you collect information mid-way

through a course, tell the students about the results in the following week and tell them what you plan to do in response to their assessments.

- Try to interpret any evaluative comments made by students or colleagues within the context in which they have been given. If someone complains that an "instructor was never available" – ask yourself how often you actually were available and if these times were convenient for the students – or whether you set the times for your own convenience. Try to understand any evaluative comments from the point of view and mindset of the assessor.

- Try your best not to become upset by evaluation results. If you don't really want to know what your students think of your teaching, don't ask them!

Despite their emotionally-charged and anxiety-producing capabilities for both students and instructors, well-designed assessments can be effective in motivating, measuring and reinforcing learning. Whether you are using fill-in-the-blanks tests, multiple choice tests, essay tests, group projects, reflective journals, individuals essays, or all of the above, take time to explain your choices to your students.

If you want someone to evaluate your teaching and provide you with constructive feedback, contact the TLC.

Hidden Agendas

In addition to planned objectives and outcomes, instructors should be aware of the influence of the "hidden curriculum" or "hidden agenda" on learners. The term, "hidden curriculum," refers to those unplanned yet implicit messages learners pick up from your choice of words or actions inside and outside the classroom. For example, lectures which are recitations of factual information, or reading from a text book, create the impression that in this subject, truth is simply a question of right or wrong choices, and you or the textbook are the final authority. The implication is that learners can succeed by rote learning, memorization and regurgitation. On the other hand, a lesson that is designed to stimulate thought and deliberately refuses to commit itself to an exclusive view of the subject conveys the idea that in this subject truth is multifaceted, and resides in thought, in perspective, in logical argument.

Another way in which a hidden curriculum is revealed is through the image the instructor projects — whether you have a casual or formal approach to the subject (e.g., how you dress or how you address learners) may give the impression that it is okay to have a casual attitude toward details. If your approach is too formal learners may perceive that there is nothing in the specifics to which they can relate their own experience.

There are a number of studies which point out that if the instructor, consciously or unconsciously, expresses sexual biases, this contributes to the effects of the hidden curriculum as it implies disparagement to one sex or the other. Sexually biased behaviour can be expressed through making more eye contact with one gender group than with the other, or through excluding representatives of one sex or the other from aspects of the course such as the reading list, or through habitually standing by or interacting with a specific gender group in the classroom.

The structure of your course and its style of delivery is as much a part of course design as is published in the course syllabus. Try to be as explicit as possible.

Instructional Methods

Instructional methods are the various approaches, strategies, techniques and procedures used by instructors to assist learners to learn knowledge, information, skills and values. As modern educators, we have access to more knowledge about how individuals acquire, process, store and use knowledge than ever before. After years of wishing, debating and searching, it is clear there is no one instructional method that works for all learners, for all content and in all contexts. While it is true that you perform more effectively when you use your preferred method of instruction, your expertise and comfort are not the only factors to be considered when planning a course.

There are numerous instructional methods. A few are listed in the appendicy to this Handbook.

Instructional methods can be categorized in a number of different ways. One way is to describe them in terms of the learning domains (cognitive, psychomotor, affective) which they serve. Other ways of categorizing instructional methods include the following:

1. The nature of the knowledge base used:

- authority-defined or "received" knowledge;
- personally-defined or "subjective" knowledge; and
- combined authority and personally defined or "constructed" knowledge.

  Each type of knowledge is important and useful in different contexts.

2. The level of activity required of the learner:

- passive, receptive activity involving listening, reading, and observing;
- active, independent activity involving writing, talking, and doing as a separate, independent person. Most programmed learning activities fall into this category; and
- active, interdependent activity involving group-based and field-based methods.

  All three levels of activity are useful in different contexts. A general principle is that learning effectiveness increases with the level of learner activity.

3. The balance of control exercised by the instructor and the learners in designing and delivering (managing) the activities involved. Design control is exercised in the planning phase while delivery control is exercised while the activity is in progress. Three general types are possible:

- the instructor has direct control over both the design and delivery phases. The learner has little or no control over the instructional process except in responding to the instructor's activity (e.g., listening to a lecture) or responding to an activity the instructor (or designate) has programmed (eg., into a computer).

- the instructor has direct control over the design phase but little or no control over the delivery phase. The learner has no control over the design phase but considerable control over the delivery phase. This type is exemplified in case studies, simulations, games.

- the instructor has no direct control over either the design or delivery phases. The learner has full or almost full control over both phases. This type is typical of field-based activities and some group-based activities. The role of the instructor is to set up the activity in general terms and to debrief the learners at the end of it.

