Polish Post-Secondary Vocational Schools And Canadian Community Colleges

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ABSTRACT

'T'his dissertation compared Canadian community colleges with post-secondary vocational schools in Poland. The comparison concentrated upon programs in nursing (2), tourism (2) and information technology (3) that are delivered by three Polish schools and four colleges: Krakowska Szkola Medyczna, Policealne Studium Zawodowe, Cracow School of Information Technology, Red Deer College, Centennial College, Durham College and Confederation College.

Two research approaches were used in this study: qualitative and quantitative mixed research methodologies. Moreover, the theoretical framework was supplied by the general notion of the school as an organization and social institution.

Data collection was both at the institutional and system level, and involved.

1. Visits to the Polish Ministry of' National Education an Sport and 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.
5. Telephone conversations.
6. Contacting community colleges.
7. Administering a program evaluation form to learners in both Poland and Canada.

We tried to answer the following research questions.

1. Are post-secondary vocational institutions meeting the requirements of the labor market as well as Canadian community colleges?

The predicted answer was “no” because it is easier for colleges to form articulation agreements with schools of higher education than it is for their Polish counterparts. Colleges are part of the same system of schooling (post-secondary) as them (schools of higher education) whereas post-secondary vocational institutions are not-they are part of a secondary school scheme. Articulation agreements allow learners to begin their vocational training in one institution and continue it in another. Consequently, they have the potential to meet additional labor market requirements

2. Do college students have a higher perception of their programs than their Polish tallies?

The predicted answer was “yes” because colleges are higher up in the school structure “pecking order” than post-secondary vocational schools: post-secondary as

opposed to secondary. Therefore, college learners ought to place more value on their programs than their Polish counterparts.The results of our investigation partially supported the predicted answer “no” for question 1-Centennial College’s program in tourism has more articulation agreements than their Polish counterpart (Policealne Studium Zawodowe). The predicted answer “yes” was fully confirmed, with regard to question 2.

Nobody commissioned us to carry out this study and therefore we were, to some extent, unrestricted in our work. However, since it consisted of a close examination of only seven programs, the results are limited to their generalizability, and the findings are perhaps more important to the participating post-secondary vocational institutions than to the colleges because of the changes that are expected to occur in the post-secondary vocational school system in 2005. It is recommended that additional research be carried out, in the future, involving a larger number of institutions.

PREFACE

The author's background includes an MA degree in Canadian community college education from Central Michigan University, community college teaching experience in Canada and teaching English as a foreign language at the university level in Poland.

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Agnieszka Klarmia, Bogusław Cykanka and Barbara Borowik who helped me with my statistical work. Marek Indyk who typed my dissertation. My family, my friends, in particular Renata Piróg, Hubert Séguin and William Goul. Their encouragement and input was particularly valuable after the death of both Czesław Majorek, my initial thesis supervisor and Robert, my brother who passed away prior to the completion of this dissertation.

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CHAPTER 1: INTRODUCTION TO THE STUDY

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 specializations requiring secondary school qualifications (Ministry of National Education, 1994, 10). There are three kinds 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 occupation (Ministry of National Education, 1994, 10). All programs insist upon the completion of secondary school prior to entry, and medical ones 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, cégep, institute of technology and university college (Association of Canadian Community Colleges). 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 (Association of Canadian Community Colleges). 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 because 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 do not award university degrees, nor do most colleges. Finally, it must be stressed that these two kinds of institutions are comparable, but not equivalent.

Our comparison focused upon programs in:

1. Information technology (3) because we live in an information age (Kupisiewicz, 1999, 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, as well as many other countries.

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, which will be discussed in chapter 4 (Kucińska, 11 October, 2001; Ministerstwo Edukacji Narodowej, 1999, 3-72; Ministerstwo Edukacji Narodowej, 1999, 3-80; Ministerstwo Edukacji Narodowej, 1999, 3-48).

CHAPTER 2: THE SCHOOL AS AN ORGANIZATION AND SOCIAL INSTITUTION

Schooling (whether it be primary, secondary or higher) usually occurs in classrooms (Husén, 1974, 3). Pupils or students are seated in these rooms where they actively listen to a man or woman who is referred to as a teacher. A great deal of effort is expended by the teacher in "maintaining discipline" in order to establish the necessary conditions for instruction (Husén, 1974, 22). All the learners are taught the same subjects, and are expected to progress at the same rate (Mercieca). No learning is deemed to take place without teaching. Formal education is compulsory in many countries, and young people stay in school beyond the mandatory age which prolongs their "childhood" (Husén, 1974, 9).

The school is in competition with a number of organizations in society with regard to distributing information: newspapers, radio, TV, video-cassettes and (more recently) the Internet (Husén, 1974, 19). Therefore, teachers are not the only sources of knowledge for learners which might, at times, diminish their credibility as information providers.

The teacher's mission ought to include teaching students how to cope with the amount of information available to them, in other words, give them the ability to locate information, explain it and be responsible knowledge consumers (Husén, 1974, 23; Hallack, 2000, 33). Emphasis, then has to be placed on "learning how to learn?".

Due to rapid advances in technology, learning is now a lifelong process and therefore teachers must instill a liking for formal education during the period when it is mandatory (Husén, 1979, 153). They can do this, by making sure that learners are satisfied with their programs. Some 25% of all Canadian post-secondary school learners are now more than 24 years of age which suggests that Canadians recognize the need for lifelong learning (http://www.ibe.unesco.org/international/databanks/dossiers/mainfram.htm).

Educational institutions value quantification – learners are given high marks for good work and poor ones for unsatisfactory performance (Illich). Personal development can not be measured nor compared to the achievement of others, however, portfolio assessment programs do take it into account (Illich and http://www.bgsu.edu/offices/gsw/advport. html#instructor). For example, in Bowling Green State University's composition program students include changes and drafts (as well as finished products) in their portfolios in order to demonstrate how much work they have put into their writing tasks. Effective portfolio assessment programs are very time-consuming to carry out and therefore teachers and

students might be reluctant to get involved in them (http://www.ed.gov/pubs/or/consumerGuides/classuse.html).

Educators believe that grades are required in order to make students learn which suggests that the satisfaction of learning something for its own sake is not important in the school (Husén, 1974, 16)[1]. They are often not a measure of what we actually know but of what we have learnt in relation to what others have learnt. Therefore, it is not surprising that norm based testing is popular with educators (http://www.technos.net/tg_02/3goodlad. htm). The Graduate Record Exam, for example, is given to students who seek admission to American and Canadian graduate schools.

Learners compete for marks which leads to divisions within student groups. Moreover, given that grades can be used by teachers as a weapon to punish students, they may not be viewed by them as a credible evaluation tool.

Learners cheat on examinations so that they can get better marks than they normally would, for several reasons (class discussion at the University of Science and Technology):

1. They are forced to study subjects that they do not like and/or they are not very good at.
2. They have too many examinations to prepare for at once. If a student is not ready for a test, he or she may crib.
3. Poor invigilation.

Cribbing ought to be discouraged because it invalidates the teaching process and leads to poor study habits. Many of my Polish students have told me that it is all right for them to cheat on examinations, which is rather disturbing. Joanna, who is an English language learner at Warsaw University, presents an interesting argument (which I have heard before) as to why cheating is socially acceptable amongst Polish learners (http://www.woe.edu.pl/2003/4_03/beat_cheats.html). Her reasoning is that Poles do not respect authority because in the past it was imposed upon them against their will. Joanna's logic suggests that Canadian students would find cribbing degrading due to the fact that they "have never known tyranny".

According to John Dewey, citizens in a democracy need education to enable them to work together and tackle issues (Ziniewicz). Therefore, it is necessary for individuals in both Canada and Poland (as well as in other democratic states) to have access to schooling.

Professor Husén, has put forth an interesting theory as to why mandatory primary education took root in 19th century Europe (Husén, 1974, 10). According to him, parents began to work in factories and therefore the family could no longer operate as an educational institution. The task of educating children in the Christian Faith and teaching them how "to read and write" then had to be given to a separate institution thus ensuring that industry's

future labor force was appropriately educated. It should be noted that this approach to education does not value childhood for "its own sake", but only as a preparation for adulthood (http://www.pdkintl.org/kappan/kgoo0009.htm).

(Private) and "alternative schools" exist in many countries which suggests that governments have failed in their attempts to satisfy the needs of their citizens (Husén, 1974, 14). An example of an "alternative school" is Summerhill which was established in 1921 by A.S. Neill (http://www.summerhillschool.co.uk/pages/index.html). According to the founder, the central notion of the institution is "to make the school fit the child" instead of the reverse which is the case in ordinary schools (http://www.facultyweb.cortland.edu./andersmd/summer/summer.html)[2]. At Summerhill, children are not forced to attend classes and therefore those who do want to learn. Lastly, pupils and staff have an equal say in the governance of the school.

Interestingly, territories and provinces in Canada permit home schooling. A number of parents have chosen this method of instructing their child and as a result have taken personal responsibility for educating their offspring (http://www.ibe.unesco.org.international/databanks/dossiers/mainfram.htm).

A discussion of schooling would not be complete without mentioning the Virtual University. Its advocates believe that the Internet can be made use of to replace traditional higher schooling (Resnick). Admittedly, the Virtual University has advantages over its traditional counterpart: 1) class size is not limited by classroom space and 2) a course can be taken at "any time and any place". However, in comparison with the Traditional University, it can not deliver extracurricular activities in an organized manner which are supposed to prepare graduates to live in the real world[3, 4]. Therefore, it might be better for them to restrict their enrolment to older learners who might not need to take part in these activities as much as younger students.

According to Professor Sue Martin of Grand Valley State University, professors have concerns about teaching online (Martin, 2001, 98). Student cribbing, for instance, is made easier. I, also, suspect that some faculty members are not sufficiently familiar with the technology of the Internet and therefore feel threatened by it. Moreover, she is of the opinion that alumni and traditional learners might be concerned that courses taken via the Internet are devaluing the degree they completed on campus. As a matter of fact, there are other electronic networks besides the Internet that can be made use for the distribution of learning (cable TV, CD-Roms and WAP), which have made new teaching skills necessary (Yaklief, 2001, 129; Hallak, 2000, 32).

The school system fosters individualism because it acts as a screening device for the workplace (Husén, 1979, 134). It controls the allocation of job opportunities. Furthermore, there is a hierarchy of school structures, which might not be the same in each country (King, 1979, 55). This means that academic achievement is valued in terms of school structure. And, as we shall see in chapter 4, articulation agreements are formed between institutions so that learners can continue their vocational education enabling them to meet additional labor market requirements.

People are often discriminated against in hiring based on attendance in school, even though they may have acquired the necessary skills for a given position through nonformal or informal learning. Nevertheless, formal education does lead to both the advancement of society and individuals (Husén, 1974, 88).

The school ought to educate broadly when preparing learners for the workplace because we can not accurately predict what their needs will be due to rapid advances in technology and increasing globalization (http://www.pdkintl.org/kappan/kgoo0009.htm).

Because of increased globalization, there is a greater requirement to compare educational qualifications, and formal educational schemes must play an active role in addressing this problem (Hallack, 2000, 33-34).

The school does not function in “a social vacuum” (Husén, 1974, 5). Whether one takes a functionalist or a neo-Marxist view of the part the school plays as a determinant of society, in both cases, societies are polarized as a result of their involvement in formal education in terms of the number of years of schooling of their citizens and therefore the school is not the “Great Equalizer”, as it was intended (Husén, 1979, 73-74; Illich).

Professor Husén has informed us that school is a place where students get to know the real world through abstract-verbal activities and where “little concrete action” occurs (Husén, 1979, 133). Unfortunately, this still appears to be true, based on my recent conversations with Polish engineering learners at the University of Science and Technology, where I teach.

Marshall McLuhan has written that each communication medium impacts upon human functions (http://www.marshallMcLuhan.com/fags.html). The Internet has brought about a novel style of human relationships by heightening the need for participation, feedback and partnership. (Because of this new communication technology, there is now more information available to us to share). The school ought to support this new style of behavior in its interactions with students due to fact that learner identification is important for the educative process (King, 1979, 37). Teachers could do so by posting required course material on their web sites for the benefit of students.

Notes

1. My conversations with university learners seem to indicate that “learning for pleasure” does occur when the material in question is thought to be connected to their future professional work.
2. Generally speaking, this is true. Nevertheless, according to Kathleen Cotton, some government school systems are interested in nongraded primary school programs (http://www.nwre/org/scpd/sirs/7/cu14.html). (Graded programs, which are the rule, assume that “chronological age and mental age” correspond, which is not always the case).
3. Resnick’s remarks refer to American colleges and universities, however, they are applicable to higher educational institutions in other countries.
4. It should be noted that part-time traditional university students have been part of the educational landscape for some time and they have only limited access to extracurricular activities.

CHAPTER 3: EDUCATION IN POLAND AND CANADA

> "I don't understand how a serious writer these days can judge his own terrain if he knows no other"
>
> (quoted in Wulff, 1992)

A. Politics, goals and features of the formal educational systems

Unlike Poland, Canada does not have a national system of education (see Figures 1 and 2) – each province and territory has its own system of schooling. One advantage of having separate school plans in a country as large as Canada is that regional needs are more likely to be dealt with. Conversely, a single system of schooling might strengthen Canadian identity.

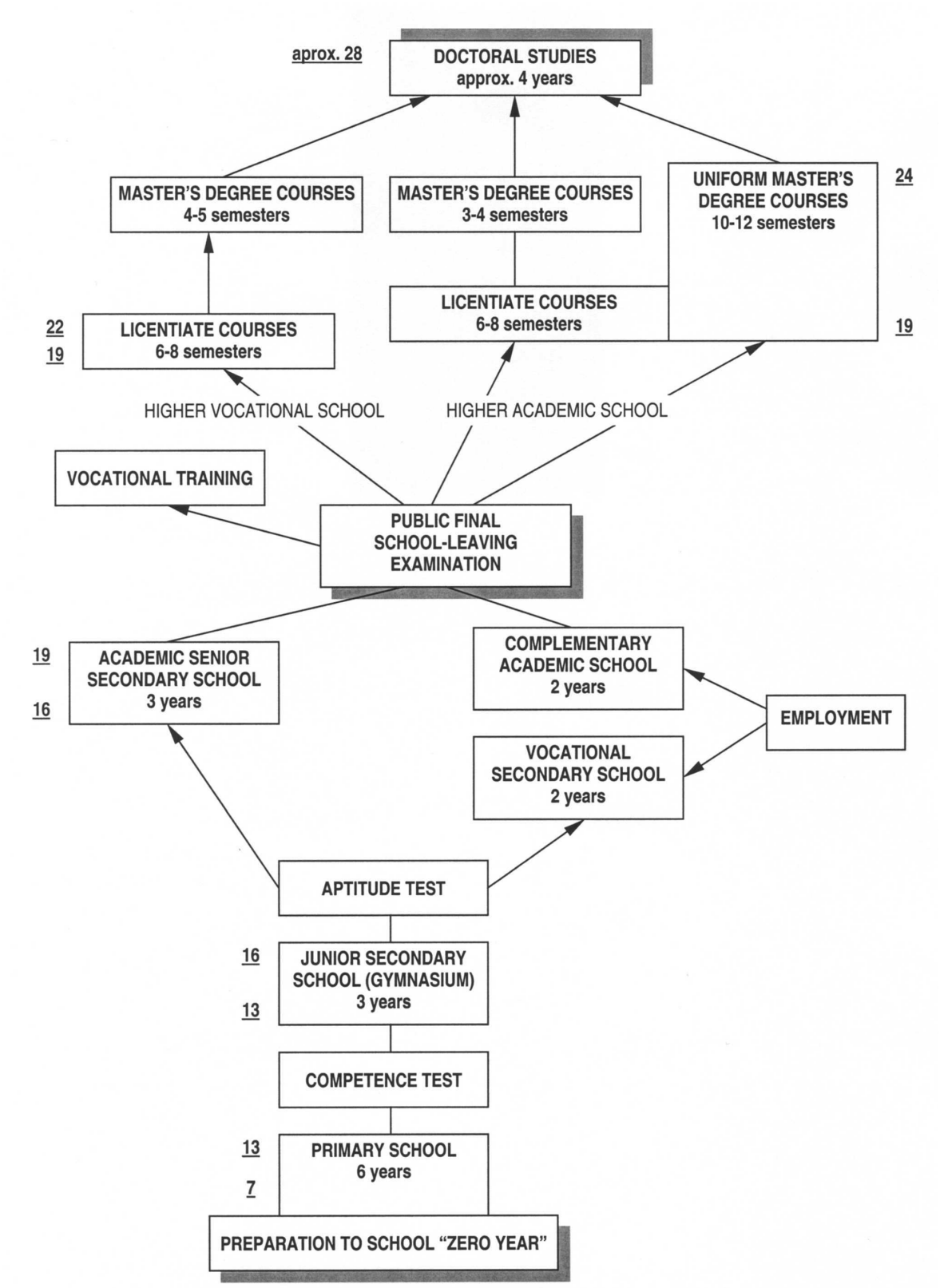
Polish educators as well as Canadian ones are sensitive to the linguistic needs of minority groups. Generally speaking, the language of instruction in Polish schools is Polish, but there are provisions for Slovaks, Ukrainians, Jews, Germans, Byelorussians and Lithuanians to be taught all subjects in their own language (Janowski, 1992, 49). Likewise, "minority language education" (English or French) is provided for in Canada (Council of Ministers of Education, Canada).

Both Poles and Canadians are committed to the notion of compulsory education and public (state) schooling. Poles start school at age 7 and can leave at age 18; Canadians are expected to begin their studies generally between 5 and 7 years of age depending on the province or territory and remain in school until they are 16 or older (Council of Ministers of Education, Canada).

As a matter of fact, there are guarantees in both countries for private school and special education.

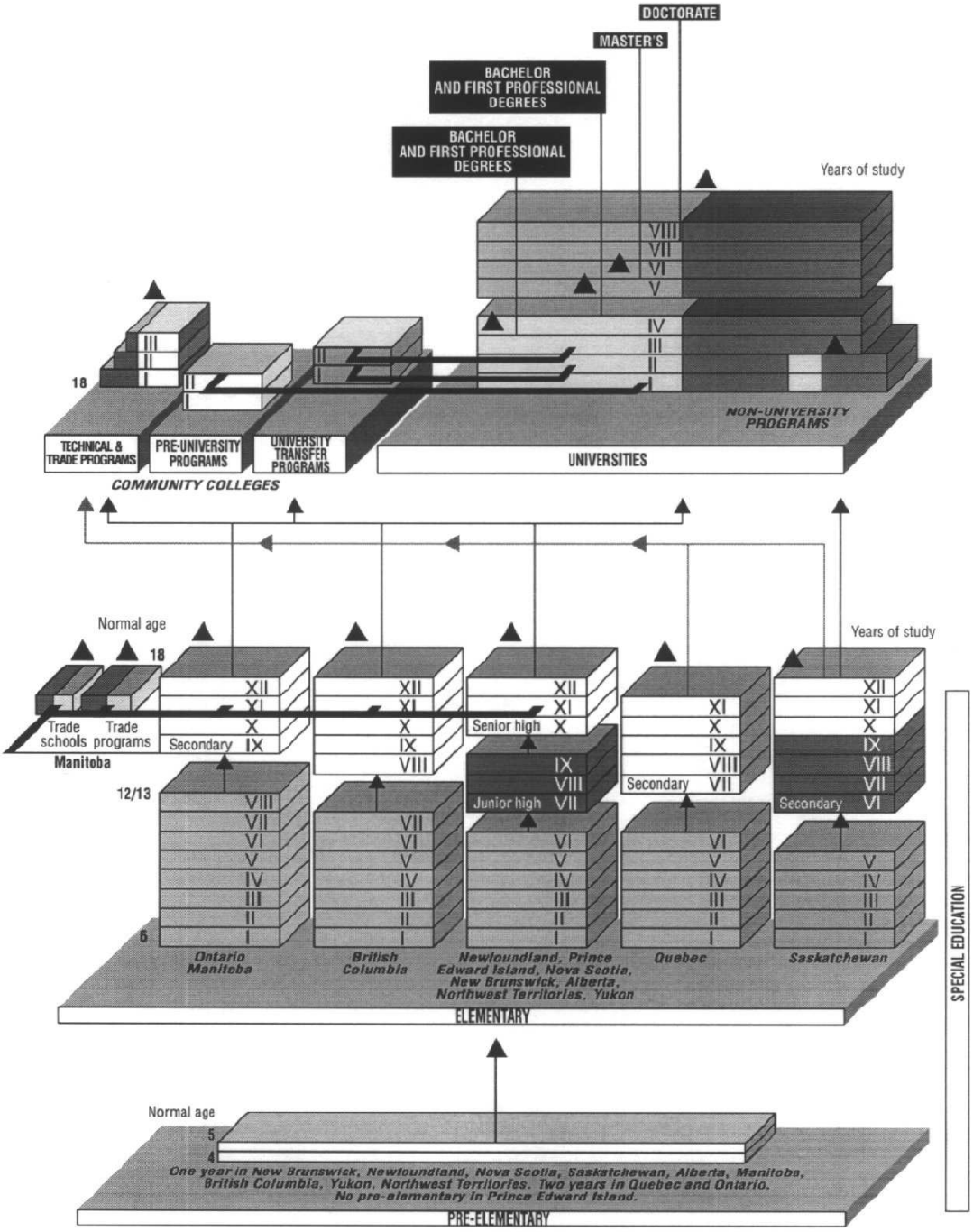
Perhaps, the main feature of Polish and Canadian education respectively is: 1) the studying of West European languages at an early age[1] which are of benefit to Poles in the European Union and 2) religious tolerance (Johnson 1968, 5). In some Canadian provinces, there are separate school systems based upon religious preference, Ontario and Quebec, for example.

Figure 1. Structure of the planned educational system in Poland (excludes special schools)



Source: Quoted in Bogaj et al., 1999, 69

Figure 2. Structure of the educational system in Canada.



Source: Quoted in Canadian Education Statistic Council, 1996, 9.

1. Primary and secondary school education

It should be mentioned that in September 1999 the Polish Ministry of National Education and Sport introduced significant changes into the primary and the secondary

school system (Kucińska, 23 February, 2000; Ministerstwo Edukacji Narodowej, 1999, 3-72; Ministerstwo Edukacji Narodowej, 1999, 3-80; Ministerstwo Edukacji Narodowej, 1999, 3-48). The number of years of primary schooling was reduced from 8 to 6 years, 3 year junior secondary schools (gymnasiums) were created, and starting in September 2001 students (depending on their academic ability) began their studies in either 3 year academic senior secondary schools (specialized lyceums) with the possibility of earning a school leaving certificate (the matura) or 2 year vocational senior secondary institutions (Bogaj et al., 1999, 70).

The Ministry hopes that junior secondary schooling will lead to an increase in the number of pupils entering secondary school due to the fact that these institutions will be better staffed and equipped than many primary schools (Kucińska, 23 February, 2000, Ministry of National Education, 2000, 12-13). Poland's rural dwellers will most likely significantly profit from this particular change. A recent UNESCO report entitled "Republic of Poland Education For All: The year 2000 assessment" indicates that 35% of the urban adult population have finished secondary school whereas somewhat less than 15% in rural centers have done so. The establishment of junior secondary schools will in itself be of benefit because it will segregate pupils between the ages of 13 to 15 from much younger ones.[2] That is, of course, if these schools are located apart from primary institutions.

Academic schools include broad vocational training in their curriculum, and the vocational schools offer "wide fields of study" instead of "narrow ones" which prepare students to move from "one vocation to another" (Bogaj et al., 1999, 86; Kupisiewicz, 1999, 105-108). This approach to vocational education is very much in keeping with the labor requirements of a global market economy which Poland now is moving towards. Moreover, it will be possible for those students who originally choose to study at vocational institutions to prolong their education in two grade academic schools and then write the school leaving exam (Bogaj et al., 1999, 71; Ministry of National Education, 2000, 4).

The new system involves: 1) integrated skills teaching for the first three years, 2) block instruction for the next three and 3) teaching by subject throughout junior secondary school. In the old system, instruction by subject began in the second grade. Since it is thought that children have difficulty differentiating between subjects at an early age these changes in teaching practices are an attempt "to make the school fit the child"

(Kucińska, 23, February, 2000). As was mentioned in chapter 2, non-graded primary school programs also have the same purpose.

Besides, these new iniatives include standardizing the written part of the school learning exam resulting in increased equivalency of school leaving certificates (Ministrerstwo Edukacji Narodowej, 2001, 3-136; Szymański, 2000, 197)[3].

Major changes are also taking place in the Ontario secondary school system of education – students who began their studies in 1999 will be able to finish them in four years as opposed to five (Ontario Ministry of Education and Training). Therefore, Ontario learners will soon be able to pursue post-secondary learning opportunities after 12 years of schooling as is the case now with their Polish counterparts.

Furthermore, according to a 1998 report published by the Council of Ministers of Education, Canada, interesting iniatives were happening a few years ago in education in other parts of Canada:

1. The "development and implementation of curriculum that reflected the Dene and Inuit perspectives" (Northwest Territories).
2. The implementation of "a new elementary – secondary school accreditation program" (British Columbia).
3. The development of "common curriculum and assessment instruments at the K-12 level" (Newfoundland and Labrador).
4. "Program changes in cooperative education, school – to – work programs, [and] entrepreneurship education" (Nova Scotia).

The first initiative suggests that the government of the Northwest Territories is sensitive to the needs of its aboriginal citizens, and the fourth one implies that vocational education is a priority for the government of Nova Scotia.

2. Post-secondary (grammar) vocational schools in Poland and Canadian community colleges

Post-grammar vocational schools and community colleges have, in general, similar functions that is to respond to the educational concerns of the occupationally oriented secondary school leaver. These two types of institutions will be dealt with in detail in the next chapter.

3. Higher education

Higher vocational schools[4]

Higher vocational schools (higher professional schools) have been in operation in Poland for many years, however, it is only recently that they have been organized into a cohesive system (the 1997 Bill on Schools of Higher Vocational Education) which has enhanced their credibility thus making them more attractive places to study at. They differ from schools of higher education in that they can only offer schooling up to the professional title of licentiate or engineer (Ministry of National Education, 1997, Article 6 (1)). Private schools exist, as well as, state-supported ones. Many institutions are situated in smaller towns (e.g. Tarnów and Jarosław) where access to higher education is limited. Consequently, many more people are able to continue their studies beyond secondary school than would normally do so (Ministry of National Education, 2000, 36-37).

Schools of higher education

Poles have been interested in higher learning activities for many years. The Jagiellonian University (1364), where Copernicus once studied, is their oldest university. In comparison, Canada's first university (Laval University) was founded in 1663, about 300 years later (Liwicka, 1959, 10; Seldenthuis, 1996, 84).

Polish higher schooling is carried out in various kinds of institutions such as universities, academies, technical universities and higher pedagogical schools whereas in Canada such education takes place in one type of learning environment – universities. Moreover, as one would expect, both Polish and Canadian schools award professional and non-professional degrees.

Usually, at least one advanced degree is required to teach at both Canadian and Polish higher institutions. Moreover, in Canada the most common faculty ranks are as follows: lecturer, assistant professor, associate professor and professor. On the other hand, Polish higher schools have two classifications of ranks: 1) “academic teachers and researchers” and 2) didactic employees (workers who only have teaching responsibilities) (Bogaj et al., 1999, 120).

Higher education is free for Polish daytime students[5, 6] attending public institutions. On the other hand, Canadians must pay for their university studies which limits enrolment.

During the year 1995-1996, “the average tuition at Canadian universities” was around $ 2,500, Seldenthuis, 1996, viii). Fortunately, there is a government loan program in each country for students who are in need of financial assistance which means that both the Polish and Canadian government are responding to the educational needs of their poorer citizens.

Entrance exams are used by both higher schools and Canadian universities. Poles administer examinations to people who wish to begin studying towards a first degree whereas Canadians use a norm based test (the Graduate Record Examination), when selecting students for advanced degrees. (The first degree at a Polish higher school is the licentiate which takes three years to complete or the magister which takes four or five years. In comparison, an initial degree (e.g. a BA) at a Canadian university is awarded after three or four years of full-time study).

B. Administrative and supervisory structure and operation of the systems of education

1. Primary and secondary school education

There is wide participation pertaining to educational administration in Poland and in Canada. Pedagogical supervision is carried out by the Ministry of National Education and Sport. The responsible minister is represented at the voivodship level by a superintendent (kurator) and at the institution level by a school headteacher or director (Ministry of National Education, 2000, 31). On the other hand, the administration of school affairs is handled by district authorities (senior secondary schools) that are smaller government units than voivodships and communes (kindergartens, primary and junior secondary institutions) that are even smaller still (Ministry of National Education, 2000, 29). All educational expenditures are covered by the state budget (http://www.ibe.unesco.org/international/databanks/dossier/mainfram.htm). Communes may have difficulty carrying out their responsibilities due to a lack of expertise even though the EU has provided assistance for the training of local administrators of education through their Term Plan (OECD, 1996, 98; Bogaj, et al., 1999, 107). During the Communist Period such responsibilities were undertaken by the Ministry of National Education and Sport.

Each Canadian province has a department of education that looks after kindergarten and K-12 schooling (Withworth, 1995, 404). Individual schools headed by principals are under the influence of school boards whose areas are provincially determined. Boards are responsible for the commercial side of education such as: 1) the hiring of teachers and 2) the purchasing of equipment (Withworth, 1995, 404).

2. Higher education

Schools of higher education

There is broader government involvement in higher education in Poland than there is in Canada. In Canada only ministries of education play an active role in the educational process whereas in Poland other ministries besides education (e.g. agriculture and transport) are also concerned.

Most institutions of higher education in Poland are regulated by the 1990 Bill on Schools of Higher Education (Ustawa o Szkolnictwie Wyższym) which is based on an 1989 report (Stachowski, 1989, Chapter X). The Minister of National Education and Sport is responsible for enforcing and establishing the particular framework for it (Article 31(1))[7, 8, 9]. However, he or she must take into account the views of the Central Council of Higher Education (Rada Główna Szkolnictwa Wyższego) (Article 35 (2)) which is a freely elected organ consisting of representatives of the academic community (Article 36 (3)).

The 1990 Bill gives full autonomy to some state institutions of higher learning and limited autonomy to others[10, 11]. Institutions with full autonomy can begin and shut down departments, decide on their own internal laws and determine their admission criteria; schools that do not have full autonomy must receive the approbation of the responsible government minister for these judgements (Articles 48 (2), 12 (1) and 141 (1&3) respectively). In order for a school to have enlarged autonomy it has to engage 60 professors and half of its faculties must have the right to grant the degree of doctor habilitated (Article 12 (1))[12]. These are not good reasons for determining autonomy. This division of autonomy favors larger institutions over smaller ones. Consequently, academic staff and students might want to be associated with the former instead of the latter kinds. On the other hand, once a public Canadian university is given permission to grant degrees and deliver academic programs by the responsible provincial authority it has the right to

design curricula, determine entry requirements and establish program demands (Dennison, 1995, 236).

Furthermore, the Bill allows for the creation of non-state schools of higher education (Article 15 (1)). As a result more people have access to post-secondary schooling[13, 14]. Prior to this act the only private university operating in Poland was the Catholic University of Lublin (Kozakiewicz, 1992, 95). A number of non-public schools evolved from management training centres which were established between 1989 and 1990 (Białecki, 1996, 171). In 1991, the first additional non-state higher school was started, and now there are 136 of these institutions (Białecki, 1996, 171; Ministry of National Education, 2000, 37). In 1996, the largest number of private institutions of higher learning (12) were situated in the Warsaw area, nevertheless, a few were located in places that had never had a higher school thus enhancing the cultural aspect of these communities (Białecki, 1996, 171). Moreover, only 12 non-state higher institutions offer degrees at the magister (MA) level. 413,781 students attended such schools in 1999 which suggests that public educational institutions might not be meeting the needs of Polish society (Auleytner, 2000, 1-1.3; Ministry of National Education, 2000, 37; Przyborowska, 1997, summary)[15].

Private higher schools are believed by some people to have lower admission requirements, higher graduation rates, lower student to teacher ratios, better facilities less credibility with employers than their state counterparts[16]. Moreover, one reason that has been put forth for deciding on a non-state institution of higher learning is “equal partnership between staff and students” (Białecki, 1996, 172-173). In addition, as one might expect, the distinguishing feature separating students who attend non-state schools instead of state ones is their financial standing (Białecki, 1996, 173). About 50 to 60% of non-public institution students have at least one parent who is involved in the ownership of a business. An additional 15 percent of parents are employed by private companies (Białecki, 1996, 173). This suggests that wealth is a factor when considering a private school.

If there is continued growth in the number of students enrolling in private higher schools then public expenditures that would be required to educate these people could be aimed at underfunded state-institutions[17]. In fact, it might be to the Polish government’s advantage to financially support non-public higher institutions. (Interestingly, the Bill allows for this, Article 23 (1)). However, if this were to occur, they (private higher schools) might be subject to more government controls than they are now.

Polish higher institutions are directed by rectors and Canadian ones by presidents. However, the decision- making powers of these administrators are limited by internal governing organs such as senates (Canada and Poland) and boards of governors (Canada) (Canadian Information Centre for International Credentials). It should be noted that none of the Polish managing boards include people from outside the school (as is the case at the University of Toronto) thus excluding society's direct involvement in higher education management (University of Toronto (1997-98), 509). This point was mentioned in a recent OECD Report (OECD, 1996, 104).

In accordance with the Bill, deans as well as their assistants (vice-deans) are elected for no longer than a 3 year period with the resolution that they do not serve in their respective posts for more than 2 terms thus allowing others to do so (Article 63 (1&4))[18]. In comparison, Canadian university deans are selected through competition which means that appointments are based on the decisions of a few as opposed to many people.

Article (33 (1)) of the Bill allows for higher schools to form partnerships (including foreign ones) and to hold accounts in banks outside Poland for this purpose (Article 26). Moreover, the Bill (Article 33 (1)) specifies that the Ministry of National Education and Sport is to facilitate such arrangements by co-ordinating the collaboration of institutions with outside educational facilities. There are benefits to such agreements: 1) academic workers become more qualified and prosperous, 2) institutional and program credibility are established, 3) students become more knowledgeable and 4) schools enhance their reputations. Arrangements which can include student and staff exchanges, occur: 1) "naturally and freely", 2) as a result of bilateral co-operation between governments and 3) within the framework of international bodies (multilateral cooperation) (Ministry of National Education, 2000, 40-41).

European Community Tempus program funds are obtainable for facilitating academic partnerships between Polish and European Union organizations (Kallen, 1993, 25). The Tempus program began on the 7th of May 1990 to help countries (like Poland) who were thought to be ready for entry into the European Union develop their higher education programs within the fabric of a market economy and a democratic society (Kallen, 1993, 25). There is information available (Kallen, 1993, 26) to justify Poland's fear of an increased brain drain westward in such arrangements due to the low salaries paid to Polish academic workers.

As a matter of fact, foreign partnerships are important to Canadian universities – "1,800 international exchange agreements" (e.g. faculty and student exchanges) have taken place (Seldenthuis, 1996-1997, X).

On the 20th of July 2001, a change was made to the 1990 Bill which allowed for the creation of the State Accreditation Committee which makes higher schools more accountable to the Polish government (http:/www.ceenetwork/a_about.html). Consequently, better equivalence of degree arrangements can now be made with EU countries because there is an assurance of higher quality education. Earlier ones appear to be based on "comparable study organization procedures and student exchange programs" (Edmondson, 1998, 90). However, participation in the Committee is limited to members of the academic community which appears to be the tendency in a number of other countries which recently have become members of the EU (Phare, 1998). Exceptions are the Czech and Slovak Republic.

No national quality assurance system covering Canadian universities exists.

C. Supplying personnel for the systems of education

K-12 teacher education normally occurs only in Canadian universities (Berg, 1995, 624) when in fact in Poland various sorts of higher schools like universities, academies and higher pedagogical institutions participate in such training which provides opportunities for different kinds of learning experiences (Bogaj et al., 1999, 209).

The status of teachers who are employed in the Polish public school system is defined in the Teachers' Charter which has recently been amended (18 February, 2000) by parliament (Ministry of National Education, 2000, 34). At the moment, there are four "categories of teaching posts": trainee teacher, contracted teacher, appointed teacher and chartered teacher. Also, provisions are made in the charter concerning advancement, wages and working conditions. The Charter does not cover terms of employment communes and district authorities are responsible for such matters (Kuchinska, 11 October, 2001). On the other hand, provincial and territorial governments are responsible for teacher certification in Canada which restricts the movement of teachers from one part of the country to another. However, there are agreements concerning the "transfer of teacher credentials"

from one jurisdiction to another (http://www.ibe.unesco.org/international/databanks/dossiers/mainfram.htm).

Polish teachers are limited in their capacity to become involved in the educational process because teacher – training in Poland focuses on preparing them to teach only one subject (OECD, 1996, 94). This approach is particularly not suitable for aspiring primary school teachers because recent changes in primary school teaching methods (which were mentioned earlier) do not include subject teaching.

D. Nonformal education

"It is never to late to learn"
(author unknown)

Ready access to nonformal education is very important nowadays because we live in a rapidly changing world. That has a profound influence on both the way we spend our leisure time and the essential quality of our work.

Numerous kinds of Canadian and Polish organizations take part in the delivery of nonformal educational courses and programs, for example: universities, community colleges, trade unions and foundations (Berg, 1995, 622; Komorowska and Janowski, 1995, 4547).

A very important edict was issued by the Polish Ministry of National Education and Sport in 1992 which lead to the creation of 58 centers of continuing education throughout Poland, and their functions include: "out of school education and [the] further training of adults" (Bogaj et al., 1999, 181). Financial support for the centers has been provided by Phare, a EU program (Bogaj et al., 1999, 183). Likewise, in 1998, the Canadian province of Prince Edward Island began "developing and implementing a strategy for improving adult and student literacy education" (Council of Ministers of Education, Canada, 1998).

Concluding comment

Civic education is a requirement in Polish and Ontario schools which means that governments in both Poland and in Canada are attempting to foster democratic ideals and values in their citizens (http://www.civnet.org/journa/issue2/jfmzbug.html; http://www.edu.gov.on.ca/eng/document/curricul/secondary/oss/oss.html#diploma).

Notes

1. Starting in the late 1940's, the Russian language was adopted as the primary foreign language to be instructed to all students from the age of 11 and upwards, regardless of the kind of institution (Janowski, 1992, 43). A "West European language" was offered as a "second foreign language" only to pupils attending full secondary school in other words, institutions leading to a school leaving certificate (Janowski, 1992, 43). From the 1989-90 academic year onward the learning of Russian ceased to be compulsory, and, at about the same time, the Polish government began to encourage the widespread teaching of West European languages in schools (Janowski, 1992, 50). Fifty-five new teacher training colleges have been opened throughout Poland in support of the government's policy (Janowski, 1992, 51). From 1991 to 1992 two foreign organizations endorsed this new training iniative by sending volunteers to Poland: 1) Solidarity Eastern Europe, a Canadian company and 2) the American Peace Corps. The author has first-hand knowledge about the activities of these organizations. In 1991 he was recruited by Solidarity Eastern Europe to teach English at The Technical University of Rzeszów, and while he was there he got to know one Peace Corps worker.
2. This point was made by Mgr Jadwiga Tyszownicka who is a senior lecturer in English at the University of Science and Technology in Cracow.
3. The Polish school leaving certificate is a recognized qualification for admission to undergraduate programs at the University of Toronto, a leading Canadian university with an international reputation, suggesting that both Polish and Canadian secondary schooling are of similar standard (University of Toronto).
4. No comparable institutions exist in Canada.
5. Poland's public higher institution student population is divided. Daytime learners do not have to pay for their studies whereas non-daytime ones do. This division impedes the learning process. One way of resolving this problem would be to demand tuition payments from daytime students as well. Consequently, state schools would be on an "equal footing" with non-state ones as to tuition fees. That might make them less attractive to prospective students than they are now. However, such a measure would not only be contrary to Poland's constitution but also quite possibly might restrict access to higher education (Edmondson, 1998, 88).

6. Also, it has been noted that most non-daytime students have not succeeded in passing the entrance exams to full-time day studies and that the student to academic staff ratio is significantly greater for non-daytime students than it is for daytime ones (Edmondson, 1998, 54).
7. The 1990 Bill does not include state institutions whose status are spelled out by the act on Higher Military Education (Article 1 (1)) nor does it cover "schools of higher education and theological seminaries" owned by churches and other religious organisations unless there are agreements to the contrary except for the Catholic University of Lublin (Article 1 (3)). Also, it must be noted that there is separate legislation regulating the following academic degrees and title: doctor, doctor habilitated and professor.
8. As a matter of interest, many other former soviet-bloc countries have also introduced legislation pertaining to higher education since 1990 suggesting that existing laws were not compatible with the new economic and political realities: Albania (1994), Estonia (1992), Hungary (1993), Latvia (1995), Romania (1993) and Slovenia (1993), (Phare, 1998).
9. Provisions are made in the Bill for students to form self governing bodies in each school (Article 156 (1)) and for representatives of such organs to be consulted about the drafting of laws pertaining to students in higher education (Article 157 (3)). Furthermore, student organisations are permitted (Article 158 (1)).
10. The only exception to this is "the state art School of higher education" (Article 12(2)).
11. Poland is not the only nation to restrict the boundaries of autonomy in their legal documents pertaining to higher education. Estonia, the Czech and the Slovak Republic have also done so (Phare, 1998).
12. In 1993, only 15% of government – run schools had the number of professors needed for full autonomy (Directory of Polish Universities and Other Higher Education Institutions) (OECD, 1996, 105).
13. The fact that foreigners (as well as Poles) can set-up non-state schools (Article 15 (1)) may give cause to some concern.
14. Private universities also exist in Canada (Canadian Information Centre for International Credentials).
15. It appears that public schools in Canada are also not meeting society's requirements given that private institution enrolment there has slightly increased from 4.6% of

children in 1987/88 to 5.6% in 1998/99 (http://www.ibe.unesco.org/international/databanks/dossier/mainfram.htm).

16. Class discussions, 9 and 11 May 2001, the University of Science and Technology in Cracow.
17. The same point has been made with reference to the increasing popularity of private schools in China (Cheng and De Lany, 1999).
18. Prior to the passage of the Bill, deans were chosen, however, it was common knowledge within the higher education community that quite often "political criteria" was a crucial factor in the election process. Likewise, there is no longer a "political criteria" for administrative positions in both primary and secondary institutions (Janowski, 1992, 48). In 1990, the Ministry of National Education and Sport permitted teachers to approve of their headmaster or headmistress or to choose another one (Janowski, 1992, 48). During the same year open competitions were held for important managerial positions in education in all of the voivodships (Janowski, 1992, 48).

CHAPTER 4: POST-SECONDARY (VOCATIONAL SCHOOLS IN GRAMMAR) POLAND AND CANADIAN COMMUNITY COLLEGES

> "Human resources are our most important asset for tomorrow. The nation making inadequate use of its citizens through failure to educate them will be a nation doomed to economic distress at best, and economic disaster at worst".
>
> Quoted in Dennison and Gallagher, 1986, 28.

Introduction

Post-grammar vocational schools came into being in Poland in the 1970s and (as was indicated earlier), they may be state or non-state[1]. The Ministry of National Education and Sport exercises their control over private institutions (as well as government-run ones) in order to protect Poles from unscrupulous educational providers (Kucińska, 28 December, 1998). Non state schools are registered with the appropriate district authority or state on the recommendation of the Ministry, and in order for this to occur the following conditions must be met: 1) an institution school must have a written constitution which is in accordance with Polish laws, 2) a school must have a local address and a suitable location, 3) the owner of an institution "must have the right to use the location" and 4) a school's headmaster must "have the right qualifications" (Kucińska, 28 December, 1998). After fulfilling the following requirements, a private post-secondary vocational institution can obtain state-school status which enhances its credibility (Kucińska, 28 December, 1998; Ministry of National Education, date unknown):

1) Schools can only offer training in Ministry of National Education and Sport approved areas, which limits access to them.
2) An institution's basic curriculum has to be the same as that found in a government – run one.
3) Assurances must be made that learner transcripts and documents are retained indefinitely.

4) Teacher – qualifications must be the same as in state-schools.
5) The grading and promotion schemes must be like the ones in effect in public-institutions[2, 3, 4, 5].

Private post-grammar vocational schools that have been granted public-institution designation are able to show their flexibility by making use of teaching methods which differ from those in place in state-schools and in the delivery of their programs thus enabling them to attract potential learners that may not want to enrol in public institutions (Kucińska, 11 October, 2001). For example, Cracow School of Information Technology offers a computer programmer program on both a full and a part-time basis, and part-time learners are not required to study physical education whereas full-time ones must do so (Policealne Studium).

Community colleges became part of the Canadian educational landscape some years earlier than post-secondary vocational institutions and much later than their American counterparts (Dennison and Gallagher, 1986, 13)[6, 7]. There are two serious contenders to the title of Canada's first community college: Lakehead College of Applied Arts and Technology (1956) in Thunder Bay, Ontario and Lethbridge Community College (1958) which is situated in the Province of Alberta (Dennison and Gallagher, 1986, Appendix B).

In order to qualify for regular membership in the Association of Canadian Community Colleges (ACCC), an educational institution has to:

a) "Deliver post-secondary programs of the academic standard for diploma and certificate qualifications as set out by the appropriate jurisdictional authorities.
b) Operate as an integral part of a provincial or territorial government's educational activities and be substantially funded through that government[8]. Membership is not restricted to government-run institutions, in other words, private ones are accepted provided that they meet the above-stated criteria[9]. The Association has 150 member institutions throughout Canada (Association of Canadian Community Colleges, Appendix D). In addition, Ontario has the most member colleges (27), and the Northwest Territories and Nunavut have the fewest (1 each). Furthermore, colleges appear to have considerably higher enrolments than post-secondary vocational institutions which can lead to impersonal learning environments. For example, Red River College in Winnipeg, Manitoba had a student body of about 32,000 in January 2000 when in fact Cracow School of Information Technology provided instruction to

just 40 students in February, 2001 (Red River College, date unknown, IX; Wilusz, 9 October, 2001).

