



# History of Media and Technology in Education

EDCP 571.031

University of British Columbia

Summer 2a 2011

## Course Description:

In this Winter 2011 section, the theme is From Twentieth to Twenty-First Century Learning—proceeding from Edison and motion picture students through McLuhan and new media to telelearning and mobile autodidacticism. We will address issues such as how, why and to what degree media and technology have been incorporated into, or changed by, education over time. Some historians argue that media and technology have been an imposition on humanistic curriculum practices; others describe media and technology as the principle means of progress in administration, learning and teaching. Some lament the separation of curriculum from instruction via media and technology, and subsequent displacement of instructional labour by capital; others champion the creativity and intellectual productivity that media and technology seemingly nourish. This course is designed from a basis that educational media and technologies are *not* merely tools; educational premises are *neither* fully durable nor pliable; and actors or agents of education are *not* merely humans.

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## Valued Ends of the Course:

My intention is to help you develop a framework for exploring and understanding the history of media and technology as unsettled and lived by students and teachers. I will encourage you to examine your own biases toward the history of media and technology, and a major effort will be in providing you with a background for historical research into educational and learning technologies, and new media.

## Outcomes:

By the end of this course, students should be able to:

- Understand a range of explanatory and narrative approaches to the historiography and history of media and technology in education.
- Examine key philosophical and historical claims about the role of media and technology in education.
- Analyze processes of historical change, including the challenge of placing media and technology within cultural and social contexts.
- Analyze educational change (e.g., educational media and technology) in historical context.
- Utilize evidence from historical case studies for critically interpreting debates and discussions over media and technology in education.
- Develop a sense of chronology and narrative of the history of media and technology in education.
- Develop a writing style for historical research by engaging in a process of primary and secondary source analysis and outlining, drafting, reviewing, and revising a historical essay.

**Texts (Required):**

EDCP 571 Course Packet. (cost recovery)

1. *EDCP 571 Primary & Secondary Sources in the History of Media and Technology in Education.*

**Assessment (for details, see below):**

1. Participation in Seminar & Research Activities (20%)
2. Historical Discourse Leadership (groups of 3) (25%)
3. Scholarly Historical Essay (55%)

**Deadline:**

Ongoing  
Ongoing  
6 Dec

- **Academic Honesty and Standards, and Academic Freedom:** Please refer to *UBC Calendar*
- **Policies and Regulations (Selected):** <http://www.students.ubc.ca/calendar>
- **Academic Accommodation for Students with Disabilities:** Students with a disability who wish to have an academic accommodation should contact the Disability Resource Centre without delay (see UBC Policy #73 [www.universitycounsel.ubc.ca/policies/policy73.pdf](http://www.universitycounsel.ubc.ca/policies/policy73.pdf)).

**Participation:**

Participation is valued at 20% of your final grade. We refer to the scholarly level of participation as **academic conversation**, which entails a variety of things including academic conversation, articulation and presentation. Participation is interdependent with **preparation** for each week, which involves **reading** (highlighting, pagination post-its, margin notes, comments & questions, etc.), **writing** (posting to discussions, note-taking, outlining, questioning, defining, mapping, framing, summarizing, journaling, blogging, podcasting, exposition, etc.), **organizing** (documenting, labelling, ordering, archiving, filing, sequencing events, chronicling, etc.), **reflecting** (rethinking, reincorporating, remapping, analyzing, synthesizing, etc.), and **speaking** (discussing, podcasting, corresponding with peers, chat, etc.). One goal of preparation is to sustain increasingly sophisticated academic conversations or engagement with the readings, course and peers. A second goal is to develop systematic approaches for engaging with the readings and your peers (i.e., developing reading, speaking, writing, organizing, and reflection form(at)s and styles that are effective). **Read for Meaning along with Purpose...**

