

**POLISH POST-SECONDARY VOCATIONAL
INSTITUTIONS AND CANADIAN COMMUNITY
COLLEGES: A COMPARISON USING AN
INFORMATION TECHNOLOGY CONCEPTUAL
FRAMEWORK**

Norman L. Butler
Doctoral Candidate
Institute for Educational Research in Warsaw, Poland

Dr. Ryszard Pachocinski
Professor of Comparative Education
Institute for Educational Research, Warsaw, Poland

Dr. Barry S. Davidson
Graduate Faculty
Troy State University

ABSTRACT

The aim of this study was to compare Polish post-secondary vocational institutions with Canadian community colleges using an information technology theoretical framework consisting of three parts: participation, feedback and partnership. The research concentrated upon programs in nursing, tourism and information technology delivered by the three following Polish schools: *Krakowska Szkola Medyczna*, (Cracow, Poland), *Policealne Studium Zawodowe* (Cracow, Poland), Cracow School of Information Technology; and four Canadian community colleges: Red Deer (Red Deer, Alberta), Centennial (Scarborough, Ontario), Durham (Oshawa, Ontario) and Confederation (Thunder Bay, Ontario).

No individual or group commissioned this research study; therefore, the investigators were unrestricted in conducting this work. Since this study consisted of a close examination of only seven programs, the results obtained are limited in their

scope and applicability. The findings are perhaps more important to the participating Polish post-grammar vocational institutions than to the Canadian colleges because of the changes that are expected to occur in Poland's post-secondary vocational school system by the end of 2005. It is recommended that additional research be carried out in the future involving a larger number of institutions.

Definitions:

What are post-secondary (grammar) vocational schools?
(*szkoły policealne i pomaturalne*)?

Post-secondary vocational institutions, which are part of the Polish secondary school system of schooling, prepare secondary school graduates for employment as "skilled manual workers or their equivalent" and for specializations requiring secondary school qualifications (Ministry of National Education, 1994, p. 10). There are three types of schools: 1) public (state), 2) non-public and 3) non-public with state-school status. Post-grammar vocational institution programs lead to a diploma and last up to three years, depending on the occupational track (Ministry of National Education, 1994, p. 10). All programs insist upon the completion of secondary school prior to entry, and medical programs require that a person hold a school-leaving certificate (the *matura*) as well (*Kucińska*, 23 February, 1998).

What are Canadian Community Colleges?

The term community college is generic. According to the Association of Canadian Community Colleges, community colleges are characterized by a number of designations including college of applied arts and technology, *College d'Enseignement General et Professionnel (cégep)*, institute of technology, and university college. The main task of the institutions is to respond to the educational concerns of vocationally orientated school graduates and the training needs of both the public and the private sector. In the beginning, colleges offered learners only certificates and diplomas; however, at the moment, some of them award university degrees as well, and a number offer university transfer programs (Association of Canadian Community Colleges).

Objectives of this investigation

The aim of this study was to compare Polish post-secondary vocational institutions with Canadian community colleges. The rationale for doing so is that on one hand, many college courses are occupationally directed and require at least some secondary school attendance prior to admission; on the other hand, one must complete secondary school prior to starting a post-grammar vocational institution course. Moreover, post-secondary vocational schools in Poland do not award university degrees, nor do most community colleges. Finally, it must be stressed that these two kinds of institutions are comparable but not equivalent.

Our comparison focused upon programs in the following areas:

1. Information technology (3) because we live in an information age (*Kupisiewicz*, 1999, p. 111).
2. Nursing (2) owing to the fact that universal health care is available to both Poles and Canadians. Furthermore, populations in Canada and in Poland are aging, which presents challenges to the health care schemes in both countries: 19% of the people in both countries are between 0-14 years of age, about 68% are between 15-64, and about 13% are 65 years of age and over (<http://www.odci.gov/cia/publications/factbook/geos/ca.html> and <http://www.odci.gov/cia/publications/factbook/geos/pl.html>). The present life expectancy for a Pole is 73.2 years and the Canadians' life expectancy is slightly longer (79.4 years) possibly based on better living conditions within Canada. The life expectancies for both countries will increase and present unique health and nursing training needs that will shape training programs of the future.
3. Tourism (2) because it closely reflects the economic and political changes that have taken place in Poland since 1989 (the opening up of the country to outsiders and the removal of restrictions on foreign travel). Five times more people visited Poland (87.8 million) in 1997 than in 1990 (18.2 million) and the number of Poles traveling to foreign countries increased from 19.3 million in 1989 to 48.6 million in 1997 (Institute of Tourism, 1998, 8 and 18). Moreover, tourism is an important source of revenue for both Poland and Canada.

