



expanding the  
learning space  
beyond the  
classroom walls

## The New Classroom : Engaging Students with Online Activities



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## How to Use this Manual

In addition to providing some background information about the series and the T5 model, the manual is intended to help guide you through the online modules. The manual includes an outline of each of the online modules that lists the tasks in each module that you will complete for the series. You can use the outline pages to keep track as you complete each task and review the feedback provided to the task.

## Introduction

Current educational research recommends task-based instruction that allows students to engage in “authentic activities” that mirror real-world situations. However, faculty training programs in learning technology often fail to follow this principle by separating training programs in technology options from the teaching and learning context in which the technology will be used. The instructional design of the New Classroom Series models the task-based instructional approach that faculty will use in their own courses and allows faculty to learn about technology options in conjunction with developing the online component for their own course. This series is designed primarily for faculty who teach a ‘face-to-face course’ but would like to enhance their course with an online component. The focus is on the designing of learning tasks and feedback activities.

### ***Our goals in creating the delivery method for the New Classroom Series were:***

- To focus on the curriculum design issues, integrating the use of technology tools during participation in the series
- To provide an “authentic setting” (learning in the same context the learning will be applied) for the faculty members to learn about the online technology options
- To provide flexible timelines for completing the required components.

We have also adapted and delivered the series internationally, including institutions in Thailand, Hong Kong and Sri Lanka. Formal evaluation studies to assess learning impact in courses resulting from the New Classroom Series are currently in the planning stages.

## Co-creators



### **Diane Salter**

Diane has a PhD in Cognitive Science from the Ontario Institute for Studies in Education, University of Toronto and a Masters in Educational Psychology from the University of Calgary. Her graduate work research focused on the areas of narrative understanding, communicative intention and students' interpretation of historical text.

Diane joined the LT3 Centre in October of 2000. Prior to coming to the University of Waterloo, Diane was on faculty at the University of Toronto at Mississauga as a Teaching and Learning Specialist. Her role was to provide support and enhance a research based curriculum working with faculty, graduate students and undergraduates to improve learning and teaching.

### **Les Richards**

Leslie's career spans over thirty years and has been dedicated to the excellence of teaching support. An arts background (Honors graduate of the Ontario College of Art, Certificate, Instructional Design, Sheridan College, 30 years in the educational communications field) and an innate ability to problem-solve enable Les to develop and design unique concepts that bridge the gap between academic theory and practical applications.



At the University of Waterloo his focus is the research, development and promotion of technology-based courseware. Leslie directs the design, production and delivery of online courses for Distance and Continuing Education. In addition is a Senior Courseware Designer for the University's Center of Learning and Teaching for Technology.

Leslie is an active consultant to Sukhothai Thammathirat Open University and Ubon Rachathani University in Thailand, and several government and private organizations in Canada, the U.S.A. and South East Asia.

## Response to the Series

The first offering of the New Classroom Series was in November 2001. Since then 195+ individuals (faculty, staff and librarians) have participated in the series on our campus. Since completing the series, about 150 of the faculty participants have used the model to some extent to add an online component to a course; about 100 are actively using the T5 model to deliver a course with an online component. During the series faculty are able to reconsider the design and delivery of their courses to integrate technology learning options guided by sound pedagogical practice. Some faculty are incorporating a few tasks, others are developing major course restructuring. We are monitoring and evaluating the impact of this series by:

- using feedback forms to monitor the reaction immediately following the series.
- tracking behaviour change after the series by tracking the kinds of online activities incorporated into courses.
- working with faculty to develop learning impact studies to evaluate the impact of incorporating online tasks and feedback.

Informal feedback from faculty, both through personal correspondence and post-session feedback questionnaires, indicates a favourable reaction to the use of well-designed tasks and feedback, as shown by the following comments:

- “I think my students are better prepared for class. More important, from my perspective, is that the pre-class tasks encourage students to discuss, in a focused manner, the course readings outside of class. It is my hope that they will realize that they can form critical opinions on these matters outside of the classroom.”
- “First year students need structure to help them get started; the online template helps guide them in the kinds of things they are supposed to get at.”