**Participation**

	Low-----Avg-----High
Appropriately and accurately articulates key constructs and themes in readings, etc.	1-----3-----5
Reveals an attempt to synthesize knowledge of media and technology in education (readings, etc.).	1-----5.5-----10
Advances collective knowledge and consciousness by engaging with authors, peers, instructors in the online course	1-----3-----5
<b>Total:</b> xx / 20	

**1. Scholarly Historical Essay (55%)**— Choose a topic that corresponds with one of the weekly topics (or propose a related topic) and write a scholarly, publishable paper exploring the history of media and technology in education. The essay should provide a clear, cogent, concise history of the topic at hand. Take a position (state a thesis or argument) and provide evidence, through

examples and historical narrative, to support the position. Be creative and choose a topic that really interests you! **At the mid-point of the course, please also bring a \*one page hard copy outline\* of your paper as a work in progress. Outline = outline form. This includes the:**

1. Historical topic and time / chronology
2. Theme and argument
  - a. The argument or thesis
  - b. The background
3. Primary and Secondary sources for insight into the topic
  - a. Issues to be addressed
  - b. Literature to be consulted
4. Provisional conclusions drawn from the argument & issues or data
5. Structure / sections of the paper

**Assessment: (Limit to 10-12, tight well-written double-spaced pages including title page (limit to 3000 words + references).**

1. Clarity of communication / writing
  - a. Is the writing clear and concise?
  - b. Are the ideas focused and organized?
2. Development of argument / thesis
  - a. Is the argument coherent? Thoughtful? Analytical? Critical? Sophisticated?
3. Exploration of content and theory
  - a. Is there evidence of critically and theoretically exploring the issues?
  - b. Are the ideas theorized, synthesized, extended or applied?
4. Examples
  - a. Are examples sufficient? Do examples ground the paper?
  - b. Are there narrative examples?
5. Grammar & Style
  - a. Organization, sentence structure, paragraphs, spelling
  - b. APA or Chicago Style (format, references)

#### **Scholarly Historical Essay**

**Low-----Avg-----High**

Clarity of communication / writing

1-----5.5-----10

Development of argument / thesis

1-----5.5-----10

Exploration of content and theory

1-----8-----15

Provision of effective and sufficient examples

1-----5.5-----10

Grammar & Style

1-----5.5-----10

**Total:** xx / 55

**2. Historical Discourse Leadership (25%)**— Choose one week and topic on the schedule to coordinate the seminar. It will be your responsibility to clearly re/present the topic and reading(s), and to coordinate the discussions. Please use the approach described below. Format: Group Project— groups of 3. For the discussion that you lead, please prepare to:

1. Outline the readings (primary and secondary sources) and post this outline to the group.
2. Provide a brief overview of the readings based on the outline.
3. Define key terms or methodological and theoretical concepts that are challenging.
4. Design handouts, discussion questions and presentation media for clarifying the readings.
5. Design activities for the group with attention to inclusive participation. Possible activities include:
  - Discussion focus questions and moderation of discussion forums
  - Wiki / Interactive Web
  - Voice & Podcast, etc.
6. Moderate and bring closure to the topic for the week.

### Historical Discourse Leadership

Low-----Avg-----High
Outlines & addresses key concept(s) in readings 1-----5.5-----10
Sufficient examples from readings are provided & synthesizes with previous readings 1-----5.5-----10
Communication and media are professional in format— Style is clean and coherent 1-----3-----5
<b>Total:</b> xx / 25

### Grading Guidelines

Approved July 2008

#### **A level - Good to Excellent Work**

- A+ (90-100%) A very high level of quality throughout every aspect of the work. It shows the individual (or group) has gone well beyond what has been provided and has extended the usual ways of thinking and/or performing. Outstanding comprehension of subject matter and use of existing literature and research. Consistently integrates critical and creative perspectives in relation to the subject material. The work shows a very high degree of engagement with the topic.
- A (85-89%) Generally a high quality throughout the work. No problems of any significance, and evidence of attention given to each and every detail. Very good comprehension of subject and use of existing literature and research. For the most part, integrates critical and creative perspectives in relation to the subject material. Shows a high degree of engagement with the topic.
- A- (80-84%) Generally a good quality throughout the work. A few problems of minor significance. Good comprehension of subject matter and use of existing literature and research. Work demonstrates an ability to integrate critical and creative perspectives on most occasions. The work demonstrates a reasonable degree of engagement with the topic.

