Creative Multimedia

Prince Edward Island
Department of Education

Creative Multimedia

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Prince Edward Island

Department of Education

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PRINCE EDWARD ISLAND

SENIOR HIGH CURRICULUM

Creative Multimedia 801A

Curriculum Guide

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Introduction

Background

The Creative Multimedia curriculum has been developed with the intent of responding to continually evolving education needs of students and society while preparing students for the challenges they will face throughout their lives.

On going changes in society **S** for example, rapidly expanding use of technologies **S** require a corresponding shift in learning opportunities for students to develop relevant knowledge, skills, strategies, processes, and attitudes that will enable them to function well as individuals, citizens, workers, and learners. To function productively and participate fully in our increasingly sophisticated technological, information-based society, citizens will need broad digital-age literacy abilities.

Rationale

The primary goal of Creative Multimedia is to promote technological literacy in the area of new media. Creative Multimedia education prepares individuals to meet personal needs, provides an awareness of the variety of careers, and lays the foundation for lifelong learning. It can serve as a vocational preparation for a career in the new media industry, mastery of basic skills for related media occupations, or a foundation for a post-secondary educaton.
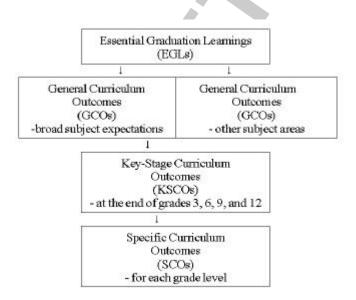
Program Design and Components

Program Organization

The curriculum is designed to support the foundation documents created and approved in partnership with the other Atlantic Provinces. The APEF Essential Graduation Learnings (EGL) statements describe the knowledge, skills, and attitudes expected of all students who graduate from high school. Achievement of the Essential Graduation Learnings will prepare students to continue to learn throughout their lives. These cross-curriculum learnings confirm the need for students to make connections to meet the ever changing workplace in the future. The Essential Graduation Learnings serve as a framework for the curriculum developed in this guide.

Curriculum Outcomes

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                    ┌─────────────────────────────┐
                    │ Essential Graduation Learnings │
                    │           (EGLs)              │
                    └─────────────────────────────┘
                          ↓              ↓
        ┌─────────────────────┬─────────────────────┐
        │ General Curriculum  │ General Curriculum  │
        │      Outcomes       │      Outcomes       │
        │       (GCOs)        │       (GCOs)        │
        │-broad subject       │ - other subject     │
        │  expectations       │   areas             │
        └─────────────────────┴─────────────────────┘
                          ↓
              ┌─────────────────────────────┐
              │    Key-Stage Curriculum     │
              │         Outcomes            │
              │         (KSCOs)             │
              │- at the end of grades 3, 6, 9, and 12 │
              └─────────────────────────────┘
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              ┌─────────────────────────────┐
              │    Specific Curriculum      │
              │         Outcomes            │
              │          (SCOs)             │
              │   - for each grade level    │
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Essential Graduation Learnings

Essential Graduation Learnings are statements describing the knowledge, skills, and attitudes expected of all students who graduate from high school. Achievement of the Essential Graduation Learnings will prepare students to continue to learn throughout their lives. These learnings describe expectations not in terms of individual school subjects but in terms of knowledge, skills, and attitudes developed throughout the curriculum. They confirm that students need to make connections and develop abilities across subject boundaries if they are to be ready to meet the shifting and ongoing demands of life, work, and study today and in the future. Essential Graduation Learnings are cross-curricular, and curriculum in all subject areas is focused to enable students to achieve these learnings. Essential Graduation Learnings serve as a framework for the curriculum development process.

Specific Essential Graduation Learnings

Aesthetic Expression

Graduates will be able to respond with critical awareness to various forms of arts and be able to express themselves through the arts.

Citizenship

Graduates will be able to assess social, cultural, economic, and environmental interdependence in a local and global context.

Communication

Graduates will be able to use the listening, viewing, speaking, reading and writing modes of language(s) and mathematical and scientific concepts and symbols, to think, learn, and communicate effectively.

Personal Development

Graduates will be able to continue to learn and to pursue an active, healthy lifestyle.

Problem Solving

Graduates will be able to use the strategies and processes needed to solve a wide variety of problems, including those requiring language, mathematical, and scientific concepts.

Technology Competency

Graduates will be able to use a variety of technologies, demonstrate an understanding of technological applications, and apply appropriate technologies for solving problems.

Curriculum Outcomes

Curriculum outcomes are statements articulating what students are expected to know and be able to do in particular subject areas. These outcomes statements also describe the knowledge, skills, and attitudes students are expected to demonstrate at the end of certain key stages in their education. These are based upon their cumulative learning experiences at each grade level in the entry-graduation continuum. Through the achievement of curriculum outcomes, students demonstrate the Essential Graduation Learnings.

General Curriculum Outcomes

are statements that identify what students are expected to know and be able to do upon completion of study in a curriculum area.

Key-Stage Curriculum Outcomes

are statements that identify what students are expected to know and be able to do by the end of grades 3, 6, 9, and 12, as a result of their cumulative learning experience in a curriculum area.

Specific Curriculum Outcomes

are statements identifying what students are expected to know and be able to do at a particular grade level. The specific curriculum outcomes serve as a framework for students to achieve key stage and general curriculum outcomes.

Cross-Curriculum Specific Items

Meeting the Needs of all Students

This curriculum is inclusive and is designed to help all learners reach their potential through a wide variety of learning experiences. The curriculum seeks to provide equal entitlements to learning opportunities for all learners.

The development of students' literacy is shaped by many factors including gender, social and cultural background, and the extent to which individual needs are met. In designing learning experiences for students, teachers should consider the learning needs, experiences, interests, and values of all students.

In recognizing and valuing the diversity of students, teachers should consider ways to:

- provide a climate and design learning experiences to affirm the dignity and worth of all learners in the classroom community

- redress educational disadvantage S for example, as it relates to students living in poverty

- model the use of inclusive language, attitudes, and actions supportive of all learners

- adapt classroom organization, teaching strategies, assessment strategies, time, and learning resources to address learners' needs and build on their strengths by:

    - providing opportunities for learners to work in a variety of learning contexts, including mixed-ability groupings

    - identifying and responding appropriately to diversity in students' learning styles

    - building upon students' individual levels of knowledge, skills, and attitudes

    - designing learning and assessment tasks that correspond to diverse learning styles

    - using students' strengths and abilities to motivate and support learning

    - offering multiple and varied avenues to learning

- celebrate the accomplishments of learning tasks by students

Gender-Inclusive Curriculum

In a supportive learning environment, male and female students receive equitable access to teachers' assistance, resources, technology, and a range of roles in group activities. It is important that the curriculum, classroom practice, and learning resources reflect and value the experiences, interests, achievements, and perspectives of both males and females.

- Teachers promote gender equity in their classrooms when they:

- articulate equally high expectations for male and female students

- provide equal opportunity for input and response from male and female students

- model gender-fair language and respectful listening in all their interactions with students

- promote critical thinking and challenge discrimination

Valuing Social/Cultural Diversity

In order to engage in and maximize learning, all students need to see their social/cultural identities reflected and affirmed in curriculum and classroom practices. It is important to recognize that students in Prince Edward Island come from an increasingly wider range of diverse ethnic, racial, cultural, and social backgrounds than in the past. In addition, they communicate with the wider multicultural world through technology, media, travel, and family and business connections in order to understand their own and others' customs, histories, traditions, values, beliefs, and ways of seeing and making sense of the world. Through experiential learning or through reading, viewing, and discussing authentic texts that reflect diverse social and cultural voices, students from different social and cultural backgrounds can come to understand each other's perspectives; to realize that their own ways of seeing and knowing are not the only ones possible; and to probe the complexities of the ideas and issues they are examining.

Curriculum, classroom practices, and learning resources should reflect the diverse and multicultural nature of our society, examine issues of power and privilege, and challenge stereotypes and discrimination.

Engaging All Students

One of the greatest challenges to teachers is engaging students who feel alienated from learning S students who lack confidence in themselves as learners, who have a potential that has not yet been realized. Among them are students who seem unable to concentrate, who lack everyday motivation for academic tasks, who rarely do homework, who fail to pass in assignments, who choose to remain on the periphery of small-group work, who cover up their writing attempts fearing the judgements of peers, who are mortified if asked to read aloud, and who keep their opinions to themselves. These students are significantly delayed when it comes to learning. Some, though not all, exhibit behaviors in classrooms that further distance them from learning. Others are frequently absent from class. Cumulatively, these are disengaged students.

These students need essentially the same experiences as their peers S experiences that:

- engage students in authentic and worthwhile communication situations

- allow them to construct meaning, connect, collaborate, and communicate with each other

- form essential links between the world of text and their own world
- give them a sense of ownership of learning and assessment tasks

They need additional experiences as well S experiences designed to engage them personally and meaningfully to make their learning pursuits relevant. They need substantial support in reading and writing. They need positive and motivational feedback. They need all of these experiences within purposeful and interactive learning contexts. Ultimately, the curriculum for students should prepare them for adult life.

Preparing students means engaging them with resources and with people from whom they can learn more about themselves and their world. Many students feel insecure about their own general knowledge and are reluctant to take part in class discussions, deferring to their peers who seem more competent. Through the curriculum, the students must find their own voice. The learning environment must be structured in such a way that all students, alongside their peers, develop confidence and gain access to information and to community.

The greatest challenge in engaging learners is finding an appropriate balance between supporting their needs by structuring opportunities for them to experience learning success and challenging them to grow as learners. Teachers need to have high expectations for all students and to articulate clearly these expectations.

Links to Community

A complete curriculum allows for the flexibility of inclusion of the community through various means. Activities such as guest speakers, field trips, and historical presentations allow the students to become more aware of the influence of the community on their lives. Students gain insight into the current workings of their local society, as well as observe role models and establish contacts with the community.

This curriculum guide provides suggestion, wherever possible, for community involvement to become an integrated part of the course.

Role of Parents/Guardians

Parents and guardians play a vital role in the educational focus of the students. Although parents and guardians may or may not necessarily feel comfortable to help in specific subject learning with their children, their role is a vital link to the development of the students. It is most important that the parents and guardians understand and support the

school policies. Parents and guardians are a vital component in the facilitation of the learning of student responsibility in such areas as attendance, safe school policies, goal setting and career investigations. Schools need parents and guardians to share in their children's successes.

Teachers should invite opportunities for parents and guardians to discuss these matters. Frequent parent-teacher conferences are encouraged via telecommunications and/or school-based meetings.

Involvement in school councils, home and school associations, and/or other school-based organizations enable parents and guardians to play an active role in the educational development of their child. Parents and guardians may become actively involved as guest speakers in the classroom for students to understand the community in which they live or as a spokesperson on a particular career.

Homework

Homework is an essential component of a program as it extends the opportunity to think and reflect on ideas investigated during class time. Meaningful homework experiences can allow the students to learn self-discipline and team responsibility while acquiring a sense of self-worth.

Homework provides an effective means to model classroom practice. This might involve seeking community input, constructing a model, group discussion to prepare a presentation, or answering questions for assessment purposes.

Teachers use their professional judgement to assign homework as a means of reinforcement, assessment, and/or further investigation.

Homework is another channel for parents and guardians to be involved. It is a tool for parents and guardians to understand the focus of their child's education in a specific subject area. In some cases, it opens the opportunity for parents and guardians to become actively involved in the homework process.

The Senior High School Learning Environment

Learning environment for grades 10-12 is:

- participatory, interactive, and collaborative
- inclusive
- caring, safe, challenging
- inquiry based, issues oriented

- a place where resource-based learning includes and encourages the multiple uses of technology, the media, and other visual texts as pathways to learning and as avenues for representing knowledge

The teacher structures the learning situation and organizes necessary resources. In assessing the nature of the task, the teacher may find that the situation calls for teacher-directed activities with the whole class, small groups of students, or individual students. Such activities include direct instruction in concepts and strategies and brief mini-lessons to create and maintain a focus.

As students develop a focus for their learning, the teacher moves to the perimeter to monitor learning experiences and to encourage flexibility and risk taking in the ways students approach learning tasks. The teacher intervenes, when appropriate, to provide support. In such environments, students will feel central in the learning process.

As the students accept more and more responsibility for learning, the teacher's role changes. The teacher notes what the students are learning and what they need to learn, and helps them to accomplish their tasks. The teacher can be a coach, a facilitator, an editor, a resource person, and a fellow learner. The teacher is a model whom students can emulate, a guide who assists, encourages, and instructs the student as needed during the learning process. Through the whole process, the teacher is also an evaluator, assessing students' growth while helping them to recognize their achievements and their future needs.

Learning environments are places where teachers:

- integrate new ways of teaching and learning with established, effective practices

- have an extensive repertoire of strategies from which to select the one most appropriate for the specific learning task

- value the place of dialogue in the learning process

- recognize students as being intelligent in a number of different ways and encourage them to explore other ways of knowing by examining their strengths and working on their weaknesses

- value the inclusive classroom and engage all learners in meaningful activities

- acknowledge the ways in which gender, race, ethnicity and culture shape particular ways of viewing and knowing the world

- structure repeated opportunities for reflection so that reflection becomes an integral part of the learning process

The physical learning environment should not be restricted to one classroom. There should be ample physical space for students to use cooperative learning techniques as well as other learning styles. There should be access to other learning centers in the school building such as labs and gymnasiums. Learning should be extended to community facilities, allowing field trips and guest speakers to expand the learning environment.

Safety

Students and teachers need to feel safe, both physically and emotionally, in the school setting. In a learning environment where cooperative, active, and collaborative teaching strategies are utilized, students must become knowledgeable of their role in enabling a safe environment to exist.

Empowering students to take ownership for their own safety and those of their peers is an essential component of the classroom learning. Teachers can provide students with the knowledge necessary to prevent unnecessary risks in their learning environment. By educating students about the risk factors involved in the classroom setting, they can become active participants in the ownership of their own safety. In all learning situations, the teacher needs to encourage a positive, responsible student attitude toward safety.

Risk is involved in everything a person does. To minimize the chance of harm, the student must become a conscious participant in ensuring a healthy, safe learning environment. Complacent attitudes regarding safety reflect a behavior which invites a less protected setting.

While physical safety is of utmost importance in the classroom setting, emotional safety is equally important. Students need to know the unacceptable behavior and the consequences that ensue. Students should be encouraged to be active learners without being intimidated by others. In every learning environment, teachers foster cooperative, respectful verbal dialogue, and physical presence. Student consequences to the contrary are essential components to the learning process.

