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FRIEDRICH FROEBEL'S PEDAGOGICAL CONCEPT WITHIN POLISH PRE-SCHOOL EDUCATION – THE REVIVAL OF 19th CENTURY THOUGHT IN MODERN INSTITUTIONAL UPBRINGING OF CHILDREN

Abstract: The article presents the profile of Friedrich Wilhelm August Froebel (1782-1852), the basic postulates of his philosophy and pedagogy. It describes the origin of kindergartens, which became the bedrock of young child education spreading across the world, and the birth of the institution of kindergarten. Froebel's thought reached many countries, among others Great Britain, USA and Poland, thanks to its popularizers. The first Polish kindergarten was set up thanks to Teresa Mleczkowa. However, it was Maria Weryho-Radziwiłowiczowa (1858-1944), who contributed the most to the popularization of Froebel's pedagogy. Together with J. Strzemeska, she developed the methodology of working with young children on the basis of Froebel's concept. She adjusted Froebel's pedagogy to Polish conditions by rejecting some of its elements and adding some new ones. Unfortunately, the 20th century in Polish pedagogy was a moment, when F. Froebel was forgotten. The situation was very different in the international arena: there were institutions arising in the world, which through publications and research spread the views of the German pedagogue. Modern Polish popularizers of Froebel (among others Barbara Bilewicz-Kuźnia, Froebel.pl association) undertook to interpret the thought of F. Froebel and with a new curriculum proposal for preschool education The Gift of Play they are trying to revive Froebel's pedagogy by adjusting it to the modern conditions. As a result of their actions, more and more kindergartens are transformed into Froebel preschools. However, they are still considered pedagogical alternatives.

Keywords: Friedrich Froebel, preschool pedagogy, Kindergarten, gifts, nursery school, Maria Weryho-Radziwiłowiczowa.

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Introduction

This analysis aims at presenting the profile of Friedrich Froebel, the pedagogical concept created by him and showing its impact on the shape of pre-school education all over the world, with special reference to Poland. Froebel, together with Maria Montessori and Ovide Decroly, is considered the most influential educator of the 19th century. He was a pedagogue, a publicist, a social activist, the creator of preschool education system, a propagator of education for young children. The pedagogical idea developed by him is revived by popularizers in the 21st century and meets new expectations: individualization, subjectivity, holistic treatment of the child and the need to move away from humanistic behaviorism spread in education.

Friedrich Wilhelm August Froebel (1782-1852)

Eureka! I have it! Kindergarten shall be the name of the new institution! – Friedrich Froebel.

The biography and historical and philosophical context of times in which Friedrich Froebel lived had important impact on his pedagogical concepts. That is why outlining the biographical background of the creator of kindergartens is so important in understanding the phenomenon of the Froebel movement. Since a detailed analysis of Froebel's biography is available in publications made by Wanda Bobrowska-Nowak, Stefana Możdżenia, Helmut Heiland, Peter Weston, Evelyn M. Lawrence, Stefan Wołoszyn, Stanisław Kot, Marta Kotarba and Barbara Bilewicz-Kuźnia, for the purposes of the article, the information is limited to those which are most important, the criterion being their influence on the formulation of Froebel's pedagogical concept.

Friedrich Froebel was born in a German village, Oberweisbach, on 21st April 1782. He was the sixth son of the Lutheran pastor. Being raised by his father and a step-mother (his mother died before his first birthday), due to the lack of their attention, he spent an abundance of time out in the nature and reading the Bible. At the age of 10, he moved to his uncle Herr Hoffmann's house in a nearby city, Stadtilm, where he went to a school for boys. When he was 15-17 years old, Froebel underwent apprenticeship with a forester Herr Witz in Thuringer Wald forest, where he had the chance to be in contact with nature and broaden his education related to botany, forestry, geometry and mathematics. Experiences from early childhood – not having a mother, religiousness, experiencing the natural environment of the forest provided

the grounds for Froebel's philosophy. Years spent on studies gave it a precise, practical shape. He started his university education at the University of Jena, where he studied Mathematics and Botany, but he did not finish due to financial reasons. From 1801 to 1805 he worked as an actuary at the Faculty of Forestry and as a surveyor and accountant in a private estate. His stay in Frankfurt, where, for the first time, he worked as a teacher in the Gottlieb Anton Gruner school and found his calling, was a breakthrough. During this time he also discovered the views of Johann H. Pestalozzi. Froebel travelled to Switzerland (Yverdon) a few times, where he observed and analyzed the activity of the master and introduced his philosophy and practice in his subsequent work as a private teacher of three sons of Baron von Holzhausen.