It should be mentioned that colleges have taken steps to increase aboriginal enrolments (Baker, 1995, 213)[10]. For instance, all colleges in British Columbia have hired First Nation staff coordinators in a attempt to facilitate entry and improve program completion. Nevertheless, factors such as "small population densities" and “isolated geographic locations” are continued obstacles for aboriginals in acquiring a college education (as well as other forms of post-secondary schooling) (Baker, 1995, 209). Colleges should consider measures that would encourage other minority groups besides aboriginals to enrol in their programs because it is important for all citizens in a democracy to have access to post-secondary education (see chapter 2).

As a matter interest, in 1998 the Ontario Institute for Studies in Education of the University of Toronto began a part-time graduate program in higher education at the doctoral level for community college administrators who want to sharpen their managerial skills by attending one of Canada’s leading universities (ACAATO). One Polish higher school – Cracow Pedagogical University – has a program for people who would like to be responsible for post-grammar vocational school program administration at the institutional level (Professor Czesław Majorek of Cracow Pedagogical University, personal communication, 27 March, 2002).

Universities, private career colleges and “secondary school systems offering enrichment programs” are sources of competition for colleges (Price Waterhouse, 1997, 11). On the other hand, post-secondary vocational institutions compete for potential students with both higher institutions and higher vocational schools.

There are different reasons as to why colleges and post-grammar vocational schools are able to successfully compete in the marketplace. Colleges are able to do so because:

1) They “provide credentials with the backing of quality associated with the college system”.
2) Their tuition fees are low when compared to their competitors.
3) They provide academic counselling to students enabling them to make intelligent academic choices.
4) Their programs are usually not as theoretical as those given by universities.
5) They have a “proven track record”.

6) They deliver “a coherent offering of courses” when in fact some private institutions do not (Price Waterhouse, 1997, 12).

On the other hand, future learners are attracted to post-grammar vocational schools over both higher institutions and higher vocational schools due to their shorter programs, lower admission standards and absence of tuition fees implying that such people are less qualified, not as ambitious and poorer than their Polish counterparts[11, 12, 13].

The decade of the 1960s was a period of tremendous growth in college education for four reasons (two of which have to do with Canadian federal government initiatives):

1) The anticipated demand for post-secondary education due to the increasing number of eighteen to twenty four year olds in the Canadian population.
2) The effects of technological and scientific advances following World War II.
3) “High unemployment in the 1950s” which prompted the Canadian government to bring in the Vocational Training Assistance Act (1960).
4) The introduction of the Federal-Provincial Fiscal Arrangements Act of 1967 which resulted in federal financial assistance for "academic/technical" programs in both the non-university and university areas (Dennison and Gallagher, 1986, 12, 15 and 16).

Five issues underlying the need for colleges in the 1960s have been put forth:

1) “A desire to shift national economic development priorities from an agrarian-based to an industrial-based economy.
2) A mismatch between educational programs and labour force needs exacerbated by rapid escalation in technological sophistication, creating a need for higher levels of scientific and technical knowledge and skills.
3) Rigid provincial education structures inhibiting access to educational programs relevant to the changing needs of industry and society.
4) Lack of access to educational opportunities for the unemployed, early school leavers, and adults wishing to upgrade skills for enhanced employment opportunities.
5 Inefficiency and redundancy of costly education and training programs offered in institutions operated by various ministries and government departments whose primary purpose was something other than education (Joyner, 1995, 245)”.

The first issue is not as relevant as it once was because the Canadian economy (as are other economies) is now changing from an industrial to a knowledge – based one and therefore there are different workforce requirements that must be met. Furthermore, the

fifth point is not substantiated by the author. Also, since the 1960s there has been increased globalization which has impacted upon labour force needs (Levin, 1996).

Recent economic and political changes in Poland have had a dramatic impact on schooling at the post-secondary vocational level. During 1990/91 there were 893 institutions and in 1999/2000 there were considerably more (2,328)[14]. Likewise, there has been a significant increase in the student population (from 108,285 to 205,538) during the period, of which 133,686 were female, and business programs were of most interest to them[15, 16, 17, 18]. In comparison, there were about 494,955 college learners in 1998/1999, and approximately 270,533 of them were female[19]. This statistical evidence suggests that it is easier to become a college student than a post-grammar vocational school learner and that both colleges and post-secondary vocational institutions are very attractive places for females to study at.

It should be mentioned that some people probably become post-secondary vocational school learners to avoid compulsory military service which is a requirement for Poles (but not for Canadians). Needless to say, these people are not always the best students.

The most important function for post-secondary vocational school teachers and college faculty is teaching. Nevertheless, there are people in both types of institutions who are able to carry out research and who would benefit professionally from doing so (Dennison and Gallagher, 1986, 270). Research is justified because it is a way of "keeping teaching on the cutting edge" (Dennison and Gallagher, 1986, 270). Institutional research as well as discipline-related should be encouraged so that institutions gain a better understanding of themselves (Dennison and Gallagher 1986, 269-270).

Accessibility

Colleges (except for those in the Province of Quebec) charge tuition fees whereas all public post-grammar vocational schools do not thus making them more affordable than their Canadian counterparts (Government of Quebec, College Education Regulations). However, federal government grants and loans are available to Canadian students which makes it easier for them to attend college (Centennial College, 35).

As a matter of fact, both colleges and post-grammar vocational schools offer full and part-time programs indicating that both Canadian and Polish educators are sensitive to the educational needs of working adults.

Colleges also deliver courses from different locations. For instance, Red River College (referred to before) has its main campus situated close to Winnipeg International Airport, a campus in downtown Winnipeg and regional campuses in the Pembina Valley (Winkler), the Interlake (Arborg), Selkirk, Portage la Prairie and Steinbach (Red River College, date unknown, ix). One post-grammar vocational institution operates from more than one place: Prywatna Szkoła Menedżerów Turystyki in Krynica (Porębska, 23August, 1999).

Our investigation revealed that at least one post-grammar vocational institution – Cracow School of Information Technology – is considering offering distance education courses (Wilusz, 27 October, 1999). In comparison, nearly 80% of colleges offer distance learning courses (e.g. computer science, programming, data base management and college preparation) using various modes of delivery, such as: written correspondence, teleconferencing, audio graphics, the world wide web, the Internet and video conferencing (Price Waterhouse, 1997, 89). Due to the fact that Canada is considerably larger than Poland, distance education is probably more important for Canadians than for Poles. Nevertheless, as was mentioned in chapter 2, teaching on-line has its limitations.

Colleges reach out to potential learners by delivering courses 12 months a year whereas their Polish counterparts only operate from September to June (Dennison and Gallagher, 1986, 67). There are two good reasons as to why post-secondary vocational schools should deliver their programs during the summer months: 1) current learners would graduate sooner and 2) student enrolments would increase. However, if they (post-grammar vocational institutions) were to do so, district authorities and states would have to

augment their spending on education and as a result other government services might suffer.

As a matter of fact, both post-secondary vocational schools and colleges are on-line and therefore both kinds of institutions support the new style of behavior brought about by the Internet in their interactions with potential students, witch is important for the educative progress, as was mentioned in chapter 2.

Mention should be made of the fact that admission to both Ontario and Alberta colleges has been made easier by the introduction of on-line application services. Ontario permits applicants to apply to more than one college and program, at the same time, which increases their chances of enrolment. Setting-up a similar service throughout Canada would be difficult because each province has its own scheme of education. On the other hand, establishing one covering all parts of Poland would be relatively easy because of the country's single system of schooling.

Colleges have opened their doors to many Canadians by offering a wide curriculum (Dennison and Gallagher, 1986, 70-72). As well as offering two to three year technical, paraprofessional and career programs, a given school might also ofr:[21]

1. "Vocational and trades training programs of different but usually short durations, intended to lead directly to employment by graduates who would be job-ready".
2. "Apprenticeship training programs".
3. "University transfer programs". Bargains concerning credit transfer take place between colleges and universities on a provincial or a bilateral basis".[22, 23]
4. "General academic programs with courses not intended for transfer to universities".
5. "Personal interest and community development programs". A course such as Playing Bridge falls into this category.
6. "Pre-college and upgrading programs".
7. Contract programs which involve supplying training services to both private and public sector organizations.[24]

It should be mentioned that the curriculum comprehensiveness that is present in colleges is not duplicated in any other sort of Canadian institution (secondary or post-secondary) and therefore they are strong competitors in the Canadian marketplace (Dennison and Gallagher, 1986, 72-73).

Because of their program mix, colleges attract people of various interests, abilities, goals and ages which in turn leads to enriched learning experiences (Dennison and

Gallagher, 1986, 73). In fact, some institutions have made it practice that learners enrolled in different programs must study together (Dennison and Gallagher, 1986, 74). Because colleges admit such a broad segment of the Canadian population, student services are a necessary as well as a major function for them so that learners are able to succeed after they are enrolled (Dennison and Gallagher, 1986, 74-75).

In comparison with colleges, state and non-state post-grammar vocational schools with public – institution status are only permitted to deliver diploma level courses covering a specific number of occupations which are indicated in the Classification of Occupations and Vocational Education Specialities thus limiting their program offerings (Kucińska, 11 October, 2001). Therefore, post-secondary vocational school student bodies might not be as diversified in terms of learner abilities as college ones.

Unfortunately, there is no provision for "mature students" to enter post-secondary vocational institutions as is the case with colleges. Completion of secondary school is a requirement for all of their programs. Admitting such people would make them more competitive in the marketplace (given that higher schools and higher vocational institutions do not enrol them) and lead to more varied learner populations[25].

However, if post-secondary vocational schools were to do so they, like colleges, might be required to deliver academic upgrading programs which in turn would add to their operating costs which would have to be totally absorbed by the taxpayer (in the case of public institutions) unless they began charging tuition fees. On the other hand, it may be relatively easier for private schools to offer such programs due to the fact that they already require their learners to pay for their studies.

Governance

The Ministry of National Education and Sport is responsible for matters relating to education in post-secondary vocational schools, and district authorities and states are concerned with financial and administrative matters and therefore there are now more levels of government taking part in the post-secondary and vocational school educational process than there were before 1999 (Ministry of National Education, 2000, 28-29, 31-32)[26, 27]. This new arrangement is geared to respond to the particular needs of individual states and districts.

On the other hand, all colleges function "under provincial legislation and within provincial jurisdictions" (Dennison and Gallagher, 1986, 179)[28, 29, 30]. Some are under direct provincial administration, and others are governed through boards which allow for direct societal representation (Dennison and Gallagher, 1986, 179). The relationship between institutions and provincial governments with respect to college governance is not always made clear in government documents which can lead to conflict (Dennison and Gallagher, 1986, 180). In comparison, Canadian universities are substantially independent from government control, and primary and secondary school districts operate "only with delegated authority" from provincial governments (Dennison and Gallagher, 1986, 178-179)[31].

No national or provincial accreditation scheme exists with respect to Canadian community colleges (Dennison, 1995, 236). (The Association of Canadian Community Colleges does not attempt to accredit colleges "either formally or informally", Dennison, 1996, 237). Institutional accreditation involving quality assessments would make college programs more credible. That would make them more competitive in the marketplace given that universities are not accredited. Nevertheless, an accreditation body would be difficult to create at the national level given that Canada is made up of 13 different educational schemes (Dennison, 1995, 237). On the other hand, provincial and regional ones would be relatively easier to establish. But, the task might prove to be hard one in Ontario given that, at one time, the Ontario Association of Certified Engineering Technologists and Technicians were not even allowed to accredit programs in the province's colleges (Skolnik, date unknown, 11).

Two Canadian provincial governments have demonstrated an interest in college performance within their respective jurisdictions. Saskatchewan colleges have been

reviewed (Dennison, 1995, 36). The Government of the Province of New Brunswick has conducted research to determine if student needs were being adequately met by college programs (Dennison, 1995, 64).

Every year the Ontario Ministry of Education and Training surveys all colleges within its jurisdiction for the purpose of making them more accountable to the people they serve (Centennial College, Association of Ontario Colleges of Applied Arts and Technology). The survey is given to all stakeholder groups: employers, college students and graduates. In addition, recent results suggests that Ontario colleges are performing well:

1) "88.7 percent of recent college grads got jobs within six months of graduation.
2) 91.7 percent of employers were satisfied with the quality of the educational preparation of college grads.
3) 81.4 percent of graduates were satisfied with the usefulness of their college education in achieving their goals after graduation.
4) 74.4 percent of students were satisfied with the overall quality of services, programming and resources available to them (seven percent were dissatisfied)" (Association of Ontario Colleges of Applied Arts and Technology).

Nevertheless, a fuller appreciation of college performance would result, if the opinions of college partners were also considered.

Interestingly, a major review of Ontario colleges (Vision 2000) was published in 1990 by the Ontario Ministry of Education and Training which recommended the creation of system-wide college program standards (Ministry of Education and Training). Program graduates, college personnel, employers as well as professional and industry associations take part in the evolvement of these requirements hence ensuring that they are relevant (Ontario Ministry of Education and Training). The establishment of standards makes it easier for programs to be evaluated.

In comparison with colleges, post-grammar vocational schools are evaluated by the Ministry of National Education and Sport every five years which suggests that institutional accountability is important to Polish educational authorities (Ministry of National Education, 2000, 231). Since 1999, superintendents (kurators) have been obliged to write a report about "the quality of education" in each post-secondary vocational school (as well as in each primary and secondary institution) in their state (voivodship) (Ministry of National Education, 2000, 31). In the preparation of a school's account, parents, teachers

and students are spoken to, classes are visited and documents are scrutinized, and the superintendent's findings are shared with headteachers, parents and local authorities (Kucińska, 11, October, 2001)[32, 33]. It might sometimes be difficult to compare post-grammar vocational institutions because the manner in which this procedure is carried out in each state may not be the same (Kucińska, 11, October, 2001)[34, 35].

Such reports are only made about state and private post-grammar vocational schools with public institution status (Kucińska, 11 October, 2001). Private institutions that do not have this designation are supervised differently, and Ministry of Education and Sport Regulations do not clearly specify as to how this supervision should be carried out and therefore each state is responsible for developing and implementing its own supervisory practices (Kucińska, 11 October, 2001). Nevertheless, in the Małopolska Region, school performance is measured against institutional objectives, and infringements upon students' rights are of concern (Kucińska, 11 October, 2001).

College faculty and staff are unionised, however, the way in which collective bargaining takes place differs from province to province (Dennison and Gallagher, 1986, 215). For instance, in British Columbia bargaining is decentralized, in other words, each school bargains separately. Some institutions in the province have separate bargaining units (for example, for support staff) when in fact others do not. But, in the Province of New Brunswick bargaining groups deal directly with the government on a province wide basis which increases the likelihood of equable collective agreements (Dennison and Gallagher, 1986, 218).

Another form of employee organization which should be mentioned here is "the non-union, professional association model" (Dennison and Gallagher, 1986, 225). This approach which may be attractive to some teachers because it encourages them to view themselves as professionals more readily than workers, leaves people vulnerable to college administrators (Dennison and Gallagher, 1986, 225)

As a matter of fact, post-grammar vocational school teachers working in state-run institutions are unionised and therefore they are able to protect themselves against unfair labour practices (OECD, 1996, 86).

Teacher evaluation systems in place in post-grammar vocational schools must be concerned with preparedness for promotion. (Teachers must obtain a positive assessment in order to be promoted throughout the categories of teaching posts mentioned in the Teachers' Charter, Ministry of National Education, 2000, 34)[36]. These sorts of appraisal

schemes do not treat teachers as professional but as employees (Dennison and Gallagher, 1986, 231).

On the other hand, some college faculty members have developed and administered their own appraisal programs which have focused on "improvement of performance" (instead of readiness for advancement) (Dennison and Gallagher, 1986, 231-232). However, non-faculty college workers might object to this approach to performance evaluation being used, if it is not extended to them.

Staff development is provided for in the Teachers' Charter where it is linked to promotion (Ministry of National Education, 2000, 34). In order for a teacher to progress from one category of teaching post to another he or she must successfully finish "a practical placement" thus allowing for equal opportunities for advancement. However, the process does not appear to be strategic. In other words, it does not seem to be linked to the long term plans of the educational system and therefore, to some extent, it can be compared to the haphazard – like employee development programs which were in place in colleges in the early 1990s (Gallagher, 1995, 268). During this period, development resources were made use of for such things as rewarding workers for faithful service or to meet goals determined by particular departments.

All public and private post-secondary vocational institutions with state-school status make use of the same grading system (because they are part of a single scheme of education) which is as follows:

- stopień celujący (excellent) – 6
- stopień bardzo dobry (very good) – 5
- stopień dobry (good) – 4
- stopień dostateczny (enough) – 3
- stopień dopuszczający (passable) – 2, a passing grade
- stopień niedostateczny (not enough) – 1

A similar 6 point scale system is used in Polish higher schools which makes it easier for post-grammar vocational school students to transfer to them (Jankowicz, 2001, 76). On the contrary, grading schemes are not the same in each college (due to the fact that Canada has many systems of schooling) which might make it difficult for: 1) learners to begin their studies in one province and to continue them in another or to transfer to a university and 2) potential employers to assess graduates[37]. For example, the pass mark in each diploma course in all Quebec colleges is 60% whereas students attending Red River

College, which is located in the Province of Manitoba need only obtain a mark of 50 out of 100 to succeed in a course (Government of Quebec, College Education Regulations; Red River College, date unknown, A-11).

As a matter of fact, the post-grammar vocational school system is expected to be reformed in 2005 (Kucińska, 11 October, 2001). Changes have already occurred to other parts of the Polish educational system (see chapter 3). The authors of the changes have indicated that completing a post-secondary vocational school program will not be tantamount to obtaining a vocational qualification (e.g. the title of technician) as is the case now (Drogosz-Zabłocka, 1999, 52). Post-grammar vocational institution graduates of the future will have to sit an exam organized by regional examination boards and a central examination committee (Ministry of National Education, 2000, 28; Drogosz-Zabłocka, 1999, 52). The new system will result in more equitable qualifications that will make it easier for potential employers to assess graduates.

Due to the fact that academic senior school programs now include some vocational training, post-secondary vocational institution programs of the future will be shorter (Kucińska, 11 October, 2001). There will most likely be an increase in the number of people attending them because: 1) there will be more academic senior school graduates as a consequence of the establishment of junior secondary institutions (Drogosz-Zabłocka, 1999, 54) and 2) of the closing down of technical secondary schools (Kucińska, 11 October, 2001).

Lastly, policymakers might want to consider broadening the function of post-secondary vocational schools from that of mainly providing vocational training to recent secondary school leavers to include involvement in government iniatives related to the re-structuring of the Polish economy (e.g. job re-training schemes). This would result in them becoming more visible and hence more desirable to prospective learners. (Colleges have been instruments of government policy since their inception, Gallagher, 1995, 259. For example, Cégeps have played an important part in the democratisation of schooling in the Province of Quebec). But, private schools might be reluctant to take part in such programs because they may not be profitable and therefore public institutions would have to deliver them which would result in additional operating costs which district and state authorities would be forced to bear.

Post-grammar vocational school and college programs

Some institutions (University College of the Cariboo, University College of the Fraser Valley, Kwantlen University College, Malaspina University College and Oktavagan University College) in the Province of British Columbia offer university degrees as well as certificates and diplomas (Association of Canadian Community Colleges). The major reason behind the university-college notion is to increase access to university education to those people residing outside of British Columbia's major cities (Vancouver and Victoria) (Dennison, 1995, 135).

Associate in Arts (AA) degree programs have been available at some colleges in British Columbia since 1992 (Dennison, 1995, 129-130). These programs are attractive to some people because they are shorter than Bachelor of Arts ones and therefore takes less time to complete. However, perhaps we should be concerned about their value in the Canadian workplace given that it has been mentioned that that have little worth in the American one (Skolnik, 1995-96).

The Alberta government has agreed to allow colleges within that province to deliver applied degree programs in four areas: forest resources management, petroleum engineering technology, communications and small business and entrepreneurship which might imply that some other areas of applied study are not worthy of such consideration (Skolnik, 1995-96).

Ontario community college leaders would like to replace diplomas by applied degrees for college programs lasting three years (Skolnik, 1995-96)[38]. There is a precedent in Ontario for these kind of degrees. Ryerson Polytechnic Institute (which is now Ryerson University) offered them (Skolnik, 1995-96)[39].

As a matter of interest, in the Province of Alberta there are creative partnerships which permit universities to deliver their programs at particular colleges (Dennison, 1995, 30). An example of such an arrangement (which we will look at again later) is between Red Deer College and the University of Alberta with respect to nursing. Such programs are desirable for learners because they: 1) often involve “lower tuition fees and smaller class sizes” when they are attending college and 2) enable them to complete part of their studies without leaving home which saves them money on accommodation (Byrne, 1998/1999).

Post-grammar vocational institutions do not grant higher degrees (only diplomas) and in order for them to be able to do so they would have to become part of the higher

education system and then they would be subject to the same laws that regulate either higher schools or higher vocational institutions (Ministry of National Education, 1994, Article 4 (2); Ministry of National Education, 1997, Article 6 (1)). But, three post-secondary vocational schools (which were mentioned earlier) have transfer agreements with Polish higher schools: Prywatna Szkoła Mendżerów in Krynica, Cracow School of Information Technology and Policealne Studium Zawodowe in Cracow. This means that some vocational institution courses are of university standard.

Erika Gottlieb (Gottlieb, 1995-96) in her article entitled "Reconciling the University with the Community College" reminds us about the overall importance of general education subjects in career-oriented programs. The studying of such subjects leads to personal fulfilment (and the refinement of the mind) (Gottlieb, 1995-96). Although, her comments are directed at colleges they are equally applicable to post-secondary vocational schools.

Gottlieb does not attempt to inform us as to what the balance should be between avocational courses and vocational ones in such programs and whether or not some students are in greater need of them than others. It should be pointed out that she sees studying general education subjects as "possibly even as preparation for university" and in doing so she might be undermining the notion that they should be considered for their own sake.

A number of provinces in different parts of Canada have voiced sentiments about general education subjects in their college programs:

"Every field of education has its discursive and contemplative aspects as expressed in its historical, social and aesthetic components. Within a college programme they may be merged in ways that will enable students to comprehend their fields of study not merely as academic or technical but as powerful social and intellectual forces that are deeply and widely influential in human affairs" (British Columbia).

"The college's aim is to provide opportunities to meet learning needs to perform all of life's roles in a satisfying way. Within any one phase of a person's life he is likely to be filling several roles.... The college staffs undertook to identify needs arising from these new roles and to facilitate programmes that would contribute to the competence of people in all of their endeavours" (Saskatchewan).

"There has long been a deficiency in our educational system in regard to the training of technical personnel beyond the high school but short of the university level... An adequate

general education is the best basis on which to build and to rebuild the particular work skills which the future will require" (Ontario).

["Colleges will]... provide educational opportunities for the continuing development of individuals in their careers, and within this general framework, for personal growth and development" (Manitoba).

"All programs of studies should include the study of general education subjects and specific vocational subjects" (Prince Edward Island).

["The college must]... promote and provide opportunities for continuous learning for the personal enrichment of the citizens for [of] New Brunswick" (New Brunswick). (Quoted in Dennison and Gallagher, 1986, 244-245).

However, the Province of Quebec[40] has implemented a coherent program in general education which means that all Quebec diploma learners must take courses in four vocational subject areas:

1) "Language of instruction and literature, 7 1/3 credits.
2) Second language, 2 credits.
3) Philosophy or humanities, 4 1/3 credits.
4) Physical education, 3 credits".

(Government of Quebec, College Education Regulations). Subject area number one is considered to be the most important of the four areas due to the fact that more credits (7 1/3) are allotted to it than to the others. The Quebec Ministry of Education has the right to "impose a uniform examination" in each of the four subject areas which students must pass prior to being granted a college diploma (Government of Quebec, College Education Regulations). This would suggest that, at least, one Canadian province considers general education courses to be an important component of college programs[41].

As a matter of interest, the only general education subjects available to post-secondary vocational school learners are "languages and sports" (Kucińska, 28 December, 1998). But, post-grammar vocational institution programs are designed with general secondary school leavers in mind who have already completed avocational courses of study.

"Diversity skills" courses should be included in college curricula and post-secondary vocational school programs, as well, because many employers operate internationally and consequently they require that their workers be able to deal with

diverse populations (Milroy, 1996). These courses are also important for students who intend to work for firms that only do business within Canada because of the multiethnic nature of Canadian society.

Eight particular skills are thought to be most important: “intellectual communication”, “monitoring and modifying language”, “critical thinking”, “identifying sources of personal discomfort”, “cross-cultural understanding”, “facilitating group activities”, “flexibility or adaptability” and “recognizing the role of teamwork in the diverse workplace”. Milroy has mentioned that “diversity skills” training could be included in existing college courses that are intended to teach portable skills like “consensus building and negotiating” (Milroy, 1996). Mind-expanding subjects like philosophy and history and multicultural education courses might also be useful in developing these skills. Schools that offer “diversity training” will find it easier to attract students due to the fact they are teaching skills that are wanted by employers (Milroy, 1996).

Colleges now face the problem of delivering much needed services during a time of tight – budgets and therefore some of them generate additional revenue by taking part in international programs involving foreign students (Knowles, 1995, 184 and 196). Such programs enrich the lives of both college learners and staff and reduce the dependency of colleges on provincial financing thus making them more independent (Dunlop, 1998). Likewise, it would be financially advantageous for post-grammar vocational schools to provide educational services to foreign learners. However, it might be difficult for them to do so because Polish is not widely spoken. Instead, they may have to deliver their programs in English, French and German[42].

Concluding remarks

There appears to be no national body representing post-grammar vocational schools, as is the case with community colleges. The existence of one would make the institutions more visible to future partners.

Colleges demonstrate their flexibility in ways that might not be acceptable to post-secondary vocational school educators which makes them very attractive places to study at: 1) students are allowed to plan their own curriculum, under the direction of a teacher, 2) credit is given for prior learning (academic work carried out elsewhere or skills gained in non-formal settings) and 3) special programs are created for people who are not interested in conventional methods of instruction (Dennison and Gallagher, 1986, 76).

Educators in Poland as well as those in Canada must respond to the needs of an aging population (Dunlop, 1998). As was mentioned earlier, 68% of the people in both countries are between 15 and 64 years of age, and about 13% are 65 years and over. Public post-grammar vocational schools might have more difficulty dealing with older learners than their Canadian counterparts because they are part of a secondary school educational scheme and colleges are not. Secondary institution systems of schooling are designed with younger people in mind. Nevertheless, post-secondary vocational institutions could favourably respond to the educational requirements of older people by admitting “mature students” into their programs.

Post-secondary vocational schools like colleges ought to come to terms with the impact that globalization is having upon labour force needs (Levin, 1996). Unfortunately, three college systems (Ontario, Alberta and British Columbia) have not done so in a favourable manner by proposing that institutions within their jurisdiction emphasize programs that train people for a specific job instead of ones like community education that impart “knowledge and learning” (Levin, 1996). The suggestion disregards the particular concerns of colleges learners and communities (Levin, 1996). On the other hand, if colleges undertake this proposal it would be an opportunity for them to generate much – needed revenue in a period of fiscal restraint.

One way for colleges (and post-grammar vocational institutions) to successfully tackle the problem of changing employment requirements resulting from global economic forces would be for them to assist their students in developing skills (e.g. personal management ones like creativity and adaptability) that will permit them to become independent learners (Gallagher, 1995, 267). Another way for them to deal with this

challenge is to collaborate on a country-wide basis (Gallagher, 1995, 263)[43]. Moreover, it would be relatively easy for post-secondary vocational schools to do so because they are part of a single system of education.

Notes

1. Mgr Theresa Kucińska, telephone conversation, 29, January 2001.
2. High tuition costs might be a major obstacle influencing enrolment in private post-secondary vocational schools. In 1998, tuition fees for daytime students attending them ranged from 1100-1420 zloties per semester (Drogosz-Zabłocka, 1999, 50). In comparison, students attending public post-grammar vocational schools do not have to pay for their studies.
3. Most private post-secondary vocational schools had this status in 1997/98 (Drogosz-Zabłocka, 1999, 46).
4. It is desirable for a non-state post-secondary vocational institution to obtain and maintain public-school status because such institutions receive government subsidies and their learners are entitled to tax-deductions (Kucińska, 28 December, 1998).
5. Interestingly, the Polish government has funded private schools that did not have public institution designation. That has encouraged people to continue operating them (Białecki, 1995, 68).
6. The first American College (Fresno College) was established in 1910 in California because it was felt that there was a need for "an intermediary level (of institution) between high school and college (university) where academic maturity could occur" (Dennison and Gallagher, 1986, 13). (At the time, the Americans had an "open door" policy concerning admission to university). Newer colleges have diversified their programs to include technical training (Dennison and Gallagher, 1986, 14).
7. Two reasons have been put forth as to why Canadians did not found colleges until much later than their American neighbours: 1) their unwillingness to accept the notion that high school leavers ought to be given automatic acceptance into post-secondary programs and 2) their belief that some subjects (e.g. mathematics) are "college subjects" and others (e.g. gunsmithing) are not (Dennison and Gallagher, 1986, 14-15).
8. Ms. Louise Slocombe, Executive Assistant to the President of ACCC, 2 March, 1999, e-mail message.
9. Ms. Judy Barbeau, Information Services, ACCC, 17 December 1999, e-mail message.
10. Interestingly, Saskatchewan has established an aboriginal college: the Saskatchewan Institute of Indian Technologies (Baker, 1995, 213; Association of Canadian Community Colleges).

11. Programs in these institutions last from three to five years whereas the longest post-secondary vocational school ones last three years.
12. All higher school and higher vocational institution programs require the possession of a school leaving certificate prior to entry when in fact only post-grammar vocational school medical ones do.
13. Regular higher school students are not obliged to pay tuition, but part time ones must do so. On the other hand, no post-grammar vocational school learner attending a public institution has to pay for his/her studies.
14. Statistical Yearbook of the Republic of Poland, 2000, 236.
15. Similarly, admissions to Polish higher schools increased dramatically during the 1990s: from 394,313 to 1,463,303 (Ministry of National Education, 2000, 37).
16. Post-grammar vocational institutions are a popular destination for many secondary school graduates – in 1998/1999 every third graduate continued his/her studies in one of them (Drogosz-Zabłocka, 1999, 43).
17. Statistical Yearbook of the Republic of Poland, 2000, 237.
18. The same kinds of programs seem to be popular with college students (Statistics Canada).
19. Statistics Canada.
20. This remark only applies to full-time diploma students; on the other hand, part-time ones must pay for their studies. This provision impedes the learning process because it divides the college learner population. This division is the same as the split in the Polish higher school student body which was referred to earlier.
21. English as a second language (ESL) programs can be added to this list.
22. As a matter of interest, on December the 1st, 1998, the Ontario – College – University Transfer Guide website was launched (The 2000 Environmental Scan). The site provides information about postsecondary learning opportunities open to Ontario learners.
23. As a matter of fact, three post-grammar vocational institutions also have transfer agreements with Polish higher schools: Prywatna Szkola Menedżerów Turystyki in Krynica, Cracow School of Information Technology and Policealne Studium Zawodowe in Cracow (Porębska, 23 August, 1999, Wilusz, 27 October, 1999, Kasolik, 6 December, 1999).

24. It should be noted that Cracow School of Information Technology also provides similar services (Cracow University of Economics, date unknown, 21).
25. In order to become either a higher school or a higher vocational institution learner one must possess a school learning certificate (Ministry of National Education, 1994, Article 140 (1); Ministry of National Education, 1997, Article 71 (1)).
26. Post-grammar vocational institutions as well as other vocational schools are allowed to develop modules in order to tailor their courses to local employment requirements which makes them more attractive to potential students (Kucińska, 11 October, 2001).
27. One other government ministry has been involved in the development of a post-secondary vocational school program which ensures its relevance. In 1996, the Ministry of Health and Social Welfare developed a three year nursing program in co-operation with the Ministry of National Education and Sport (Ministry of Health and Social Welfare, Ministry of National Education, 1996).
28. The federal government is also involved in college educational matters (ACCC International, 1998/1999). For example, they have established two programs (The Program for North American Mobility in Higher Education and the Canada – European Community Program for Co-operation in Higher Education and Training) for the purpose of stimulating college and university partnering with post-secondary institutions located outside of Canada.
29. There are 13 college systems whereas only one post-grammar vocational school scheme exists.
30. There is one provincial association of colleges – the Association of Colleges of Applied Arts and Technology of Ontario (ACAATO).
31. The Quebec Government's legislation concerning educational institutions at the university level supports this view (Governement du Quebec, 1995-2001).
32. The Ministry's assessment would be more complete, if the views of program graduates and employers were also solicited.
33. The procedure used in the Małopolska Region is outlined in the following publication: Biuletyn Informacyjny Małopolskiego Kuratorium Oświaty, 2000, 11-17).
34. As a matter of interest, a written account must also be produced every five years concerning the quality of schooling in each state (Ministry of National Education, 2000, 31). Prior to 1999, reports were written after a two week inspection period, and they were not as comprehensive as they are now (Kucińska, 11 October, 2001). This

would imply that more attention is currently being paid to the quality of education in Polish schools than previously.

35. Based upon my interviews with representatives of the three post-grammar vocational schools which took part in this study, it appears that Ministry of National Education evaluations, of some sort, do in fact take place (Wilusz, 6 October, 2001; Masio and Sarnak, 5 April, 2000; Kasolik, 6 December, 1999).
36. The Teachers' Charter, which was referred to earlier, regulates the teaching profession in Poland.
37. Transferring from one educational institution to another can be problematic for a number of reasons (Byrne, 1998/1999). For instance, courses may not be the same in each one. Nevertheless, if all colleges agreed upon a single grading system then, at least, one difficulty would be removed. Furthermore, it is necessary for institutions to be concerned about transferability issues given that students are faced with changing workplaces resulting from global economic forces (Byrne, 1998/1999).
38. Applied degrees originated in Europe for programs considered to be “hands on” whereas the associate degree came about in the US at the beginning of the last century (Skolnik, 1995-96). And initially, it (the associate degree) was aimed at learners who were only able to complete two years of a four year university program (Skolnik, 1995-96). However, nowadays it is granted by community and junior colleges “upon [the] completion of a two year program for which [students are given] credit towards a four year degree at most universities” (Skolnik, 1995-96).
39. “While the layman might assume that there are well established criteria which a program must meet in order to qualify for a degree, such is not the case. What constitutes degree level study is essentially what institutions which have the authority to grant degrees are willing to put their imprimatur on, and there is considerable – but, of course not unlimited – variation in the nature of the learning experience which different institutions deem necessary for a degree. The determination of what constitutes a degree is thus to at least a considerable extent a matter of politics” (quoted in Skolnik, date unknown, 19).
40. Quebec’s educational scheme is unique in Canada. After completing 11 years of primary and secondary school, students can progress to ą CÉGEP (community college) where they enter either a pre-university or a technical stream (Les Publications du Quebec, Division III).

41. Prior to 1986 Quebec was the only Canadian province to include general education subjects in all of its college programs which suggests that Quebec learners then received a broader education than their Canadian counterparts (Dennison and Gallagher, 1986, 247). At the time, Quebec students were obliged to take fourteen avocational courses (two of which had to do with the Province of Quebec which is not surprising given the interest there was in Quebec separatism during this period): "language and literature (four courses), philosophy or humanities (four courses), Quebec civilization (one course), Quebec economy (one course), and physical education (four courses)" (Dennison and Gallagher, 1986, 247-248).
42. The Jagiellonian University delivers MA programs in English which are aimed at foreign students and therefore the suggestion that post-grammar vocational institutions offer educational services to foreign learners is not an unthinkable one (Jagiellonian University, date unknown, 3).
43. An outstanding example of college partnering at the provincial level is Contact South. Contact South is a group of colleges (19) in Ontario that deliver on-line distance learning courses (The 2000 Environmental Scan). A course is developed by one member of the consortium which turn is used by other members.

CHAPTER 5: THE RESEARCH QUESTIONS

A review of the literature allowed us to frame two research questions pertaining to our comparison of post-secondary vocational school and community college nursing, tourism and information technology programs.

Research question 1

Are post-secondary vocational institutions meeting the requirements of the labor market as well as Canadian community colleges?

We predicted that the answer to the above question would be “no” because it is easier for colleges to form articulation agreements with schools of higher education than it is for post-grammar vocational institutions. Colleges are part of the same system of schooling as them (post-secondary)whereas post-secondary vocational schools are not – they are part of a secondary school scheme. As was mentioned in chapter 2, articulation agreements are formed between institutions so that learners can continue their vocational education enabling them to meet additional labor market requirements.

Research question 2

Do Canadian college students have a higher perception of their programs than their Polish tallies?

Because academic achievement is valued in terms of school structure (see chapter 2) we predicted that the answer to the above question would be “yes”. Colleges are part of a higher scheme of schooling than post-grammar vocational schools: post-secondary as opposed to secondary.

CHAPTER 6: THE RESEARCH METHODOLOGY

The research approaches

Two research approaches were used in this study: qualitative and quantitative mixed research methodologies.

Methods of data collection

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

1) Visits to the Polish Ministry of National Education and Sport and 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 (see Appendix C).
5) Telephone conversations.
6) Contacting community colleges.
7) Administering a program evaluation form to learners in both Poland and Canada.

The program evaluation form

The program evaluation form used in this investigation consisted of 33 statements, and covered three areas curriculum (8 statements), learning materials (5 statements) and instruction (20 statements) (see Appendix D)[1]. Furthermore, space was available following each group of statements for comments and recommendations. At the top of the first page provisions were made for students to: 1) write the name of their institution and their program of studies and 2) indicate the year of their studies and sex (male/female). Moreover, 3rd year Red Deer nursing learners were also asked to indicate whether they were diploma or degree students.

The form and the instructions associated with it were translated into Polish (see Appendix E).

Copies of the form were given to eight Cracow School of Information Technology students in order to confirm that the instructions to it were understood and that 30 minutes was sufficient time for it to be completed. The results of these learners were included in our investigation.

Methodological 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 to 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 interviewee[2].

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.

Limitations of the study

Since this investigation consisted of a close examination of only 7 programs, the findings obtained are limited to their generalizability.

The procedure

Initial and follow-up interviews began in 1998 (Kucińska, 23 February, 1998) and lasted until 2001 (Masio, 18 December, 2001)[3, 4]. 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 program evaluation forms were completed between January 2001 (Cracow School of Information Technology) and the fall of 2002 (Confederation).

The recorded interviews were transcribed during the summer of 2002.

Notes

1. The statements and the format were drawn from two forms (Program Evaluation Form and Performance Appraisal) that have been used by Durham College to evaluate faculty performance. Permission was granted via e-mail on 25 January 2001 to use the material.
2. Seven 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) Poręba, 23 August, 1999.
   4) Kasolik, 6 December, 1999.
   5) Kasolik, 3 October, 2001.
   6) Wilusz, 9 October, 2001.
   7) Masio, 13 December, 2001.
3. The interview guide was used during the initial interviews.
4. Follow-up interviews occurred for the purpose of confirming and/or clarifying information.

CHAPTER 7: THE ANALYSIS

The participating schools

All of the Polish institutions that took part in this study (Cracow School of Information Technology, Policealne Studium Zawodowe and Krakowska Szkoła Medyczna) are located in the City of Cracow, which is situated in the south of Poland, and is home to a number of higher institutions including the Jagiellonian University, where Copernicus once studied. They are registered with the local Ministry of National Education and Sport office (the kuratorium) (as are all post-grammar vocational schools in the area), and advertised in Krakowski Informator Edukacyjny (pages 56 and 57) and Edukacja w Krakowie (pages 28, 29 and 32).

Cracow School of Information Technology is a private institution with state-school status, and it was founded in 1992 (Cracow University of Economics, date unknown, 21). It is under the patronage of one of the larger higher institutions in Cracow – Cracow University of Economics – and therefore the School's students have available to them more services and activities than other post-grammar vocational institution learners (Cracow University of Economics, date unknown, 21). That makes it a very attractive place to study at. In fact, it is located on the University Campus. Provision is made in the 1990 Bill on Schools of Higher Education (Article 36) for higher institutions to manage post-secondary vocational schools.

Policealne Studium Zawodowe is a public institution that shares accommodation with a secondary school in the center of Cracow. Besides tourism, the Institution delivers courses in banking and accounting and enrols about 500 students in a11 of its programs (Kasolik, 6 Dec, 1999).

The third Polish school (Krakowska Szkoła Medyczna) involved in this investigation was established in 1949 and is also government-run (Masio and Sarnak, 5 April, 2000). In addition to nursing, it provides training in other medical areas (Masio and Sarnak, 5 April, 2000)[1].

Three of the four Canadian institutions being considered in this study (Durham College, Centennial College and Confederation College) are part of the Ontario community college system of education whereas the third one (Red Deer College) is located in the Province of Alberta between the cities of Edmonton and Calgary. All four educational

institutions are members of the Association of Canadian Community Colleges (Association of Canadian Community Colleges).

Durham is situated in the City of Oshawa, which lies east of Toronto. It has five campuses and offers more than 70 programs (Durham College, date unknown, 8 and 3-211). More than 87% of employers have indicated in a recent survey that they were satisfied with the quality of Durham's graduates suggesting that the College's programs are of high standard (Durham College).

Durham shares facilities with Ontario's newest university – the University of Ontario Institute of Technology – which began operation in 2003 (Durham College, date unknown, 10). In fact, the institution is situated at the college's Oshawa location. Durham College learners benefit from this partnership due to the fact that it is easy for them to transfer to university – level programs (Durham College, date unknown, 10).

Centennial came into being in 1966 and has its main campus in Scarborough, which is located near Toronto, a major Canadian city and a provincial capital (Centennial College). The College's certificate and diploma level programs number over 80, and in 19981999 overall student enrolment was nearly 42,000, 12,000 of which were full-time (Centennial College).

Confederation was established in 1967 (one year after Centennial was founded), and its main campus is in Thunder Bay which is located 700 kilometers from Winnipeg, Manitoba (Confederation College). The College delivers educational programs to post-secondary learners (about 3,200) as well as to other students (Confederation College). As a matter of fact, in a recent surrey 87% of employers indicated that they were pleased with the educational preparation of Confederation's graduates implying that the college's programs are of high quality (Confederation College, date unknown, 1).

The fourth Canadian school of interest to us (Red Deer) is situated in the City of Red Deer and was founded about 35 years ago (Red Deer College). The sorts of programs delivered by the College (for example, university transfer and technical) are similar to those available at other Canadian community colleges (Red Deer College).

All the participating colleges are board governed and therefore institutional management in each case involves a sharing "of authority and responsibility" between college and provincial government (Dennison and Gallagher, 1986, 180; Confederation College; Centennial College; Durham College and University of Ontario Institute of Technology, 2002, 1; McKay 24, personal communication, October, 2001)[2].

In comparison, the Polish government (the Ministry of National Education and Sport) is responsible for matters relating to education in each post-secondary vocational school, and district and state authorities are concerned with administrative activities in two of the institutions: 1) Krakowska Szkoła Medyczna and 2) Policealne Studium Zawodowe (Ministry of National Education, 2000, 28-29, 31-32).

All of the Canadian institutions attempt to diversity their student enrolment by encouraging foreign applicants to apply to their programs, and in order to maximize their success these potential learners have to provide evidence as to their proficiency in English (e.g. a satisfactory TOEFL score) (Red Deer College; Confederation College, date unknown, 2; Centennial College, date unknown, 120; Durham College, date unknown, 216)[3]. Foreign students must pay considerably more in tuition for two semesters of study at Durham than Canadian ones which could have a negative impact on the College's learner body: $ 9,676 and $ 1,786, respectively (Durham College, date unknown, 206).

The nursing programs

Table 1. Nursing program, Red Deer College, Red Deer, Alberta.

Year 1	
Fall term	Winter term
Learning package	Learning package
Nursing practice	Nursing practice
Integrated psychology I	Integrated psychology II
Integrated sociology I	Integrated sociology II
Anatomy I	Anatomy II
Integrated microbiology I	Integrated microbiology II
Integrated physiology I	Integrated physiology II

Intersession English

Year 2	
Fall term	Winter term
Learning package	Learning package
Nursing practice	Nursing practice
Anatomy III	Anatomy IV
Integrated microbiology III	Integrated medical microbiology IV
Integrated physiology III	Integrated physiology IV
Year 3	
Fall term	Winter term
Learning package	Transition to the graduate role
Nursing practice	Nursing practice – diploma completion

Program Head: Ms Sheila McKay

Total number of full-time students: 153 (as of October 2001)

1st year: 80 (of which 6 were male)

2nd year: 67 (of which 4 were male)

3rd year: 6 (of which 1 was male)

Program cost: $ 5,079.25 (year 1), $ 4,379.75 (year 2) and $ 2,722.25 (year 3)

Sources: Red Deer College; McKay, personal communication, (24-25 October, 2001).

Table 2. Nursing program, Krakowska Szkoła Medyczna, Cracow.[4]

Year 1	
Semester 1	Semester 2
Physical education	Physical education
Psychology and introduction to sociology	Psychology and introduction to sociology
Human anatomy and physiology	Pathology
Pathology	Pharmacology
Health care policy	Nursing (internal medicine)
Nursing	Nursing (surgery)
Nursing station	Nursing (paediatric)
Practice	Nursing station
	Practice
Year 2	
Semester 3	Semester 4
Nursing practice	Physical education
	Nursing (maternity)
	Nursing (psychiatry)
	General nursing
	Nursing (emergency)
	Nursing station
	Nursing practice
Year 3	
Semester 5	
Nursing practice	

Program Head: Dr Jan Sarnak[4]

Total number of full-time students: 40 (as of March, 2001)

1st year: 22 (all were female)

2nd year: 18 (all were female)

Sources: Krakowska Szkoła Medyczna; Masio, 13 December, 2001; Information Sheet (Appendix F).

Possession of a school leaving certificate (the matura), which is earned after twelve years of schooling, is required for admission into Krakowska Szkoła Medyczna's nursing

program. Sometimes potential learners are interviewed (Masio and Sarnak, 5 April, 2000). However, no one is refused entry due to the fact that there is a shortage of applicants which is understandable because nurses are very poorly paid in Poland (Masio and Sarnak, 5 April, 2000). It is necessary for the school to advertise for future students in the newspaper, on the radio and television (Masio and Sarnak, 5 April, 2000).