Motivation

Motivation plays a very important role in student understanding and successful completion of curriculum. Motivation for the student is heightened when the emphasis within the classroom is placed on the "whole person". This environment provides a focus which recognizes achievements accomplished and initiates the growth of a safe place to belong.

Many factors are cited as instruments that foster student motivation. Clear expectations and flexibility of structure enhance the desire to learn. When students have a structure which enables them to accomplish goals, the motivation increases.

Support must exist for both the teacher and the student. Daily support for teachers via such modes as "pairing and sharing" techniques, education web sites, and professional development should be available.

Student support should include career awareness. Promoting student goal-setting strategies enables her/him to develop higher self-esteem which is a natural motivator to success.

Varied instructional strategies within the class time also excites motivation. Students need variety, choices, and opportunities to take ownership of their learning.

There should be a limited amount of "traditional homework" and the home assignments given should relate to the students interests in real life.

Teaching Strategies

Learning theory research clearly indicates that teachers need to employ a wide variety of instructional strategies to address the learning styles of all learners. Moreover, the nature of certain content or processes can only be taught effectively if specific instructional strategies are employed. In order to achieve this objective, students must have an opportunity to co-operatively brainstorm, discuss, evaluate information, and make informed decisions. Students often point to experiential activities as the best part of a program as they have the chance to work cooperatively and be actively involved in the learning process.

Teachers are ultimately responsible for determining the best teaching methods for their student, the best way of grouping them, and the best way to present material to make it relevant and interesting. Exemplary teachers use a variety of instructional strategies and have the flexibility to call upon several different strategies both within one period and during a unit of study. Adolescent learners need a balance between practical work, listening, discussing, and problem-solving.

Direct Instruction is highly teacher-directed consisting of lectures, explicit teaching and demonstrations. It is effective for providing information and developing step-by-step skills.

Interactive Instruction relies heavily on discussion and sharing among participants. For the teacher it involves management and organizational skills to set up the activities which may involve small groups to class situations. The teacher must observe the students in action and have good record keeping methods. The students will learn from peers and teacher through interactions with both.

Teaching Strategies

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Indirect Instruction involves inquiry, induction, problem-solving, decision-making and discovery. It is mainly student-centered and is used to generate alternatives and solve problems. The teacher acts as facilitator, supporter and resource person, while the student is highly involved observing, investigating, inferring information from data or forming hypothesis.

Interactive Instruction relies heavily on discussion and sharing among participants. For the teacher it involves management and organizational skills to set up the activities which may involve small groups to class situations. The teacher must observe the students in action and have good record keeping methods. The students will learn from peers and teacher through interactions with both

Assessment and Evaluation

The terms "assessment" and "evaluation" are often used interchangeably. However, they are not exactly the same. "Assessment" refers to the process of collecting and gathering information about student performance as it relates to the achievement of curriculum outcomes. "Evaluation" refers to the systematic process of analyzing and interpreting information gathered through the process of assessment. Its purpose is to make judgements and decisions about student learning. Assessment provides the data. Evaluation brings meaning to the data. Assessment must reflect the intended outcomes, be ongoing, and take place in authentic contexts.

Meaningful learning involves reflection, construction, and self-regulation. Students are seen as creators of their own unique knowledge structures, not as mere recorders of factual information. Knowing is not just receiving information but interpreting and relating the information to previously acquired knowledge. In addition, students need to recognize the importance of knowing how to perform, when to perform and how to adapt that performance to new situations. Thus, the presence or absence of discrete bits of information S which has been the traditional focus of testing S is no longer the focus of assessment of meaningful learning. Rather, what is important is how and whether students organize, structure, and use that information in context to solve problems.

Evaluation may take different forms depending on its purpose. *Diagnostic* evaluation will identify individual problems and suggest appropriate corrective action. Evaluation may be *formative* in that it is used during the instructional process to monitor progress and to make necessary adjustments in instructional strategies. *Summative* evaluation is intended to report the degree to which the intended curriculum outcomes have been achieved. It is completed at the end of a particular instructional unit.

Since the specific curriculum expectations indicate behaviors involving knowledge, skills, and attitudes, assessment must reflect student performance in each of these areas. The learning outcomes specific to the cognitive domain emphasize the acquisition of cognitive skills at three taxonomic levels: knowledge, understanding, and higher-order thinking. This will help to ensure that the focus on instruction goes beyond the lower levels of learning S recalling facts, memorizing definitions, solving problems and so on. Likewise, the focus of evaluation should also go beyond testing at the knowledge level.

Assessment/Evaluation Techniques

The evaluation plan should include a wide variety of assessment methods. Any single item of information about a student's learning is only a minuscule sample of that individual's accomplishments. All types of learning outcomes cannot adequately be evaluated with a single type of instrument. Notions about students having different learning styles also apply to their performance on items designed for purposes of evaluation.

Evaluation strategies must closely resemble the nature of the instructional program, curriculum, and modern learning theory. There is significant movement toward authentic assessment or performance assessments. These could include such strategies as open-ended questions, exhibits, demonstrations, hands on execution of experiments, computer simulations, writing, and portfolios of students' work over time.

A multifaceted plan is needed to respond to the differences in the intended learning outcomes, the learning styles of students, and to reflect the APEF Essential Graduation Learning.

Individual learning outcomes, the criteria for success and the form that assessment and evaluation will take, should be clearly understood by teachers, students, and parents. This involves clearly describing unit and lesson objectives and how the achievement of these objectives will be assessed. If students are to see themselves as responsible for their own learning, the requirements for attaining success in a unit of work must be clearly understood. The assessment and evaluation of the unit should contain no surprises.

Using Varied Assessment Strategies

Teachers must realize they are preparing students for a world where knowledge is expanding at a rate we can no longer track. This requires that we shift emphasis from content knowledge to information processing skills. Our students need to be able to select, process, and evaluate knowledge.

This knowledge does not always need to be tested directly on evaluations that rely strictly on recall of facts during tests, rather it can be encompassed in higher level objectives such as comprehension, synthesis, or application. These could be better measured through a problem-solving approach.

It is therefore important to emphasize a variety of strategies in evaluation plans. These must reflect the teaching strategies employed in the delivery of the specific topic.

Anecdotal Records are positively written reflections of a student's actions and work while activities are occurring. As an informal assessment process, it is typically based on notes or a check list with space for writing comments. It is completed when appropriate.

Teacher Student Conferences are valuable evaluation techniques to gather information about students not obtained in other ways. More information is shared through conversation than through writing. It allows teachers to assess progress through questioning content and feelings on selected topics. A written record of the conference is advised.

Checklists**:**

Student **self-evaluation of:**
- interest
- attitudes
- social
- group skills
- understanding

Teacher **evaluation of:**
- laboratory skills
- groups skills
- interests
- attitudes

Group **Self-evaluation of:**
- group skills
- achievement

Testing assesses the student's knowledge and understanding of the subject matter. The most common methods include: essay, column matching, true/false, and multiple choice questions. Also included are problem solving, interpretation and production of graphs, data tables, and illustrations.

Student Work Samples are means for students to communicate what they are learning through a variety of experiences including:
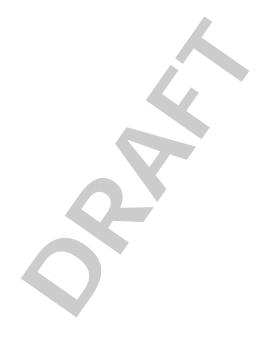
portfolios- a collection of student's work

laboratory reports- documentation of experiential activities

major reports and written reports- further research on topics

homework- opportunity for parent/guardian involvement

learning journals- individual perceptions of progress

oral presentations- individual or group form of communicating ideas.

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Design Principles

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GCO: explore personal and creative ways to use multimedia tools for aesthetic expression based upon knowledge of the elements and principles of design

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DP 1: identify the principles and elements of design

DP 1: Principles of Design are pattern, unity, rhythm, movement, and contrast.

DP 1: Elements of Design include form, space (2D, 3D), colour/hue, line, texture, and shape.
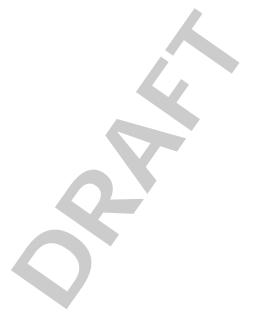
DP 1: Good design:

- should be purposeful; students must decide whether the project is designed for attention or for transparency
- should simplify; make complicated information easy to understand
- should organize; help readers separate information by importance
- should provide contrast; create a visual stimulation which prevents reader boredom (white space, typeface, type size, etc.)
- should create unity; project a consistent image of ideas to readers using white space, type, and colours in a consistent way throughout the document
- should have an emphasis; provide a consistent background in order to create an emphasis
- should involve editing that is characterized by strong standards and simplicity; design succeeds when standards are not compromised in the name of expediency
- should enhance efficiency; the tools of electronic design include templates, styles, and palettes, all of which may be shared between documents. (Templates are "empty" documents containing pre-determined margins and column layouts. Styles permit the designer to pre-select typeface, type size, line spacing etc. before working on a document. Palettes permit the creator to pre-choose colours and tints)

Evaluation and/or Assessment	Resources/Notes

Design will be introduced and applied appropriately to content throughout each unit in the Creative Multimedia curriculum.

DP 1.1: Students will create a portfolio of projects and assignments while completing this course.

DP 1.2: Analyse a range of existing examples of print material (magazine advertisements) and formats to illustrate strong examples of principles and element of design.

DP 1.3 Create a rubric for analysing design.

DP 1.4: Analyse a range of existing examples of print material (magazine advertisements) and formats, then discuss why these examples are successful or not.

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(*Design our own resource examples on web or CD*)

Cotton, Bob (1990) The New Guide to Graphic Design. Chartwell Books, New Jersey.

ISBN 1-55521-508-4

Williams, Robin & Tollett, John (2001). Robin Williams Design Workshop. Peachpit Press, Berkeley.

ISBN 0-201-70088-3

Visual Elements and Principles:

http://www.artsconnected.org/toolkit/

(all sites listed in this guide were last accessed during the fall of 2004)

Art Principles Animated:

http://www.wildlifeart.org/Rungius/index.html

Online Rubrics Maker:

http://rubistar.4teachers.org/index.php

Completed Rubric Examples:

http://www.uwstout.edu/soe/profdev/rubrics.shtml

GCO: explore personal and creative ways to use multimedia tools for aesthetic expression based upon knowledge of the elements and principles of design

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DP 2: demonstrate a working knowledge of colour theory	DP 2: Colour theory includes primary, secondary, tertiary, complementary, warm/cool, analogous, and use of colour wheel.
DP 3: describe font and attributes	DP 3: Fonts and attributes including font families, font styles, kerning, leading, all capitals, style (bold, italic, underline). Legibility and suitability must be considered as various font attributes can convey emotion or draw attention to particular elements.
DP 4: create a document layout	DP 4: Layout concepts include hierarchy of elements, proportion, off-size publications (business cards, envelopes, jewel cases, posters, label or box), standard conventions for headers and footers, appropriate font sizes, landscape/portrait, graphic placement, logos, symbols (stop sign, poison, etc.).
	DP 4: Design of a document involves considerations such as choice of medium (eg. newsletter, poster), anticipated audience, and method of feedback when designing a document.
	DP 4: It is advisable to plan the layout and design with pencil and paper.

Evaluation and/or Assessment	**Resources/Notes**

DP 2.1: Design a greeting card that uses colour to support "the message".

DP 2.2: Design a logo or button to convey a simple message and use colour effectively.

DP 3.1: Find a font that will enhance the impact or meaning of the text.

DP 3.2: Select an appropriate font to be used for: wedding invitation, personal letter, overdue bill collection, letter of recommendation, obituary.

DP 4.1: Find examples of static layouts that demonstrate various principles that have been discussed in class.

DP 4.2: Use pencil and paper to design the layout for a variety of publications such as business card, jewel case, thank you card, or product label.

Macromedia Freehand Software MX-2004 Studio

Macromedia Staff Development Guide

http://www.pixy.cz/apps/barvy/index-en.html
http://www.artistsincanada.com

Colour, Contrast & Dimension

http://poynterextra.org/cp/colorproject/color.html

Typography

http://counterspace.motivo.com/

Typography & Page Layout

http://www.typography-1st.com/typo/txt-lay.htm

Principles of Layout & Design

http://writing.colostate.edu/references/documents/desktop%5Fpublishing/list3.cfm

Basic Graphic Design (slide show)

http://www.ext.colostate.edu/staffres/grdesignmenu.html

GCO: apply critical thinking, research and problem solving strategies in the development of multimedia creations

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DP 5: describe print vs digital considerations in publishing

DP 6: apply creative thinking strategies relating to an original graphic design

DP 5: The colours displayed on a monitor look different from the ones seen in print. This is because the two display types use different technologies to display colour.

RGB - Red, Green, Blue; the additive primary colours are used for monitor screens and most image file formats. There are actually a number of RGB colour spaces— sRBG, Adobe RGB 1998, Bruce RGB, Chrome 2000, etc.— differing from each other in the purity of their primary colours, which affects their gamut— the range of colours they represent.

CMY(K) - Cyan, Magenta, Yellow are the primary colours which printmakers use to create prints as all other colours can be created using a combination of these; Widely used in inks for printing with black (K) added because to add depth.

DP 5: The TIFF file format is widely used in publishing. This format provides very high resolution images for commercial reprographics equipment that allows the beauty and detail in photographs to be shown. This has implications for file size, transfer and storage.

DP 6: A message may be delivered in a wide variety of creative and novel ways. For example, in the case of television advertisements the most powerful and memorable messages are presented in humorous and interesting ways. Designers must be aware of the purpose of their work and the target audience when creating material.

Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>

DP 5.1: Save a scanned image in TIFF format. View the image properties to determine the file size. Based upon a standard floppy disk capacity of 1.44 meg, have students calculate how many floppy disks it would take to store their image if it were to be stored in this format.

DP 5.2: Convert a TIFF image to other file formats comparing file size and print quality.

DP 5.3: Examine the web safe colour palette from within a graphics program.   Experiment by designing custom colours within the program. Explain why or why not this colour may be reproduced during printing.

Web Safe Colour Chart

http://www.websitetips.com/color/

Webmaster's Colour Labaratory

http://www.visibone.com/colorlab/

DP 6.1 Expressive lettering exercise (paper and pencil), where students pick a word and convey a mood/feeling with the use of shape, colour, and texture of letters. For example, "hot", "cool", "awesome", "passion", "fuzzy", "used".

DP 6.2: Students use the letters of their first names and completely fill a page with the letters.