## Goals of the Workshop

- to support instructors in improving student work through technology enhanced learning.
- to encourage instructors to consider learning tasks in course design.
- to identify different ways to use time and space in learning (class time / study time).

## In these workshops you will:

- Identify new technology enhanced learning tasks to support your students' work.
- Create learning tasks for your course.
- Design learning and feedback tasks that will be added to your online course template.
- Consider different modes of using time and space in course delivery.

## The T-5 Model

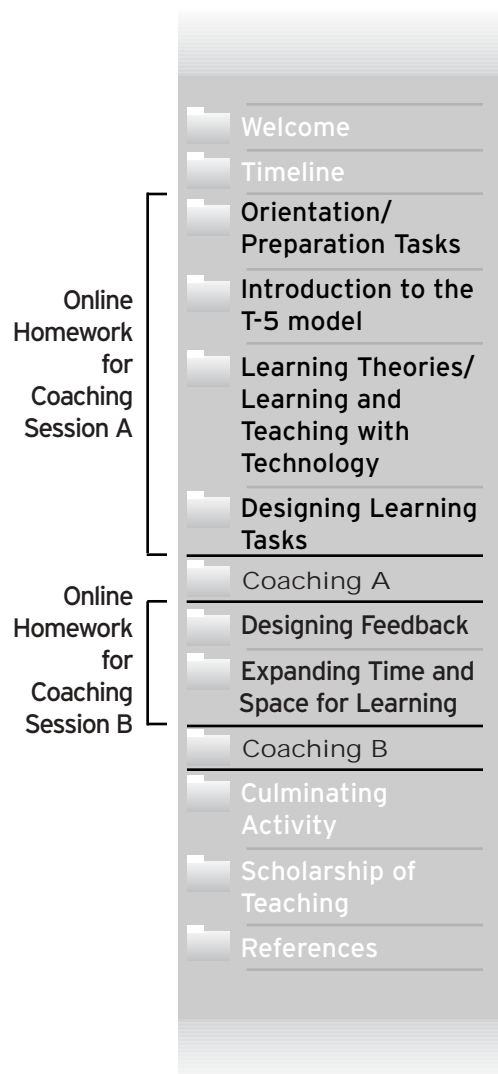
The instructional design of the faculty series is based on the T5 model. This model forms the basis of the online course delivery platform at our university and is used for mixed-mode on-campus courses as well as for fully online distance education courses. The T5 model was developed as an approach to instructional design that incorporates **Tasks** (learning tasks with deliverables and feedback), **Tutorials** (feedback), **Topics** (content resources to support the activities), **Teamwork** (role definitions and online supports for collaborative work) and **Tools** (for developing tasks, delivery options and administration). In this student-centred instructional design model, learning objectives define the framework of each unit of study. Learning tasks, the resulting task products (deliverables), and feedback to these deliverables are the primary vehicles for learning. The course development and delivery platform designed at our university is based on this model and serves to guide the instructor in both the design of the learning space and the delivery of the course.

***The guiding principles in the design of the T5 model include:***

- A learner-centred approach to course delivery
- An emphasis on the importance of designing tasks that promote student engagement with the content
- An emphasis on the importance of prompt feedback
- Flexibility to allow for re-use of the many learning objects that have been developed and can be incorporated into the model.

1. Learning **Task** is an activity that requires the student to engage with the course material.
2. **Tutoring** provides both guidance and feedback to the student after they have completed the learning tasks.
3. **Topics** are learning resources that may contain a broad range of items including lecture presentations, simulations, animation, tutorials, drill and practice, etc.
4. **Teamwork** represents collaboration. The way teamwork can be used varies as the learning challenge varies. The choice of teamwork resides in both the instructor's and learner's control. The makeup of a team and role within the team varies from team leader to task designer, manager, monitor, expert, etc.
5. **Tools** are used to support the other 5 T's and may include using online conferencing, a word processor, or a customized or off-the-shelf interactive simulation, etc.

## Timeline (Model used at the University of Waterloo)



**Registration:**  
**Online anytime**

During the workshop time, online work can be submitted and you will receive feedback from the facilitators. All preparation tasks for the first face-to-face coaching session should be submitted before attending.