Following a very considerable number of inquiries, four Canadian and three Polish institutions agreed to participate in this study: Red Deer College, Confederation College, Durham College, Centennial College, *Policealne Studium Zawodowe*, Cracow School of Information Technology (*Szkoła Informatyki AE*) and *Krakowska Szkoła Medyczna*.

This Investigation was undertaken to provide information in Canada and Poland about programs with a common mission (nursing, tourism and information technology) and because of: 1) the changes that have been taking place in the Polish primary and secondary school system of education and 2) the anticipated reforms to the post-secondary vocational school sector (*Kucińska*, 11 October, 2001; *Ministerstwo Edukacji*

Narodowej, 1999, pages 3-72; *Ministerstwo Edukacji Narodowej*, 1999, pages 3-80; *Ministerstwo Edukacji Narodowej*, 1999, pages 3-48).

THEORETICAL FRAMEWORK

Since the 1980s (Byron and Glagiardi) massive changes have occurred in the area of information technology (for example, the development of the Internet and (CD-ROMS) which have resulted in more knowledge being available that has brought about a new form of human relationships in terms of participation, feedback and partnership. That being the case it is reasonable to compare Polish post-secondary vocational schools and Canadian community colleges in terms of the manner in which these two kinds of institutions adopt this new form because "Education is not only a preparation for life; it is a development in life" (King, 1979, p. 12).

THE RESEARCH METHODOLOGY

Methods of data collection

Data was collected both at the institutional and system level, and involved the following:

- 1) Visits to post-grammar vocational schools,
- 2) Using the Internet and libraries in Cracow,
- 3) Open-ended interviews,
- 4) Semi-structured interviews accompanied by an interview guide or questions,
- 5) Telephone conversations,
- 6) Contacting community colleges by e-mail and telephone.

METHODOLOGY CONCERNS

Reliability: Lack of reliability is a major fault of the qualitative approach to research owing, to the fact that the individual research worker is closely associated with the process and, consequently, it is unlikely that another worker would be able to duplicate the findings. This shortcoming was taken into account by tape-recording interviews or by leaving the interview guide with the interviewee (*Kasolik*, 15 December,

1999) for completion that in turn was reviewed by the researcher in the presence of the interviewee¹.

Validity: Interview information was compared and verified against written documentation when it was possible to do so. On two occasions information was confirmed by a personal visit.

THE PROCEDURE

Initial and follow-up interviews began in 1998 (*Kucińska*, 23 February, 1998) and lasted until 2001 (Masio, 18 December, 2001)^{2,3}. Interviews were carried out in English or with the assistance of an English-speaking interpreter.

Questions pertaining to matters raised during the interviews were sent to Ms. Sheila MacKay at Red Deer College, Mr. Rob Butler at Centennial College, Mr. John Mather at Durham College and Mr. Boris Cham at Confederation College so that comparisons could be drawn.

The recorded interviews were transcribed during the summer of 2002.

THE ANALYSIS

THE NURSING PROGRAMS

Both the Red Deer College and *Krakowska Szkoła* nursing programs are limited to full-time learners thus restricting access to them (Masio and *Sarnak*, 5 April, 2000; McKay, personal communication, 25 October, 2001). Nevertheless, at one time the program at *Krakowska Szkoła Medyczna* 'was open to part-time students, and programs at other post-grammar vocational schools are now open to part-time learners (Masio and *Sarnak* 5 April, 2000).

Students in both nursing programs are evaluated by means of written tasks and tests providing them with different kinds of opportunities to demonstrate what they have mastered (Masio, 13 December, 2001; McKay, personal communication, 25 October, 2001). Red Deer learners are assessed through poster presentations in their clinical practices, which encourage the development of work-related public speaking skills (McKay, personal communication, 25 October, 2001).

Faculty evaluation at *Krakowska Szkoła Medyczna* is limited to Ministry of National Education and Sport and headmaster or headmistress assessment (Masio and *Sarnak*, 2 April, 2000). On the other hand, Red Deer College's appraisal process involves peer, student and self – evaluation (as well as management input), which results in a fuller appreciation of faculty performance (McKay, personal communication, 24 October,

2001). however, the evaluation systems in place at both institutions treat faculty as employees (and not as professionals) because they are management administered.

It should be noted that both *Krakowska Szkoła Medyczna* and Red Deer College learners carry out their practices in hospitals (e.g., in surgery) and community service facilities (e.g., in day-care centres) (Masio, 13 December, 2001; McKay, personal communication, 25 October, 2001).