In 1811 Froebel continued his university education at the University of Gottingen, where he developed the philosophy of upbringing – the philosophy of spheres (balls). Upbringing and educating were described in it as support in the process of forming categories – reaching internal rights and structures governing the external reality in order to understand them. The scientific theory of Froebel bases the relation between subjective perception and the scientific subject on pedagogical activity. Upbringing leads to analytical exploration of external reality, discovering its complexity in order to reveal the human brain's capacity to create structures (Heiland 2000: 39-40).

Froebel spent the next stage of his life in Berlin (he studied Crystallography and met Christian Weiss). In years 1813 - 1816, the pedagogue abandoned his studies and joined the Prussian army in the ranks of Lutzow Free Corps as a volunteer. In the corps, he met Heinrich Langethal and Wilhelm Middendorff - who later became his best friends and coworkers. He corresponded with professor Weiss about mineralogy and geology. After the war he returned to Berlin, where he became Weiss' assistant at a mineralogy museum. In 1816, as a result of his brother's death and the necessity to take care of his nephews, Froebel abandoned his work and went to Grisheim and next, with the children, to Keilhau, where he started a private school, Universal German Educational Institute (Allgemeine Deutsche Erziehungs – Anstalt). At first his nephews and nieces were his students and then numerous other students joined (in 1825 there were 57 of them) and teachers (among others H. Langethal and W. Middendorff). Teaching, according to Pestalozzi's ideas, was based on integrating the fundamental strengths of mind, hands and heart. Froebel's programme was shaped individually, it included exercises in finding one's self, practical apprenticeship, educational games, gardening and sport. The main creation of F. Froebel, The Education of Man (Die Menschenerziehung), was developed in Keilhau and it constituted his educational philosophy, theory of development and school pedagogy.

Due to poor fund management and hostile political situation, Froebel's school started to crumble. Froebel spend 1831 – 1836 in Switzerland, where he started a school and run an orphanage. The Educational Institute carried out Froebel's pedagogy to which it added 'creative activities'. In addition, the pedagogue held courses for elementary school teachers and became the principal of the orphanage in Burgdorf and the affiliated elementary school. It was there, that he started thinking about creating a curriculum for young children (pre-school education) based on games.

Another breakthrough moment in the biography of the German pedagogue happened in 1837, when he started his first kindergarten in Bad Blankenburg (Play and Activity Institute) and started working on a methodological series, gifts and occupations. Manufactured toys: wool balls, wooden balls, cubes and a cylinder and a cube divided into eight subsequent cubes, played an important role in Froebel education. The information that led to understanding the structure, the essence and the laws governing the object was provided through activity, construction games and actions performed with it (Heiland 2000: 46). In 1840 Froebel named the Educational Institute a garden for children – Kindergarten. The kindergarten became a place for professionally organized games, where the teachers (having completed preparatory courses) led the children's activities. The main role was played by the 'gifts', movement activities (running, dancing, games in a circle and role play) and gardening.

Subsequent years included numerous travels (Drezno, Lipsk, Darmstadt, Hamburg, Frankfurt) that were aimed at popularizing pre-school education. In 1848 there were already 50 pre-schools in Germany. A person who played an important part in spreading Froebel's idea was Baroness Bertha von Marenholtz-Bulow, who introduced the pedagogical concept of pre-schools into learning environments and royal society and she helped with obtaining funds for kindergartens' activity. She also introduced the pedagogue to Princess Marie, wife of Prince Sachsen-Weimar Charles Frederick, who in turn shared a hunting house, Marienthal, for a training facility for future teachers (Kindergartenerinnen). The Prussian government, suspecting Froebel of subversive activity, banned pre-schools. Even though on 21st June 1852 Friedrich Froebel died, his thought did not share the same fate, but thanks to its popularizers reached England, the United States, Geneva and Poland.

Froebel's educational concept

The child should experience nature in all its aspects – form, energy, substance, sound and colour – Friedrich Froebel

Froebel built his pedagogical concept on Rousseau's proposal, Pestalozzi's practice and his own experience from childhood, studies and working as a teacher (Weston 2000: 2-17). He was one of the first to point out the need to educate young children, seeing in it not only the basis for the formation of future achievements but also their influence on the condition and development of society.

