Electronic Collection   **OLE.10**

TIME
10 minutes, daily

OVERVIEW
An Electronic Collection is a file-management system for collecting samples of electronic and/or scanned work for the purpose of content assessment (e.g., to represent work accomplished in a given project, to display work in an Electronic Portfolio, to save work samples reflecting learning from a semester or a year for future reference).

Students create and maintain an Electronic Collection of their work in the *Community and Diversity* interdisciplinary unit to assess their own learning and to reflect upon their strengths and learning styles. As the unit draws to an end, students may select samples of their work that illustrate growth and they may represent them in an Electronic Portfolio, in the form of web pages or in multimedia presentations.

Note: Keeping an Electronic Collection is an ongoing file-management process that can last the whole year. Creating an Electronic Portfolio occurs as an end process when students select electronic works completed in a given time period and organize and represent them in a form that features their accomplishments over that time.

LEARNING OUTCOMES
Through this learning experience (LE), students will achieve specific learning outcomes (SLOs) in various subject areas. Consider the intent of this LE and your choice of instructional and assessment strategies to determine which SLOs students may achieve, in addition to those identified.

English Language Arts
Consider the intent of this LE and your choice of instructional and assessment strategies to determine which SLOs students may achieve, in addition to those identified below:
* 3.1.4 *Create and Follow a Plan*—Select and use a plan for gathering information.
* 3.3.1 *Organize Information*—Organize information and ideas in logical sequences using a variety of strategies [such as clustering, webbing, charting from a model . . .].

ICT LITERACY SKILLS AND COMPETENCIES
Consider the intent of this LE and your choice of instructional and assessment strategies to determine which skills and competencies students may achieve, in addition to those identified below:
* basic operating skills
* concept mapping
* graphics creation
* electronic publishing
* web page authoring
* word processing

SUGGESTED LEARNING RESOURCES
Software
* web page authoring
* concept mapping
* word processing

- graphics
- multimedia presentation

Internet
- IMYM Links Database. <www.edu.gov.mb.ca/k12/tech/imym/resources/links.html>.
- Searching the Internet using the terms "student electronic collection" will provide numerous useful hits.

Print
- Appendix C: Index of Teaching, Learning, and Assessment Strategies

BLMs
- BLM OLE.8#3: Metacognitive Reflection
- BLM OLE.10#1a: Sample Concept Map—Web
- BLM OLE.10#1b: Sample Concept Map—Top-Down Tree
- BLM OLE.10#2: Sample Outline Based on Concept Map—Web
- BLM OLE.10#3: Electronic Collection Learning Centre
- BLM OLE.10#4: Electronic Collection Checklist
- BLM OLE.10#5: Creating an Electronic Portfolio
- BLM OLE.10#6: Electronic Portfolio Checklist
- BLM OLE.10#7: Electronic Portfolio: Peer Feedback

TBLMs
- TBLM OLE.10#1: Suggestions for Organizing and Displaying Electronic Collections
- TBLM OLE.10#2: Content and Structure of Electronic Collections

Materials
- folder for each group
- access to chart paper, pads of paper, or pieces of scrap paper for recording ideas

SUGGESTIONS FOR INSTRUCTION

MANAGING ELECTRONIC COLLECTION FILES
Preparation and Set-up
- Instruct students to print copies of their original electronic work (e.g., reports, writings, math graphs, letters, web pages, digital photographs, illustrations) for one school cycle. This becomes the basis from which students plan and organize their Electronic Collections. Copies are kept together in a file folder or in a legal size envelope with the student's name on it.
- Review with students the structure and directories of the class server.

