E – PORTFOLIOS: AN EDUCATOR'S GUIDE

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INTRODUCTION

Why this document?

There have been many new developments in portfolio assessment in recent years. Research has advanced our understanding of the processes and environments that lead to successful learning. The policy environment continues to evolve, both in the Toronto Catholic District School Board (TCDSB) and in the Ministry of Education of the Province of Ontario. As more teachers turn to the use of e-portfolios in their classrooms, the Project Team identified a need for a Guide, linked to current research and policy and providing more assistance to teachers in developing classroom materials.

Although there are many excellent resources on e-portfolio assessment, much of the work is theoretical in nature. This Guide condenses the theory and provides practical tools and examples from TCDSB teachers and students.

The case studies included in the Appendix represent examples of portfolio at St. Jane Frances Catholic school and secondary classrooms in the TCDSB. The case studies also represent many types of portfolio listed in the “Choosing” section of this Guide.

What are e- portfolios?

An e-portfolio is a digital, systematic and purposeful collection of student work that displays the learner’s effort, growth, process, and achievement in demonstrating his/her skills, knowledge, and values using Wikis or www.boxnet. In collaboration with their teachers, students choose the criteria for selecting the contents of their e-portfolio and evaluate their growth and achievement. Students reflect upon their own learning, and share with teachers, peers, and parents as part of the learning process. Teachers act as coaches and facilitators to guide students throughout the process.

Using Web 2.0

The first step in creating your e-portfolio is to access Web 2.0 tools such as “Wikis” or “Blogs”. These tools are freely accessibly through the internet. They don’t require software installation and can handle a wide variety of different content. Staff and students can easily access content online; therefore there is no need to handle large files.

See http://electronicportfolios.org/web20portfolios.html for SAMPLE E-PORTFOLIOS

What's a wiki?
A wiki is a web site that lets any visitor become a participant: you can create or edit the actual site contents without any special technical knowledge or tools. All you need is a computer with an Internet connection. A wiki is continuously “under revision.” It is a living collaboration whose purpose is the sharing of the creative process and product by many. One famous example is Wiki-pedia, an online encyclopedia with no “authors” but millions of contributors and editors. The word "wiki" comes from Hawaiian language, meaning "quick" or "fast."

**Who uses wikis?**

Wikis are used in the “real world” (outside of K-12 schools) by people collaborating on projects or trying to share things online, such as family information and photos, technical information from users of a product, data from a research and development project, wine expertise, travel journals from abroad, club or specialty information, or projects like collaborative cookbooks.

Sometimes they are used for free expression, such as a youth group online graffiti space. College and university courses seem to be using wikis far more than the K-12 community right now. In K-12 education, wikis are being used by educators to conduct or follow-up after professional development workshops or as a communication tool with parents. The greatest potential, however, lies in student participation in the ongoing creation and evolution of the wiki.

**What is the difference between a wiki and a blog?**

A blog, or web log, shares writing and multimedia content in the form of “posts” (starting point entries) and “comments” (responses to the posts). While commenting, and even posting, are open to the members of the blog or the general public, no one is able to change a comment or post made by another. The usual format is post-comment-comment-comment, and so on. For this reason, blogs are often the vehicle of choice to express individual opinions.

A wiki has a far more open structure and allows others to change what one person has written. This openness may trump individual opinion with group consensus.

**Wiki ideas for math:**

- A calculus wiki for those wicked-long problems so the class can collaborate on how to solve them (a “wicked wiki”?)
- A geometry wiki for students to share and rewrite proofs (a geometwiki?). What a great way to see the different approaches to the same problem!
- Applied math wiki: students write about and illustrate places where they actually used math to solve a problem.
- Procedures wiki: groups explain the steps to a mathematical procedure, such as factoring a polynomial or converting a decimal to a fraction.
• Pure numbers wiki: student illustrate numbers in as many ways possible: as graphics to count, as mathematical expressions, etc. Elementary students can show graphic illustrations of multiplication facts, for example.

