

Course
Computer Document Production
CMP-P102-2
Presecondary



“One only understands the things that one tames.”

Antoine de Saint-Exupéry

Presentation of the Course *Computer Document Production*

The course *Computer Document Production* is designed to help adult learners deal competently with real-life situations in which they must produce documents using a computer.

The course prepares adult learners to make effective use of computer tools. Among other things, it shows them how to use word

processing and desktop publishing applications, Web editing software, spreadsheets and computer graphics to produce different types of documents.

Dealing With the Real-Life Situations

Dealing effectively with real-life situations is based on actions. These actions are grouped into categories and make use of a set of resources that include operational competencies and essential knowledge. During the learning process, adults are expected to construct knowledge related to these resources in order to be able to deal appropriately with their real-life situations.

The class of situations, categories of actions, operational competencies and essential knowledge constitute the compulsory elements of the course. These elements are explained in detail under their respective headings.



Class of Situations Addressed by the Course

This course addresses a single class of situations: *Producing a computer document*.

Computers have enabled more people to produce meticulous documents with less difficulty. Because modern computers are relatively easy to use, adults are required to deal with real-life situations involving computers on a daily basis, for example to write

letters, manage their budget or distribute information on the Internet or by means of a multimedia presentation. However, if they are to be able to use computers properly, they must be familiar with the basic elements of computer document production.

Class of situations	Examples of Real-Life Situations
Producing a computer document	<ul style="list-style-type: none">▪ Maintaining personal or business correspondence▪ Monitoring his/her health or diet▪ Managing his/her budget▪ Planning a purchase▪ Looking for a job▪ Distributing cultural, artistic or other information▪ Preparing a cultural activity▪ Making travel arrangements▪ Performing an activity at school or work▪ Preparing a personal leisure activity▪ Creating a visual work

Categories of Actions

The *categories of actions* are groups of actions that are appropriate for dealing with the real-life situations addressed in the course. *Examples of actions* are provided to illustrate the scope of the category in a variety of contexts.

Categories of Actions	Examples of Actions
<ul style="list-style-type: none"> ▪ Identifying a communication need 	<ul style="list-style-type: none"> ▪ Enters a personal letter ▪ Creates the layout of a business letter, a request for information, a letter of complaint, etc. ▪ Creates a résumé layout ▪ Creates a presentation on a topic in the news ▪ Promotes a cause by creating a Web page ▪ Calculates material quantities and costs for a renovation project ▪ Plans an expense (e.g. purchase, rental travel, etc.) ▪ Expresses an opinion or supports a cause by producing an advertising poster ▪ Creates an invitation or greeting card ▪ Plans a trip, showing how to get to a certain location
<ul style="list-style-type: none"> ▪ Selecting the appropriate application 	<ul style="list-style-type: none"> ▪ Considers the families of applications ▪ Identifies the features of the word processing application ▪ Identifies the features of the desktop presentation software ▪ Identifies the features of the Web editing software ▪ Identifies the features of the spreadsheet software ▪ Identifies the features of the computer graphics software ▪ Compares the possibilities offered by the different applications ▪ Determines selection criteria based on the functions of the various applications ▪ Selects an application

Categories of Actions	Examples of Actions
<ul style="list-style-type: none">▪ Applying the steps in the document production process	<ul style="list-style-type: none">▪ Prepares a model▪ Prepares content▪ Enters the content▪ Revises the content▪ Formats the content▪ Revises the product▪ Distributes the final product

Compulsory Elements and End-of-Course Outcomes

The compulsory elements are those that the teacher must absolutely take into account when designing learning situations.

Class of Situations

Producing a computer document

Categories of Actions

- Identifying a communication need
- Selecting the appropriate application
- Applying the steps in the document production process

Operational Competencies

Acts methodically

- Follows instructions carefully
- Identifies the constraints associated with production of the document
- Plans the steps in the document production process
- Selects the appropriate page layout options
- Assesses the result and the process

Communicates

- Considers the communication intention
- Produces a clear message
- Adjusts the message to the receiver
- Applies the rules of language

Essential Knowledge

- Document layout
- Preparing a spreadsheet
- Creating a computer graphic composition

The end-of-course outcomes describe how adults make use of the compulsory elements to deal with the real-life situations addressed in the course.