THE TOURISM PROGRAMS

Policealne Studium Zawodowe admits new students once a year (in September) when in fact their Canadian counterpart (Centennial College) does so every eight weeks throughout the year, thus stimulating enrolment (Centennial College).

As a matter of fact, learners in both programs must intern a practice, which makes them attractive to prospective employers (Centennial College; *Kasolik*, 15 December, 1999).

THE INFORMATION TECHNOLOGY (IT) PROGRAMS

Both of the Canadian institutions (Durham College and Confederation College) and Cracow School of Information Technology are equally accessible to future learners because they admit part-time students as well as full-time learners in their programs (Mather, personal communication, 16 October, 2002; *Wilusz*, 6 October, 2001; Cham, personal communication, December, 2002). Cracow School of Information Technology's part-time course of study in information technology is given in a different way than their full-time one (*Policealne Studium Informatyki*). According to *Dr Wilusz*, who is the School's head, less is expected of part-time learners than of full-time students (*Wilusz*, 9 October, 2001).

Cracow School of Information Technology's program lasts two years as does Durham's whereas Confederation's takes one year longer to finish because students are required to complete two fifteen week paid work placements. Likewise, practices (which are unpaid) are the rule for the Polish students (*Wilusz*, 9 October, 2001). On the other hand, Durham College's Information Technology (IT) program may not always require "hands on", cooperative education, practicums, internships or other field experiences (Mather, personal communication, October, 2002; Durham College, date unknown, p. 39). Consequently, Durham College learners may not be as attractive to potential employers as their Polish counterparts.

Confederation, Durham and Cracow School of Information Technology learners are given written exams (which include multiple – choice tests), but the Polish students also have an opportunity to demonstrate what they have mastered in oral exams as well.⁴

(Cham, personal communication, December, 2002; Mather, personal communication, October, 2002; *Wilusz*, 9 October, 2001).

Cracow School of Information Technology and Confederation students formally appraise their teachers, which means that administrators in both Poland and in Canada believe that learners are able to identify good teaching practices (*Wilusz*, 27 October, 1999; Cham, personal communication, December, 2002.) The evaluation schemes in place in both institutions consider faculty as employees (and not as professionals) because they are administered by management (*Wilusz*, 27 October, 1999; Cham, personal communication, December, 2002).

CONCLUDING REMARKS

Disabled learners are provided for by Durham College, Red Deer College, Centennial College and Cracow School of Information Technology but not by *Policealne Studium Zawodowe*, limiting access to their tourism program (Durham College, 202; Red Deer College; Centennial College, date unknown, 134; *Wilusz*, 27 October, 1999; *Kasolik*, 15 December, 1999).⁵

Scholarships are available to Durham, Red Deer, Centennial and Confederation learners but not to Cracow School of Information Technology, *Krakowska Szkoła Medyczna* and *Policealne Studium Zawodowe* students making it easier for the Canadian students to attend college (*Wilusz*, 27 October, 1999; Durham College, date unknown, pages 196-197; Red Deer College; Centennial College; Confederation College, date unknown, p. 10; Masio and *Sarnak*, 5 April, 2000, *Kasolik*, 15 December, 1999).

The following grading system is used to evaluate Red Deer's nursing students:

Letter grade	Grade Point	Description
A	4.0	Excellent Performance
A-	3.7	
B+	3.3	
B	3.0	Good Performance
B-	2.7	
C+	2.3	
C	2.0	Satisfactory Performance
C-	1.7	
D+	1.3	
D	1.0	Pass
F	0.0	Fail

Source: Red Deer College

In comparison, *Krakowska Szkoła Medyczna* uses the 1 to 6 numerical scheme that is used throughout the post-secondary vocational educational system. Furthermore, the marking systems used by Durham and Centennial also involve both letter grade and grade point equivalents as well as numerical ones resulting in a better understanding of student performance (Durham College and University of Ontario Institute of Technology, 2002, p.128; Centennial College, date unknown, p. 198).

Students in all of the post-grammar vocational institutions and in three of the colleges (Red Deer, Confederation and Durham) have the right to appeal their marks implying that sound grading practices are important to both Polish and Canadian educators (Masio and *Sarnak*, 5 April, 2000; Red Deer College, Centennial College; Durham College and University of Ontario Institute Technology, date unknown, p. 98). In fact, all post-grammar vocational school learners attending government-run or state-approved institutions can challenge their grades (*Wilusz*, 27 October, 1999).

Interestingly, Red Deer College and Durham have policies concerning academic dishonesty aimed at students whereas their Polish counterparts do not, meaning that Canadian educators do not tolerate this type of behaviour and Polish educators do. (Red Deer College; Durham College and University of Ontario Institute of Technology, date unknown, 99; Masio, 13 December, 2001; *Wilusz*, 27 October, 1999).