(See Re: wikispaces.com)

Wiki ideas for language arts:

• A continuing story in which your class adds sentence using new vocabulary words and writes and adventure story in collaboration with the entire class. They will NEVER forget the meaning of the words as they read and re-read their story each time they visit to add. The story can be a single version or branch off into multiple versions and endings.
• A collection of mythological allusions found in “real life” while studying Greek/Roman mythology: Ex. Mercury cars- why are they so named?
• An online writer’s workshop or poetry workshop with suggested revisions from classmates. Start with drafts and collaborate. Make sure students use the notes tab to explain why they make changes.
• Summary and discussion of a scene of a play, a poem, or even chapter by chapter of a novel, with groups taking responsibility for different portions
• Literary analysis of actual text on the wiki- with links to explanations of literary devices, a glossary to explain vocabulary, etc. Try it with a scene from Shakespeare or a sonnet! Each student or group could be responsible for a portion, then ALL can edit and revise to improve the collaborative project. You will be amazed how much they will find and argue.
• Collaborative book reviews or author studies
• Creative projects, such as a script for a Shakespeare scene reset in the 21st century
• A travel brochure wiki- use wikis to “advertise” for different literary, historical, or cultural locations and time periods: Dickens’ London, fourteenth century in Italy in Verona and Mantua (Romeo and Juliet), The Oklahoma Territory, The Yukon during the Gold Rush, Ex-patriot Paris in the Twenties, etc.
• Character resume wiki: have literature classes create a resume wikis for characters in a novel or play you are reading. Both creativity and documented evidence from the literature are required (use notes to indicate the evidence from the text).
E- Portfolios

E-portfolios using www.wikispaces.com or www.boxnet are a valuable learning and assessment tool. An e-portfolio is a digitalized collection of artifacts including demonstrations, resources, and accomplishments that represent an individual, group, or institution. This collection can be comprised of text-based, graphic, or multimedia elements archived on a Web site or on other electronic media such as a CD-ROM or DVD. An e-portfolio is more than a simple collection—it can also serve as an administrative tool to manage and organize work created with different applications and to control who can see the work. E-portfolios encourage personal reflection and often involve the exchange of ideas and feedback.

Here are the basic steps for using WikiSpaces to construct an interactive electronic portfolio.

1. **Purpose.** Decide on the purpose for the portfolio. What are you trying to show with this portfolio? Are there outcomes, goals, or standards that are being demonstrated with this portfolio? In this example, we will use an electronic portfolio to provide formative feedback on student work.
   - Identify how you are going to organize the portfolio. Will it be around the outcomes, goals or standards that you identified in this first step?
   - Set up a template for students, if appropriate. ([WikiSpaces Help File on Templates](#))

2. **Collection/Selection.** What artifacts will you include in your portfolio?
   - Create a digital archive of work. Offline, this archive would be on a hard drive, flash drive, iPod or local area network server; online, these files can be stored anywhere on the Internet, as long as each document has a unique URL.
   - Use a simple table to list the artifacts, and assign (classify) each one to the outcome/goal/standard that the artifact will demonstrate. See Dr. Barrett's WikiSpaces portfolio for an example ([Artifacts](#)).
   - Once these categories are identified, set up a page for each major category PLUS an Introduction page.
   - To create the navigation bar (on the left) click the edit navigation link, and create links to each page in the portfolio.
   - Add the artifacts (upload or through hyperlinks) to the appropriate pages in the portfolio.
3. **Reflection.** Reflection is the heart and soul of a portfolio. Reflection provides the rationale for why these artifacts represent achievement of a particular outcome, goal or standard.
   - Write a brief reflection on each artifact (what is the context in which this artifact was developed? Why was it included in the portfolio?).
   - You might also write a reflection on each grouping of artifacts (by outcome/goal/standard).
   - The Introduction page should contain an overview of the portfolio. It serves as a "letter to the reader" and provides an explanation of the overall goals of the portfolio.

4. **Connection/Interaction/Dialogue.** This stage provides an opportunity for interaction and feedback on the work posted in the portfolio. This is where the power of Web 2.0 interactive tools becomes apparent.
   - Teachers and peers can use the feedback features of the software, such as collaborative "Edit this page" and discussions in WikiSpaces, to provide feedback on the work posted in the ePortfolio.
   - Teachers often provide exemplars for different levels of achievement, and provides a rubric for evaluation.
   - The portfolio developer should be given the option of updating the work, based on the feedback and the rubric.

5. **Presentation/Publishing.** The portfolio developer decides what parts of the portfolio are to be made public.