End-of-Course Outcomes

In order to deal with the situations in the class *Producing a computer document*, adult learners identify the communication need, select the appropriate application that allows them to produce a document, and apply the steps in the document production process.

To identify the communication need, they determine the purpose(s) for which the communication is required and plan the steps leading up to document production.

To select the appropriate application, they consider the communication intention and identify any constraints associated with the type of document to be produced. They then select the appropriate application.

To apply the steps in the document production process, they carefully follow the instructions. They take the necessary steps to produce and format a clear message that is adapted to the recipient. They must also comply with language rules and select the options required for a suitable page layout. They use the options and commands correctly. Once the task has been completed, they save the document and distribute it to the recipient concerned. They then examine their method and the results obtained, noting down their observations if necessary, so that they can use their evaluation to improve future documents.

By the end of the course, adult learners will be able to produce, format, revise and distribute simple documents using a computer, in order to respond to communication needs in their everyday lives.

Evaluation Criteria

- Accurately identifies the communication need
- Selects the appropriate application
- Methodically applies the steps in the document production process

Operational Competencies

The contribution of each operational competency is described in terms of the actions that are appropriate for dealing with the real-life situations in the course. These operational competencies are addressed in other courses and therefore all of the courses taken together contribute to their development.

In this course, only the following operational competencies are addressed: *Acts methodically* and *Communicates*.

Contribution of the Operational Competency *Acts methodically*

The operational competency *Acts methodically* helps adult learners to deal effectively with situations related to the class *Producing a computer document*. It helps them to master the task at hand and follow instructions carefully.

Adult learners identify the constraints associated with presenting a document, then select the appropriate application and choose options for a suitable page layout. They plan a series of steps including entering, correcting, formatting, saving and printing the document. When the task is completed, they examine both the results and the process. This allows them to judge their progress, decide what can be done to improve it, and identify other areas to which their new knowledge can be applied.

The operational competency *Acts methodically* therefore allows adult learners to gather the resources they need to deal with the situation, and helps them to adopt an effective working method to complete the task.

Contribution of the Operational Competency *Communicates*

The operational competency *Communicates* helps adult learners to meet their communication and expression needs based on their own mastery of language. It enables them to send a message whose form and content convey the intended meaning.

Adult learners produce a clear message that is adapted to the recipient and complies with the rules of language. In the case of a text, Web page, multimedia presentation or computer graphic composition, they create an aesthetically pleasing layout that attracts the interest of the reader and allows the message to be communicated effectively.

Essential Knowledge

The elements of essential knowledge shown in parentheses are provided as suggestions only.

Document layout

- Entering text
- Correcting text
 - Spell check, thesaurus
- Editing text
 - Selecting and moving blocks of text
 - Replacing, adding and deleting words
 - Dividing and merging paragraphs
- Moving the cursor around a text: keys, menus
- Inserting images into a text
- Formatting a text or a selection
 - Character attributes (bold, italic, size, font, colour)
 - Paragraph formats (alignment, line spacing)
- Page setup options
 - Size, orientation
- Creating a simple multimedia presentation (presentation software)
- Creating a simple Web page (word processing special editor)

Preparing a spreadsheet

- Entering data and values
- Creating formulas
 - Addition, subtraction, multiplication and division
- Function applications
 - Total, average
- Adjusting column widths

- Selecting text in a spreadsheet
 - Copying and moving cells
 - Simple sorting
- Creating graphics
 - Selecting the cell range
 - Types of graphics, options
- Printing from a spreadsheet
 - Selection, orientation
 - Printing a table or graphic

Creating a computer graphic composition

- Drawing lines
 - Straight lines, curves (Bezier curves)
 - Colour, thickness, style
- Drawing shapes
 - Predetermined shapes (rectangles, ellipses, polygons)
 - Freeform shapes
 - Fill, contour
- Inserting objects
 - Images, text areas
- Manipulating selections (or overlay)
 - Copying, moving, rotating, resizing, deleting
 - Modifying (line, shape, text, contour)
 - Applying a filter

Creating a computer graphic composition (cont.)

