



Table of contents

ABSTRACT	2
INTRODUCTION	4
I) A BRIEF DESCRIPTION OF HIGHER EDUCATION IN POLAND (HEI): STRUCTURES, STUDIES, STUDENTS.....	4
a) <i>Primary and Secondary Education</i>	5
b) <i>Higher Education Institution : Types of Structures and Studies</i>	7
II) MANAGEMENT OF HIGHER EDUCATION AND RESEARCH	8
III) INCREASE IN THE NUMBER OF STUDENTS: THE ROLE OF EVENING, WEEK-END, EXTERNAL AND EXTRAMURAL COURSES.	9
IV) AN IMPORTANT FEMINISATION OF HIGHER EDUCATION	
a) <i>Historical perspective</i>	
b) <i>From a legal point of view, is the Polish system " women-friendly" ?</i>	13
c) <i>Situation of gender studies</i>	16
V) MARKETISATION AND REFORM OF HIGHER EDUCATION.....	17
A) <i>The process of marketisation of higher education</i>	17
B) <i>Waiting for a new reform.</i>	18
a) Standards and Quality assessment	19
b) The financial problems.....	20
VI) DEGREES, DIPLOMAS AND TITLES.....	21
a) <i>Degrees awarded</i>	21
b) <i>Qualifications required for each appointment</i>	22
c) <i>Time necessary to complete each superior degrees.</i>	25
VII) CONCLUSION: SOME SPECIFIC CHARACTERISTICS OF POLISH ACADEMIC STAFF	28
RELEVANT BIBLIOGRAPHY	29
APPENDIX	35

Abstract

During the last decade the Polish higher education has undergone a great transformation. The law on higher education voted in 1990, just after the systemic changes, is still ruling the system today. This law was the base of the development of private higher education and of the increasing autonomy of the state system.

The most important facts concerning this period are: the increase of the number of students, marketisation, and the creation of new diplomas corresponding to European norms.

Poland has 1 431 900 students, 56.9% are women (year 1999, source: GUS 2000). The number of students has increased by 455% since 1990. This increase has been accompanied by the development of the private sector. A third of students are registered in such schools, mostly in Finance, Banking and Management and Law. There are 174 private higher education institutions out of a total of 287 (among them fifteen universities). For 1999, the number of students registered in the first year in private institutions is almost equal to the number in state institutions.

A great part of the increase in the number of students is due to the development of evening, extramural, external and week-end courses. This could be considered a particularity of the Polish system. Students enrolled in daily courses represent only 46% of the total. These kind of daily studies are the only ones to be free of charges. A great deal of students registered in private higher education institutions come from the lower social classes and rural areas.

The Polish system is divided into universities and professional higher education institutions. Since 1997, professional high education institutions propose two stage-degrees: a bachelor degree (three years, "licencjat", or four years "Engineer") and a master's degree. This seems to better correspond to the needs of the economy towards intermediate management and at the same in accordance with the European model. A new law which is still in debate proposes to extend this system to the universities.

This reform raises a debate about what constitutes Higher Education. The main issues are the problem of the quality of studies, the financial autonomy of higher education institutions, the level of scientific activities and the management of academic staff's careers.

Concerning the academic staff the Polish system appears to be really hierarchical with many types of appointments. It is facing a difficult financial situation which forced most of academics to find supplementary job. In the last period, the academic staff has become more and more feminised, even if at the top positions men

are still the majority. But such a feminisation appears at a time where academic appointments are less and less interesting in comparison to the opportunities offered by the private sector. Which is the reason why one could say that women are "*winner among losers*".¹

¹ Sieminska R, 2000, "*Women in academe in Poland: winners among losers ?*", Higher Education in Europe, vol.XXV, n°2, Unesco.

Introduction

The Polish higher education system is now facing a great challenge. It had to adapt itself to the European rules, to marketisation and answer to the increasing social demand for education. A first reform voted in 1990 permitted the opening of private higher education institutions. This part of higher education increased rapidly in the last decade accompanying the increase in the number of students.

This increase in the number of students was not accompanied by a similar increase in the number of professors leading to a critical point in the ability of the system to carry out its mission. During the same time, the feminisation of the academic staff continued. In 1999, Women represented 38.5% of the academic staff (GUS 2000). This puts Poland at the top rank position concerning women's share in Higher Education Institution. But such a situation reflects above all the fact that "*women are winner among losers*" (Siemienska 2000). Academic career seems far to be the main dream of the majority of students above all because of the increasing gap between wages in Higher Education and labour market (Gulczynska and Swierzbowska-Kowalik 2001). However, the feminisation of academic staff shouldn't lead one to conclude that discrimination has no place within the Polish Higher Education. The top rank positions remain mainly male privilege.

In this paper we will try to replace the Polish reality in its context. The present paper is divided into three parts. The first one proposes an overview of the Polish higher education system. The second part is dedicated to a presentation of marketisation and reform of higher education. The third part will be centred on diplomas awarded and academic staff career's².

I) A brief description of Higher Education in Poland (HEI): Structures, Studies, Students.

The Minister of Education is the major actor in what concerns educational policy. The Minister of Education is helped in his task by 5 deputy ministers (education system reform, school system, higher education, scientific research and international co-operation). In some rare occasions, proposals and initiatives may come from the Education Committee if the Sejm (Lower Chamber of Parliament). However, Parliament is responsible for the final version of legal Acts ruling educational system. Until recently the Ministry of Education was responsible for nearly the whole system of education. Only vocational schools were run by other minis-

² If any other sources are mentioned the data will come from the GUS's (Central Office of Statistics) publication, (GUS 2000).

tries in the past. Some remain still today in such a situation, like artistic schools run by the Ministry of Culture.

The reform of the state in the early 90's assume that only the national educational policy will be developed and carry out centrally, while the administration of education and the running of schools, pre-schools institutions and other educational establishments will be decentralised. The local authorities are responsible for public nursery, primary schools and gimnasia (see appendix C), the poviats (districts) are responsible for secondary and artistic schools. The voivodships (provinces) have a co-ordination function. A part this public sector exists also in Poland numerous non-public schools run by associations (among them the "social school"), religious and private.

a) *Primary and Secondary Education*³

A child aged from 3 to 6 may receive pre-primary education, which is not compulsory. In 1998, 49% of children aged 3 to 6 attend either kindergartens or pre-primary schools (32.1% for children aged 3 to 5, 97.1% for aged 6). Since 1989, the number of pre-school institutions has seriously decreased and most of them have introduced fees. Parents pay an average of 11 to 22% of the average monthly salary.

According to the Education Act of 1991, pre-school education is treated as the first level of the education system in Poland. Children aged 6 have the right to one year of pre-primary education, and communes are obliged to provide this.

From the school year 1999/2000, the reformed full time compulsory education (the Act of 25 July 1998, amending the Act on the Education System of 1991, Article 15) starts during the civil year in which the child reaches 7 years and lasts 9 years. It covers education in 6-year primary schools (*szkola podstawowa*) and 3-year lower secondary schools (*gimnasia*). Compulsory education is free of charges for all pupils.

The upper secondary education covers the age group 15 to 18 or 19/20. After compulsory education leaves have a choice between the following schools :

- Liceum ogólnokształcące (4-year general secondary school);
- Technikum (5-year vocational and technical secondary school);
- Liceum zawodowe (4-year vocational secondary school);

³ For more information see *The System of Education in Poland, 2000*, Socrates National Agency - Warsaw. This report was the basis of this chapter. For an overview of the Polish system see Appendix C.

- Liceum techniczne (4-year secondary school with general and general vocational subjects);
- Szkoła Zasadnicza (3-year basic vocational school)

Pupils are admitted to secondary schools (with the exception of Szkoła Zasadnicza) on the basis of entrance examinations. Schools implement the syllabus approved by the Minister of National Education. The school year (ten months) is divided into two semesters.

A structural reform will deeply change the system. It will start in the school year 2002/2003. In the reformed school system in Poland, the leavers of the *Gimnazjum* will have the choice between the following schools:

- Liceum profilowane (Profiled Lyceum) - an institution, which will be introduced in 2002/2003 offering 3-year of full-time general and specialised upper secondary education for students aged 16 to 19. It will offer the *Matura* examination necessary for admission to higher education.
- Szkoła Zawodowa - an institution, which will be introduced in the year 2002/2003, offering two years of full time upper secondary vocational education for students aged 16 to 18. The leavers will be given access to a trade or occupation or to the liceum uzupełniające.
- Liceum uzupełniające - an institution, which will be introduced in the school year 2004/2005, offering 2 years of full or part time general upper secondary education for students aged 18 to 20 in preparation for the *Matura* examination. This school is meant for leavers from the Szkoła Zawodowa.

The main objective of the reform is to enlarge the access to higher education.