Activating Strategies
- Students discuss the need to and the advantages of organizing one's work in a collection that can be accessed and examined easily, and that can be stored with minimal use of space. (Include a discussion of physical limitations of small desks and small classrooms, the portability of a CD-ROM, and universal accessibility of a website.)
- Students examine the samples they collected in one school cycle by sorting the contents of their envelopes.
- Students organize their samples, using concept-mapping software to create a structure with categories and subcategories (see ICT.5: Inspired). In collaborative groups or Think-Pair-Share groups, students discuss the organization criteria they used in their concept maps

and provide one another with feedback. They may make changes to their structure and categories based on the feedback received.
- Students post their printed concept maps around the class. During a Gallery Walk, they note the variety of map layouts and the categories and subcategories created.

Acquiring Strategies
- As a whole group, plan a class model of an Electronic Collection using a wall chart or concept-mapping software and projection system. Include categories for organizing students' information files based on students' collaborative group maps, as well as organizational tools such as a title page, a table of contents, an index, and any other page that would enhance the collection and make it user-friendly. (See TBLM OLE.10#2: Content and Structure of Electronic Collections.)
- Students access their saved organizational concept map, edit it based on the class model, represent it using the Outline View of their electronic concept map, and print it. Viewing the concept map and its outline side-by-side enables students to understand the relationship between them, as well as the relationship between categories and subcategories, and helps them to organize their Electronic Collection. The outline created with concept-mapping software becomes a table of contents for the Electronic Collection. Students print the updated outline periodically, and insert it in their Personal OLE Binder or another appropriate location for future reference. The latest print copy can be used to record additions and updates until the student has a turn at the Electronic Collection Learning Centre to update his or her electronic file.

Applying Strategies
- Students create an electronic folder and name it My Electronic Collection or any other suitable name, identical to the label chosen for the main idea on their concept map. The contents of this electronic folder will match the structure of the concept map, including the same labels. Students use BLM OLE.10#4: Electronic Collection Checklist to record dates of creation and updates of their Electronic Collection. Students save their electronic files in the appropriate folder and record the name and location of the file on their concept map.
- Students use BLM OLE.10#4: Electronic Collection Checklist to record the date every time they update their Electronic Collection.
- Students reflect on their learning and their work, as they add content to their Electronic Collection (see OLE.8: Reflection Journal). This is an ongoing process throughout the school year.

REPRESENTING AN ELECTRONIC PORTFOLIO
At the end of a unit of study, a semester, or the school year, students may wish to select samples representative of their work and represent them in an Electronic Portfolio, in the form of a multimedia presentation or on web pages.

Preparation and Set-up
- Decide on a format for representing the Electronic Portfolio (see ICT.7: Make Your Point) and determine the number of work samples to be included.
- Become familiar with the selected format. Create a model of the Electronic Portfolio that students are expected to produce. Web pages can be saved on the class website while students produce their own portfolios. Decide whether student work will be uploaded to the school website, choosing either the Internet or intranet, or whether it will be saved on CD-ROMs for their personal use. Consider school/division policy on this matter.

Activating Strategies
- Students discuss the reasons they would set up an Electronic Portfolio to represent their work (e.g., for display, to keep for a long time, to show future teachers, to refer to for future work).
- Students examine the contents of their Electronic Collection. In collaborative groups, they discuss their work and list samples that they think best represent a wide range of their achievements.
- As a class, decide what samples should be included.

Acquiring Strategies
- As a class, plan a class model of an Electronic Portfolio using a wall chart or concept-mapping software and projection system. Include categories based on students' collaborative group discussions, as well as organizational tools such as a title page, a table of contents, an index, and any other page that would enhance the Electronic Portfolio and make it user-friendly. The outline created with concept-mapping software becomes the table of contents for the multimedia presentation or web pages.

Applying Strategies
- Students identify their personal files to be included in the Electronic Portfolio. They note the location in the Electronic Collection directory for ease of access and retrieval.
- Students read BLM OLE.10#5: Creating an Electronic Portfolio to become familiar with the set-up and contents of an Electronic Portfolio.
- Students consider the appearance of the background and links in their Electronic Collection (see ICT.7: Make Your Point). In Think-Pair-Share groups, students discuss their choices with a partner and give one another suggestions.
- Students use BLM OLE.10#6: Electronic Portfolio Checklist to verify that their Electronic Portfolio is complete and ready to publish.