  Control can also be understood in terms of who is responsible for deter-

mining (a) the procedures to be used and (b) both the general topic(s) and specific content to be covered.

Control can also be understood as being exercised by someone or something which stands in the place of the instructor — such as the designer of a computer program or the organization of a workbook or course manual.

All methods have both advantages and disadvantages for some learners and some instructors. If you plan to improve the variety of methods you use, start with one new method at a time. Incorporate it only when you are ready. Then try it three or four times before you come to any conclusions. There is nothing wrong with telling the learners that this is the first time you have tried this method. You will find that most learners are quite patient and supportive of your efforts to venture into new instructional territory.

Is There a Method to Your Madness?

Choosing appropriate methods involves making a number of informed choices. Once you have a rough outline of your course go back over it and check to see if:

i Your chosen methods and materials match your objectives

For example, if your objectives state that learners will improve their golf swing, be sure to include some activities other than telling the great story about your hole-in-one.

ii Your chosen methods match the needs of your audience.

Maybe your learners are in attendance because they want to learn how to manage a golf club, not swing one.

iii You have considered the practical constraints of the instructional setting.

Teaching thirty swingers in a tiny room spells law suits.

iv You have the necessary skills and/or time to both instruct and assess learning outcomes.

If you have trouble distinguishing a driver from a putter consider bringing in an expert or go back to the hole-in-one story.

Okay, everything has checked out! You are confident in your knowledge of the subject matter and your ability to deliver the information. You have considered the needs and expectations of the learners, your objectives agree with your methods and planned assessment. Now what? How about throwing caution to the wind and trying out a little experiential teaching just for the fun of it? For example, instead of giving that three hour lecture on the bombing of Pearl Harbour, why don't you dig out those model air planes and ships you have spent years gluing together and use them for show and tell!

Learners Don't Get Passes for Skipping Large Classes

Suppose you have just finished writing your course objectives, worked out how you are going to assess learner performance, and sequenced your topics. Before you call it a day, and just to be on the safe side, you check your computer for the latest enrolment figures on your up-coming course. Seventy-five!!! There goes that nice little interactive design you spent all day putting together.

Now what? Well, first you pick up the phone and call Media Services (formerly a/v) and ask them to order another gross of overhead projector bulbs. Then you call Imaging Services (formerly Graphic Services) and ask for 50 more copies of your course syllabus. With your free hand, make a note to yourself to replace the role plays and field trips with two or three well-prepared ideas for each lecture.

Then call:
The Office of Instructional Development and Technology, Dalhousie University (902-494-1622) and order your very own copy of the *STLHE Green Guide No. 1, Teaching Large Classes,* by Allan Gedalof. It will cost you less than $15 and is well worth it. (Of course, you can always borrow a copy from the UNB Teaching and Learning Centre.)

Here are some highlights from this reader-friendly work on a formidable topic:

> *Among the things that I know apply to all effective teaching of larger classes are these. That classes work better when you show your students that you care about them and want them to learn. That you care about and are still deeply interested in, excited about, and moved by the material you are discussing. And that you are still open to new ideas and are still learning (Gedalof, 1998, p.52).*

Gedalof offers the following advice on preparing to teach a large class:

- Check out the classroom for adequate size, equipment or projection technology.
- Think about the room and how you are going to use it while preparing your lecture.
- Organize your material thoroughly and provide students with a clear outline of what you will cover.
- Remember you can teach only two or three big ideas, if that much, in a single hour.
- Plan in detail and in advance any interactive activities you will use, including the specific questions you will ask or tasks you will assign.
- Make sure that everything works before class but be prepared for the moment when the technology fails you. Develop a sense of humour about the vagaries of technology.
- Communicate clearly and early on your policy on late and deferred assignments, missed exams, plagiarism, and so on.

On the topic of delivering a lecture:

- Start by greeting learners in more or less the same way each time so that they come to recognize the signal to begin.
- Remember to embrace the whole class by removing any physical barriers between you and them (e.g., stepping out from behind the lectern once in a while).
- Everything has to be bigger than normal. If you are writing on the board, write big. Make overhead images appropriately large — anything less than a 24 point font is too small.
- Use everything you can to teach through sound and sight: the chalkboard and projection devices, body language, writing things down — even saying stuff out loud together, preferably in a light-hearted way.
- Make sustained eye contact with individual students in order to let them know you care about whether or not they are with you.
- Let students know that you enjoy what you are doing and what you are talking about, that you want to be in the classroom with them.
- Start and finish on time. However, avoid saying things like "One or two more points and then we can go." You may as well say "Start packing up now."