#### **B level - Adequate Work**

- B+ (76-79%) Some aspects of good quality to the work. Some problems of minor significance. There are examples of integrating critical and creative perspectives in relation to the subject material. A degree of engagement with the topic.
- B (72-75%) Adequate quality. A number of problems of some significance. Difficulty evident in the comprehension of the subject material and use of existing literature and research. Only a few examples of integrating critical and creative perspectives in relation to the subject material. Some engagement with the topic.
- B- (68-71%) Barely adequate work at the graduate level.

#### **C & D level - Seriously Flawed Work**

- C (55-67%) Serious flaws in understanding of the subject *material*. Minimal integration of critical and creative perspectives in relation to the subject material. Inadequate engagement with the topic. Inadequate work at the graduate level.

**NOTE: For UBC's Faculty of Graduate Studies (FOGS), a final mark below 68% for Doctoral students and below 60% for Masters students is the equivalent of a Failing mark.**

## EDCP 571 Course Schedule & Readings

Seminars for each week include a balance of activities and resources.

Date	HDLG	Assignments	Readings
Week 1 7 Sept		Course Intro	Course introduction, Mapping & Definitions
<b>Historiography: Etymology &amp; Semantics</b>			
Week 2 14 Sept		Readings	Gentry (1984); Petrina (2008); Petrina & Rusnak (2010)
<b>Historiography: The School of Tomorrow</b>			
Week 3 21 Sept	#2	Readings & HDLG	Cuban (1986); Petrina (2002); Morgan (1929)
<b>Orality &amp; Literacy</b>			
Week 4 28 Sept	#3	Readings & HDLG	Wiman (1969); Merzbach (1971); Comenius (1657/1887)
<b>Twentieth Century Learning</b>			
Week 5 5 Oct	#4	Readings & HDLG	Alexander (2010); Edison (1912, 1925)
<b>Psy-entific Classrooms &amp; Offices</b>			
Week 6 12 Oct	#5	Readings & HDLG	Luke (1988); Petrina & Rusnak (2010); Gray (1930/1940); Thurston (1937)
<b>More Learning in Less Time</b>			
Week 7 19 Oct	#6	Readings & HDLG	Noble (1991); Gagne (1954)
<b>(Week 8) 26 Oct – 1 Nov Reading Break</b>			
<b>From Screen Education to Media Studies</b>			
Week 9 2 Nov	#7	Historical Essay Proposal due	Bolas (2008); Davis (2008); Cambre (1981)
<b>Marshall McLuhan &amp; Understanding New Media</b>			
Week 10 9 Nov	#8	Readings & HDLG	McLuhan (1960, 1967); Moody (1999)
<b>The New Cyberculture</b>			
Week 11 16 Nov	#9	Readings & HDLG	McHoul (1988); Hilton (1969); Skinner (1965)
<b>Automating Curriculum &amp; Teledidactics</b>			
Week 12 23 Nov	#10	Readings & HDLG	Bush (1945); Buck (1952); Moore (1972)
<b>Individualizing &amp; Personalizing Curriculum</b>			
Week 13 30 Nov	-	Historical Essay Due 6 Dec.	Ito (2010)

**Course Schedule:**

Each session will generally consist of discussion based on readings. Readings for each session will include a balance of secondary and primary sources. Each session will also be supplemented with image and sound resources.

