Course
Computer Integration
CMP-1101-2
Secondary Cycle One

Presentation of the Course *Computer Integration*

The course *Computer Integration* is designed to help adult learners deal competently with real-life situations in which they must assemble a document for distribution.

It teaches them how to create documents using a combination of different applications.

By the end of the course, adult learners will be able to create a model of the product required, assemble or produce the documents to be used as a base, and then extract the portions they need to insert into the final document. As a result, they will have developed the skills required to assemble portions of separate documents into a single document.

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: *Assembling a document for distribution*.

Most real-life documents are produced by combining documents or portions of documents from different applications, rather than simply by using a single application. Newspapers and magazines are produced by assembling documents created using word processing, spreadsheet, computer graphics and database applications. All these various packages are integrated into a desktop publishing application. Not all documents are as complex as this, but the method used to create simpler documents such as reports, Web pages, digital portfolios, greeting cards and even letters is similar.

To deal effectively with the real-life situations in this course, adult learners must produce and distribute user-friendly documents intended for groups or individuals that meet their communication needs. They may, for example, create a Web page for a career plan, produce an advertising document for a social or community group, or compose personal messages when corresponding with friends and family.

Class of Situations	Examples of Real-Life Situations
Assembling a document for distribution	- Corresponding with friends and family - Communicating for personal and official purposes - Doing coursework - Managing one's money - Exercising one's rights and responsibilities - Developing a career plan - Taking part in social and cultural activities - Interpreting current events

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
▪ Preparing the task	▪ Prepares a model of the proposed product ▪ Writes texts ▪ Creates illustrations ▪ Retouches images ▪ Carries out documentary research on the Internet ▪ Assembles documents (e.g. text and images) ▪ Applies the spell check function to the texts
▪ Assembling portions of selected sources to form a single document	▪ Creates greeting cards or invitation cards ▪ Inserts a table into a text to present different kinds of data ▪ Attaches a map to a letter, showing a specific itinerary ▪ Creates a presentation or Web site to provide information on a specific subject ▪ Formats an advertising brochure ▪ Formats a document (menu, instructions, report) ▪ Prepares a mass mailing or a form letter
▪ Distributing the finished product	▪ Uploads the Web page ▪ Prints and distributes a paper document ▪ Presents a slide show to an audience

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

Assembling a document for distribution

Categories of Actions

- Preparing the task
- Assembling portions of selected sources to form a single document
- Distributing the finished product

Operational Competencies

Thinks logically

- Analyzes the source documents in order to clarify needs
- Selects an appropriate software application to integrate the source documents
- Uses the necessary functions and commands
- Applies a coherent production and revision procedure

Uses creativity

- Uses similar documents as inspiration
- Designs an original product
- Identifies solutions to problems
- Creates an aesthetically pleasing layout
- Processes information in a personal way

Essential Knowledge

- Preproduction
- Production
- Postproduction

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 *Assembling a document for distribution*, adult learners analyze the task to be performed, prepare a page layout for their design and group together their source documents. They then assemble the source documents to form a single document, which they distribute using output peripherals such as a digital projector or a television screen.

To prepare the task, adult learners examine the source documents to clarify the assembly needs, and draw inspiration from similar documents in order to design an original product. This involves producing a model, sketch or storyboard. Basing their decision on the suitability of the available software applications for the type of document, they select an appropriate application, gather or produce the necessary source documents, check their spelling and grammar, and file the documents in a folder created for that purpose.

When combining the source documents to form a single document, adult learners follow a coherent production and revision process. They organize their work and follow a timetable. They use their prior learning to apply the commands and functions required for the task. Where necessary, they refer to the application's help files, Internet information sources or reference guides to find solutions to the problems they encounter. They limit themselves to no more than three source documents, which they bring together to form an effective, aesthetically pleasing and coherent product with a page layout that highlights the most important elements. In doing this, they process the information in a personal way.

When distributing the final product, adult learners must ensure that it is suited to the method they have selected. They make any corrections that may be required and then print, present or post their document on-line.

Evaluation Criteria

- Rigorously prepares for the task
- Assembles several source documents in a coherent way to form a single document
- Distributes the final product in a coherent and effective way

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: *Thinks logically* and *Uses creativity*.

Contribution of the Operational Competency *Thinks logically*	
The operational competency *Thinks logically* helps adult learners to deal effectively with situations related to the class *Assembling a document for distribution*. It helps adult learners to carry out the task as effectively as possible.	Adult learners begin by examining the source documents and their relevance to the communication goal, in order to identify the assembly requirements. They then visualize a finished product that satisfies those requirements and select the most appropriate software application for the task, based on the type of document required and the sources from which it will be assembled. They apply their prior learning, using the correct functions and commands to efficiently assemble the final document. They do this as part of a coherent production and revision process.

Contribution of the Operational Competency *Uses creativity*	
The operational competency *Uses creativity* allows adult learners to deal effectively with situations related to the class *Assembling a document for distribution*. It encourages them to approach a task from a new angle and give their own personal touch to a document produced from a combination of sources. To design an original product, they use existing documents as their inspiration and build a model. They solve any technical, conceptual and organizational problems that may arise during the process. They process the information in a personal way, creating an aesthetically pleasing layout that is suitable for the chosen method of distribution.	This competency encourages adult learners to take the initiative by processing information in a new and different way as they complete the task at hand.