DP 6.3: Creative Challenge, using verbal and visual interplay. Students choose a noun and brainstorm associations with the word in order to create a product that will become the focus of an advertisement. Students present their creations, which might take the form of a label, point-of-purchase display, print advertisement. Peer evaluations to identify the most memorable creation.

DP 6.4: Acquire items from a dollar store and have groups of students prepare promotional materials to market an item.

DP 6.5: Listen to music, read a poem or other form of artistist expression and visually express the mood/feeling/atmosphere.

DP 6.6: Collaborate with peers from other classes and illustrate their works. (eg. illustrate poems written within an English class.)

GCO: apply critical thinking, research and problem solving strategies in the development of multimedia creations

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DP 7: critically appraise and support design choices of a simple desktop publishing document

DP 7: A publication may be subject to critical analysis in the use of:

- design principles
- appropriate graphics
- appropriate file formats
- font type/size/colour
- appropriate background
- space
- correct grammar
- effective communication

Awareness of audience and adherance to "appropriateness" in such areas as multiculturalism, gender neutrality, language and content. (eg. slang phrases and terminology, offensive content, sexism or racism)

DP 8: utilize software to produce a document

DP 8: Basic features of a desktop publishing and/or graphics software would include precisely placing and manipulating text, insert graphics, borders, and fill.

Evaluation and/or Assessment

Resources/notes

DP 7.1: Analyze desktop publishing documents and recommend changes which would make each more effective.

DP 7.2: Perform a self and/or peer evaluation of works created using a rubric.

DP 7.3: Select works for inclusion in a personal portfolio. Provide reflection upon reasons for choosing particular selections.

DP 8.1: Collaboratively, build a corporate identity, including logo, letterhead, business cards, and envelope.

DP 8.2: Identify needs and produce a document (poster) for teachers or clubs/organizations within the school. Utilize basic design features such as establishing points of interest, page orientation, font selection, white space and graphics.

GCO: build an understanding of the evolving nature of technological literacy and capability, and their impact on education needs and career options

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DP 9: identify occupations in the graphic communication industry

DP 9: Evolving careers in the publishing and new media industries are graphic designers, web designers, advertising consultants, press operator, estimator, scheduler and binder. Identify aspects important to the selection of a career (the skill sets/ aptitudes, interest and training required, job requirements such as mobility, life long learning, environmental considerations, unions and association requirements, etc.)

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Evaluation and/or Assessment

Resources/Notes

<u>Resources/notes</u>

DP 9.1: Arrange a field trip, guest speaker, teleconference or video conference. Contact a professional who works in a design studio that uses the latest technology (eg. Holland College, UPEI, Atlantic Technology Centre, CBC)

DP 9.2: Produce a profile of one publishing or new media career.

HRDC Essential Skills

http://www15.hrdc-drhc.gc.ca/english/general/search_e.asp

Application of Working and Learning National Project

http://www.awal.ca/

Job Futures PEI

http://pei.jobfutures.org/en/noframes/Home.html

Canada Prospects Magazine

http://www.careerccc.org/canadaprospects/

HRDC WorkSearch

http://worksearch.gc.ca/index.html

Video Exploration of Careers, Transitions, Opportunities and Realities

http://www.vector.cfee.org/english/index.php

Technology PEI Government

http://www.techpei.com

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Digital Imaging

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GCO: demonstrate an understanding of the history, evolution and future of multimedia and its influence on society and culture

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DI 1: identify the major characteristics of images such as file formats, image quality, & colour attributes

DI 1: Introduce terms such as pixels, resolution, resize, resample and compression. Distinguish between raster and vector images and the appropriate use of each. The colours displayed on a monitor look different from the ones seen in print. This is because the two display types use different technologies to display colour.

RGB - Red, Green, Blue; the additive primary colours are used for monitor screens and most image file formats. There are actually a number of RGB colour spaces— sRBG, Adobe RGB 1998, Bruce RGB, Chrome 2000, etc.— differing from each other in the purity of their primary colours, which affects their gamut— the range of colours they represent.

CMY(K) - Cyan, Magenta, Yellow are the primary colours which printmakers use to create prints as all other colours can be created using a combination of these; Widely used in inks for printing with black (K) added because to add depth.

DI 1: Strategies to optimize images include changing colour depth, cropping, resizing and resampling. Conversion from one file format to another allow images to be used within a variety of media. Note that images will lose resolution when re-saved time and again with a compression algorithm such as that used by a .jpg

DI 2: identify key developments in the history of traditional & contemporary imaging

DI 2: Imaging processes and techniques change as technology advances. Artisans may work in both modern and traditional media.

Evaluation and/or Assessment	Resources/Notes
	Resources/notes
DI 1.1: Choose an image and save it several times in different file formats then make comparisons such as file size, resolution, obvious visual differences in quality, etc.	Macromedia Fireworks Software MX-2004 Studio

DI 2.1: Examine past and current imaging media, processes & materials.

DI 2.2: Compare and contrast the style of photographers and digital imaging artists.

DI 2.3: Research a major artist and create an image in the style of the artist.

GCO: demonstrate skill in using a variety of technologies in the preparation of original multimedia

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DI 3: demonstrate proper use of imaging equipment

DI 3: Demonstrate the functions and software components relating to acquiring an image through scanning or drawing tablet. Relate resolution and file size to the purpose of the image and the media in which it will be used. Explain how to choose specific areas to scan, selection of appropriate colour options and resolution settings, and saving or exporting the image in an appropriate file format.

DI 3: Digital cameras have various features and capabilities. Most will allow the user to record short video/audio clips, edit images, select flash settings, zoom, manually or auto focus, and select image quality and resolution. Be familiar with camera specifications such as memory capacity, types of removable storage, file transfer, docking station, battery power metre, and media connection types (USB, Firewire etc.)

DI 3: Introduce various printing possibilities (inkjet, laser, commercial offset) and discuss cost, quality, speed considerations when determining a printing method for a particular production. Operate the printer efficiently by adjusting print property settings, choosing the correct media, loading media into printer, and accessing and controlling network printing.

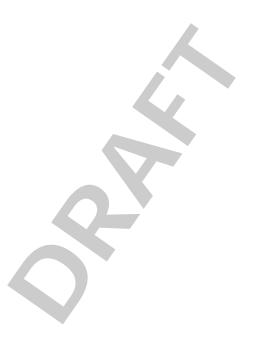| Evaluation and/or Assessment	Resources/Notes
	Resources/notes
DI 3.1: Demonstrate proper use of digital camera and scanner. Practise on equipment following teacher provided steps or guidelines.	Ulead Learning Center http://www.ulead.com/learning/ imageinfo.htm Kodak Digital Learning Center http://www.kodak.com/US/en/ digital/dlc/index.jhtml UCR Museum of Photography http://digitalstudio.ucr.edu/ about/about.html

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GCO: explore personal and creative ways to use multimedia tools for aesthetic expression based upon knowledge of the elements and principles of design

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DI 4:   apply knowledge of composition to create a visual message

DI 4:   Compositional considerations in photography:

- fill the frame
- consider horizontal vs. vertical treatment
- choose a main point of interest
- consider the angle and eliminate unimportant features from the background
- shoot the subject at eye level, unless producing an "effect"
- use the "rule of thirds"
- include objects in the foreground to produce "depth of field"
- use natural lines to make the image interesting
- categorize: portrait, landscape, still life, abstract and action

DI 4:   Photographic elements of light, line, motion, texture, perspective and shape are essential to successful visual composition.

DI 4:   Lighting conveys mood, emotion and depth. The direction, quality and intensity of light each have a dramatic effect on photographs. Lighting position includes "high front", "front", "side" and "back". In particular, special effects may be accomplished with "side lighting" which enhances texture, shapes or patterns and "back lighting" which shows strong shadows and the subject in silhouette. Other lighting considerations might include use of natural light, time of day, and weather conditions. Use the "white balance" feature and flash in order to compensate for fluorescent or tungsten artificial lighting situations that cause photographs to appear tinted.

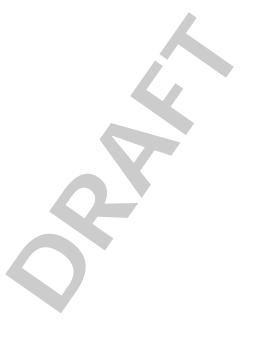| Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
DI 4.1: Create images having creative use of lighting. Create images of same subject using a variety of lighting techniques and sources.	Taking Great Pictures <u>http://www.kodak.com/US/en/digital/dlc/index.jhtml</u>
DI 4.2: Create, edit and present effective images using categories portrait, landscape, still life, action.	Focus on Photography <u>http://www.fodors.com/focus/</u>
DI 4.3: View and identify principles & elements of design/ composition from a photograph.	Ten Tips to Improve Photographic Technique <u>http://www.betterphoto.com/exploring/tips.asp</u>
DI 4.4: Experiment with the effect that eye level or change in angle has on their photographs.	Photography Tips <u>http://www.photographytips.com/</u>
	Analyzing Digital Photography <u>http://www.mysharmin.com/digitalphotography/analyze.html</u>

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GCO: demonstrate skill in using a variety of technologies in the preparation of original multimedia

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DI 5: acquire and maintain images from a variety of sources and technologies

DI 6: enhance and correct image quality

DI 5: Images may be acquired through scanning, camera, internet and clipart databases. Once images have been acquired they need to be stored in a directory and file structure on an appropriate storage medium (hard drive, memory stick, optical disk, floppy, etc.)

DI 6: Digital images may be enhanced in a variety of ways including:
- brightness/contrast, hue, saturation, luminance, colour density of image
- colour correction, sharpen, crop & resize image to improve composition
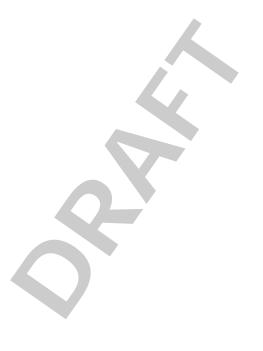- darkroom techniques - dodging, cloning, burning to enhance image quality

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Evaluation and/or Assessment	Resources/Notes

DI 5.1: Save files in appropriate file folders.

DI 6.1: Scan an old or damaged photo and restore it using digital techniques such as cloning, changing brightness and contrast.

DI 6.2: Apply colour and gamma correction, cropping, brightness, and contrast to enhance digital photos.

DRAFT

GCO: form strategies to review, develop and convey effective multimedia content

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DI 7: analyse and critique the composition of an image

DI 7: Images can be analysed based on effective use of compositional considerations.

DI 7: Formal Critique (Feldman Formal Critique, 1972) includes the following steps:

- Description: state the facts; describe the image, subject matter, medium, size, title, artist, etc.
- Analysis: Identify the Elements and Principles of Design evident in the image.
- Interpretation: Try to state the intentions of the artist or meaning of the work.
- Judgement: Give opinion of the creation and state why it works.

DI 8: create a graphic design following a planning process

DI 8: The planning process involves:

- defining the problem
- brainstorming
- creating a thumbnail sketch
- producing a rough draft
- revising
- producing a final product

DI 9: communicate ideas, visually

DI 9: Convey information to an audience including thoughts, feelings, messages, or a knowledge story.

DI 10: modify or manipulate an image using digital techniques

DI 10: Software allow images to be altered by inserting, removing or combining objects (compositing) and applying special effects, filters, distortion, hand tinting, and sepia toning. A number of images may also be combined into a collage, montage, or panorama.

Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
DI 7.1: Critique the work of well known photographers, making reference to compositional elements.	Analyzing Digital Photography
DI 7.2: Critique own original digital image.	http://www.mysharmin.com/ digitalphotography/ analyze.html
DI 7.3: Use or create a checklist to evaluate image quality.	
DI 7.4: Display and place a blank page beside own images. Classmates will write constructive comments regarding possible improvements to particular images.	
DI 7.5 Upload image to an electronic forum so peers can critique online. (eg. Knowledge Forum)	
DI 8.1: Include a record of all steps found in the planning process in a personal portfolio including: definition of the problem, brainstorming notes, thumbnail sketches, rough drafts, revision, final products.	
	(provide examples of images that are powerful)
DI 9.1: Produce a series of images that tell a story or have a common theme. (photo essay)	
DI 9.2: Collect or create images that demonstrate feelings or emotions.	
DI 9.3: Illustrate a famous quote by combining images and creative text.	
DI 9.4: Create a visual pun, play on words, double-meaning. i.e. 'time flies' or ' I really do have a photographic memory - I just haven't developed it yet'.	
DI 10.1: Create a self-portrait using an unusual background. i.e. put yourself beside the leaning tower of Pisa. (compositing)	
DI 10.2: Create a series of images of the same photo using a variety of special effects, filters, distortions, etc.	http://www.jasc.com/ community/newsletter/ archive2003.asp
DI 10.3: Stitch related images together to form a panorama.	
DI 10.4 Create virtual reality panorama or other object.	
DI 10.5: Apply colour to a black and white photo using software tools.	

GCO: form strategies to review, develop and convey effective multimedia content

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DI 11: create graphics using vector and bitmap tools

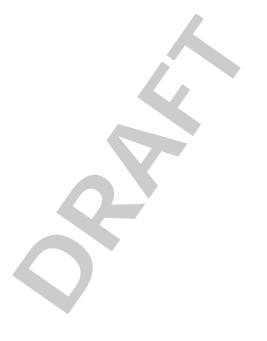DI 11: Bitmap (Raster) images are composed of pixels that display variations in colour ie. scanned images or photographs. Colour information about each pixel is included in the file information. When reducing the size of a bitmap image through the imaging software's resample or resize command, pixels are discarded. When increasing the size of a bitmap image through the software's resample or resize command, the software has to create new pixels. When creating pixels, the software estimates the colour values of the new pixels based on the surrounding pixels. Bitmap files are therefore large in size and lose definition when scaled. Bitmap file formats include .bmp, .gif, .jpg, .png, .tiff, .raw

Vector images are based upon shapes and line mathematical functions and are suitable for simple shapes and flat areas of colour as found in icons, logos and cartoon drawings. They are small in file size and can be enlarged without losing definition. Vector image file formats include .cdr, .al, .wmf, hgl.

Evaluation and/or Assessment	Resources/Notes

DI 11.1   Explain situations in which the use of vector or bitmap formats would be more appropriate.

DI 11.2   Create the logo or button that was designed in the Design Principles section DP 2 or section DI 13

DI 11.3   Create custom effects and titling relating to Video Production section VP 12

DI 11.4   Prepare a webpage masthead relating to Web Authoring section WA 6

DI 11.5 Transform a vector image into a bitmap image and vice versa.