Between secondary and tertiary education exist also in Poland post-secondary schools. The *szkoly policealne*, because of the qualification they offer, are included as part of secondary education in the Polish classification, and assigned to level 4 in the ISCED revised version. These schools admit (first of all) graduates of general secondary schools. Most of them require only a secondary school leaving certificate, not the *Matura* certificate. They prepare students for work in blue-collar and equivalent occupations. They propose, one to two and a half-year curriculum. Students in these schools are trained as nurses, accountants, administrative personnel for enterprise, hotel, computer specialist or librarians. The majority are females.

For graduates from upper secondary schools possessing the *Matura* certificate the natural way is to enter higher education institutions.

b) Higher Education Institution : Types of Structures and Studies

In Poland, the Higher education system is based on various types of institutions. We could organise a first distinction between⁴:

- Schools of higher vocational education (Wyzsza Szkola Zawodowa) of 3 to 4 years duration, and 3-year teaching training college (Kolegium Nauczycielskie).
- Schools of higher education (university type, uniform Master degree studies) of from 4.5 to 6 years duration: Universities (Uniwersytet), Technical Universities (Politechnika), Agricultural Academies (Akademia Rolnicza), Schools of Economics, Teacher Upper Education Schools (Wyzsza Szkola Pedagogiczna), Medical Academies (Akademia Medyczna), Maritime Schools, Academies of Physical Education, Schools of Arts.

Beyond such a distinction a second one has to be done between:

- Private and public higher education
- Religious and non-religious higher education institutions
- Institutions entitled by the government to award the Master's and Doctorate's degrees and non-entitled institutions.

Further, each of these groups could be subdivided to take account of all the possible situations, for example there are private religious higher education institutions accredited by the government and at the same time private lay non-accredited higher education institutions, private or public post-secondary vocational schools and among these some are religious, some are lay. There is one public religious university, the Catholic University of Lublin.

There are 287 higher education institutions in Poland, among them fifteen universities. To this must be added institutions of research like PAN (Polish Academy of Science) where one can complete either a doctorate or habilitated doctorate. Universities are generally plurithematic, they are organised on the bases of faculties and lower level departments.

The most important place is Warsaw where study 244300 students (among them 113200 in one of the forty-one private higher education institutions). Out of the 78100 academics in Poland, 11800 work in Warsaw. After Warsaw come Cracovia, Katowice, Poznan, Wroclaw, Lublin, Lodz and Gdansk. These centres cover 42.4% of students and 51.7 % of academic staff in Poland.

⁴ This is the distinction used for statistical data provided by the National office of Statistics.

The Polish system is in the process of growth and reform. Due to the competition with private higher education institutions (which since 1991 offer a large range of courses), the public system itself has developed new diplomas, mostly in vocational higher education institutions.

The monolithic system of a unique Master has been divided into a two stage system where after three years, a "licencjat" can be obtained, and after four years, the title of engineer, and after five the Master's. The number of students having a first stage diploma is increasing very fast. 43.9% of the students are taking such a diploma. These diplomas seem to correspond to the needs of the labour market towards intermediate management, and at the same time they correspond to the recommendations of the European Union for integration process according to the 3-5-8 system⁵. Since 1998, professional higher education institutions proposed the two-stage (licencjat-engineer) degree courses, following a new law voted in 1997. In 1999, 29000 students were concerned, of which 11200 were involved in daily courses.

II) Management of Higher Education and Research

The law voted on 17 October 1990 gave universities and higher education institutions greater autonomy. The most important means of regulation to have remained in the hands of the Minister is the approval. For some private institutions the approval is given for a limited time (4 years, for example) as a trial period. In some cases the Minister can withdraw this accreditation. But as the recent case concerning a private institution of journalism studies shows that doesn't mean that those higher education institutions will stop providing courses. This approval could be considered at least as a quality label.

According to the law in universities and higher professional education the Rector is in charge of the management of the administration. He is elected by the Senat, a council where there are elected representatives of the academic staff, students and external personalities. In the name of the Senat, the Rector is in charge of the courses contents and the research orientations.

Each department of the university is led by a council where the specific topics concerning the department are defined.

The resources of higher education come not only from the government but also increasingly from the private sector (students, private firms,...). The Minister

⁵ See for example the Tempus program's priorities for Poland in 1997-1998, "*Transformation of five-year Master degree courses into two stage system with three-four year Bachelor degree course followed by a two-year Master degree, development of professional three/four year bachelor degree courses*".

of Education allocates funds to higher education establishments taking in account the following criteria: number of enrolled students, number of students eligible for accommodation in student hostels, and the number of hostels. The Rectors and the student self-governments boards are responsible for the distribution of these funds, according to internal rules. Funding for the research activities is mostly managed by the KBN (Komitet Badan Naukowych - Committee of scientific research). But each educational unit has the right to sell its research activities.

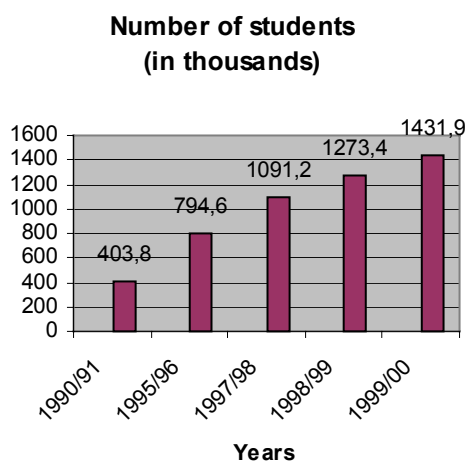
Research activities are divided in 3 sectors: universities, PAN (Polish Academy of Sciences) and institutes of applied research. These institutes are mostly linked with technical and industrial ministries. The KBN created in 1991 is the epicentre of decisions concerning the funding policy. The main principle is competition between institutions. Each year the KBN provides a classification of research institutes in terms of scientific rank (rank A, B or C). A part of the amount received by an institute is connected to the rank in the classification.

III) Increase in the number of students: the role of evening, week-end, external and extramural courses.

The Polish system is peculiar for the extent of non-daily courses, that means evening courses, external/week-end and extramural courses. Such a situation concerned, in 1999, 53.7% of the students and this number is increasing very rapidly. All public and private higher education institutions offer such a possibility. These kind of studies usually concern candidates who failed the test required in order to enter the free daily courses⁶. Obviously, evening, external/week-end and extramural courses are not free.

The great transformation of the education system in Poland has accompanied a huge increase in the number of students since 1989. There is now 1 431 000 students, 3.5 times more than in 1990.

⁶ According to art.70 of the Constitution, studies in public system are free of fees. But according to a recent decision of the Constitutional court that doesn't mean that higher education institutions are not supposed to ask for supplementary fees.

Figure 1- Number of Students (in thousands, Source: GUS, 2000)

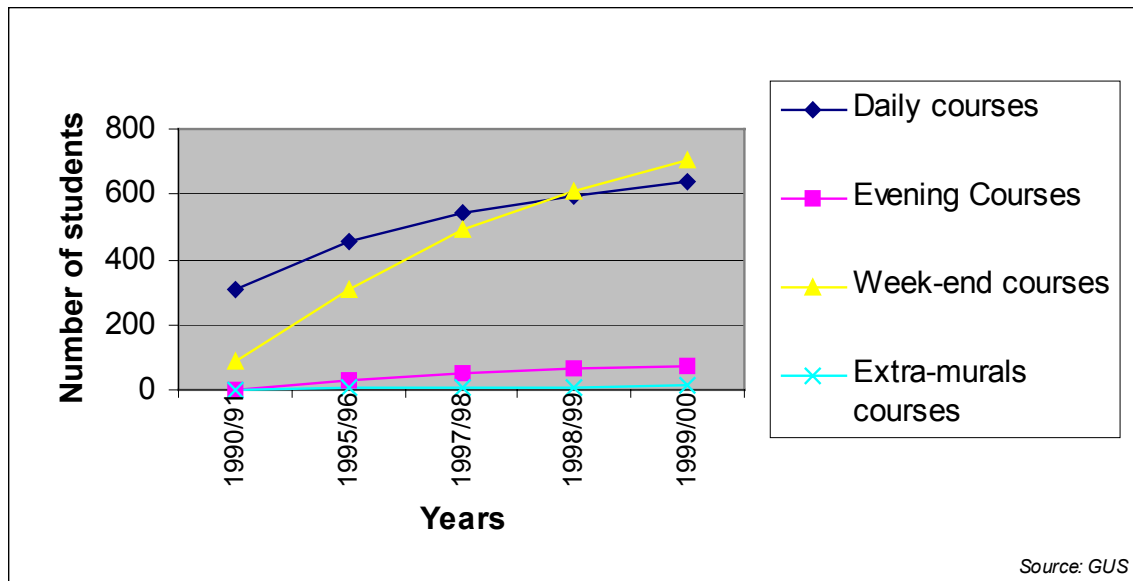
A great part of this increase has to be linked with the development of evening, week-end and extramural courses.