The faculty performance appraisal schemes in existence at Cracow School of Information Technology and *Krakowska Szkoła Medyczna* (as well as those at all other government-run post-grammar vocational institutions) should be examined. The current schemes limit professional development (teachers are treated as workers and not as

professionals). That might make it difficult for them to adjust to the changes that are expected to take place in the post-secondary vocational school system.

Krakowska Szkoła Medyczna student internships in hospitals are most likely influenced by the recent changes in the Polish health care system whereas Cracow School of Information Technology and *Policealne Studium Zawodowe* learners probably experience difficulties carrying out their practices because of the re-structuring that is taking place in the Polish economy (Bogaj et al., 1999, pages 65-66).

Articulation agreements are important for both Polish post-grammar vocational institutions and Canadian community colleges.

Red Deer College's nursing program is delivered in collaboration with the University of Alberta (Red Deer College). After their second year at the College, students decide whether they would like to end their studies after one more year and earn a college diploma or spend two additional ones for a university degree. All learners follow the same course of study for the first two years. This is not so afterwards. The benefit of such an arrangement is that learners are able to complete university level courses without leaving the City of Red Deer reducing the overall cost of their schooling. (The University of Alberta is located in Edmonton).

Krakowska Szkoła Medyczna nursing graduates (as well as ones from other post-grammar vocational school nursing programs) can earn an MA degree at the Jagiellonian University in four years instead of five (Lenartowicz, 23 June, 1999).

Centennial has articulation agreements with a number of universities (e.g. the University of Guelph and Ryerson University) when really *Policealne Studium Zawodowe* has only one, which is with the Academy of Physical Education (*Akademia Wychowania Fizycznego*) in Cracow which means that Centennial students have more opportunities to continue their studies beyond the diploma level than do their Polish counterparts (Centennial College; Kasolik, 15 December, 1999).

Durham has no university articulation agreements, which makes it difficult for their graduates to continue their studies beyond college (Mather, personal communication, October, 2002). On the other hand, Confederation has an arrangement with the University of Athabasca and Cracow School of Information Technology has one (not surprisingly) with their patron (Cracow University of Economics), (Confederation College, Wilusz, 27 October, 1999). Unfortunately, this agreement applies only to part-time studies (Wilusz, 27 October, 1999). Cracow School of Information Technology graduates who want to study on a full-time basis must write the University's entrance exam.

NOTES

1. Six interviews (three of which were follow-up ones) were carried out without the benefit of a tape-recorder:
 - 1) Kucińska, 23 February, 1998.
 - 2) *Lenartowicz*, 23 June, 1999.
 - 3) *Kasolik*, 6 December, 1999.
 - 4) *Kasolik*, 3 October, 2001.
 - 5) *Wilusz*, 9 October, 2001.
 - 6) *Masio*, 13 December, 2001.
2. The interview guide was used during the initial interviews.
3. Follow-up interviews occurred for the purpose of confirming and/or clarifying information.
4. It is not clear if Durham learners are examined orally.
5. Interestingly, *Krakowska Szkoła Medyczna* has never had anyone with a physical disability apply to their program implying that disabled people may not be encouraged to study nursing (*Masio and Sarnak*, 5 April 2000).

INTERVIEWS

Kasolik, Marta, (MA), Teacher of English, *Policealne Studium Zawodowe*, Cracow.

Kucińska, Teresa, (MA), Deputy Director of the Department of Post-Primary Training and Permanent Education, Ministry of National Education in the Republic of Poland.

Lenartowicz, Helena, (PhD), Director, The faculty of Health Protection, The Institute of Nursing, Jagiellonian University, Collegium Medium.

Masio, Sophia, (MA), Teacher of English, *Krakowska Szkoła Medyczna*.

Sarnak, Jan (MD), Director, *Krakowska Szkoła Medyczna*.

Wilusz, Tadeusz, dr inż., Director, Cracow School of Information Technology.

REFERENCES

- Bogaj, A., Kwiatkowski, S., Szymański, M. (1999), *Education in Poland in the Process of Social Change*, Institute for Educational Research, Warsaw.
- Byron, I. and Gagliardi, R., *Communities and the Information Society: The Role of Information and Communication Technologies in Education*, UNESCO: International Bureau of Education, <http://www.idrc.ca/acadia/studies/ir-unesl.htm#1/introduction>. Retrieved: 25 June, 2001.
- Centennial College, *Academic Matters*, <http://www.cencol.on.ca/admiss/acmatt.htm>. Sent to me by Ms Kenny: 13 October, 1999.