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GCO: form strategies to review, develop and convey effective multimedia content

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

DI 12: select and present a display of images (printed or digital)

DI 12: Use criteria to select images to be presented in the form of a theme that conveys a message. This may be achieved through various means such as electronic portfolio, school display, web site, gallery or anthology.

DI 13: apply images to a variety of media

DI 13: When considering a particular media to present an image, strengths and weaknesses, appropriate use, and technical aspects should be addressed.   This might might include incorporating the image into a web page, a printed document, an animation or video, etc.

DI 14: explore career opportunities in imaging

DI 14: Examples of jobs/careers in imaging and publishing related areas include graphic design, printing, photography, mapping, visual journalism, virtual reality, and gaming. Human Resource Development Canada (HRDC) has identified the following essential employablity skills:

- reading text
- document use
- writing
- oral communication
- computer use
- numeracy
- thinking skills
- working with others
- continuous learning

Evaluation and/or Assessment	Resources/Notes

DI 12.1: Select work for inclusion in a portfolio and evaluate it based upon how well the examples met stated expectations, aesthetics, and technical quality.

DI 12.2: Curate an exhibition of work from the class (select, organize, label, mount, hang, then dismantle).

DI 12.3: Individuals or groups will select images and present them in the form of a slide show

DI 13.1: Develop an original logo for a fictitious company which will be used to advertise a product on the web, TV commercial, or in print.

DI 14.1: Arrange a field trip, guest speaker, or video conference with someone who works in a setting that uses the latest imaging technology. (newspaper publisher, printing house, photographer) Make links to local businesses that provide services in the imaging field.

DI 14.2: Produce a profile of one imaging or new media career through web research, email or personal interview with someone working in the industry.

DI 14.3: Research specific skill sets from the HRDC Essential skills website necessary for a job within the multimedia industry.

HRDC Essential Skills

http://www15.hrdc-drhc.gc.ca/english/general/search_e.asp

Application of Working and Learning National Project

http://www.awal.ca/

Job Futures PEI

http://pei.jobfutures.org/en/noframes/Home.html
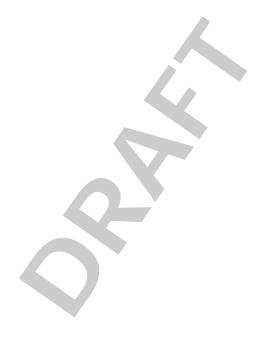
Canada Prospects Magazine

http://www.careerccc.org/canadaprospects/

HRDC WorkSearch

http://worksearch.gc.ca/index.html

Video Exploration of Careers, Transitions, Opportunities and Realities

http://www.vector.cfee.org/english/index.php

Video/Audio Production

GCO: demonstrate skill in using a variety of technologies in the preparation of original multimedia

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

VP 1: identify camcorder parts and their corresponding function	VP 1: Explore essential components of camcorders including power on and off, load and eject tape, attach battery, battery time remaining, select mode of play or record, fast forward, rewind and input jacks.
VP 2: demonstrate basic video operations	VP 2: Use and experiment with camera functions such as manual focus, auto focus, zoom, light, tape speed and digital time through the creation of a video segment.
	VP 3: Become familiar with audio controls and the proper selection and positioning of microphones for the task. This is important so the audience can clearly understand what performers are saying.
VP 3: identify basic audio operations	Pick-up Patterns of Microphones:
	Cardioid (pickup pattern is heart shaped)- pick up sounds from the front and cancels sound from the back. Lapel microphone used in an on-location radio interview is an example.
	Hyper-Cardioid - pick up a narrow pattern in front of the microphone. A shotgun microphone is commonly used in TV or movie productions as well as political scrums.
	Omnidirectional - pick up sounds from all directions. A microphone inside a camera or picking up groups of performers on stage.
	A microphone sock should be used when recording sound outdoors to avoid feedback and unwanted wind noise.
	VP 3: Demonstrate correct audio production technique: plug headsets into the camera to monitor the feed, perform test checks with the subject to determine that the microphone is working consistently and listen for annoying background noise on the set.
VP 4: demonstrate the ability to develop an effective 30 second audio advertisement/PSA.	VP 4: Listen to and critique common audio advertisements. The criteria include the following: clarity, repetition, hook, dialogue style.

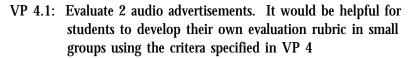| Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
VP 1.1: Explain expectations for recording of experiences in a personal journal and the portfolio requirements for this unit.	Camcorder, with manual
	Computer
VP 2.1: Hands-on exercise with camcorder to locate and learn to operate main functions (power on and off, load and eject tape, attach battery, select mode of play or record, fast forward, rewind, etc.) These can be of simple every day events such as walking into a room, picking up a book, or a variety of shots of ordinary objects.	Royalty-free audio of clips (tags, short and long formats)
	Announcing book - pg 105
VP 2.2: Visit a web site to explore camera features as a virtual reality image.	Sound effects CD
VP 3.1: Record audio in a variety of settings using the appropriate microphones. Eg. A quiet room, a location that has loud background noise, in the outdoors, etc. The audio might be of someone speaking, natural noise or animal sounds, or the creation of special sound effects.	*Video Maker* magazine (subscription includes access to web site and archived materials)
	Search Engine for audio files
	http://www.findsounds.com/
	Apple Videography for Educators
	http://ali.apple.com/ali_sites/ ali/exhibits/1000019/
VP 4.1: Evaluate 2 audio advertisements. It would be helpful for students to develop their own evaluation rubric in small groups using the critera specified in VP 4	
VP 4.2: Based upon rubric created by the class script and mix a 30 second audio advertisement/PSA suitable for radio play. Use class generated rubric to assess peers' production.	

GCO: demonstrate an understanding of key aspects of multimedia production individually or collaboratively including roles and responsibilities of team members

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

VP 5: examine various possible career choices, training and personal aptitude requirements within the video and audio industry

VP 5: Research educational training, experience and personal aptitudes required to fulfil the roles of director, production manager, and audio or video editor in a commercial production.

VP 6: examine the roles and responsibilities of production team members

VP 6: Recognize that a video production involves the efforts of a number of people: director, production manager, camera person, audio person, video editor, art, costume and set design. Work in teams to develop storyboards, scripts, production schedule, task assignments and to shoot and edit the production

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Evaluation and/or Assessment	Resources/Notes

VP 5.1: Select three post-secondary schools that offer programs in video production and report on their programs.

VP 5.2: Discuss what might comprise suitable contents in a portfolio (as an admission requirement to the program above).

VP 5.3: Arrange for a field trip, guest speaker, teleconference or video conference with someone who works in film or journalism.

VP 6.1: Research the traditional video production team chain of command and create a flowchart.

VP 6.2: How have recent changes in technology challenged the traditional chain of command structure?

Digital Video in Education
http://edtech.guhsd.net/video.html

SNN Newsroom
http://www.snn-rdr.ca/snn/nr_reporterstoolbox/multimedia.html

Shannon and Barbara - visual

Human Resources & Skills Development Canada, Essential Skills http://www15.hrdc-drhc.gc.ca/

Cultural Human Resources Council http://www.culturalhrc.ca/home-e.asp

Cultural Careers Council Ontario http://www.workinculture.on.ca/

(Publications - new media career info Cultural HR Council - evaluation copies ordered Sept 16)

GCO: **understand ethical and legal issues associated with multimedia technology**

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

VP 7: examine and become familiar with copyright laws, privacy and ethics in video and audio productions

VP 7: Become knowledgeable about copyright as it applies to music, video, print and Internet resources. Distinguish between legal and ethical behaviour. Copyright permission to use images, sounds and ideas originally produced by others must be obtained. Permits/release forms should be signed by all persons appearing in productions. When producing commerical products, regulations and codes of conduct of industry organizations, unions and governmental agencies, such as the CRTC must be acknowledged and respected.

VP 7: Demonstrate an awareness of audience and adhere to "appropriateness" in such areas as multiculturalism, gender neutrality, language and content treatment. (eg. slang language and teminology, offensive content or situation, sexism, racism and violence)

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Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
VP 7.1: Prepare a list of questions for a guest speaker on the following topics: copyright laws, privacy, and ethics.	Professionals (lawyers, university professors), Media organizations as resources (CBC)
VP 7.2: Identify copyright issues on a favourite music or video recording.	Copyright Matters: Some Key Questions and Answers for Teachers. (Wanda Noel, 2000)
VP 7.3: Identify steps involved in registering an original video production.	http://www.cmec.ca/else/ copyright/matters/ CopyrightMatters.pdf
	Canadian Government information on the Internet
	cgii.gc.ca/f-IP-e.html#pt2
	Entertainment Code of Ethics www.amisontario.com/eic.php
	Alliance of Canadian Television and Radio Artists
	www.actra.ca

DRAFT

GCO: form strategies to review, develop and convey effective multimedia content

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

VP 8: develop an effective concept or idea from initial proposal to storyboard and script

The purpose of the video will be to support a focussed message delivered via the medium of the World Wide Web.

VP 8: Respond to a suggested topic by brainstorming, webbing, flowchart etc. considering the implications of delivery via the World Wide Web. This may be aided with the use of graphical organizer software.

VP 8: Treatments: A treatment is usually a description of what will happen in the video written in paragraph format. A treatment often will include the theme or plot, characters and technical considerations.

VP 8: Storyboards: Develop the director's blueprints for shooting the production. Cast the characters and choose the location. Provide example storyboards and emphasis that drawing skills are not essential for this activity. Organize individual shots and provide suggestions for audio, lighting, shots, setting, scenes, and prop sounds.

DRAFT

Evaluation and/or Assessment	Resources/Notes

<u>Resources/notes</u>

VP 8.1: Brainstorm to create a flowchart of ideas for a video from a suggested topic.

VP 8.2: Write a treatment for a short video segment.

VP 8.3: Write a brief script and illustrated storyboard in response to assigned topic or project.

Free Storyboard Pro software from Atomic Learning. Download from http:// www.atomiclearning.com/ storyboardpro

Inspiration 7.5

DRAFT

GCO: demonstrate skill in using a variety of technologies in the preparation of original multimedia

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

VP 9: identify and apply basic video concepts and cinematic devices

VP 9: Videographers apply effective compositional principles; rule of thirds, fill the frame, leading lines, depth of field, background, etc

VP 9: Basic considerations in framing a shot are: the territory used in the shot, how close an object appears to the viewer, where to place the object relative to the screen edges and how to make viewers perceive a complete object when only parts of it are visible on the screen. Terminology includes:

- extreme long shot (xls) used to establish a location
- long shot (ls) frame person from head to foot, often used to follow a character
- medium long shot (mls) a frame person from knees up
- medium shot (ms) frame a person from the waist up, closer view of the action
- medium close up (mcu) closer view of character, from the chest up, used to show a reaction or interview
- close up (cu) show details of an object or intimate shot of the character (head only)
- extreme close up (xcu) show minute detail (part of face)

VP 9: Camera Positioning:

- eye level: camera aligned with subject whether standing or sitting
- high angle: camera is positioned above the eye level of the subject and tilted downward
- low angle: camera is positioned below the eye level of the subject and tilted upward
- point of view: camera shows view of scene from the character's eyes

VP 9: Camera Movement:

The camera often must move to keep the subject framed, to reveal more information or to provide variety, interest and style.

Standard camera movements include:

- tilt: camera tilts in sync with a moving object
- pan: camera scans one object of interest to another
- zoom: camera pulls in or out to reveal information
- dolly: camera is placed on a cart to film a long continuous shot with movement

Evaluation and/or Assessment

Resources/notes

VP 9.1: Tape an effective example of each of the different ways of framing shots. eg. wide shot, long shot, full shot, etc. Assess the production of peers and select samples for a portfolio. Compare the selected samples to those of professionals.

VP 9.2: Record a sample of each shot style with combination of camera position and movement. Create a rubric to discuss the effectiveness of the resulting video clips.

VP 9.3: Crop pictures in a video editor based on shot sized for television format.

VP 9.4: Find film/video examples. Present these examples to the class to illustrate camera position, camera moves, types of shots, etc. Create a checklist of examples of cinematic devices used to create these film/video.

[Provide students examples of shot sizes, i.e. extreme long shot, long shot, medium-long shot, medium shot, medium close-up, close up, extreme close-up.

Provide students examples of types of shots, i.e. establishing a shot, reaction shot, cutaway, etc. See http://www.atomiclearning.com/freeexamples.shtml]

Nortel Networks Kidzonline

http://www.kidzonline.org/teachit/Video_DV.html

TV Production

http://www.cybercollege.org/tvp_ind.htm

Focus

http://www.focusinfo.com/articles/

DRAFT

GCO: **form strategies to review, develop and convey effective multimedia content**

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

VP 10: demonstrate the ability to select the shot (or shot sequence) to convey an intentional message

VP 10: Plan different shot selection scenarios using storyboarding and scripting exercises. Examples of intentional messages occur in videos for organizations such as MADD, SADD, Workers Compensation Board, Multicultural Association, etc.
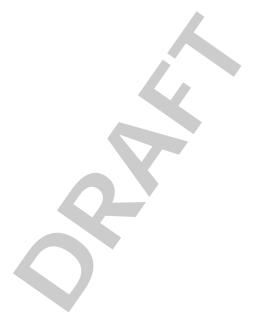
DRAFT

Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
VP 10.1: Generate a storyboard assignment based on a choice of a number of scenarios that have been provided. For example: (1) impaired driving (2) smoking (3) workplace accidents (4) inclusion.	(video produced by Gordie Cox at Col Gray)
VP 10.2: Given the first shot sequences, complete the frames of a storyboard.	
VP 10.3: Film a variety of scenario sequences. Utilize the best shot size and length and place in effective sequence.	

DRAFT

GCO: demonstrate skill in using a variety of technologies in the preparation of original multimedia

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

VP 11: implement the production/filming schedule

VP 11: Cast roles, schedule rehearsals, choose teleprompter, locate props and costumes, follow story board/film schedule, plan special effects, and shoot the project scenes.

VP 11: Demonstrate best use of equipment to solve a production problem (i.e. microphone, zoom lens, lighting, tripod).

VP 12: produce an edited version of the video (audio and video)

VP 12: Use various procedures such as field, crash and post-production editing.

VP 12: Utilize the five stages of non-linear editing; log and capture, trim, sequence (timeline), effects, output to desired media.

VP 12: Consider various file formats available to deliver audio and video content. Discuss advantages and disadvantages of the more common formats. Low resolution formats may sometimes be desirable. Streaming video technique allows the user to start viewing or listening to incoming media without having to wait for the entire file to download.

VP 13: demonstrate the ability to assess and evaluate final projects of ones own and others

VP 13: Interpret the relationship between the intention of the original production and the outcome in their own work. Analyze the work of others to assess the relationship between the intention of the original production and the outcome.

