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Assignment 2: Critique of a Contemporary Adult Education Program

Callouts such as this one are inserted by me to link the content in this assignment to corresponding competencies. Extended commentaries and reflections can be found on the e-portfolio page where this file was downloaded from.

Distance Education for Power Engineers in Western Canada

by

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MDDE 611 Foundations of Adult Education

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From course website:  
Assignment 2: Presentation to a Group: This assignment requires you to critique a historical or contemporary adult education program. In your critique, integrate the historical, philosophical and socio-economic foundations of adult education into a review of a program.  
Present your critique (500 to 750 words) online, posting it in the specified conference. Your presentation is meant to teach others in the class about programs they might not otherwise have had the opportunity to explore, to provoke interesting and lively discussions that enhance understanding of the application of educational foundations, and to moderate the discussion. You are all expected to respond to each other's presentations within the assigned group by commenting, asking critical questions, and critiquing the points and conclusions put forward in the presentation.

This paper attempts to be a brief critique of Distance Education (DE) programs for Power Engineers (PE) in the western provinces of Canada. The first section describes the Programs, their purpose and the theoretical adult education views they are based on. The second section analyses the Programs from three different perspectives. The final section highlights the characteristics of the Programs and emphasizes the role of the adult educators.

### Program Description

The Power Engineering Distance Education (PEDE) programs at B.C. Institute of Technology (BCIT) offer courses in all levels of PE Certification, namely Fifth to First Class, with the latter being the highest obtainable certificate. The programs are primarily designed for those living in the western provinces, currently employed in industrial power plants and interested in obtaining higher levels of certification.

PEDE courses provide the knowledge required to pass the “Interprovincial Power Engineering Certification” examinations conducted by government agencies (e.g. B.C. Safety Authority and Alberta Boiler Safety Association). Instruction is provided through web-based DE or self-paced tutorial modes. The students may be sponsored by Human Resources and Development Canada; many students in the program are reimbursed for their educational expenses by their employers.

PEDE programs are strictly composed of “exam” preparatory courses. As such the “Human Capital Theory” appears to have influenced the programs’ original design and delivery methods. The notions embodied in the theory of Human Capital, such as one’s

abilities and information have *economic values* are the underlying beliefs that if practising engineers upgrade their qualifications (i.e. certificates), they will develop better work skills, their employability will increase and they will earn higher salaries (Bouchard, 1998). However, a typical exam preparatory course is a map of corresponding government exam syllabus. If a course is developed accordingly and the learner completes it successfully then the candidate would pass the government exam. Simply put, passing a generic set of exams leads to a higher level of certification.

1.1. Recognize problems.

Analysis of the Programs

### *Historical Context*

It is not easy to establish dates when training and certification of PEs first began. A public statement by Edward I of England in 1306 prohibited the "use of coals in furnaces", and established a commission, which could relax the rules in the case of careful firemen working at the furnaces.

The steam engine, invented early in the nineteenth century, was built by mechanics that also commissioned and started up the engine. The mechanics frequently stayed with the new owner and the owner hired unskilled helpers to run the plants. Through a system called "progression", unskilled workers were "certified" by employers and promoted to jobs with gradually increasing levels of skill.

With the advent of higher capacity boilers and engines, serious accidents began to occur due to the use of unqualified workers. This led insurance underwriters and governments to become involved in the certification of both operators and equipment.

In Canada, most provinces adopted the “progression system” and each province had several levels of certification of PEs. In the early 70s, an attempt to “standardize” the exams and curriculum for PEs was made and British Columbia joined the Standardization of Power Engineer Examinations Committee (SOPEEC) in 1973.

Currently, BCIT is the only accredited institution that meets the requirements of SOPEEC in this province.

#### *Philosophical Foundations*

According to Rubenson & Walker (2006), Canadian educational systems are based on increasing human capital and the social cohesion element appears to have been “tacked on” to an economic framework. This observation can be clearly proven by looking at PEDE’s operational environment. The main players in this environment are SOPEEC as the national standards organization for PE, B.C. Safety Authority (BCSA) as the regulatory body and BCIT as the education and training provider.

PEDE’s courses conform to SOPEEC’s guidelines and the SOPEEC’s mandate is to encourage and promote a uniform national standard of certification for PE that will meet the needs of industry and safety (SOPEEC, 2005).