Starting Out on the Right Foot

Whether the situation is a large class, a small class, a seminar or tutorial, first impressions are the ones that last the longest. The first day of any class sets the tone for the rest of the term. You are not the only one feeling anxious, excited and uncertain. You are the one, however, who can allay learners' fears and increase their excitement levels by letting stu-

dents know what you expect from them and what they can expect from you. Here are some tips for starting the learning journey off on the right foot (inspired by Davis, 1993).

- *Check out the classroom before the first class.*

  Visualize yourself in the classroom when it is filled with eager learners. Check things out: turn on the lights, play with the projection screen, see how your voice carries.

- *Arrive early on the first day of class.*

  Give learners a chance to check you out. Greet them as they enter. Finish on time.

- *Do something nice for yourself before your first class.*

  Such as buying yourself something new. Remember in Grade 3 how you liked the smell of a new pencil case or how proud you were of your new jacket, one you picked out yourself. Do something for yourself to help you feel as confident and comfortable as possible.

- *Write the name and number of the course on the board, along with your name.*

  (Aren't you glad you checked out the room beforehand and brought extra chalk or the right kind of marker?) This will save learners from the embarrassment of having to sneak out 30 minutes later when they finally realize they are in the wrong class.

- *Introduce yourself to the class.*

  Don't forget to include something about your background. Pour on a little enthusiasm about how you became interested in your subject, and so on.

- *Take attendance.*

  Have a backup plan in case more learners show up than you can accommodate.

- *Hand out and discuss the course syllabus.*

  Discuss the goals and objectives of the course. Tell the students how you propose to spend class time. Discuss the nature of the required assignments.

- *Ask learners to fill out some kind of student information sheet.*

  Asking learners to write their names, telephone numbers, electronic mail address, year and major field of study is a good way to get some indication of your audience. Some instructors supply forms which ask learners to include their interests, hobbies, employment and any concerns they may have about the course which they would rather not discuss in front of the class. Avoid asking for any personal information that violates learner human rights. Stand at the door and collect these forms as students leave.

- *Begin to learn names.*

  In small classes, passing out cards and having learners put their names in front of them encourages communication.

- *Give learners an opportunity to meet each other.*

  Have learners interview each other and then introduce each other to the class sharing one interesting thing they found out about that person. Or go around the room and ask learners to respond to a question about what they hope to gain by taking the course.

If you handle administrative matters with care, explain course expectations and standards clearly, and are as friendly and respectful toward your learners as they will be toward you on that first day, then you can be confident that you got off to a good start.

Will This Be on the Exam?

Evaluating Student Performance[1]

Tests and examinations are extremely important educational tools that contribute to both the teaching and the learning process. They define what is important in the course, motivate students to study, and provide feedback to instructors and learners. They enable us to arrive at grades for students. The results assist us in planning and facilitating further learning.

Most instructors spend a lot of time thinking about the evaluative criteria for their courses. As much as we cringe when we hear the words "will this be on the exam?" it is a question we must also ask ourselves.

Research and anecdotal evidence indicates that if learners believe instructors will emphasize factual recall in their tests, students will learn facts. If instructors are going to ask them to apply material to new situations, students will study and learn how to apply principles and theories. If students believe they will be required to analyze, synthesize, and make judgements, then they will learn to use higher-level thinking skills. (Ramsden, 1985).

Many instructors view test construction and grading as one of the most difficult and unpleasant parts of their job as it can be time consuming and tedious work for which they have had no formal training. The Teaching and Learning Centre periodically offers workshops on constructing and grading tests and exams. In the meantime, here are some suggestions you can use as a checklist against your current practice.

[1]The information in this section comes from *Preparing for Teaching*, published by Cornell University, Ithaca, NY.

Suggestions for Constructing Exams

a. Vary the level of your questions: ask students to demonstrate their knowledge, comprehension, application, analysis, synthesis, and evaluation of the subject.
b Make sure the directions and format are clear and well-organized. Indicate point values.

c Start with questions that build rather than undermine student confidence.

d Exams should be challenging and interesting, but not tricky or excessively hard.

e Take the exam yourself; it should take you about 25% of the time allotted to the students.

f Write problems or items that measure important learning objectives and are consistent with the goals of the course.