SUGGESTIONS FOR ASSESSMENT
- At regular intervals during the Electronic Portfolio creation process, a different team member visits the Electronic Portfolio and comments on a section using BLM OLE.10#7: Electronic Portfolio: Peer Feedback. The student whose Electronic Portfolio is being reviewed may need to take action or reply to the feedback received.
- The main focus for assessment should be on the content of the collection rather than on the way it was put together. Individual pieces of work in a student's Electronic Portfolio will already have been assessed when the collection was being assembled. It is possible to use the collection in terms of how well the student is organizing and managing the Electronic Portfolio.
- Review each student's reflection. (Ideally, confer with each student over the course of the following week.)
- Students take their reflections/journals home for comments from parents/guardians.
- Students use BLM OLE.8#3: Metacognitive Reflection to reflect upon their learning and their acquired skills.

CONNECTION TO **COMMUNITY AND DIVERSITY**
- Students use the folder structure they created to save all electronic files produced while working within the *Community and Diversity* interdisciplinary unit.
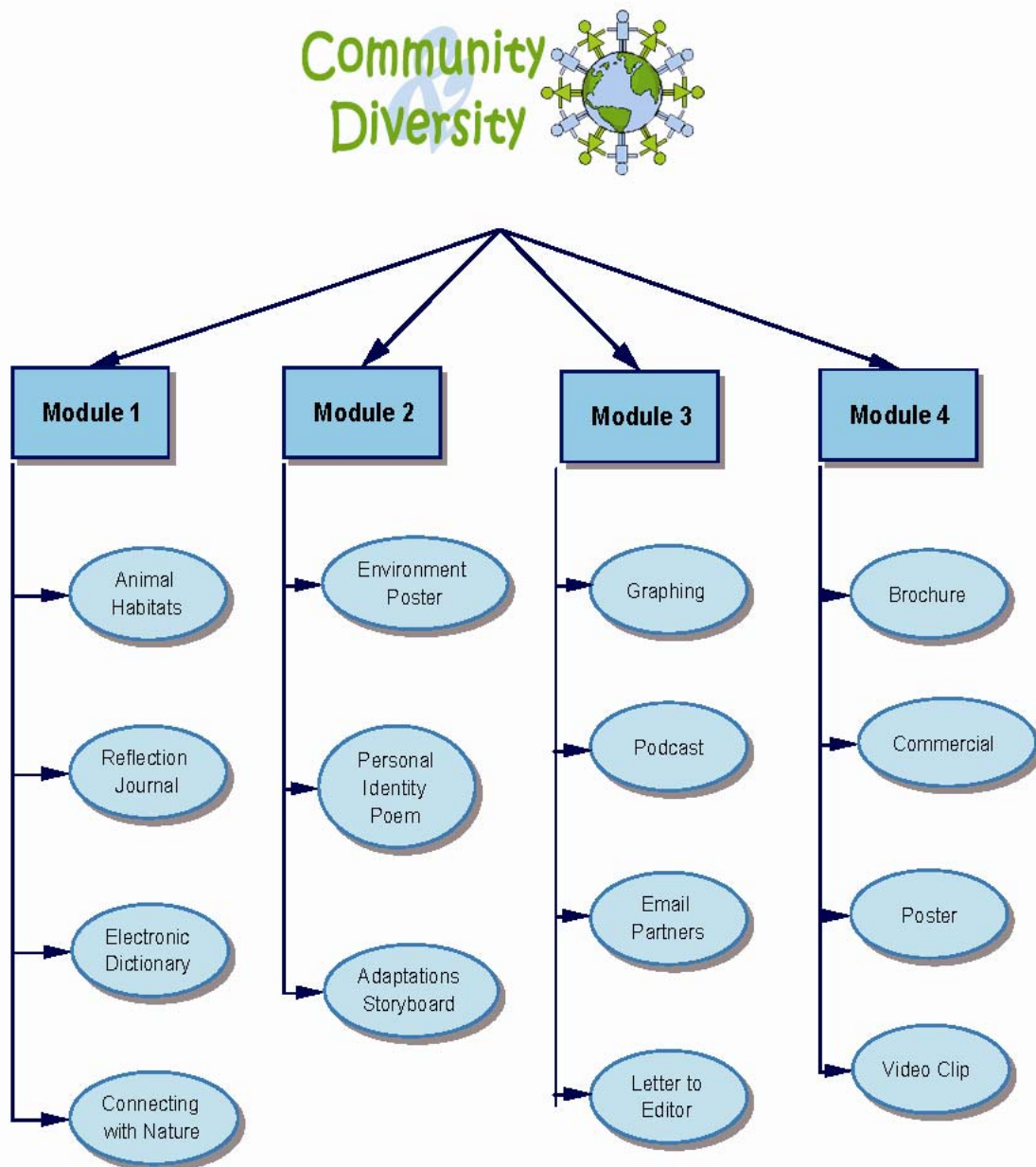
BLM OLE.10#1a: Sample Concept Map—Web
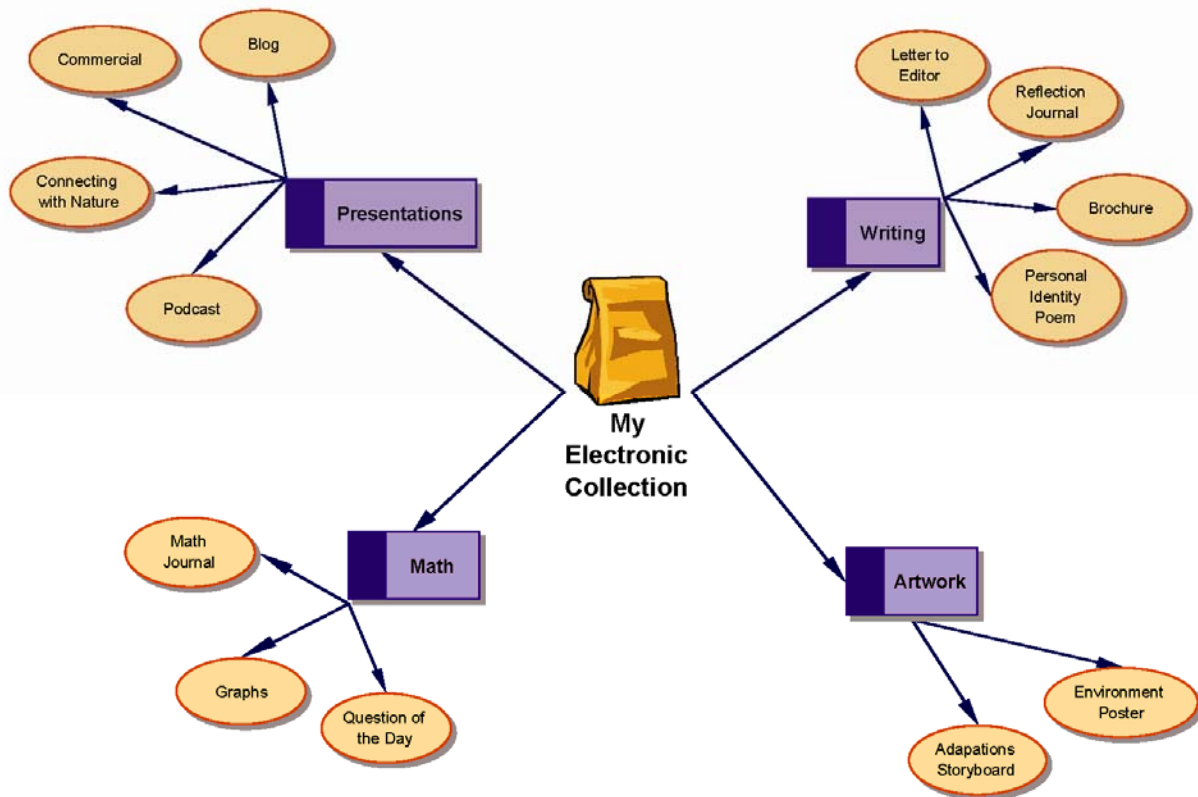
Example of a "Web" Arrangement Made with Concept-Mapping Software

The use of different symbols, colours, and shapes to represent each category and subcategory helps students visualize the relationship between the categories and subcategories and their order of importance.