Evaluation and/or Assessment	Resources/Notes

VP 11.1: Proceed to the production stage (shooting footage).

VP 11.2: Form groups and assign final project, where students will begin by using the skills covered thus far (conceptualization, planning, storyboarding) and work within given roles, assigned by the group.

VP 12.1: Edit raw footage with consideration given to the five stages of non-linear editing (log and capture, trim, sequence-timeline, effects and titling, output to desired media) and generate title and credits.

VP 12.2: Convert the production to an alternative media. (web site or CD ROM)

VP 13: Consider the purpose of the original production. Were the ideas or messages effectively communicated? Who was the intended audience? Was the storyboard followed? Were technical aspects of the production appropriate? Did the production group work together effectively? View screen productions as a class and provide opportunities for constructive feedback. Rubrics or checklists may be used or developed.

Teleprompter Software?

DRAFT

Animation Principles

DRAFT

GCO: demonstrate an understanding of the history, evolution and future of multimedia technologies and its influence on society and culture

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

AP 1: examine the purpose and advantages of using animation	AP 1: Animation is used in preference to live action if "the concept" can be communicated more visually dramatic to the intended audience. Unique features of animation include: • performing activity not possible in real life or dangerous • models and props do not need to be built • travel to far away set locations does not need to occur • more set variables can be controlled such as size, shape, position, speed, viewpoint, distance, scene, and visuals such as texture, pattern, shading and colour • universal appeal - reduce racial distinction and nationality in animated characters and objects; language soundtracks more easily changed • enhanced fantasy and special effects to impact setting and atmosphere; create emotion and the "unexpected"
AP 2: describe the historical developments and evolution of animation	AP 2: Recognize the contributions of animation inventors and their respective innovations. Examples include: Joseph Plateau's phenakistiscope, William Horner's zoetrope and Eadweard Muybridge's photography *Silent Film Era*: Winsor McCay, 1914, *Gertie the Dinosaur*; Otto Messmer, 1919, *Felix the Cat*; Max Fleischer, 1920, *Koko the Clown*; Walt Disney & Ub Iwerks, 1927, *Oswald the Lucky Rabbit.* *Golden Era*: Walt Disney, 1928, *Mickey Mouse*; 1932, *Flowers and Trees* (full colour); 1933, *Three Little Pigs*; Max Fleischer, 1930, *Betty Boop and Popeye the Sailor*; Willis O'Brien, 1933, *King Kong.* *TV Era*: Chuck Jones, 1950's, *Bugs Bunny, Road Runner*; William Hanna & Joseph Barbera, 1950's, *Tom and Jerry*, 1960's, *The Flinstones*; John Hubley, 1960's, *Mister Magoo*; George Pal, 1951, *When Worlds Collide*, 1952, *War of the Worlds.* *The Renaissance*: Bill Melendez, 1965, *A Charlie Brown Christmas*; Chuck Jones, 1966, *How the Grinch Stole Christmas*; Disney Co., 1967, *Jungle Book*; 1977, *The Rescuers*; 1989, *The little Mermaid*; 1991, *Beauty and the Beast*; 1992, *Aladdin*; 1994, *The Lion King*; Steven Spielberg, 1988, *Who Framed Roger Rabbit*; 1988, *The Land Before Time*; Matt Groening, 1990's, *The Simpsons*; Nick Park, 1992, *Wallace and Gromit*; 2000, *Chicken Run*; Mike Judge, 1993, *Beavis and Butthead.*

Evaluation and/or Assessment	Resources/Notes

AP 1:1 Identify the rationale for creating an animated production rather than a live action.

Consider the following:
- characteristics of animated products
- different creativity and skill sets required
- different audience
- do not have to fit a traditional racial profile
- actions that may be done with animation that cannot be done with live action
- cost implications
- characters can be "branded" and used in marketing and promotion

AP 2:1 Create a time-line to illustrate pioneers in animation and their innovations.

AP 2:2 Build a zoetrope and/or flipbook to illustrate simple animations

Macromedia Flash Software MX-2004 Studio

Animation World Network www.awn.com

Toronto Animated Image Society http://www.awn.com/tais/

The Complete Animation Course
by Chris Patmore
Zoetrope page 48
Flip books pages 50 and 51

Women in Animation
 www.womeninanimation.org/

Acaemy of Motion Pictures, Arts and Sciences
http://www.oscars.org/teachersguide/animation/index.html

GCO: demonstrate an understanding of the history, evolution and future of multimedia technologies and its influence on society and culture
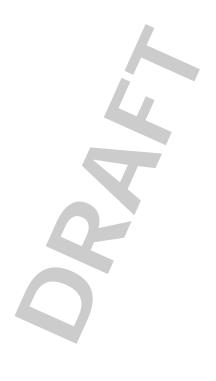
Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

AP 3:   describe methods and techniques used to create animation

AP 3:   Methods of creating animation include: stop motion, cel, web and CGI animation.

- stop motion (also called stop action animation, encompasses a wide variety of styles, including *claymation, puppet animation, pixilation* and *time lapse.*
- cel animation (traditionally drawn on a transparent cel, or paper)
- web animation (describes any form of animation delivered over the internet, though mainly used to refer to specialized 'web specific' formats such as animated GIF's, Flash movies or a variety of 3D
- CGI (computer generated imagery)

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Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
AP 3.1: Create a matching activity that identifies different methods of creating animations to well known animated film. (e.g. *stop motion, cel animation, web animation and CGI*)	[Print / Video / Computer examples]
AP 3.2: Demonstration of how to use basic equipment to create various styles of animation.	
AP 3.3: Guide the development of drawing skills and suggest shortcuts in the creation of web animations.	
AP 3.4: Demonstrate preparation of materials for the type of animation being produced eg. plasticine, wire or cardboard models, film, and artwork. Allow the opportunity to shape own original creations.	
AP 3.5: Establish workstations to experiment with various methods of creating animation.	
AP 3.6: Use appropriate equipment to capture images and develop strategies to edit the final product so that the images move smoothly.	

DRAFT

GCO: understand ethical and legal issues asociated with multimedia technology

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

AP 4: demonstrate an awareness and responsibility for ethical behavior in animation

The "Movie Picture Production Code of 1930" sometimes referred to as the "Hays Code" imposed a type of censorship on what content and behaviour was appropriate in film and TV produced and broadcast within the United States. The effectiveness of the Hays Code eroded during the 1960's. Since that time no "umbrella code of ethics" regulates content of film and new media such as computer and video games. Manny Romero (Dec, 2002) advocates that the industry be proactive and implement a "Voluntary Code of Ethics" before law makers impose one.

It has been established that certain audiences will purchase products that appear in film or TV. Media may alter ones sense of reality as inanimate objects come to life or film characters perform unrealistic activities. Investigators of the Columbine School shootings in 1999 commented that the exposure to violent video games, music and movies may have affected the two youths involved and their distinction between reality and fantasy.

Appropriateness of materials is often a reflection of the attitudes, standards and values of the community. Does the definition of community change? ie. family community, school community, or geographical community. When is humour funny and when does it become insulting? Does viewer age have an influence on whether the material is appropriate? Who decides what is appropriate? Is censorship ever right? When does the artist have "to be true to the intent of their creative works"? Other considerations might include:

• degree of violence and shock effect "gore"

• gender issues

• racial sterotyping and other culturally sensitive topics such as mental illness, drug use, AID's and sexual orientation

• language usage, slang terms and music soundtracks

• inappropriate setting, hidden message, or implied sexual connotation

Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
AP 4.1: Brainstorm a code of ethical guidelines for creating an animated piece. This might take the form of an evaluation rubric.	The Complete Animation Course, by Chris Patmore
AP 4.2: Use the guidelines generated in AP 4.1 to critique popular animations of the students' choosing. (ie. TV, film, video game)	Media Awareness Network <u>http://www.media-awareness.ca/english/issues/index.cfm</u>
AP 4.3: Discuss a variety of well known animated videos or TV programs with students (ie. Beavis and Butt Head, South Park, Kevin, Spencer, The Simpsons). Consider the following: Who is it made for? Is it (age) appropriate? What language/terms are used? Is it offensive? Is it sexist? Is it racist? Is it violent?	
AP 4.4: Apply ethical guidelines whenever creating original animations.	

DRAFT

GCO: demonstrate an understanding of key aspects of multimedia production individually or collaboratively including roles and responsibilities of team members

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

AP 5: demonstrate responsible, safe operation and care of equipment and material	AP 5: Respect equipment, materials and work of classmates. Maintain a clear work area and return tools, materials and equipment to their storage locations when finished with them. A rule of thumb is not to allow use of a particular piece of equipment until the potential user is oriented in its specific use, controls, features and care.
AP 6: prepare an outline and/or formulate a storyboard	AP 6: Emphasize the importance of planning the animation. Prepare the outline or storyboard keeping the following elements in mind: • keep the concept simple, try to minimize the background, clutter • use personification to try to give an object human qualities • give objects emotion • create interaction between objects • a tension or conflict between objects will enhance the concept • plan for sound in order to enhance the short
AP 7: apply the stages of the creative process to complete an animation project	AP 7: Create a project proposal to suit a particular animation style. Use strategies that will promote creativity and problem solving at various stages throughout the concept, design and production stages. Some of these strategies include brainstorming, webbing, timelines, visual representation of text, debating, writing ideas separately before sharing with the group, and use of graphical organizer or storyboarding software. Once a concept has been planned "on paper" the next creative endeavour will be to design the "characters" and construct prototypes in the medium being used.

Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
AP 5.1: Complete an orientation to equipment and demonstrate responsible use and care of work area and materials.	Free Storyboard Pro software from Atomic Learning. Download from http://www.atomiclearning.com/storyboardpro
AP 6.1: View a simple animation; develop a storyboard to show the progression of events and items that the animators had to consider in creating the animation.	Inspiration 7.5
AP 7.1: Develop a rubric identifying required elements of an animation short.	
AP 7.2: Assign groups to work collaboratively in creating the concept for an animation short. Teams will develop "proposals" for animations and submit a written storyboard and periodic project updates once a proposal has been approved.	
AP 7.3: Provide feedback to peer groups regarding the concept of a proposed animation and "mock" field test or trial of the storyboard.	

GCO: form strategies to review, develop and convey effective multimedia content

Elaboration- Strategies for Learning and Teaching

SCO:	
Students will be expected to :	

AP 8: incorporate sound to enhance an animation, where applicable

AP 8: Sound is used to support and enhance a message and also to establish atmosphere. Background music, voices, and sound effects, such as waves, wind, animal noises, applause, laughter are examples.

AP 9: identify file formats for distributing animation

AP 9: Graphic Interchange Format (GIF) allows for animation through presentation of a series of bitmap images. Flash is an interactive format that is made up of vector images which allows smaller file sizes. Flash uses the .FLA file extension for source files and .SWF extension for the Flash "movie" that is created and played. Flash files are widely used on the Web because the SWF format is very space-efficient. Movie files (AVI, MPG, etc.) files are massive by comparison and are not designed for interaction.

AP 9: Codec (COder/DECoder or COmpressor/DECompressor) hardware or software encodes/compresses and decodes/decompresses audio and video data streams. The purpose of a codec is to reduce the size of digital audio samples and video frames in order to speed up transmission and save storage space. The goal of all codec designers is to maintain audio and video quality while compressing the binary data further.

AP 10: demonstrate the ability to assess and evaluate final animations of one's own and others

AP 10: Consider the purpose of the original animated production. Were the ideas or messages effectively communicated? Who was the intended audience? Was the storyboard followed? Were the technical apects of the production appropriate? Did the animation team work together effectively?

Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
AP 8.1: Create or acquire appropriate audio for an animation project.	Sound clip search engine: www.findsounds.com
	Music clips (educational use):
AP 9.1: Identify advantages and limitations of different animation formats.	www.freeplaymusic.com
AP 9.2: Select an appropriate medium(s) for the presentation of completed animations in a portfolio.	Royalty Free CD??
AP 10.1: View animations as a class and provide opportunities for constructive feedback. Rubrics and checklists may be used or developed for this activity. (see AP 7.1)	

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GCO: build an understanding of the evolving nature of technological literacy and capability, and their impact on education needs and career options
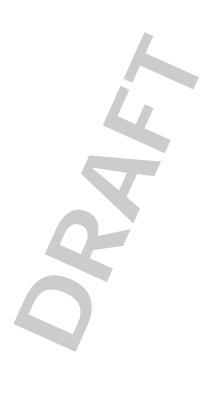
Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :
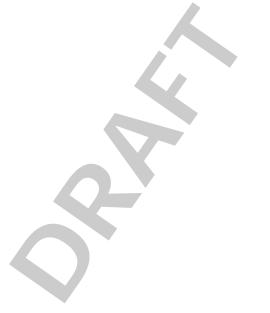
AP 11: explore career opportunities in animation

AP 11:   Animators may work in various fields such as film, television, the Internet, CD ROM production, product design, architecture and interior design. The roles performed within each industry differ widely.

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Evaluation and/or Assessment	Resources/Notes
	Resources/notes
AP 11.1: Arrange a field trip, guest speaker, teleconference or video conference. Contact a professional who works in animation.	HRDC Essential Skills
	http://www15.hrdc-drhc.gc.ca/english/general/search_e.asp
AP 11.2: Produce a profile of one animation career.	Application of Working and Learning National Project
	http://www.awal.ca/
	Job Futures PEI
	http://pei.jobfutures.org/en/noframes/Home.html
	Canada Prospects Magazine
	http://www.careerccc.org/canadaprospects/
	HRDC WorkSearch
	http://worksearch.gc.ca/index.html
	Video Exploration of Careers, Transitions, Opportunities and Realities
	http://www.vector.cfee.org/english/index.php
	Technology PEI Government
	http://www.techpei.com

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DRAFT

Web Authoring

DRAFT

GCO: apply critical thinking, research and problem solving strategies in the development of multimedia creations

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 1: identify the site purpose

WA 2: create and maintain a file structure to effectively manage media

WA 1: Shneiderman (1998) provides the following guidelines for creating hypertexts that allow users to concentrate on "the message":

- identify the intended audience

- ensure meaningful structure for the audience

- organize information into components that deal with one theme or idea

- show interrelationships by using links to related articles

- design the link structure so that navigation is simple and consistent throughout the site. Often a metaphor is used so users can anticipate the next action ie. rooms in a house or items in a children's playground to correspond to site activities

- ensure that spelling and grammar are correct

WA 2: Benefits of effective web site file structure maintenance include the ability for the programmer to find files quickly and easily. The structure and maintenance of the site should be easily understood.