Table 1-Number of Students by Type of Courses (in thousands)

	1990/91	1995/96	1997/98	1998/99	1999/00
Daily courses	311,7	454,7	539,7	592,2	635,1
Evening Courses	15,72	27,01	50,4	62,7	70,7
Week-end courses	89,1	307,9	492,6	611,7	707,9
Extra-murals courses	1,5	5	9,2	7,3	11,8

Source: GUS, 2000

Figure 2- Number of Students by Type of Courses (in thousands, Source: GUS, 2000)



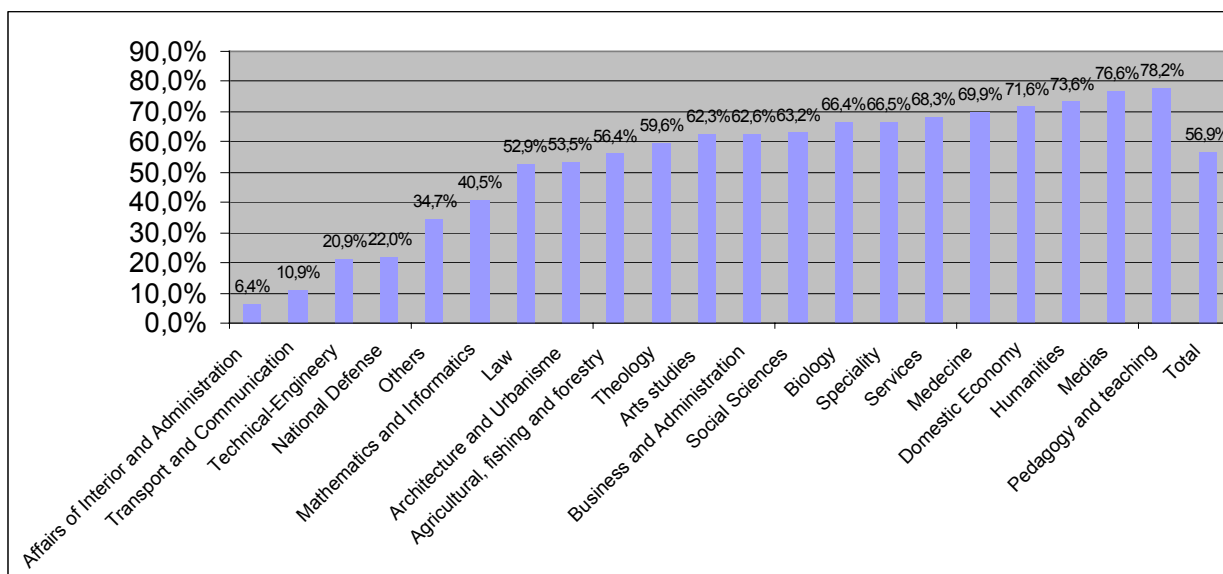
Between 1998 and 1999, the total number of students has increased by 12.3%, new entrances have increased by 7.2%. At the same time, the number of teachers has increased by 4.9%. There is currently one teacher for 18 students. And the credits for higher education represent since 1990 a constant 0.8% of the GDP.

IV) An important feminisation of higher education.

a) Historical perspective

The Polish higher education system could be considered as a very feminised one. Obviously, this doesn't take in account the internal segregation which appears clearly in Table 3.

Figure 3-Percentage of Women in Higher Education per Discipline (Year 1999, Source GUS, 2000)



But even if it seems today to be obvious, the access of women to the academic world was, like in all the countries, a long road, even if some women like Marie Sklodowska-Curie, Nobel price-winner, entered the history of Polish science (Siemienska 2000, Bialecki 1997, WRC 2000).

In a large part of its history Poland was ruled by the three partitioning powers: Russia, Prussia and Austria. These three countries could be considered as belonging to the most conservative ones even during the 19th century. That didn't helped the improvement of women's education. Prussia was the most conservative presenting an opposition towards women's education and particularly women's higher education. The situation in the Russian parts of Poland was a bit better. Men and women from the "Enthusiasts" movement, numerous writers, intellectuals and radical democrats, inspired by the ideas of the "Springtime of Nations", demanded that women should have the right to higher education and the right to full participation in public life. The same ideas were promoted in the second half of the 18th century by Polish Positivists. Moreover, after the failure of the January up-rising (1863-64), as a result of the Russian reprisals against the Polish landed gentry, tens of thousand of men were either exiled or forced to emigrate, and their property was confiscated. The reprisals destroyed the gentry manor, which served as a cultural and educational centre, causing the larger part of Polish nobility to move to towns where they turned, first, into the petite bourgeoisie, and later, into the new intelligentsia. Many women were forced to take financial responsibility for themselves and their families. Because women needed to seek employment, the need for higher education became vital. In the Russian partition, some Polish

women attended the Higher Courses for Women organised in 1878 in Saint-Petersburg.

Many in the Austrian partition also engaged in heated debates on women's education. Relatively wide support in academic circles brought positive practical change. In 1868, almost thirty years before women were allowed to enter universities, the first Higher Courses for Women were established in Krakow. The courses were highly respected and widely popular, even after women were accepted at the Jagiellonian University in 1894.

Before the 1890's, Polish women who wanted to enter the university went abroad with very often the help of Polish women's organisation. In 1815, the Galician universities (in Southern Poland) were the first to accept women. Even after Independence in 1918, as women obtained formal political and social equality with men, they were still discriminated education and employment. Before the second world war women represented less than a third of the students (a large proportion of women could be found in pharmacy, dentistry, philosophy).

After the 2nd world war, the number of educated women rapidly increased. In fact, women were needed to enlarge the labour force in a time where the country needed to be rebuilt. In the 1980's the number of women in higher education exceeded the number of men. But during the time of the PRL (Polish People's Republic) the university-level studies were not really profitable in terms of remuneration, even if they continued to offer social prestige (the title of Doctor is still prestigious in Poland). In brief, for men there were more interesting ways than lengthy studies to acquire social and economic capital.

Nevertheless, this feminisation of universities didn't concern postgraduate studies. The percentage of women enrolled in doctoral courses was 35.5% in 1970 and 28.9% in 1985. According to the GUS this proportion was 43.5% in 1999 (9713 women for a total of 22239 doctoral students - see Appendix A - Table 3).

b) From a legal point of view, is the Polish system " women-friendly" ?

The Constitution of 1997 contains two articles that directly pertain to gender equality in the field of education:

Article 33, Clause 2

Men and women shall have equal rights, in particular, regarding education, employment and promotion, and shall have the right to equal pay for work of

equal value, to social security, to hold offices, and to receive public honours and decorations.

Article 70, Clause 4

Public authorities shall ensure universal and equal access to education for citizens. To this end, they shall establish and support the systems of financial and organisational assistance for pupils and students. The conditions of such assistance shall be specified by statute.

Furthermore, the Polish parliament has ratified several international treaties and conventions that directly or indirectly promote gender equality in education. According to the new Constitution, ratified international laws are directly applicable and superior to domestic statutory laws. Moreover, Poland, as a member of the Council of Europe, is obliged to follow the Council's recommendations. For instance the Polish parliament has ratified the following treaties:

- The UN Convention Against Discrimination in Education (ratified in 1964).
- The UN Convention on the Elimination of All Forms of Discrimination against Women (ratified by Poland in 1981).
- International Covenant on Economic, Social and Cultural Rights (ratified by Poland in 1977).
- Recommendations on Gender Equality in Education adopted by the Council of Europe's General Assembly (ratified by Poland in 1989).

According to the Women's Right Centre of Warsaw, many of the provisions of these international treaties are not observed by the Polish authorities. For example the case for the following provisions of the UN Convention Against Discrimination in Education :

Article 10

States Parties shall take all appropriate measures to eliminate discrimination against women in order to ensure them equal rights with men in the field of education and in particular to ensure, on a basis of equality of men and women:

(a) The same conditions for career and vocational guidance, for access to studies and for the achievement of diplomas in educational establishments

of all categories in rural as well as in urban areas; this equality shall be ensured in pre-school, general, technical, professional and higher technical education, as well as in all types of vocational training;

(c) The elimination of any stereotyped concept of the roles of men and women at all levels and in all forms of education by encouraging coeducation and other types of education which will help to achieve this aim and, in particular, by the revision of textbooks and school programs and the adaptation of teaching methods;

(h) Access to specific educational information to help to ensure the health and well-being of families, including information and advice on family planning.

Without speaking about the point c) which is totally contradicted by the last educational reform of 1997 proposing a very traditional family model as a reference or about the point h) really mistreated by the de facto elimination of sexual education in schools in 1998⁷, it should be stressed that point a) itself is not really observed in Poland. Some higher education institutions have introduced quotas for men candidates (for example, for the High School of Police).