See BLM OLE.10#2: Sample Outline Based on Concept Map—Web for the corresponding outline.

BLM OLE.10#1b: Sample Concept Map—Top-Down Tree

Example of a "Top-Down Tree" Arrangement Made with Concept-Mapping Software

The use of different symbols, colours, and shapes to represent each category and subcategory, combined with the top-down display, helps students visualize the relationships of categories and subcategories and the order of importance (from main category at the top to subcategories further down).

BLM OLE.10#2: Sample Outline Based on Concept Map—Web

My Electronic Collection

Writing
Letter to Editor
Reflection Journal
Brochure
Personal Identity Poem

Artwork
Environment Poster
Adaptations Storyboard

Mathematics
Question of the Day
Math Journal
Graphs

Presentations
Blog
Commercial
Connecting with Nature
Podcast

BLM OLE.10#3: Electronic Collection Learning Centre

Overview
At this learning centre you will work in collaborative groups to help each other update and enhance your Electronic Collection, and create an Electronic Portfolio of samples from your Electronic Collection.

Resources
- BLM OLE.10#4: Electronic Collection Checklist
- BLM OLE.10#5: Creating an Electronic Portfolio
- BLM OLE.10#6: Electronic Portfolio Checklist

Tasks
- Use your most recent printed concept map (from your Personal OLE Binder), to which you have been adding updates, to update your electronic concept map.
- Print this newly updated concept map and insert in your Personal OLE Binder.
- Ensure that all your files can be located in the folders that match the categories on your concept map.

Suggestions for Collaboration
- Divide the learning centre time into sections that enable all members of your group to receive time to update and enhance their Electronic Collection.
- Call on the expertise and feedback of each group member while organizing and enhancing your Electronic Collection.

What to Do with the Results of This Learning Centre
- Keep a record of your questions so that your teacher may address them in a class discussion.
- Keep BLM OLE.10#4: Electronic Collection Checklist in your Personal OLE Binder for future reference and teacher assessment.
- Start creating your Electronic Portfolio when your teacher instructs you to do so, based on the content and structure of your Electronic Collection.

Assessment Criteria
- The Electronic Collection is up to date, organized, and easily accessed.

BLM OLE.10#4: Electronic Collection Checklist

Name _____ Date _____

Title Page
The title page of your Electronic Collection should include
❑ the title of the Electronic Collection
❑ your name
❑ school year
❑ your teacher's name

Table of Contents
The table of contents should include
❑ the title (same as on title page)
❑ a paragraph explaining the purpose of the Electronic Collection
❑ a background
❑ date created and date last updated

Index
The index page should include
❑ the title (same as on title page)
❑ a paragraph explaining how the index works
❑ an alphabetical list of content, including a short description of each file
❑ a background
❑ date created and date last updated

Collection of Work Samples
The collection of work should include at least one sample from each of the following:
❑ writing
❑ reading report
❑ artwork
❑ mathematics or problem solving
❑ journal entry
❑ project
Each sample includes
❑ a title
❑ date created

Item	Date Created	Update	Update	Update	Update	Update	Update	Update	Update
Title Page									
Table of Contents									
Index									
Collection of Work Samples									
Teacher Comments									

Remember to record the date of each update. File this checklist in your Personal OLE Binder.