When a page or project is no longer viable, up-to-date, or appropriate, it is very simple to delete the page or project if it is all in one folder. This ensures all images and files with page or project are also deleted.

WA 2: Important file and folder naming conventions are required for the Internet.   Spaces, and special characters (such as #,&,%,^) do not display in the URL as such and make the page very difficult to type in.

Some web editing software, by default, names pages sequentially as page 1, page 2, etc.   These are not descriptive enough to aid the programmer in knowing what they are. Rename files with simple descriptive names as they are saved. Do not include spaces in these file names.

Evaluation and/or Assessment	Resources/Notes
	Resources/notes

WA 1.1: Visit a web site that is directed at children and one that is primarily directed at adults. Identify differences in the way that information is presented to each group.

WA 1.2: Brainstorm possible metaphors that might be used with a web site describing exotic animals; a collection of student poems; or businesses located in a town.

WA 1.3: Brainstorm the minimum wesbsite features of the following:

1) Doctor's Office

2) School

3) Hockey Team

4) Recording Studio

Brainstorm enhancement features for the above and state how they can be implemented to lessen user frustration.

WA 1.4: How would a high school web page differ from an elementary school web page? How would a Canadian government web page differ from The Confederation Centre Gallery web page? Why?

WA 2.1: General File Management Skill Review. Demonstrate how to store a file, copy, paste, move, delete.

WA 2.2: Brainstorm the content for a webpage project. Outline the main ideas within a written down file structure consisting of appropriate files, names, and subfolders.

GCO: apply critical thinking, research and problem solving strategies in the development of multimedia creations

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 2: create and maintain a file structure to effectively manage media

WA 2: Web Site Structure consists of one main images/graphics folder. In this folder images which are re-used throughout the website are stored. The main file, which should always reside in the root folder, will be named index.htm. Subfolders are built from a category, department or project. Subfolders should contain separate folders for graphics, video or audio.

WA 2: File Structure affects linking. Direct or absolute links are links which contain the entire URL of a specific page. These should be used for links to pages not included in the site being worked on. Relative links point to files included within the web page file structure being worked on. Higher end web editors have the ability to change links when they are relative when the author drags and drops the files to which there are links throughout the site without

WA 2: The anatomy of a URL demonstrates the entire site structure. The initial section after http:// is the server address (eg. www.edu.pe.ca) Folders and subfolders are separated by a backslash (www.edu.pe.ca/journeyon/). Individual files finish the URL with a file extension (eg .htm, .asp, .php, .jpg, .avi, etc.) www.edu.pe.ca/journeyon/ pd.htm

WA 2: Files are initially created and the structure is maintained locally on the users' computer system. This structure is transferred to a file server by using FTP. Some web page editors allow the user to edit files directly on the remote server.

Evaluation and/or Assessment	Resources/Notes

WA 2.3 Perform an internet search to determine the rules for relative linking when it comes to coding. What does a file without a character in front of it mean? What does a file with a combination of ../ mean (or ../../)? What does a file with a word and a forward slash mean before the file name (eg. graphics/index.html)?

WA 2.4: Draw the file structure for the following URL:

http://www.edu.pe.ca/journeyon/pro_d_pages/frontpage/class_webpage_exercise.htm

WA 2.5: Write the URL for a specific file based on a file structure provided.

WA 2.6: Demonstrate the use of FTP for transferring and maintaining files.

DRAFT

GCO: **explore personal and creative ways to use multimedia tools for aesthetic expression based upon knowledge of the elements and principles of design**

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 3: apply principles of
visual design to the web

WA 4: design for digital display

WA 3: Unity, pattern, movement, rhythm and contrast are principles that are applied to make media appear clean, neat and professional. Web design makes use of these principles and sometimes uses slightly different terminology from other media.

WA 4: Individual users may set their screen size to a variety of different resolutions. Most use 800 x 600 pixel resolution.

If the web page designer plans for a larger screen size the end result is that a user with a smaller screen size will end up having to use the scroll bars to experience the entire page.

There are several methods to accomplish a flexible layout or compensate for wasted space.

1) Use a table to layout the page and use the percent sizing. This means the table will stretch/contract to fit the screen; however, when this occurs, the elements located in the page will be spaced differently.
2) Design using a table to constrict the page elements and define the width in pixels (usually 750). Pages designed in this manner will display intact; however, the main table will appear where it is aligned. It is a good idea to centre the main table in order to evenly align the "white space" (negative space) outside the table.

WA 4: The placement of information must be considered carefully:
1) important information should be near the top of the page
2) blank space (white space) is also important to decrease eye fatigue (this is especially important in text based sites)
3) bullets, horizontal rules, titles, subtitles and graphics, etc. also break up the flow
4) font size and colour can also help direct the reader's attention causing them to focus on the important elements.

WA 4: The widely accepted view for the index (beginning) page of a web site is that it must be short and quick to load (i.e. it should be the size of a browser window).

Evaluation and/or Assessment	Resources/Notes

WA 3.1 Visit different web sites. Identify those that are more organized and visually appealing. What principles have been applied to make them appear that way?

WA 3.2 Locate two web pages that demonstrate the principles of design.

WA 3.3 Visit the web sites of two large corporations. Close your eyes as the page loads. Note where your eyes first focus on the page; where do they go next on the page? They are probably following contrasting elements. Do these elements lead in a logical path through the information?

WA 4.1: Provide an example website (which is confined by a 600 pixel width table) designed for an 800 x 600 pixel webpage. View this website in several different screen resolutions.

Change the design to fill a 1024 x 768 page and to centre align on a 1025 x 768 page without changing the width using a WYSIWIG Web Editor.

WA 4.2: Provide a basic webpage which has been designed without an intended size and without a constraining table. Adjust the design for an 800 x 600 pixel set up and a 1024 x 768 set up.

Williams, R. & Tollett, J. (2000). The Non-Designer's Web Book, 2nd Edition. Peachpit Press, Berkeley, CA

Cool Web sites

http://coolwebsites.org

Course CD rom/Website of examples of effective uses/non-effective uses.

Tech Corps - Web Teacher

http://www.webteacher.org/windows.html

Univeristy of Saskatchewan, Web Design for Instruction

http://www.usask.ca/education/coursework/skaalid/index.htm

Resource Centre for Academic Technology, University of Toronto

http://www.utoronto.ca/upload/stuff/anatomy.html

["My Webpage Template" on Course CD/Webpage

Company files on Course CD/Webpage]

GCO: explore personal and creative ways to use multimedia tools for aesthetic expression based upon knowledge of the elements and principles of design

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 5: identify components of a web page that form a site identity

WA 6: create a masthead and footer

WA 5: Site identity refers to the establishment of a theme for a web site. It encompasses many visual aspects such as layout, masthead (header), footer, graphics, font, the use of colour and navigation.

WA 6: Web sites divide and subdivide pages using headers. A common header known as a masthead identifies each page as part of the overall site. The masthead usually incorporates the following:

- company/organization logo
- company/organization title
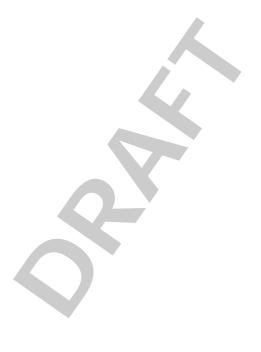- company/organization colours

The design of mastheads support the overall theme for the site. It can include navigation elements. Some sites incorporate major sponsors/advertiser information in this area. Buttons and other graphics should be designed in conjuction with the Masthead to reflect the overall appearance of the site.

WA 6: Footers can contain the following: page update/posting information; company information; basic site navigation (as the page has probably required scrolling and the main navigation is no longer visible); copyright and legal information; a link to the webmaster or owner of the page for questions/problems.

Evaluation and/or Assessment

Resources/Notes

<u>Resources/notes</u>

WA 5.1: Provide a text based layout of a web page. Enhance the text to direct the reader simply by changing fonts. (style, size, colour, etc)   Only Windows (safe) fonts should be used.

WA 6.1: Provide fictitious information for a company home page. Design a masthead on paper.

WA 6.2: Visit a government web page, a school web page and a business web page. Is there a page footer? Identify common information shown in the footer of the page.

DRAFT

GCO: explore personal and creative ways to use multimedia tools for aesthetic expression based upon knowledge of the elements and principles of design

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 7: select fonts

WA 7: A good rule of thumb is to use a maximum of two fonts: one for text passages and one for accents such as titles, buttons, etc. Use common fonts on web pages as speciality fonts are replaced when viewed on the users' computer. Designers can provide the font for download, however, they must be aware of copyright for the fonts. Most people will leave a site rather than download the font as it takes time and they often are, understandably, concerned about downloading files. A second consideration is that each installed font will consume computer memory.

In the end ask the question: "Is that font really needed?" If the font is important to the design of the site and is used for titles, etc. consider using it in graphic format (i.e. creating a small graphic with the font used).

WA 8: select colour and graphics

WA 8: Choose colours from a web safe palette to ensure compatibility between different types of computer systems. When choosing colours for display on a web page. Use light backgrounds and dark coloured text for ease of reading and in anticipation that the page could be printed. The ability to use an image as a background also contributes to this issue. Many backgrounds are very busy and conflict with viewing text.

Demonstrate that when a computer does not have the capability to view the colour, it will do one of two things:

• it changes the colour — and not always to the closest one!
• it combines two colours and interweaves them creating a grainy approximation of the colour

WA 8: Graphics are useful in web sites in a number of ways:
• attract attention to particular material and help the user remember the information
• enhance enjoyment or evoke emotion
• increase comprehension and relay information not easily transmitted through text
• symbols help users compensate for poor reading skills

Evaluation and/or Assessment	Resources/Notes

WA 7.1: Perform an Internet search for "standard windows fonts" and "standard mac fonts." Are the fonts the same for both platforms? Do your findings have implications for web page design?

WA 8.1: Create a webpage with text on it in the Verdana Font default size. Use the following colour combinations and rate them on a scale of 1-10 in terms of "readability".

Background	Name
Black 000000	White FFFFFF
White FFFFFF	Black 000000
Red FF0000	Green00FF66
Pale Yellow FFFFCC	Dull Blue 000066
Dull Teal 006633	Pale Dull Pink FF99CC

Discuss the results.

http://www.visibone.com/colorlab/

[From Course CD Rom/ Website??]

WA 8.2: Visit two web sites that make extensive use of graphics. Identify the purpose of including these graphics for the reader.

GCO: **explore personal and creative ways to use multimedia tools for aesthetic expression based upon knowledge of the elements and principles of design**

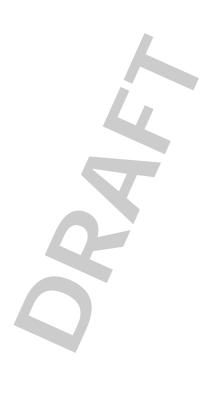**Elaboration- Strategies for Learning and Teaching**

SCO:

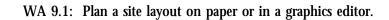Students will be expected to :

WA 9: create a site identity

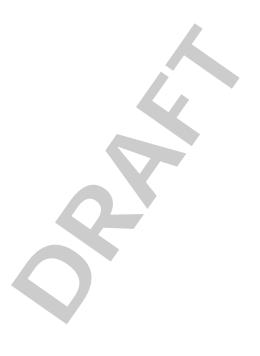WA 9: Every page should have a theme which ties it to the site. This allows users to recognize pages which are part of the same site. Creating a template for pages assures a visual consistency for the site and simplifies page creation and maintenance.

DRAFT

Evaluation and/or Assessment

Resources/Notes

WA 9.1: Plan a site layout on paper or in a graphics editor.

DRAFT

GCO: form strategies to review, develop and convey effective multimedia content

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 10: create a navigation
structure

WA 10: The most important element in designing a navigation format for your website is consistency. The same general format should be used throughout the site so that the user can easily find their way around.
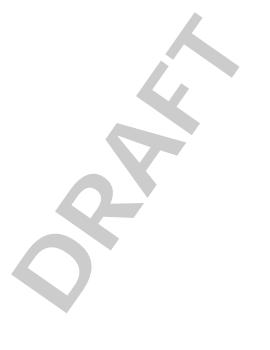
Remember the following:

- use a breadcrumb which is a "You are here" symbol identified by a graphic or highlighted colour in the navigation bar
- group navigation elements together and place them in the same spot on each page (this is often done through the use of a navigation bar)
- vertical navigation bars are usually located on one side of the page — they can take up quite a bit of room and can be detailed; dropdown menus can be used, but are not as user friendly.
- horizontal navigation bars are located under the masthead or in the footer. Due to space constraints they do not include much detail; however, they can use dropdown menus quite easily

WA 10: When planning a site navigation it is important to categorize similar pages.   These main categories and subcategories should be included in the navigation.

WA 10: The navigation structure should be flexible enough to accommodate growth without requiring the entire site to be updated.

WA 10: By default, web browsers use blue to identify links to sites that have not been visited and purple for those that have been visited.

Evaluation and/or Assessment

Resources/Notes

WA 10.1: Visit three websites identifying their navigational elements. Does it appear that the designers carefully thought out the navigational design? Is there one particular format that is easier to use than the others?

WA 10.2   Demonstrate several examples of different navigation methods. Discuss the merits and pitfalls of each.

WA 10.3   Provide a thoughtweb generated for a web page on a specific topic. Categorize it and then develop a navigation format for it.

WA 10.4: Visit three websites identifying their navigational elements. Does it appear that the designers carefully thought out the navigational design? Is there one particular format that is easier to use than the others?

DRAFT

GCO: form strategies to review, develop and convey effective multimedia content

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 11: select a media for
        a web site

WA 11: Potential choice of media includes: digital photos, images, flash, video, java(script), audio etc.

Animation focuses attention. However, it is hard to concentrate on reading a message if your brain is attending to the spinning logo or the cycling advertisement at the top of the screen. Rieber (1990) states that "designers...must resist incorporating special effects, like animation when no rationale exists"

Video that is included on a site must include information about its size so that users can decide whether or not they want to wait the time required to view the media. Never incorporate the automatic downloading of a video into the loading of a page.

Audio must be produced on the best quality sound equipment the user can obtain. Reeves and Nass (1996) found that people will put up with poor video but are very affected by poor audio. Care must be taken not to overload the user with competing visual and audio information. People cannot read text and listen to spoken audio at the same time - their brains cannot process the competing signals without tuning one out or the other.

WA 11: Gif, .png and .jpeg are the main graphics file formats for web publishing.

