

**THE MAIN TENDENCIES OF GIRLS' NATURAL AND MATHEMATICAL
EDUCATION IN UKRAINIAN EDUCATIONAL ESTABLISHMENTS OF
THE XIX – THE BEGINNING OF THE XX CENTURY**

The modern information society needs highly educated people and highly qualified specialists who are capable of being mobile, communicative, creative, striving for continuous self-development and self-education, perception and processing of a large amount of information. The basis for the formation of such qualities in the younger generation is natural and mathematical preparation. Its level is one of the indicators of the intellectual development of any society. Therefore, studying the disciplines of the natural and mathematical cycle is an integral part of preparing a person for today's socio-economic conditions. These disciplines form learners' need to improve their abilities, provide strong and conscious mastery of the system of knowledge and skills, contribute to the successful study of other disciplines, nurture the natural and mathematical culture that is necessary for further education and successful implementation of future professional activities. The results of international comparative studies represent the current state of gender differences in both sexes in achieving certain results. Thus, the search for ways of reforming and improving natural and mathematical preparation implies the consideration of the gender component in education. This is also due to the fact that for long periods of time natural and mathematical sciences were considered as «not a woman's business». The artificially created stereotyping has significantly influenced the further development of natural and mathematical education, causing gender segregation in the relevant professions, the overcoming of which is still relevant. Hence, there is an urgent need to apply a gender-based approach to education, which will increase girls' competitiveness in the labour market. The historical experience of the XIX – the beginning of the XX century is particularly interesting in this context, when women's natural and mathematical education modified from the traditional for that time (from giving girls the elementary skills to

count and maintain a secular conversation) to comprehensive, equal education with men.

The article presents the results of historical and pedagogical research of the theory and practice of the development of girls' natural and mathematical education in the territory of Ukraine in the XIX – the beginning of the XX century. The tendencies of girls' natural and mathematical education in Ukrainian educational establishments have been highlighted during relevant time frame.

The purpose of the study is to substantiate main tendencies of the genesis of girls' natural and mathematical education in educational establishments of Ukraine of the XIX – the beginning of the XX century.

The research tools for the study scientific and bibliographic, historical and logical, chronological-systemic, problem-search and historical-genetic methods.

Based on methodological tool the leading tendencies of the development of women's natural and mathematical education have been revealed, which are represented in the separate periods: first part of XIX century characterized by legislative regulation of the education system; changing the vector of society's attitude to women's education; opening of the first state secondary educational institutions for girls; second part of XIX century involved the creation of a centralized system of women's education and a legislative base of functioning of women's educational establishments; increasing public awareness of girls' education, creating associations and unions that had contributed to women's natural and mathematical education, including higher education; moving away from classicism and approaching the content of girls' natural and mathematical education to similar education for men; improving the content, forms and methods of girls' teaching in natural and mathematical disciplines; the beginning of the XX century was marked by the government's efforts to implement a general elementary school; unification of girls' natural and mathematical education; restoring women's access to higher education, including natural and mathematical; development of new concepts, further improvement and emergence of new forms, methods and teaching tools of natural and mathematical disciplines.