Completion of 12 years of primary and secondary school education is likewise required prior to starting nursing studies at Red Deer (Red Deer College).

In comparison with Red Deer's 3 year program Krakowska Szkoła Medyczna's is 2.5 years long which suggests that their graduates might not be as well-trained as their Canadian counterparts (Masio and Sarnak, 5 April, 2000)[6].

Both 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 Krakowska Szkoła Medyczna's was open to part-time students, and ones at other post-grammar vocational schools are now (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 learnt (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).

Interestingly, Red Deer's overall learner enrolment was more than three times greater than Krakowska Szkoła Medyczna's: 153 and 40, respectively. This means that the Canadian program was larger than the Polish one.

Both programs have a general education component: 1) English and physical education (Krakowska Szkoła Medyczna) and 2) English (Red Deer College). However, only the Polish learners are required to study computer science enabling them to acquire computer skills so that they can become independent learners (Masio, 13 December, 2001). Independent learning skills are required to meet the changing employment needs of a global market economy.

As a matter of fact, teacher-training does not seem to be as important when being considered for a Red Deer nursing faculty position as it is for a Krakowska Szkoła Medyczna one – all six of the Polish teachers have received pedagogical training at the

MA level whereas only some of the 26 full-time Canadian ones have (McKay, personal communication, 24 October, 2001; Masio, 13 December, 2001)[7].

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'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 a management administered.

It should be noted that both Krakowska Szkoła Medyczna and Red Deer College learners (most of whom are female) 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

Table 3. Hospitality and Tourism Administration Program, Centennial College, Scarborough, Ontario.

Year 1	Year 2
Semester 1	Semester 2
Food and beverage practices Introduction to computing Introduction to accounting Dimentions of tourism Reading and writing prose Geography and tourism General education elective	Beverage knowledge and service Human resources for hospitality and tourism administrators Practical math for hospitality and tourism Hospitality and tourism marketing Presenting and communicating effectively Food fundamentals Sanitation, safety and hygiene Approaches to literature General education elective
Year 2	
Semester 3	Semester 4
Advanced hospitality accounting Principles of hospitality management Sales for hospitality and tourism professionals Canada Coast to Coast Approaches to literature Choose two courses from: Ontario tourism product Destinations 3, (September) Tour operations Room division management Loading facilities management International cuisine Bar and cellar management	Advertising and sales promotion for hospitality and tourism administrators Meeting and convention management Career planning placement strategies Purchasing for the service industry Advanced business communication General education elective Chose two courses from: Destinations 1 Online reservations Destination 2 Hotel resort and club management Hotel sales and marketing Menu management and design Facilities planning and design
Year 3	
Semester 5	Semester 6
Financial management Entrepreneurship in hospitality and tourism Issues in tourism Marketing strategies for hospitality and	Hospitality and tourism industry internship A Hospitality and tourism industry internship B

tourism Field placement strategies Hospitality law Budget control Hospitality contemporary management Choose four courses from: Effective selling Techniques for hospitality and tourism Group escorting Special events management Tour costing and design Product knowledge – United States Product knowledge – Canada Issues in international hospitality management Security systems Introduction to casino operations Hospitality recreation administration Issues in international management Oenology	

Program Head: Mr. Shyam Ranganathan

Tuition fees and other costs per year: $ 2,289.80 (Canadian students) and $ 10,425.80 (International learners)

Source: Centennial College.

Table 4. Hotelier Program (Technik Hotelarstwa), Policealne Studium Zawodowe, Cracow[8].

Year 1	
Semester 1	Semester 2
Foreign languages (2) Law and economics The principles of nutrition and kitchen operations Customer service Organizational management Office work strategies Professional foreign language Physical education	Foreign languages (2) Law and economics The principles of nutrition and kitchen operations Customer service Organizational management Office work strategies Professional foreign language Physical education

Year 2	
Semester 3	Semester 4
Foreign languages (2)	Foreign languages (2)
Organizational management	Organizational management
Office work strategies	Office work strategies
Professional foreign language	Professional foreign language
Tourism services	Tourism services
The essentials of accounting and financial management	The essentials of accounting and financial management
Marketing for hospitality	Marketing for hospitality
Practical classes	Practical classes
Physical education	Physical education

Program Head: Mgr Anna Gawinek-Pisarczyk

Total number of full-time students: 145 (as of February 2001)

1st year: 70 (of which 53 were female)

2nd year: 75 (of which 59 were female)

Sources: Kasolik, 3 October, 2001; School Diploma (Appendix G); Poster (Appendix H).

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

Secondary school completion is required for admission to both Centennial College and Policealne Studium Zawodowe programs (Centennial College; Kasolik, 15 December, 1999). Also, potential Centennial students "must obtain a satisfactory result in a communication skills assessment" implying that the development of good verbal skills is not emphasized in the Ontario secondary school scheme of education (Centennial College). On the contrary, all applicants to Policealne Studium Zawodowe's program are accepted when there are enough places (Kasolik, 15 December, 1999). However, if there are not, the best candidates are determined by means of an interview or an entrance examination in geography and foreign languages suggesting that potential learners might not always be proficient in these areas (Kasolik, 15 December, 1999).[9]

Centennial's Hospitality and Tourism Administration Program not only lasts one year longer than Policealne Studium Zawodowe's Hotelier Program (three years as opposed to two), it is broader in scope, as one might expect. Centennial students can focus their training in four different areas of tourism which increases their marketability: 1) food

service management, 2) convention and meetings management, 3) tourism management and 4) accommodation management.

Both programs include general education subjects: 1) general education electives (Centennial College) and 2) foreign languages (2) and physical education (Policealne Studium Zawodowe). But, only the Canadian students are obliged to study computer science (introduction to computing) making them employable.

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

The Information Technology (IT) Programs

Table 5. Information Technology Program, Cracow School of Information Technology.

Year 1	
Semester 1	Semester 2
Structural programming Operating systems Computer equipment Office software Mathematics and basic statistics Economics English Physical education Computer workshops (Individual study using the internet)	Structural programming Operating systems Computer equipment Office software Mathematics and statistics Economics English Physical education Computer workshops (Individual study using the internet)
Year 2	
Semester 3	Semester 4
Object programming Operating systems Computer equipment Office software Computer networks Multimedia and computer graphics Computer systems Mathematics and basic statistics English Physical education Computer workshops (Individual study using the internet)	Object programming Operating systems Office software Computer networks Multimedia and computer graphics Computer systems Internet programming English Physical education Computer workshops (Individual study using the internet)

Program Head: Dr Tadeusz Wilusz

Total number of full-time students: 40 (as of 24 February, 2001)

1st year: 24 (of which 3 were female)

2nd year: 16 (of which all were male)

Tuition costs: 300 złoties a month (2001/2002)

Sources: Cracow University of Economics, date unknown, 21; Wilusz, 9 October, 2001; Policealne Studium Informatyki, School Diplomas (Appendix I).

Table 6. Computer Programmer Program, Durham College, Oshawa, Ontario.

Year 1	
Semester 1	Semester 2
Communications for success Computer programming I Database programming I Computer systems I Introduction to programming Mathematics I Microcomputer operating systems	Advanced VB C programming I Internet programming Interpersonal communications Network administration VBA developer
Year 2	
Semester 3	Semester 4
C programming II Cobol programming I Computer operations Visual applications/JAVA Internet programming II	Advanced database design Database engines Project management Systems analysis and design Team programming Windows programming

Program Head: John Mather

Total number of full-time students: 63 (as of 10 November, 2002)

1st year: 38 (of which 10 were female)

2nd year: 25 (of which 7 were male)

Year 1 cost (2002-2003): $ 4,367

Source: Durham College, date unknown, 39; Mather, personal communication, 10 November, 2002.

Table 7. Computer Programmer Analyst (Co-op) program, Confederation College, Thunder Bay, Ontario.

Year 1	
Semester 1	Semester 2
Knowledge work software Programming I Information systems I Information technology Mathematics I	Productivity tools Programming I IT hardware and software Computer mathematics Fundamental accounting principles

Introductory accounting Basic communications	International communications General education elective
Year 2	
Semester 3	Semester 4
Statistics/quantitative methods Programming III Information systems II Networks and telecommunication Network essentials Principles of economics Advanced communications	Database design and implementation Web programming I Project management and practice Structured analysis and design Operating systems IT client services and marketing Career planning, professional and training development

Co-op placement 1: May-August (15 weeks) following semester 4

Year 3	
Semester 5	Semester 6
IT trends and new developments IT business development management Web programming II Object-oriented analysis and design Client project Business without borders	IT co-op work placement II; January-May (15 weeks) IT co-op work placement review (1 week)

Program Head: Boris Cham

Total number of full-time students: 89 (as of December, 2002)

1st year: 37 (of which 33 were male and 4 were female)

2nd year: 32 (of which 28 were male and 4 were female)

3rd year: 20 (of which 14 were male and 6 were female)

Tuition cost: $ 1,786 (approximately) per academic year.

Sources: Confederation College; Cham, personal communication, December, 2002.

Secondary school completion is necessary for people who would like to study information technology at Durham College, Confederation College and Cracow School of Information Technology (Durham College, date unknown, 39; Confederation College; Wilusz, 27 October, 1999)[10]. Both of the Canadian schools and the Polish one are equally

accessible to future learners because they admit part-time students as well as full-time ones 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 studies 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).

Confederation's efforts to attract new learners are relatively more aggressive than their Polish counterpart's because the college visits nearby secondary schools in order to entice future students (Cham, personal communication, December, 2002). However, both institutions make use of traditional advertising to draw potential learners (Cham, personal communication, December, 2002; Wilusz, 27 October, 1999).

Cracow School of Information Technology's program lasts two years as does Durham's whereas Confederation's takes one year longer to finish due to the fact that 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 learners do not always complete internships, however, provisions are made for them to obtain "extensive hands – on experience in computer labs" (Mather, personal communication, October, 2002; Durham College, date unknown, 39). Consequently, they may not be as attractive to potential employers as their Polish counterparts.

As a matter of fact, all three IT programs under consideration prepare students for a career in computer programming which suggests that there is a need for people in this area in both Canada and Poland[11].

Both Confederation's and Durham's overall student enrolments were considerably higher than Cracow School of Information Technology's: 89, 63 and 40, respectively. This means that the Canadian programs are larger than the Polish one.

It should be noted that there is an avocational subject component in both the Canadian programs and the Polish one which means that learners in both countries are required to take general education courses: communications for success (Durham), general education elective and principles of economics (Confederation) and English and physical education (Cracow School of Information Technology).

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 learnt in oral ones as well.[12] (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; see Appendix J). The evaluation schemes in place in both institutions consider faculty as employees (and not as professionals) due to the fact that they are administered by management (Wilusz, 27 October, 1999; Cham, personal communication, December, 2002). Finally, all of Confederation's information technology faculty members only hold bachelor degrees whereas some of Cracow School of Information Technology's teaching personnel have also earned a doctorate qualifying them to carry out research activities as well as instructional ones (Cham, personal communication, December, 2002; Wilusz, 27 October, 1999).

Concluding remarks

All of the programs require the completion of secondary school prior to entry and have an avocational subject component suggesting that educators in both Poland and Canada consider academic success and general education courses to be important for vocational learners.

Krakowska Szkoła Medyczna (nursing), Policealne Studium Zawodowe (hotelier) and Cracow School of Information Technology (information technology) learners are required to study physical education when in fact their Canadian counterparts are not. This suggests that physical fitness is not important to some Canadian educators.

Durham, and Confederation, Red Deer and one of the Polish schools (Cracow School of Information Technology) recognize learning activities taken outside of their institutions meaning that incoming students do not have to repeat courses thus saving them both time and money (Durham College, date unknown, 211; Confederation College, date unknown, 5; Wilusz, 27 October, 1999).

Disabled learners are provided for by Durham, Red Deer, Centennial and Cracow School of Information Technology but not by Policealne Studium Zawodowe limiting access to them (Durham College, 202; Red Deer College; Centennial College, date unknown, 134; Wilusz, 27 October, 1999; Kasolik, 15 December, 1999).[13]

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 ones making it easier for them to attend college (Wilusz, 27 October, 1999; Durham College, date unknown, 196-197; Red Deer College; Centennial College; Confederation College, date unknown, 10; Masio and Sarnak, 5 April, 2000, Kasolik, 15 December, 1999).

It has been suggested that colleges should play an active role in transforming Canada into a lifelong learning society (Dennison and Gallagher, 1986, 177). They could do so by making older learners central to college life instead of them being guests in a place established essentially for traditional students (Dennison and Gallagher, 1986, 176). That being said, it should be noted that Red Deer offers services (child-minding ones) that are particularly aimed at older learners (Red Deer College).

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 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, 128; Centennial College, date unknown, 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, 98). In fact, all post-grammar vocational school learners attending government-run or state-approved institutions can grieve their grades (Wilusz, 27 October, 1999).

Interestingly, Red Deer 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 ones do (Red Deer College; Durham College and University of Ontario Institute of Technology, date unknown, 99; Masio, 13 December, 2001; Wilusz, 27 October, 1999). This is not surprising given that Polish learners consider cheating on exams to be sociably acceptable (see chapter 2).

Unfortunately, our investigation did not reveal any usage of student portfolio assessment programs, which were mentioned in chapter 2.

Interestingly, two of the participating Polish institutions had lower student enrolments than their Canadian counterparts. That is not surprising given that post-grammar vocational schools, as a rule, appear to admit fewer learners than colleges: 40 (Cracow School of Information Technology), 500 (Policealne Studium Zawodowe), 5,000 (Durham College), about 3,200 (Confederation College) and 42,000 (Centennial College) (Wilusz, 24 February, 2001, Kasolik, 6 December, 1999; Durham College and University of Ontario Institute of Technology, 2002-2003; Confederation College; Centennial College).

All of the Krakowska Szkoła Medyczna and most of the Red Deer nursing learners (140 out of 153) were female whereas the majority of the Cracow School of Information Technology, Confederation and Durham students were male: 37 out of 40, 75 out of 89 and 47 out of 63, respectively.

Three of the four Canadian community college programs might be less attractive to potential learners than their Polish counterparts due to the fact that they take more time to complete: Red Deer (nursing), Centennial (hospitality and tourism administration) and Confederation (computer programmer analyst program).

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 ones 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 scheme.

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 due to the re-structuring that is taking place in the Polish economy (Bogaj et al., 1999, 65-66).

None of the college programs require their students to learn French, one of Canada's official languages. Requiring them to do so would increase their employment opportunities.

Research workers should be aware that post-secondary vocational institution nursing programs will cease to exist in the near future (Kucińska, 28 December, 1998; Masio and Sarnak, 5 April, 2000).

Research question 1

Are post-secondary vocational institutions meeting the requirements of the labor market as well as colleges?

Red Deer College's nursing program is delivered in collaboration with the University of Alberta (see Table 1). 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 studies for the first two years, however, 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 Szkola 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). Perhaps, the reason for this is because their IT program is not of high quality due to the fact that their students are not always required to do practices and therefore they lack "real world" work experience. 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 only applies 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.

Research question 2

Do Canadian college students have a higher perception of their programs than their Polish tallies?

Data collection

Responses to each of the 33 program evaluation statements were coded and placed on Excel® (Microsoft Office) spreadsheets (see Appendix K).

Data analysis[14]

With regard to each student sample:

1. The mean, median mode, standard deviation and skewness of the responses were computed.
2. Response percentages were calculated for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction).

Following this, the resulting information was put into histogram format.

The nursing programs

The respondents

A. Krakowska Szkoła Medyczna: Twenty-two learners completed our program evaluation form: 1) 11 first year, 2) 5 second year and 3) 6 first or second year.
B. Red Deer College: One-hundred and twenty-five diploma students filled out our appraisal instrument: 1) 63 first year (of which 3 were male, 57 were female and 3 were male or female), 2) 56 second year (of which 4 were male, 51 were female and 1 was male or female) and 3) 6 third year (of which 1 was male and 5 were female).

Forty 3rd year degree nursing students (of which 3 were male, 32 were female and 5 were male or female) also took part in our investigation. Moreover, their responses were compared to their diploma counterparts.

The percentage of learners sampled was greater for both the Red Deer diploma and degree populations than it was for the Krakowska Szkoła Medyczna one meaning that the participation level in our study was larger for the Canadian students than for their Polish counterparts: 82.4% (125 out of 153), 63.5% (40 out of 63) and 55% (22 out of 40), respectively[15].

The Results

Figure 3, 4 and 5 below illustrate the value for the measures of central tendency and the standard deviation for each of the nursing distributions.

Figure 3

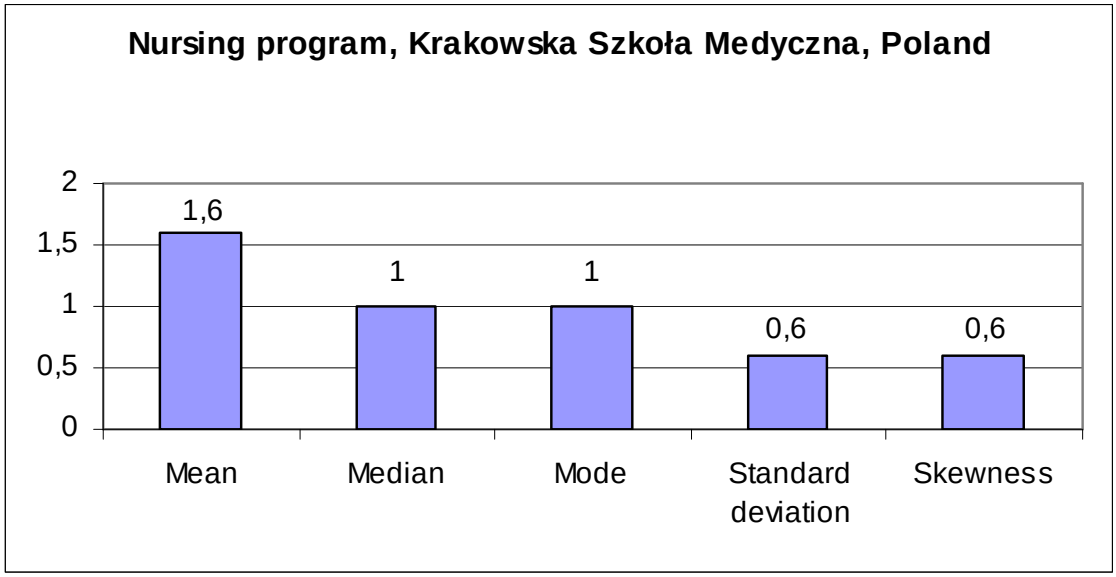


Figure 4

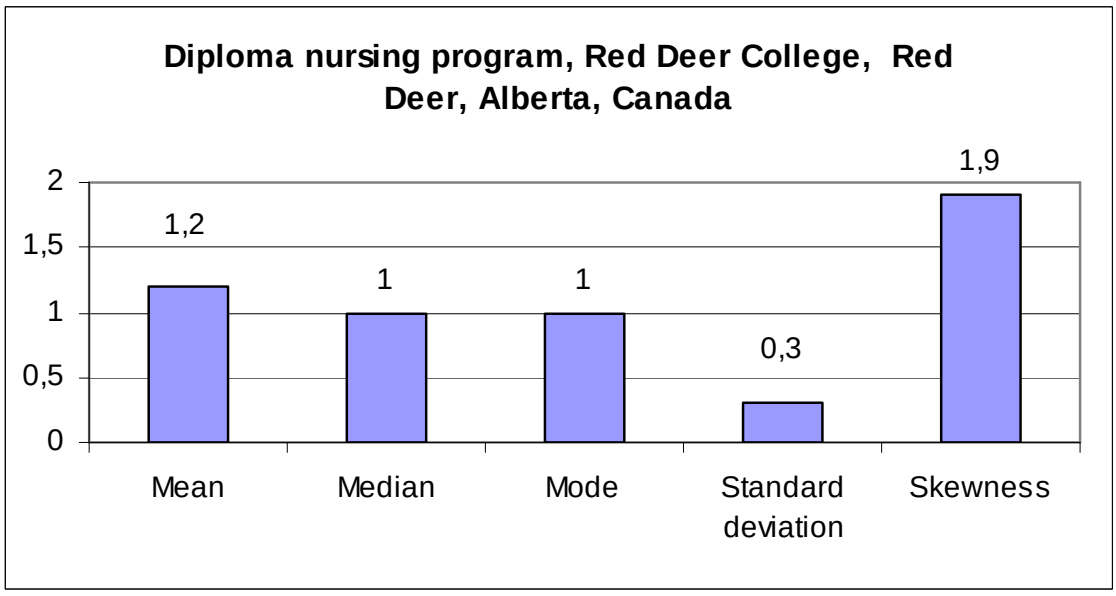
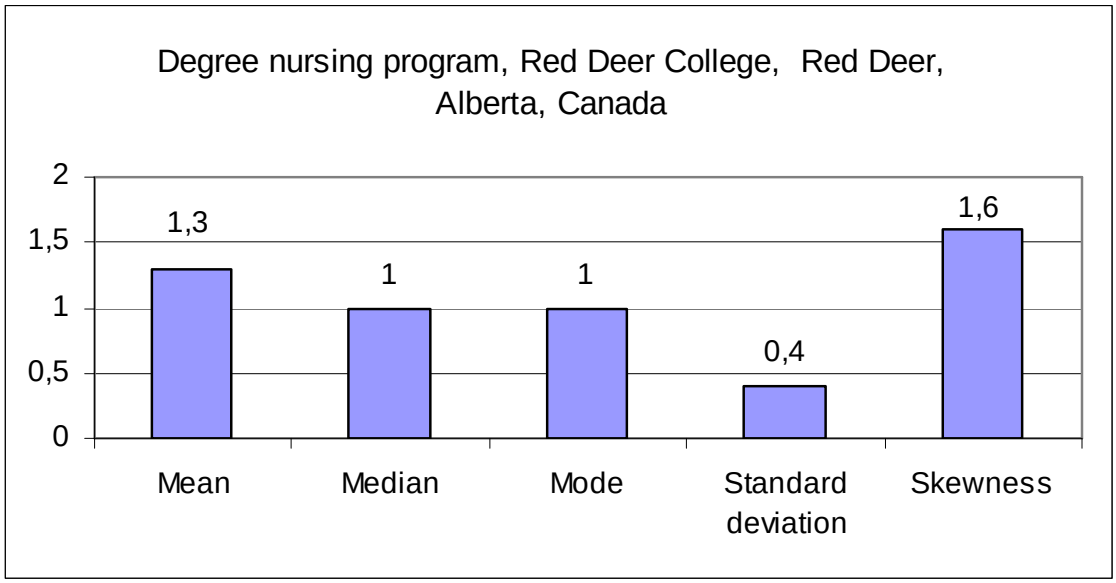


Figure 5



Figures 6-8 below show the skewness for the distribution of each of the nursing samples.

Figure 6

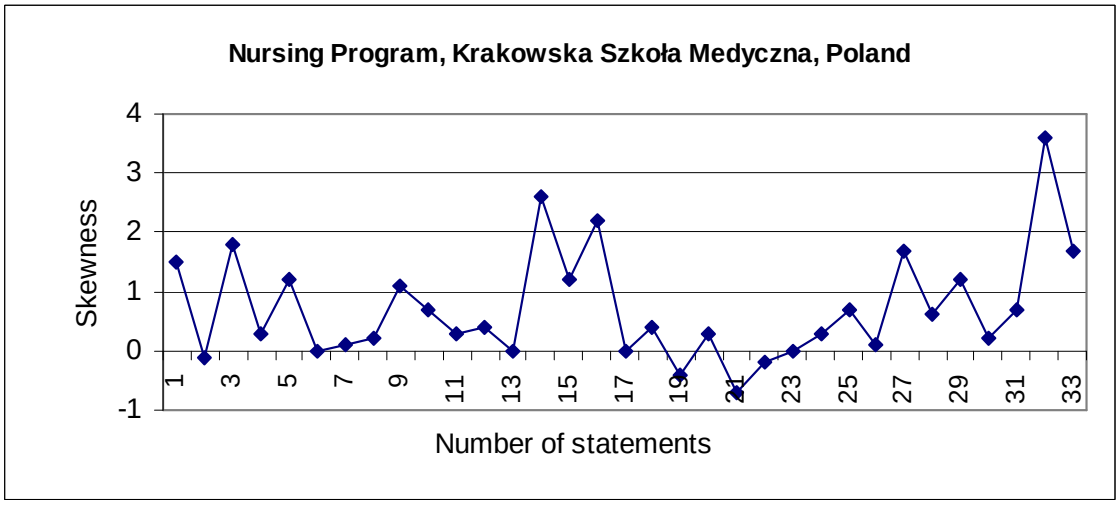


Figure 7

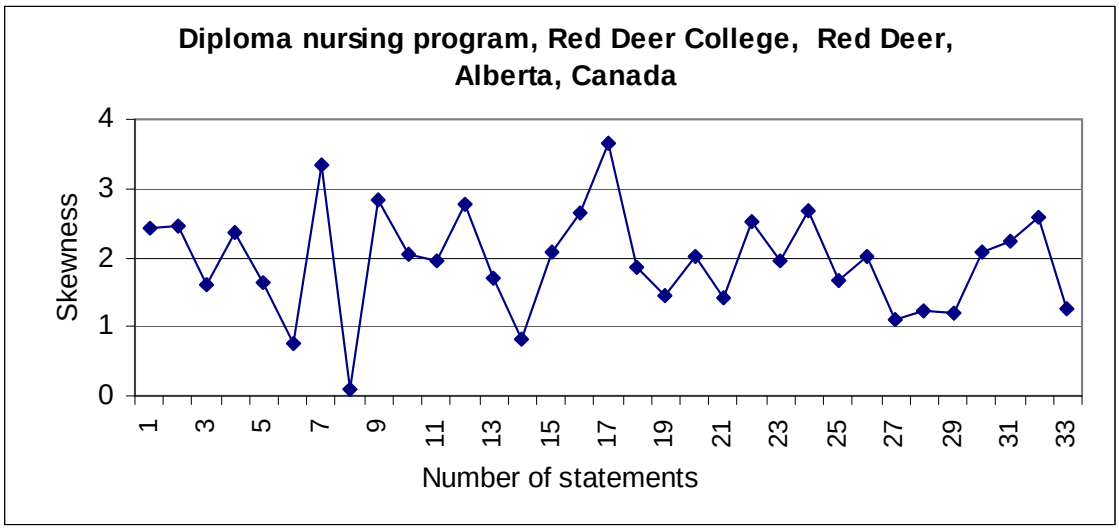
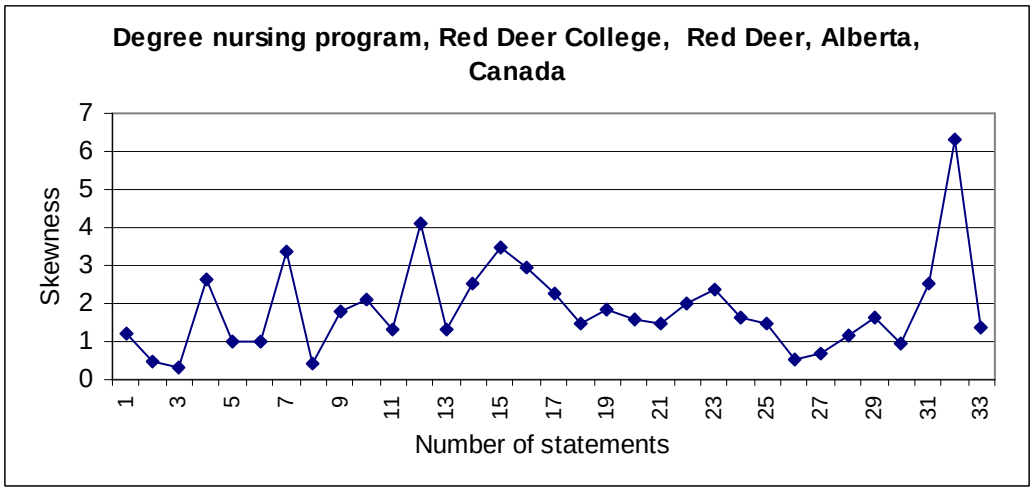


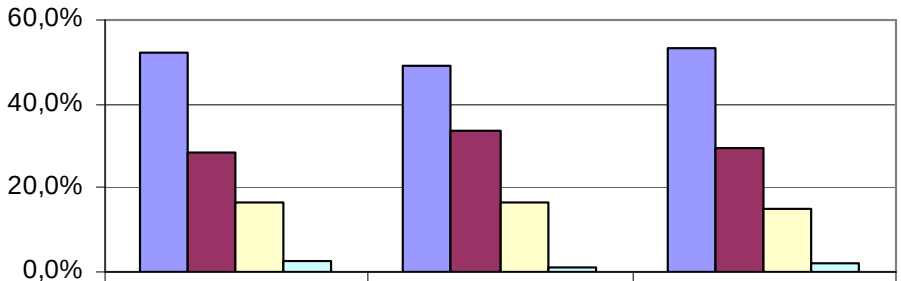
Figure 8



Response percentages for assertions 1-8, 9-13 and 14-33 for the Krakowska Szkoła Medyczna, Red Deer diploma and degree learners are illustrated by figures 9, 10 and 11 underneath.

Figure 9

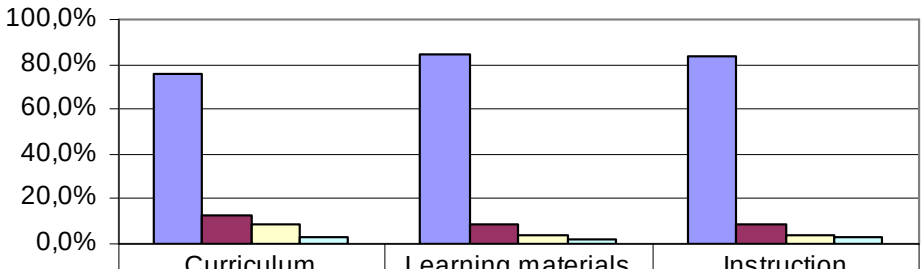
Nursing program, Krakowska Szkoła Medyczna, Poland
Response percentages for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	52,3%	49,1%	53,2%
Disagree	28,4%	33,6%	29,5%
Don't know	16,5%	16,4%	15,0%
No answer	2,8%	0,9%	2,3%

Figure 10

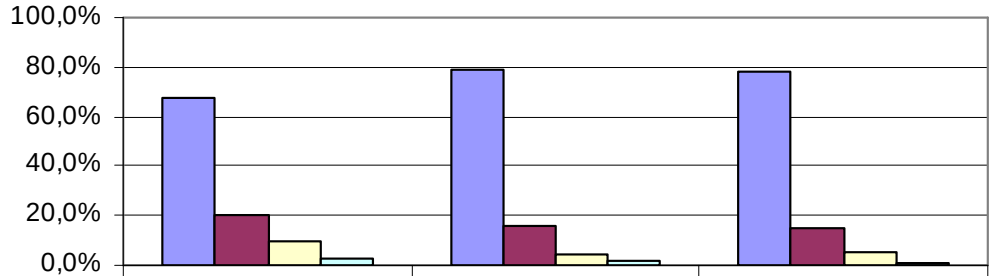
Diploma nursing program, Red Deer College, Red Deer, Alberta, Canada
Response percentages for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	75,3%	84,8%	83,7%
Disagree	12,8%	9,0%	9,2%
Don't know	8,6%	4,2%	3,9%
No answer	3,3%	2,1%	3,2%

Figure 11

Degree nursing program, Red Deer College, Red Deer, Alberta, Canada
Response percentages for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	67,8%	79,0%	78,5%
Disagree	20,0%	15,5%	14,8%
Don't know	9,4%	4,0%	5,5%
No answer	2,8%	1,5%	1,3%

Discussion

The value for both the mode and the median for the Krakowska Szkoła Medyczna and the Red Deer College nursing program sample distributions is 1 which means that category Agree contains the highest frequency of responses and is the point in each of the distributions where 50% of the sample falls below and 50% falls above (see figures 3, 4 and 5).

The value for the mean is greater for the Polish distribution than for the Red Deer diploma one: 1.6 and 1.2, respectively (see figures 3 and 4). This signifies that the average response for both groups of participants lies between categories Agree and Disagree and that the Krakowska Szkoła Medyczna learners were more likely to choose category Disagree than were the Red Deer Diploma students. Moreover, the Red Deer degree respondents also tended to decide upon designation Disagree (slightly) more often than the diploma ones given that the value of the mean of their responses is larger than it is for their Canadian counterparts: 1.3 as opposed to 1.2 (see figures 4 and 5).

None of the nursing distributions are positively or negatively skewed, and their shapes differ (see figures 6-8).

The value for the standard deviation is greater for the Polish distribution (.6) than for the Canadian diploma one (.3) which means that the dispersion of responses is larger around the mean for the Krakowska Szkoła Medyczna learners than for the Red Deer ones (see figures 3 and 4). Moreover, the Red Deer degree distribution is slightly more dispersed about the mean than the diploma one given that there is a difference in standard deviation values: .4 as apposed to .3 (see figures 4 and 5).

Response percentages for assertions 1-8 are higher for category Agree and lower for designation Disagree for the Red Deer Diploma participants that for the Krakowska Szkoła Medyczna respondents: 75.3% and 12.8% and 52.3% and 28.4%, respectively (see figures 9-10). This suggests that the Canadian nursing diploma curriculum was more highly valued by learners than the Polish one. Furthermore, answer percentages indicate that the Canadian diploma curriculum was held in higher esteem by students than the degree one (see figures 10-11).

Answer percentages for statements 14-33 are higher for designation Agree and lower for category Disagree for the Red Deer diploma respondents (84.8% and 9%) than for either the Red Deer degree (79% and 15.5%) and the Krakowska Szkoła Medyczna

participants (49.1% and 33.6%) (see figures 9, 10 and 11). This suggests that the learning materials that are in use in the Canadian nursing diploma program were more highly estimated by students than those employed in the other two ones.

As a matter of interest, Red Deer respondents commented on our evaluation form that the textbooks required for their program are too expensive, hard to read and written with American students in mind. Greater care in the selection of texts would lead to increased student participation.

Our findings indicate that the Red Deer diploma students valued instruction more than their Polish and institutional counterparts; response percentages for assertions 14-33 are higher for category Agree and lower for designation Disagree for them (83.7% and 9.2%) than for the either the Krakowska Szkoła Medyczna (53.2% and 29.5%) or the Red Deer degree (78.5% and 14.8%) learners (see figures 9-11).

With regard to assertions 1-33, response percentages for category Don't know indicate that program knowledge was considerably less for the Polish learners than for the Red Deer diploma ones and that it was about the same for both groups of Canadian students: 1) 16.5%, 16.4% and 15% (Krakowska Szkoła Medyczna), 2) 8.6%, 4.2% and 3.9% (Red Deer diploma) and 3) 9.4%, 4% and 5.5% (Red Deer degree) (see figures 9, 10 and 11).

Lastly, the percentages of learners that did not choose a category (No answer) ranges from .9-3.3 which suggests that the level of interest demonstrated by the nursing program participants in our investigation in both Canada and in Poland was very high (see figures 9-11).

The tourism programs

The respondents

A. Policealne Studium Zawodowe. Seventy-eight full-time hotelier students completed our program evaluation form:
   1) 39 first year (of which 8 were male, 30 were female and 1 was male or female) and
   2) 39 second year (of which 2 were male, 36 were female and 1 was male or female)[16].

Fifteen tour guide and travel agent students (of which 3 were male and 12 were female) also took part in our research during the same period as the hotelier ones[17, 18]. We compared their program evaluations with the appraisals made by the hotelier learners because we thought it would be of benefit to examine two different programs within a given institution in terms of student feedback.

The percentage of students sampled was slightly larger for the tour guide and travel agent population than for the hotelier one: 55.6% (15 out of 27) and 53.7% (78 out of 145) respectively. This means that the level of participation in our investigation was greater for the tour guide and travel agent learners than for their institutional counterparts.

The results

Figures 12 and 13 below illustrate the value for the measures of central tendency and the standard deviation for each of the Policealne Studium Zawodowe sample distributions.

Figure 12

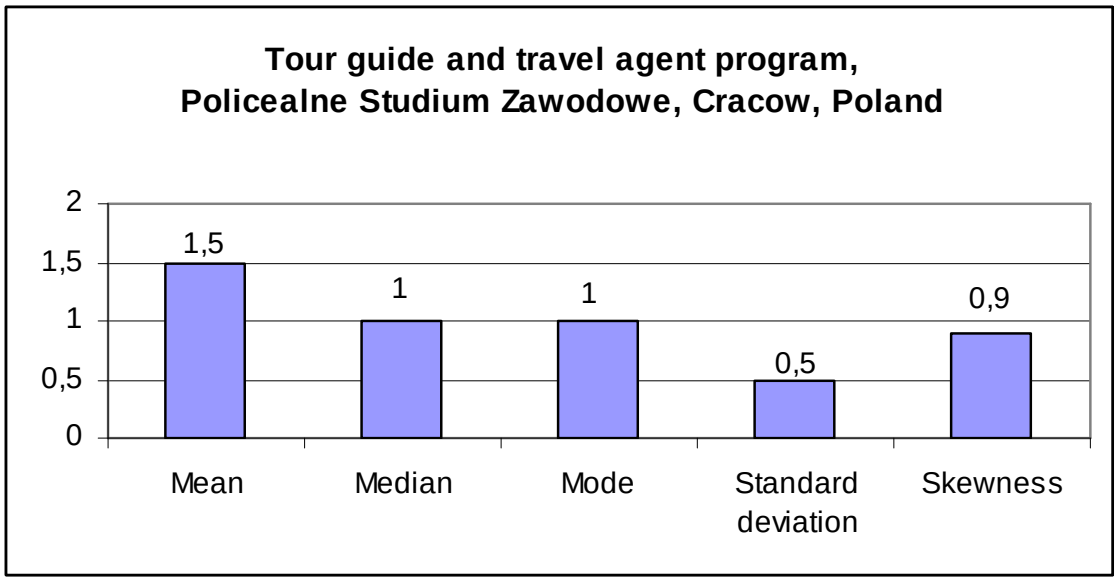
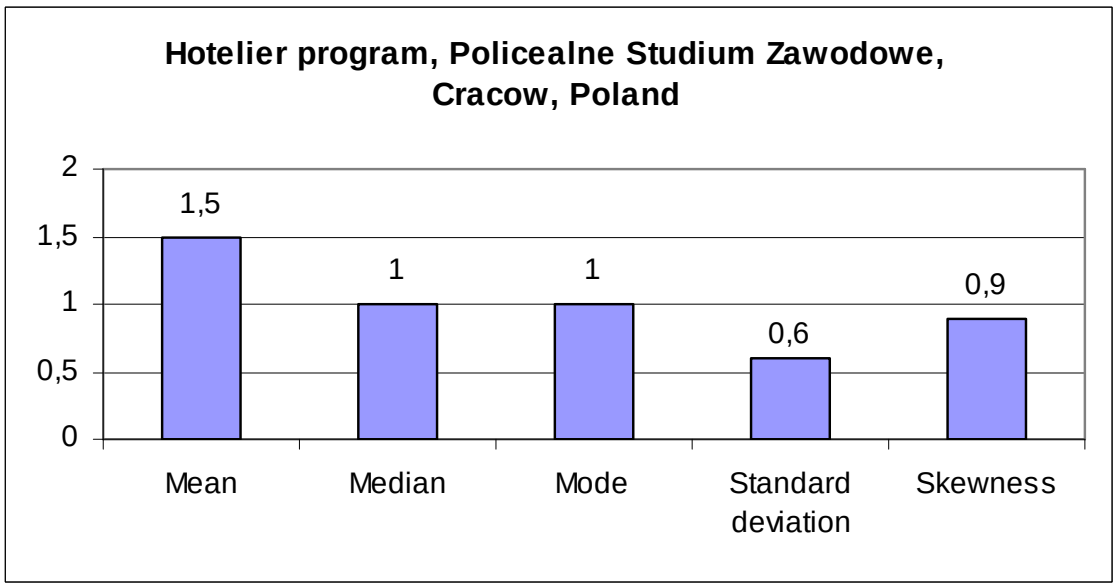


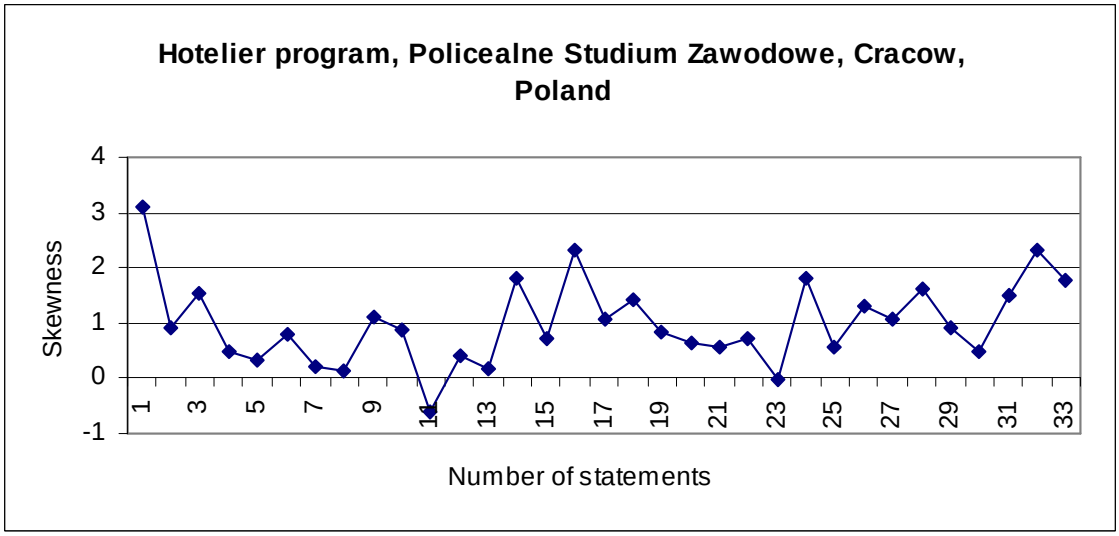
Figure 13



Figures 14-15 underneath show the skewness for the tour guide and travel agent and hotelier sample distributions.

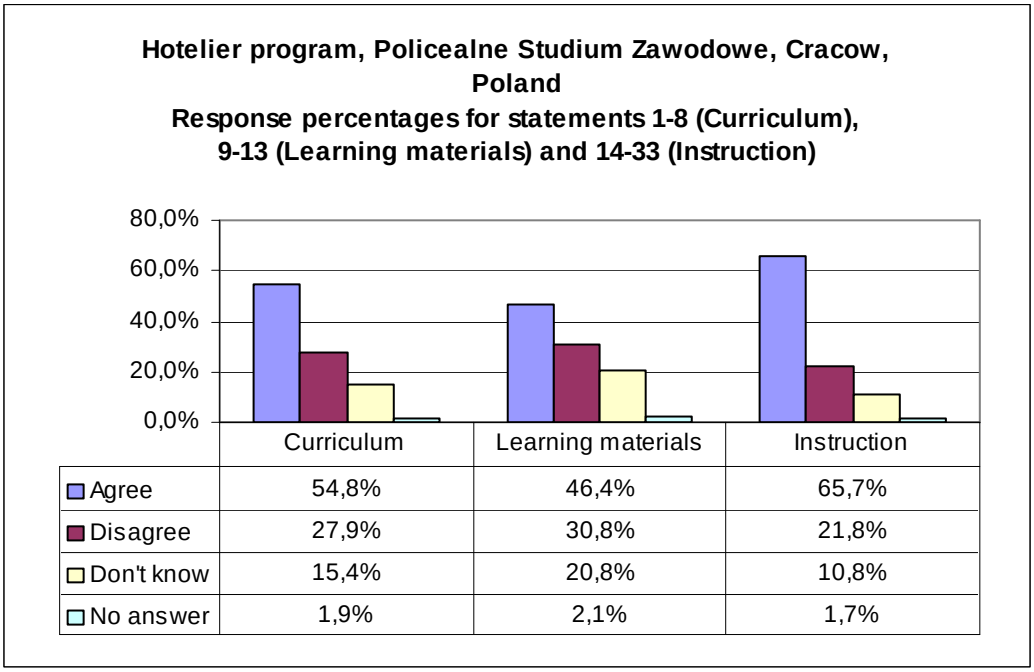
Figure 14

Figure 15



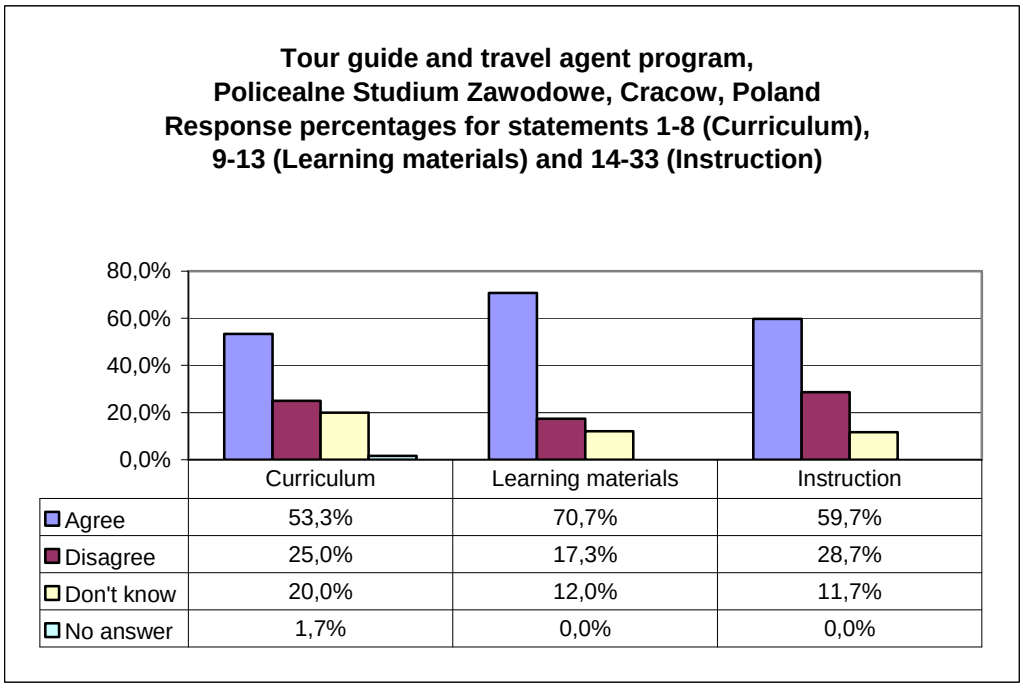
Response percentages for statements 1-8, 9-13 and 14-33 for each group of Policealne Studium Zawodowe students are illustrated by figures 16-17 below.