In 1998, the UN Committee on Economic, Social and Cultural Rights issued "comments and recommendations," based on reports by the Polish government and a women's NGO on the country's observance of the Covenant's provisions. The Committee made several critical comments concerning, among other things, the excessive role of the Catholic Church and restrictions on reproductive rights. In a more crude way according to the Women's Right of Warsaw : "*Neither the present Polish government nor the parliament has done anything to meet its constitutional and international obligations concerning gender equality in education; on the contrary, both governing bodies have passed laws and pursued policies that reinforce stereotypes, support traditional family models, and discriminate against women in all fields of social life, including education. The Polish Ministry of Education has not offered guidelines for teachers, nor has it organised training to promote gender equality in school, family, or public life. Instead, the Ministry regards the teachers who will not fully conform with its discriminatory orders and policies as "morally incoherent."* (Woycicka J., Dominiczak A., 2000:⁶

⁷ For example, in the basic guidelines for the school programs contained in the Executive Order issued by the Minister of National Education (Official Journal of 23 February 1999) it is recommended that the so called natural family planning methods be taught, whereas medical birth control methods should be described in a way emphasising their danger to health and morality.

c) Situation of gender studies⁸

Poland's first Women's Research Centre was only established in 1992, at Lodz University. The Centre employs twelve research and teaching staff representing various disciplines: anthropology, philosophy, biology, sociology, literary and theatre studies, and pedagogy. The Lodz Centre represents the Women's International Studies in Europe (WISE), an international network of academics dealing with women's issues. The Centre has organised several seminars on various topics, including the policy of equal opportunities in the media, women's cinema, and women's pedagogy.

The second and currently the most influential initiative started in 1993 at Warsaw University. The Professor Renata Siemienska, created the Interdisciplinary Research Section on Gender within the framework of the Women's Forum established by the Institute of Social Studies and the F. Ebert Foundation. Since 1996, the Professor R. Siemienska is in charge of the UNESCO Chair "Women, society and development" at the Institute of Sociology of the Warsaw University. These two seminars focus on a comparison of men's and women's situation, attitudes and behaviour. The main subject of research and teaching are: electoral behaviour, political participation, economic elites in cross-national perspective, gender stereotypes and socialization, gender identity, women's economic situation, labour market, media.

The same year was created the Warsaw Gender Studies, a postgraduate college, offering an interdisciplinary approach to gender issues in a social and cultural context. The main objectives of the research and analysis conducted in the college is to determine a suitable definition of gender, the way it functions in culture, social life, and social sciences and, finally, the social consequences of the norms and stereotypes related to gender. The two years courses trains prepare professionals for family courts, law offices, therapy centres, media, and women's non-governmental organisations. Furthermore, The PAN offers a doctoral seminar in gender studies in the framework of an international program. Poznan University is Poland's most recent institution of higher education to implement a rudimentary women's studies program. A seminar organised on Culture and Gender is now in its second year. The participants in the seminar discuss issues from the theory of culture, to philosophy and feminist theory.

⁸ From the report "Polish Women in the 90'S" published by the Women's Rights Centre of Warsaw, 2000.

V) Marketisation and reform of higher education.

A) The process of marketisation of higher education

This increase of the number of students must be linked to the development of private higher education institutions. At the beginning of the academic year 1999/2000, Poland had 174 private higher education institutions for a total of 287 higher schools (among them fifteen universities). 419200 students were registered in private sector, among them 158500 are registered at the first stage. Private higher education institutions employed 7091 academic staff.

Most of these private institutions offer a three year degree, mostly in economics, management, banking, finance and law. Only 29 of them are entitled to deliver Master's degrees and a few, like the Higher School of Enterprise and Management Leon Kozminski, have the right to award doctorates. Since 1995, the number of students registered in private institutions has increased by 569%, and the number of students in public institutions by about 243%. In 1995, 11% of the students studied in a private institutions, this proportion has increased now to 29%.

The development of private higher education institutions in small towns has contributed to improve the access to higher education in Poland. Even if these schools are more expensive than public ones, considering the costs in travel, accommodation, they are in the end often less expensive. The major social base of recruitment for the private sector of education is inhabitants of small towns where these institutions are often located. It seems too that most of these students belong to the lower social classes, working class or peasantry (Domanski 2000, :57). As a consequence, if there is a certain democratisation of education, at the same time, appears a segmentation between an elitist public system and a devaluated private one which proposes an access to higher education for those who have been rejected by the public system.

The private higher education institutions are more feminised than the public ones. 261800 women studied in the private system in 1999, 62.5% of the total of students. In the public system there is 549315 women, 54.5% of the total.

Beyond the democratisation, the privatisation has a second effect in terms of recruitment. In Poland there is entrance exams for the daily courses in the public system. This is totally different in private schools. Since 1990, the number of schools (private and public) have increased the number of students in the first year of study. By the same time the entrance tests have been often replaced by a selection by diploma, or after an interview. And when there is still a competitive entrance examination it became easier (that the case in architecture studies, journal-

ism, philology, law, sociology, medicine and economics) Moreover in 2003, a new law will give the possibility to enter to the post secondary studies just with a Bacculaureate. In 2002 will be experimented a new Matura, which will be extended to whole country in 2003. This new matura will replaced the examination passed only within the lyceum and checked by candidate's teachers by a new examination involving partly external teachers within the process of evaluation. This reform is supposed to enforce the value of the matura. The low value of the matura made University's entrance examination more important than the matura itself. This supports the development of special schools providing paying courses to prepare to the University's entrance examination. The supporters of the new matura argue of more equality between candidates and more competition and transparency between lyceum.

B) Waiting for a new reform.

The possibility to enter higher education after a successful completion of Bacculaureate is a part of a new global reform of higher education, planned since 1997, and still in debate.

Facing this evolution and under the pressure of globalisation of education and European integration the Polish system will perhaps change again. A new law project concerning Universities and professional higher education institutions has been approved by the government on the 18th July 2000. This project has been proposed directly by the European Integration committee and represents an adaptation to the European rules in education. Up until the vote of this law the Universities are still under legal rules of the law of the 12th September 1990. But according to the prime Minister, Jerzy Buzek⁹, "*if the law from 1990 is still the one which managed the university system, the economic and social evolution of the system requires important changes in order to adapt it to this process, and by the same time to the system operating in the other European countries*". According to the ex-Minister of Education, M. Handke, the reform is necessary in order to meet the requirements of the Constitution, but at the same time, this project attempts to defend the quality of studies at a time where the number of students has increased by 400% since 1990.

The topics of the political debate concerning the reform of higher education is comparable to the one which is taking place now in most other European countries. The keywords are the same: quality, competition and flexibility, efficiency and accountability (Enders 2000). The business management theory and tools en-

⁹ From a press release after an encounter between the prime minister and students organisations on the first March 1999.

tered largely the field and it is common to cross the idea that "*higher education system has to be ruled as enterprises*" (Woznicki 2000). The Polish higher education is now involved in a process of diversification and rationalisation of studies. The number of specialisation has been strictly reduced (from 194 to 96), but at the same time instead of the old monolithic Master's degree, new diplomas have been proposed. During the last decade, the diversification, in great part assumed by the private sector, has been completed by rationalisation and control while preserving what could be considered as a positive point (diversity)¹⁰. The current trend of the political debate should not be considered as expressing a deep change. Even if higher education institutions or local government have seen their power increasing, the central state stays the major regulatory and funding actor. At the same time the problem of higher education's cost-effectiveness becomes a more and more debated question.

a) Standards and Quality assessment

The quality of studies in Poland is a very hot debate. There are a lot of articles on this theme in newspapers¹¹, reviews and books (Woznicki 2000).

Numerous problems are identified. The quality of studies is supposed to have decreased because of the excessive increase of evening, external and extra-mural courses and because of the too small increase in the number of academic staff. In answer to these two points, the reform proposed an accreditation system by a national commission. The needs for regulation seems to be so urgent that without waiting until the end of the debate concerning the new reform, the conference of Rectors organised a special commission of accreditation in 1999. There also a private system of accreditation for business schools (FORUM). According to the law of 1997, only the professional higher schools are submitted to a public commission of accreditation. However, private higher education institutions have to get a permission of the Ministry of Education to teach. The permission depends on meeting of different criteria: programmes, proportion of students studying daily or on weekends, qualification of the staff,...

Another fact which is often underlined to explain the poor quality of studies is the particular situation of polish academic staff who, because of very low wages, are forced to find supplementary jobs¹² and so have less time to prepare

¹⁰ This diversification has played an important role on academic staff's structure and working conditions (see *infra*).

¹¹ See for example Filas A., 1999, "Znak Jakosci", *Wprost* suppl, 30 May, n°22 or Paciorek A., "Studia ze Znakiem jakosci", *Rzeczpospolita*, 18 October.