**Coaching Session Locations:**  
See your group's registration form for specific details.

**Preparation for Coaching Session A**  
Complete and submit tasks for the following modules:

- Orientation,
- Intro to T5,
- Learning Theories,
- Designing Learning Tasks.

It is anticipated that it will take 3 hours to complete these modules.

**Preparation for Coaching Session B**  
Complete tasks from Coaching Session A. Complete and submit tasks for the following modules:

- Feedback,
- Time and Space.

It is anticipated that it will take 3 hours to complete these modules.

**Individual Consultation**  
Individual consultations are available.

## Description of the New Classroom Modules

Each module consists of tasks that you will complete, resource topics that provide content information relevant to completing the tasks, and a feedback component.

For each task, you will see a descriptor term. At the LT3 centre, we use 7 categories of task types that reflect the types of activities that students complete as learning tasks. (Tom Carey, 2002).

- 1. Preparation**
- 2. Concept**
- 3. Application**
- 4. Integration**
- 5. Enrichment**
- 6. Reflection**
- 7. Self-Assessment.**

The first four tasks described, Preparation, Concept, Application and Integration, describe a transition from tasks that connect new learning with past experience to tasks that ask students to integrate the new learning with real world experience. Students move from considering prior knowledge and personal experiences (Preparation Tasks), to articulating new concepts that are introduced (Concept Tasks), to applying the new content or concept (Application Tasks), and integrating the new learning into their real life experience (Integration Tasks).

Enrichment, Reflection, Self-assessment tasks are advanced level tasks. Enrichment tasks allow students to go beyond the course requirement. Reflection tasks allow students to review their understand of course topics and reflect on the new concept or content. Self-assessment tasks can be provided to allow students to assess their own understanding prior to formal assessment processor, or a customized or off-the-shelf interactive simulation, etc.

## Overview of the New Classroom Module Content

### **Welcome:**

This link takes you back to the New Classroom home page to check to see if you have the correct software to run this course, and to introduce you to the course facilitators, as well as view comments from Past Participants.

### **Timeline:**

This link will give you an overview of the workshop.

### **Orientation:** Online/Time 1 hr

There are 3 tasks in this module that you need to complete and submit in preparation for the start of Workshop A. Feedback by facilitators to your orientation tasks will be provided after completion of tasks.

### **Introduction to the T5 Model:** Online/Time 1 hr

There is 1 task in this module that you need to complete and submit in preparation for the start of Workshop A. Feedback by facilitators to your task will be provided after completion of tasks.

### **Learning Theories/Learning and Teaching with Technology:** Online/Time 1hr

There are 2 tasks in this module that you need to complete and submit in preparation for the start of Workshop A. Feedback by facilitators to your tasks will be provided after completion of tasks.

### **Designing Learning Tasks:** Online/Time 1 hr

There are 3 tasks in this module that you need to complete and submit in preparation for the start of Workshop A. Feedback by facilitators to your tasks will be provided after completion of tasks.

### **Workshop A:** (Face to face) Time 2 hrs

#### **Designing Feedback:** Online/Time 1 hr

There are 2 tasks in this module that you need to complete and submit in preparation for the start of Workshop B. Feedback by facilitators to your tasks will be provided after completion of tasks.

#### **Expanding Time & Space for Learning:** Online/Time 1 hr

There are 2 tasks in this module that you need to completed and submit in preparation for the start of Workshop B. Feedback by facilitators to your tasks will be provided after completion of tasks.

#### **Workshop B:** Face to face/Time 2 hrs

### **Scholarship of Teaching:**

This online module provides information on the scholarship of teaching and is a resource to help you to consider how to evaluate the learning impact of your course redesign.

### **References:**

This module provides a list of references to citations that have been used during the series.

## Module 1 Orientation

- Step 1** - Read over the Objectives for this Module
- Step 2** - Listen to **Diane's lecture** on Orientation.
- Step 3** - Complete the **3** tasks.