- Image attributes
 - Vector, matrix
 - Resolution (72, 96, 160 ppi)
 - Modes (RGB, grey tone, 8, 16 bits)
 - Format (RAW, JPG, TIF)
 - Overlays

Attitudes

The following attitudes are provided as suggestions only. The development of these attitudes can help adults become more competent in dealing with the real-life situations in this course.

Curiosity	Perseverance
<p>Curiosity encourages adults to try new experiences and review those that do not work, in order to progress on their own. The field of computer technology is in constant evolution, and adults who develop curiosity are more likely to update their skills, seek out new products and features, and explore specific aspects of the field. Often, curiosity drives adults to excel at what they do.</p>	<p>Adult learners who work hard understand that every person develops at his or her own pace, and that mistakes are an integral part of progress. Adults who are able to develop perseverance have the psychological resources required to progress and succeed in life.</p>
Attention to Detail	
<p>Attention to detail is needed to produce good quality work. Adults learn to work accurately and to improve their standards when revising their documents and making any necessary corrections. Their goal is to hand in a finished product with which they are satisfied. Attention to detail is reflected in every area of the adult learner’s activities.</p>	

Complementary Resources

The following resources are provided as suggestions only and consist of references that may be consulted in learning situations.

Social Resources	Material Resources
<ul style="list-style-type: none">▪ Guest speaker who is an expert in a related field	<ul style="list-style-type: none">▪ Computer, printer▪ Operating system▪ Office automation software (word processor, spreadsheet)▪ Desktop presentation software▪ Graphics software▪ Web browser, utilities▪ Digital projector▪ Reference books▪ Web page editor

Contribution of the Subject Areas

The contribution of other subject areas, in particular knowledge related to Languages and Mathematics, Science and Technology, is also useful for dealing with the real-life situations in this course. The elements identified for each subject area are not compulsory and do not constitute prerequisites.

Subject Area: Languages

Program of Study: *English, Language of Instruction*

Knowledge of the language of instruction contributes significantly to learners' capacity to use a computer to search for information, communicate with others, produce documents and collaborate on group projects. The content of the written messages that adult learners receive and produce depends on the language resources they have constructed, particularly their reading and writing skills with respect to the type of discourse concerned, and this is true whether the message is conveyed in print, handwriting or electronically. These skills are developed throughout all the courses in the English, Language of Instruction program. In addition to the language resources that are specific to the situation and the messages being conveyed, the capacity to use a computer for these purposes depends in particular upon:

- Oral interaction to obtain and give information and instructions (e.g. regarding steps and procedures to follow when using a computer)
- Decoding strategies (e.g. to interpret computer-specific terminology, symbols, icons, abbreviations)
- Reading to obtain information and instructions (e.g. help menus, pop-up messages, instruction manuals for computer software)

Subject Area: Mathematics, Science and Technology

Program of Study: *Mathematics*

Course: *Arithmetic and Personal Finances*

- Searching for and interpreting financial information
- Producing a message containing financial information
- Calculating a sum of money

Andragogical Context

Computers are now present in every sector of human activity, and it is essential for today's adult population to understand how they work and how they should be used. The courses in the *Computer Science* program develop the ability of adult learners to understand the computer environment, produce documents and search for, process and manipulate information. More specifically, the courses enable adult learners to identify similarities between different software applications and use this basic information to transfer their learning from one application to another.

The learning derived from the program is essential for helping adults integrate into the work force and function in their social and cultural environment and in their training activities, regardless of their level of schooling. The ability to use a computer is an advantage in their everyday lives and especially in their learning. Adult learners who own or have access to a computer will benefit from it on a daily basis.

Adult learners build on their prior knowledge through learning acquired by thinking, acting and interacting with the people around them, every time the learning context allows them to do so. Discovery and individual exercises are always available, but are used with the goal of building new knowledge or applying prior knowledge. Feedback allows adult learners to assess their own progress, take corrective action where necessary, and realize how their knowledge of computers can be applied in their everyday lives.

Learning is acquired gradually in this course. Adult learners begin by addressing general notions, which they enrich and apply in the classroom or laboratory through situational reconstructions and other appropriate activities. They may then be asked to apply their newly constructed knowledge to real-life situations.