In Canada, Power Engineering is a regulated profession and the BCSA is responsible for assessing qualifications and licensing PE in B.C. The most important part of BCSA’s legal framework is the Safety Standards Act; however, it is an independent *corporation* that provides cost-effective safety services to business, industry and the general public. (British Columbia Safety Authority, 2008).

(4.3) Justify and defend your ideas orally and in writing in meetings, forums, seminars, exams and other contexts.

For the third player, one of BCIT's mandates is to increase the level of economic and entrepreneurial activity as well as employment for the province (BCIT vision & mission).

As can be seen, the dominant philosophy embedded in PEDE's operating environment is economical growth by primarily serving the industry and businesses.

#### *Socio-economic Forces*

B.C.'s resource dominated economy centred on the forestry industry has seen a steady fall in employment. This presents itself as a threat to PEDE's student enrolment because of the decline in the pulp and paper industry; however, the increased retirement of the aging PE population has a self-healing effect to the problem. PEDE's student enrolment also takes advantage of the flourishing oil and gas industry in Alberta.

With the high demand for qualified PEs in Western Canada, distance learners who pass their government exams usually take well paying positions before completing the PEDE program. Figure 1 illustrates a current three-year statistics of student enrolment and completion trends in the PEDE programs. It seems that learners see the PEDE program as a vehicle to obtain certificates and secure jobs.

Conclusion: Did a Successful Program Fail a Social Goal?

Industrialization transformed societies in many ways profoundly; the introduction of petroleum and electricity as energy sources, the appearance of larger forms of business organization such as corporations and monopolies and the application of new technologies brought the growing importance of finance capital to new levels where "human" is perceived as "capital resource".

(4.3) Justify and defend your ideas orally and in writing in meetings, forums, seminars, exams and other contexts.

1.3. Formulate questions.

(4.3) Justify and defend your ideas orally and in writing in meetings, forums, seminars, exams and other contexts.

According to Spencer (2006), the idea that education could be an important contributor to economic growth, and therefore, a main purpose of education should be to support economy, was established in the late 1950s and early 1960s. The PEDE programs dating back to mid 1970s took its fair share of this notion and have served well to that purpose. However, as Bouchard (2006) asserts human capital is a macro-economic theory and not a way as to how to organize our lives and our society; hence one might suggest PEDE, a successful program might have failed a social goal.

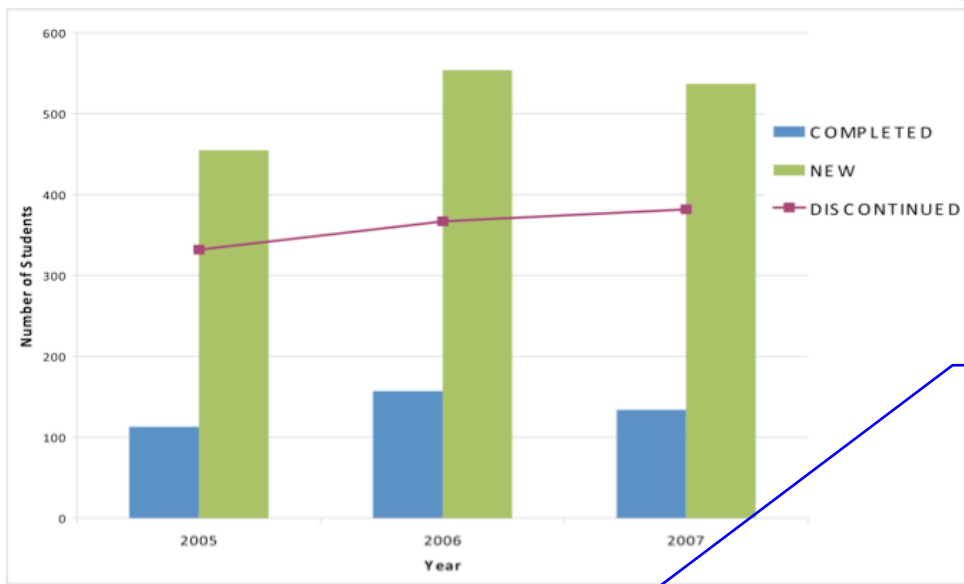
Standardized PEDE programs endorse safety for the public, the plant owners, and the operators. They successfully prepare upgrading PE for certification examinations and produce enough PE to meet the job market demands. With no doubt, PEDE programs have been instrumental to learners' success in the workplace.