- Centennial College, Backgrounder, <http://www.cencol.on.ca/about/back.htm>. Sent to me by Ms Kenny: 13 October, 1999.
- Centennial College, date unknown, Full-time Studies 2000-2001, Centennial College.
- Centennial College, Full-time studies 2000-2001, Centennial College, Scarborough, Ontario
- Centennial College, Hospitality and Tourism Administration, http://www.11db.2.centennialcollege.ca/full_timesterch/fmpro?-db=ftcourse.fps8-format=record%sfdetail.htm-iay=details8-op=eg&program%20. Retrieved: 11 January, 2003.
- Centennial College, Key Performance Indicators, <http://www.centennialcollege.ca/findajob/employers/gradkpi.htm>. Retrieved: 25 May, 2002.
- Centennial College, Scholarships and Awards, <http://www.cencol.on.ca.admiss/scholars1.htm>. Sent to me by Ms Kenny: 13 October, 1999.
- Centennial College. Tuition/Fees for Full-time Programs, <http://www.centennialcollege.ca/register/ft/tuition.html>. Retrieved: 11 January, 2003.
- Confederation College, College Profile, <http://www.confederation.on.ca/college/profile.htm>. Sent to me by Mr. Boris Cham: 2002.
- Confederation College, date unknown, Program Calendar 2002/2004, Confederation College.
- Cracow University of Economics, date unknown, Cracow University of Economics, International Programmes Office.
- Durham College, date unknown, Full-time Course Calendar (2003-2004), Durham College.
- Durham College and University of Ontario Institute of Technology, 2002, Staff Handbook 2002-2003, Durham College and University of Ontario Institute of Technology.
- <http://www.odci.gov/cia/publications/factbook/geos/pl.html>, Retrieved: 17 June, 2001.
- Institute of Tourism (1998), Polish Tourism 1997. State Sports and Tourism Administration, Warsaw.
- King, E. (1979), *Other Schools and Ours*. Fifth Edition, London: Holt, Rinehard and Winston.
- Kupisiewicz, C. (1999). *O Reformach Szkolnych*, Wydawnictwo Akademickie „Żak”, Warszawa.
- Ministry of National Education in the Republic of Poland (1994), *Development of Education in Poland in 1992-1993*, Warsaw.
- Ministerstwo Edukacji Narodowej (1999), *O doskonaleniu nauczycieli*, Ministerstwo Edukacji Narodowej, Warszawa.
- Ministerstwo Edukacji Narodowej (1999), *O nauczaniu przyrody*, Ministerstwo Edukacji Narodowej, Warszawa.
- Ministerstwo Edukacji Narodowej (1999), *O programach nauczania w gimnazjum*, Ministerstwo Edukacji Narodowej, Warszawa.
- Ministerstwo Edukacji Narodowej (1999), *O reformie programowej gimnazjum*, Ministerstwo Edukacji Narodowej, Warszawa.

- Ministerstwo Edukacji Narodowej (1999), O reformie programowej, kształcenie zintegrowane, Ministerstwo Edukacji Narodowej, Warszawa.
- Ministerstwo Edukacji Narodowej (1999), O reformie programowej, kształcenie blokowe, Ministerstwo Edukacji Narodowej, Warszawa.
- Ministerstwo Edukacji Narodowej (1999), O reformie programowej, kształcenie zintegrowane, Ministerstwo Edukacji Narodowej, Warszawa.
- Red Deer College, About the College, <http://www.rdc.ab.ca/about>. Retrieved: 11 September, 2001.
- Red Deer College, Academic policy, http://www.rdc.ab.ca/academics_resources/academic-policy.htm. Retrieved: 27 October, 2001.
- Red Deer College, Admission, http://www.rdc.ab.ca/academic_resources/admission.html. Retrieved: 27 October, 2001.
- Red Deer College, Apply On-line, <http://www.rdc.ab.ca/apply>. Retrieved: 27 October, 2001.
- Red Deer College, Nursing, <http://www.rdc.ab.ca/cgi-bin/ca/endar2001/preview?62>. Retrieved: 12 September, 2001.
- Red Deer College, Scholarships, <http://www.rdc.ab.ca/scholarships>. Retrieved: 27 October, 2001.
- Red Deer College, Search/Site Index, http://www.rdc.ab.ca/search_site. Retrieved: 25 October, 2001.
- Red Deer College. College Directory of Services, <http://www.rdc.ab.ca/directory-of-services/index.html#academicadvising>. Retrieved: 27 October, 2001.