Figure 16



	Curriculum	Learning materials	Instruction
Agree	54,8%	46,4%	65,7%
Disagree	27,9%	30,8%	21,8%
Don't know	15,4%	20,8%	10,8%
No answer	1,9%	2,1%	1,7%

Figure 17



	Curriculum	Learning materials	Instruction
Agree	53,3%	70,7%	59,7%
Disagree	25,0%	17,3%	28,7%
Don't know	20,0%	12,0%	11,7%
No answer	1,7%	0,0%	0,0%

Discussion

The value for both the mode and the median for the hotelier and the tour guide and travel agent sample distributions is 1 which means that category Agree contains the highest number of responses and is the point in each of the distributions where 50% of the sample falls below and 50% falls above (see figures 12-13).

The value for the mean for each Policealne Studium Zawodowe distribution is 1.5 which signifies that the average answer lies between categories Agree and Disagree (see figures 12-13).

Standard deviation values for each distribution suggest that answers are similarly dispersed around the sample means (see figures 12-13).

Figures 14 and 15 illustrate that neither of the Policealne Studium Zawodowe distributions are positively or negatively skewed, and that their shapes differ.

Response percentages for statements 1-8 are higher for both category Agree and Disagree for the hotelier students than for their institutional counterparts: 54.8% and 27.9% and 53.3% and 25% respectively (see figures 16-17). This means that the hotelier program curriculum was not as highly valued by learners as the tour guide and travel agent one.

As a matter of interest, hotelier program participants remarked on our research instrument that there is a need for increased foreign language training in their curriculum, for example, instruction in French and Spanish. This suggests that learners know that they must learn the language and culture of their customers to be successful.

With reference to assertions 9-13, the percentage of answers is higher for designation Agree and lower for category Disagree for the tour guide and travel agent learners than for their institutional counterparts: 70.7% and 17.3% and 46.4% and 30.8%, respectively (see figures 16-17). This signifies that the learning materials used in the hotelier program were not as highly estimated by students as the ones employed in the tour guide and travel agent one.

Concerning statements 14-33, response percentages are higher for designation Agree and lower for category Disagree for the hotelier respondents than for their Policealne Studium Zawodowe tallies: 65.7% and 21.8% and 59.7% and 28.7%, respectively (see figures 16 and 17). This suggests that instruction was not as highly valued by the tour guide and travel agent learners as it was by their institutional counterparts.

As to assertions 1-33, the percentage of answers for category Don’t know indicate that tour guide and travel agent respondents lacked more information about both program

curriculum (20% as opposed to 15.4%) and instruction (11.7% as opposed to 10.8%) than the hotelier participants whereas the reverse was true for learning materials (20.8% as opposed to 12%) (see figures 16-17).

Finally, the percentage of students that did not choose a designation (No answer) for statements 1-33 ranges from 0-2.1% which implies that the degree of interest shown by tourism program participants in our study was very high (see figures 16-17).

The information technology programs

The respondents

A. Cracow School of Information Technology. Thirty-two full-time students took part in our investigation:
   1) 17 first year (of which 13 were male and 4 were female) and
   2) 15 second year (of which 14 were male and 1 was female).
B. Durham College. Fifteen full-time learners filled out our program evaluation instrument (of which 10 were male, 4 were female and 1 was male or female)[19].
C. Confederation College. Fifty-seven full-time students participated in our research:
   1) Eighteen first year (of which 14 were male and 4 were female).
   2) Twenty four second year (of which 21 were male and 3 were female).
   3) Fifteen third year (of which 12 were male, 2 were female and 1 was male or female).

The percentage of learners sampled was greater for the Cracow School of Information Technology population than for the Confederation and Durham ones: 80% (32 out of 40), 64% (15 out of 89) and 60% (15 out of 25) respectively. This means that the participation level in our study was larger for the Polish students than it was for both of their Canadian counterparts.

The results

Figures 18, 19, 20 and 21 below illustrate the value for the measures of central tendency and the standard deviation for each of the information technology program sample distributions.

Figure 18

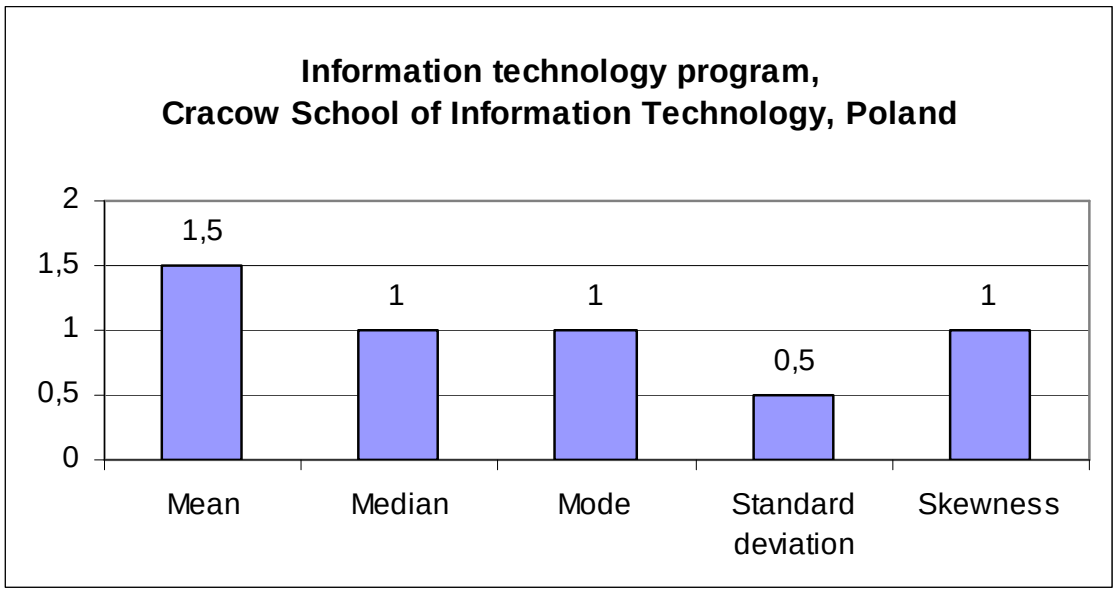


Figure 19

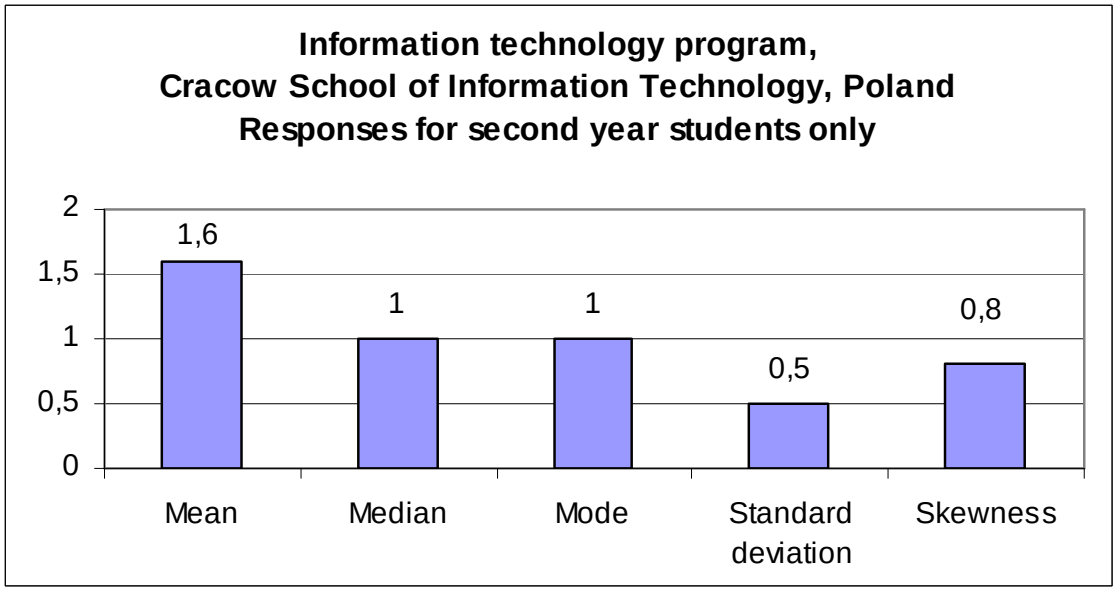


Figure 20

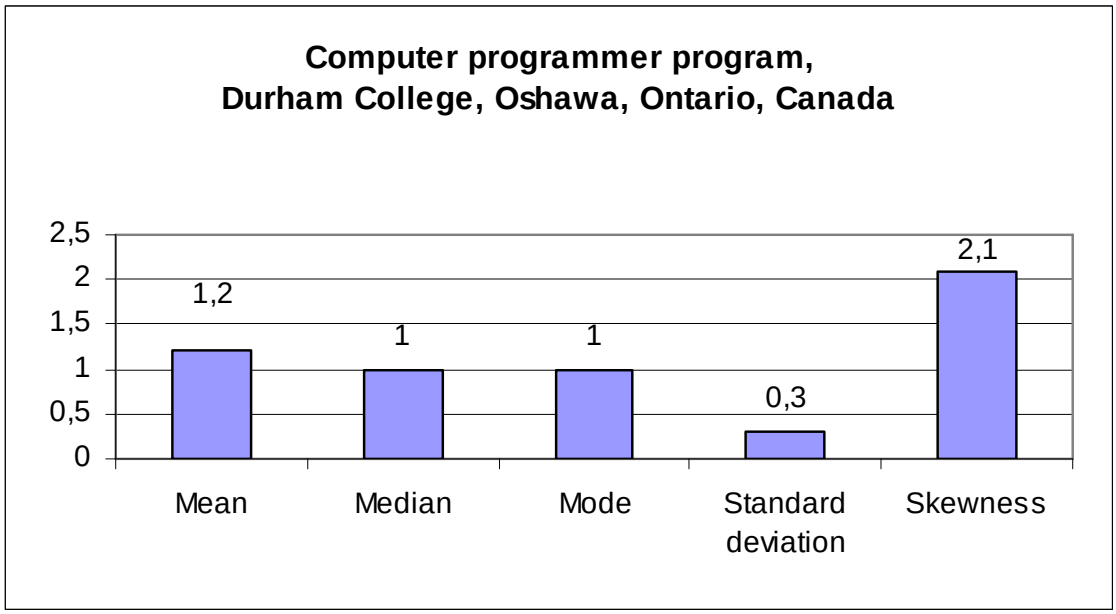
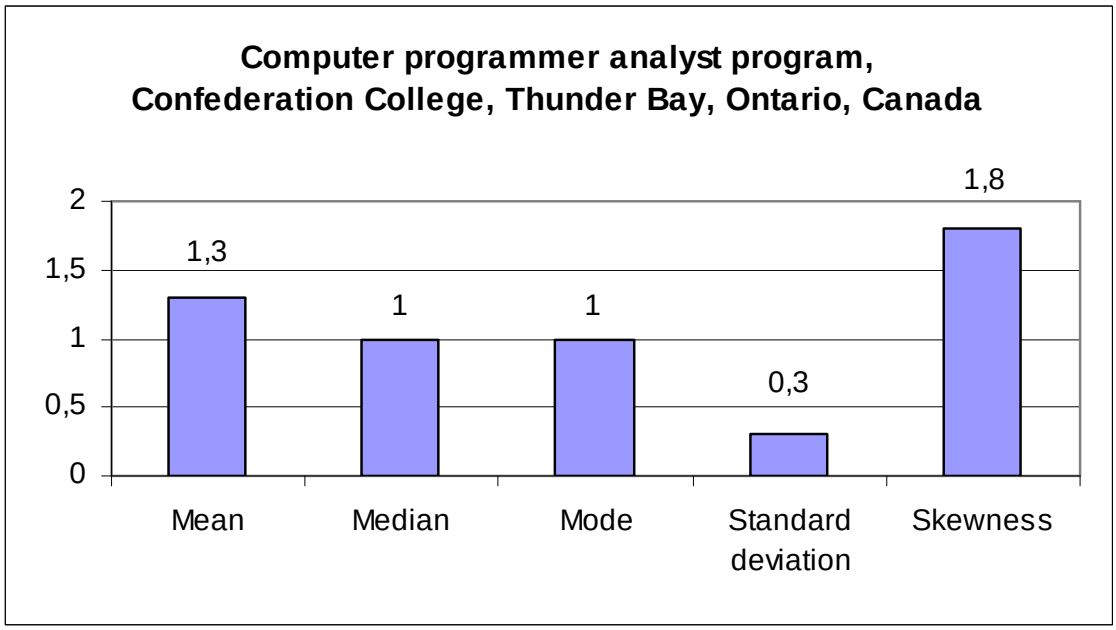


Figure 21



Figures 22-25 below show the skewness for the Cracow School of Information Technology, the Durham College and the Confederation College sample distributions.

Figure 22

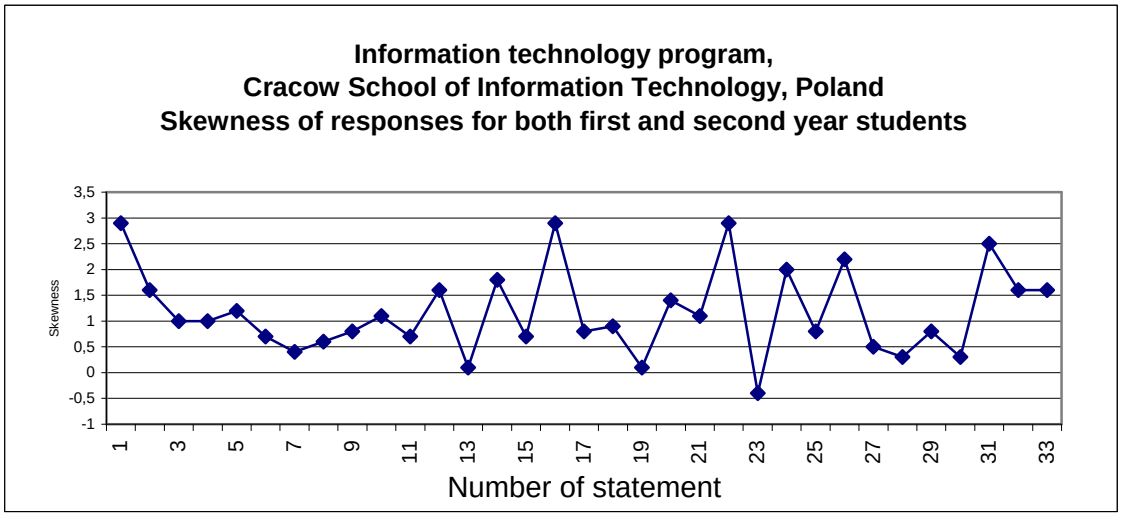


Figure 23

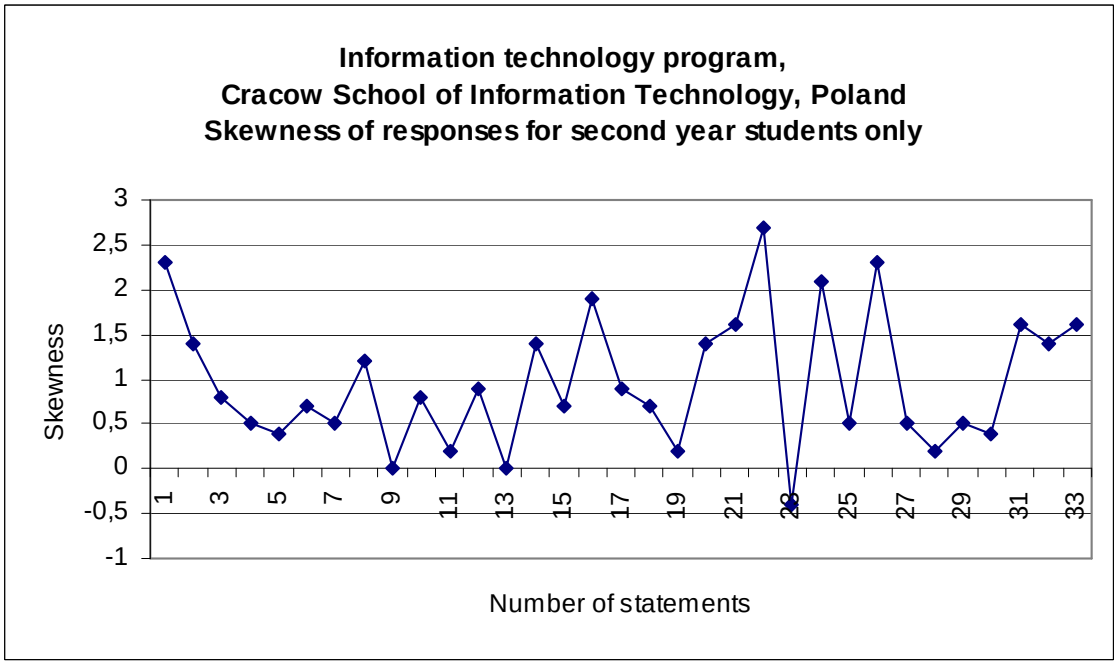


Figure 24

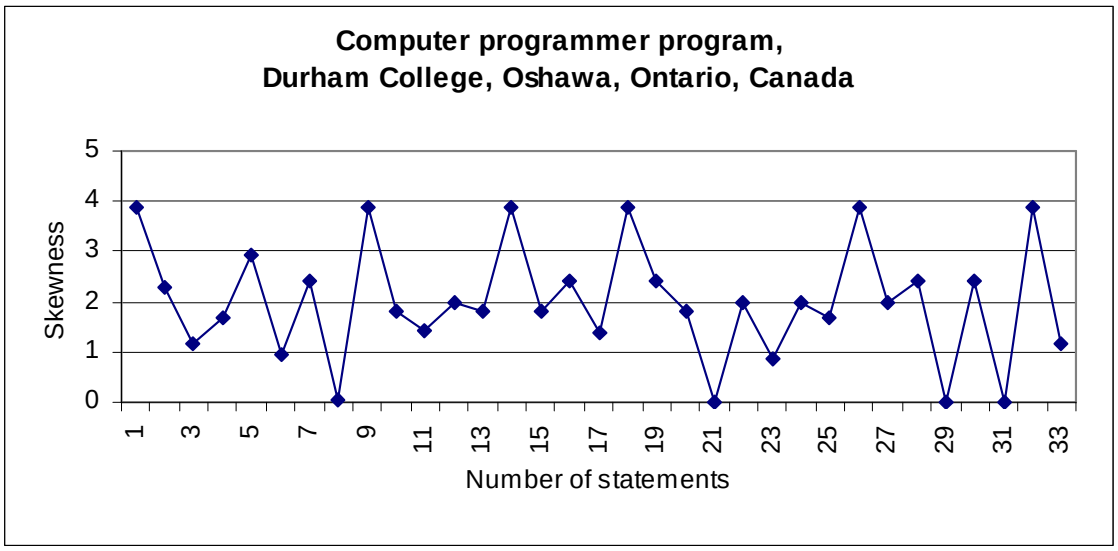
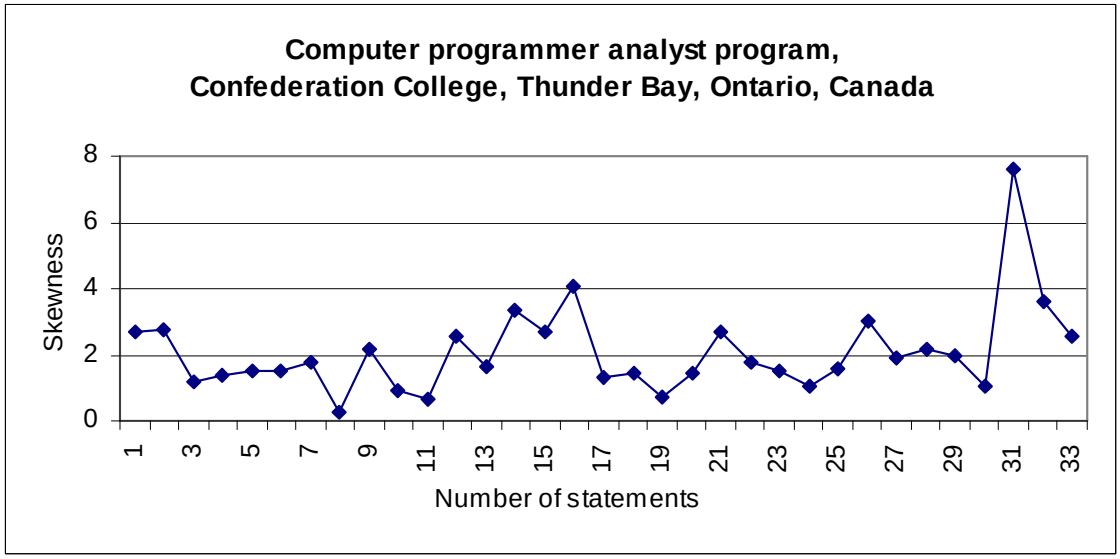
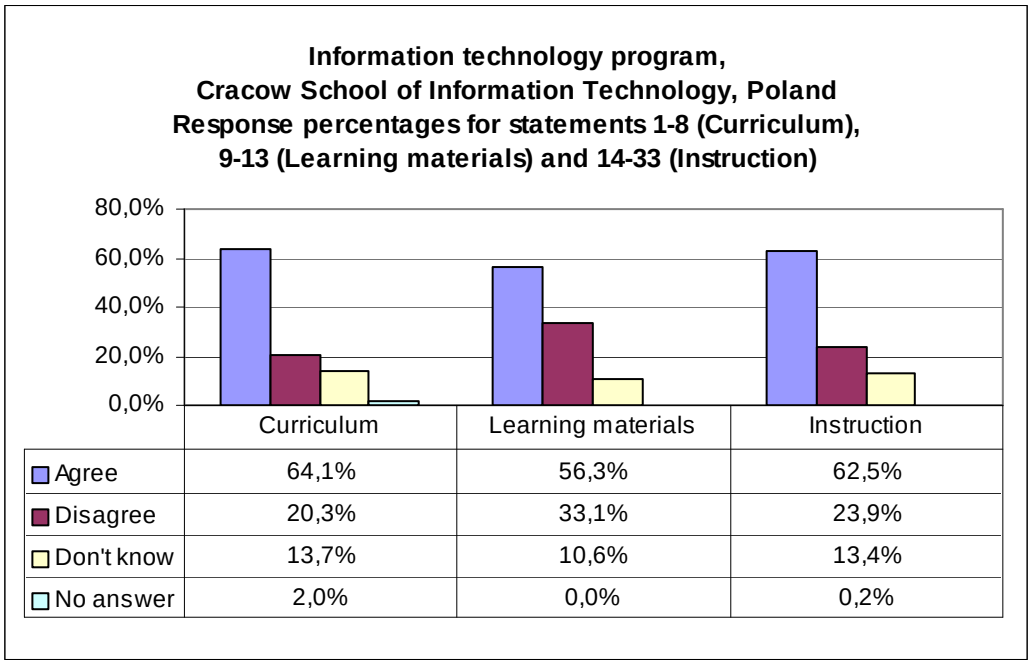


Figure 25



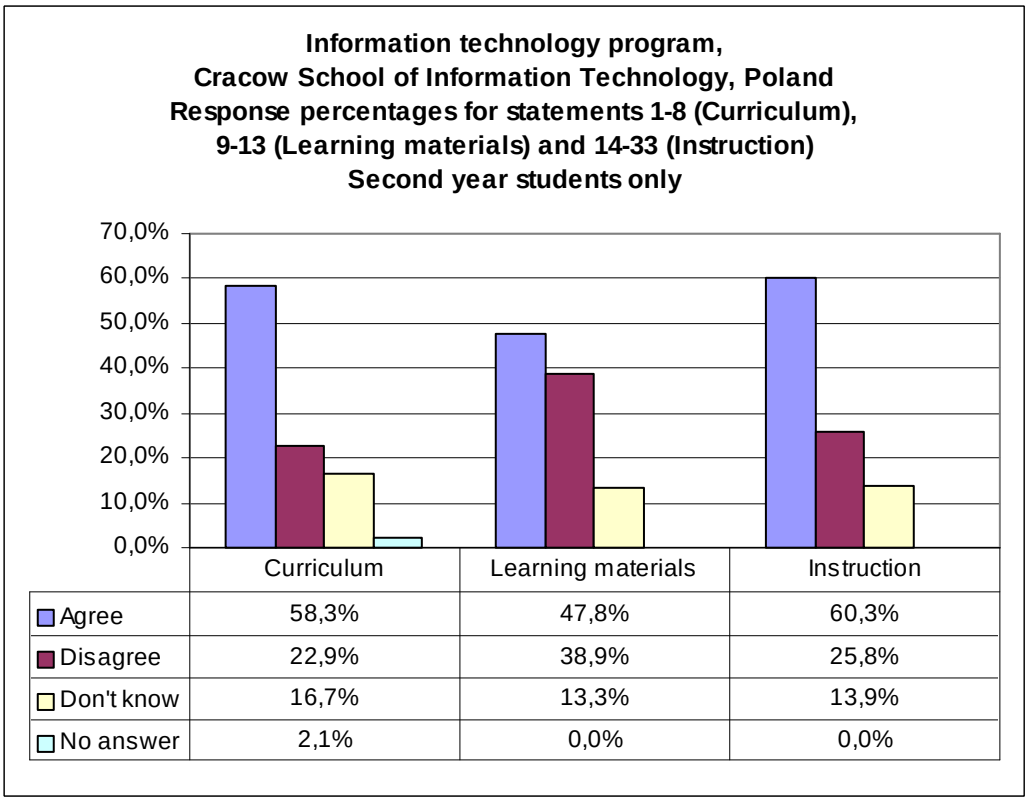
Response percentages for assertions 1-8, 9-14 and 15-33 are shown in figures 26-29 underneath for each group of information technology participants.

Figure 26



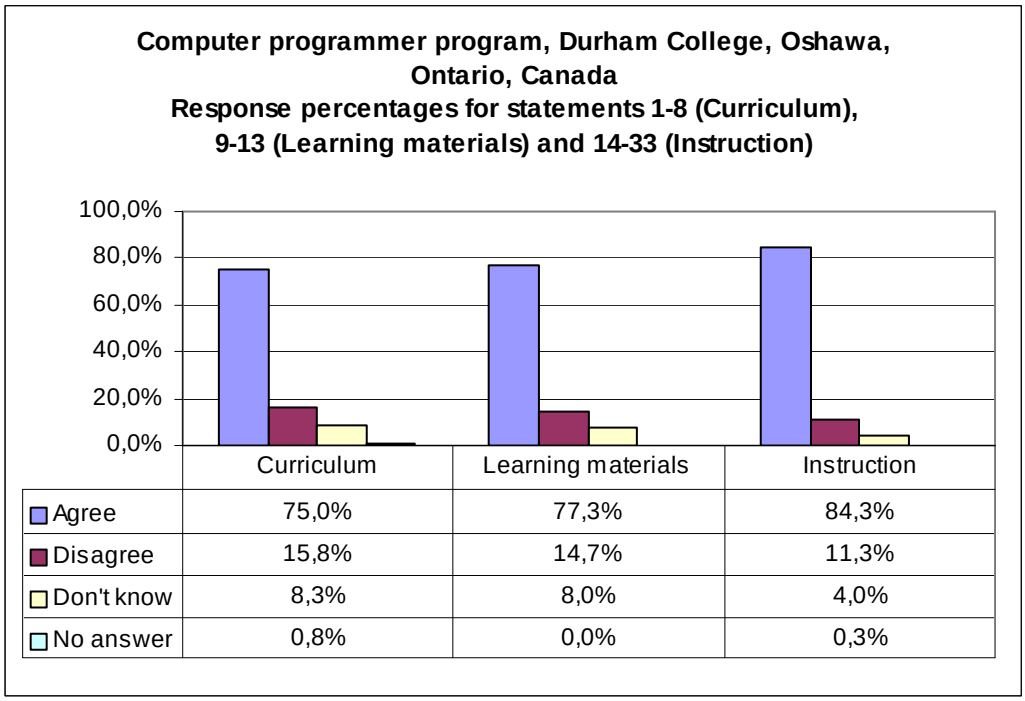
	Curriculum	Learning materials	Instruction
Agree	64,1%	56,3%	62,5%
Disagree	20,3%	33,1%	23,9%
Don't know	13,7%	10,6%	13,4%
No answer	2,0%	0,0%	0,2%

Figure 27



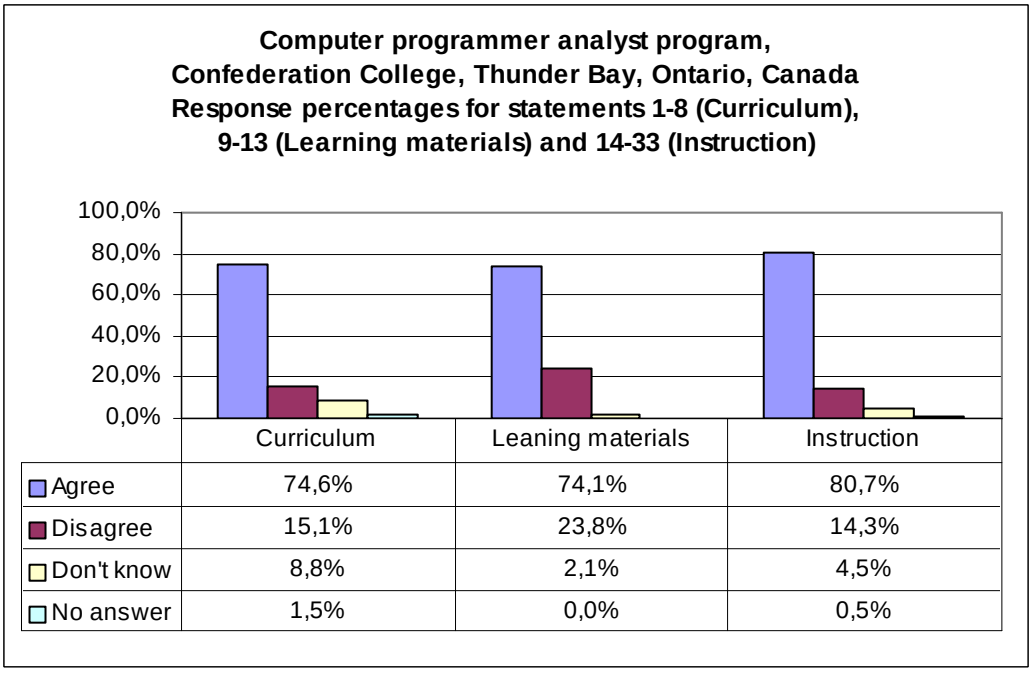
	Curriculum	Learning materials	Instruction
Agree	58,3%	47,8%	60,3%
Disagree	22,9%	38,9%	25,8%
Don't know	16,7%	13,3%	13,9%
No answer	2,1%	0,0%	0,0%

Figure 28



	Curriculum	Learning materials	Instruction
Agree	75,0%	77,3%	84,3%
Disagree	15,8%	14,7%	11,3%
Don't know	8,3%	8,0%	4,0%
No answer	0,8%	0,0%	0,3%

Figure 29



	Curriculum	Leaning materials	Instruction
Agree	74,6%	74,1%	80,7%
Disagree	15,1%	23,8%	14,3%
Don't know	8,8%	2,1%	4,5%
No answer	1,5%	0,0%	0,5%

Discussion

The value for both the mode and the median for the Cracow School of Information Technology, Durham College and Confederation College sample distributions is 1 which means that category Agree contains the highest number of answers and is the point in each of the distributions where 50% of the sample falls below and 50% falls above (see figures 18-21).

The value for the mean is greater for the Polish sample distribution than for either the Confederation or the Durham one: 1.5 and 1.6 (2^{nd} year students only), 1.3 and 1.2, respectively (see figures 18-21). This means that the Polish learners were more likely to choose category Disagree than their Canadian counterparts and that the average response for each of the three groups of students lies between designations Agree and Disagree.

None of the information technology distributions are positively or negatively skewed, and their shapes differ (see figures 22-25).

The value for the standard deviation is smaller for both of the Canadian distributions than for the Polish one: .3 (Confederation), .3 (Durham) and .5 (Cracow School of Information Technology (see figures 18-21). This signifies that the spread of answers for the Polish distribution is larger around the mean than for either of the Canadian ones.

Response percentages for statements 1-8 are higher for category Agree and lower for designation Disagree for both the Confederation and the Durham students (74.6% and 15.1% and 75% and 15.8%, respectively) than for the Cracow School of Information Technology respondents (64.1% and 20.3% and 58.3% and 22.9%) (second year students only) which implies that the Polish information technology curriculum was not as highly valued by learners as the Canadian ones (see figures 26-29).

Interestingly, Confederation participants indicated on our program evaluation instrument that they would like statistics, banking, English and accounting courses removed from their curriculum which suggests that they are not interested in studying avocational subjects.

With regard to statements 9-13, the percentage of answers is higher for designation Agree and lower for category Disagree for both the Confederation and the Durham respondents (74.1% and 23.8% and 77.3% and 14.7%, respectively) than for the Polish sample: 56.3% and 33.1% and 47.8% and 38.9% (second year students only) (see figures 26, 27, 28 and 29). This indicates that the learning materials that are used in the Cracow

School of Information Technology program were not highly esteemed by students as those employed in the Canadian ones.

Likewise, instruction was not as highly valued by the Polish respondents as it was by their Canadian counterparts given that response percentages for statements 14-33 are higher for category Agree and lower for designation Disagree for both the Durham and the Confederation participants (84.3% and 11.3% and 80.7% and 14.3%, respectively) than for the Cracow School of Information Technology ones (60.3% and 25.8% (second year students only) and 62.5% and 23.9%) (see figures 26-29).

Figures 26-29 illustrate that the percentage of Polish students who decided upon designation Don't know for assertions pertaining to curriculum, learning materials and instruction is higher in each case than for their Canadian tallies: 13.7%, 10.6% and 13.4% as opposed to 8.8%, 2.1% and 4.5% and 16.7%, 13.3% and 13.9% (second year students only) as opposed to 8.3%, 8% and 4%. This indicates that the Cracow School of Information Technology learners had less information about their program than their Canadian counterparts.

The percentage of Cracow School of Information Technology, Durham and Confederation learners that did not choose a category (No answer) for statements 1-33 ranges from 0-2.1 suggesting that the level of interest shown by the information technology program participants in our investigation in both Canada and in Poland was very high (see figures 26-29).

Concluding remark

None of the distributions are positively or negative skewed, and their shapes are not the same.

Notes

1. On 5 April, 2000, the School's student body consisted of 212 learners (Masio, 5 April 2000).
2. Centennial's Board of Governors is composed of 17 members including people from outside the college thus ensuring that there is direct societal representation (Centennial College, date unknown, 128).
3. As a matter of fact, Cracow School of Information Technology has had three foreign learners in its seven year existence (Wilusz, 27 October, 1999).
4. English and computer science subjects are not shown in the Table because the author is not certain when students must study them.
5. Mgr Barbara Piwowarczyk is currently the Director of the School (Masio, 13 December, 2001).
6. There are three year programs which involve more practices (Masio and Sarnak, 5 April, 2000).
7. As a matter of fact, all post-grammar vocational school teachers are supposed to have pedagogical training (and understandably so) given that post-grammar vocational institutions are part of the secondary school system of education (Kucińska, 28 December, 1998).
8. Similar post-secondary vocational school program have been available to Poles since 1960 implying that there has been a need for tourism education in Poland for some time (Borne-Falencik, 1992, 2).
9. It appears that secondary school marks in these areas are not taken into consideration.
10. The educational requirement for entry into the nursing profession in Alberta can be met by either a diploma or a degree in nursing. Likewise, at the moment, one can become a nurse in Poland by either attending a post-secondary vocational institution or a higher school. (Post-grammar vocational school and college (diploma) nursing programs are shorter in duration than either higher school or university degree ones and for that reason they are more attractive to some people, Masio and Sarnak, 5 April, 2000).
11. As a matter of fact, Durham has developed a satisfaction guarantee program for their "2002 post-secondary graduates" (Durham College, date unknown, 198). If a graduate

is discovered to be deficient by an employer in skills that he/she is supposed to have acquired while being a student the college will remedy the deficiency through further training. Similar programs would benefit other colleges and post-secondary vocational institutions because they would lead to higher graduate employment rates.

12. It is not clear if Durham learners are examined orally.
13. Interestingly, Krakowska Szkoła Medyczna has never had anyone with a physical disability apply to their program implying that disabled people are not encouraged to study nursing (Masio and Sarnak, 5 April 2000).
14. Excel 2000 PL was used to compute the responses: agree, disagree and don't know.
15. Population sizes for the Red Deer's nursing program were given to me by Ms. Sheila Mc Kay (personal communication, 25 October 2001).
16. Unfortunately, we did not receive any completed program evaluation forms from Centennial College and therefore we were unable to compare the responses made by Policealne Studium Zawodowe hotelier learners with their Canadian counterparts.
17. These people were given our research instrument to complete because the School wanted to know what students thought about their one year program.
18. Information about the tour guide and travel agent population was given to me by Mgr Marta Kasolik on the 14th of November 2002 during a telephone conversation.
19. It should be noted that Durham was asked to restrict their sampling to second year students due to the anticipated completion date of our research.

CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS

This dissertation compared Canadian community colleges with post-secondary (grammar) vocational schools in Poland. The comparison concentrated upon programs in nursing (2), tourism (2) and information technology (3) that are delivered by three Polish schools and four colleges: Krakowska Szkoła Medyczna, Policealne Studium Zawodowe, Cracow School of Information Technology, Red Deer College, Centennial College, Durham College and Confederation College.

Two research approaches were used in this study: qualitative and quantitative mixed research methodologies. Moreover, the theoretical framework was provided by the concept of the school as an organization and social institution.

With regard to the qualitative analysis, all of the Polish program heads were interviewed (at their respective locations), however, it was not possible to meet in person with their Canadian counterparts due to financial considerations. Nevertheless, when I lived in Toronto during the late 1980s I had a number of opportunities to visit Durham and Centennial.

Nobody commissioned us to carry out this investigation and therefore we were, to some extent, unrestricted in our work. However, since it consisted of a close examination of only 7 programs, the results obtained are limited their to generalizability, and the findings are perhaps more important to the participating post-grammar vocational institutions than to the colleges due to the changes that are expected to occur in the post-secondary vocational school system in 2005. It is recommended that additional research be carried out, in the future, involving a larger number of institutions.

Future researchers may want to include private post-grammar vocational schools that do not have public-institution status and Colleges d'Enseignement General et Professionel (CÉGEPs) in their work. (CÉGEP learners do not have to pay tuition as is the case for students who attend government-run post-secondary vocational institutions).

Given that Poland has recently entered the European Union, it would be useful to compare post-grammar vocational schools with their counterparts in EU member states.

Research questions:

1. Are post-secondary vocational institutions meeting the requirements of the labor market, as well as, Canadian community colleges?
2. Do college students have a higher perception of their programs than their Polish tallies?

Research question 1

Our investigation revealed that all of the institutions (with the exception of Durham) have articulation agreements with universities and higher schools. However, Centennial has them with more than one institution. Therefore, we must partially accept our research hypothesis that post-secondary vocational institutions might not be meeting the demands of the labor market as well as colleges.

Research question 2

Our results indicate that both the Polish and the Canadian students valued their programs given that answer category agree is the most popular one for all of the samples and is the point in each of the distributions where half of the sample falls below and half falls above. However, response percentages for the three program areas and the value for the sample means suggest that the Red Deer, Durham and Confederation learners held their programs in higher esteem (and had more information about them) than their Polish counterparts. Therefore, we can fully accept our research hypothesis that college students have a higher perception of their programs than their Polish counterparts.

It seems that our investigation was taken seriously by students in both Canada and Poland given that they provided the information that was asked for (about themselves, their programs and their institutions) and made comments in the appropriate places on the evaluation form.

Our findings should be taken in earnest due to the fact that the percentage of Canadian and Polish students sampled was high ranging from 60% to 82.4% (http://www.wnh.edu/pff.seminar/studentexp/classval.htm). This means that more than half of all the student populations were directly involved in our research. Moreover, the percentage of learners that did not choose a response category fluctuated from 0-3.3% suggesting that the degree of interest of the participants was also very high.

It should be noted that learner evaluations of instruction (as well as of curriculum and learning materials) are 'subjective by nature' and therefore we ought to keep this in mind when making use of them (Adams). They can be influenced by such things as: 1) grades received and 2) socialization with faculty outside of the classroom.

Also, we should think about, how qualified are post-secondary vocational school and college students to make judgments concerning the effectiveness of their programs (Adams). It has been suggested that evaluations are a 'measure of student satisfaction' which is an aspect of program quality (Adams). Because formal learning is now a lifelong

process (due to rapid advances in technology), it is therefore important for students to be satisfied with their programs so that they will have a liking for education. This point was made in chapter 2.

Other sources of information besides students ratings should be employed when evaluating programs, such as: administrator and peer appraisals and 'faculty self-reports' (http://www.wky.edu/ir/dsi/tce/tce7016.html).

The program form we used could be improved by adding statements pertaining to student internships[1]. However, if we were to do this, it would take longer to administer which might result in fewer learners completing it.

We did not examine learner estimations of their programs in terms of sex (male/female) and year of study. However, if one wishes to do so, the necessary calculations can be found in Appendix L.

Notes

1. This point was made by one of my students during a class discussion which took place at the University of Science and Technology on 1 April, 2003.

Appendix A

Glossary of Terms

"A college board" is responsible for formulating policy and selecting "a chief executive officer" to manage The college on its behalf (Dennison and Gallagher, 1986, 206-207).

Associate in arts degree programs take two years of full-time study to complete whereas Bachelor of Arts degree ones take at least four years to finish (after twelve years of schooling) (Dennison, 1995, 130).

"Mature students" are people who have been away from school for some time and are unable to fulfil normal selection criteria (Seldenthuis, 1996, XXV).

Portfolio assessment: a method of evaluating students that takes into account personal growth.

"Formal education is a 'true' system in the sense that all of its parts, at least in principle, are interconnected and naturally supporting" (Coombs, 1985, 23).

Nonformal education is a generic term which includes: "any organized, systematic, educational activity, carried on outside the framework of the formal system, to provide selected types of learning to particular sub-groups of the population, adults as well as children. Thus defined nonformal education includes, for example, agricultural extension and farmer training programs, adult literacy programs, occupational skill training given outside the formal system, youth clubs with substantial educational purposes, and various community programs of instruction in health, nutrition, family planning, cooperatives, and the like" (quoted in Coombs, 1985, 23). There is another basic manner of education which is called informal. Such education is about. "The life – long process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment at home, at work, at play, from the example and attitudes of family and friends; from travel, reading newspapers and books; or by listening to the radio, or viewing films or television. Generally, informal education is unorganized, unsystematic and even unintentional at times, yet it accounts for the great bulk of any person's total lifetime learning – including that of even a highly 'schooled person'" (quoted in Coombs, 1985, 24).