BLM OLE.10#5: Creating an Electronic Portfolio

Overview

You may create an Electronic Portfolio of samples of school work and projects you did throughout a unit, a semester, a year, or any other time frame. Regardless of whether you represent the Electronic Portfolio as a multimedia presentation or as web pages (see ICT.7: Make Your Point), it will include the following five basic components:

- **Title Page:** Choose a title that reflects the content or focus of the Electronic Portfolio.
- **Table of Contents:** Create a contents list based on the outline obtained from the concept map created to organize all the files included in the Electronic Portfolio.
- **Site Map:** Create a site map based on the concept map created to organize all the files included in the Electronic Portfolio.
- **Index:** Prepare an alphabetical list of files or keywords for subjects addressed within the Electronic Portfolio.
- **Collection of Work Samples:** Select representative work samples, including writing, artwork, mathematics, journal entries, and projects, in a variety of formats such as electronic, audio, or video.

Electronic Portfolio Contents	
Title Page	**Include** ❑ an appropriate title reflecting the content of the Electronic Portfolio ❑ your name ❑ school year ❑ your teacher's name
Table of Contents	❑ the title ❑ hyperlinks to sample files, including a short description of each file ❑ navigational tools at the bottom of the page allowing the user to access the home page, the site map, or the index ❑ date completed
Site Map	❑ the title ❑ a paragraph explaining how to use the site map ❑ hyperlinks to sample files ❑ navigational tools on the page allowing the user to access the home page, the table of contents, or the index ❑ date completed
Index	❑ the title ❑ a paragraph explaining how the index works ❑ content listed in alphabetical order ❑ hyperlinks to sample files ❑ navigational tools on the page allowing the user to access the home page, the table of contents, or the site map ❑ date completed
Collection of Work Samples	❑ a title for each sample (most samples already have a title and do not need another) ❑ navigational tools on the page allowing the user to access the home page, the table of contents, the site map, or the index ❑ date each sample was created and date it was included in the Electronic Portfolio

BLM OLE.10#6: Electronic Portfolio Checklist

Name _____

Write the date when a section is finished and show the checklist to your teacher for comments.

Electronic Portfolio Item	Date Completed	Teacher Comments
Title Page includes		
❑ an appropriate title		
❑ your name		
❑ school year		
❑ your teacher's name		
Table of Contents includes		
❑ the title		
❑ hyperlinks to sample files		
❑ navigational tools		
❑ date completed		
Site Map page includes		
❑ the title		
❑ an explanatory paragraph		
❑ hyperlinks to sample files		
❑ navigational tools		
❑ date completed		
Index page includes		
❑ the title		
❑ an explanatory paragraph		
❑ an alphabetical list of content		
❑ hyperlinks to sample files		
❑ navigational tools		
❑ date completed		
Collection of Work Samples includes at least one sample of		
❑ writing		
❑ reading report		
❑ artwork		
❑ mathematics or problem solving		
❑ journal entry		
❑ project		
❑ Other: •		
•		
•		
•		
•		

BLM OLE.10#7: Electronic Portfolio: Peer Feedback

Name _____

Date	Section
Comment	Initials _____
Action Taken/Reply	

Date	Section
Comment	Initials _____
Action Taken/Reply	

Date	Section
Comment	Initials _____
Action Taken/Reply	

Date	Section
Comment	Initials _____
Action Taken/Reply	

TBLM OLE.10#1: Suggestions for Organizing and Displaying Electronic Collections

The three most common means of organizing and displaying Electronic Collections are
- a folder directory
- a multimedia presentation
- a web page or website

In deciding which option is the most suitable for their needs, students consider the following:

1. Folder Directory
- A folder directory is by far the simplest choice, as students do not have to hyperlink any files or update links if the files are moved or deleted.
- It is the least time consuming option. (Once fields are saved, little or no other work needs to be done.)
- The directory is identical to the organizational concept map created at the time of the set-up.
- As the concept map is updated or edited, the folder directory can easily be updated or edited accordingly.
- When the folder is complete, the Electronic Portfolio can be burned onto a CD-ROM. Alternatively, students can represent the Electronic Portfolio using a multimedia presentation or a web page.