¹² According to a survey conducted among its member by Solidarity, 90% of academic staff give private tuition. (Andrzejewski, 2000).

courses, improve knowledge and carry out research (Rocki 1999, Nowakowska 1999a). There are, according to statistical data, twice as many professors employed in higher education institutions than living professor in Poland (Nowakowska, 1999b). To this we must add the brain drain to private sector of numerous professors (50% of chemical scientist 30% of physics, 1/7 in economics). One of the statements of the new reform is the obligation of rector's agreement for a professor who would want to get a supplementary job. This is according to the reform a way to fight against "*the pathology of multiple jobs*".

b) The financial problems

The second point of the reform concerns the financial situation of public higher education sector. As we have already seen, according to the Constitution the public higher education has to be free of charge. If the 1990's law gave to universities and higher education institutions a high level of autonomy as far as diplomas and organisation are concerned, they are still dependent on state funding. According to the law, the amount received by universities depends on: the structure of academic staff, the number of students and the average cost of studies determined by discipline. In order to give to the public system the possibility to increase the number of students (this is a top objective of the new reform) without increasing state expenditure (the Polish budget is in structural deficit and this appears to be a negative point for European Union integration) the reform proposes to increase others forms of funding.

This project introduces fees for students enrolled in day programmes which where used to be free of charge. According to the Minister of Education, the fees for some students will be paid from the pedagogical action budget and that will concern also students not involved in days programmes. So, the number of student studying for free should stay the same. The financing of the fees will be supported by student loans and other financial support systems. The student loans became a more and more important way of funding studies and since 1998 a system of state guaranteed loans for students exists(European Commission 2000).

A recent decision from the Constitutional Court allows the public universities to ask for tutions-fees in so far as those fees are linked to the real cost of studies and are supposed to reduce the gap between public subsidies and the university's real expenses. The problem of the cost of studies is far from being gender neutral. Even if more and more women are attending higher education, at present, more than a third of Polish people believe that university education is more important for men than for women and the increase in the cost of studies stands a good chance of discriminating against women, at a time when families have to choose who, a son or a daughter, should attend university.

VI) Degrees, diplomas and titles.

According to article 140 of the law of 1990 in order to attend tertiary education one must have succeeded in the *Matura's* exams (Baccalaureate). According to the law of 1990, each higher education institution is autonomous and has the right to define the way of :

- admitting students (Art. 141). But a common minimal required level has been defined for each discipline in order to homogenise the level at the national level and make it compatible with the exigencies of the internationalisation of education.
- validating knowledge
- accreditation (licence, master, special courses, engineer title) or attestation of doctoral and post graduate studies.

Only the authorised higher education institution have the right to propose post-graduate studies and to deliver the title of doctor or habilitated doctor.

a) Degrees awarded

In Poland, the following degrees can be awarded:

- licence : about three years (Bachelor degree)
- Engineer diploma : about four years (Engineering degree)
- Master (MA or MD), one year for people having a licence and two years for the ones having on engineering degree. So one could earn a Masters after five or six years of study (depending on the discipline)
- PhD can be obtained, for those having a Masters degree, after completion of a special doctoral program: about four years.

Following the PhD, there is the most advanced degree awarded in Poland, the habilitated doctorate that is usually completed by mature scholars working in educational or research institutions.

The masters degree, the PhD and the habilitated doctorate require the defence of a dissertation meeting the criteria of the respective degrees.

4000 doctorates and 915 habilitated doctorates were delivered in 1999. Women represented 41,3% of the new doctors and 29,5% of the habilitated doctors (see Appendix A).

The reform of higher education proposes to apply to the universities the two stage degrees which for the moment exists in professional schools only and in a few universities (see Appendix C).

b) Qualifications required for each appointment

The different positions in Polish academy are the following ones:

Teaching and research positions:

- Full Professor (Profesor zwyczajny)
- Extraordinary Professor (Profesor nadzwyczajny)
- Associated Professor (Docent)
- Assistant Professor, tutor (Adiunkt)
- Senior Assistant
- Assistant

Teaching position only :

- Senior Lecturer
- Lecturer
- Teacher of languages
- Instructors

and Librarians

- Full-professors are employed individuals having the scientific title of Professor which is obtained after the completion of the habilitated doctorate and after evaluation of the research activity. Full-professors need to have the title of professor, given by a National Commission in the name of the President of the Republic. This title gives the right to apply for a full-professor position.

- Extraordinary professors are employed individuals having at least an habilitated doctorate or in some cases having a PhD and great deal of professional experience. The "title" of extraordinary professor is given by a commission formed by the senate of the university.

- Extraordinary professor in vocational higher education institutions, delivering Bachelor degrees (licencjat) or Engineer degrees, are employed people having a PhD or professional experience after graduate studies.

Positions and degrees required in Polish Higher Education

Position	Degree required	Conditions	Procedure
Researching and didactical activities.			
Full Professor	Habilitated Doctorate	Important research activity and title of Professor.	The title of Professor is given by a national commission in the name of the President of the Republic
Extraordinary Professor	Hab. Doctorate or PhD and great experience.		Named by the Senate of the University.
Associated Professor	PhD		Named by the University. Temporary contract.
Assistant Professor	PhD		""
Senior Assistant	PhD or Master		""
Assistant	PhD or Master		""
Didactical Positions			
Senior lecturer	PhD or Master		
Lecturer			
Teacher of languages			
Instructors			
Librarians			

There was a debate connected to the reform of high education which proposed to change the recruitment procedure for professorship. The title of professor could be earned directly with the completion of habilitated doctorate which has to be linked to obligatory teaching activities and not only research. The goal of the reform was to increase the number of teaching staff in academia in order to face the increase in the number of students. That raised a first problem for research institutes which are authorised to award habilitated doctorate but do not provide any taught

courses. The second criticism concerned the possible depreciation of research activity in Poland due to the fact that the title of professor will not be only connected with research production and will be given by universities themselves and not by a special national commission like the current situation (see for example Nowakowska, 1999a). The last version of the project proposes to maintain the status-quo and to give the title of professor without the habilitated doctorate but on the basis of research and teaching activities but the question of which institutions should deliver the title is still in debate (cf. Art. 216 of the project).

- Assistant professors are employed individuals having a PhD.
- Assistants are employed individuals having a master degree.

These two positions are limited in time and concern people completing their habilitated doctorate (first case), or their doctorate (second case). Normally, if those people do not complete their doctorates in time they lose the right to be appointed by the university.

- Senior Lecturers are employed individuals having a doctorate or a master's degree and professional experience. Most of the people occupying this position are people who didn't yet completed their habilitation.

For the other teaching positions the required degrees are to be determined by each higher education institution.

Table 2 - Number of Persons by Academic Appointment, by Sex (Year 1999, Source: GUS, 2000)

	Total	Number of Women	% of Women
Full	4983	644	12,9%
Extraordinary	10579	2239	21,2%
Associated Professor	598	120	20,1%
Assistant Professor	27773	9748	35,1%
Assistant	18258	8565	46,9%
Seniors lecturers	9731	5065	52,1%
Lecturers	4097	2180	53,2%
Language assistants	1718	1338	77,9%
Instructors	354	128	36,2%
Total	78091	30027	38,5%

**Table 3- Percentages of Women in the Academic Teaching Staff by Position
(Sources: GUS, 2000 and Siemienska, 2000)**

	Total	Professors	Associate Professors	Assistant Professors	Assistants
1970-1971	30,7	8,6	13,2	32,8	35
1980-1981	35,1	11,2	17,6	33,1	39,3
1985-1986	35,1	12,9	19,4	33,3	38,5
1988-1989	36,3	13,2	19,7	33,4	41,9
1989-1990	40,1	13,8	20	34,3	46,2
1990-1991	37	15,1	19,3	34,6	43,1
1996-1997	37,7	17,3	16,6	34,2	44,5
1999-2000	38,5	18,5	20,1	35,1	46,9

As one could see the Polish academic staff is, in comparison with European standards, highly feminised. This feminisation is an increasing process, a no roll back movement. This process concerns all the positions but it appears to be more important in what concerns the position of extraordinary professor. Women represented in 1999, 12.9% of full professors and 20.1% of extraordinary professors (see Table 2). Such a feminisation could be explained by the less and less social interest for academic career. Just a few doctoral students, 16%, want to enter academia, most of them are rejecting this perspective because of financial considerations (46%) (Gulczynska and Swierzbowska-Kowalik, 2001). In fact the salary of the academic staff is really low compared to the salary in the private companies. Even if it is feminised, the academic world in Poland remains a male world, above all in the top rank positions. The glass ceiling is real. If men tend to prefer to join the labour market and have for that more possibilities than women, they still remains major actors of academic staff among others because an academic title remains the best way to find a good position on the private market.

c) Time necessary to complete each superior degrees.