Adult educators have a social responsibility to promote “social well-being” of individuals. Bouchard (1998) quotes John Dewey: “Learning is an empowering process through which individuals gain access to the instruments of their own advancement”. With this in mind, Human Capital Theory and other relevant theories should be viewed in their proper context. Bouchard (1998) reminds us that adult educators are dynamic actors in the relationship between learners, production organizations and the larger needs of a democratic society.

#### *Suggested Reading*

Chapter 9 Marxism and Education and Chapter 10 Philosophy and the Theory and Practice of Education in Philosophical Foundations of Education by Howard Ozmon and Samuel Craver (ISBN: 0-675-21133-6).

1.7. Make reasoned arguments leading to rational solutions.



1.1. Recognize problems.

Figure 1 Program completion rates in PEDE programs

## References

*BCIT vision & mission*. (n.d.). Retrieved June 21, 2008, from British Columbia Institute of Technology: <http://www.bcit.ca/about/vision.shtml>

Bouchard, P. (2006). Human Capital and the Knowledge Economy. In T. Fenwick, T. Nesbit, & B. Spencer, *Contexts of Adult Education* (pp. 166-172). Toronto: Thompson Educational Publishing, Inc.

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British Columbia Safety Authority. (2008). *Welcome*. Retrieved June 20, 2008, from British Columbia Safety Authority: <http://www.safetyauthority.ca/?q=home>

Rubenson, K., & Walker, J. (2006). The Political Economy of Adult Learning in Canada. In T. Fenwick, T. Nesbit, & B. Spencer, *Contexts of Adult Education* (p. 184). Toronto: Thompson Educational Publishing, Inc.

SOPEEC. (2005). *home*. Retrieved June 20, 2008, from SOPEEC: <http://www.sopec.org/>

Spencer, B. (2006). *The Purposes of Adult Education*. Toronto: Thompson Educational Publishing, Inc.



## Presentations - Instructor Responses

Name: Serhat Beyenir

Presentation Title: Critique of a Contemporary Adult Education Program: Distance Education for Power Engineers in Western Canada

Comments: Serhat, Your presentation is well organized and informative. The paper and powerpoint complemented one another well. The explanation of the historical context effectively demonstrated the importance standardization has played in ensuring the safety of power engineers and the public in general. You succinctly engaged some of the literature from the first part of the course to highlight the predominant orientation of the program. Your questions encouraged your group members to think critically about the role of human capital theory within professional settings of adult education. You moderated the discussion well and it was interesting to hear your ideas about making changes to the program.

5 = superb work

4 = very good work

3 = competent graduate-level work

2 = needs improvement

1 = not yet ready for grading

Topic Development Presentation demonstrates clear understanding of topic and related theory.

The program description is sufficiently developed including its purpose, its sponsors, the participants and its educational content and process. The theoretical perspectives within the field of adult education are explicated clearly. Mark: 5/5

Program Analysis Presentation provides the historical context in which the program exists (or existed). A succinct analysis of the dominant philosophy embedded in the program, in particular the assumptions about society, humans, the role of education in society, and the view of the learner. A critical analysis of the socio-economic forces affecting the program and the extent to which they shaped the program is provided. Integration of foundational aspects from course literature is demonstrated.

Presentation concludes with a brief analysis of whether or not the program has met its purpose. Mark: 5/5

Presentation Concepts are communicated clearly and accurately in a logical sequence. Presentation flows

(4.6) Demonstrate effective design, delivery and evaluation of presentations, computer conferences, or seminars.

(4.3) Justify and defend your ideas orally and in writing in meetings, forums, seminars, exams and other contexts.

(4.2) Construct coherent arguments and articulate ideas clearly to a range of audiences, formally and informally, through a variety of techniques.

(4.8) Organize, and convey your ideas effectively through a range of communication skills and work collaboratively and in teams.

smoothly from one element to the next. Presentation is engaging encouraging class participation. A reference list is provided. Mark: 5/5

Discussion Facilitation Discussion with audience is initiated and probed with effective questions.

Evidence is demonstrated of moderating discussion through correcting misunderstandings, extending ideas, and clarifying enhance understandings of the application to educational foundations and related theories. Mark: 4/5

Total Mark: 19/20

(4.4) Support the learning of others when involved in teaching, mentoring, moderating, or demonstration activities.

Serhat Beyenir 11-2-27 9:25 PM

**Comment [1]:** Feedback, comments and grading were received by email on July 01, 2008