Appendix B

List of community colleges by province and territory

British Columbia

Emily Carr College of Art and Design
Vancouver
Website: www.eciad.bc.ca/eciadMain

Camosun College
Victoria
Website: www.camosun.bc.ca

Capilano College
North Vancouver
Website: www.capcollege.bc.ca

The University College of the Cariboo
Kamloops
Website: www.cariboo.bc.ca

Columbia College
Vancouver
Website: www.columbia-college.org

Douglas College
New Westminster
Website: www.douglas.bc.ca

University College of the Fraser Valley
Abbotsford
Website: www.ucfv.bc.ca

Justice Institute of British Columbia
New Westminster
Website: www.jibc.bc.ca

Kwantlen University College
Surrey
Website: www.kwantlen.bc.ca

Langara College
Vancouver
Website: www.langara.bc.ca

Malaspina University-College
Nanaimo
Website: www.mala.bc.ca

College of New Caledonia
Prince George
Website: www.cnc.bc.ca

Nicola Valley Institute of Technology
Merritt
Website: www.nvit.bc.ca

North Island College
Courtenay
Website: www.nic.bc.ca

Northwest Community College
Terrace
Website: www.nwcc.bc.ca

Okanagan University College
Kelowna
Website: www.okanagan.bc.ca

Open Learning Agency
Burnaby
Website: www.ola.bc.ca

College of the Rockies
Cranbrook
Website: www.cott.bc.ca

Selkirk College
Castlegar
Website: www.selkirk.bc.ca

Vancouver Community College
Vancouver
Website: www.vcc.bc.ca

Yukon

Yukon College
Whitehorse
Website: www.yukoncollege.yk.ca

Alberta and Northwest Territories Region

Alberta

Bow Valley College
Calgary
Website: www.bowvalleyc.ab.ca

Fairview College

Fairview
Website: www.fairviewc.ab.ca

Grande Prairie Regional College
Grande Prairie
Website: www.gprc.ab.ca

Grant MacEwan College
Edmonton
Website: www.gmcc.ab.ca

Keyano College
Fort McMurray
Website: www.keyanoc.ab.ca

Lakeland College
Vermilion
Website: www.lakelandc.ab.ca

Lethbridge Community College
Lethbridge
Website: www.lethbridgecollege.ab.ca

Maskwachees Cultural College
Hobbema
Website: www.maskwachees.ab.ca

Medicine Hat College
Medicine Hat
Website: www.mhc.ab.ca

Mount Royal College
Calgary
Website: www.mtroyal.ab.ca

NorQuest College
Edmonton
Website: www.norquest.ab.ca

Northern Alberta Institute of Technology (NAIT)
Edmonton
Website: www.nait.ab.ca

Olds College
Olds
Website: www.oldscollege.ab.ca

Portage College
Lac La Biche
Website: www.portagec.ab.ca

Red Deer College
Red Deer
Website: www.rdc.ab.ca

Northwest Territories

Aurora College
Fort Smith
Website: www.auroracollege.nt.ca

Saskatchewan, Manitoba and Nunavut Region

Manitoba

Assiniboine Community College
Brandon
Website: www.assiniboinec.mb.ca

Keewatin Community College
The Pas
Website: www.keewatincc.mb.ca

Red River College of Applied Arts, Science and Technology
Winnipeg
Website: www.rrc.mb.ca

College universitaire de Saint-Boniface
Saint-Boniface
Website: www.ustboniface.mb.ca

Winnipeg Technical College
Winnipeg
Website: www.wtc.mb.ca

Yellowquill College
Winnipeg
Website: www.yellowquillcollege.mb.ca

Nunavut

Nunavut Arctic College
Iqaluit
Website: www.nac.nu.ca

Saskatchewan

Cariton Trail Regional College
Humboldt
Website: www.ctrc.sk.ca

Cumberland Regional College
Nipawin
Website: www.cumberlandcollege.sk.ca

Cypress Hills Regional College
Swift Current
Website: www.cypresshillscollege.sk.ca

North West Regional College
North Battleford
Website: www.nwrc.sk.ca

Northlands College
Air Ronge
Website: www.northlandscollege.sk.ca

Parkland Regional College
Melville
Website: www.parklandcollege.sk.ca

Prairie West Regional College
Biggar
Website: www.pwrc.sk.ca

Saskatchewan Indian Institute of Technologies (SIIT)
Saskatoon
Website: www.siit.sk.ca

Saskatchewan Institute of Applied Science and Technology (SIAST)
Saskatoon
Website: www.siast.sk.ca

Southeast Regional College
Assiniboia
Website: www.southeastcollege.org

Ontario Region

Conestoga College
Kitchener
Website:

College d'Alfred
Alfred
Website: www.alfredc.uoguelph.ca

Algonquin College of Applied Arts and Technology
Nepean
Website: www.algonquincollege.com

College Boreal
Sudbury
Website: www.borealc.on.ca

Cambrian College of Applied Arts and Technology
Sudbury
Website: www.cambrianc.on.ca

Centennial College of Applied Arts and Technology
Scarborough
Website: www.cencol.on.ca

La Cite collegiale
Ottawa
Website: www.lacitec.on.ca

Confederation College of Applied Arts and Technology
Thunder Bay
Website: www.confederationc.on.ca

Durham College
Oshawa
Website: www.durhamc.on.ca

Fanshawe College of Applied Arts and Technology
London
Website: www.fanshawec.on.ca

George Brown College of Applied Arts and Technology
Toronto
Website: www.gbrownc.on.ca

Georgian College of Applied Arts and Technology
Barrie
Website: www.georgianc.on.ca

Humber College of Applied Arts and Technology
Toronto
Website: www.humberc.on.ca

Kemptville College
Kemptville
Website: www.kemptvillec.uoguelph.ca

Lambton College of Applied Arts and Technology
Sarnia
Website: www.lambton.on.ca

Loyalist College of Applied Arts and Technology
Belleville

Website: www.loyalistc.on.ca

The Michener Institute for Applied Health Sciences
Toronto
Website: www.michener.on.ca

Mohawk College of Applied Arts and Technology
Hamilton
Website: www.mohawkc.on.ca

Niagara College
Welland
Website: www.niagarac.on.ca

Northern College of Applied Arts and Technology
Timmins
Website: www.northernc.on.ca

St. Clair College of Applied Arts and Technology
Windsor
Website: www.stclairc.on.ca

St. Lawrence College
Brockville
Website: www.sl.on.ca

Seneca College of Applied Arts and Technology
Toronto
Website: www.senecac.on.ca

Sheridan College of Applied Arts and Technology
Oakville
Website: www.sheridanc.on.ca

Sir Sandford Fleming College
Peterborough
Website: www.tlemingc.on.ca

Quebec Region

College Montmorency
Laval
Website: http://www.cmontmorency.qc.ca

Cegep de l'Abitibi-Temiscamingue
Rouyn - Noranda
Website: www.cegepat.qc.ca

Cegep Andre-Laurendeau
Ville LaSalle

Website: www.claurendeau.qc.ca

College de Bois-de-Boulogne
Montreal.
Website: www.bdeb.qc.ca

Champlain Regional College
Sherbrooke
Website: www.champlaincollege.qc.ca

Cegep de Chicoutimi
Chicoutimi
Website: www.cegep-chicoutimi.qc.ca

Dawson College
Montreal
Website: www.dawsoncollege.qc.ca

Cegep de Drummondville
Drummondville
Website: www.cdrummond.qc.ca/cegep/index.htm

College Edouard-Montpetit
Longueuil
Website: www.collegeem.qc.ca

College Francois-Xavier-Garneau
Quebec
Website: www.cegep-fxg.qc.ca

Cegep de la Gaspesie et des Iles
Gaspe
Website: www.cgaspesie.qc.ca

Heritage College
Hull
Website: www.cegep-heritage.qc.ca

Institut de technologie agroalimentaire de La Pocatiere
La Pocatiere
Website: www.italp.qc.ca

Institut de technologie agroalimentaire de Saint-Hyacinthe
St-Hyacinthe
Website: ita.qc.ca

Institut Teccart Inc.
Montreal
Website: www.teccan.qc.ca

Institut maritime du Quebec
Rimouski
Website: www.imq.qc.ca

Institut du Tourisme & d'Hotellerie du Quebec
Montreal
Website: www.ithq.qc.ca

John Abbott College
Ste-Anne-de-Bellevue
Website: www.johnabbott.qc.ca

Cegep de Jonquiere
Jonquiere Website: www.cjonquiere.qc.ca

College Latleche
Trois-Rivieres
Website: www.clafleche.qc.ca

College LaSalle
Montreal Website: www.clasalle.qc.ca

Cegep de Limoilou
Quebec Website: www.climoilou.qc.ca

College Lionel-Groulx
Saint-Thetese
Website: www.clg.qc.ca

College de Maisonneuve
Montreal
Website: www.cmaisonneuve.qc.ca

Marianopolis College
Montreal
Website: www.marianopolis.edu

Cegep de Matane
Matane
Website: www.cgmatane.qc.ca

Cegep de Matane
Matane
Website: www.cgmatane.qc.ca

College Merici
Quebec
Website: www.college-merici.qc.ca

College de l’Outaouais

Hull
Website: www.coll-outao.qc.ca

College de la region de l'Amiante
Thetford-Mines
Website: www.cegep-ra.qc.ca

Cegep regional de Lanaudiere
Repentigny
Website: www.collanaud.qc.ca

Cegep de Riviere-du-loup
Riviere-du-loup
Website: www.cegep-rdl.qc.ca

College de Rosemont
Montreal
Website: www.crosemont.qc.ca

Cegep de Sainte-Foy
Sainte-Foy
Website: www.cegep-ste-foy.qc.ca

Cegep de Saint-Hyacinthe
Saint-Hyacinthe
Website: www.cegepsth.qc.ca

Cegep Saint-Jean-sur-Richelieu
St-Jean-sur-Richelieu
Website: www.cstjean.qc.ca

Cegep de Saint-Jerome
Saint-Jerome
Website: www.cegep-st-jerome.qc.ca

Cegep de Saint-Laurent
Saint-Laurent
Website: www.cegep-st-laurent.qc.ca

Cegep de Sept-Iles
Sept-Iles Website: www.cegep-sept-iles.qc.ca

College Shawinigan
Shawinigan
Website: www.collegeshawinigan.qc.ca

College de Sherbrooke
Sherbrooke
Website: www.collegesherbrooke.qc.ca

Cegep de Sorel-Tracy
Tracy
Website: www.cegep-sorel-tracy.qc.ca

Cegep de Trois-RiviBres
Trois-Rivieres
Website: www.cegepV.qc.ca

Vanier College
St-Laurent
Website: www.vaniercollege.qc.ca

Atlantic Region

New Brunswick

New Brunswick Community College (NBCC)
Fredericton
Website: www.nbcc.nb.ca

CCNB - Bathurst
Bathurst
Website: www.bathurst.ccnb.nb.ca

CCNB - Campbellton
Campbellton
Website: campbellton.ccnb.nb.ca

CCNB - Dieppe
Dieppe Website: www.dieppe.ccnb.nb.ca

CCNB - Edmundston
Edmundston
Website: www.edmundston.ccnb.nb.ca

CCNB - Peninsule Acadienne
Caraquet
Website: www.gov.nb.ca/0345/

NBCC - College of Craft & Design
Fredericton
Website: www.nbccd.nbcc.nb.ca

NBCC - Miramichi
Miramichi Website: www.miramichi.nbcc.nb.ca

NBCC - Moncton
Moncton
Website: www.moncton.nbcc.nb.ca

NBCC - St. Andrews
St. Andrews
Website: www.standrews.nbcc.nb.ca

NBCC - Saint John
Saint John
Website: www.saintjohn.nbcc.nb.ca

NBCC - Woodstock
Woodstock
Website: www.woodstock.nbcc.nb.ca

Newfoundland

College of the North Atlantic
Stephenville
Website: www.northatlandc.nf.ca

CNA - Bonavista Campus
Bonavista
Website: www.northatlantic.nf.ca

CNA - Comer Brook Campus
Comer Brook
Website: www.northatlantic.nf.ca

CNA - Grand Falls - Windsor Campus
Grand Falls - Windsor
Website: www.northatlantic.nf.ca

CNA - Happy Valley - Goose Bay Campus
Happy Valley - Goose Bay
Website: www.northatlantic.nf.ca

CNA - Placentia Campus
Placentia
Website: www.northatlantic.nf.ca

CNA - Prince Philip Campus
St. John’s
Website: www.northatlantic.nf.ca

The Fisheries and Marine Institute
St. John’s
Website: www.mi.mun.ca

Centre for Nursing Studies
St. John’s
Website: www.cns.nf.ca

Nova Scotia

College de l,Acadie
La Butte
Website: www.ccfne.ns.ca

Nova Scotia Agricultural College (NSAC)
Truro
Website: www.nsac.ns.ca

Nova Scotia Community College (NSCC)
Halifax
Website: www.nscc.ns.ca

University College of Cape Breton
Sydney
Website: www.uccb.ns.ca

Prince Edward Island

Holland College
Charlottetown
Website: www.hollandc.pe.ca

Societe educative de l'Ile-du-Prince-Edouard
Wellington
Website: www.teteco.org/socedipe/index.html

Appendix C

Interview Guide

Admission requirements (including appeals and provisions for mature students), student body composition, student outreach activities, university transferability of program, provisions for the physically disabled student, student evaluations of faculty, consumer reports, distance learning opportunities, provisions for full and part-time studies, student loan programs, scholarships, student housing, method of promotion, grade grievance procedure(s), policicy(ies) towards repeating students, student placements, student exchange programs, collaborative programs, student services, institutional accessability, student activities, teacher qualifications, program evaluations, teacher salaries, teacher evaluations, tuition fees, academic (other than grades) and non-academic reasons for student dismissal.

Appendix D

Program evaluation form (English version)

RESEARCH

Please administer this form to as many students (male and female) as possible.

INSTRUCTIONS TO ADMINISTRATORS

1. Ask the students to provide the required information at the top of the first page.
2. Instruct the students to complete the form using a pen. They have 30 minutes to do so. Moreover, the administrator should remain in the classroom during this time.
3. Pick-up the forms and thank students for their participation.
4. Return the completed forms by registered mail as soon as possible to:

   Mr. Norman BUTLER
   Hotel Asystencki Nr. 1
   ul. Tokarskieoo 2/407
   30-065 Kraków
   Poland

Thank you for your assistance.

Name of your institution: .....

Name of your program: .....

Sex: M or F circle the appropriate response.

Year of study: 1, 2 or 3 circle the appropriate response.

Status: Full or Part-time circle the appropriate response.

HOSPITALITY AND TOURISM ADMINISTRATION PROGRAM

Curriculum

Would you please respond to some statements about the content of the hospitality and tourism administration program. For each statement, please circle the appropriate response:

agree	**A**
disagree	**D**
don't know	**DK**

1.	The program objectives, classroom setting and grading expectations were clearly explained to me when I started.	**A**	**D**	**DK**
2.	The courses in this program are generally well-organized.	**A**	**D**	**DK**
3.	The courses in this program relate well together without too much repetition or too many gaps.	**A**	**D**	**DK**
4.	The courses in this program offer an effective balance between theory and practice.	**A**	**D**	**DK**
5.	The courses in this program cover the knowledge and skills hospitality and tourism managers need.	**A**	**D**	**DK**
6.	The number of hours in each course is about right to achieve course objectives/outcomes.	**A**	**D**	**DK**
7.	The courses in this program are challenging.	**A**	**D**	**DK**
8.	Are there any courses or subject areas which you would add or delete from the program of studies? Please state your reasons.	**A**	**D**	**DK**

ADD **Reasons**

_____

_____

DELETE **Reasons**

_____

_____

Additional Comments/Recommendations

Learning Materials

Would you please respond to some statements about learning materials (manuals, textbooks, handouts, films, etc.) used in this program. For each statement, please circle the appropriate response.

9.	The learning materials are up to date.	**A**	**D**	**DK**
10.	The learning materials are clear and understandable.	**A**	**D**	**DK**
11.	The textbooks have enough helpful examples.	**A**	**D**	**DK**
12.	The learning materials are practical and clearly related to program objectives.	**A**	**D**	**DK**
13.	Sufficient diagrams and visual aids are used.	**A**	**D**	**DK**

Additional Comments/Recommendations

Instruction

Would you please respond to some statements about instruction in the program. For each statement, please circle the appropriate response.

14.	Teachers in this program are well prepared for class.	**A**	**D**	**DK**
15.	Teachers are well organized and make good use of class time.	**A**	**D**	**DK**
16.	Teachers are knowledgeable and up to date on subject matter.	**A**	**D**	**DK**
17.	Teachers are enthusiastic and interested in subject matter.	**A**	**D**	**DK**
18.	Teachers communicate clearly and are understandable.	**A**	**D**	**DK**
19.	Teachers use a variety of teaching styles and techniques.	**A**	**D**	**DK**
20.	Teachers are concerned about student progress and explain what is required to improve.	**A**	**D**	**DK**
21.	Teachers set fair tests and assignments.	**A**	**D**	**DK**
22.	Teachers are available to give individual help when needed.	**A**	**D**	**DK**
23.	Teachers give regular feedback about my progress.	**A**	**D**	**DK**
24.	I am generally satisfied with my progress in this program.	**A**	**D**	**DK**
25.	I would recommend this program to friends.	**A**	**D**	**DK**
26.	Teachers treat students with dignity and respect.	**A**	**D**	**DK**
27.	Teachers maintain firm control of classes.	**A**	**D**	**DK**
28.	Classes start and end on time.	**A**	**D**	**DK**
29.	Teachers conduct all scheduled classes.	**A**	**D**	**DK**
30.	Teachers stimulate sufficient discussion and participation.	**A**	**D**	**DK**
31.	Teachers cover material that is related to the program outline and objectives.	**A**	**D**	**DK**
32.	Teachers give sufficient notice of tests and assignments.	**A**	**D**	**DK**
33.	Teachers stress important points.	**A**	**D**	**DK**

Additional Comments/Recommendations

Appendix E

Program evaluation form (Polish version)

BADANIA

Proszę o wręczenie tego formularza jak największej liczbie studentów/studentek.

INSTRUKCJE DLA KOORDYNATORÓW

1. Proszę poprosić studentów, aby podali wymagane informacje w górnej części pierwszej strony.
2. Proszę poinstruować studentów, aby wypełniali formularz długopisem. Mają na to 30 minut. W tym czasie koordynator powinien pozostać w klasie.
3. Proszę zebrać formularze i podziękować studentom za ich pomoc w ich wypełnianiu.

Dziękuję za pomoc

NORMAN L. BUTLER

Nazwa Pani/Pana instytucji: .....

Nazwa Pani/Pana programu: .....

Płeć: K lub M – zakreślić właściwą odpowiedź.

Rok studiów: 1, 2 lub 3 – zakreślić właściwą odpowiedź.

Zatrudnienie: pełny lub niepełny wymiar godzin - zakreślić właściwą odpowiedź.

PROGRAM SZKOLENIA HOTELARSKIEJ KADRY KIEROWNICZEJ

Program nauki

Proszę odpowiedzieć na niektóre z poniższych stwierdzeń dotyczących szkolenia hotelarskiej kadry kierowniczej, objętego programem studiów. Przy każdym stwierdzeniu proszę zakreślić odpowiednią odpowiedź:

Zgadzam się	**Z**
Nie zgadzam się	**NZ**
Nie wiem	**NW**

1.	Cele programu, otoczenie pracowni klasowej oraz wymagania dotyczące poszczególnych ocen wyjaśniono jasno przed rozpoczęciem nauki.	**Z**	**NZ**	**NW**
2.	Kursy objęte tym programem ogólnie były dobrze zorganizowane.	**Z**	**NZ**	**NW**
3.	Elementy programu zachowują ciągłość tematyczną bez nadmiernego powtarzania się i bez zbyt dużych luk.	**Z**	**NZ**	**NW**
4.	Kursy objęte programem oferują prawidłową równowagę między teorią a praktyką.	**Z**	**NZ**	**NW**
5.	Kursy w tym programie obejmują wiedzę i umiejętności potrzebne kadrze kierowniczej.	**Z**	**NZ**	**NW**
6.	Liczba godzin przewidziana w każdym kursie jest mniej więcej wystarczająca aby osiągnąć cele programu.	**Z**	**NZ**	**NW**
7.	Kursy w tym programie są ciekawe i ambitne.	**Z**	**NZ**	**NW**
8.	Czy są jakieś kursy czy przedmioty, które dodał(a)byś lub usunął(usunęłabyś) z programu? Proszę podać powody.	**Z**	**NZ**	**NW**

Dodać **Powód**

_____

_____

Usunąć **Powód**

_____

_____

Dodatkowe komentarze

Materiały dydaktyczne

Proszę odpowiedzieć na kilka poniższych stwierdzeń dotyczących materiałów dydaktycznych (podręczniki, skrypty, konspekty, filmy itp.) w tym programie. Proszę zakreślić właściwą odpowiedź.

9.	Materiały dydaktyczne są aktualne.	**Z**	**NZ**	**NW**
10.	Materiały dydaktyczne są przejrzyste i zrozumiałe.	**Z**	**NZ**	**NW**
11.	Podręczniki zawierają wystarczającą liczbę pomocnych przykładów.	**Z**	**NZ**	**NW**
12.	Materiały dydaktyczne są praktyczne i ściśle związane z założeniami programu.	**Z**	**NZ**	**NW**
13.	Została użyta wystarczająca liczba rysunków i pomocy wizualnych.	**Z**	**NZ**	**NW**

Dodatkowe komentarze

Szkolenie

Proszę odpowiedzieć na kilka poniższych stwierdzeń dotyczących szkolenia. Proszę zakreślić właściwą odpowiedź.

14.	Nauczyciele prowadzący ten pogram są dobrze przygotowani do zajęć.	**Z**	**NZ**	**NW**
15.	Nauczyciele są dobrze zorganizowani i dobrze wykorzystują czas zajęć.	**Z**	**NZ**	**NW**
16.	Nauczyciele są kompetentni i mają aktualną wiedzę z tego przedmiotu.	**Z**	**NZ**	**NW**
17.	Nauczyciele przejawiają entuzjazm i zainteresowanie tematem.	**Z**	**NZ**	**NW**
18.	Nauczyciele wyrażają się jasno i zrozumiale.	**Z**	**NZ**	**NW**
19.	Nauczyciele wykorzystują różnorodność stylów i technik nauczania.	**Z**	**NZ**	**NW**
20.	Nauczycieli interesuje postęp studentów i wskazują i wyjaśniają braki w wiedzy studentów.	**Z**	**NZ**	**NW**
21.	Nauczyciele dają rozsądne testy i zadania domowe.	**Z**	**NZ**	**NW**
22.	Nauczyciele, gdy jest to konieczne, są dostępni by udzielić indywidualnej pomocy.	**Z**	**NZ**	**NW**
23.	Nauczyciele stale reagują na mój postęp.	**Z**	**NZ**	**NW**
24.	Ogólnie jestem zadowolony z kursów objętych tym programem.	**Z**	**NZ**	**NW**
25.	Mógłbym polecić ten program znajomym.	**Z**	**NZ**	**NW**
26.	Nauczyciele odnoszą się do studentów z szacunkiem i godnością.	**Z**	**NZ**	**NW**
27.	Nauczyciele ściśle i w pełni kontrolują przebieg zajęć.	**Z**	**NZ**	**NW**
28.	Zajęcia zaczynają się i kończą o czasie.	**Z**	**NZ**	**NW**
29.	Nauczyciele przeprowadzają wszystkie zaplanowane zajęcia.	**Z**	**NZ**	**NW**
30.	Nauczyciele w wystarczający sposób zachęcają do dyskusji i udziału w zajęciach.	**Z**	**NZ**	**NW**
31.	Nauczyciele poruszają materiał, który wiąże się z wytyczonym programem i jego celami.	**Z**	**NZ**	**NW**
32.	Nauczyciele z odpowiednim wyprzedzeniem informują o testach i zadaniach domowych.	**Z**	**NZ**	**NW**
33.	Nauczyciele kładą szczególny nacisk na ważne zagadnienia.	**Z**	**NZ**	**NW**

Dodatkowe komentarze

Appendix F

Information sheet

KRAKOWSKA SZKOŁA MEDYCZNA
im. Stanisławy Leszczyńskiej
STUDIUM ZAWODOWE

30-523 Kraków, ul. Zamojskiego 58
tel. (012) 656-03-15, 656-24-81, tel./fax (012) 656-48-45
jest publiczną szkołą medyczną przeznaczoną dla absolwentów szkół średnich kształcącą w zawodach medycznych: INSTRUKTOR HIGIENY, PIELĘGNIARKA, POŁOŻNA, TECHNIK ELEKTRORADIOLOGII, TECHNIK FARMACEUTYCZNY .
Prowadzi nabór kandydatów na rok szkolny 2002/2003

KIERUNEK INSTRUKTOR HIGIENY
- nauka trwa 2 lata (bezpłatna)
- INSTRUKTOR HIGIENY znajduje zatrudnienie w Inspekcji Sanitarnej/Stacja Sanitarno-Epidemiologiczna jako średni personel medyczny.

KIERUNEK PIELĘGNIARKA
- nauka w szkole trwa 2,5 roku (bezpłatna)
- możliwość odbywania praktyk w Danii
- PIELĘGNIARKA (PIELĘGNIARZ) – zatrudnienie w służbie zdrowia jako średni personel medyczny

KIERUNEK POŁOŻNA
- nauka trwa 2,5 (bezpłatna)
- POŁOŻNA – zatrudnienie we wszystkich placówkach ochrony zdrowia

KIERUNEK TECHNIK ELEKTRORADIOLOGII
- nauka trwa 2 lata (bezpłatna)
- możliwość zatrudnienia jako średni personel medyczny obsługujący aparaturę: RTG, USG, Rezonans magnetyczny, EKG, EEG, mammografia

KIERUNEK TECHNIK FARMACEUTYCZNY
- nauka w szkole trwa 2 lata (bezpłatna)
- zatrudnienie w pionie farmaceutycznym jako średni personel medyczny

WARUNKI PRZYJĘCIA

- świadectwo dojrzałości – kierunek pielęgniarka, położna
- świadectwo dojrzałości lub ukończenia szkoły średniej – kierunek instruktor higieny, technik elektroradiologii, technik farmaceutyczny
- zaświadczenie lekarskie o przydatności do zawodu (wyniki badań podstawowych)
- rozmowa kwalifikacyjna: kierunek instruktor higieny, pielęgniarka, położna, technik elektroradiologii
- wyniki egzaminu wstępnego z biologii i chemii na kierunek technik farmaceutyczny

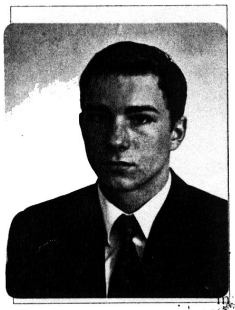
Termin składania podań do 09 sierpnia 2002 r.
Lokalizacja szkoły: Kraków-Podgórze, ul. Zamojskiego 58
Dojazd z Dworca w kierunku Rondo Mateczny tramwaj Nr 10, autobus Nr 179

Appendix G

School diploma

DYPLOM
UZYSKANIA TYTUŁU ZAWODOWEGO

Artur Zbigniew
imię (imiona) i nazwisko



urodzony dnia 16 lutego 1978 r.
w Krakowie woj. małopolskie
zdał w dniu 12 czerwca 2000 r.
egzamin z przygotowania zawodowego
(przygotowania zawodowego / nauki zawodu)
w zawodzie technik hotelarstwa

przed Komisją Egzaminacyjną powołaną przez Dyrektora Z.S.E. Nr 1 w Krakowie
zgodnie z Uchwałą 11/305/99 Rady Miasta Krakowa z dn. 29.12.1999 r.
pismem nr 12/1999/2000 z dnia 9 marca 2000 r.
przy Zespole Szkół Ekonomicznych Nr 1
im. M. Kopernika w Krakowie
i otrzymał ocenę bardzo dobry
oraz uzyskał tytuł zawodowy technik hotelarstwa

Kraków (miejscowość), dnia 16 czerwca 2000 r.

Nr 1156/463/2000

CZŁONKOWIE KOMISJI EGZAMINACYJNEJ

m.p.

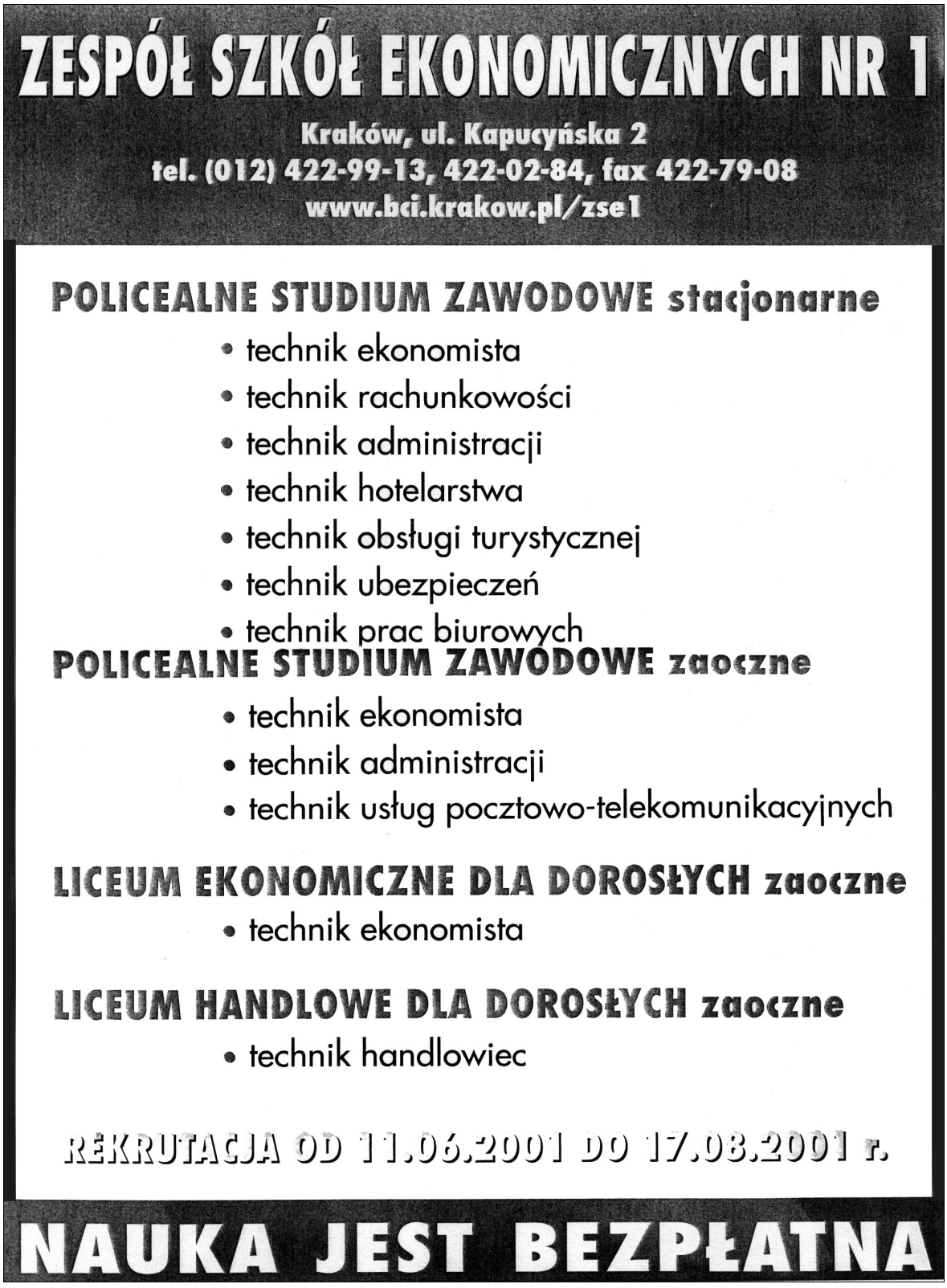
PRZEWODNICZĄCY KOMISJI EGZAMINACYJNEJ
Wicedyrektor
mgr [illegible] (podpis)

MEN-II/105/2

S30/Pn

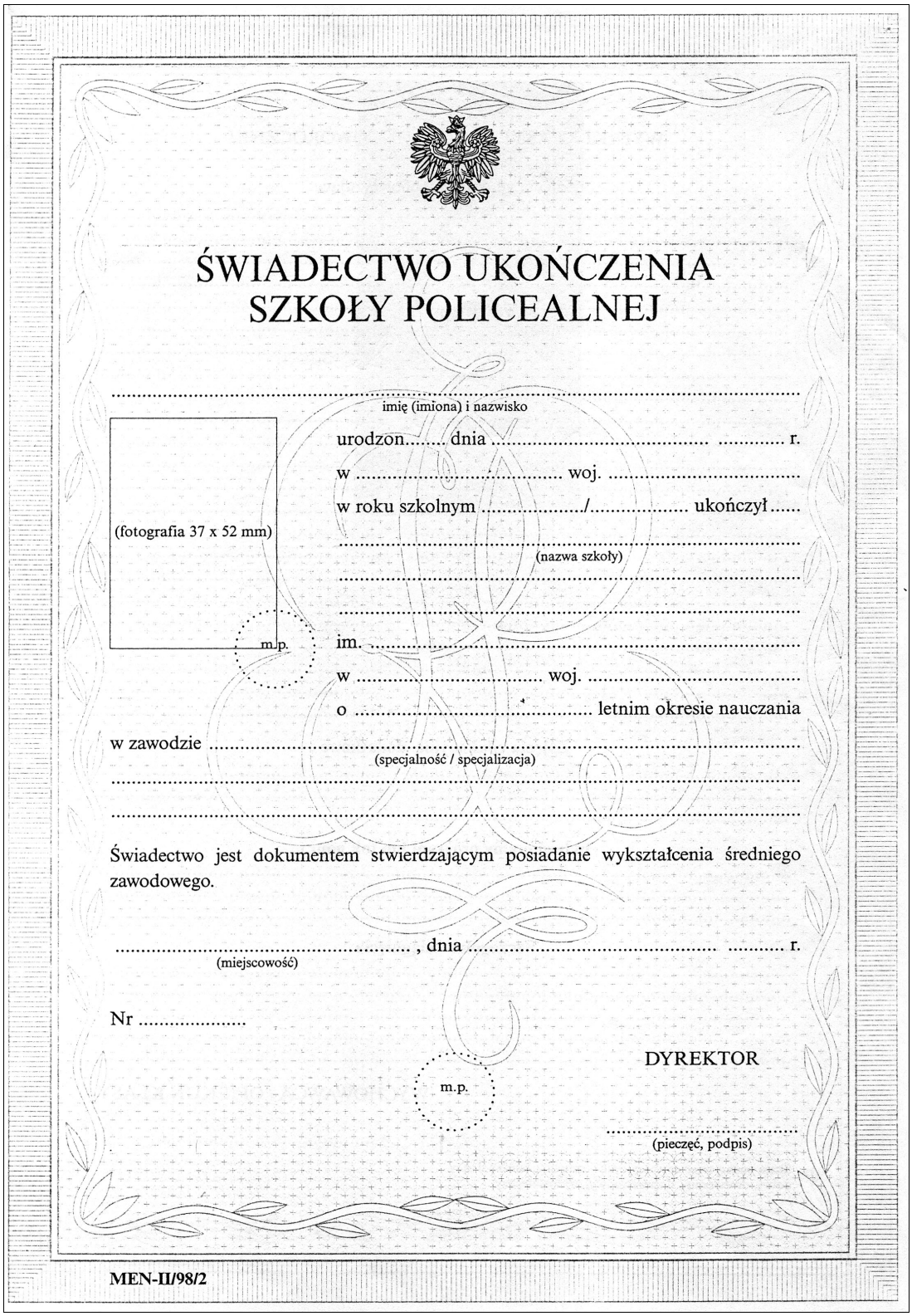
Appendix H

Poster



Appendix I

School diplomas



ŚWIADECTWO UKOŃCZENIA
SZKOŁY POLICEALNEJ

.....
imię (imiona) i nazwisko

(fotografia 37 x 52 mm)

urodzon..... dnia .... r.

w ..... woj. .....

w roku szkolnym ...../..... ukończył .....

.....
(nazwa szkoły)

.....

.....

m.p.

im. .....

w ..... woj. .....

o ..... letnim okresie nauczania

w zawodzie .....
(specjalność / specjalizacja)

.....

.....

Świadectwo jest dokumentem stwierdzającym posiadanie wykształcenia średniego zawodowego.

....., dnia .... r.
(miejscowość)

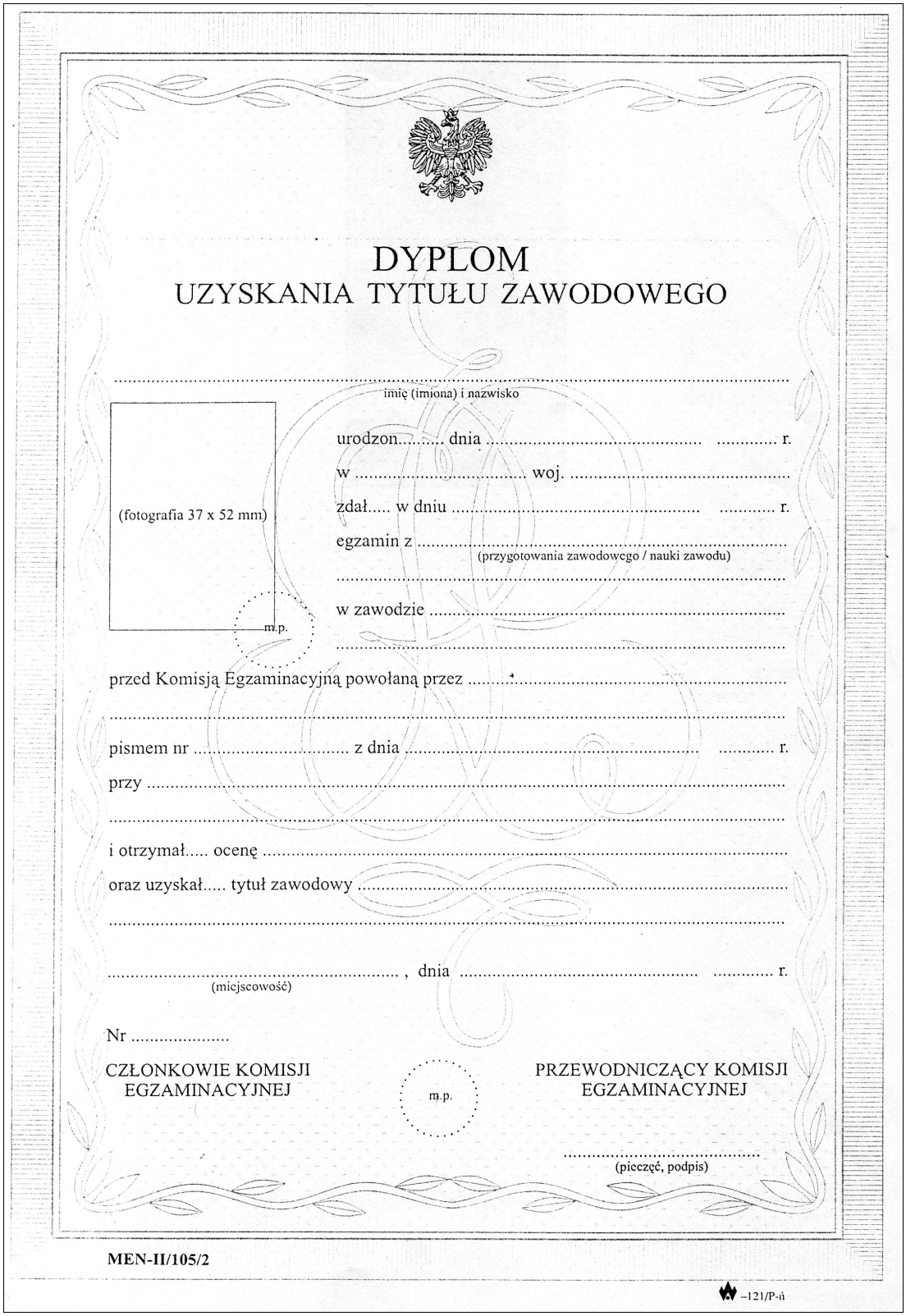
Nr .....

DYREKTOR

m.p.

.....
(pieczęć, podpis)

MEN-II/98/2



DYPLOM
UZYSKANIA TYTUŁU ZAWODOWEGO

.....
imię (imiona) i nazwisko

(fotografia 37 x 52 mm)

m.p.

urodzon..... dnia .... r.

w ..... woj. .....

zdał..... w dniu .... r.

egzamin z .....
(przygotowania zawodowego / nauki zawodu)

.....

w zawodzie .....

.....

przed Komisją Egzaminacyjną powołaną przez .....

.....

pismem nr ..... z dnia .... r.

przy .....

.....

i otrzymał..... ocenę .....

oraz uzyskał..... tytuł zawodowy .....

.....

..... , dnia .... r.
(miejscowość)

Nr .....

CZŁONKOWIE KOMISJI EGZAMINACYJNEJ

m.p.

PRZEWODNICZĄCY KOMISJI EGZAMINACYJNEJ

.....
(pieczęć, podpis)

MEN-II/105/2

–121/P-ń

Appendix J

Confederation College

STUDENT FEEDBACK QUESTIONNAIRE

This course information must be transferred to your answer sheet.

Division: 21	Faculty:
Course:	Date: November 02
Section:	Faculty ID:

Read the following statements and mark your responses on the accompanying computer form according to the scale. Please mark darkly with a pencil on the computer form.

If you	Mark
Strongly Agree	A
Agree	B
Disagree	C
Strongly Disagree	D
Statement not applicable	E

1. Uses a variety of teaching and evaluation techniques to compliment individual learning styles.
2. Explains expectations clearly at beginning of semester and throughout.
3. Gives overview of what is going to take place at the beginning of the class so students know direction and purpose.
4. Informs students of class cancellations.
5. Uses enthusiasm, energy, and optimism to motivate students to learn.
6. Demonstrates positive attitude.
7. Follows the evaluation method stated at the beginning of the course.
8. Recognizes when students do not understand the material.
9. Effectively deals with disruptions in class/group activity.
10. Displays courtesy and respect by doing such things as keeping appointments, arriving to class on time, and ending class on time.
11. The tests, exams and/or projects reflected the key areas of the course, based on the course outline presented.
12. The marks have been given in a clearly defined, impartial manner.

13. The teacher provided feedback in a timely manner on tests and assignments.
14. The teacher adequately notified you of upcoming tests and assignments.
15. The teacher demonstrated knowledge of course material.
16. The teacher attended all scheduled classes.
17. The teacher was prepared for every class.
18. The teacher had the ability to convey the subject matter in a way that is understood.
19. The teacher encouraged students to ask questions or to participate in discussions.
20. The teacher was available for guidance.
21. The teacher established a professional rapport with students.
22. The teacher used current information relevant to the course.
23. The teacher used innovative ideas relevant to the course.
24. The teacher maintains a descrimination free environment on the basis of gender, race, disability and/or sexual orientation.

Appendix K

Coded responses

CODING INFORMATION

Year of Study	YoS
Institution	Ins
Program	Pr
Status	Sts
Nationality	Nat
Statement number	Sx
Person number	Px
Program option	PO

SEX

Male	1
Female	2

INSTITUTIONS

Cracow School of Information Technology	1
Krakawska Szkoła Medyczna	2
Policealne Studium Zawodowe	3
Red Deer College	4
Durham College	5
Confederation College	6

PROGRAMS

IT	1
Nursing	2
Hotelier	3
Tour Guide and Travel Agent	4

PROGRAM OPTION (3rd year Red Deer Nursing students only)

Diploma	1
Degree	2

STATUS

Full-time	1
Part-time	2

NATIONALITY

Polish	1
Canadian	2

ANSWERS

No answer	0
Agree	1
Disagree	2
Don’t know	3

- If there was no response for statement number 8 then comments in the space provided immediately following it were taken into consideration.
- If two responses were circled and no indication was given as to which one was intended, then the response was given a “0” code.