Essential Knowledge

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

Preproduction

- Formatting the concept (sketch, model, storyboard)
  - Planning the distribution method (print, presentation, on-line)
  - Selecting the integration software
  - Preparing a timetable
- Grouping available documents
- Producing documents
- Classifying documents

Production

- Learning the functions and techniques of the integration software
- Inserting objects (files, images, bookmarks, hyperlinks, audio or video clips)
  - Cut/Copy/Paste
  - Import, export (linked object, embedded object)
- Page layout
  - Adjusting the margins and line spacing
  - Setting out the header and footer
  - Inserting page breaks
  - Numbering the pages
- Creating a table of contents

Postproduction

- Printing
  - Recto verso, scope, print quality
  - Grey levels, colours
- Presenting a slide show
  - Timing, transitional effects
  - Type of projector, screen resolution
- On-line presentation
  - File naming conventions
  - Downloading, uploading

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
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.	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.

Complementary Resources

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

Social Resource	Material Resources
▪ Guest speaker who is an expert in a related field	▪ Computer, printer ▪ Operating system ▪ Internet browser ▪ Audio, video or audio-video peripherals ▪ Digital projector ▪ Reference books

Contribution of the Subject Areas

The contribution of other subject areas, in particular knowledge related to Languages, 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)

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, function in their social and cultural environment and in their education and 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 Centre in Action

One of the real-life situations selected for the course *Computer Integration* involves taking part in social life. Adult learners are asked to create an advertising campaign, the purpose of which is to inform students about the extracurricular activities available to them at their centre, and encourage them to participate. The advertisements may take different forms, including multimedia presentations displayed continuously in the training centre's entrance hall, a leaflet distributed in classrooms, or a Web page. Depending on its quality, the finished product could also be distributed to other centres and perhaps even used as an advertising capsule on the community television channel or in the local newspaper.

Before beginning the learning situation, the teacher collects information from other teachers on the centre's extracurricular activities (e.g. advertising texts, activity timetables, results of sporting events, photographs of events, videos, etc.). He or she also collects examples of advertisements from newspapers, magazines, television and the Internet. If audio-visual material is available, the teacher may reserve a digital projector or large-screen television and DVD player.

To begin the learning situation, the teacher proposes a brainstorming session on the centre's extracurricular activities, completing the list drawn up by the adult learners if necessary. Together, they discuss participation rates and general interest in the activities. The teacher then suggests that the adult learners could inform and attract the interest of the centre's students by distributing an advertisement of their choice. Each adult learner is asked to work on the activity of most interest to him or her.

The adult learners divide into groups, based on the software application selected for the task, and then watch a short demonstration of the procedure required to assemble several source documents into a single final product. Using this information, each adult learner designs an original product, producing a sketch, model or storyboard. Where necessary, adult learners may consult or view existing advertisements as a source of inspiration. They file the documents collected or created for the activity.

Adult learners then produce an advertisement, incorporating portions of the source elements at their disposal. Where necessary, they learn the commands and techniques required to insert objects and format their documents, along with any other functions they need for the task. They create an aesthetically pleasing layout, and combine and alter both the texts and the image so as to arrange the information in a personal way. In doing this, they apply their prior knowledge of computers and make the necessary connections between the potential offered by the software application and the type of document they wish to produce. They solve problems by consulting the software help files or reference books or resources on the Internet. They may also ask their classmates for additional information. The teacher provides help as required, and depending on the questions raised, may give feedback on specific subjects to the entire group.

The advertisements produced by the adult learners are grouped together for the next step in the process. The presentations are

saved successively on the same digital support, to form a continuous display. Paper advertisements are printed and stapled together, and Web pages are uploaded onto a Web site. The advertising campaign is started by launching all the advertisements at the same time.

Several days later, to complete the learning situation, the adult learners evaluate the activity and assess their level of satisfaction with the results. As a group, they assess the campaign and the relevance of the tools used, and discuss avenues for improvement with the teacher.

Elements of the Course Addressed by the Learning Situation

Class of Situations
Assembling a document for distribution

Learning Situation
A Centre in Action

Categories of Actions

- Preparing the task
- Assembling portions of selected sources to form a single document
- Distributing the finished product

Operational Competencies	**Essential Knowledge**
▪ Thinks logically ▪ Uses creativity	▪ Preproduction ▪ Production ▪ Postproduction

Complementary Resources

▪ Computer, printer ▪ Word processing, graphics and spreadsheet applications ▪ Desktop presentation software ▪ Desktop publication software	▪ Web editor ▪ Internet browser ▪ Digital projector, screen or television(s) and DVD or VHS players ▪ Reference books

Mathematics, Science and Technology

CITIZENSHIP

HEALTH AND WELL-BEING

Social Sciences

Broad Areas of Learning

Subject Areas

Languages

THE WORLD OF WORK

ENVIRONMENT AND CONSUMER AWARENESS

Personnal Development

Working Life