# Course CMP-5078-2 Computer-Assisted Presentation

# **Computer Science**



#### INTRODUCTION

The goal of the *Computer-Assisted Presentation* course is to provide adult learners with the means to improve their communication skills and to enable them to produce multimedia documents that present their ideas effectively.

In this course, adult learners deal with various learning situations that help them acquire practical knowledge about a computer-assisted presentation program. By creating and presenting slides, adult learners take a critical look at their communication tool; they communicate their ideas effectively, in accordance with language rules and their target audience. Throughout the learning process, they evaluate their work by making sure they have met the standards that have been set.

By the end of this course, adult learners will be able to create a multimedia presentation for which they will have customized the slides and user interaction. They will be familiar with different contexts in which computer-assisted presentations are used and will be able to plan, create and standardize presentations.

#### SUBJECT-SPECIFIC COMPETENCIES

This course targets the following subject-specific competencies:

- Interacts in a computer environment
- Produces computerized documents
- Adopts behaviours that reflect a concern for ethics, safety and critical thinking

Thus, it is by activating and integrating all three subject-specific competencies and by using other resources that adults are able to effectively structure their learning.

During the learning situations, adult learners communicate using a human-machine interface. They carefully plan their work and adapt their plan as they work. As they carry out a project and upon its completion, they evaluate their efficiency and make any necessary adjustments.

# **PROCESSES AND STRATEGIES**

As they learn about computers, adult learners are called upon to use various processes and strategies. These processes and strategies represent the way in which adults go about solving problems, meeting challenges and, in general, carrying out their learning activities.

For the *Computer-Assisted Presentation* course, the suggested approach is the production process.

#### **Production process**

- This process consists of two steps: planning and production. Four values are associated with it: communicate clearly; validate the production on a regular basis; maintain ongoing feedback and collaboration; accept the change.
- During the planning stage, adult learners must define the work to be done as precisely as possible. Planning must be flexible and allow adjustments throughout the project.
- During the production stage, adult learners must complete the project according to the planning established; maintain ongoing feedback and collaboration; accept change, even at the end of the production stage, and respond to change rather than following the initial plan.

# Examples of strategies

- Comparing the current situation with the desired situation
- Determining the steps involved in carrying out the work
- Drawing up a work schedule
- Choosing a work method
- Making adjustments to the plan as they work
- Analyzing their results

To meet the requirements of the production process, the initial plan must be flexible enough to allow for adjustments throughout the project. Through discussions with the teacher or with their peers, adults learn to reflect on each step in their process and arrive at a result that will differ from their original plan. By applying the above process, they learn to cooperate with others and to accept changes during the course of a project.

#### **CROSS-CURRICULAR COMPETENCIES**

The cross-curricular competencies are not developed in a vacuum; they are rooted in learning situations and contribute, to varying degrees, to the development of the subject-specific competencies, and vice versa.

Several cross-curricular competencies can be useful in dealing with the learning situations in the *Computer-Assisted Presentation* course. Two are considered particularly relevant to this course: *Uses information* and *Communicates appropriately*.

#### Intellectual Competency

By preparing presentations, adults learn to *use information* in order to convey their ideas and to bring in elements to support these ideas They systematize the information-gathering process, assimilate the information before using it, and put it to use while respecting intellectual property.

#### Communication-Related Competency

By sharing computer-assisted presentations, adults learn to *communicate appropriately*. They adapt their work to a communication intention, a message or a target audience.

# SUBJECT-SPECIFIC CONTENT

The subject-specific content consists of knowledge and cultural references. The prescribed content for this course is outlined below. However, depending on the context (e.g. if certain tools or functions are not available in a given software program), other equivalent content may be substituted for that outlined below.

#### **KNOWLEDGE**

# Definitions and properties of the main concepts associated with computer-assisted presentations

- · Slides and slide shows
- Slide layouts
- Objects
- Masks (master slides)
- Transitions
- · Animation effects
- Grids
- · Timing and timeline
- Comments
- View modes (outline view, slide view, slide show)

#### Roles of the presenter and the presentation

- Presenter-reader
- Presenter-speaker
- Linear, non-linear, interactive presentation
- Self-running presentation
- Presentations on computer, projector, interactive whiteboard

# Situations in which computer-assisted presentations are used

- · Situations in which it may be appropriate to use a presentation
- Situations in which it may be appropriate to use masks (master slides)
- Situations in which it may be appropriate to use templates

- Rules of image composition
- Standard terminology associated with computer-assisted presentations
- Creating a slide
  - Inserting objects
  - · Defining the stacking order
  - Adding comments