**Benefits to Teachers**

E-portfolio assessment is a powerful tool that requires student involvement in assessing her/his individual progress. E-portfolio assessment also benefits teachers by:

- Providing opportunities for students to value their learning achievements
- Addressing enduring learning
- Providing a vehicle for teacher accountability, by providing a mechanism to link Ministry expectations, instruction, and the monitoring of whether expectations have been met.
- Integrating assessment with instruction and documenting learning that is not easily assessed with traditional methods
  - Emphasizing the interconnection between process and product, content and skills in student learning
  - Adding an organizational framework to existing classroom routines and processes
• Enabling students to assume greater ownership of their learning through self-evaluation, goal setting, and management of the e-portfolio process and products

• Promoting the integration of cross-curricular literacy and critical thinking skills

• Collecting data to evaluate student learning and offering clear evidence of student achievement and growth over time

• Offering parents concrete evidence of evaluation

Providing a focus for student-centred conferencing with teachers and parents

Benefits to students

Through e-portfolio assessment, students develop cross-curricular literacy and critical thinking skills needed for the workplace, post-secondary education, and other new situations. The many ways in which e-portfolio assessment benefits students include:

• Developing the skills of self-reflection and goal setting which are foundations for life-long learning

• Increasing self-confidence through seeing the growth in the quantity and quality of their work over time

• Increasing motivation by linking their interests, needs, and choices

• Helping them learn organizational and decision making skills

• Fostering positive attitudes toward literacy and subject specific content and skills

• Developing learning skills, including independence, teamwork, initiative, work habits, goal setting, problem-solving and organization

Reinforcing social skills including sensitivity and a recognition and appreciation of differences

• Accommodating their diversity and individual needs of learners

• Following the process necessary for maximum learning according to current brain research.

It helps keep the focus of instruction on genuine purposes for reading and writing; thus it is authentic, as the instructional experience it complements should be. It reveals student interests and genuine needs that language can serve (Farr and Tone, 1994, 18).
Traditionally, classroom-based assessment has been an activity done to students, with teachers devising the tests, administering them and evaluating student work. The students themselves assume a passive role in the process. Portfolios, on the other hand, alter that culture. By engaging in a portfolio process, students participate actively in assessing their own work and monitoring their progress toward instructional goals (Denielson and Abrutyn, 23).

Benefits to parents

The collection of artifacts in e-portfolios draws parents into their child’s learning by becoming a focus for conversations about academic progress, interests and needs. E-portfolios assessment can also benefit parents by:

- Providing parents with concrete examples of their child’s development over time, including subject specific knowledge and skills, literacy and critical thinking skills and reflective and goal setting skills.
- Providing evidence of student achievement and evaluation.
- Increasing involvement in their child’s learning.
- Promoting teacher-parent communication.
- Allowing them to see the results of independent and co-operative learning experiences.
- Providing evidence of teacher and student work in the classroom.

How does e-portfolio assessment connect to other Ministry and Toronto Catholic District School Board policies, practices and documents?

The Evaluation Policies of the Toronto Catholic District School Board are based on the following precepts, frameworks and goals.

1. The purposes of these policies is to:
   i. Improve student learning
   ii. Develop greater consistency in evaluation practice
   iii. Provide clarity in reporting
2. The following policies and guidelines will be adhered to:
   i. Ontario Secondary Schools, Grade 9-12, Program and Diploma Requirements, 1999.
   ii. The Ontario Curriculum Grades 9-12: Program Planning and Assessment, 2000
   iv. Guide to the Provincial Report Card, Grades 9-12, 1999
   v. The Ontario Curriculum, Grades 1-8
vi. The Ontario Curriculum, Grades 9-10
vii. The Ontario Curriculum, Grades 11-12
viii. The Ontario Curriculum, Grades 1-12, 2004: Achievement Charts (Draft)
ix. Ontario Catholic School Graduate Expectations

3. Subject to further clarification and specificity, TCDSB’s Department of Curriculum and Accountability endorses the interpretation and application of the resource document Policy to Practice (2003) instituted by the Council of Directors of Education (CODE). The Policy to Practice document was funded by the Ontario Ministry of Education, written by a consortium of school boards and subject associations to reflect best practice.