**Topic 1****Introduction: Historiography, Semantics, Rhetoric and Etymology****Readings / Media:**

1. Gentry, C. C. (1984). Educational technology: A question of meaning. In E. E. Miller & M. L. Mosley (Eds.), *Educational media and technology yearbook* (pp. 1-9). Littleton, CO: Libraries Unlimited.
2. Stephen Petrina, *What is Historical Research?* (August 2008). Vancouver: UBC.
3. Petrina, S. & Rusnak, P. (2010). Technology. In C. Kridel (Ed.), *Encyclopedia of curriculum studies* (pp. 876-878). Thousand Oaks, CA: Sage.
4. Paul, R. (Executive Producer) & Petrina, S. (2002, October 11). *The magic box: Technology in education* (Sound Recording). Washington, D.C.: National Public Radio, Sound Prints.

**Doctoral Seminar**

5. Guillory, J. (2010). Genesis of the media concept. *Critical Inquiry*, 36, 321-362.

**Topic 2****The School of Tomorrow:****Historiography of Material and Visual Culture or Media & Technology in Education****Readings / Media**

1. Larry Cuban, *Teachers and Machines: The Classroom Use of Educational Technology since 1920* (New York: Teachers College Press, 1986), 1-8, 104-109.
2. Stephen Petrina, "Getting a Purchase on 'The School of Tomorrow' and Its Constituent Commodities: Histories and Historiographies of Technologies," *History of Education Quarterly* 42 (Spring 2002): 75-111.
3. Joy Elmer Morgan, "The School of Tomorrow," *Journal of the National Education Association* 18 (January 1929): 1-2.
4. NEA Film.

**Doctoral Seminar**

5. Tilly, Charles. "How (and What) are Historians Doing?." *American Behavioral Scientist* 33 (1990): 685-710.

**Topic 3****Orality & Literacy: Media & Technology in Education prior to the Twentieth Century****Readings / Media**

1. Wiman, R. V. (1969). An historical view of communication in the classroom. In R. V. Wiman & W. C. Mierhenry (Eds.), *Educational media: Theory into practice* (pp. 5-26). Columbus, OH: Charles E. Merrill.
2. Uta Merzbach, *Of Levers and Electrons and Learning and Enlightenment* (Washington, DC: Office of Naval Research, 1971), 1-27.
3. John Amos Comenius, *The Orbis Pictus* (Syracuse, NY: C. W. Bardeen, 1657/1887).

**Doctoral Seminar**

4. Serafina Cuomo, *Technology and Culture in Greek and Roman Antiquity* (Cambridge: Cambridge University Press, 2007), 7-40.

#### Topic 4

##### Twentieth Century Learning: Thomas A. Edison, Motion Pictures, and Visual Education

###### Readings / Media

1. Geoff Alexander, *Academic Films for the Classroom* (Jefferson, NC: McFarland & Company, 2010), 13-37.
2. Thomas Alva Edison, "Moving Pictures in the Classroom," *Literary Digest* 44 (6 April 1912): 683-684.
3. Thomas Alva Edison, "What Edison would Like to do with the Movies: An Interview by Hugh Weir," *Collier's* 75 (21 February 1925): 20-21.
4. Moving Picture and Motion Picture archive.

###### Doctoral Seminar

5. Benjamin, W. (1936/1968). The work of art in the age of mechanical reproduction. In H. Arendt (Ed.), *Illuminations* (trans. H. Zohn) (pp. 217-252). New York: Harcourt, Brace & World.

#### Topic 5

##### Psy-entific Classrooms & Offices: The New Psychology, Tests, Textbooks, and Audiovisual Education

###### Readings / Media

1. Allan Luke, *Literacy, Textbooks and Ideology: Postwar Literacy Instruction and the Mythology of Dick and Jane* (New York: Falmer Press, 1988).
2. Petrina, S. & Rusnak, P. (2010). Intelligence tests. In C. Kridel (Ed.), *Encyclopedia of curriculum studies* (pp. 487-488). Thousand Oaks, CA: Sage.
3. William S. Gray with Zerna Sharp, *Fun With Dick and Jane* (Toronto: Gage, 1930/1940).
4. Ralph Thurston, "Hitler Mobilizes 'Mother Goose'," *The Nation* 144 (20 March 1937): 317-318.