Writing Multiple-Choice Questions

- present a single clearly worded problem in the stem of the item
- put the answer alternatives at the end of the question, not in the middle
- put as much of the wording as possible, especially repeated words, in the stem
- avoid unnecessary wordiness
- make all answer options homogeneous, plausible, and grammatically consistent
- order options logically and list vertically
- make **not** bold in negatively worded stems (Which of the following is **not...**)
- use "all of the above" and "none of the above" sparingly

Writing True-False Questions

- keep the length of true statements about

the same as that of false statements

- test important ideas, not trivial ones
- make sure the item is definitely true or false
- to help eliminate guessing, require students to correct the false statements

Writing Short Answer Questions

- state the question so that a single, brief answer is possible
- use direct questions rather than incomplete, fill-in-the blank statements where possible
- place the blanks at the end of the statement

Writing Essay Questions

- ask students to use knowledge in novel situations rather than asking for simple recall
- ask relatively specific and focused questions
- provide ample space--the space indicates to students the amount of detail you expect
- provide ample time--suggest a time limit for each question

Suggestions for Grades and Grading

- Decide on your grading policy at the beginning of the semester; include it in your syllabus or information sheet; tell students how you handle late homework and papers. You may want to schedule an extra quiz or test so that students can drop their lowest grade (this practice avoids make-up exams and minimizes pleas concerning "bad days").

- Keep accurate records. Let students know how they are doing during the semester.

- When grading papers and exams, prepare a scoring guide that assigns a specific number of points to each answer. Develop your own model answer with explicit point values.

- When grading long essay questions or papers, you may wish to establish general criteria and assign papers to 5 grade bands. Then check all papers in each group for uniformity, make necessary adjustments, and use+ and - for borderline cases.

- Look over 5 to 10 exams before you start grading and decide whether your grading guidelines are reasonable.

- Clearly indicate where points were awarded or subtracted. This practice gives students a more accurate picture of their performance. It is also a great benefit if students have questions about your grading or ask for a regrade.

- Grade exams one question at a time; this promotes grading consistency and also helps you grade more efficiently (i.e., it takes less time)

- Complete the grading as soon as possible, and return papers to students individually. Do not publicly post student grades. If you must post grades, only do so by ID number.

- Go over the exam in class (at least the areas where most students had difficulty) and post your answer key.

- Exams and papers should be learning experiences, not simply evaluation mechanisms. Help students to profit from this part of your course.

Alternative Assessment

Although most of the following alternatives to the traditional forms of testing are not suitable for large classes, you may want to consider them for smaller groups of learners:

1. ***Open-book exams***—students use textbooks

and notes to solve problems.

- encourage the application of knowledge rather than memorization of material
- are less anxiety provoking than regular classroom tests

2. Oral exams

- allow for probing on a given topic
- take a lot of time
- favour students who are glib and handicap shy learners

3. Take-home exams

- require students to do research and integrate a variety of material
- difficult to know if students received help in acquiring answers
- in a variation, students are given a list of questions to study beforehand and then answer selected questions in classroom

4. Performance tests — instructor observes and evaluates a procedure

- much more appropriate for some topics
- time consuming & difficult to grade

5. Portfolios of student work

- encourage active student involvement in and responsibility for projects
- collected periodically for feedback
- encourage collaboration between learners and instructors

6. Journals

- encourage students to think about subject matter
- may or may not be graded

7. Variations on a theme

- Multiple choice in small groups where students consult with one another but turn in one answer sheet - encourages discussion with one another, "teaching" each other and "learning" from each other
- Allowing students to repeat classroom tests - reduces student anxiety and allows students to learn from their mistakes.

Test Anxiety

Most learners suffer from test anxiety for one reason or another. A moderate amount of anxiety is probably motivating and enhances their performance but some experience so much anxiety that it interferes with their abilities to study and write.

While Jacobs and Chase (1992) state that failure on earlier tasks influence the development of anxiety, they believe that anxiety does not arise simply from the ack of knowledge or skills required to answer the test questions. Research shows that the debilitating effects of high levels of anxiety are greater when learners perceive that it is important to perform well, when they expect the test to be difficult, and when they feel time pressure (Crooks, 1988).

Jacobs and Chase admit there is no magic formula that instructors can use to reduce the anxiety associated with exams but they do offer some things we may do to help alleviate it as much as possible:

- let students know what to expect on the test;
- give them ample time to prepare;
- help students understand that tests are not your way of "getting" them but rather are a means to help them learn;
- avoid overemphasizing grades;
- hold review sessions;
- have practice tests;
- place exam files on reserve in library;
- allow for breaks during long exams;
- be calm yourself on test day;
- encourage students to do well;
- in a reassuring manner, remind students to look over the whole tests;
- make sure learners understand directions before they begin; and

- advise learners to answer the questions they are certain about first.

In spite of everything you try to do, some learners will say they are so anxious that they cannot think. On occasion, make special arrangements for these students, such as permitting them to take exams in your office or in a smaller room by themselves.

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