2. Multimedia Presentation (See ICT.7: Make Your Point)
- A multimedia presentation tends to be linear, although hyperlinks can be made between various parts of the electronic file in order to access slides in a different order.
- The multimedia presentation may be
  — saved online within a web page, although the result is not as smooth as a document created originally as a web page
  — burned onto a CD-ROM and become portable. (Yearly portfolios can be added to the CD-ROM if the session is not closed.)
  — viewed only if the application that created the presentation is available. (Newer versions of the application will usually open older files.)
- The content of slides is layered, including background, text, and illustrations.

3. Web Page
- A web page may be
  — multi-layered by using hyperlinks to connect all contents in any chosen order
  — saved online. Consider safety issues and school/division policies when posting student work online (i.e., save the file using a URL that is not hyperlinked from another page and that can only be accessed using its own address).
  — burned onto a CD-ROM and viewed off-line using any web browser when online access is difficult

No computer at home?
Record the Electronic Collection on videotape by running a cable from the computer video-out to the VCR video-in. Use a separate microphone to add the student's oral commentary.

For more information, see "Frequently Asked Questions (FAQs)," on the Department's IMYM website at <www.edu.gov.mb.ca/k12/tech/imym/faqs/imym-model.html>.

TBLM OLE.10#2: Content and Structure of Electronic Collections

Selecting Work Samples for the Electronic Collection
The potential for a huge, unmanageable collection exists if choices are not made from the start. Eventually, each category could become so large with contents that it would have to be subdivided, increasing the workload and forcing the student to spend more time in regrouping and backtracking on work previously done.

Consider whether students should be directed to
1. use only electronic documents and files
2. scan and use all work they create
3. scan or photograph only artwork or work that cannot be created electronically such as calligraphy or three-dimensional artwork (see ICT.6: Caught in Action)

In addition to encouraging students to select their favourite samples, advise the class that, for the purpose of the *Community and Diversity* interdisciplinary unit, each student should include similar sections, as outlined below:

1. **Title Page**
    The title page should include the title of the Electronic Collection, such as *Community and Diversity* (or any suitable title chosen by the student), the student's name, the year, and the teacher's name. It might also include a picture or a video of the student. Look at the title page of several books for ideas on layout and contents. The title page can be used in a multimedia presentation. It can also become the home page of a website.

2. **Table of Contents**
    This component shows the contents of the Electronic Collection at a glance. Look at the table of contents of several books as examples and review the outline created from the organization of work samples to create the final table of contents. A table of contents can easily be created using the Outline tool of concept-mapping software (see ICT.5: Inspired). When the outline is complete, students can select the diagram presentation for the outline. When the diagram is arranged in a "top down" or "right tree" format, a site map is created and can be kept as an additional element of the Electronic Collection (see BLM OLE.10#1b: Sample Concept Map—Top-Down Tree).

3. **Index**
    This is a single alphabetical listing of all the files in the Electronic Collection. It could also include keyword entries (e.g., a file for Stewardship and Sustainability in the News could be listed under "Articles," a Photo Story file for Diversity of Manitoba could be listed under "Presentations"). An index can be time-consuming to produce, but useful when locating a file with a non-descriptive title.

4. **Suggested Contents**
    Contents of the Electronic Collection may include samples of
    *   writing (electronic or scanned)
    *   reading (recorded oral reading)
    *   artwork (computer generated or scanned)
    *   mathematics and/or problem solving (scanned)
    *   journal entries (word processed)
    *   other ICT projects (linked directly to these)

Students use BLM OLE.10#4: Electronic Collection Checklist to keep their Electronic Collection updated. At the end of the year, students can burn onto a CD-ROM the whole Electronic Collection or the Electronic Portfolio containing selections from the Electronic Collection.

For more information, see "Frequently Asked Questions (FAQs)," on the Department's IMYM website at <www.edu.gov.mb.ca/k12/tech/imym/faqs/imym-model.html>.