###### Doctoral Seminar

5. Mona Gleason, "The History of Education and the History of Psychology: What can Interdisciplinary Research Offer?," *Historical Studies in Education* 9 (Spring 1997): 98-106

#### Topic 6

##### "More Learning in Less Time:" The Military, Psychology & Technology

###### Readings / Media

1. Douglas D. Noble, *The Classroom Arsenal: Military Research, Information Technology and Public Education* (New York: Falmer Press, 1991), 98-120.
2. Robert M. Gagné, "Training Devices and Simulators: Some Research Issues," *American Psychologist* 9 (March 1954): 95-107.
3. Ohio State Archives (Pressey Papers)

###### Doctoral Seminar

4. Haraway, D. (1985). A manifesto for cyborgs. *Socialist Review*, 15(2), 65-107.

#### Topic 7

##### From Screen Education to Media Studies: Broadcasting, Film, Radio and Television

###### Readings / Media

1. Terry Bolas, *Screen Education: From Film Appreciation to Media Studies* (Bristol, UK: Intellect, 2009), 37-68.

2. Michael Davis, *Street Gang: The Complete History of Sesame Street* (New York: Viking, 2008).
3. Marjorie Cambre, "Historical Overview of Formative Evaluation of Instructional Media Products," *Educational Communication and Technology* 29 (Spring 1981): 3-25.

#### **Doctoral Seminar**

4. Brian Low, "The New Generation": Mental Hygiene and the Portrayals of Children by the National Film Board of Canada, 1946–1967," *History of Education Quarterly* 43 (December 2003): 540-570.

### **Topic 8**

#### **Marshall McLuhan and the Project in Understanding New Media**

#### **Readings / Media**

1. McLuhan, H. M. (1960). *Report on project in understanding new media*. Washington DC: National Association of Educational Broadcasters.
2. McLuhan, M. (1967). The medium is the message. *NEA Journal*, 56(7), 24-27.
3. Kate Moody, *The Children of Telstar: Early Experiments in School Television Production* (New York: Center for Understanding Media, 1999), 1-23.
4. McLuhan film archive.

#### **Doctoral Seminar**

5. Arthur Kroker, *Technology and the Canadian Mind: Innis/McLuhan/Grant* (Montreal: New World Perspectives, 1984), 7-19, 52-86.

### **Topic 9**

#### **The New Cyberculture: Educational Technology, Teaching Machines & Programmed Learning**

#### **Readings / Media**

1. McHoul, A. (1998). Cybernetymology and –ethics. *Postmodern Culture*, 9(1).
2. Alice Mary Hilton, "Cybernetics: Its Impact on the Processes of Learning, Politics, and Production," in *Progress of Cybernetics*, Volume 3 ed. J. Rose (London: Gordon and Breach Science Publishers, 1969), 1287-1297.
3. B. F. Skinner, "The Technology of Teaching," *Proceedings of the Royal Society of London* 162 (27 July 1965): 427-443.
4. Alice Mary Hilton Archives.

#### **Doctoral Seminar**

5. Hannah Arendt, "The Crisis in Education," *Between past and future* (New York: Viking, 1961), 173-196.

### **Topic 10**

#### **Automating Curriculum and Teledidactics: The Automation of Education via Correspondence, Distance & Online Learning**

#### **Readings / Media**

1. Vannevar Bush, "As We May Think," *Atlantic Monthly* (July 1945): 47-61.
2. Buck, G. J. (1951). Correspondence education in Canada. *Phi Delta Kappan*, 32(5), 220-222.
3. G. A. B. Moore, "The Growth of Educational Technology in Canadian Higher Education," *British Journal of Educational Technology*, 1 (January 1972): 32-47.
4. NEA and Pressey films.