### Objectives

- to provide you with an orientation to the series - to provide you with an orientation to the T5 model
- to reflect upon your teaching goals
- to consider how strategies that support student learning can be delivered in an online environment
- to reflect upon your best 'learning experiences'
- to reflect on strategies that you believe support student learning

### tasks

**Your Goals** (Preparation Task)

**Step 1** - Complete the responses to the questions about your goals in taking this series.

**Step 2** - Submit. The task response will go to the facilitator.

**Step 3** - Review the facilitator's feedback.

**Task submitted**

**Feedback received**

**Engaging Students** (Preparation Task)

**Step 1** - Review the task about engaging students in your class.

**Step 2** - Review resources under Topics to help you with your task.

**Step 3** - Complete the task and submit it.

**Step 4** - Review the facilitator's feedback.

**Task submitted**

**Feedback received**

**Seven Principles** (Application Task)

**Step 1** - Read The Seven Principles Topic.

**Step 2** - Complete your responses to the questions about how the Seven Principles relate to your course.

**Step 3** - Submit your responses.

**Step 4** - Review the facilitator's feedback.

**Task submitted**

**Feedback received**

### Notes / Questions to Ask in the Coaching Sessions:

## Module 2 Introduction to the T5 Model

**Step 1** - Read over the Objectives for this Module

**Step 2** - Listen to **Diane's lecture** on the T5 Model.

**Step 3** - Complete the task.

### Objectives

- to describe the T-5 model.
- to define the elements of the T5 model
- to introduce the concept of learning tasks in course design
- to introduce how 'learning tasks' and 'feedback' fit into course design

### tasks

#### The T5 Model (Application Task)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete the task about your current course activities and submit it.

**Step 3** - Review the facilitator's feedback.

Task submitted

Feedback received

### Notes / Questions to Ask in the Coaching Sessions:

## Module 3 Learning Theories / Learning and Teaching with Technology

**Step 1** - Read over the Objectives for this Module

**Step 2** - Listen to **Diane's lecture** on the Learning Theories.

**Step 3** - Complete the **2** tasks.

### Objectives

- to identify personal teaching philosophy
- to consider research ideas on learning and teaching
- to consider best practices online

### tasks

#### Your Teaching Philosophy (Reflection Task)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete the task about your teaching philosophy and submit it. **Task submitted**

**Step 3** - Review facilitator's feedback. **Feedback received**

#### Your Views of Online Course Delivery (Reflection Task)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete the task regarding your views on online learning and submit it. **Task submitted**

**Step 3** - Review the facilitator's feedback. **Feedback received**

### Notes / Questions to Ask in the Coaching Sessions:

## Module 4 Designing Learning Tasks

**Step 1** - Read over the Objectives for this Module

**Step 2** - Listen to **Diane's lecture** on the designing learning tasks.

**Step 3** - Complete the **3** tasks.

### Objectives

- to identify specific course objectives
- to create learning tasks relevant to these objectives

### tasks

#### Writing Course Objectives (Application)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete the task about writing your course objectives and submit it.

Task submitted

**Step 3** - Review the facilitator's feedback.

Feedback received

#### Writing Learning Tasks (Application)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete the task where you will write learning tasks for your course and submit it.

Task submitted

**Step 3** - Review the facilitator's feedback.

Feedback received

#### Task / Assignments (Concept)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete the task to help you clarify the difference between tasks and assignments and submit it.

Task submitted

**Step 3** - Review the facilitator's feedback.

Feedback received

### Notes / Questions to Ask in the Coaching Sessions:

## Module 5 Coaching Session A (Face-to-face session, 2 hours)

### What happens in a Coaching Session?

During the coaching sessions, participants describe their self-generated instructional goals and challenges and discuss technology options that may help with these challenges. An important part of the coaching session is the dialogue between participants; this allows them to clarify misconceptions about using online technologies, describe preliminary ideas for tasks, receive feedback to help in developing these ideas and discuss best practices. In coaching sessions, the coach/facilitator ensures that new ideas are fully understood so that they can be incorporated into practice.

The focus of Coaching Session A, as well as the related online preparatory modules, is on the design of learning tasks.

### Are you prepared for the Coaching Session?

Complete and submit the tasks for the following modules:

- Orientation – 3 tasks
- Introduction to T5- 1 task
- Learning Theories – 2 tasks
- Designing Learning tasks – 3 tasks

It is anticipated that it will take about 2-3 hours to complete the online preparation for **Coaching Session A**.