Information technology program
Cracow School of Information Technology, Poland

Lp.	Person	Sex*	YoS*	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
1	P1	1	1	1	1	-	1	1	2	1	1	1	1	1	1	1	1	2	2	1	2	2	2	1	1	1	1	2	1	1	2	2	2	1	2	1	1	1	1	1	1
2	P2	1	1	1	1	-	1	1	1	1	1	1	1	2	3	0	1	3	1	1	3	1	1	1	1	3	1	1	3	1	3	1	1	1	3	2	1	3	1	1	1
3	P3	1	1	1	1	-	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	2	1	2	2	1	1	2	1	1	1	1	1	2	2	1	1	2
4	P4	1	1	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	1	1	1	1	1	1	1	1	1	1
5	P5	2	1	1	1	-	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	3	1	1	1	3	1	1	1	1	1	1	1	1	1	1
6	P6	1	2	1	1	-	1	1	1	1	2	1	1	2	1	1	2	1	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2	2	2	2	1	1	1
7	P7	1	2	1	1	-	1	1	3	2	2	1	1	1	2	0	2	1	1	1	2	3	2	3	1	1	1	1	1	1	2	1	3	1	2	2	2	2	1	1	2
8	P8	1	2	1	1	-	1	1	2	2	2	3	3	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
9	P9	1	2	1	1	-	1	1	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1
10	P10	1	2	1	1	-	1	1	1	1	1	1	1	2	1	1	2	1	3	1	2	1	2	1	1	1	2	1	1	1	2	1	1	1	2	2	2	1	1	1	1
11	P11	1	2	1	1	-	1	1	3	3	1	2	1	1	1	1	1	2	3	3	3	1	1	1	1	3	3	3	3	1	2	3	1	1	3	1	3	3	1	3	1
12	P12	1	2	1	1	-	1	1	1	1	1	2	3	2	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1
13	P13	1	2	1	1	-	1	1	1	1	1	3	3	1	1	1	2	1	1	2	2	1	1	1	3	1	2	1	1	1	2	1	1	1	1	1	2	1	1	1	1
14	P14	1	2	1	1	-	1	1	1	1	3	1	1	1	3	0	2	2	3	2	2	1	3	1	1	3	2	2	1	1	3	1	3	1	1	1	1	1	3	1	1
15	P15	1	2	1	1	-	1	1	1	3	2	2	1	2	3	1	1	1	3	1	3	1	2	1	3	2	1	1	2	1	3	1	3	3	3	1	3	1	1	1	1
16	P16	1	2	1	1	-	1	1	1	2	2	1	2	2	2	1	2	2	2	2	2	2	2	1	1	2	2	1	1	1	2	2	2	1	2	1	1	2	2	1	1
17	P17	1	2	1	1	-	1	1	1	1	1	1	3	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	3	1	1	1	1	1	1	1	1
18	P18	1	2	1	1	-	1	1	1	2	1	2	2	2	2	1	1	2	3	1	2	1	2	1	2	2	2	3	1	1	3	2	3	1	1	2	3	2	1	1	3
19	P19	1	2	1	1	-	1	1	1	1	2	1	2	2	3	3	2	2	1	1	1	1	1	1	2	3	2	2	2	1	2	1	1	1	2	1	2	2	1	1	2
20	P20	2	2	1	1	-	1	1	1	1	2	2	1	1	1	3	2	1	1	2	2	1	2	2	1	2	2	1	1	1	2	1	1	1	1	2	1	1	1	1	1
21	P21	1	1	1	1	-	1	1	1	1	1	1	1	3	3	2	1	2	2	1	2	1	2	1	2	1	1	1	2	1	2	1	3	3	1	2	2	2	1	2	1
22	P22	1	1	1	1	-	1	1	1	1	1	1	1	3	3	1	1	3	2	1	2	3	2	1	3	1	1	1	2	1	2	2	3	1	1	2	2	2	1	2	1
23	P23	1	1	1	1	-	1	1	1	1	2	1	1	2	1	1	1	2	1	1	2	1	1	1	1	2	2	1	2	1	2	1	1	1	2	1	1	2	1	1	1
24	P24	1	1	1	1	-	1	1	1	3	2	1	1	1	3	0	1	1	1	1	3	1	3	1	3	1	0	3	1	1	3	1	1	1	3	2	2	3	1	2	3
25	P25	1	1	1	1	-	1	1	1	3	1	2	1	2	3	1	1	2	2	3	2	1	3	1	3	2	2	2	3	3	2	3	3	3	3	2	1	3	1	2	1
26	P26	1	1	1	1	-	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	2	1	1	2	2	1	1	1	1	1	1	1	2	1	1	2	1	1	1
27	P27	1	1	1	1	-	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	2	2	1	1	1
28	P28	1	1	1	1	-	1	1	1	1	1	2	1	2	1	2	1	1	1	1	2	1	1	1	1	2	1	1	2	1	3	1	1	1	2	1	1	1	1	1	1
29	P29	1	1	1	1	-	1	1	1	1	1	1	2	1	3	3	2	1	1	1	1	1	1	1	3	1	3	1	1	1	3	1	1	1	1	2	1	1	1	1	3
30	P30	2	1	1	1	-	1	1	1	1	1	2	3	1	1	2	1	1	1	1	1	3	3	1	3	1	1	1	1	1	2	1	1	1	2	2	2	3	1	1	1
31	P31	2	1	1	1	-	1	1	1	1	1	1	1	3	3	1	1	1	1	1	3	3	1	3	3	1	2	2	1	2	3	1	3	3	2	2	1	2	1	3	1
32	P32	2	1	1	1	-	1	1	1	1	1	3	1	3	3	1	1	1	3	3	3	1	1	1	1	2	1	1	3	1	3	1	1	1	1	1	1	3	3	3	3

*The person responsible for administering the evaluation instrument provided this information at the top of the first page of the form for person 1-8

Nursing program
Krakowska szkoła Medyczna, Cracow, Poland

Lp.	Person	Sex	YoS*	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
1	P33	2	1	2	2	-	1	1	1	3	1	2	1	2	1	0	1	3	3	2	1	3	3	2	2	2	2	2	2	3	3	1	3	2	2	2	2	2	2	1	1
2	P34	2	1	2	2	-	1	1	1	2	2	2	1	2	1	3	1	3	1	1	2	1	1	1	3	2	2	2	2	3	2	1	1	2	1	1	1	1	1	1	2
3	P35	2	1	2	2	-	1	1	1	3	1	3	2	2	2	1	1	2	3	3	2	1	1	1	2	2	2	2	2	3	2	3	2	2	1	1	1	2	3	1	1
4	P36	2	1	2	2	-	1	1	1	2	1	2	1	1	2	3	1	1	1	2	1	1	2	1	2	2	2	2	1	2	2	1	1	1	1	2	1	2	1	1	1
5	P37	2	1	2	2	-	1	1	2	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1
6	P38	2	1	2	2	-	1	1	3	2	2	1	1	2	0	3	1	1	2	1	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7	P39	2	1	2	2	-	1	1	1	1	1	1	1	2	1	1	1	3	2	1	2	1	1	1	3	2	2	2	2	3	3	3	3	0	1	1	1	3	1	1	1
8	P40	2	1	2	2	-	1	1	1	3	1	2	1	1	1	3	2	2	1	2	2	1	1	1	2	2	2	2	2	2	2	2	2	1	2	2	1	2	1	1	3
9	P41	2	1	2	2	-	1	1	1	3	1	1	1	1	3	1	1	3	3	3	3	1	1	1	3	3	3	3	2	3	2	1	1	2	2	1	1	3	3	1	1
10	P42	2	1	2	2	-	1	1	3	2	2	1	3	2	3	1	1	1	1	1	1	3	3	2	3	2	3	2	2	2	2	3	2	2	2	2	0	2	1	1	2
11	P43	2	2	2	2	-	1	1	2	2	1	1	1	1	2	3	1	1	1	1	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	P44	2	1	2	2	-	1	1	1	2	1	3	2	2	2	1	1	2	3	3	2	1	1	1	2	2	2	2	2	3	2	3	2	2	1	1	1	2	3	2	2
13	P45	2	2	2	2	-	1	1	1	1	1	2	1	3	1	1	1	1	1	1	1	1	3	1	1	1	1	1	2	1	1	2	1	2	1	1	1	1	1	1	1
14	P46	2	2	2	2	-	1	1	1	2	1	0	1	1	1	1	2	1	3	2	2	1	1	1	2	2	2	2	1	2	2	2	2	2	3	1	1	1	3	1	1
15	P47	2	2	2	2	-	1	1	1	3	1	3	1	0	1	1	1	1	3	1	0	1	1	1	0	1	0	1	0	1	1	3	3	1	1	1	1	0	0	1	1
16	P48	2	0	2	2	-	1	1	1	1	1	2	2	2	2	1	2	3	1	2	1	1	2	1	1	2	2	1	2	1	2	1	1	1	1	2	2	2	1	1	1
17	P49	2	0	2	2	-	1	1	1	1	1	2	2	2	2	2	2	1	2	2	1	1	1	1	2	1	2	2	2	1	2	1	1	1	1	2	2	2	1	1	2
18	P50	2	0	2	2	-	1	1	3	2	1	2	2	3	2	0	2	2	1	3	3	1	2	3	3	1	1	2	1	2	2	3	3	3	1	2	1	3	3	1	1
19	P51	2	0	2	2	-	1	1	2	3	2	1	1	1	1	3	2	2	2	2	2	1	1	1	1	1	1	2	1	1	1	1	2	1	1	2	1	1	1	1	1
20	P52	2	2	2	2	-	1	1	1	3	1	1	3	2	2	1	1	1	2	2	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	2	1	1	1	1
21	P53	2	0	2	2	-	1	1	1	1	1	1	2	1	2	1	1	1	2	2	1	1	1	1	1	1	2	1	2	2	3	1	1	1	1	2	1	1	1	1	1
22	P54	2	0	2	2	-	1	1	1	1	1	1	1	3	3	3	1	1	2	1	2	1	1	1	1	2	2	1	0	0	2	0	1	2	1	1	1	1	1	1	1

*Students participating in the study provided this information at the top of the first page of the form in their own handwriting

Tour guide and travel agent program
Policealne Studium Zawodowe, Cracow, Poland

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
1	P55	2	1	3	4	-	1	1	1	1	3	2	2	1	1	3	1	1	1	1	3	3	2	1	1	2	2	3	2	1	2	1	1	1	3	1	1	1	1	1	1
2	P56	2	1	3	4	-	1	1	1	1	3	2	2	1	1	3	1	1	1	1	3	3	2	1	1	2	2	2	2	1	2	1	1	1	3	1	1	1	1	1	1
3	P57	2	1	3	4	-	1	1	1	1	3	2	2	1	1	3	1	1	1	1	2	3	2	1	1	2	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1
4	P58	2	1	3	4	-	1	1	1	1	3	2	2	1	1	2	1	1	1	1	3	3	2	1	1	2	2	2	2	1	2	1	1	1	3	1	1	1	1	1	1
5	P59	2	1	3	4	-	1	1	1	2	2	2	3	1	1	3	1	1	1	1	2	2	2	1	3	2	2	3	2	1	2	1	1	1	1	3	2	2	1	1	1
6	P60	2	1	3	4	-	1	1	1	2	2	2	3	1	1	3	1	1	1	1	2	2	2	1	3	2	2	3	2	1	2	1	1	1	2	3	2	2	1	1	1
7	P61	2	1	3	4	-	1	1	1	2	2	2	3	1	1	3	1	1	1	1	2	2	2	1	3	2	2	3	3	1	2	1	1	1	2	2	2	2	1	1	1
8	P62	2	1	3	4	-	1	1	1	1	2	1	1	1	2	0	1	2	2	2	2	1	1	1	1	1	2	1	2	2	2	1	2	2	1	2	2	1	1	1	1
9	P63	2	1	3	4	-	1	1	1	1	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	2	2	1	1	2	1	1	1	2	2	2	2	2	1	1
10	P64	1	1	3	4	-	1	1	2	1	1	2	1	1	1	2	1	2	3	1	2	2	2	1	1	2	3	2	1	1	1	1	1	2	2	2	2	1	1	2	2
11	P65	1	1	3	4	-	1	1	2	1	2	2	1	1	2	1	1	2	1	2	2	1	2	1	2	2	2	1	1	2	3	2	3	1	2	1	1	1	1	2	1
12	P66	2	1	3	4	-	1	1	1	1	1	1	1	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	P67	2	1	3	4	-	1	1	1	1	1	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1
14	P68	1	1	3	4	-	1	1	3	3	3	3	3	3	1	3	3	3	3	3	3	1	1	3	3	3	3	3	3	3	3	3	3	2	3	1	1	3	3	1	1
15	P69	2	1	3	4	-	1	1	1	1	0	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	1	2	1	1	1	1	1	1	1

Hotelier program
Policealne Studium Zawodowe, Cracow, Poland

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
1	P70	2	1	3	3	-	1	1	1	1	1	2	2	3	3	1	1	3	3	1	1	1	3	1	3	1	1	2	2	1	2	2	3	1	1	3	3	2	1	1	1
2	P71	2	1	3	3	-	1	1	2	1	1	1	2	2	2	1	1	2	2	2	1	1	1	1	3	1	1	2	2	1	2	1	1	2	1	2	2	1	1	1	2
3	P72	2	1	3	3	-	1	1	1	1	1	3	2	1	1	3	1	2	3	1	1	1	2	1	1	2	1	1	1	2	1	1	1	2	1	1	1	2	1	1	1
4	P73	2	1	3	3	-	1	1	1	1	1	1	3	1	1	3	1	1	3	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1
5	P74	2	1	3	3	-	1	1	1	1	1	1	1	2	1	1	1	1	3	1	1	1	1	1	1	1	3	1	1	1	1	1	3	2	1	1	1	3	1	1	1
6	P75	2	1	3	3	-	1	1	1	1	1	3	3	1	1	3	1	1	3	1	1	1	1	1	1	2	1	1	2	1	2	1	1	2	1	1	1	2	1	2	1
7	P76	2	1	3	3	-	1	1	1	1	1	3	3	1	1	3	1	1	3	1	1	1	1	1	0	2	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1
8	P77	2	1	3	3	-	1	1	1	1	1	2	1	1	2	1	2	1	1	1	2	1	1	1	3	1	1	3	1	1	3	1	1	1	1	1	3	1	1	1	1
9	P78	2	1	3	3	-	1	1	1	1	1	2	1	1	2	1	2	1	1	1	2	1	1	1	3	1	1	3	1	1	3	1	1	1	1	1	3	1	1	1	1
10	P79	2	1	3	3	-	1	1	1	1	1	2	2	1	2	3	1	1	2	2	2	2	2	1	2	3	2	1	2	2	1	2	1	1	2	2	1	2	1	1	1
11	P80	2	1	3	3	-	1	1	1	1	1	2	2	1	2	1	1	1	2	2	2	2	2	1	2	2	2	1	2	2	1	2	3	1	2	1	1	2	1	1	1
12	P81	2	1	3	3	-	1	1	1	1	1	2	2	1	1	3	1	1	2	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
13	P82	2	1	3	3	-	1	1	1	1	1	2	1	2	2	3	1	1	2	1	2	2	2	2	1	1	1	1	2	1	3	1	1	1	1	1	2	2	1	1	3
14	P83	2	1	3	3	-	1	1	1	1	1	1	0	2	1	1	1	1	3	1	1	1	2	1	3	1	3	1	2	1	1	1	1	2	1	1	1	3	2	1	1
15	P84	2	1	3	3	-	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1
16	P85	2	1	3	3	-	1	1	1	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	P86	2	1	3	3	-	1	1	1	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	P87	2	1	3	3	-	1	1	1	2	2	1	1	2	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	P88	2	1	3	3	-	1	1	2	2	1	3	2	1	1	0	1	2	2	2	2	1	1	1	1	1	2	2	1	1	2	1	1	1	1	2	1	1	1	1	1
20	P89	2	1	3	3	-	1	1	1	2	2	2	1	2	1	0	1	2	2	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	2	1	1	1
21	P90	2	1	3	3	-	1	1	1	3	1	2	1	2	1	1	1	1	3	1	2	1	2	1	1	1	1	2	1	1	2	1	3	3	1	1	2	2	1	1	1
22	P91	2	1	3	3	-	1	1	1	3	2	2	1	3	1	3	1	1	3	2	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	2	2	1	1
23	P92	2	1	3	3	-	1	1	1	1	0	2	2	2	1	3	1	2	2	1	2	1	1	1	1	2	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1
24	P93	2	1	3	3	-	1	1	1	1	2	1	1	2	3	3	1	3	3	3	3	1	1	1	1	1	3	2	1	3	3	1	1	3	3	1	1	3	1	2	1
25	P94	2	1	3	3	-	1	1	1	1	1	3	1	2	3	3	1	1	1	3	2	1	1	1	3	1	1	3	3	1	2	1	1	1	2	1	1	2	1	1	1
26	P95	2	1	3	3	-	1	1	1	1	2	1	1	2	1	3	1	3	1	1	3	3	2	1	1	2	1	2	1	1	2	1	1	3	1	2	1	1	1	1	1
27	P96	2	1	3	3	-	1	1	2	3	1	1	2	3	2	3	3	3	3	3	3	1	1	1	2	2	2	2	2	1	2	1	3	2	2	1	1	1	3	1	1
28	P97	0	1	3	3	-	1	1	2	3	1	1	2	3	2	3	3	3	3	3	3	1	1	3	2	1	2	2	2	1	2	1	3	2	2	1	1	1	3	1	1
29	P98	2	1	3	3	-	1	1	1	3	2	1	1	1	3	0	1	1	2	2	2	1	1	1	1	1	1	3	3	1	1	1	1	1	2	1	1	1	1	1	1
30	P99	2	1	3	3	-	1	1	1	3	3	1	1	2	1	3	1	1	3	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1
31	P100	2	1	3	3	-	1	1	1	3	3	1	1	2	1	3	1	1	3	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	3	1	1	3	1	1	1
32	P101	1	1	3	3	-	1	1	2	2	1	3	3	2	2	1	0	0	0	0	0	3	1	3	1	1	3	1	3	3	0	2	2	1	2	1	3	1	3	1	3
33	P102	1	1	3	3	-	1	1	1	1	1	1	3	1	3	2	1	1	3	1	3	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2
34	P103	1	1	3	3	-	1	1	1	3	1	3	3	1	3	3	1	2	3	1	3	1	1	1	1	2	3	3	1	2	1	1	1	1	1	1	1	1	1	2	1
35	P104	1	1	3	3	-	1	1	1	1	1	1	3	2	3	0	1	3	3	3	3	1	3	1	1	3	2	1	1	3	3	2	2	1	1	0	0	2	1	3	1

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
36	P105	1	1	3	3	-	1	1	1	1	1	1	1	1	3	2	3	3	3	3	1	1	1	1	1	1	3	3	3	3	2	1	1	1	3	1	1	2	3	1	3
37	P106	1	1	3	3	-	1	1	1	1	1	1	1	1	1	3	1	1	1	1	3	1	1	1	1	1	1	1	1	3	3	1	3	1	1	1	1	3	1	1	1
38	P107	1	1	3	3	-	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39	P108	1	1	3	3	-	1	1	3	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	2	3	3	1	1	1	1	1	1	1	1	1	1
40	P109	2	2	3	3	-	1	1	1	1	1	1	3	1	2	1	3	3	3	3	3	1	1	1	1	1	1	2	1	3	2	1	3	1	1	1	1	1	1	1	1
41	P110	2	2	3	3	-	1	1	1	1	2	2	1	1	2	1	1	1	2	2	3	1	2	1	2	2	1	2	2	1	2	1	3	1	2	1	1	1	1	1	1
42	P111	2	2	3	3	-	1	1	1	1	2	3	1	2	3	0	1	1	2	2	1	1	2	1	1	2	3	2	2	3	2	1	1	1	2	2	2	2	1	1	1
43	P112	2	2	3	3	-	1	1	1	2	2	2	2	3	2	3	1	1	2	1	3	1	2	1	1	1	2	2	2	2	2	1	3	1	3	1	1	3	3	1	3
44	P113	2	2	3	3	-	1	1	1	1	1	2	2	2	2	1	1	3	2	2	2	1	2	1	1	1	2	1	2	1	3	1	2	1	1	1	2	2	1	1	1
45	P114	2	2	3	3	-	1	1	1	1	2	1	1	1	2	1	1	2	3	2	2	1	2	1	1	1	2	2	2	2	2	1	2	2	1	1	1	2	1	2	1
46	P115	2	2	3	3	-	1	1	1	2	1	3	1	1	2	0	2	1	1	3	3	1	2	1	1	1	1	1	2	1	3	2	2	1	1	2	1	2	3	1	1
47	P116	2	2	3	3	-	1	1	1	2	1	3	1	1	2	1	2	0	3	3	3	1	1	1	1	3	1	1	1	1	2	1	1	1	1	3	3	3	1	1	1
48	P117	2	2	3	3	-	1	1	1	2	1	3	1	1	2	1	2	3	2	3	3	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	2	3	1	1	1
49	P118	1	2	3	3	-	1	1	1	3	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	3	3	3	3	2	3	3	1	1	1	3	1	1
50	P119	2	2	3	3	-	1	1	1	1	1	2	3	1	2	1	1	1	1	3	2	1	2	1	1	1	2	1	2	1	1	2	2	3	2	2	1	1	1	1	2
51	P120	2	2	3	3	-	1	1	1	2	1	1	1	2	2	1	1	1	0	3	2	1	1	1	2	1	2	2	2	1	2	1	1	1	3	1	1	1	1	1	1
52	P121	2	2	3	3	-	1	1	1	3	1	2	3	3	3	1	3	2	2	3	1	1	1	1	2	1	1	1	1	3	3	3	3	1	3	1	3	2	1	1	3
53	P122	0	2	3	3	-	1	1	2	2	1	2	2	3	2	1	2	2	3	2	1	3	2	1	1	1	2	1	1	3	2	2	2	1	3	1	1	1	1	1	1
54	P123	2	2	3	3	-	1	1	2	2	1	2	2	3	2	0	2	2	3	2	1	1	2	1	2	2	1	2	1	1	2	3	2	1	1	1	3	2	3	1	1
55	P124	2	2	3	3	-	1	1	1	2	1	2	2	1	2	1	2	2	2	2	2	1	2	3	1	1	2	2	1	1	2	3	3	3	1	1	1	3	1	1	1
56	P125	2	2	3	3	-	1	1	1	1	1	1	2	1	1	3	1	1	2	1	1	1	1	1	1	1	2	3	2	3	2	1	1	1	1	1	1	1	1	1	1
57	P126	2	2	3	3	-	1	1	1	1	1	3	3	1	2	1	3	2	3	2	3	1	1	1	1	1	2	1	3	3	2	1	1	1	2	1	3	1	1	1	1
58	P127	2	2	3	3	-	1	1	1	1	1	1	2	1	2	1	1	1	3	1	1	1	1	1	1	1	1	1	1	2	1	1	3	1	1	1	1	1	1	1	1
59	P128	2	2	3	3	-	1	1	1	2	2	2	2	2	3	1	2	1	3	3	2	2	2	1	1	1	1	1	1	1	3	2	1	1	2	2	2	2	1	1	3
60	P129	2	2	3	3	-	1	1	1	2	2	2	2	2	2	3	2	2	2	2	2	1	1	1	1	1	2	2	2	3	2	1	1	1	1	1	3	3	3	1	1
61	P130	2	2	3	3	-	1	1	1	1	2	2	2	1	2	3	2	2	2	3	2	1	1	1	1	1	2	2	2	3	2	1	3	1	1	1	3	3	3	1	1
62	P131	2	2	3	3	-	1	1	1	2	1	2	2	1	2	3	1	1	2	2	2	1	1	1	1	2	2	1	1	1	2	1	1	1	1	1	0	2	1	0	2
63	P132	2	2	3	3	-	1	1	1	1	2	2	2	1	2	2	2	2	2	2	2	1	1	1	1	1	2	2	1	2	1	2	1	1	1	1	1	1	1	1	1
64	P133	2	2	3	3	-	1	1	1	1	1	1	3	1	2	3	2	2	2	2	2	3	2	1	1	1	1	1	2	1	1	1	1	1	1	1	3	1	1	1	1
65	P134	2	2	3	3	-	1	1	1	2	2	1	3	2	1	0	1	1	1	1	1	2	2	2	2	1	1	2	1	2	1	1	3	1	2	1	2	1	2	1	1
66	P135	2	2	3	3	-	1	1	1	2	1	2	1	1	2	3	1	1	2	1	2	1	2	1	2	1	3	2	2	1	2	1	1	1	1	2	3	2	1	1	3
67	P136	2	2	3	3	-	1	1	1	2	1	1	2	3	2	3	1	2	2	1	2	1	2	2	1	2	1	2	2	1	2	1	3	2	1	1	1	2	1	1	3
68	P137	2	2	3	3	-	1	1	1	1	1	2	1	2	2	1	1	1	3	0	2	1	1	1	1	1	2	3	3	1	3	1	1	1	1	1	1	2	2	1	3
69	P138	2	2	3	3	-	1	1	1	1	3	3	1	1	3	3	2	1	3	1	3	3	1	1	2	1	1	3	3	1	3	1	3	1	1	2	1	0	1	1	1
70	P139	2	2	3	3	-	1	1	1	1	1	1	2	2	2	1	3	1	2	2	1	2	2	2	2	1	1	1	2	2	1	1	3	3	2	1	3	1	1	1	1
71	P140	2	2	3	3	-	1	1	1	1	1	1	1	2	2	1	1	1	2	1	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2
72	P141	2	2	3	3	-	1	1	1	1	1	1	2	1	2	0	1	1	2	1	2	1	1	1	2	1	2	1	1	2	2	1	1	2	1	1	1	1	2	1	1
73	P142	2	2	3	3	-	1	1	1	1	1	1	2	2	2	1	2	1	2	2	1	2	2	2	2	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1
74	P143	2	2	3	3	-	1	1	1	2	1	2	2	1	2	1	2	1	2	2	2	1	1	1	2	1	2	2	1	2	1	2	2	2	1	1	2	1	1	1	1

75	P144	2	2	3	3	-	1	1	1	1	1	2	2	1	2	1	2	1	2	1	2	2	1	2	2	1	1	2	1	1	2	3	3	1	1	3	1	2	1	1	1
76	P145	2	2	3	3	-	1	1	1	1	1	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	1	2	2	3	2	2	3	2	2	1	2	1	1	1	1
77	P146	2	2	3	3	-	1	1	1	1	1	1	2	1	2	1	1	1	3	3	3	1	1	1	1	1	2	2	2	2	2	1	3	1	1	1	1	1	1	1	2
78	P147	1	2	3	3	-	1	1	3	2	1	2	1	3	2	1	2	1	3	1	1	2	2	2	1	1	1	1	1	2	2	1	2	2	1	1	1	1	3	2	1

Nursing program
Red Deer College, Red Deer, Alberta, Canada

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
1	P148	2	1	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	1	1	1	1	1	1	1	1
2	P149	2	1	4	2	-	1	2	1	1	3	1	1	2	0	1	1	1	1	1	3	1	3	3	1	1	1	1	3	1	1	3	1	1	2	1	3	3	3	1	1
3	P150	2	1	4	2	-	1	2	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1
4	P151	2	1	4	2	-	1	2	1	1	1	2	3	1	1	1	3	1	1	3	2	1	3	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	3	1	1
5	P152	2	1	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1
6	P153	2	1	4	2	-	1	2	1	1	1	1	1	3	1	3	1	2	1	1	1	1	1	1	3	1	1	1	3	3	3	1	1	1	1	1	2	1	1	3	1
7	P154	2	1	4	2	-	1	2	1	2	1	1	3	1	1	3	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	2	1	1	1
8	P155	2	1	4	2	-	1	2	1	1	2	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	2	1	1	1	1	1
9	P156	2	1	4	2	-	1	2	1	1	2	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	2	2	1	1	1	1
10	P157	2	1	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	P158	2	1	4	2	-	1	2	1	1	1	1	3	2	2	1	1	1	1	3	1	1	1	1	1	1	3	1	1	1	2	1	1	1	1	1	1	3	1	1	1
12	P159	2	1	4	2	-	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1
13	P160	2	1	4	2	-	1	2	1	1	1	1	3	1	1	3	3	1	1	1	1	1	1	3	1	3	1	1	1	1	1	1	1	1	2	1	2	2	1	1	2
14	P161	2	1	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
15	P162	2	1	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	2	2	1	1
16	P163	2	1	4	2	-	1	2	1	1	3	3	3	2	1	3	1	3	1	1	3	1	1	1	3	3	1	1	3	1	1	1	1	1	1	3	3	3	1	3	3
17	P164	2	1	4	2	-	1	2	1	2	2	1	1	1	1	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1
18	P165	2	1	4	2	-	1	2	2	1	1	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1
19	P166	2	1	4	2	-	1	2	3	1	2	1	1	2	1	0	1	1	1	1	2	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1
20	P167	2	1	4	2	-	1	2	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	P168	2	1	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1
22	P169	2	1	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	P170	2	1	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	P171	2	1	4	2	-	1	2	1	1	1	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1	1	1	1	1	3	1	1	1	1
25	P172	2	1	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	P173	2	1	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1
27	P174	2	1	4	2	-	1	2	1	1	1	1	1	2	1	3	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	3	1	3	1	1	2	2
28	P175	2	1	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	P176	2	1	4	2	-	1	2	2	1	1	1	3	2	1	3	1	1	1	1	2	1	1	1	1	3	2	1	1	1	1	1	1	1	2	1	1	3	3	1	2
30	P177	2	1	4	2	-	1	2	2	1	1	2	3	3	1	1	1	1	1	1	2	1	1	2	1	2	1	1	2	1	1	1	1	1	2	1	1	1	1	1	2
31	P178	2	1	4	2	-	1	2	1	1	1	1	1	2	1	0	1	1	2	1	1	1	1	1	1	1	1	2	1	3	2	1	1	3	3	1	1	1	1	1	1
32	P179	2	1	4	2	-	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	P180	2	1	4	2	-	1	2	2	1	1	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34	P181	2	1	4	2	-	1	2	1	1	2	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
35	P182	2	1	4	2	-	1	2	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
36	P183	2	1	4	2	-	1	2	1	1	1	1	3	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	3	1	1	1	1
37	P184	2	1	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1
38	P185	2	1	4	2	-	1	2	1	1	1	1	1	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39	P186	2	1	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1
40	P187	2	1	4	2	-	1	2	1	1	1	1	1	2	3	0	1	1	1	1	2	1	1	1	1	3	1	1	1	2	1	1	1	1	3	1	1	1	1	1	1
41	P188	2	1	4	2	-	1	2	2	1	1	3	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	2	1	2	2	1	1	1	1	1	1	1	2	1	1
42	P189	2	1	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43	P190	2	1	4	2	-	1	2	1	1	1	3	1	2	1	3	1	1	3	1	3	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2
44	P191	2	1	4	2	-	1	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	3	1	1	1	1	1	1	1	1
45	P192	2	1	4	2	-	1	2	2	2	2	1	2	2	1	1	1	1	1	1	2	1	2	2	1	2	1	2	2	2	2	1	2	2	2	1	1	1	2	2	2
46	P193	2	1	4	2	-	1	2	1	1	2	1	1	1	1	2	1	1	2	1	1	1	1	2	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1
47	P194	2	1	4	2	-	1	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	1	2
48	P195	2	1	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49	P196	2	1	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50	P197	2	1	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1
51	P198	2	1	4	2	-	1	2	1	1	1	1	3	3	1	3	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1
52	P199	2	1	4	2	-	1	2	1	1	2	1	2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53	P200	2	1	4	2	-	1	2	1	1	1	1	1	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	1	1	1	1	1	1	1	1
54	P201	2	1	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2
55	P202	2	1	4	2	-	1	2	1	1	1	1	1	1	1	0	1	3	3	3	3	1	1	3	1	3	1	3	3	1	1	3	3	1	1	1	3	1	3	1	1
56	P203	2	1	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57	P204	2	1	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
58	P205	1	1	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
59	P206	1	1	4	2	-	1	2	1	1	1	3	3	3	1	1	1	3	1	1	1	2	2	3	1	2	2	3	1	1	1	1	2	1	2	1	2	1	2	1	2
60	P207	1	1	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61	P208	0	1	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62	P209	0	1	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2
63	P210	0	1	4	2	-	1	2	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1
64	P211	2	2	4	2	-	1	2	2	1	2	1	1	2	1	3	1	2	2	2	1	1	1	1	1	2	1	2	2	1	2	1	1	1	2	2	2	1	1	1	1
65	P212	2	2	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1
66	P213	2	2	4	2	-	1	2	1	1	0	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67	P214	2	2	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68	P215	2	2	4	2	-	1	2	1	1	1	1	3	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69	P216	2	2	4	2	-	1	2	2	1	1	1	2	1	2	0	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	2	2	1	1	1	1	2
70	P217	2	2	4	2	-	1	2	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	2	0	1	2	1	1	1	1	1	1	2	1	1	1	1
71	P218	2	2	4	2	-	1	2	2	2	2	3	1	3	2	1	2	2	3	1	1	1	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
72	P219	2	2	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	2	2	2	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	2	1	1	2
73	P220	2	2	4	2	-	1	2	1	1	2	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1
74	P221	2	2	4	2	-	1	2	1	2	2	1	1	2	1	0	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	2	1	1	1	2	1	1	2	1	1

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
75	P222	2	2	4	2	-	1	2	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2
76	P223	2	2	4	2	-	1	2	1	1	1	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	2	1	1	2	1	1	1	1	2
77	P224	2	2	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78	P225	2	2	4	2	-	1	2	1	1	1	2	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	2	1	2	1	1	1	1
79	P226	2	2	4	2	-	1	2	1	2	1	1	2	2	1	3	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	P227	2	2	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	2	1	1	1	1	1	1
81	P228	2	2	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
82	P229	2	2	4	2	-	1	2	3	1	1	2	3	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
83	P230	2	2	4	2	-	1	2	1	2	1	1	3	1	1	3	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1
84	P231	2	2	4	2	-	1	2	1	1	3	3	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	1	1	3	1	1	1	1	1	1	1	2
85	P232	2	2	4	2	-	1	2	1	1	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	1	1	1	1
86	P233	2	2	4	2	-	1	2	1	1	1	1	1	1	1	3	2	1	1	1	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	2	1	1	1	1	1
87	P234	2	2	4	2	-	1	2	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2
88	P235	2	2	4	2	-	1	2	2	1	2	1	1	2	1	3	1	2	1	1	3	1	1	3	1	1	2	2	1	3	2	1	3	1	1	2	1	1	1	1	3
89	P236	2	2	4	2	-	1	2	1	1	1	2	1	2	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1
90	P237	2	2	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	3	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1
91	P238	2	2	4	2	-	1	2	1	1	1	1	1	1	2	3	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1
92	P239	2	2	4	2	-	1	2	1	1	1	1	3	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
93	P240	2	2	4	2	-	1	2	1	0	0	1	1	0	1	1	0	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1
94	P241	2	2	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	2	0	1	1	0
95	P242	2	2	4	2	-	1	2	1	1	2	1	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	1	1	2	2	1	1	1	1	1	1	1	1
96	P243	2	2	4	2	-	1	2	1	1	1	1	1	2	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1
97	P244	2	2	4	2	-	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
98	P245	2	2	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
99	P246	2	2	4	2	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1
100	P247	2	2	4	2	-	1	2	1	1	2	1	3	2	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	3	1	1	1	2
101	P248	2	2	4	2	-	1	2	1	1	3	1	2	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	2	2	2	1	1	1	1
102	P249	2	2	4	2	-	1	2	1	1	1	1	1	3	1	1	2	2	0	0	1	1	1	1	1	2	1	1	2	2	1	1	1	1	2	2	2	1	1	1	1
103	P250	2	2	4	2	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
104	P251	2	2	4	2	-	1	2	1	1	1	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	2	1	1	1	1	1	1	3	3	3	1	1
105	P252	2	2	4	2	-	1	2	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
106	P253	2	2	4	2	-	1	2	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1
107	P254	2	2	4	2	-	1	2	1	1	1	1	1	2	1	1	1	1	1	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	P255	2	2	4	2	-	1	2	2	1	2	1	1	2	1	0	1	1	1	1	2	1	1	1	1	1	2	1	2	1	2	1	2	1	1	2	1	1	1	1	1
109	P256	2	2	4	2	-	1	2	1	0	1	1	1	2	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	2	1	1	1	1
110	P257	2	2	4	2	-	1	2	1	1	1	1	1	3	1	3	2	1	1	3	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1
111	P258	2	2	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1
112	P259	2	2	4	2	-	1	2	2	1	1	1	1	2	1	1	1	1	2	3	3	1	1	1	1	1	2	3	3	1	1	1	2	1	3	3	3	1	1	1	1
113	P260	2	2	4	2	-	1	2	1	1	1	1	0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
114	P261	2	2	4	2	-	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	P262	1	2	4	2	-	1	2	1	1	3	1	1	1	1	3	1	1	1	1	3	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
116	P263	1	2	4	2	-	1	2	1	1	2	1	1	2	1	1	2	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1
117	P264	1	2	4	2	-	1	2	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
118	P265	1	2	4	2	-	1	2	1	3	1	1	1	1	1	1	2	1	1	1	2	1	3	3	1	1	1	2	2	1	1	1	1	1	2	2	1	3	1	1	1
119	P266	0	2	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	2	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	2	1	2	2	1	1	1
120	P267	2	3	4	2	2	1	2	1	1	1	2	3	2	1	1	1	1	1	1	1	3	3	1	1	1	1	1	3	1	1	1	1	1	2	1	1	1	1	1	1
121	P268	2	3	4	2	2	1	2	2	1	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	3	1	1	1	1	1	1
122	P269	2	3	4	2	2	1	2	1	2	2	1	2	2	1	3	1	1	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	1	1	1	1	2	2	1	2
123	P270	2	3	4	2	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
124	P271	2	3	4	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1
125	P272	2	3	4	2	2	1	2	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
126	P273	2	3	4	2	2	1	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	3	1	1	1	1
127	P274	2	3	4	2	2	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1
128	P275	2	3	4	2	2	1	2	1	1	2	2	2	1	1	0	1	2	1	1	1	1	1	1	1	2	1	2	2	1	1	2	2	2	1	1	1	1	1	1	1
129	P276	2	3	4	2	2	1	2	1	1	2	1	3	1	1	1	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	2
130	P277	2	3	4	2	2	1	2	1	1	2	1	1	2	1	1	1	1	1	1	2	1	1	1	1	3	1	2	3	1	3	1	3	1	1	1	1	1	3	2	3
131	P278	2	3	4	2	2	1	2	2	2	2	1	1	2	1	3	1	2	2	1	2	1	1	1	1	2	1	2	1	1	2	2	2	2	1	2	2	1	1	1	2
132	P279	2	3	4	2	2	1	2	2	2	2	1	3	2	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	2
133	P280	2	3	4	2	2	1	2	2	1	2	1	1	2	1	1	3	3	2	2	2	1	1	1	1	2	1	1	2	1	1	1	2	2	3	1	2	2	3	1	1
134	P281	2	3	4	2	2	1	2	1	1	2	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	2	2	1	1	1	2
135	P282	2	3	4	2	2	1	2	1	3	1	3	2	1	3	2	1	1	1	1	1	1	1	1	3	1	1	3	1	1	1	3	2	1	1	1	1	1	1	1	1
136	P283	2	3	4	2	2	1	2	1	1	3	1	3	3	1	1	1	1	3	1	3	1	1	1	1	1	3	1	1	1	1	3	3	1	3	1	1	1	1	1	3
137	P284	2	3	4	2	2	1	2	1	1	2	1	2	2	1	1	2	2	1	2	2	1	2	1	2	1	2	1	1	2	2	1	2	2	1	2	1	2	1	1	1
138	P285	2	3	4	2	2	1	2	1	1	1	2	2	1	1	1	2	1	1	1	2	1	1	1	3	0	1	3	1	1	2	3	1	0	0	1	1	0	1	1	2
139	P286	2	3	4	2	2	1	2	2	2	2	1	1	2	1	3	1	1	2	1	1	2	2	2	2	2	1	2	1	1	1	2	1	1	1	2	1	1	2	1	1
140	P287	2	3	4	2	1	1	2	0	1	1	2	1	2	1	1	1	0	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1
141	P288	2	3	4	2	1	1	2	1	1	1	3	1	1	1	3	1	1	1	1	3	1	1	1	1	1	3	1	1	1	1	1	3	1	0	1	1	1	1	1	1
142	P289	2	3	4	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
143	P290	2	3	4	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1	1	1	1
144	P291	2	3	4	2	1	1	2	1	2	2	2	2	2	1	2	1	1	1	3	3	2	2	3	3	2	3	1	3	1	1	2	2	2	3	2	2	1	3	2	2
145	P292	2	3	4	2	2	1	2	1	1	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
146	P293	2	3	4	2	2	1	2	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	2	1	1	1	1
147	P294	2	3	4	2	2	1	2	1	2	2	2	2	3	1	1	2	1	1	1	2	1	1	2	1	2	1	3	2	1	1	2	1	1	1	1	1	1	1	1	1
148	P295	2	3	4	2	0	1	2	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
149	P296	2	3	4	2	2	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1
150	P297	2	3	4	2	2	1	2	1	2	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	2	2	2	1	1	1	1	1
151	P298	2	3	4	2	2	1	2	1	2	1	1	1	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
152	P299	2	3	4	2	2	1	2	2	2	1	1	1	3	3	3	1	1	1	1	2	1	1	1	1	2	2	1	1	1	1	1	1	1	2	3	1	2	1	1	1

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
153	P300	2	3	4	2	2	1	2	1	1	1	1	3	1	3	1	1	1	1	1	3	1	1	3	1	1	1	3	2	0	1	3	2	1	1	1	1	1	1	1	2
154	P301	2	3	4	2	2	1	2	1	1	1	3	1	1	1	3	3	1	3	1	1	3	1	1	2	1	1	2	1	1	3	1	1	1	3	2	1	1	3	1	1
155	P302	2	3	4	2	2	1	2	1	2	1	1	3	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	2	1	2	1	2	1	1	1
156	P303	2	3	4	2	2	1	2	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1
157	P304	1	3	4	2	2	1	2	2	2	2	1	1	1	1	3	1	1	2	3	2	2	1	3	1	3	2	1	3	1	1	3	2	1	3	1	3	1	1	1	3
158	P305	1	3	4	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	2	2	1	1	1	1	2	1	2	1	2	1	2	1	1
159	P306	1	3	4	2	2	1	2	1	0	0	1	1	1	1	0	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1
160	P307	1	3	4	2	2	1	2	2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	2	1	1	2
161	P308	0	3	4	2	2	1	2	1	2	2	1	1	2	1	1	2	0	2	1	2	1	1	1	1	1	2	1	2	1	1	1	2	1	2	1	1	1	1	1	2
162	P309	0	0	4	2	-	1	2	1	1	1	1	0	1	1	2	1	1	0	1	2	1	1	1	0	1	1	1	1	0	1	1	1	0	0	0	1	1	1	1	2
163	P310	0	0	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
164	P311	0	0	4	2	-	1	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	2	1	1	2
165	P312	0	0	4	2	-	1	2	1	1	1	1	1	1	1	0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
166	P313	0	0	4	2	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Computer programming program
Durham College, Oshava, Ontario, Canada

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
1	314	1	2	5	1	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1
2	315	1	2	5	1	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	1	1	1	1	1	1	3	1	1	1	3	1	1	1	1	1	1
3	316	1	2	5	1	-	1	2	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	3	1	1	1	1	1	1	1	3	1	1	1	2	1	1	1	1	1
4	317	1	2	5	1	-	1	2	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	318	1	2	5	1	-	1	2	1	1	2	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1
6	319	1	2	5	1	-	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	320	1	2	5	1	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1
8	321	1	2	5	1	-	1	2	1	2	1	1	1	1	1	3	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1
9	322	1	2	5	1	-	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	323	1	2	5	1	-	1	2	1	1	2	1	2	2	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	2	2	1	2	1	2	1
11	324	2	2	5	1	-	1	2	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	2	2	1	2	2	1	1	1	1	1	1	1	1	1	2
12	325	2	2	5	1	-	1	2	3	3	2	2	3	3	1	3	3	3	3	3	3	1	1	1	1	1	1	3	1	3	3	3	2	1	1	1	1	1	1	1	1
13	326	2	2	5	1	-	1	2	1	1	1	1	1	3	1	1	1	1	1	3	1	1	1	1	3	2	1	2	1	1	2	1	1	1	3	1	1	2	1	1	2
14	327	2	2	5	1	-	1	2	1	1	1	1	1	2	1	1	1	2	1	1	2	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	2
15	328	0	2	5	1	-	1	2	1	2	2	2	1	3	1	0	1	2	2	2	2	2	2	2	0	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2
16	329	0	2	5	1	-	0	2	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	2	1	2	1	1	1	1	1	1
17	330	0	2	5	1	-	0	2	1	1	0	0	0	1	0	3	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
18	331	0	2	5	1	-	0	2	1	2	1	1	1	2	1	0	1	2	2	1	1	1	1	2	2	1	1	3	1	1	1	1	1	1	1	1	2	1	1	1	1

Computer programmer analyst program
Confederation College, Thunder Bay, Ontario, Canada

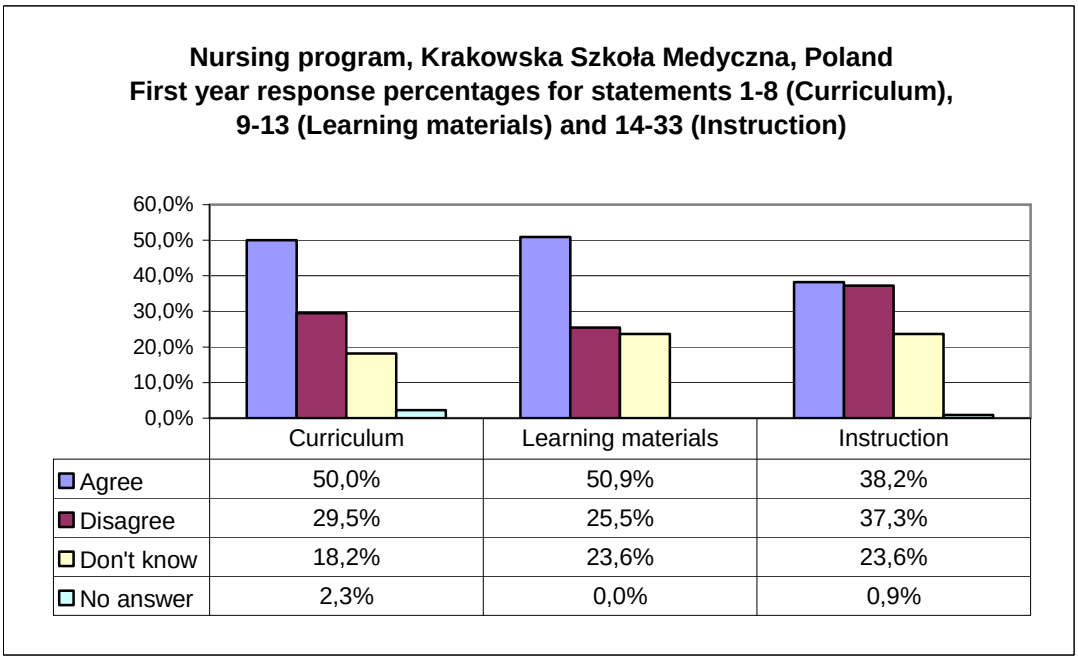
Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
1	332	1	1	6	1	-	1	2	1	1	1	1	3	3	1	3	1	2	1	1	1	1	1	1	1	1	2	3	1	3	3	1	1	1	1	1	1	1	1	1	1
2	333	1	1	6	1	-	1	2	1	3	1	3	2	1	1	2	1	2	2	1	1	1	1	1	1	2	2	3	3	1	2	2	1	1	1	1	2	1	1	1	1
3	334	1	1	6	1	-	1	2	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	2
4	335	1	1	6	1	-	1	2	1	1	1	1	1	2	1	2	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1
5	336	1	1	6	1	-	1	2	1	1	1	2	1	1	1	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	337	1	1	6	1	-	2	2	1	1	1	2	2	1	1	0	1	1	1	2	2	1	2	1	2	2	2	2	2	3	1	3	3	3	3	1	1	2	2	1	2
7	338	1	1	6	1	-	1	2	1	1	1	2	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	339	1	1	6	1	-	1	2	1	1	1	2	1	1	1	1	1	2	1	2	2	1	1	1	2	2	2	1	2	3	3	1	1	1	1	2	2	1	1	1	1
9	340	1	1	6	1	-	1	2	1	1	2	1	2	1	2	2	2	1	2	1	1	1	1	1	1	1	1	3	1	1	1	1	2	1	2	2	2	2	1	1	1
10	341	1	1	6	1	-	1	2	2	1	1	2	1	3	1	0	1	2	2	1	2	3	1	1	2	2	2	1	3	2	2	2	1	3	2	1	1	2	1	1	3
11	342	1	1	6	1	-	1	2	1	3	1	1	3	1	1	3	1	1	1	1	1	1	1	1	1	1	3	3	1	3	1	2	1	1	1	1	1	3	1	1	1
12	343	1	1	6	1	-	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	2
13	344	1	1	6	1	-	1	2	1	1	3	2	2	3	2	1	2	1	1	3	1	1	1	3	1	1	2	2	2	3	2	2	2	3	1	2	1	1	1	1	1
14	345	1	1	6	1	-	1	2	3	1	0	2	2	1	1	3	2	1	1	2	1	1	1	3	0	2	1	3	0	1	1	0	2	2	1	1	1	0	1	1	1
15	346	1	1	6	1	-	1	2	2	1	1	1	1	2	1	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	2	2	1	1	1
16	347	2	1	6	1	-	1	2	3	2	1	1	1	3	2	1	1	1	3	1	1	1	1	1	1	1	2	2	1	3	2	2	1	1	1	1	2	1	1	1	2
17	348	2	1	6	1	-	1	2	1	3	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1
18	349	2	1	6	1	-	1	2	1	2	1	2	1	1	1	1	1	2	2	1	2	2	1	2	1	2	2	1	1	1	2	2	1	1	1	1	1	2	1	1	1
19	350	2	1	6	1	-	1	2	1	1	1	1	3	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	351	1	2	6	1	-	1	2	1	1	2	1	3	1	1	1	1	3	1	3	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1
21	352	1	2	6	1	-	1	2	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	2	1	1	1
22	353	1	2	6	1	-	1	2	1	1	0	1	1	3	2	3	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	2	1	1	1
23	354	1	2	6	1	-	1	2	1	1	2	1	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
24	355	1	2	6	1	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	356	1	2	6	1	-	1	2	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	2	2	1	2	1	1	2	1	1	2
26	357	1	2	6	1	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1
27	358	1	2	6	1	-	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	1	1	1	1	1
28	359	1	2	6	1	-	1	2	1	1	1	1	1	2	1	1	2	2	2	1	2	2	2	1	1	2	1	2	1	1	2	1	1	1	2	2	1	1	1	1	1
29	360	1	2	6	1	-	1	2	2	2	2	1	2	3	2	1	2	2	2	1	1	2	2	2	1	3	2	2	1	2	2	3	2	3	2	2	2	1	1	1	3
30	361	1	2	6	1	-	1	2	1	1	1	1	1	1	1	3	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1
31	362	1	2	6	1	-	1	2	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	3	1	1	1	1	1	1	3	1	3	1	1	1	1	1	1
32	363	1	2	6	1	-	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	364	1	2	6	1	-	1	2	1	1	2	1	3	1	2	1	1	1	1	1	1	3	3	1	1	3	1	1	1	1	1	1	2	1	2	2	1	3	1	1	1
34	365	1	2	6	1	-	1	2	3	1	1	1	1	1	1	3	1	2	2	1	1	1	2	1	1	1	2	1	1	1	3	1	1	1	2	1	1	2	1	1	1
35	366	1	2	6	1	-	1	2	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1