According to the data collected by the GUS, 56.4% of the students complete their doctorate in less than three years (between two and three) and 88% in less than four years (between two and five) after having earned their masters degrees. 98.2% of academics with an habilitated doctorate have reached this level in less than three years after their doctorate. It has to be stressed that most of doctoral students earn a stipend (around 900 zł half of the average income) and have some teaching obligations. If they don't present their doctorate after 4 years they must

give back the money. That is the reason why doctoral studies are generally considered to be very "dangerous"¹³.

We do not dispose of a global analysis of the time required to reach each appointment. But a survey based on the case of the University of Warsaw realised in 1999 could be helpful to have a first idea of the Polish trend on such a point. This study, conducted by Renata Siemienska¹⁴, concerns the careers of current full-professors and presents the following results (see Table 4). Globally, this research has confirmed the hypothesis that in faculties in which the percentage of women among the students are and have been high for a long time, the percentage of women full professor will also be high. And longer the tradition of feminisation, the higher the percentage of women full professors. But this correlation presents some exceptions as the Faculty of Law which has had a high percentage of women for a long time and has appointed a low percentage of women full professors, or the Faculties of Journalism and of Political Science which do not have any women full professors.

On average women required more time than men to complete their doctorates. And later the difference increased substantially. But the difference concerning the time to move from extra-ordinary professorship to full professorship became reversed. It is now shorter for women than men in all the faculties¹⁵.

Such a situation may be explained in two ways. The first refers to the link between the life cycles and the shifting activity of women. In the time where they complete their habilitated doctorate women have fewer home duties, for their children, by now adults. So, they are more equal to men in the race for degrees than when they were younger, in the time of their doctorate.

According to R. Siemienska there's also another hypothesis that she called optimistic-pessimistic. *"The drop in funding for science, which means less money for research and relatively lower remuneration (compared to the national average) than, for instance, in the 1970s or the early 1980s and the simultaneous appearance of attractive possibilities in other areas of employment, e.g. business, in which remuneration is much higher, has caused men, in particular, to begin to either resign from positions at universities, or to begin treating them as a kind of resource that facilitates the seeking of additional employment elsewhere, which when found, becomes the primary occupation. Therefore, women began to fill the vacuum appearing at the "heights" of academic careers relatively more rapidly*

¹³ See Baszynski A, 2000.

¹⁴ Siemienska R, 2000, "Women in academe in Poland: winners among losers ?", *Higher Education in Europe*, vol.XXV, n°2, Unesco.

¹⁵ But it's worth noting that for all the women employed in a research institute at a position below the rank of professor the age of retirement is 60, so 5 five years less than for men and in fact 10 less.

and frequently" (Siemienska 2000). So women in academia could be consider as "*winners among losers*".

IV) Conclusion : Some specific characteristics of Polish academic staff.

Although this report has focused on the current evolution of higher education and academic staff from a gender point of view it could be interesting to underline, in conclusion, the specific characteristics of Polish academic staff. As mentioned, academic staff in Poland have had to cope with a major transformation of higher education. The “wind of change” toward more flexibility, quality competition and cost effectiveness has led to an evolution of the structure and practices of academic staff structure. The increase in the number of students has led to an increase in the number of academics (even if the number of academic staff have not increased as fast as the number of students). A great part of the increase in the number of academic staff has been based on the increase of people in non-tenured position, the multiplication of short-term and part-time contracts. This trend led to an heterogenisation of the sector. Heterogenisation of work contract, status, prestige and wages. Even if the Polish system could in some ways be considered as highly centralised because salaries are negotiated on the national level, because conditions of recruitment are defined by national law, the great autonomy of higher education and the reality of marketisation has nevertheless produced a differentiation in the academic staff structure and working conditions. On this point the fact that a majority of academic staff is forced to cumulate several jobs, often in the public and private sector, inside and outside of higher education, makes the analysis of gender discrimination quite difficult. It seems that the men’s resources in such a situation are not quite the same as the women’s and that the inequalities in the private sphere tend to shape and reinforce inequalities in the public sphere. So, an analysis of gender discrimination in higher education in Poland requires an analysis of the global situation taking account of the fact that even tenured professorships could be in other places and/or other times employed under the rules of a private work contract. The heterogenisation of academic staff didn’t create different groups, socially homogeneous, which could be presented as different ideal types but a continuum of individual situations integrating a great diversity making the gender discrimination more difficult to measure with any degree of certainty from a purely statistical point of view and could hide the fact that women are winners among losers.

Faculties	Women				Men			
	<i>Ma/PhD</i>	<i>PhD-Hab, doctor</i>	<i>Hab, doctor- extraordinary professor</i>	<i>Extraordinary professor- Professor</i>	<i>Ma/PhD</i>	<i>PhD-Hab, doctor</i>	<i>Hab,doctor- extraordinary professor</i>	<i>Extraordinary professor- Professor</i>
Biology	5,3	8,3	9,3	7,2	5,1	7,3	9,4	9,7
Chemistry	9,0	11,0	15,0	9,0	6,6	6,5	9,1	8,1
Philosophy and Sociology	9,3	10,5	11,7	7	6,2	6,3	7,8	9,6
Physics	7,0	5,0	14,5	8	5,7	6,4	9,4	7,9
Geography	9,0	14,3	11,0	4,5	9,4	7,4	8,4	6,8
History	6,2	11,0	10,5	7,8	6,7	9,1	9,2	8,5
Applied linguistics and East Slavic Philology		8,0	12,0	4,0	7,3	7,3	9,5	6,4
Mathematics, Informatics and Mechanics					3,9	6,4	10,7	5,4
Economy	4,0	11,0	10,5	7,8	6,7	9,1	9,2	8,5
Pedagogy	11,5	9,3	8,7	6,0	7,0	6,3	11,0	7,2
Polish Philology	8,3	9,9	12,0	5,8	7,7	10,3	9,4	10,6
Law and administration	7,0	7,0	12,7	9,5	6,3	7,9	10,0	10,4
Psychology	6,7	10,8	12,3	3,5	6,6	6,6	9,4	11,4
Applied Social sciences and Resocialisation	6,3	12,8	14,3	4,7	7,5	9,5	10,4	7,8
Management	4,0	7,0	12,0	7,0	6,9	6,3	8,2	6,9

Source: Siemienska, 2000

Relevant bibliography

Main books, articles and sources:

Bialecki I., 1997, "Nierownosci w dostepne do ksztatlcenia w Polsce powonnej" [Inequality in Access to Education in Postwar Poland]" in R. Siemienska, ed., *Wokol problemow zawodowego rownouprawnienia kobiet i mezczyzn* [About Problems of Professional Equality of Women and Men]. Foundation for the Promotion of European Law, Warsaw.

This article is published in a book edited by Pr. Renata Siemienska. This book proposed an overview of the problem of professional equality of women and men in Poland. The purposes of this article is to analyse the inequality in access to education of men and women. This inequality being considered as a factor professional equality. It presents outcomes of two surveys conducted in Poland in 1987 (Struktura 1987), on a population of 5853 men and women born between 1912 and 1969 and 1994 (IALS) on a population of 3000 men and women aged 16-65. This paper analyses the influence of social class and gender. One conclusion for example is to stress that after the second world war inequality in access to education has really decreased between men and women belonging to the lower social classes. Whereas during the same time inequality in access to education between classes has (till the 80's) increased. Furthermore this paper presents an analyse of the changes in the educational system since 1989. At the end Bialecki analyses the differences in aspirations towards education by sex.

Siemienska R., 2000, "Women in academe in Poland: winners among losers ?", *Higher Education in Europe*, vol.XXV, n°2, Unesco.

This paper is published in a volume of *Higher Education in Europe* dedicated to gender inequality. It is written by Pr. Renata Siemienska who's considered the specialist on the problem in Poland. After an historical introduction concerning the entrance of women to academia (as students and staff), the second part of the paper focuses on the situation of higher education in the 90's. The main purpose of this article appears in the last part. Based on a statistical analyse R. Siemienska shows how the progress of women in academia (37,7% of academic staff in 1997) could be consider as a Pyrrhus' victory. Women have filled the places men had left free after having found more interesting oppor-

tunities in the private sector. The end of the paper presents the outcomes of research conducted by the author concerning the rate of progress of men and women in academic careers. It appears that, if at the lower rank of academic staff, the progress of men faster than women the contrary is also correct for top rank positions. There is an acceleration of the careers of women at the finish. One hypothesis may be that women find themselves in different stage in their lives, the second hypothesis, the author called optimistic-pessimistic, is the change in the context in the academic world in Poland in the 1990s. Women are winners among losers filling the vacuum appearing at the heights of academic careers more rapidly. A case studies at the Warsaw University on full professors confirms these hypotheses.

Woznicki J., 2000, *Model zarzadenia publiczna instytucja akademicka* [Model of management of higher educational public institution], Instytut Spraw Publicznych, Warsaw.