If their learning is to be effective, it must be structured by means of an appropriate pedagogical method. Although pedagogical methods and techniques are specific to each training centre and adapted to the teacher's own abilities, they should nevertheless be alternated in order to diversify the learning conditions and provide adult learners with different ways of building their knowledge. This approach will also increase the adult learners' motivation and encourage them to work harder. It is therefore important to allow time for sharing knowledge, experiences and ideas. A broad range of learning activities will provide plausible topics through which adult learners are able to apply the concepts addressed in the course.

Learning Situation

The learning situation that follows is provided as an example to show teachers how the principles of the education reform can be applied in the classroom.

It is authentic in the sense that it addresses a real-life situation (taken from the class of situations in the course) that adults may find themselves in. It is sufficiently open and comprehensive to allow adult learners to explore several important aspects related to dealing with this real-life situation.

The examples of actions presented in the course help the teacher to identify those actions that an adult would take to deal with the real-life situation. The teacher can then refer to these examples in order to develop pertinent learning activities.

The learning situation is organized in terms of the three steps of the teaching-learning process, which are as follows:

- planning learning
- actual learning
- integrating and reinvesting learning

These steps highlight the principles of the education reform insofar as they encourage adults to be active, to reflect on their learning and to interact with their peers when the learning context is suitable. They include learning activities and may also include evaluation activities intended to support adults in the learning process.

These activities help learners to construct knowledge related to the compulsory elements of the course that are targeted by the learning situation concerned: one or more categories of actions, essential knowledge and the actions of the operational competencies associated with the categories of actions.

The example provided also refers to certain teaching strategies—pedagogical methods and techniques—that can be selected according to the learners, the context and the learning environment. Certain learning strategies may also be suggested, as well as a variety of material and social resources.

Example of a Learning Situation

A Dream Vacation

One of the real-life situations chosen for the *Computer Document Production* course involves using a spreadsheet to plan a purchase. In the related learning situation, adult learners must plan the purchase of a trip to the destination of their choice.

When preparing the activity, the teacher asks the adult learners what they know about spreadsheets. Some will know how to use them, while others will not. The teacher also asks the adult learners to bring a selection of newspapers, travel agency brochures and travel agent Web site addresses to class.

The learning situation begins with a group brainstorming session that reveals the group's vacation interests. The teacher asks them about past vacations and dream destinations. Each adult learner then selects a destination from a newspaper, brochure or Web site, noting down the cost and duration of the trip and whether or not the package includes meals. They then learn how to use the spreadsheet, entering real or fictional income and expenditures to determine whether or not they can afford the dream vacation.

The learning activity is divided into four stages. Each stage begins with a digital projector demonstration, and the adult learners are then asked to apply what they have just learned. The teacher walks around the classroom and provides guidance to individuals or small groups in their construction of knowledge. The first stage involves preparing the spreadsheet structure by entering headings showing their monthly income and expenses, and all trip-related costs (e.g. transportation, accommodation, meals, etc.). The second stage involves entering the values for the income, expenditures and costs identified in the headings. They apply the monetary format to the

appropriate cells. The third stage involves calculating total annual income and expenses. The feasibility of the trip depends on the difference between the adult's income and expenses. In the fourth and final stage, the adult learners reconsider their expenses and, if necessary, select a more realistic destination for their vacation. By altering the amounts allocated to expenses, they are able to simulate different budgets and discover the best way of turning their dream into reality.

The teacher ends the learning situation with a group feedback session. Together, the teacher and adult learners review the procedure and summarize the notions addressed in the activity. This particular learning situation acts as a catalyst by raising the adult learners' awareness of the importance of making informed choices, since every decision will have impacts in the longer term.

Elements of the Course Addressed by the Learning Situation

Class of Situations	
Producing a computer document	
Learning Situation	
A Dream Vacation	
Categories of Actions	
<ul style="list-style-type: none"> Identifying a communication need Applying the steps in the document production process 	
Operational Competency	Essential Knowledge
<ul style="list-style-type: none"> Acts methodically 	<ul style="list-style-type: none"> Preparing a spreadsheet
Complementary Resources	
<ul style="list-style-type: none"> Computer, printer Spreadsheet, user guides 	<ul style="list-style-type: none"> Internet browser Newspapers, magazines or specialized Web sites, travel agency advertisements