**Doctoral Seminar**

5. Toutant, T. S. (2003). *Equality by mail: Correspondence education in British Columbia, 1919 to 1969*. (PhD. Diss., University of Victoria). (Download DAI)

**Topic 11****Individualizing & Personalizing Curriculum: Computers in Education****Readings / Media**

1. Mizuko Ito, *Engineering Play: A Cultural History of Children's Software* (Cambridge, MA: MIT Press, 2010), 1-10, 29-84.
2. Misc. Computers in Education films.

## Selected Secondary Sources

### For an exhaustive bibliography and historiography, see

Stephen Petrina, "Getting a Purchase on 'The School of Tomorrow' and Its Constituent Commodities: Histories and Historiographies of Technologies," *History of Education Quarterly* 42 (Spring 2002): 75-111.

### Examples of Practitioner Histories

- Charnel Anderson, *History of Instructional Technology I: Technology in American Education, 1650-1900*, (Washington, D.C.: United States Office of Education, 1961).
- Anglin, G. J. (Ed.). (1995). *Instructional technology: Past, present, & future* (2nd ed.). Englewood, CO: Libraries Unlimited.
- George H. Buck, "Teaching Machines and Teaching Aids in the Ancient World," *McGill Journal of Education* 24 (Winter 1989): 32-54.
- Martha Casas, "The History Surrounding the Use of Skinnerian Teaching Machines and Programmed Instruction (1960-1970)" (Ph.D. diss., Harvard University, 1997).
- Edgar Dale, "Historical Setting of Programmed Instruction," in *Programmed Instruction, 66th Yearbook of the National Society for the Study of Education, part II* ed. Philip Lange (Chicago: University of Chicago Press, 1967), 28-54.
- Michael Eraut, "Conceptual Frameworks and Historical Development," in *The International Encyclopedia of Educational Technology* ed. Michael Eraut (New York: Pergamon Press, 1989), 11-21.
- James D. Finn and Paul Saettler, *History of Instructional Technology, II: The Technical Development of the New Media*, (Washington, DC: U.S. Office of Education, 1961).
- Gagne, R. M. (Ed.). (1987). *Instructional technology: Foundations*. Hillsdale, NJ: Lawrence Erlbaum.
- Impagliazzo, J. & Lee, J. A. (Eds.). (2004) *History of computing in education*. Norwell, MA: Kluwer.
- Januszewski, A. (2001). *Educational technology: The development of a concept*. Westport, CT: Greenwood.
- Johnson, D. L. & Maddux, C. D. (Eds.). (2004). *Technology in education: A twenty year retrospective*. New York: Haworth Press.
- Henrietta Lard, *Evolutionary Changes in Educational Technology*, (Ph.D. diss., Syracuse University, 1979).
- Wesley C. Meierhenry, "A Brief History of Educational Technology," in *Educational Media Yearbook, 1984* ed. James W. Brown (New York: R. R. Bowker, 1984), 3-13.
- Robert M. Morgan, "Educational Technology: Adolescence to Adulthood" *Educational Communication and Technology Journal* 26 (Summer 1978): 142-152.
- Reiser, R. (1987). Instructional technology: A history. In Robert M. Gagne (Ed.), *Instructional technology: Foundations*. (pp.11-48). Hillsdale, NJ: Lawrence Erlbaum.
- Reiser, R.A. (2001). A History of Instructional Design and Technology: Part I: A History of Instructional Media. *Educational Technology Research and Development*, 49(1), 53-64.
- Reiser, R.A. (2001). A History of Instructional Design and Technology: Part II: A History of Instructional Design. *Educational Technology Research and Development*, 49(2), 57-67.
- Paul Saettler, *The History of Instructional Technology* (New York: McGraw-Hill, 1968).
- Paul Saettler, "The Roots of Educational Technology," *Programmed Learning and Educational Technology* 15 (February 1978): 7-15.
- Saettler, P. E. (1990). *The evolution of American educational technology*. Englewood, CA: Libraries Unlimited.