This publication directed by Jerzy Woznickiego attempts to define to a new model of management of higher education in public institutions. The point of departure of this analysis was the results of the rector's conference held in January 1998 where rectors asked for change in the management of higher education. This book has to be considered as a contribution to the current debate about the reform. It presents an expert's point of view taking benefits of the results of a one year long research directed by J. Woznocki concerning higher education. The current main points in debate are analysed on the legal, financial and pedagogical levels. The model proposed by the authors is mostly oriented to a more cost-effective and flexible way of management but taking in account the major problem of quality. Integrating an exhaustive monograph of the current situation and the "state of the art" concerning public management, this books is above all really interesting in the way it proposes some examples of what is considered (by the authors) as good practice.

GUS, 2000, *Higher Schools and their Finances*, (English original title, book in polish), Informacje i opracowania statystyczne, Warsaw.

This book is the main sources of statistics. Published annually by the central office of statistics in the series "Information and Statistical Papers". The first part covers information concerning students, graduates, university lecturers, doctoral studies, post-graduate studies, national and foreign scholarships, conferment of doctor's degree and other degrees (Chapter I and II). Chapter III includes information about dormitories, academic canteens and various

range of scholarships for students. Most of the data are presented by type of higher education institutions, state and non state, by voivodship, town and often gender. Information about education is presented according the International Standard Classification of Education (ISCED). The second part of the publication presents the financial situation of higher education in Poland.

Other books and articles :

Andrzejewski P., 2000, "Szkoła Fikcji", *Wprost*, 3 September , n°36

Amsterdamski S., Bialecki I., Chmielecka E., Jablecka J., 1994, *Report on the Reform of Higher Education and Scientific Research in Poland*, "Issues in Transitions", Institute for Human Sciences, Vienna.

Baszynski A., 2000, "Goly doktorant" [Starving doctoral student], *Polityka*, 6 May, n°19.

Bialecki I., 1997, "Nierownosci w dostepne do ksztatlcenia w Polsce powonnej" [Inequality in Access to Education in Postwar Poland] in R. Siemienska, ed., *Wokol problemow zawodowego rownowprawnienia kobiet i mezczyzn* [About Problems of Professional Equality of Women and Men]. Foundation for the Promotion of European Law, Warsaw.

Bialecki I, Heyns B., 1993, "Inequality in Education in Post-War Poland", in Blossfield H.P., Shavit Y. (eds), *Persistent Inequality: Changing Educational Stratification in Thirteen Countries*, Westview Press, Boulder.

Buchner-Jeziorska A., Minkiewicz B., Osterczuk-Kozinska A., ed., 1998, *Studia wyzsze - Szansa na sukces ?* [The Higher Education - A Chance for Success ?], Instytut Spraw Publicznych, Warsaw.

Domanski H., 2000, *Hierarchie i bariery spoleczne w latach dziewiecdziesiatych* [Hierarchy and social barreers in the 1990's], chap II, "Pochodzenie spoleczne a poziom wykstalcenia [Social Origin and Level of Formation], Instytut Spraw publicznych. Warsaw.

European Commission, 2000, *Les chiffres clés de l'éducation en Europe*, Bruxelles.

Filas A., 1999, "Znak Jakosci" [The Sign of Quality], *Wprost suppl.*, 30 May, n°22

Filas A., 1999b, "Akademia Pryslosci" [Future of Higher Education], *Wprost suppl.*, 30 May, n°22

Filas A., 2000, "Katedra socjalizmu" [Faculty of Socialism], *Wprost*, 24 September, n°39

Gulczynska H and Swierzbowska E., 2001, *Czynniki motywujace do podejmowania kariery naukowej, komunikat z badan* [Motivations for an academic career, results of a research], Warsaw University.

Jackowski S., Kochanowicz J., 1994, "Jaki uniwersytet ? [Which University ?]", in *Gazeta Wyborcza*, 12th of July.

Kolakowski L., 1994, "Po co uniwersytet ? [University for what ?]", in *Gazeta Wyborcza*, n°61.

Kurczewski J., 1994, "Nasze uniwersytety [Our Universities]", in *Res Publica*, n°10.

Hulewicz J., 1936, *Walka kobiet polskich o dostep na uniwersytety* [The Struggle of Polish Women for Access to Universities]. Warsaw.

GUS, 2000, *Higher Schools and their Finances*, (English original title, book in polish), Informacje i opracowania statystyczne, Warsaw.

Jalowiecki B., Hryniewicz J., 1994, *The Brain Drain from Science and Universities in Poland: 1992-1993*. University Press of Warsaw. Warsaw.

Ministerswo Edukacji Narodowej [Ministry of National Education], 1995, *Szkolnictwo wysze i nauka - stan, perspektywy i zamierzenia* [Higher Education and Science - State, Prospects and Projects], Warsaw, October.

Nowakowska E., 1998, "Bryk Skolny" [Crib], *Polityka*, February the 7th, n°6.

Nowakowska E., 1999a, "Try piony nie na poziomie"[Three Pioneers under the Level], *Polityka*, 24 April, n°17

Nowakowska E., 1999b, "Glowy na rynku" [Heads on the Market], *Polityka*, 11 April, n°15

OECD, 1996, *Reviews of National Policies for Education in Poland*, Paris.

Paciorek A., "Studia ze znakiem jakosci" [Studies with the Sign of Quality], *Rzeczpospolita*, 18 October.

Rocki M., 1999, "Szczegoly bez ramy" [Principles without a Frame], *Polityka*, 18 June, n°24.

Siemienska R., 1992, "Academics Carreers in Poland: Does Gender Make a Difference?", *Higher Education in Europe*, vol 23, n°2. Unesco.

Siemienska R, 2000, "Women in academe in Poland: winners among losers ?", *Higher Education in Europe*, vol. XXV, n°2, Unesco.

Siemienska R, 2000, " Academe as a Space for Women and a Place for the Study and Promotion of Gender Equity in Poland", in L. Grunberg, ed., *Good practice in Promoting Gender Equality in Higher Education in Eastern and Central Europe and the Former Soviet Countries*, Bucarest, Unesco.

Turski L.A., 1999, "Fabryka Klonic" [Fabrics of Clones], *Wprost suppl*, 30 May, n°22

Walczewska S, 2000, *Damy, rycerze i feministki* [Dame, Knights and Feminists], p 69-79. Ed. EfKa, Cracovia.

Wojtyla J., 1998, "Status pracownikow szkol wyzszych [Worker's Status in Higher School] ", in Woznicki J., *Model publicznej szkoly wyzszej i jej otoczenia systemowego. Zasanidcze kierunki nowelizacji prawa o szkolnictwie wyzszyim* [Model of Public Higher Education and its Environment. Fundamental directions of the Revision of the Law for Higher Education Institutions] Konferencja Rektorow Akademickich Szkol Polskich, Warsaw.

Woznicki J., 2000, *Model zarzadenia publiczna instytucja akademicka* [Model of Management of Academic Public Institutions], Instytut Spraw Publicznych, Warsaw.

Woycicka J., Dominiczak, A., 2000, "Education of Women", in *Polish Women in the 90's*, report from the Women's Rights Center of Warsaw.

Zielinski M., 2000, "Uniwersytet Demokracji" [Democracy of University], *Wprost*, 11 June, n°24

Laws:

- Ustawa o Szolnictwie wyzzym z dnia 12 wrzesnia 1990, *Dz. Ustaw*, 1990, nr 8, poz. 28. [Law of 12 September 1990 concerning the Higher school].
- Project of Law adopted by the government 18 July 2000 concerning the Higher Education System.

Reviews:

- *Nauka i Szkolnictwo Wyzsze* [Science and Higher Schools]
- *Informator - Szkolnictwo wyzzsze* [Informator - Higher School], Ministry of Education.

Others :

- Publications of the General Council for Higher Education (Rada Glowna Szkolnictwa Wyzszego).
- Publications of The Centre for Research on Science and Higher Education Policies of the University of Warsaw [Centrum Badan Polityky Naukowej i Szkolnictwa Wyzszego Uniwersytetu Warszawskiego].

APPENDIX

A) Statistics**Table 1-Number of Students by Region and Sex (Year 1999, Source: GUS 2000)¹⁶**

	Total	Men	Men in %	Women	Women in %
Dolnoslaskie	117883	54002	45,8%	63881	54,2%
Kujawsko-Pomorskie	63799	24531	38,5%	39268	61,5%
Lubelskie	79050	32406	41,0%	46644	59,0%
Lubuskie	26669	10767	40,4%	15902	59,6%
Lodzkie	86455	37399	43,3%	49056	56,7%
Malopolskie	128445	59014	45,9%	69431	54,1%
Mazowieckie	299865	126513	42,2%	173352	57,8%
Opolskie	28299	11839	41,8%	16460	58,2%
Podkarpackie	43199	19155	44,3%	24044	55,7%
Podlaskie	39699	17373	43,8%	22326	56,2%
Pomorskie	66610	29884	44,9%	36726	55,1%
Slaskie	150310	65103	43,3%	85207	56,7%
Swietorzyskie	45956	17009	37,0%	28947	63,0%
Warminsko-Mazurskie	34911	14318	41,0%	20593	59,0%
Wielkopolskie	112266	48074	42,8%	64192	57,2%
Zachodniopomorskie	91860	38639	42,1%	53221	57,9%
Others	10570	8645	81,8%	1925	18,2%

¹⁶ The category "Other" concerns schools directly linked to the state like the Higher School of Defense.