To reduce download times, use the smallest graphic size possible (file size not physical size)

- use .jpeg for realistic graphics (photographs, art, images with shadows and shading)
- use .gif for graphics with a few colours and transparency

WA 11: Amateur web authors resize images visually on the screen, but they do not physically crop or resize the image using a graphics editor. The large file size results in a a long download time and the image appears small on the page. The visitor still waits the time it takes for the image to download.

Evaluation and/or Assessment	Resources/Notes

WA 11.1: Explain examples of each media and explain how it is used, the benefits of using each and situations which might hinder its delivery.

WA 11.2 Demonstrate effective use of media. (quick download, link/text options, seamless webpage integration)

WA 11.3 Identify criteria and create a rubric or checklist to critique sites for effective/non-effective use of media.

WA 11.4 Save a graphic file in various formats and note the size vs image quality.   The image property dialogue box of some software programs, such as Macromedia Fireworks and Paint Shop Pro, provides information on estimated download times. Web editors will give an estimated download time for entire web pages. There are various online sites that will provide this information to web authors.

Online web tools for calculating image resolution and download times.

www.netmechanic.com/accelerate.htm

www.gifworks.com

Course CD Rom/Website of various graphics saved in correct/best /optimum format and saved in the worst format.

PEI Department of Education School Finder

http://www.edu.pe.ca/finder/schoolfinderindex.asp

GCO: apply critical thinking, research and problem solving strategies in the development of multimedia creations

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 12: describe image maps used to make interactive graphics

WA 12: Image maps are a combination of image and HTML coding. The code creates "hotspots" on the image which may be linked to files or web pages. Often hot spots are used as navigation elements in web pages. Should this be done, the designer must include an alternative navigation bar in case the image map does not work with a particular browser.

WA 12: Large images can be "sliced" into smaller portions held together by an invisible table. Each part of the image loads at the same time and encourages the visitor to remain as the image is revealed. Elements of the image can be used to link to files, webpages, popups, etc. similar to a hot spot.

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Evaluation and/or Assessment	Resources/Notes

WA 12.1: Create an invisible table using a web editor to serve as a placeholder for content (graphics and text)

WA 12.2: View examples of websites that have a combination of sliced images and hot spots. Determine where the hot spots are and where the slices are. Critique a web site created with hot spots:

- recognize and describe the hot spots
- identify the function of the hot spot
- does the site provide a text based navigation
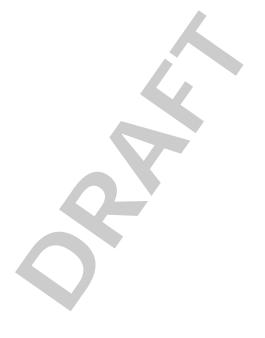- evaluate the effectivenesss

Royal Academy of Arts
www.royalacademy.org.uk/

Other examples:

CBC news:
www.cbc.ca/local/

Weather:

www.weatheroffice.ec.gc.ca/
canada_e.html

DRAFT

GCO: apply critical thinking, research and problem solving strategies in the development of multimedia creations

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 13: examine issues and adopt solutions for accessibility

WA 13: Some issues that require special attention for accessibility are:
- hearing impairment (audio)
- visual impairment (text readers, colour blindness, browsers, special features)
- learning disabilities (text readers)
- physical impairment (navigation)

In addition, socio-economic status and situation can influence the user's accessibility (issues such as browsers, plug-ins, line speeds and computer memory/speed)

WA 13: Text readers (also known as screen readers) are used by those who are visually impaired or who have reading difficulties.

Many text readers will ignore tables and read horizontally across a page. Text readers use the TAB key to move between links. Columns should not be used in a text based site. Obvious keywords must be used in ALT image tags that describe a link.

WA 13: Colour Blindness
- the most common type of colour blindness is the inability to distinguish red and green
- sometimes a secondary concern is blue and yellow
- some solutions: use strongly contrasting colours between background and foreground and use bright colours

WA 13: Browsers

IE and Netscape are the most common browsers. The W3C Web Accessibility Initiative has compiled a list on Alternative Web Browsing to accommodate people requiring special adaptation. These browsers allow the user to change the size of text and to turn off images. Consider how this might affect the site design.

WA 13: Audio
- sound files are a problem for those who have hearing difficulties or are using a computer which does not support sound
- provide an option for individuals to access the audio in a text based format

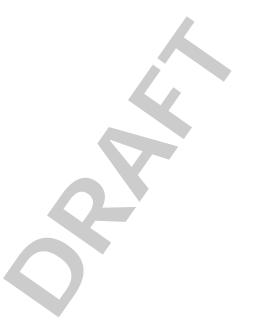| Evaluation and/or Assessment	Resources/Notes
	Resources/notes
WA 13.1: Check two school web sites in an online colour blind checker such as vischeck.	http://www.w3.org/WAI/ References/Browsing
WA 13.2: Search for an alternative web browser and identify accessibility features.	http://snow.utoronto.ca/access/ tools/index.html
WA 13.3: Visit SNOW and BOBBY Sites to check a particular site for accessibility.	
	provide URL for vischeck
	W3C Web Accessibility Initiative
	http://www.w3.org/WAI/ER/ existingtools.html
	Bobby - Accessibility Portal
	http://bobby.watchfire.com/ bobby/html/en/index.jsp
	Cynthia Says - Accessibility Portal
	http://www.cynthiasays.com/

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GCO: understand ethical and legal issues associated with multimedia technology

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 14: appreciate and comply with copyright and intellectual property laws

WA 14: Intellectual Property and Copyright laws exist to protect the creators of original works. This protection exists whether the owner has applied for formal copyright protection for a particular work or not. Copyright law has become increasingly complex in response to a sophisticated communications environment. In this high-tech age, there are many new ways of producing creative works and communicating with audiences. This ease of use and flexibility also makes it harder to control unlawful use. Laws relating to electronic media are in an evolutionary process in Canada. Point out that laws in the United States, especially in the area of "Fair Use For Education" do not apply in Canada.

WA 14: In Canada, creators of original works (images, video, web pages, etc.) have copyright protection for their lifetime, plus their heirs have rights for another 50 years. After this time passes, in most cases, the work becomes part of the public domain.

WA 14: Permission/Right of Use Statements are included on most web sites. Before graphics or other resources may be used the owner should be asked for his/her permission. The "Click to Learn Site" in the resources section, to the right, includes examples of "right of use statements" and has a sample permission letter for teachers or students to use.
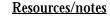
Evaluation and/or Assessment	Resources/Notes
	<u>Resources/notes</u>
WA 14.1: Class discussion.	Copyright Matters.
WA 14.2: Investigate how your own work can be "copyrighted". Do you own the work if it is posted on the internet?	http://www.cmec.ca/else/ copyright/matters/ CopyrightMatters.pdf
WA 14.3: Investigate Permission/Rights of Use Statements on "free" graphics sites.	What Every Teacher Should Know About Copyright
	http://www.2learn.ca/ copyright/copy.html
	Department of Justice
	http://lois.justice.gc.ca/en/C- 42/
	Intellectual Property Office
	http://strategis.ic.gc.ca/ sc_mrksv/cipo/cp/cp_main- e.html
	American Site: Copyright Issues - multimedia examples
	http://www.benedict.com/

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GCO: apply critical thinking, research and problem solving strategies in the development of multimedia creations

Elaboration- Strategies for Learning and Teaching

SCO:

Students will be expected to :

WA 15: select appropriate plug-ins

WA 16: promote the site

WA 15: Plug-ins are external browser enhancement programs which allow the user to enable file types to load automatically within a web browser. When using media which may require a plug-in it is a good idea to provide a link to the website where it may be obtained.

WA 15: Common plug-ins include Acrobat Reader, QuickTime, Shockwave Flash, Real Player, Windows Media Player and Java Runtime environment

WA 16: Head and Meta-Tags are not seen by the user, but are used by the web page programmer. The HTTP-EQUIV META tag is used to tell the web browser information on how to load a page and what to do with it once it is loaded. The NAME META tag is used by search engines to perform indexing and ranking. Students must understand how search engines use meta-tags to rank and describe sites.

Evaluation and/or Assessment	Resources/Notes
	Resources/notes
WA 15.1: List common Internet browser plug-ins.	QuickTime
WA 15.2: Find the appropriate plug-in download page for a variety of formats. Choose from .mpeg, .fla, .ra, .avi, .wav, .aif, etc.	http://www.apple.com/ quicktime/download
	Real Player
	http://www.realnetworks.com
	Windows Media Player
WA 16.1: Research head and meta tags. Provide a list of codes and the resulting effects.	http://www.microsoft.com/ downloads
WA 16.2: Read the information "Google" or another meta-search engine provides to webmasters corncerning ranking and listings.	Google information for webmasters
Write up a listing of 10 keywords for the school website along with the appropriate code. Provide a description of the site enclosed in the proper code.	http://www.google.com/ webmasters/

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APPENDIX

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Glossary of terms

Acrobat Reader - software that is used to read PDF (portable document format) files. This format was developed by Adobe Systems and allows data to be displayed in a format that is separate from the software in which it was created. Therefore, the person viewing the information does not need the particular program in which it was created. Material formatted in PDF will print exactly as it is shown on the screen.

Analog signal - rounded waveforms referring to the natural form of sound/audio. To store/playback on a computer, analog data is converted to digital data which is represented as a square wave form.

Analogous colour - compatible color combinations that blend well together. They are neighbors on the color wheel.

Anti-aliasing - process used to remove jagged edges surrounding computerized graphics.

Archive - long-term storage of data or images. Archiving is generally accomplished on some form of magnetic media; such as disk or tape, or optical media; such as Writable CD.

Aspect ratio - the ratio of horizontal to vertical dimensions of an image. (35mm slide frame is 3:2, TV 4:3, HDTV 16:9, 4X5 film 5:4)

.avi (Audio Video Interleaved) - Windows format for saving video with sound.

Balance - equal visual weight by placement of objects on a page in equal size or compensating using shading or colour

.bmp- bitmap file; the official file format for Microsoft Windows images. BMP is an RGB-only format; it supports Indexed 256 colors, Grayscale and 24-bit RGB documents; does not support CMYK documents.

Bandwidth - defines the amount of information that can travel between two points in a specific time.

Brightness - The brightness of a picture is a description of how much light appears to be emitted from it.

Cardioid - upside down heart-shaped microphone pickup pattern. (Sound does not pickup well at the sides or back of the microphone) Clip lapel microphone is an example.

Cascading style sheets - mechanism for defining style (eg. Fonts, colours, spacing) automatically to web HTML documents

Codec (Coder/decoder) - compresses information so that it can be sent across a network faster, and decompresses information received via the network.

Collage - assembly of different forms to create a new whole

Colour - element of design, light reflected off objects. Colour has three characteristics: Hue (its name red, green, blue), Value (how light or dark it is) and Intensity (how bright or dull it is)

Colour wheel - a circle used to show colour relationships (primary, secondary, neutral and complementary colours)

Colour depth - describes the number of bits used to represent the colour of a single pixel in a bitmapped image

Complementary colour - located opposite to each other on the colour wheel. These colours enhance each other and are often used in decorating schemes

Compositing - a technique by which one shot is super-imposed on another, resulting in a composite shot

Composition - selecting elements and arranging them within the visual space to communicate the artist's ideas or feelings to the viewer

Compression - Process that reduces the number of bytes required to store/transmit digital video. Typical schemes involve comparing frames and coding-out, or eliminating, inter-frame and intra-frame redundancies. The compression may be done by software, hardware or a combination of the two. On playback, the data is decompressed.

Compression, Lossless - digitized video containing ALL the original video information.

Compression, Lossy - digitized video which, to save space, does NOT contain all the original video information.

Contrast - the difference in visual properties that makes an object distinguishable from other objects and the background

Copyright - a legal right that grants the owner control over copying and use of an original work such as music, film, literature, art, computer program or industrial design for a period of time. Usually the owner is paid a royalty fee for use of the work and a written contract is signed.

Crash editing - linear editing (winding/rewinding tape) where data is viewed and specific parts are recorded from tape in a camera to a blank tape in a VCR recorder

Cropping - editing or cutting away part of an image that is not focal or needed

Depth of field - the distance in front and behind a subject being filmed or photographed that appears to be in focus

Digitalization/Digitized - process of converting video or audio signals normally in curved waveform (analog), into digital 1's and 0's

DPI (Dots Per Inch) - the measurement of resolution of a printer or video monitor based on dot density. For example, most laser printers have a resolution of 300 dpi, most monitors 72 dpi, most PostScript imagesetters 1200 to 2450 dpi. The measurement can also relate to pixels in an input file, or line screen dots (halftone screen) in a prepress output film.

Dolly - a mount for a video camera (similar to a tripod) that can be adjusted and is moveable on wheels or tracks.

Driver - a software utility designed to tell a computer how to operate an external device. For instance, to operate a printer or a scanner, a computer will need a specific driver.

DVD (digital video disc or digital versatile disc) - a standard for recording video using MPEG2 in better-than-broadcast TV quality. Costing about the same as a CD, DVD-ROM's hold 8 to 40 times more data.

Elements of design - include form, space (2D, 3D), colour/hue, line, texture, and shape

Ethics - a sense of what is good or moral behaviour for a particular group; eg. Journalists, lawyers and doctors have a code of ethics

Export - the process of transporting data from one computer, program, type of file format, or device to another.

Field editing - editing video footage on shoot location using "in camera" editing or a laptop computer

File compression - see "compression"

File extension - three letters that follow a computer file name and identifies the file type eg. myfile.mov indicates that the file is a Quicktime movie file; myfile.wpd indicates that the file is a Word Perfect document file

Firewire (IEEE-1394) - serial interface technology that allows connection of devices at speeds up to 50 Mbytes/s. Used for devices such as video cameras so that they can feed real time video to a computer for editing.

Flash - software developed by Macromedia Inc. for creating and delivering animated content over the Internet

Flash memory - a type of memory chip that can retain data after the system has been turned off. Its advantage is that digital cameras with flash memory can have batteries go "dead" and yet retain image data.

Font style - refers to characteristics applied to a font such as bold, italics, outline, etc.

Font family - type faces are categorized into families according to their appearance. Most common families include Blackletter, Serif and San-serif all of which contain subgroups: eg. Serif - Renaissance - Garamond; Serif - Baroque - Times Roman; Sans-serif - Neo-grotesques - Arial

Footer - information that is placed at the bottom of each page in a document, such as the name of the document. Software often has a feature for automatically placing footer information on each page.

Form - an element of design, three-dimensional shapes expressing length, width and depth. Balls, cylinders, boxes and triangles are examples of form.

Framing (shots) - composition of a video or photograph following such principles as "rule of thirds", "horizontal line", "leading room", "distance from subject", "angle", and attention to background clutter, lines and natural cutoff points for human subjects. Framing of shots is subjective and there is great latitude for creativity.