### Agenda for Coaching Session A

- Welcome and Introduction
- Your questions and comments about the completed modules (listed above).
- Learning Task Demo
- Discuss Your Ideas for Learning Tasks for your course.
- Introduce next week's topics.
- Discuss preparation for Coaching Session B.

**Step 1** - Read over the Objectives for this Module

**Step 2** - Review Topics to make sure you are prepared for **Coaching Session A**

**Step 3** - Complete the one minute summary at the **conclusion** of Coaching Session A.

### Objectives

- to discuss how to best engage students in learning
- to discuss best practices in an online learning environment
- to discuss examples of learning tasks you created for this session
- to develop the ideas for your learning task
- to discuss the next steps in preparing for Coaching Session B

### task

**One Minute Summary (After Coaching Session)**

**Step 1** - Complete One Minute Summary

Task submitted

Feedback received

## Module 6 Designing Feedback

**Step 1** - Read over the Objectives for this Module

**Step 2** - Listen to **Diane's lecture** on the designing feedback.

**Step 3** - Complete the **2** tasks.

### Objectives

- to consider the importance of feedback
- to identify different types of feedback options
- to differentiate between feedback and evaluation
- to define formative and summative evaluation
- to create feedback activities to suit your learning tasks

### tasks

#### Feedback: Your Experience (Preparation)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete task regarding your experience with feedback and submit it.

**Step 3** - Review the facilitator's feedback.

Task submitted   
Feedback received

#### Design Feedback (Application)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete task about designing feedback and submit it.

**Step 3** - Review facilitator's feedback.

Task submitted   
Feedback received

### Notes / Questions to Ask in the Coaching Sessions:

## Module 7 Expanding Time and Space for Learning

**Step 1** - Read over the Objectives for this Module

**Step 2** - Listen to **Diane's lecture** on expanding time and space for learning.

**Step 3** - Complete the **2** tasks.

### Objectives

- to consider traditional use of time and space
- to consider alternative models of time and space
- to consider how implementing online activities may change your use of time and space

### tasks

#### Use of Time and Space (Integration)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete task on how your tasks will impact your use of time and space and submit it.

**Step 3** - Review the facilitator's feedback.

Task submitted   
Feedback received

#### Planning a Course (Reflection)

**Step 1** - Read the Topics to help you with this task.

**Step 2** - Complete task on planning a course and submit it.

**Step 3** - Review the facilitator's feedback.

Task submitted   
Feedback received

### Notes / Questions to Ask in the Coaching Sessions:

## Module 8 Coaching Session B (Face-to-face session, 2 hours)

### What happens in a Coaching Session?

During the coaching sessions, participants describe their self-generated instructional goals and challenges and discuss technology options that may help with these challenges. An important part of the coaching session is the dialogue between participants; this allows them to clarify misconceptions about using online technologies, describe preliminary ideas for tasks, receive feedback to help in developing these ideas and discuss best practices. In coaching sessions, the coach/facilitator ensures that new ideas are fully understood so that they can be incorporated into practice.

The focus of Coaching Session B, and the second set of online modules, is the type of feedback options faculty can use to provide feedback to their students. In addition, faculty are encouraged to 'rethink' the use of classroom time and homework time when incorporating an online component.

### Agenda for Coaching Session B

- Welcome and Introduction
- Your questions and comments about the completed modules
- Learning Task Demo
- Discuss Your Ideas for Feedback to Learning Tasks for your course.

**Step 1** - Read over the Objectives for this Module

**Step 2** - Review Topics to make sure you are prepared for **Coaching Session B**

**Step 3** - Complete the one minute summary at the **conclusion** of Coaching Session B

### Objectives

- to discuss examples of feedback you created for your tasks
- to discuss other examples of feedback options
- to differentiate between feedback and evaluation
- to discuss how the tasks and feedback you created may change your use of time and space in teaching and learning
- to develop the ideas for the feedback options you have described for your tasks
- to discuss the resources available to the New Classroom Alumnus

### task

#### One Minute Summary

**Step 1** - Complete One Minute Summary

Task submitted

Feedback received

## The Scholarship of Teaching

“Scholarly teaching is what every one of us should be engaged in everyday that we are in a classroom, in our office with students, tutoring, lecturing, conducting discussions, all the roles we play pedagogically. Our work as teachers should meet the highest standards of groundedness, of openness, of clarity and complexity. But, it is only when we step back and reflect systematically on the teaching we have done, and that systematic analysis and reflection leads to a recounting of what we’ve done, in a form that can be publicly reviewed and built upon by our peers, that we have moved from scholarly teaching to a scholarship of teaching.”