# Formatting a presentation

- Using presentation templates
- Modifying the layout of a slide
- · Modifying colours
- · Creating slide masks
- Rearranging slides

## Integrating interactive elements in a presentation

- · Choosing view options
  - Automatic or manual startup
  - Simple or looped presentation
- Changing parameters for animating objects
  - Display order
  - Zoom in or fading
  - Speed
  - Grouping
- Changing the parameters for transitions between slides
  - Speed
  - Sound
  - Effects
  - Timing
- Creating links to slides or other resources (Web site, document)
- Set timing for animations and transitions
- Saving, exporting and printing slide shows

#### **CULTURAL REFERENCES**

The following cultural references will help adults understand some of the factors that influenced the development of computer science. These references give a cultural dimension to instruction, expand the adult learners' knowledge and make their learning meaningful. The teacher, with input from adult learners, may choose other references that are more appropriate to the task at hand.

#### Events and chronology

- Evolution of teaching tools (blackboard, chalkboard, whiteboard, interactive whiteboard, photocopies, overhead projector, computer-assisted presentation)
- Computer-assisted presentations in different forms
  - Speaker's presentation using an overhead projector and presentation software
  - Advertising on digital message boards
  - Interactive terminals
  - Election campaigns

#### Heritage objects

- Overhead projector
- Flipchart

#### Regional or national references

- Employers
- Anecdotes
- · School-related elements

#### **FAMILY OF LEARNING SITUATIONS**

The goal of the *Computer-Assisted Presentation* course is to provide adult learners with the means to improve their communication skills and to enable them to produce multimedia documents that present their ideas effectively. This course gives adult learners the opportunity to perform actions that will enable them to interact in a computer environment and produce quality computerized documents.

The shaded cells in the table below provide specifics about the contexts in which the prescribed families of learning situations are applied in this course.

Subject-specific competencies	Families of learning situations related to				
	Information	Creation	Critical thinking		
Interacts in a computer environment	Interacts by interpreting signals he/she receives and using input and output peripherals	Discovers what computers can do by consulting documentation and by experimenting	Critically examines computerized communication tools by applying evaluation criteria		
Produces computerized documents	Communicates by using computerized services	Creates by correctly using the appropriate functions	Evaluates his/her work by setting quality standards		
Adopts behaviours that reflect a concern for ethics, safety and critical thinking	Communicates respectfully, using the conventions of a given medium	Acts prudently by adopting safe behaviours	Validates information by using validation criteria		

First, adult learners critically examine the computerized communication tools by applying evaluation criteria. For example, they may choose the appropriate programs or configure their environment in a manner that suits them.

Then, they communicate using computerized services, in order to share their experiences and ideas and to express themselves, among other things. They create documents by correctly using the appropriate functions and thus work more efficiently. They evaluate their work regularly by setting quality standards or by taking into account standards that have been set for them. Throughout the project, they communicate respectfully, using the conventions of a given medium.

#### **BROAD AREAS OF LEARNING**

The broad areas of learning deal with major contemporary issues. Ideally, the situations to be studied should be selected in keeping with the educational aims of the broad areas of learning, since these areas of learning provide a broader context for the learning situations and thus serve to make learning more meaningful. Two broad areas of learning are considered particularly relevant to this course: Career Planning and Entrepreneurship, and Media Literacy.

#### Career Planning and Entrepreneurship

By developing computer competencies, adult learners increase their overall employability. A learning situation that enables adult learners to present products or services meets the educational aim of the BAL Career Planning and Entrepreneurship.

# Media Literacy

Being able to better understand how media information is processed is one of the aims of the Computer Science program. A learning activity that allows adult learners to disseminate audiovisual content meets the educational aim of the BAL Media Literacy.

#### **EXAMPLE OF A LEARNING SITUATION**

All learning situations, no matter what broad area of learning is targeted, place adult learners at the heart of the action. Learning situations promote the development of subject-specific and cross-curricular competencies, the acquisition of computer knowledge and skills and the mobilization of various resources that are useful in carrying out the tasks at hand.

The table below shows the elements that need to be considered when developing a learning situation and highlights those selected for the learning activity described on the following page.