### Examples of Critical Histories

William Bianchi, *Schools of the Air: A History of Instructional Programs on Radio in the United States* (Jefferson, NC: McFarland, 2008).

- Terry Bolas, *Screen Education: From Film Appreciation to Media Studies* (Bristol: Intellect, 2009).
- Larry Cuban, *Teachers and Machines: The Classroom Use of Educational Technology since 1920* (New York: Teachers College Press, 1986).
- Larry Cuban, "Computers Meet Classroom: Classroom Wins," *Teachers College Record* 95 (Winter 1993): 185-209.
- Barbara Finkelstein, "Dollars and Dreams: Classrooms as Fictitious Message Systems, 1790-1930," *History of Education Quarterly* 31 (Winter 1991): 463-487.
- Oscar H. Gandy, "Instructional Technology: The Reselling of the Pentagon" (Ph.D. diss., Stanford University, 1976).
- Barbara Finkelstein, "Education Historians as Mythmakers," in *Review of Research in Education* 18 ed. Gerald Grant (Washington, D.C.: American Educational Research Association, 1992), 255-297.
- Eric K. Gormly, "Critical Perspectives on the Evolution of Technology in American Public Schools," *Journal of Educational Thought* 30 (December 1996): 263-286.
- Donna J. Haraway, "Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980s," *Socialist Review* 80 (June 1985): 65-108.
- James Main, "Educational Technology and the Curriculum of Production and Efficiency, 1950-1990" (Ph.D. diss., University of Houston, 1992).
- Noble, D. F. (2002). *Digital diploma mills: The automation of higher education* (Chapter 1). Toronto: Between The Lines.
- Douglas D. Noble, *The Classroom Arsenal: Military Research, Information Technology and Public Education* (New York: Falmer Press, 1991)
- Douglas D. Noble, "A Bill of Goods: The Early Marketing of Computer Based Education and its Implications for the Present Moment," in *The International Handbook of Teachers and Teaching* eds. Bruce J. Biddle, Thomas Good, and Ivor Goodson (Dordrecht: Kluwer, 1998), 1321-1375.
- Todd Oppenheimer, *The Flickering Mind: The False Promise of Technology in the Classroom and How Learning can be Saved* (New York: Random House, 2003), 3-61.
- Petrina, S. (2004). Sidney Pressey and the automation of education, 1924-1934. *Technology and Culture*, 45(2), 305-330.

### **History of Media and Technology in BC Education**

- Boshier, R. (1999). *Leaping Fjords and Conquering Mountains: A Chronology of Technological Triumph, Zealotry and Utopianism In B.C. Education*. Vancouver, BC: TERN.
- Buck, G. J. (1951). Correspondence education in Canada. *Phi Delta Kappan*, 32(5), 220-222.
- Moore, M. G. (1983). The individual adult learner, In M. Tight (Ed.), *Adult learning and education* (pp. 153-168). London: Croom Helm.
- G. A. B. Moore, "The Growth of Educational Technology in Canadian Higher Education," *British Journal of Educational Technology*, 1 (January 1972): 32-47.
- Stephen Petrina, *Communications, Media & Technology in Curriculum Studies at UBC*. (August 2008). Vancouver: UBC.
- Ruggles, R. H., Anderson, J., Blackmore, D., Lafleur, C., Rothe, J. P. & Taerum, T. (1982). *Learning at a distance and the new technology*. Vancouver: Educational Research Institute of BC.
- Toutant, T. S. (2003). *Equality by mail: Correspondence education in British Columbia, 1919 to 1969*. (PhD. Diss., University of Victoria).