Frame - a single image/picture in a computerized "movie"/digital video.

Frame rate - number of images/pictures per second displayed in a stream of video.

File Transfer Protcol (FTP) - a program for exchanging files over the Internet. It is most often used for "downloading" a file from a web server or "uploading" web pages and graphics to a web server.

Full-motion video - digital video running at 30 fps. It does not necessarily fill the screen.

.gif (Graphic Interchange Format) - is a CompuServe's Graphics Interchange Format - the industry standard for Web pages. GIF files support only 8-bit, or 256 colors. GIF files use LZW compression which is referred to as lossless compression - the images stay true when compressed. Most frequently the GIF file format is used for cartoons, line-art and flat illustration (this file format preserves sharp edges, as opposed to the JPEG file format). GIF is the only file format which allows for transparent images (the file contains a header with the information which color in the image is invisible).

Gray Scale - a term used to describe an image containing shades of gray as well as black and white.

Halftone Image - An image reproduced through a special screen made up of dots of various sizes to simulate shades of gray in a photograph. Typically used for newspaper or magazine reproduction of images.

Header - information that is placed at the top of each page in a document, such as the name of the document. Software often has a feature for automatically placing header information on each page.

HI8 (high-band 8mm) - improved version of 8mm videotape format characterized by higher luminance resolution for a sharper picture. Compact "conceptual equivalent" of Super-VHS.

Hierarchy of elements - process of ranking elements in a work in order of importance to assign emphases and placement. What do you want the viewer to see first?

Hot spot - an area of a "sliced" graphic that is linked by hypertext to another web page URL

HTML - HyperText Markup Language; The language used to create Web pages.

Hue - the hue of a color describes whether a color is basically red, orange, yellow, green, etc.

Hyper-cardioid - microphone that picks up a narrow pattern from directly in front. A shotgun micro phone is an example.

Image - A still picture, or one frame of a motion sequence.

Import - the process of bringing data into a document from another computer, program, type of file format, or device.

Index page - the first or main page in a web site. The file index.htm or home.htm in a server directory will be automatically opened by a browser.

Javascript - An interpreted script language developed by Sun Microsystems that resembles C++. It was created to extend the capabilities of the Web.

.jpg, .jpeg (Joint Photographic Experts Group) - compressed, still-image graphics files. There are two major types of jpeg - progressive, where a fuzzy images emerges into 100% decompression/ clarity, and baseline or standard, where a clear image is revealed, part-wise, top-down. Progressive, or interleaved, decompression looks better over networks.

Kerning - the process of altering the space between specific pairs of letters. The goal of kerning is to improve the overall balance of space between letters within words.

Key frame - in movie compression, the key frame is the baseline frame against which other frames are compared for differences. The key frames are saved in their entirety, while the frames in between are compressed based on their differences from the key frame. In Media Convert, for example, if you set the key frame option to 10, every 10th frame will be a key frame. This translates to a higher level of compression and playback speed than a movie that was compressed with the key frame option set at a lower number. However, if you want to stop a movie in different places, in order to view different frames, a lower key frame option will provide better stop and start viewing.

Landscape - page orientation; information on a page is created or printed with the longer side on the horizontal axis and the shorter side on the vertical axis.

Layout - how elements are arranged on a page. These elements include heading, subheading, text matter, illustrations and photographs.

LCD (Liquid Crystal Display) - a flat panel of tiny cells used on most mobile computers in place of a monitor.

Leading - the space between lines of text (defined as the distance from one lines text baseline to the next baseline)

Line - element of design, mark with greater length than width. Lines can be horizontal, vertical, diagonal, straight or curved, thick or thin.

Linear editing - video and audio segments are permanently written to tape in sequence as editing occurs. If further editing is required the "master" must be set back to that location and later sequences rewritten.

Live Feed - real-time continuous broadcast.

Logo - a graphic that has been created to identify a company and or product. A logo is usually copyrighted by the owner. A logo forms part of the corporate identity along with design, typefaces, colours and philosophy.

Lossy compression - a method of reducing image file size by throwing away unneeded data, causing a slight degradation of image quality. JPEG is a lossy compression method.

Luminance - a colour's brightness.

Marquee - the outline of dots created by the selection tool on an image when an operator is performing a task such as cropping, cutting, drawing a mask, etc.

Masthead - common header on pages of a web site. It often incorporates an organizations logo, title and colours.

Meta tag - words inserted into the "head" area of a web page that allows web page authors to insert words that describe the page to search engines

Microphone sock - material that is wrapped around a microphone. It is used when recording audio outdoors to avoid feedback and unwanted wind noise.

MIDI - MIDI stands for Musical Instrument Digital Interface. It is a standardized digital language (and hardware specification) that enables computers and a wide variety of electronic musical instruments/devices to communicate with each other.

Montage - technique of combining in a single photographic composition elements from various different photographic and blending them together

Morphing - a special effect used in motion pictures and video to produce a smooth transformation from one object or shape to another.

.mov - see: QuickTime

Movement - principle of design, the path the viewer's eye takes through the work, often to focal areas. Movement can be directed along line edges, shape and color within the work.

MPEG (Motion Picture Experts Group) - a developing standard for digital video compression used to send movie files for viewing on the World Wide Web. The MPEG file name extension is either .mpeg or .mpg. (see also: CODEC)

MPEG I - ISO standard designed for low bandwidth of compressed digital video and audio.

MPEG II - ISO standard designed for transmission of high bandwidth compressed digital audio and video such as that used by broadcast television.

Multimedia - the combined use of several media, such as high-quality graphics, animations, and sound.

Negative space - the area and space around objects usually having a defined shape

Non-linear editing - audio and video edit decision sequences exist in computer memory as a series of internal digital markers that tell the computer where to look for segments on the hard disk. This allows the user to check work, make adjustments and experiment. When a final production has been made it is written to hard disk, CD or tape.

Omnidirectional - microphone that picks up sound from all directions. A microphone inside a camera is an example.

Palette - a thumbnail of all available colors to a computer or devices. The palette allows the user to chose which colors are available for the computer to display. The more colors the larger the data and the more processing time required to display your images. If the system uses 24-bit color, then over 16.7 million colors are included in the palette.

Pan (panning) - side to side camera movement

Panorama - an image that shows a view in a wide angle view and up to 360 degrees (full circle) using computer imaging software. This is accomplished by "stitching" together several overlapping digital still images to give the appearance of a continuous scene.

Pattern - principle of design, repeat of an object or symbol over a work

.pict - it's a standard image format for Macintosh; it was designed as both a vector and bitmapped image format. PICT is not efficient for storing large documents (10Mb or larger).

Pixels - PICture ELements = Pixel. The tiny dots comprising a picture.

Plug-in - a program that extends or enhances the capabilities of another program. For example, a Quicktime plug-in for a web browser that allows .mov files to be played through that browser. Plug-ins may be provided by the original software developer or by a third party vendor for use with that product.

.png - portable network graphic, this format was designed to replace the older and simpler GIF format. It has better compression but does not have animation capability

Point of view - a position from which an object is seen

Portfolio - a collection of "best work" samples that are organized

Portrait - page orientation; information on a page is created or printed with the longer side on the vertical axis and the shorter side on the horizontal axis.

Post production editing - occurs after video has been shot. It involves choosing material, adding titles, music/sound, transitions, and special effects.

Primary colour - one that can not be created by mixing other colours. Additive primary colours for emitted light (monitor) are red, green and blue. Subtractive primary colours for reflected light (pigments - CMYK) are cyan, magenta, yellow and key (black)

Principles of design - are pattern, unity, rhythm, movement and contrast

QuickTime (.MOV) A Cross-Platform real-time video and multimedia data format developed by Apple Computer. QuickTime files can include text, sound and video.

Raster - images made up of individual dots; each of which have a defined value that precisely identifies its specific color, size and place within the image. (Also known as bitmapped images.)

RCA - Also called "phono plug" or "RCA phono," popular cable connector for home audio as well as video components. Standard connection for direct audio/video inputs/outputs. Not to be confused with phone plug.

RealAudio - real-time, live audio on the Web. RealAudio highly compresses sound files to ship down the network. After front-loading a portion of the recording, the receiving player starts, pulling in remaining portions. This lets users begin listening as the sound file is being downloaded, hence "real-time", rather than having to wait until downloading is complete.

RealVideo - delivers "broadcast-quality" video over the Internet in real-time. The software operates over modems operating at 28.8 Kbps and up.

Resolution - the clarity of the displayed/printed image. The more pixels/dots per square inch (dpi), the finer the detail (higher resolution).
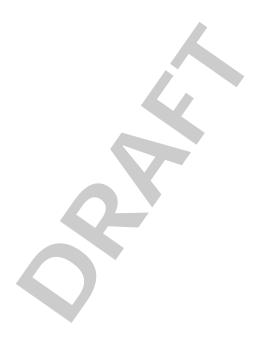
RGB - short for Red, Green, and Blue; the primary colors used to simulate natural color on computer monitors and television sets.

Rhythm - created when one or more elements of design are used repeatedly to create a feeling of organized movement. Variety is essential to keep rhythm exciting and active, and moving the viewer around the work. Rhythm may create a mood such as music or dancing.

Rubric - a written down scoring scheme that lists the criteria for a piece of work. It helps creators of work define quality, performance or expectations for an activity or product.

Rule of thirds - in image composition, dividing the image area into 9 imaginary squares. Objects of interest are placed at the intersection of these imaginary lines or aligned horizontally or vertically using these lines. Eg. A horizon would be aligned with the top horizontal imaginary line.

Saturation - the degree to which a color is undiluted by white light. If a color is 100 percent saturated, it contains no white light. If a color has no saturation, it is a shade of gray.

Secondary colour - a colour made up by mixing two primary colours. Eg. Emitting light (monitor) red and green make yellow; red and blue make magenta; Reflected light (pigments) cyan and magenta make blue, cyan and yellow make green, etc.

Sepia toning - used by photographers to create a warmer print tone. Traditionally, this was accomplished by replacing silver in black and white photo's with silver sulphide which is brown. The same effect may be created digitally with graphics software.

Shape - element of design, a closed line. Shapes can be geometric, like squares and circles, or natural free form. Shapes are flat and can express length and width.

Shockwave Flash - an alternative Flash Player from Macromedia. It's main difference from Flash Player is that it was designed to display interactive content such as games that are constructed in Flash format.

Site identity - refers to the theme of a website. It includes layout and style attributes such as the background, masthead, logo, fonts, colours and navigation elements.

Space - element of design, the area between and around objects. The illusion or feeling of depth in a work is also space.

Sound card - An add-in circuit board that once installed, enables the computer to accept audio input from a microphone, edit/trim/mix recordings, play sound files stored on disks or CD-ROM's, and produce audio output through speakers or earphones. For output, sound cards can 1) create or synthesize sounds, like a keyboard/synthesizer, and 2) play previously-recorded sounds, like a tape recorder/player.

Streaming Audio/Video - capability to begin playing media on the client side before it has fully downloaded from the server side, i.e. begins playing as it is coming in, " in real-time."

Texture - element of design, surface quality of a work that can be seen or felt. Textures can be rough or smooth, soft or hard. Two dimensional technique that makes objects appear three dimensional.
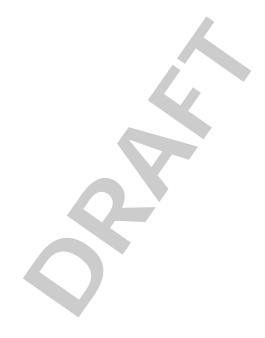
Thumbnail - a small, low-resolution version of a larger image file that is used for quick identification or speedy editing choices

.tiff (Tagged Image File Format) - general purpose file for bitmapped graphics; developed by Aldus Corporation; in general it can handle any type image. Usually the .TIF documents are 24-bit graphics images.

Tilt - up and down camera movement

Treatment - a film treatment is a prose telling of a story intended to be turned into a screenplay. It may include details for the director concerning filming style.

Trim - similar to cropping of a digital image. The selected area is preserved while the rest of the file is deleted when using the trim feature in a video or audio editor.

tripod - any three legged structure. Used for mounting cameras in order to avoid shaking or to provide for smooth movement.

True Color - the representation of color by varying amounts of red, green, and blue. There are 256 shades of each available. When mixed there are 16.7 million possible colors. Hence the term true color.

Typeface - another name for font

URL - uniform resource locator, the address of a web page eg. http://www.mypage.com

USB (Universal Serial Bus) - the USB offers a simplified way to attach peripherals and have them be recognized by the computer. USB ports are about 10 times faster than a typical serial connection.

Vector Graphics - Images composed of sets of graphical objects (lines, rectangles, ellipses, arcs, curves, etc.) stored by software as numerical coordinates and mathematical formulas specifying their shape and position in an image.

Video, Analog - True full-motion video from laser discs, videotapes. Formats: Hi8, 8mm, S-VHS, VHS.

Video Capture Card - adapter card which allows recording and digitalization of pictures for use with a computer. The pictures may be still-images or movies. Once captured, the picture data is compressed using a CODEC, with playback requiring CODEC-decompression. (see also: CODEC)

Video, Composite - single-signal video, used in VHS. Inferior to component video.

Video, Component - Used in Hi8 and SuperVHS cameras, component video splits the single composite video signal into colors (RGB) and improves the quality by adding a luminance or brightness (Y) channel and a color/chroma intensity (C) channel. Superior to composite video.

Video, Digital - Digitized video, i.e. video converted/compressed to file format. Formats: .AVI (Video for Windows) and .MOV (QuickTime - cross-platform for both Macintosh and Windows).

.wav - WAVE file. The most common file format for Windows sounds.

Webcasting - using the Web to deliver live or delayed versions of sound or video broadcasts.

W3C - World Wide Web Consortium. An organization that promotes interoperability between technologies and develops guidelines to make the Internet as accessible.

white space - another term used for "negative space" the area that surrounds objects in a graphic or page.

Windows Media Player - Windows multimedia browser plugin

.wmf - Windows Metafile. File format that can be used by the Windows platform to display graphics

.wpg - Word Perfect Graphic. File format that is Corel proprietary for graphics and clipart.

WYSIWYG - What You See Is What You Get. Term that is used to describe a web editor that applies formats created in "design mode" the same way in a browser, such as Internet Explorer.

XML - (eXtensible Mark-up Language) XML is a standard to create electronic documents on the Internet. The first application of XML is to create Web pages, similar to existing ones but more dynamic.

zoom - to focus on a smaller area of the digital work. Most programs have a "tool" or "function" that allows the user to see the digital work area magnified, in part, or the entire area from a distance perspective.

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