- Lee Shulman, *President, Carnegie Foundation for the Advancement of Learning*  
<http://www.carnegiefoundation.org/eLibrary/index.htm>

### **What is the difference between scholarly teaching and the scholarship of teaching?**

Scholarly teaching involves using best practices in teaching that is informed by research on learning and teaching.

#### **The scholarship of teaching involves:**

- posing a problem about an issue of teaching or learning
- reviewing ways that others have approached this problem (lit review)
- hypothesizing about a potential solution to the problem
- devising an appropriate method to implement the proposed solution
- evaluating the results
- communicating the results
- self-reflection
- peer-review

TEMPLATE

**Learning Tasks:** \_\_\_\_\_

**Objectives:**

*What course objective will your task address:*

**The Learning Challenge:**

*Describe the learning problem that your task will address:*

**The Task:**

*Describe the task and how it will be delivered:*

**The Feedback:**

*Describe the type of feedback that you will give to your students:*

**Time and Space:**

*Describe how this task will impact your use of time and space for learning:*

**Outcome:**

*Describe how you will know if the task is enhancing student learning:*

## Resource for Writing Course Objectives

### How does your learning task fit with your educational objectives?

Benjamin Bloom created a taxonomy (see next page) for categorizing the level of abstraction of questions that commonly occur in educational settings.

The taxonomy provides a useful structure for thinking about and categorizing the level of cognitive skill required to answer a question, do an assignment or complete a learning task.

Following is a brief description of each 'cognitive domain' described by Bloom. The chart on the following page gives examples of descriptor verbs that relate to posing a question or task within each category.

|                      |  |
|----------------------|--|
| <b>Knowledge</b>     | remembering previously learned material, recall or recognition, the lowest level of learning outcomes in the cognitive domain.   |
| <b>Comprehension</b> | the ability to grasp the meaning of material, may be translating material from one form to another (words to numbers) or interpreting material by explaining or summarizing, one step beyond simple remembering.                                   |
| <b>Application</b>   | the ability to use learned material in new and concrete situations, may include application of rules, methods, concepts, principles, laws, theories.   |
| <b>Analysis</b>      | the ability to break down material into its component parts so that its organizational structure may be understood, may include analysis of the relationship between parts.  |
| <b>Synthesis</b>     | the ability to put the parts together into a new whole, formulation of new patterns or structure.  |
| <b>Evaluation</b>    | the ability to judge the value of material (statement, novel, poem, research, report, etc.), judgments are based on definite criteria, contain elements of all other categories plus conscious value judgements based on clearly defined criteria. |

## Bloom's Taxonomy of Educational Objectives

You can use these 'descriptor terms' to help write learning tasks and assignments that are suited to testing students' understanding at the different levels ie: at the synthesis level you could word a task/ assignment as follows: 'Propose an alternative solution to the example given.'

### **Evaluation**

draw conclusions  
what errors  
what inconsistencies  
defend  
judge  
evaluate  
compare

### **Synthesis**

propose an alternative  
devise  
how else would you  
construct  
compare  
show relationship

### **Analysis**

what motive(s)  
what relationship exists  
identify the main idea or theme  
analyze  
distinguish  
examine

### **Application**

apply  
what would happen if  
what elements or statements best  
illustrate  
explain how \_\_\_\_ would react to \_\_\_\_  
illustrate  
prove  
demonstrate

### **Comprehension**

why  
how  
state in your own words  
condense  
show or demonstrate  
paraphrase  
re-tell  
interpret  
summarize

### **Knowledge**

what  
where  
when  
who  
define  
outline  
state  
list  
describe