ELEMENTS REQUIRED IN LEARNING SITUATIONS					
Broad area of learning (targeted) - Contextualizes learning to make learning more meaningful	Career Planning and Entrepreneurship				
Subject-specific competencies (prescribed)  - Are developed in action and require the active participation of adult learners	<ul> <li>Interacts in a computer environment</li> <li>Produces computerized documents</li> <li>Adopts behaviours that reflect a concern for ethics, safety and critical thinking</li> </ul>				
Families of learning situations (prescribed)  - Group together situations appropriate to the course, based on issues drawn from reality  - Promote the acquisition of computer knowledge and skills	<ul> <li>Information         <ul> <li>Communicates by using computerized services</li> <li>Communicates respectfully, using the conventions of a given medium</li> </ul> </li> <li>Creation         <ul> <li>Creates by correctly using the appropriate functions</li> </ul> </li> <li>Critical thinking         <ul> <li>Critically examines computerized communication tools by applying evaluation criteria</li> <li>Evaluates his/her work by setting quality standards</li> </ul> </li> </ul>				
Cross-curricular competencies (targeted) - Are developed in context together with the subject-specific competencies	<ul><li>Uses information</li><li>Communicates appropriately</li></ul>				
Knowledge (prescribed) - Includes computer knowledge and skills that adult learners must acquire in the course	<ul> <li>Definitions and properties of the main concepts associated with computer-assisted presentation</li> <li>Integrating interactive elements in a presentation</li> <li>Inserting and animating various objects in a slide</li> </ul>				

This section provides an example of a learning activity. It includes a context that serves as a common thread throughout the activity; however, it is not formally spelled out. Although they may not be explicit, the learning situation includes the elements identified in the previous table: the broad area of learning, the subject-specific competencies, the families of learning situations, the cross-curricular competencies and the prescribed knowledge. To promote learning, these elements must be structured in a coherent and meaningful way.

Teachers can target any element as a focus of learning, be it actions related to the subjectspecific or the cross-curricular competencies or the prescribed knowledge that adults must acquire.

#### **EXAMPLE OF A LEARNING SITUATION**

# Promoting awareness of occupational health and safety

**Task:** Design a presentation to make students aware of the health and safety risks associated with certain jobs.

To start off the activity, the teacher asks the adult learners to read about a job of their choice and select information they consider relevant for their presentation.

To carry out the activity, adult learners must first develop a model to plan their presentation. Then, they create their presentation by inserting objects (text boxes and images) into the slides and standardize the slides using templates. In order to add impact to certain elements and generate interest among their audience, they add animation and transitions.

At the end of the activity, each adult presents his or her slide show to the class, using an interactive whiteboard, a multimedia projector or a computer monitor, depending on what equipment is available at the centre. The class then discusses the risks associated with the job in question and the way in which the information was organized in the presentation.

#### **END-OF-COURSE OUTCOMES**

To deal with situations related to computer-assisted presentation, adult learners identify the contexts in which such presentations are used and determine the roles of the presenter and the presentation. They identify and use the required commands and functions. To do this, they use the following subject-specific competencies: Interacts in a computer environment, Produces computerized documents and Adopts behaviours that reflect a concern for ethics, safety and critical thinking.

When adult learners *critically examine computerized communication tools*, they distinguish between essential and secondary elements in the program and gather information by consulting the documentation provided and other help resources. In this way, they choose the features of the program that best meet their communications needs.

When adult learners *create*, they plan their work by becoming familiar with the objective of the task and by evaluating its complexity. As they carry out their work, they choose a solution, mobilize the necessary resources, and make adjustments, as needed. At this stage, they use the appropriate commands and functions correctly and work more efficiently.

When adult learners *communicate* using computerized services, they use computer resources to share their ideas and to express them clearly and aesthetically. They identify the context in which the presentation is to be used and determine the role of the presenter and the presentation. They take into account factors that can help or hinder communication. They adapt their communication to their target audience and comply with language rules.

When adult learners evaluate their work, they check whether they have attained the communication objective and the quality standards that have been set by going over the steps they followed. This helps them get an accurate sense of the results obtained and identify other contexts in which their approach could be applied.

When adult learners *communicate* respectfully using the conventions of a given medium, they use computer resources to disseminate ideas and content. They determine the available resources and consider the best way to proceed. They take into account factors that can help or hinder communication. They respect the rules, codes and conventions of the various computer languages they are called upon to use.

Throughout the learning process, adult learners develop competence in the following computer knowledge and skills: they identify the context and the roles involved. They plan and create a presentation that takes into account the information gathered and the communication need. They refine their presentation by standardizing it and adding interactive elements. In addition, they do not hesitate to consult various resources to obtain help when difficulties arise.

#### **EVALUATION CRITERIA**

## Interacts in a computer environment

Judicious application of evaluation criteria

# Produces computerized documents

- Thorough planning of the work
- Appropriate formatting based on document type
- Application of appropriate tools and functions
- Rigorous compliance with the constraints identified
- Proper presentation of the information based on the context

#### Adopts behaviours that reflect a concern for ethics, safety and critical thinking

Adequate communication using the conventions of a given medium