5. All teachers should be provided with a copy of Assessment of Student Achievement in Catholic Schools, Toronto Catholic District School Board, 2001.

6. These policies will be subject to on-going review, professional development and sharing of best practice.

Policy

Reference: ASSESSMENT FOR LEARNING - TCDSB POLICY 2005
PORTFOLIO ASSESSMENT

BEGINNING
Who will select the contents of the e-portfolio?

The teacher determines the expectations to be addressed. The contents of the e-portfolio should directly demonstrate student performance of these expectations. As students develop expertise, they should take an increasing role in setting their own goals and establishing the criteria for the selection of work to include in their electronic portfolios.
What will the e-portfolio look like?

Every portfolio has a purpose. My purpose for developing this portfolio is to show my skills in developing an electronic portfolio using any number of tools. After reviewing all of my artifacts, I found five general categories of competencies:

1. Electronic Portfolio Knowledge, Skills and Experience
2. Digital Storytelling - Digital Video Editing Skills
3. Multimedia & Web Page Authoring Skills - Technology Skills
4. Teaching and Instructional Design Skills - Presentations
5. Assessment Knowledge and Writing Skills (included under the first category) (see www.electronicportfolios.org)

How can e-portfolios be introduced to students in a particular class?

It is important from the outset to establish the significance of e-portfolios. One good way to is to view an example of your own teacher e-portfolio. I have created a sample under www.ubox.net of my e-portfolio which consists of educational articles that I have written and/or powerpoint presentations that I have given. You may also access www.electronicportfolios.org to view samples of other e-portfolios.

SELECTING OR CHOOSING

Purposes and types of portfolios

Research, industry, and classroom practice references many types of e-portfolios. Determining the purpose for the e-portfolio is key to selecting the type of e-portfolio for your classroom. All types include some form of student reflection and are supported with the teacher, self and/or peer assessment. Parental feedback also enriches the e-portfolio process. The following chart includes the most common types of portfolios.

<table>
<thead>
<tr>
<th>DEFINITION</th>
<th>PURPOSE</th>
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| Growth E-portfolio | • Shows student progress in understanding content and skill development over a longer period of time (i.e. full semester or school year).  
• Used as a resource for planning |
| • Includes work in progress, best pieces and significant pieces as determined by the student and/or teacher  
• Includes dated contents to monitor growth over time. |
| **Uses criteria set in relation to curriculum expectations** | **future instruction to assist student progress.**  
**Supports conferences and reporting to parents.** |
<table>
<thead>
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<tr>
<td><strong>Unit E-portfolio</strong></td>
<td><strong>Demonstrates acquired knowledge and skills related to a specific unit within a course/subject/grade.</strong></td>
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</tbody>
</table>
- Includes work related to a unit which can be subject specific or cross-curricular in nature.  
- Can include work in progress, process work and best pieces or be culled to the level of a Showcase Portfolio. |  
| **Skills Portfolio** | **Used to demonstrate the student's skill development over a period of time.** |
|  
- Includes work related to skill development in a specific unit/course/subject/grade (e.g. Writing Portfolio, Math Problem Solving Portfolio, Sketching Portfolio).  
- Can include work in progress, process work and best pieces, or culled to the level of a Showcase Portfolio. |  
| **Showcase E-Portfolio** | **Purpose** |
|  
- Contains the student's best work over a given period of time  
- Can be subject specific, skills or unit based |  
| **Comprehensive Portfolio** | **Used to highlight the student’s best work in a given subject/course/unit/grade**  
**Pieces can form the basis of a Comprehensive Portfolio or an Exit Portfolio**  
**Supports student progress toward mastery and can be passed on to the next grade.** |
Exit/ Graduation Portfolio
• Contains selected pieces to demonstrate the student’s achievement of the curriculum expectations and performance standards.
• Contains pieces from a variety of subject areas and several grades.

Professional Career Portfolio
Contains an individual’s best work that highlights skills and knowledge required for a particular job or profession.

• Supports student progress toward mastery and can be passed on to the next panel (e.g. elementary to secondary; secondary to college or university).
• Can form the basis for part of the entrance requirement to post-secondary institution

LET’S BEGIN CREATING YOUR CLASSROOM E-PORTFOLIO

2. You can create your e-portfolio using www.wikispaces.com or www.boxnet