Table 2- Number and Percentage of Students by Sex and Discipline (Year 1999, GUS 2000)

		Total	Men	Men in %	Women	Women in %
Total		1425846	614671	43,1%	811175	56,9%
	<i>Public</i>	1007403	458088	45,5%	549315	54,5%
	<i>Private</i>	418443	156583	37,4%	261860	62,6%
Pedagogy and teaching		157823	34370	21,8%	123453	78,2%
	<i>Public</i>	106232	22113	20,8%	84119	79,2%
	<i>Private</i>	51591	12257	23,8%	39334	76,2%
Arts studies		14467	5455	37,7%	9012	62,3%
	<i>Public</i>	13091	5047	38,6%	8044	61,4%
	<i>Private</i>	1376	408	29,7%	968	70,3%
Humanities		106654	28156	26,4%	78498	73,6%
	<i>Public</i>	96598	25569	26,5%	71029	73,5%
	<i>Private</i>	10056	2587	25,7%	7469	74,3%
Theology		21693	8754	40,4%	12939	59,6%
	<i>Public</i>	10938	4350	39,8%	6588	60,2%
	<i>Private</i>	10755	4404	40,9%	6351	59,1%
Social Sciences		192002	70622	36,8%	121380	63,2%
	<i>Public</i>	111777	41866	37,5%	69911	62,5%
	<i>Private</i>	81225	29756	36,6%	51469	63,4%
Business and Administration		394926	147839	37,4%	247087	62,6%
	<i>Public</i>	189662	70733	37,3%	118929	62,7%
	<i>Private</i>	205264	77106	37,6%	128158	62,4%
Law		58536	27544	47,1%	30992	52,9%
	<i>Public</i>	52626	24904	47,3%	27722	52,7%
	<i>Private</i>	5910	2640	44,7%	3270	55,3%
Biology		38177	12831	33,6%	25346	66,4%
	<i>Public</i>	36216	11822	32,6%	24394	67,4%
	<i>Private</i>	1961	1009	51,5%	952	48,5%
Mathematics and Informatics		33142	19736	59,5%	13406	40,5%
	<i>Public</i>	22049	10438	47,3%	11611	52,7%
	<i>Private</i>	11093	9298	83,8%	1795	16,2%
Medecine		34200	10294	30,1%	23906	69,9%
	<i>Public</i>	34200	10294	30,1%	23906	69,9%
Technical-Engineering		221654	175268	79,1%	46386	20,9%
	<i>Public</i>	213717	169522	79,3%	44195	20,7%
	<i>Private</i>	7937	5746	72,4%	2191	27,6%
Architecture and Urbanism		10141	4715	46,5%	5426	53,5%
	<i>Public</i>	9652	4473	46,3%	5179	53,7%
	<i>Private</i>	489	242	49,5%	247	50,5%
Agricultural, fishing and forestry		39262	17112	43,6%	22150	56,4%
	<i>Public</i>	37675	16283	43,2%	21392	56,8%
	<i>Private</i>	1587	829	52,2%	758	47,8%
Domestic Economy		9260	2628	28,4%	6632	71,6%
	<i>Public</i>	9260	2628	28,4%	6632	71,6%
Transport and Communication		12377	11027	89,1%	1350	10,9%
	<i>Public</i>	12119	10785	89,0%	1334	11,0%
	<i>Private</i>	258	242	93,8%	16	6,2%
Medias		7319	1714	23,4%	5605	76,6%
	<i>Public</i>	7258	1687	23,2%	5571	76,8%
	<i>Private</i>	61	27	44,3%	34	55,7%
Services		14129	4482	31,7%	9647	68,3%
	<i>Public</i>	3740	1123	30,0%	2617	70,0%
	<i>Private</i>	10389	3359	32,3%	7030	67,7%
Others		19520	12754	65,3%	6766	34,7%
	<i>Public</i>	18299	11900	65,0%	6399	35,0%
	<i>Private</i>	1221	854	69,9%	367	30,1%
Speciality		28994	9725	33,5%	19269	66,5%
	<i>Public</i>	11724	3906	33,3%	7818	66,7%
	<i>Private</i>	17270	5819	33,7%	11451	66,3%
National Defense		8010	6248	78,0%	1762	22,0%
	<i>Public</i>	8010	6248	78,0%	1762	22,0%
Affairs of Interior and Administration		2560	2397	93,6%	163	6,4%
	<i>Public</i>	2560	2397	93,6%	163	6,4%

Table 3 -Number of Doctoral Students by Discipline and Sex (Year 1999, Source GUS, 2000)

	Number of doctoral students	Number of women	Percentage of women
Army	92	1	1,1%
Theology	920	195	21,2%
Forestry	144	33	22,9%
Technical	4738	1093	23,1%
Physics	748	239	32,0%
Mathematic	355	121	34,1%
Economy	2816	1065	37,8%
Geography	82	35	42,7%
Natural	30	13	43,3%
Law	1387	604	43,5%
Earth sciences	476	215	45,2%
Veterinary	144	77	53,5%
Medicine	1218	670	55,0%
Sport	137	76	55,5%
Chemistry	1045	588	56,3%
Agriculture	1695	965	56,9%
Humanities	5278	3077	58,3%
Biology	826	558	67,6%
Pharmacy	108	88	81,5%
Total	22239	9713	43,7%

Table 4- Numbers of Doctorate and Habilitated Doctorate Awarded by Sex and Discipline (Year 1999, Source: GUS, 2000)

	Doctorates awarded			Habilitated Doctorates awarded			
	Of which women	Percentage of women		Of which women	Percentage of women		
Army	65	0	0,0%	Army	8	0	0,0%
Theology	92	9	9,8%	Mathematics	28	1	3,6%
Forestry	27	4	14,8%	Theology	22	1	4,5%
Physics	112	21	18,8%	Physics	55	5	9,1%
Technical studies	611	124	20,3%	Technical studies	142	19	13,4%
Law	68	19	27,9%	Forestry	7	1	14,3%
Economy	246	95	38,6%	Earth sciences	26	5	19,2%
Mathematics	77	30	39,0%	Chemistry	39	12	30,8%
Sport	65	28	43,1%	Medecine	146	46	31,5%
Humanities	749	347	46,3%	Agriculture	95	35	36,8%
Veterinary	41	19	46,3%	Biology	46	18	39,1%
Agriculture	279	135	48,4%	Humanities	200	79	39,5%
Medecine	1044	516	49,4%	Law	24	11	45,8%
Earth sciences	95	47	49,5%	Economy	52	24	46,2%
Chemistry	162	82	50,6%	Veterinary	6	3	50,0%
Biology	225	148	65,8%	Pharmacy	14	7	50,0%
Pharmacy	42	31	73,8%	Sport	5	3	60,0%
Total	4000	1655	41,4%	Total	915	270	29,5%

B) Laws Concerning the Polish Educational System

- The Act on Local Self-Government of 8 March 1990, according to which the running of pre-school institutions and primary schools is the responsibility of the communes
- **The Act on Schools of Higher Education of 12 September 1990**
- **The Act on The Academic Title and Academic Degrees of 12 September 1990**
- The Act on Education System of September 1991, amended by the Act of 25 July 1998
- The Teachers' Charter Act of January 1982, with subsequent amendments in 1996
- The Act of February 2000 amending the Teachers' Charter Act
- **The Act on Higher Vocational Schools of 26 June 1997**
- **The Act on Loans and Credits for Students of 17 July 1998**
- The Act on the Implementation of the Education System Reform of 8 January 1999

C) Structure of the Polish Educational System after the reform - to be fully implemented from the school year 2004/2005 (Source : Socrates National Agency).

29	DOCTORATE		
28			
27			
26	UNIFORM	MASTER'S	MASTER'S
25			
24			
23	BACHELOR		BACHELOR
22			
21	POST SECONDA RY	HIGHER EDUCATION	
20		H.E. ACADEMIC	SUPPLEMENTARY LICEUM
19	SPECIALISED SECONDARY SCHOOL		<i>Liceum Uzupełnia-</i>
18			VOCATIONAL
17			
16	LOWER SECONDARY		
15			
14			
13	PRIMARY EDUCATION 2nd stage		
12			
11			
10	<i>Szkola Podstawowa</i>		
9			
8			
7	PRE-SCHOOL EDUCATION		
6			
5			
4			
3			