Lp.	Person	Sex	YoS	Ins	Pr	PO	Sts	Nat	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33
36	367	1	2	6	1	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	2	1	1	1	1	1	1	1	1	1
37	368	1	2	6	1	-	1	2	1	1	1	1	1	1	1	3	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1
38	369	1	2	6	1	-	1	2	1	1	1	2	2	1	2	1	1	1	1	2	1	1	2	1	2	1	3	1	1	1	1	1	2	1	1	1	1	2	1	1	1
39	370	1	2	6	1	-	1	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1
40	371	1	2	6	1	-	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1
41	372	2	2	6	1	-	1	2	1	1	1	1	1	1	1	3	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42	373	2	2	6	1	-	1	2	1	1	1	1	3	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43	374	2	2	6	1	-	1	2	1	1	1	1	1	2	1	3	1	1	2	1	2	1	1	1	1	1	1	1	1	3	2	2	1	1	1	1	1	2	1	1	2
44	375	1	3	6	1	-	1	2	0	1	1	1	1	1	2	1	1	2	2	1	1	1	1	1	1	0	2	0	1	1	1	1	1	1	2	1	1	2	1	1	1
45	376	1	3	6	1	-	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1
46	377	1	3	6	1	-	1	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47	378	1	3	6	1	-	1	2	1	1	2	2	1	2	1	1	1	1	2	2	1	1	1	1	1	2	2	1	1	1	3	2	2	1	1	1	1	2	1	1	1
48	379	1	3	6	1	-	1	2	1	1	1	1	1	1	1	3	1	2	2	1	1	1	1	1	1	2	1	2	1	1	2	2	2	1	1	1	1	1	1	1	1
49	380	1	3	6	1	-	1	2	1	1	1	2	1	1	2	1	1	2	2	1	1	1	1	1	2	3	2	1	1	1	1	1	1	1	1	1	1	3	1	1	1
50	381	1	3	6	1	-	1	2	1	1	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1
51	382	1	3	6	1	-	1	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52	383	1	3	6	1	-	1	2	1	1	1	1	1	2	1	1	1	2	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53	384	1	3	6	1	-	1	2	1	1	2	2	1	1	1	3	2	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	2	1	2	2	1	1	1	1
54	385	1	3	6	1	-	1	2	1	1	1	1	1	2	1	3	1	1	2	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
55	386	1	3	6	1	-	1	2	1	1	1	2	1	1	1	2	1	1	2	1	1	1	1	1	2	1	2	2	1	1	2	1	2	1	1	1	1	2	1	1	1
56	387	2	3	6	1	-	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57	388	2	3	6	1	-	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
58	389	0	3	6	1	-	1	2	1	2	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2
59	390	0	0	6	1	-	0	2	1	1	3	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	391	0	0	6	1	-	0	2	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1
61	392	0	0	6	1	-	0	2	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	1	2	2	1	2	2	1	1	2	1	1	1	1	1	1	1	2	1
62	393	0	0	6	1	-	0	2	1	1	2	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63	394	0	0	6	1	-	0	2	0	0	0	2	1	1	1	1	1	2	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64	395	0	0	6	1	-	0	2	2	1	1	1	1	1	2	1	1	1	2	2	1	1	1	1	1	2	1	1	2	1	1	1	1	2	1	2	1	1	1	1	1
65	396	0	0	6	1	-	0	2	1	1	1	1	1	2	1	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	1	1
66	397	0	0	6	1	-	0	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	3	1	1	1	1	2	1	1	1
67	398	0	0	6	1	-	0	2	1	1	1	1	3	1	1	1	1	1	3	1	1	1	1	1	1	1	2	1	1	1	1	1	3	3	1	1	1	3	1	1	1
68	399	0	0	6	1	-	0	2	1	1	2	1	1	1	1	3	2	2	2	2	2	1	1	1	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1

Appendix L

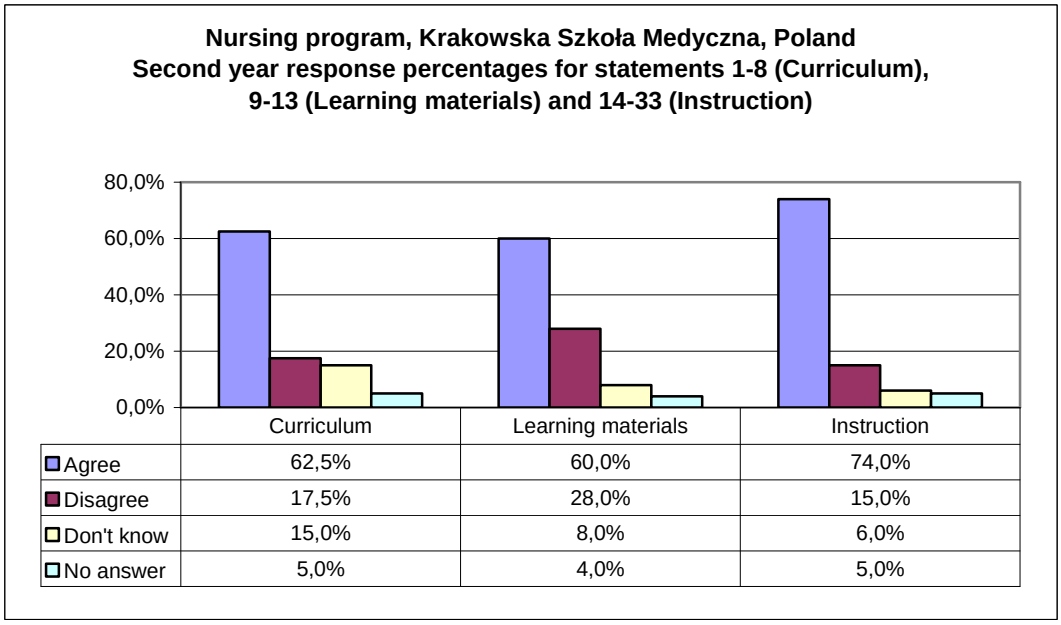
Additional figures

Figure 30



	Curriculum	Learning materials	Instruction
Agree	50,0%	50,9%	38,2%
Disagree	29,5%	25,5%	37,3%
Don't know	18,2%	23,6%	23,6%
No answer	2,3%	0,0%	0,9%

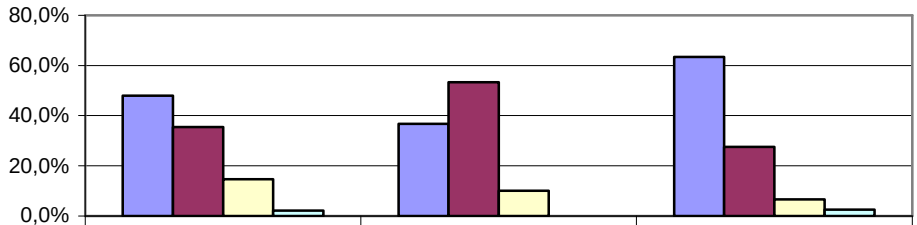
Figure 31



	Curriculum	Learning materials	Instruction
Agree	62,5%	60,0%	74,0%
Disagree	17,5%	28,0%	15,0%
Don't know	15,0%	8,0%	6,0%
No answer	5,0%	4,0%	5,0%

Figure 32

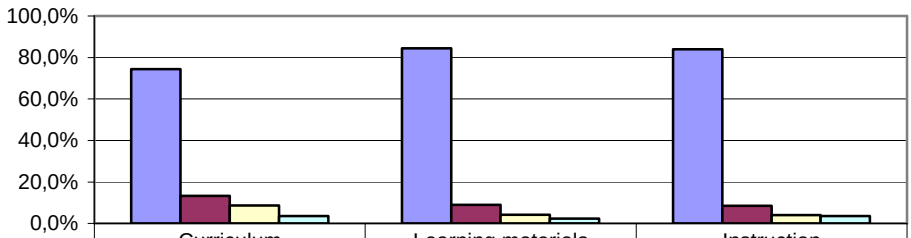
Nursing program, Krakowska Szkoła Medyczna, Poland
Year "0" response percentages for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	47,9%	36,7%	63,3%
Disagree	35,4%	53,3%	27,5%
Don't know	14,6%	10,0%	6,7%
No answer	2,1%	0,0%	2,5%

Figure 33

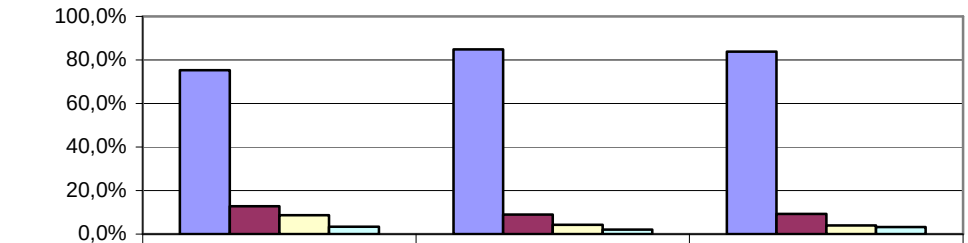
Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
Female response percentages for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	74,4%	84,4%	83,9%
Disagree	13,3%	9,0%	8,5%
Don't know	8,7%	4,2%	4,1%
No answer	3,5%	2,3%	3,5%

Figure 34

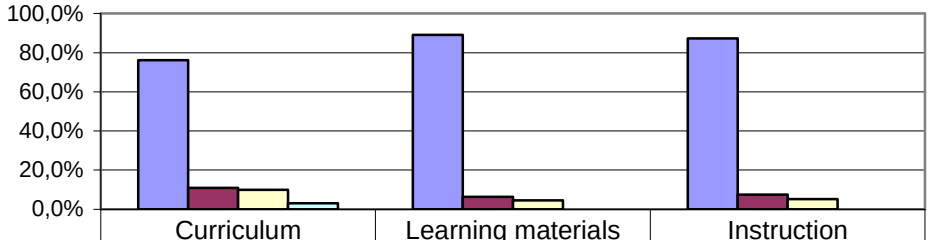
Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
Male response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	75,3%	84,8%	83,7%
Disagree	12,8%	9,0%	9,2%
Don't know	8,6%	4,2%	3,9%
No answer	3,3%	2,1%	3,2%

Figure 35

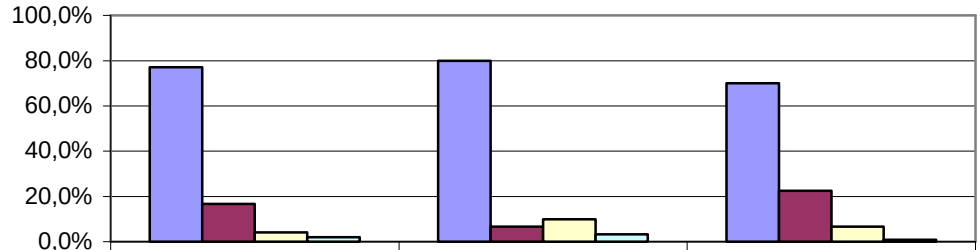
Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
First year female response percentages for statements
1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	76,1%	89,1%	87,3%
Disagree	11,0%	6,3%	7,5%
Don't know	9,9%	4,6%	5,3%
No answer	3,1%	0,0%	0,0%

Figure 36

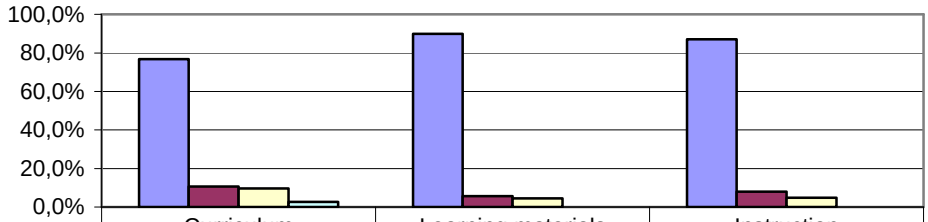
Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
Third year response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	77,1%	80,0%	70,0%
Disagree	16,7%	6,7%	22,5%
Don't know	4,2%	10,0%	6,7%
No answer	2,1%	3,3%	0,8%

Figure 37

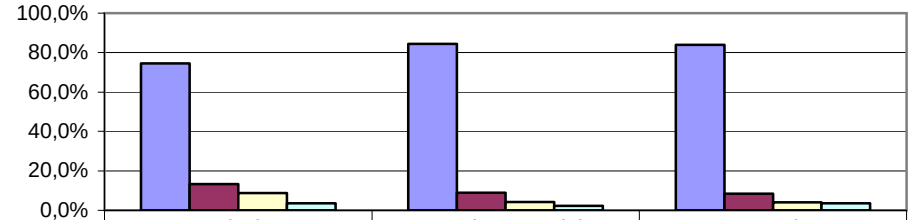
Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
First year response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	76,8%	89,8%	87,1%
Disagree	10,7%	5,7%	7,9%
Don't know	9,7%	4,4%	4,9%
No answer	2,8%	0,0%	0,0%

Figure 38

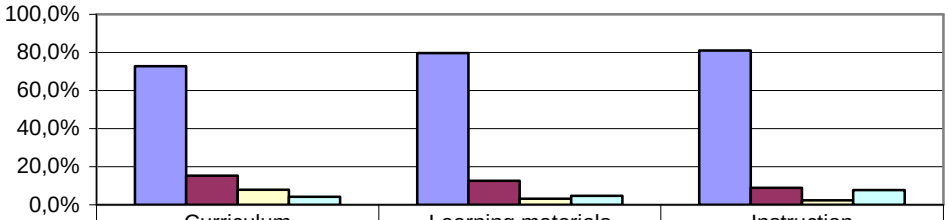
Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
Female response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	74,4%	84,4%	83,9%
Disagree	13,3%	9,0%	8,5%
Don't know	8,7%	4,2%	4,1%
No answer	3,5%	2,3%	3,5%

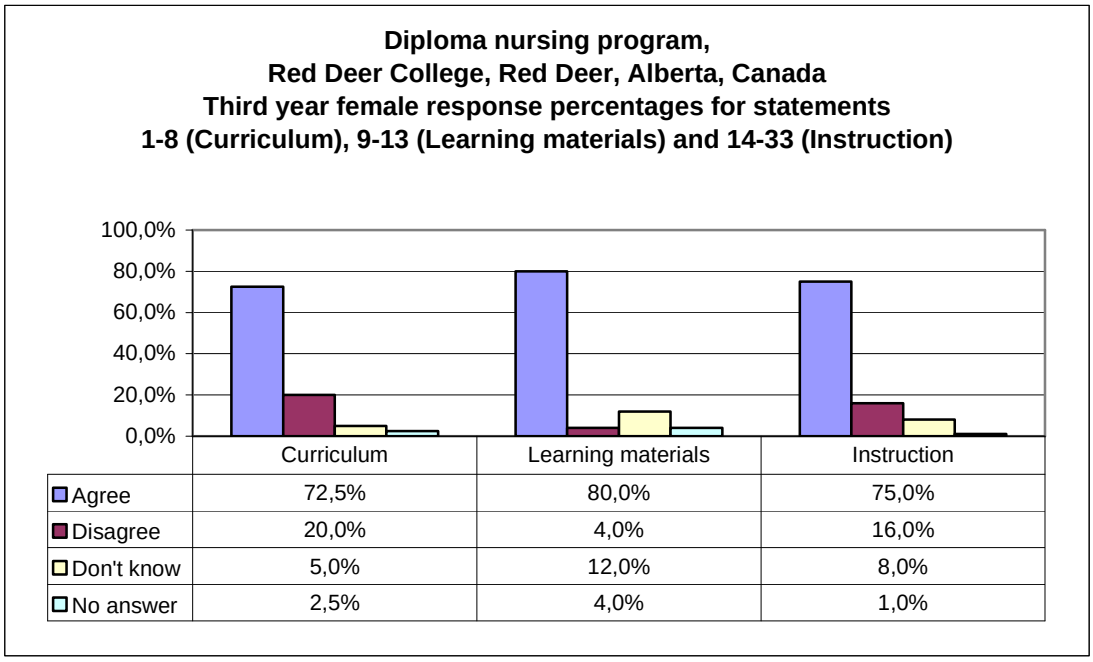
Figure 39

Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
Second year female response percentages for statements
1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



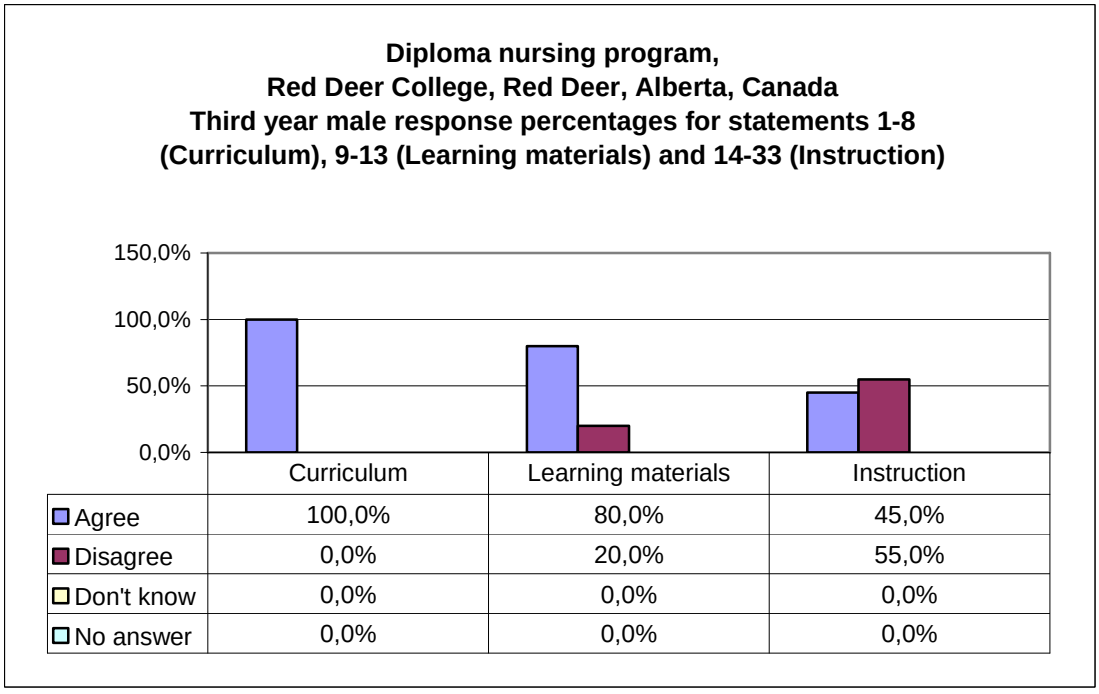
	Curriculum	Learning materials	Instruction
Agree	72,8%	79,6%	81,1%
Disagree	15,2%	12,5%	8,8%
Don't know	7,8%	3,1%	2,4%
No answer	4,2%	4,7%	7,7%

Figure 40



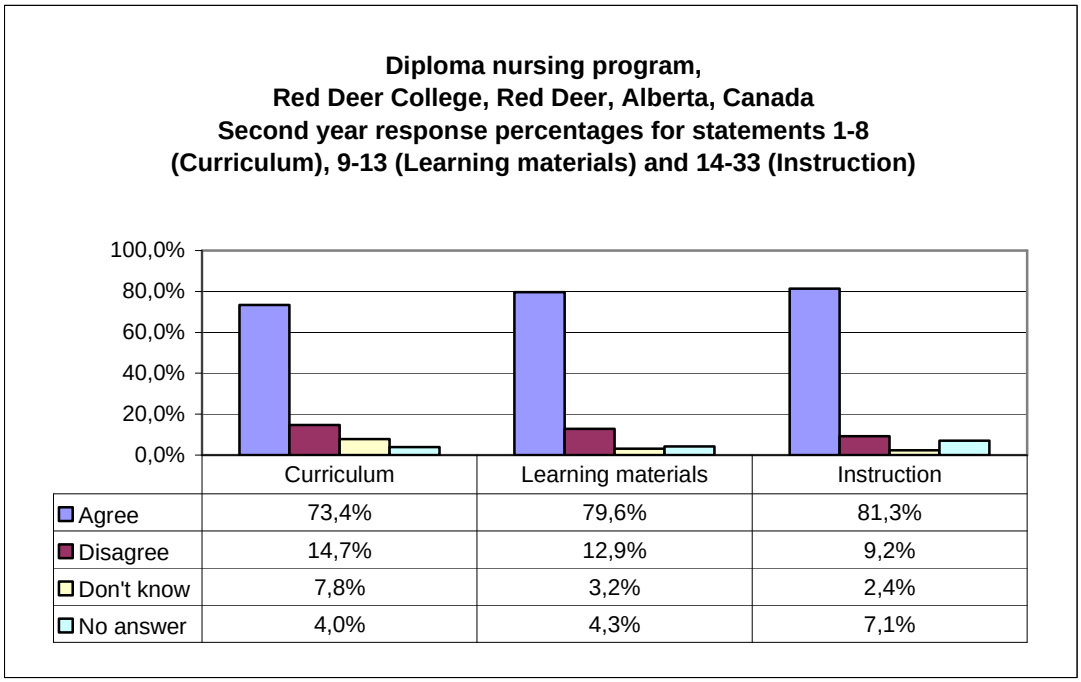
	Curriculum	Learning materials	Instruction
Agree	72,5%	80,0%	75,0%
Disagree	20,0%	4,0%	16,0%
Don't know	5,0%	12,0%	8,0%
No answer	2,5%	4,0%	1,0%

Figure 41



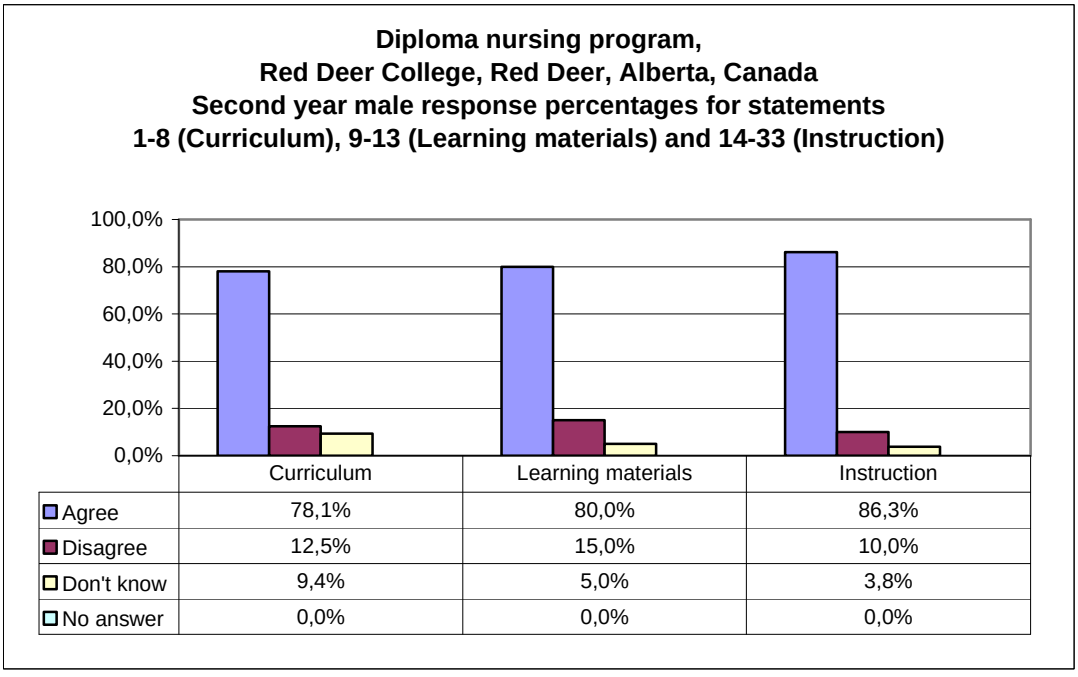
	Curriculum	Learning materials	Instruction
Agree	100,0%	80,0%	45,0%
Disagree	0,0%	20,0%	55,0%
Don't know	0,0%	0,0%	0,0%
No answer	0,0%	0,0%	0,0%

Figure 42



	Curriculum	Learning materials	Instruction
Agree	73,4%	79,6%	81,3%
Disagree	14,7%	12,9%	9,2%
Don't know	7,8%	3,2%	2,4%
No answer	4,0%	4,3%	7,1%

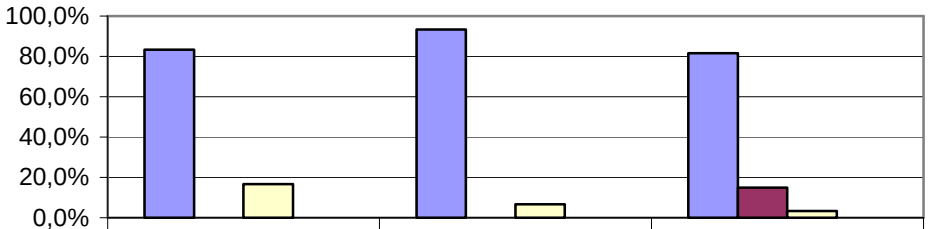
Figure 43



	Curriculum	Learning materials	Instruction
Agree	78,1%	80,0%	86,3%
Disagree	12,5%	15,0%	10,0%
Don't know	9,4%	5,0%	3,8%
No answer	0,0%	0,0%	0,0%

Figure 44

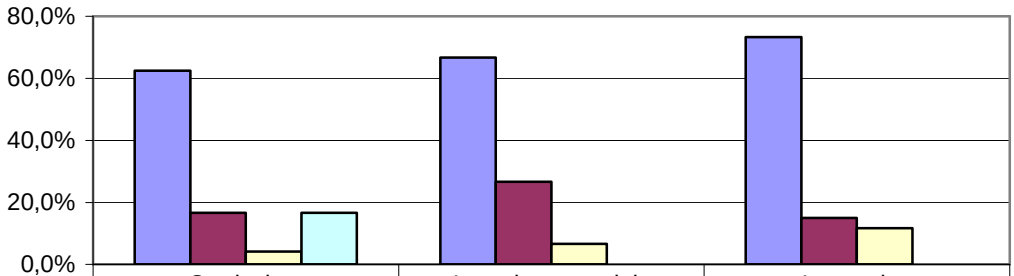
Diploma nursing program,
Red Deer College, Red Deer, Alberta, Canada
First year male response percentages for statements
1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	83,3%	93,3%	81,7%
Disagree	0,0%	0,0%	15,0%
Don't know	16,7%	6,7%	3,3%
No answer	0,0%	0,0%	0,0%

Figure 45

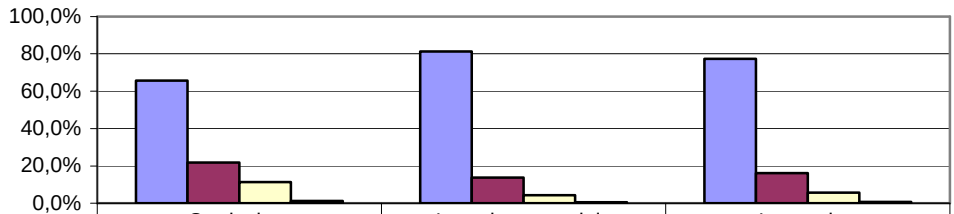
Degree nursing program, Red Deer College, Red Deer, Alberta, Canada
Male response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	62,5%	66,7%	73,3%
Disagree	16,7%	26,7%	15,0%
Don't know	4,2%	6,7%	11,7%
No answer	16,7%	0,0%	0,0%

Figure 46

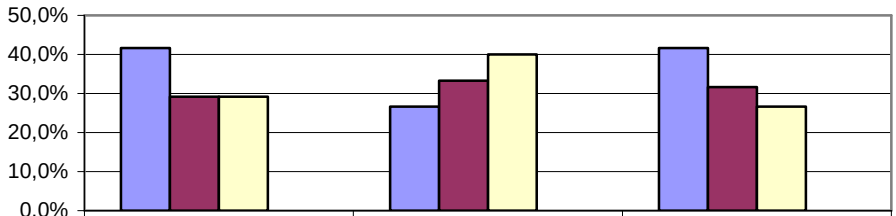
Degree nursing program, Red Deer College, Red Deer, Alberta, Canada
Female response percentages for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	65,6%	81,3%	77,3%
Disagree	21,9%	13,8%	16,1%
Don't know	11,3%	4,4%	5,8%
No answer	1,2%	0,6%	0,8%

Figure 47

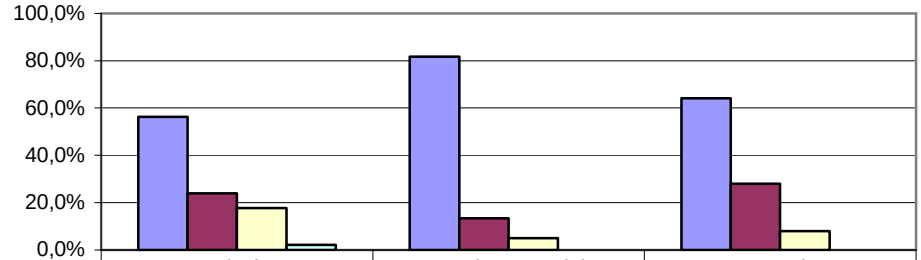
Travel agent and tour guide program, Policealne Studium Zawodowe, Cracow, Poland
Male response percentages for statements 1-8 (Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Learning materials	Instruction
Agree	41,7%	26,7%	41,7%
Disagree	29,2%	33,3%	31,7%
Don't know	29,2%	40,0%	26,7%
No answer	0,0%	0,0%	0,0%

Figure 48

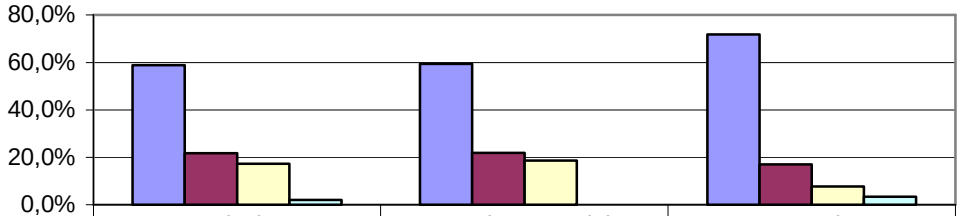
**Travel agent and tour guide program,
Policealne Studium Zawodowe, Cracow, Poland
Female response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Learning materials	Instruction
Agree	56,3%	81,7%	64,2%
Disagree	24,0%	13,3%	27,9%
Don't know	17,7%	5,0%	7,9%
No answer	2,1%	0,0%	0,0%

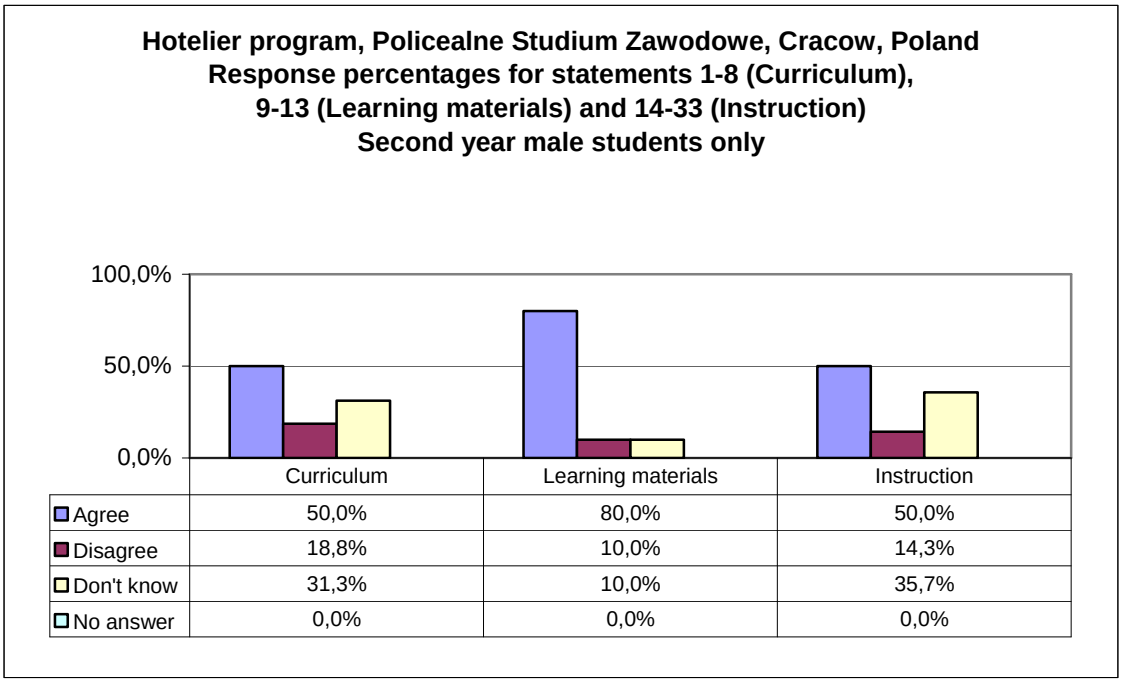
Figure 49

**Hotelier program, Policealne Studium Zawodowe, Cracow, Poland
Response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)
First year female students only**



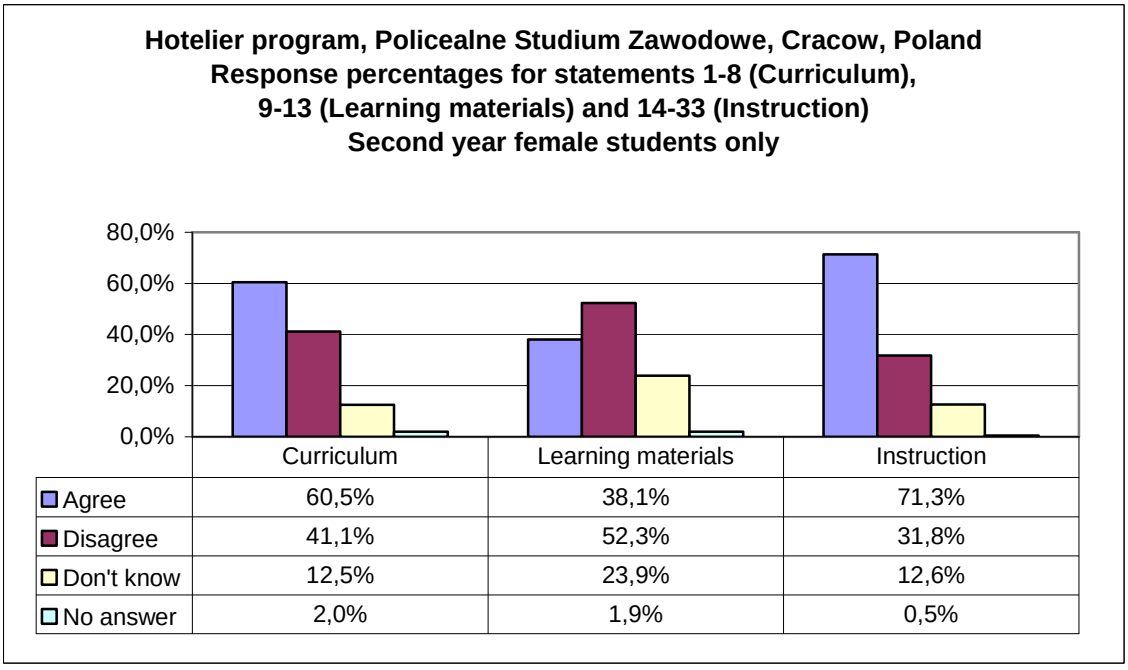
	Curriculum	Learning materials	Instruction
Agree	58,9%	59,4%	71,8%
Disagree	21,8%	21,9%	17,1%
Don't know	17,3%	18,7%	7,7%
No answer	2,0%	0,0%	3,4%

Figure 50



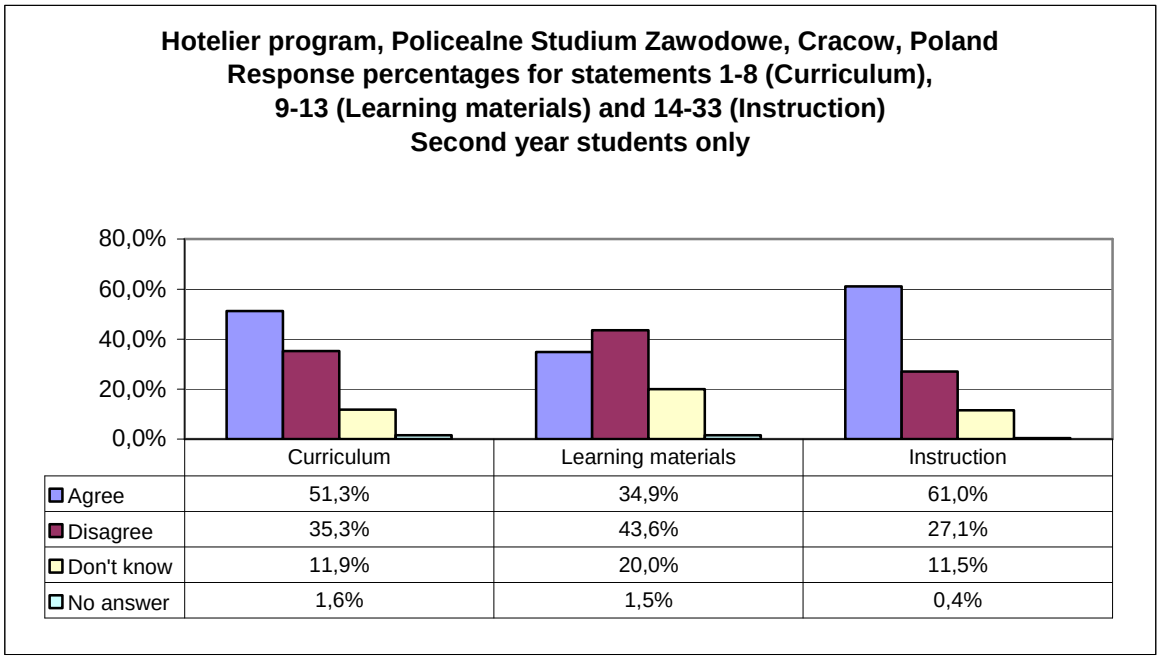
	Curriculum	Learning materials	Instruction
Agree	50,0%	80,0%	50,0%
Disagree	18,8%	10,0%	14,3%
Don't know	31,3%	10,0%	35,7%
No answer	0,0%	0,0%	0,0%

Figure 51



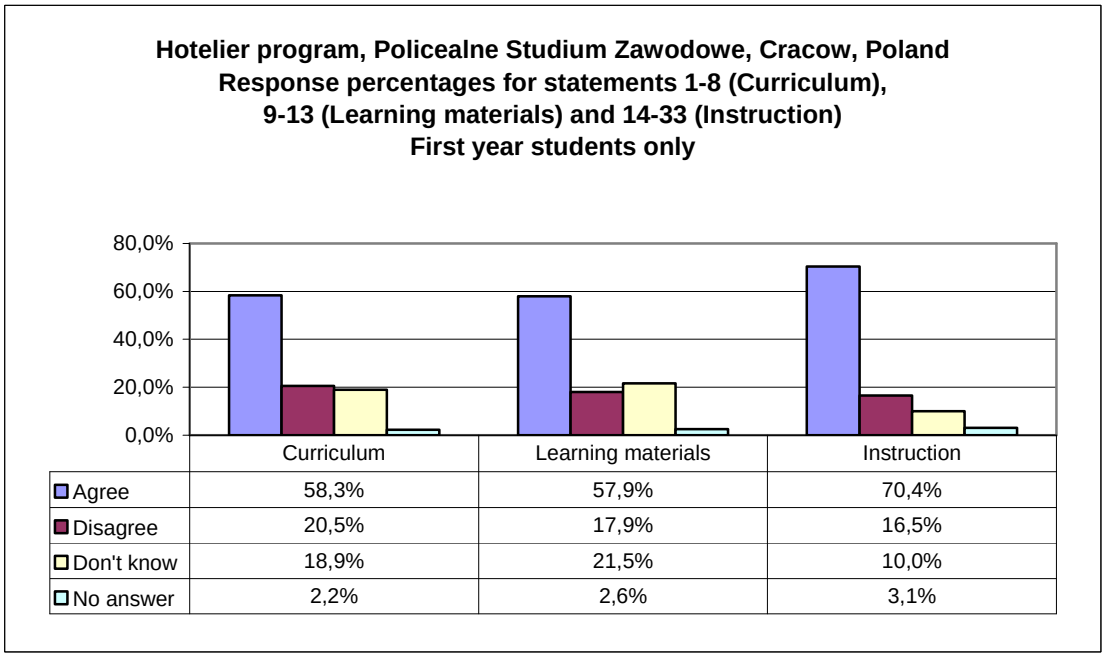
	Curriculum	Learning materials	Instruction
Agree	60,5%	38,1%	71,3%
Disagree	41,1%	52,3%	31,8%
Don't know	12,5%	23,9%	12,6%
No answer	2,0%	1,9%	0,5%

Figure 52



	Curriculum	Learning materials	Instruction
Agree	51,3%	34,9%	61,0%
Disagree	35,3%	43,6%	27,1%
Don't know	11,9%	20,0%	11,5%
No answer	1,6%	1,5%	0,4%

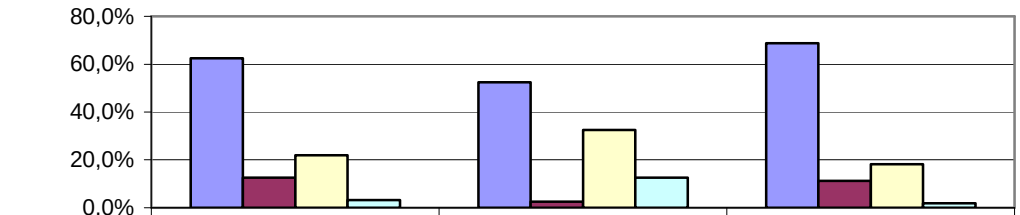
Figure 53



	Curriculum	Learning materials	Instruction
Agree	58,3%	57,9%	70,4%
Disagree	20,5%	17,9%	16,5%
Don't know	18,9%	21,5%	10,0%
No answer	2,2%	2,6%	3,1%

Figure 54

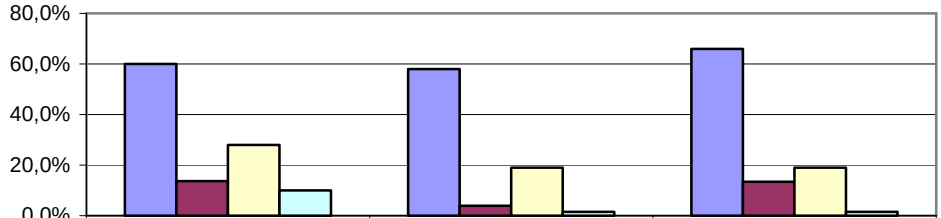
Hotelier program, Policealne Studium Zawodowe, Cracow, Poland
Response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)
First year male students only



	Curriculum	Learning materials	Instruction
Agree	62,5%	52,5%	68,8%
Disagree	12,5%	2,5%	11,3%
Don't know	21,9%	32,5%	18,1%
No answer	3,1%	12,5%	1,9%

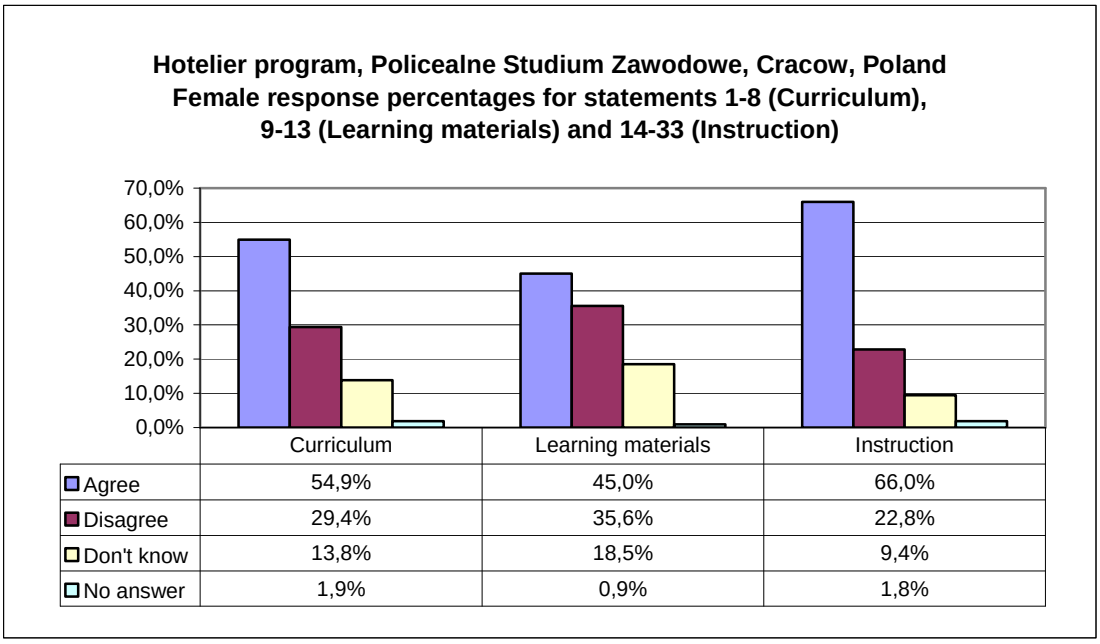
Figure 55

Hotelier program, Policealne Studium Zawodowe, Cracow, Poland
Male response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)



