Course CMP-5068-1

Word Processing: Sections and Tables

Computer Science



INTRODUCTION

The goal of the *Word Processing: Sections and Tables* course is to provide adult learners with the means to define page setups and create layouts so that they can showcase their aesthetic sensibility and communication skills. Its focus is on advanced formatting tools.

In this course, adult learners deal with various learning situations that help them acquire practical knowledge about a word processing program. By creating documents using sections and tables, adult learners discover what computers can do. Throughout the learning process, they evaluate their work, making sure they have met the standards that have been set.

By the end of this course, adult learners will be able to use section breaks to modify the layout or formatting of one or more pages in a document and insert tables to improve the document's appearance. They will be able to plan the page layout of a document, arrange text on a page, insert section breaks and present data using tables.

SUBJECT-SPECIFIC COMPETENCIES

This course targets the following subject-specific competencies:

- Interacts in a computer environment
- *Produces computerized documents*

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

During the learning situations, adult learners use software resources and discover what computers can do. As they carry out a project and upon its completion, they evaluate their efficiency and make any necessary adjustments to their approach.

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 *Word Processing: Sections and Tables* 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.

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 *Word Processing: Sections and Tables* course. Two are considered particularly relevant to this course: *Solves problems* and *Adopts effective work methods*.

Intellectual Competency

When adult learners arrange information in a text, they demonstrate the competency *Solves problems*. They analyze the current situation, determine what the desired situation should be, propose and experiment with available techniques and make the necessary adjustments.

Methodological Competency

Adult learners develop the competency *Adopts effective work methods* when they determine where to insert section breaks and tables in order to format a text.

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

- Advanced techniques for arranging text on a page
 - Tables
 - Sections
 - Tabs
 - Placeholder text (*lorem ipsum*)

Section properties

- Page size
- Page orientation
- Header and footer
- Page number
- Section breaks
 - Continuous, next page
 - Even page, odd page
- Table properties
 - Borders
 - Shading
 - Header row
 - Predefined table styles
 - Horizontal and vertical alignment
- Standard terminology associated with word processing
- Formatting a document using sections
 - Modifying elements in a section
 - Margins
 - Page size and orientation

- Headers and footers (linked or unlinked to the previous sections)
- Page numbering
- Page borders
- Presenting and arranging data using tables
 - Inserting or deleting rows or columns
 - Inserting a picture in a table
 - Adjusting column width and row height
 - Splitting and merging cells
 - Modifying text orientation in a cell
 - Adding or modifying borders and shading
 - Sorting a table
 - Converting a table into text or text into a table

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
 - Page layout standards in different historical periods and cultures
 - Evolution of electronic publishing
 - Use of data tables through the ages
- Heritage objects
 - American and European paper sizes
 - Old edition of a dictionary, Bible or other book
 - Textbooks
 - Sports statistics
- Regional or national references
 - Employers, publishers, printers
 - Anecdotes
 - School-related elements

FAMILIES OF LEARNING SITUATIONS

The goal of the *Word Processing: Sections and Tables* course is to provide adult learners with the means to define page setups and create layouts so that they can showcase their aesthetic sensibility and communication skills. 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 discover what computers can do by consulting documentation and by experimenting. For instance, they may discover new personal or occupational interests or consider new career possibilities.

Then, they create documents by correctly using the appropriate functions and thus work more efficiently. They take the time to evaluate their work by setting quality standards, or by taking into account standards that have been set for them, in order to have benchmarks with which to measure the progress they have made in developing their competencies, for example.

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 makes it easier to find information in an administrative document and increases efficiency in document production 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 requires that adult learners analyze how the elements of a document (e.g. a newspaper, magazine or other print medium) are arranged and how this affects communication 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 learning situations and highlights those used in 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 	Media Literacy		
 Subject-specific competencies (prescribed) Are developed in action and require the active participation of adult learners 	 Interacts in a computer environment Produces computerized documents 		
 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 	 Creation Discovers what computers can do Creates by correctly using the appropriate functions Critical thinking Evaluates his/her work by setting quality standards 		
 Cross-curricular competencies (targeted) Are developed in context together with the subject-specific competencies 	Solves problemsAdopts effective work methods		
 Knowledge (prescribed) Includes computer knowledge and skills that adult learners must acquire in the course 	 Planning the layout of a document by identifying where to insert section breaks and present data using tables Creating a document where the headers, footers, orientation and other page setup elements vary from one section to the next 		

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 table above: 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

Updating the look of the school newspaper

Task: Create a document template for the school newspaper that includes such features as a cover page, headers and footers, columns, boxes for certain sections and graphics.

To start off the activity, the teacher asks the adult learners to meet with the newspaper team to find out what sections the newspaper normally contains and what the team's expectations are concerning the layout. They must then suggest a template that is suitable for the content and that meets the team's expectations.

To carry out the activity, adult learners look for inspiration in various newspapers and magazines. They create different sections, which they fill with placeholder text, and insert the required layout elements. They communicate regularly with the newspaper team in order to obtain feedback, consult help resources as needed, and make adjustments to their approach or template.

At the end of the activity, adult learners print out their final template and present it to the team. Together, they evaluate the results to determine the effectiveness and limitations of the approach used and identify other contexts in which their approach could be applied.

END-OF-COURSE OUTCOMES

To deal with situations related to the use of sections and tables in a word processing program, adult learners identify and use the required insert and page setup commands and functions. To do this, they use the following subject-specific competencies: *Interacts in a computer environment* and *Produces computerized documents*.

Thus, when adult learners *discover what computers can do*, they consult the documentation provided and experiment in order to define the context, draw parallels with prior learning and identify the resources available. They determine what is feasible and choose the right tools to perform the task.

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

When adult learners *evaluate their work*, they check whether they have attained the quality standards that have been set and go over the steps they followed. This helps them determine the effectiveness and limitations of their approach and identify other contexts in which it could be applied.

Throughout the learning process, adult learners develop competence in the following computer knowledge and skills: they plan the layout of a document; format it using section breaks in order to modify the page layout and tables; and improve the appearance of the document. In addition, adult learners do not hesitate to consult various resources to obtain help when difficulties arise.

EVALUATION CRITERIA

Interacts in a computer environment

Use of appropriate strategies to interact and to troubleshoot

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