EDUCATION POLICIES AND GENDER

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Summary

To discuss the perspectives of education (primary, secondary, and tertiary) for women's development one must understand the reasons for, ways of, and conditions of gender conception. "Gender centers" today study more than ten scientific specializations and groups of population, where women are considered from different points of view, including family composition and marriage duration, family income, education, and women's choice of their own way (only family duties, family in combination with job, only career). The term "gender" means the social aspect of sex identity.

Analysis of social-professional dynamics of family couples throughout life indicates various careers types: the descending path of uneducated women or those who choose downward mobility; the horizontal or slowly developing career path; and, lastly, women with higher education who achieve optimal professional potential. The influence of quality and level of education upon the work status of women is not direct and women often are concentrated in low-prestige low-paying jobs. One reason is that women are seen first of all as being "mother and wife".

Especially interesting is the problem of the approach of women to sciencesmathematics and physics, geology and ecology, academic medicine, etc. It has been noted how gender affects scientific careers: even among high-level women scientists discrepancies in careers still occur. The conclusion is that gender and ethnic diversity are slowly becoming part of all branches of science. Modern society must agree that the differences between individual human beings are more important than the differences between the sexes. The distribution of function and roles is currently made not according to sex, but gender. This is the basis for achieving common female-male activities.

1. Introduction

The word "gender" addresses the social aspects of sex—specifically, the sexual identity as defined within a specific cultural and social environment—as opposed to the strictly biological aspects of sex.

Ethnographers have long recognized the importance of understanding the differences in the social roles, positions, rights, and duties of males and females. It has been demonstrated that these vary in different countries and ethnic groups, and are determined by many factors, both social and physical (for example, geographic, climatic, and biological). Sociologists and philosophers were the first to propose the separation of the biological aspect of sex from the social aspect. The word gender is the generally accepted term for the social aspect of sex identity.

Before discussing the methods, definitions, and application of gender approaches to science and education, one has to understand the reasons, means, and conditions for the penetration of the concept of gender into these fields. Scientists initially studied these issues without the word gender, and developed methods of analysis without knowing that similar research was under way in other countries. Gender research attracted sociologists, demographers, economists, legal researchers, and sex pathologists, as well as ethnologists, ethnographers, psychologists, ecologists, and geographers. The population groups under study were and continue to be considered from various points of view, for example, in terms of family composition, marriage duration, family income. The active involvement of women in the economy is an undeniable fact: about 90% of all women of working age are now either working or studying. The range of areas in which women work is extremely wide, and they are the primary labor resource in many countries. But production is not the only or even the primary determinant of the influence and position of women. Family ties, children, and upbringing comprise an equally important aspect of women's lives. The connection and interdependence between these two areas of women's lives have become a matter of great interest to researchers during the past few decades, and their research has highlighted serious contradictions. Modern production requires a higher degree of professional qualifications on the part of workers. The time spent at work conflicts with childrearing, and this conflict can prohibit women from achieving professional growth. The main task for the state in this case is to make it possible for women to combine the functions of worker and mother optimally.

2. Gender Terminology

As stated above, the word gender refers to the social aspects of sex-specifically, the

sexual identity as defined within a specific cultural and social environment—as opposed to the strictly biological aspects of sex.

In various publications (see, for example, the Grant Proposal Guides of the National Scientific Foundation in the United States), one can find gender aspects addressed as "professional opportunities for women in research and education." The aim of these guides is to increase the participation of women in the sphere in question.

Frequently, gender information is collected by means of a questionnaire. The questions address educational changes (time and place of study) and professional status (position, salary), as well as economic details (changes in salary, timing, and cause). Additional data are collected on the birth of children, separation from family, and on other family members. For demographic or socioeconomic events it is necessary to fix the timing of the event, and to reconstruct the family history in reference to specific events and the many other important details of women's lives.

Marriage studies are usually separated into three cohorts on the basis of duration: 20–25 years of marriage is considered senior; middle-aged is defined as 10–20 years; and young marriages are those lasting 5 to 10 years. Data comparison between categories indicates some positive shifts. In the young cohort one can see a growth in the number of families in which the women are more qualified than the men (half of the youngest cohort). The differences in salary for men and women have remained stable from one generation to another: in the senior cohort women's salaries are 61% of men's and for the young cohort this figure is 67%. The changes in qualification levels of husband and wife over the whole life cycle indicate that it is early to talk of achievement of an optimal combination for women of their work and childrearing functions.

In many cases, women still have to give up work because of family and children. Sometimes this is the desired circumstance, as a certain percentage of women prefer to concentrate on family life. In modern society, women's taking part in professional activity is not necessarily only a means of providing a second salary for a family, but also to realize interests and ambitions, to be part of a work group, and to be useful outside the family. It is necessary to determine the position of women at different stages in the family life cycle. It is well known that a family goes through different developmental stages determined by changing demographic and socioeconomic occurrences, as well as life components, their functions, and dominant activities. Most modern families during their life cycles go through similar natural phases, repeating processes of growth, stabilization, then reduction in member numbers.

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Bibliography

Aivasova S. (1998). *Russian Women in the Labyrinth of Equality*, 408 pp. Moscow: RIK of Rusanov. [in Russian.] [The book addresses equality issues from the eighteenth century until modern times.]

Chotkina Z, Pushkareva N.L., and Trophimova E. (1999). *Women, Gender, Culture,* 367 pp. Moscow: RLSHGI. [Reports of the 1997 Russian summer school on gender studies.]

Davydova S.L. and Davydova I.V. (1997). *Men and Women on the Way to Sustainable Development, Gender Approach* (ed. E.V. Nikonorova), 80 pp. Moscow: REFIA. [in Russian.] [About attempts to use the gender approach to analyzing the influence of contamination on the modern environment.]

Delvin K. (1996). Pythagoras' trousers: God, physics, gender wars. *Nature* **11**(379), 128. [About women's fate in terms of family, scientific, and social duties in recent decades.]

Hammer H. (1990). Gender aspects in statistics. *American Statistics* **15**(1), 13. [This article is about gender aspects in statistics.]

Mertus I.S., Datt M., and Flauers N. (1996). Women's rights in education. *Women's Rights—Human Rights*, Chapter 10. Moscow: CLAS. [in Russian.]

Pushkareva N.L. (1997). *Women in Russian History: From the Tenth to the Twentieth Century*, 319 pp. Ed. and trans. E. Levin. Armonk, N.Y.: M.E. Sharpe. [The book is a history of Russian women over the last ten centuries.]

Silverman B.R. (1994). The health of children of educated mothers. *Scientist* 7-8(5), 3. [An article about the health of children of educated mothers.]

Biographical Sketch

Professor S.L. Davydova graduated from the Chemistry Department of Leningrad Technological University, and moved to Moscow after her marriage. She presented her Candidate of Science thesis and then her Doctor of Science thesis in chemistry. In 1983 she received the title of Professor of Chemistry and was appointed to a position at the Institute of Petrochemical Synthesis of the Russian Academy of Sciences (Moscow). She has translated many books on scientific topics from English and German into Russian. Her own books, reviews, and articles are devoted to chemistry, chemical ecology, and women in science. Dr. Davydova is an active member of the Women in Environment Assembly, and has lectured in many countries on the above topics. She is the wife of Engineer-Colonel V.F. Davydov, mother of daughter Irina (a pediatrician) and son Dmitry (a chemist at Moscow State University), and grandmother of two granddaughters: Svetlana (12 years old) and Valentina (eight years old). She likes Russian history and enjoys leading tours of the city and countryside. In 1995 she was elected as an academician to the Russian Ecological Academy.