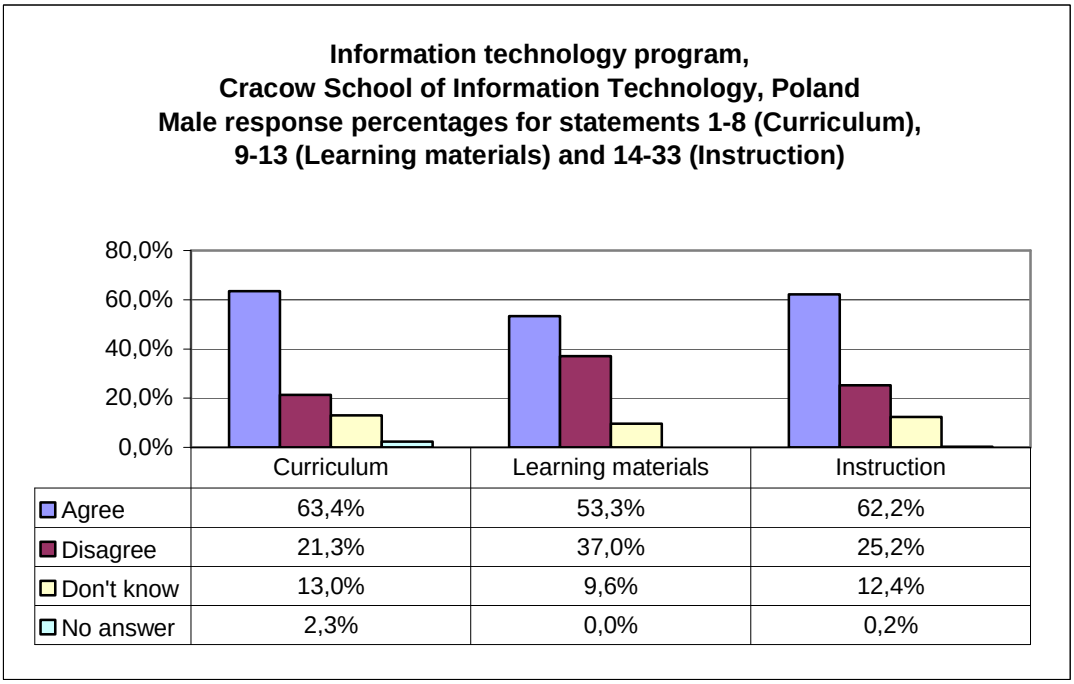
	Curriculum	Learning materials	Instruction
Agree	60,0%	58,0%	66,0%
Disagree	13,8%	4,0%	13,5%
Don't know	28,0%	19,0%	19,0%
No answer	10,0%	1,5%	1,5%

Figure 56



	Curriculum	Learning materials	Instruction
Agree	54,9%	45,0%	66,0%
Disagree	29,4%	35,6%	22,8%
Don't know	13,8%	18,5%	9,4%
No answer	1,9%	0,9%	1,8%

Figure 57



	Curriculum	Learning materials	Instruction
Agree	63,4%	53,3%	62,2%
Disagree	21,3%	37,0%	25,2%
Don't know	13,0%	9,6%	12,4%
No answer	2,3%	0,0%	0,2%

Figure 58

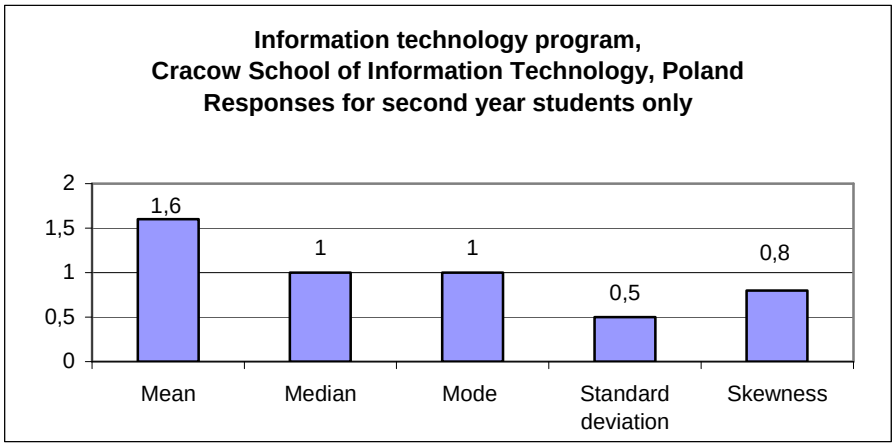


Figure 59

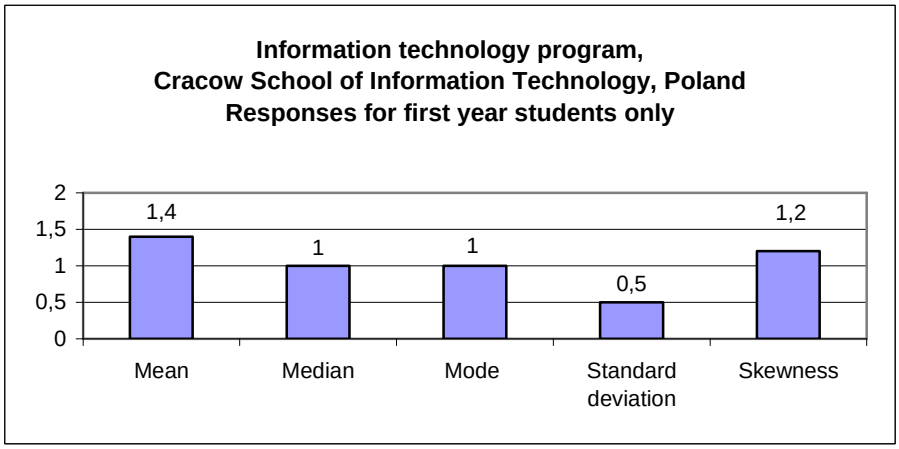
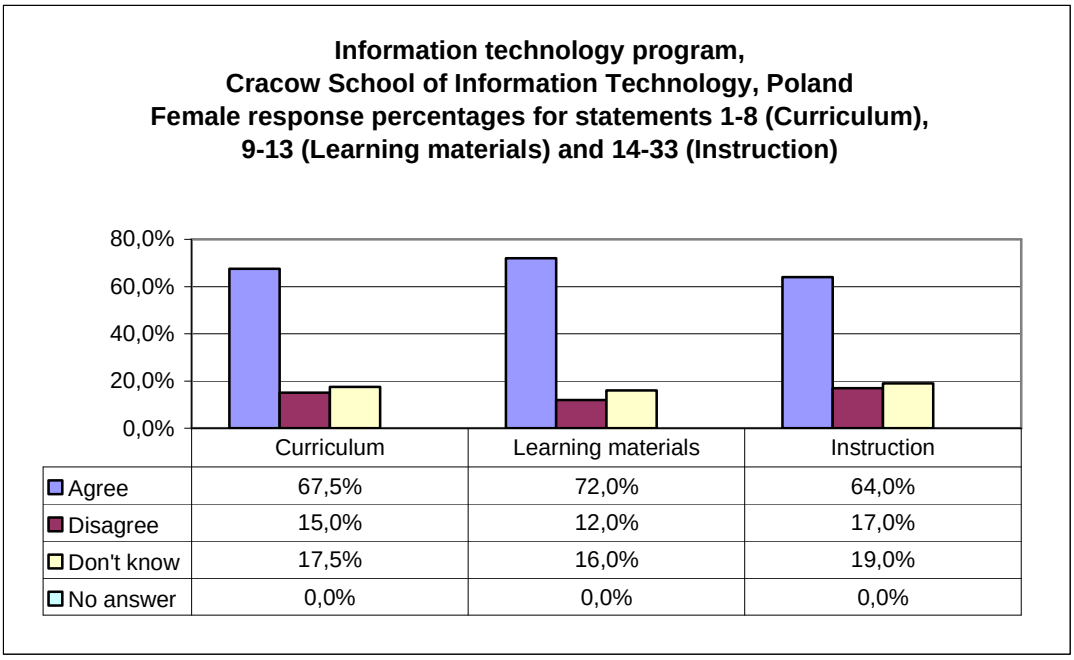
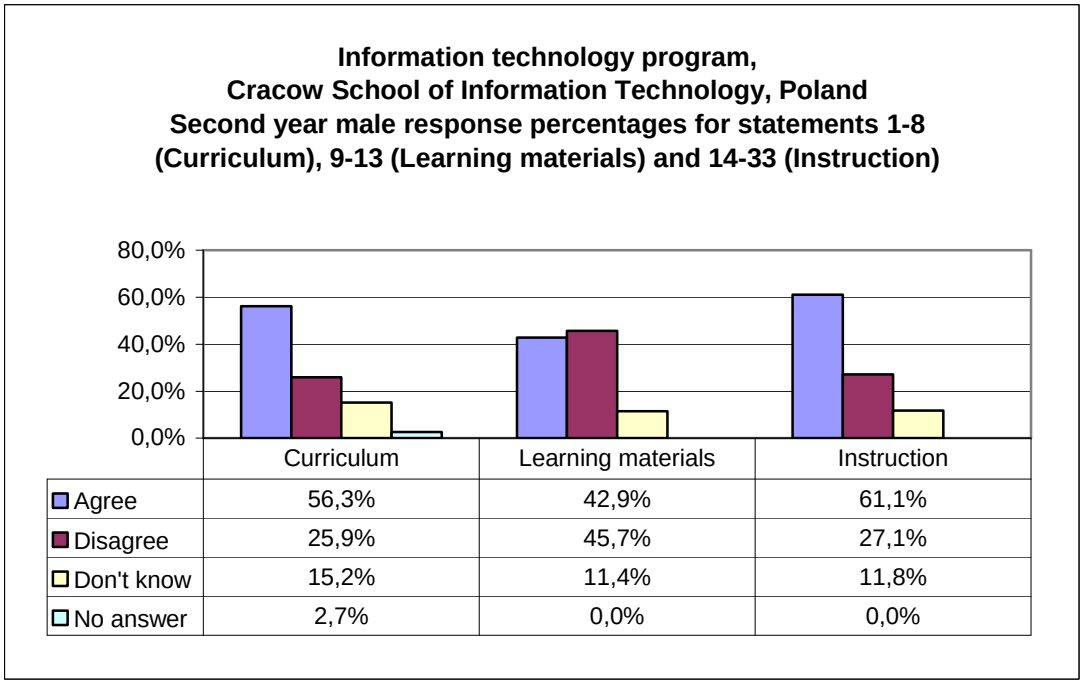


Figure 60



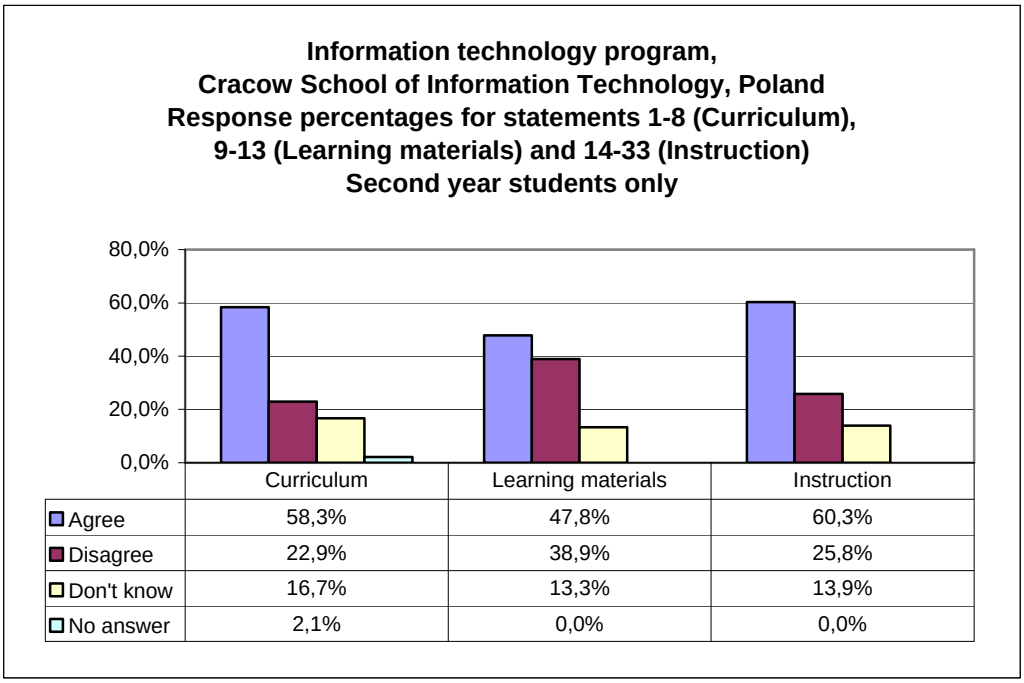
	Curriculum	Learning materials	Instruction
Agree	67,5%	72,0%	64,0%
Disagree	15,0%	12,0%	17,0%
Don't know	17,5%	16,0%	19,0%
No answer	0,0%	0,0%	0,0%

Figure 61



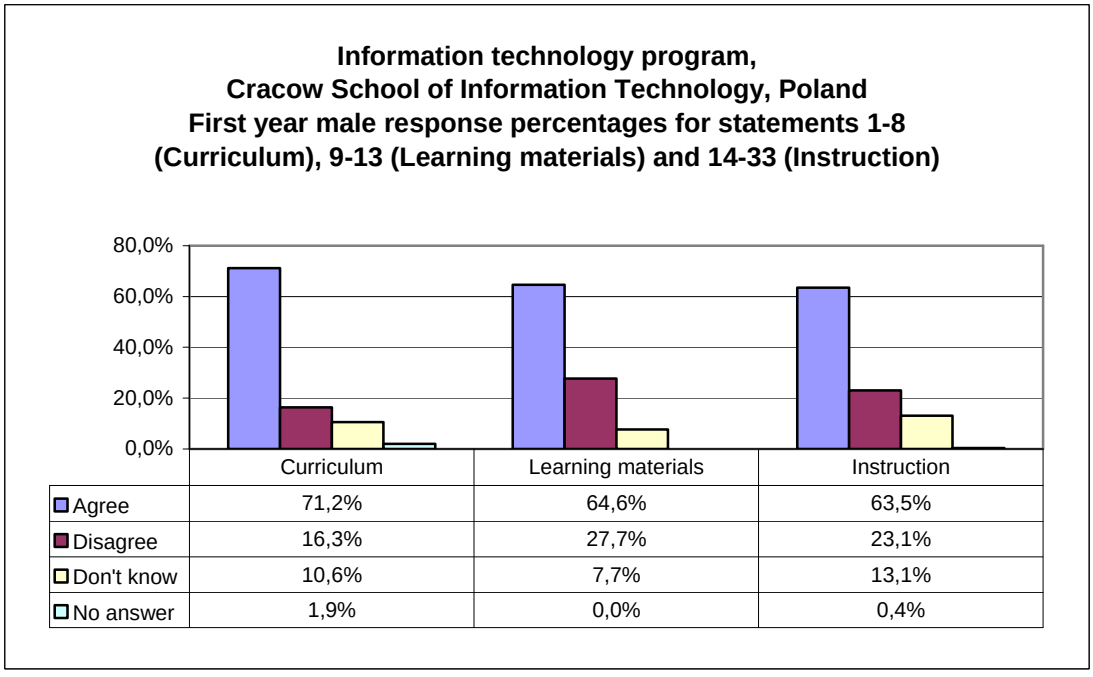
	Curriculum	Learning materials	Instruction
Agree	56,3%	42,9%	61,1%
Disagree	25,9%	45,7%	27,1%
Don't know	15,2%	11,4%	11,8%
No answer	2,7%	0,0%	0,0%

Figure 62



	Curriculum	Learning materials	Instruction
Agree	58,3%	47,8%	60,3%
Disagree	22,9%	38,9%	25,8%
Don't know	16,7%	13,3%	13,9%
No answer	2,1%	0,0%	0,0%

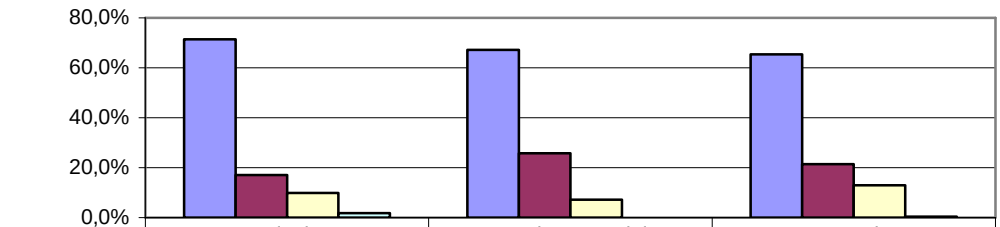
Figure 63



	Curriculum	Learning materials	Instruction
Agree	71,2%	64,6%	63,5%
Disagree	16,3%	27,7%	23,1%
Don't know	10,6%	7,7%	13,1%
No answer	1,9%	0,0%	0,4%

Figure 64

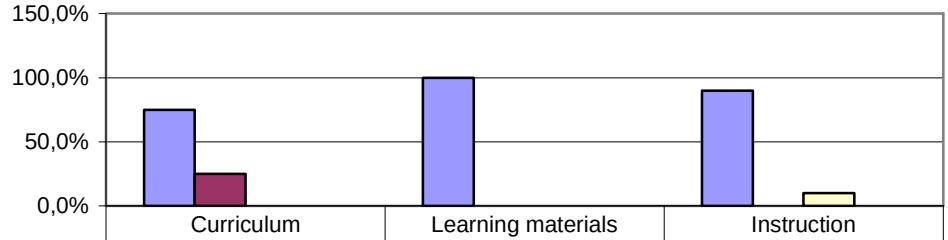
**Information technology program,
Cracow School of Information Technology, Poland
First year response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Learning materials	Instruction
Agree	71,4%	67,1%	65,4%
Disagree	17,0%	25,7%	21,4%
Don't know	9,8%	7,1%	12,9%
No answer	1,8%	0,0%	0,4%

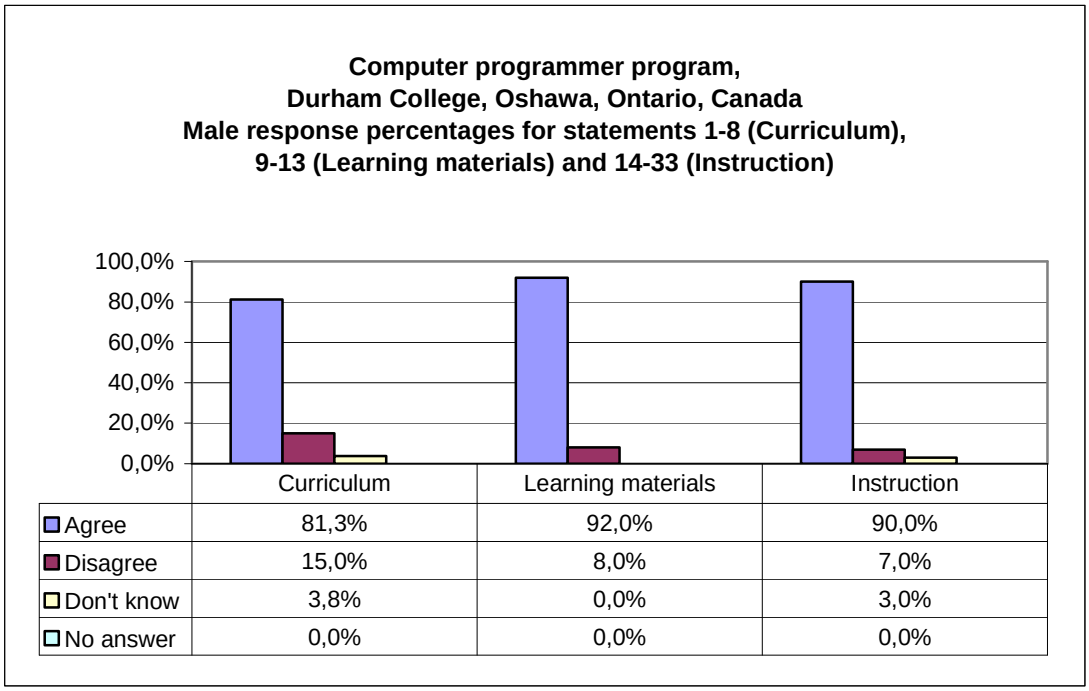
Figure 65

**Information technology program,
Cracow School of Information Technology, Poland
First year female response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



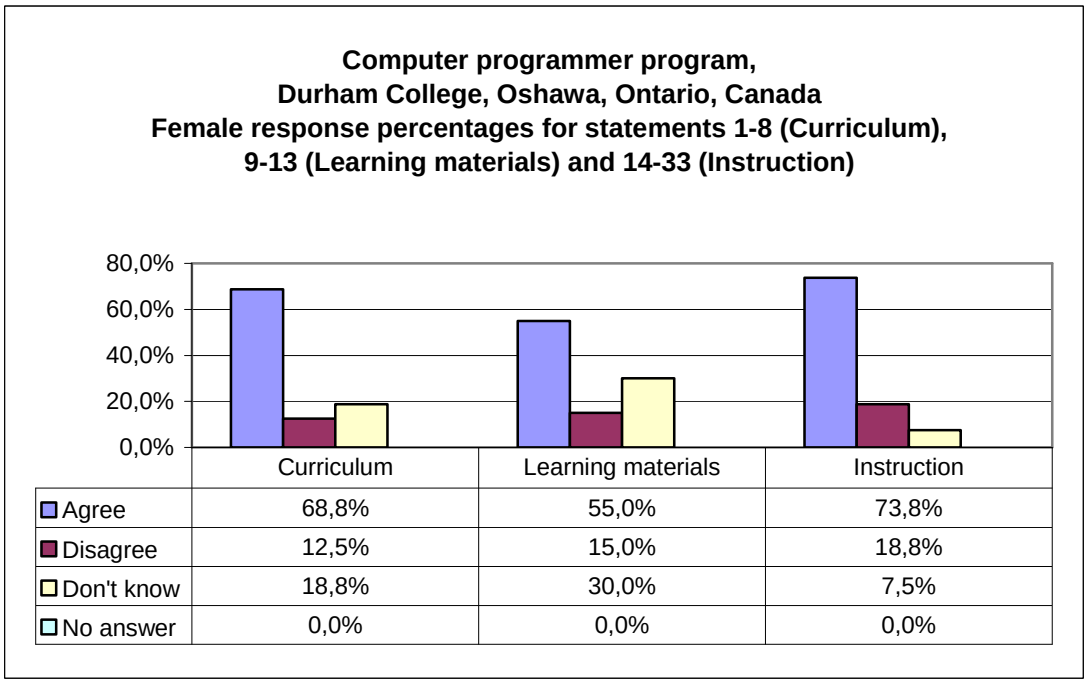
	Curriculum	Learning materials	Instruction
Agree	75,0%	100,0%	90,0%
Disagree	25,0%	0,0%	0,0%
Don't know	0,0%	0,0%	10,0%
No answer	0,0%	0,0%	0,0%

Figure 66



	Curriculum	Learning materials	Instruction
Agree	81,3%	92,0%	90,0%
Disagree	15,0%	8,0%	7,0%
Don't know	3,8%	0,0%	3,0%
No answer	0,0%	0,0%	0,0%

Figure 67



	Curriculum	Learning materials	Instruction
Agree	68,8%	55,0%	73,8%
Disagree	12,5%	15,0%	18,8%
Don't know	18,8%	30,0%	7,5%
No answer	0,0%	0,0%	0,0%

Figure 68

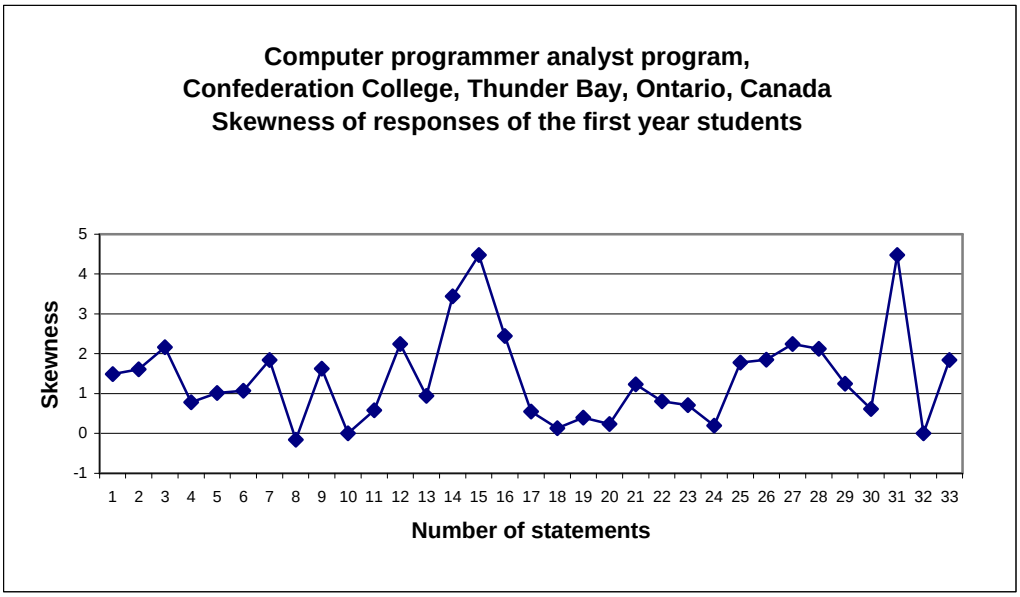


Figure 69

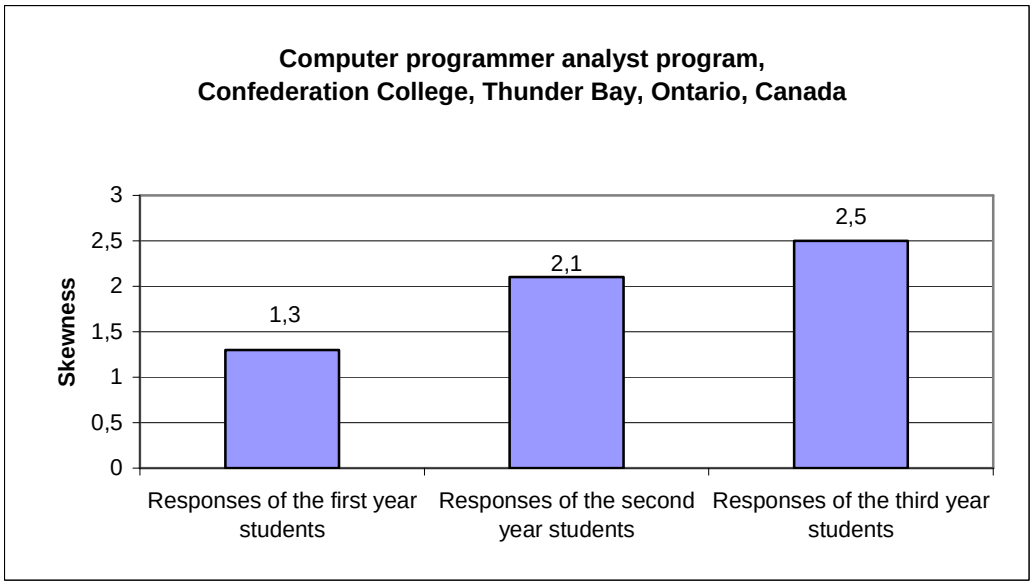


Figure 70

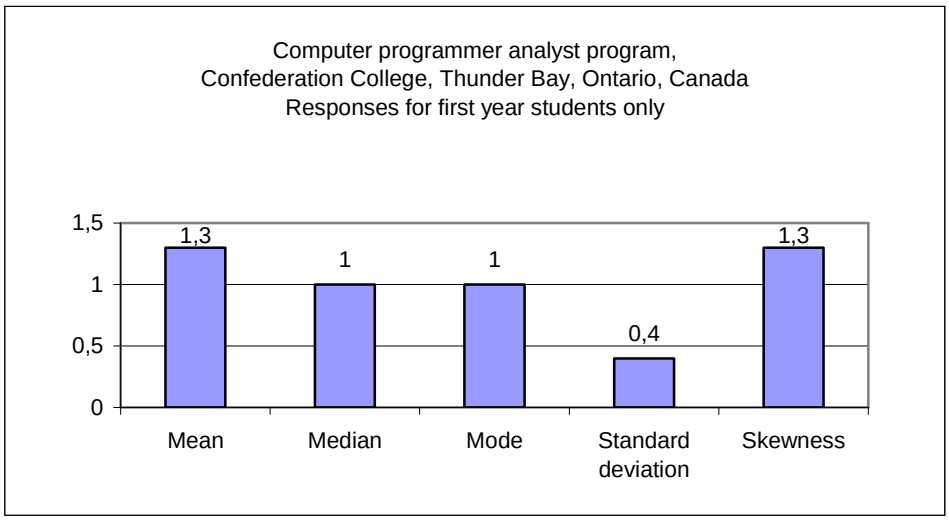


Figure 71

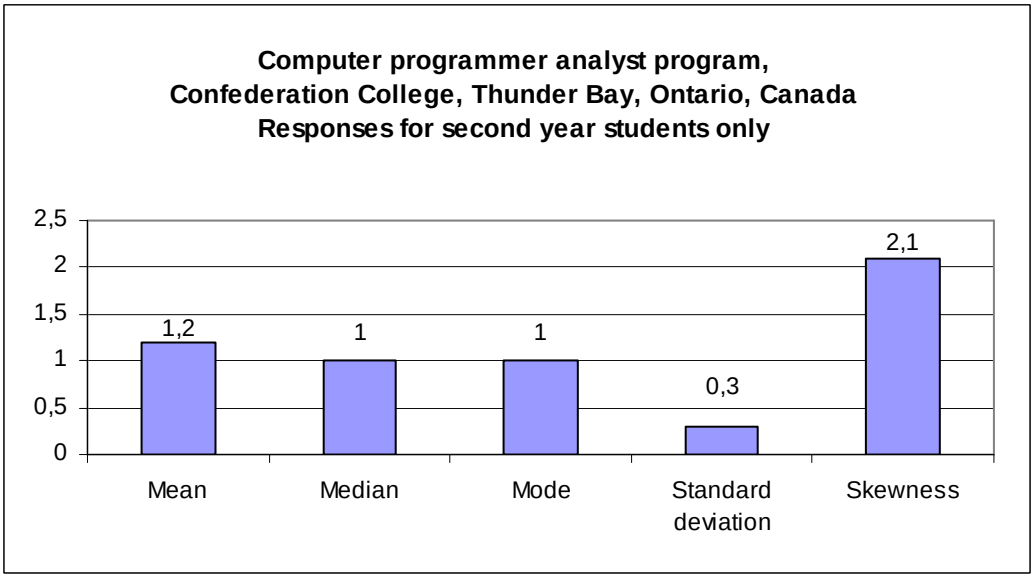


Figure 72

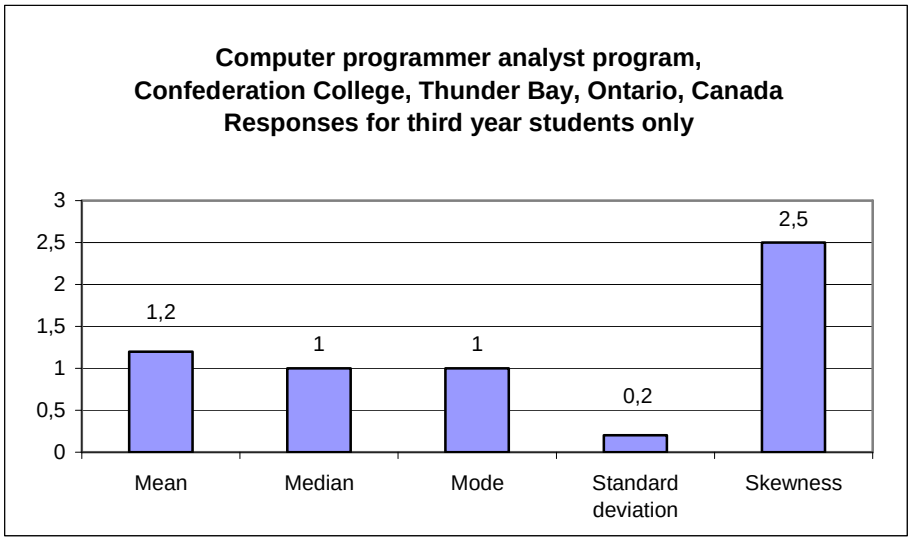
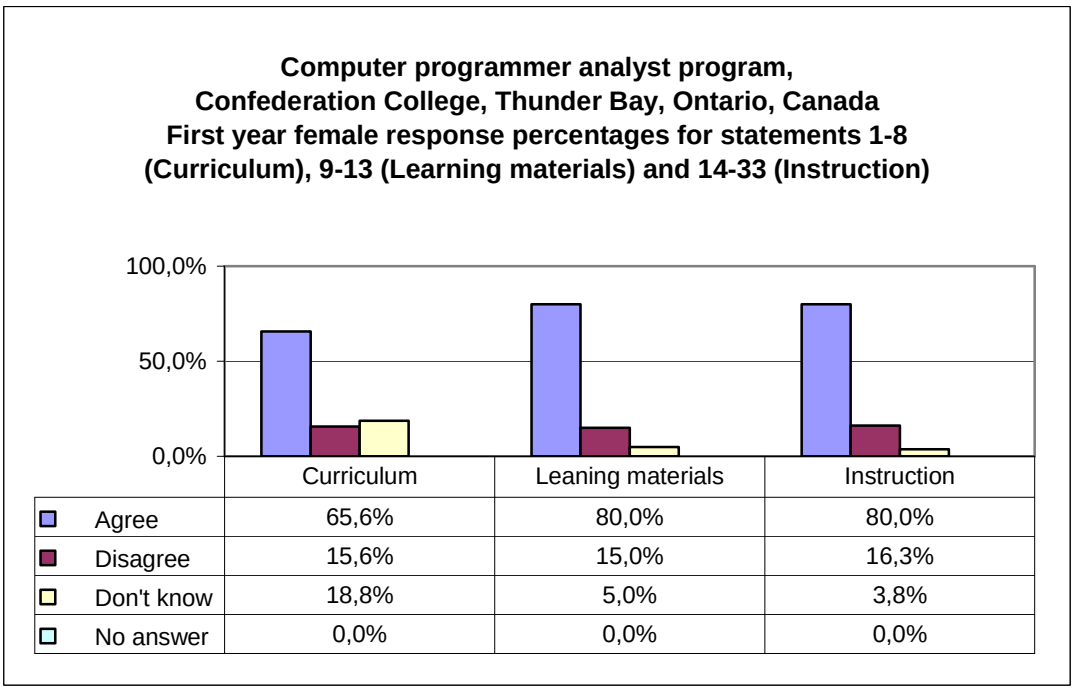


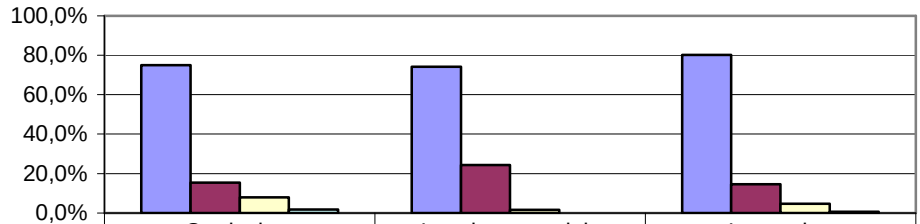
Figure 73



	Curriculum	Leaning materials	Instruction
Agree	65,6%	80,0%	80,0%
Disagree	15,6%	15,0%	16,3%
Don't know	18,8%	5,0%	3,8%
No answer	0,0%	0,0%	0,0%

Figure 74

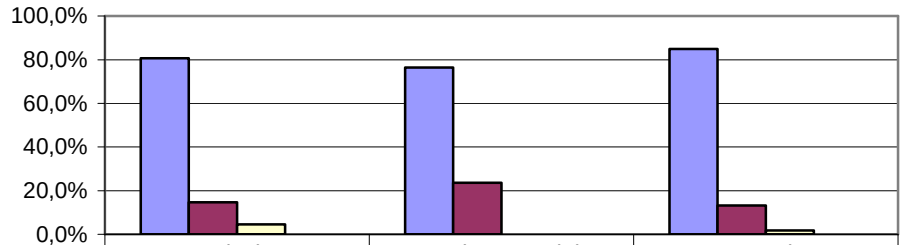
**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Male response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	75,0%	74,1%	80,1%
Disagree	15,4%	24,3%	14,6%
Don't know	7,8%	1,6%	4,7%
No answer	1,7%	0,0%	0,6%

Figure 75

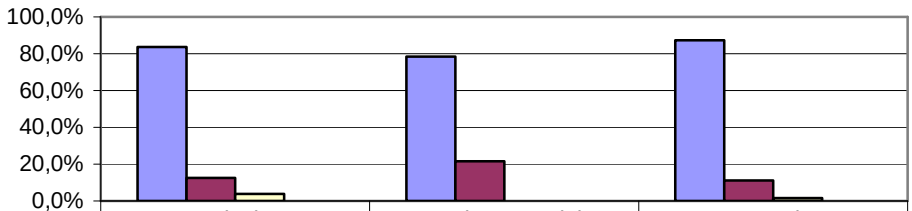
**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Third year male response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	80,7%	76,4%	85,0%
Disagree	14,8%	23,6%	13,2%
Don't know	4,5%	0,0%	1,8%
No answer	0,0%	0,0%	0,0%

Figure 76

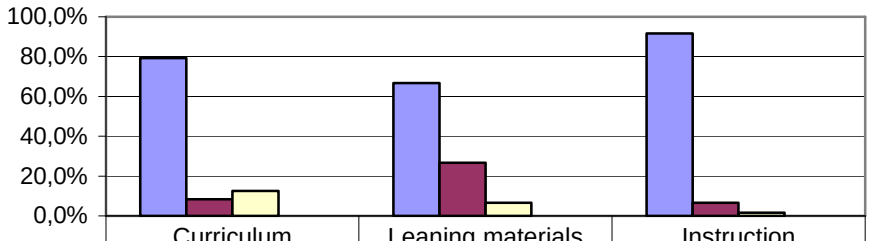
Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Third year response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Leaning materials	Instruction
Agree	83,7%	78,5%	87,3%
Disagree	12,5%	21,5%	11,2%
Don't know	3,8%	0,0%	1,5%
No answer	0,0%	0,0%	0,0%

Figure 77

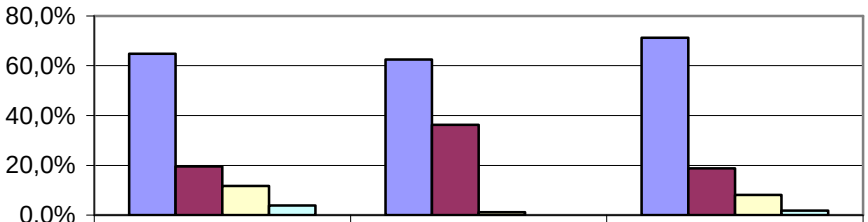
Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Second year female response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)



	Curriculum	Leaning materials	Instruction
Agree	79,2%	66,7%	91,7%
Disagree	8,3%	26,7%	6,7%
Don't know	12,5%	6,7%	1,7%
No answer	0,0%	0,0%	0,0%

Figure 78

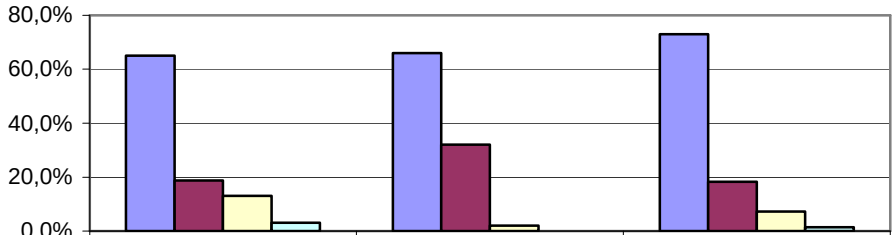
**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
First year male response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	64,8%	62,5%	71,3%
Disagree	19,5%	36,3%	18,8%
Don't know	11,7%	1,3%	8,1%
No answer	3,9%	0,0%	1,9%

Figure 79

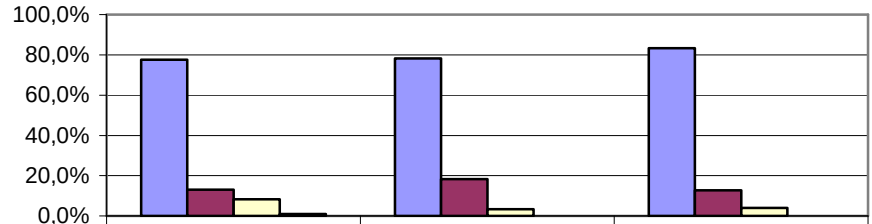
**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
First year response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	65,0%	66,0%	73,0%
Disagree	18,8%	32,0%	18,3%
Don't know	13,1%	2,0%	7,3%
No answer	3,1%	0,0%	1,5%

Figure 80

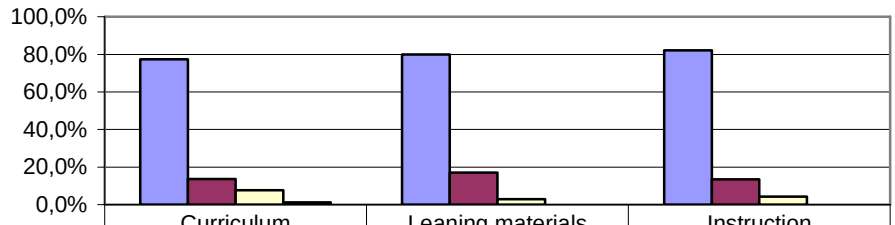
**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Second year response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	77,6%	78,3%	83,3%
Disagree	13,0%	18,3%	12,7%
Don't know	8,3%	3,3%	4,0%
No answer	1,0%	0,0%	0,0%

Figure 81

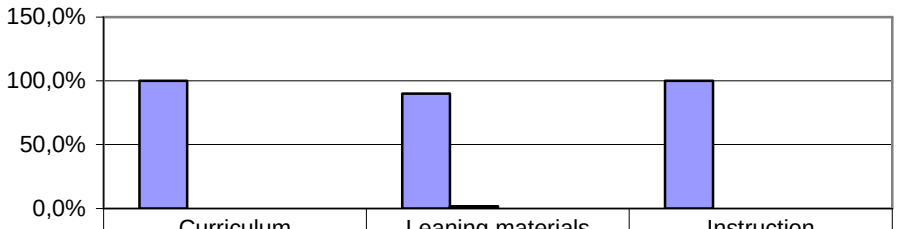
**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Second year male response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	77,4%	80,0%	82,1%
Disagree	13,7%	17,1%	13,6%
Don't know	7,7%	2,9%	4,3%
No answer	1,2%	0,0%	0,0%

Figure 82

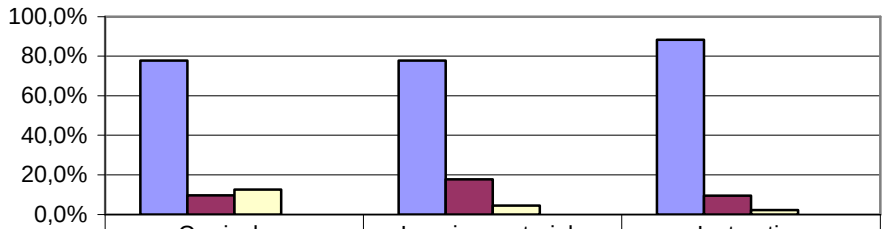
**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Third year female response percentages for statements 1-8
(Curriculum), 9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	100,0%	90,0%	100,0%
Disagree	0,0%	1,8%	0,0%
Don't know	0,0%	0,0%	0,0%
No answer	0,0%	0,0%	0,0%

Figure 83

**Computer programmer analyst program,
Confederation College, Thunder Bay, Ontario, Canada
Female response percentages for statements 1-8 (Curriculum),
9-13 (Learning materials) and 14-33 (Instruction)**



	Curriculum	Leaning materials	Instruction
Agree	77,8%	77,8%	88,3%
Disagree	9,7%	17,8%	9,4%
Don't know	12,5%	4,4%	2,2%
No answer	0,0%	0,0%	0,0%

INTERVIEWS

Kasolik, Marta, (MA), Teacher of English, Policealne Studium Zawodowe, Cracow. Interviewed: 6 and 15 December, 1999.

Kucińska, Teresa, (MA), Deputy Director of the Department of Post-Primary Training and Permanent Education, Ministry of National Education in the Republic of Poland. Interviewed: 23February, 1998; 28 December, 1998; 23 February, 2000 and 11 October 2001 in Cracow.

Lenartowicz, Helena, (PhD), Director, The faculty of Health Protection, The Institute of Nursing, Jagiellonian University, Collegium Medium. Interviewed: 23 June, 1999.

Masio, Sophia, (MA), Teacher of English, Krakowska Szkoła Medyczna. Interviewed: 5 April, 2000 and 13 December, 2001.

Porębska, Krzysztof, (MA), Vice-Director, Prywatna Szkoła Menedżerów Turystyki in Krynica. Interviewed: 23 August, 1999.

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Wilusz, Tadeusz, dr inż., Director, Cracow School of Information Technology. Interviewed: 27 October, 1999 and 9 October 2001.

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