Froebel's theory called the children's garden method, a model of educating with spheres (Bilewicz-Kuźnia 2014: 13) or the philosophy of 'spheres' (Heiland 2000: 39) was based on pantheism (belief that everything is in God). B. Bilewicz-Kuźnia, a Polish Froebel philosophy researcher, distinguishes (za Manning 2005: 371-376) three main ideas in the concept of the German pedagogue: the unity of the universe, respect for the child and his/her individuality, significance of play in child's upbring-ing (Bilewicz-Kuźnia 2014: 12).

The pedagogue based his education concept on materials – gifts. He included gifts of nature (sand, rocks, branches, grains, plants, etc.) and gifts - educational toys. The child by exploring them gains knowledge and recreates shapes from them. The teacher's task is to provide appropriate objects, which will provide development through experimenting with them and games. The basic shapes which are included in the first teaching set created by Froebel are: ball, cube, cylinder and cubes, cuboids and prisms selected in a way, so that when they are assembled they constitute a cube. Each of them has its own symbolism. The ball symbolizes movement, it shows the universe, the perfect shape, momentum. The cube, symbolizing unity and rest, is its opposite. The cylinder, as a transitional shape, combines the features of the ball and the cube, it is an attempt at uniting opposite features (Bilewicz-Kuźnia 2013: 42-43). The ball, the cylinder and the cube placed on top of each other became the symbol of Froebel's pedagogy, presenting the first idea of his concept – the unity of the universe. Friedrich Froebel emphasized, that in the world everything is connected man, nature, God, constituting unity. A child has internal (experiences, impressions, findings, emotions) and external worlds (social-environmental reality), which enter into mutual relations. In this idea, the child is part of a family, community, nature, universe, God. Education should bring that out in the holistic model, combine the child's individual experiences with his/her ability to see a connection of what is inside with what is outside. By learning about new phenomena and truths the student develops cognitive structures, becomes more aware of own self and that he/she is part of a bigger unity. This process must be adjusted to the child's strength and abilities and take place though play. The holistic nature of education can also be seen in combining of cognitive, emotional, movement, social and religious aspects (Bilewicz-Kuźnia 2014: 13).

The second idea in the Froebel's pedagogical concept regards respect for the child and his/her individuality. The pedagogue emphasized, that everyone is different; grows up at their own pace, that is why there can be no routine or rigid patterns in upbringing. Education should be characterized by respect for child's individuality and freedom, having his/her own opinions and needs. The teacher is an observing and protecting party and the student in the active, autonomous and causal party. The pedagogue's task is to create conditions for the child's self-education. Pursuant to the widely spread metaphor *kindergarten is a garden, where children are the growing plants and the teacher is the gardener caring and nurturing for their growth.*

The significance of playing in children growing up is the third element of Froebel's education concept. The pedagogue wrote about it in a way, that compared it to learning. He thought that playing has important sense and a deeper meaning. The inner urge to play transforms in a natural way in a process of learning and growing. In Froebel's garden, there were games run by the teacher (mobility games, dancing, movement and singing) as well as free flow play, that the pedagogue started to valorize through the years, writing that it is: *the highest expression of human development in childhood, for it alone is the free expression of what is in a child's soul* (Bilewicz-Kuźnia 2017: 199).

Froebel's pedagogical idea around the world

The last word of my theory I shall carry to my grave, the time is not yet ripe for it. If three hundred years after my system of education is completely and according to its real principle carried through Europe, I shall rejoice in heaven. If only the seed be cast abroad, it's springing up will not fail nor the fruit be wanting – Friedrich Froebel.

Froebel's pedagogical idea gained worldwide recognition thanks to Bertha von

Marenholtz-Bülow (1810-1893). Publications, readings, exhibitions that she organized in Western Europe countries (Belgium, France, Italy, the Netherlands, Switzerland, Great Britain) spread the knowledge about kindergartens. In Great Britain, Froebel Society was created (later National Froebel Foundation) that published books with Froebel toys and games and organized pre-school teacher training centers. The German Froebel movement influenced also the development of institutionalized preschool education in Bulgaria, Czech, Russia, Hungary, Spain, Portugal and Poland. Froebel's ideas reached also the United States. Elisabeth Peabody, Mathilde Kriege and Maria Kraus-Boelte were their popularizers (Heiland 2000: 52-53).

Nowadays there is a number of institutions spreading the Froebel philosophy and pedagogy around the world, whose scientific and educational activity contributed to the renaissance of these 19^{th} century ideas. Some of them are The Froebel Trust, Froebel Archive Childhood Studies, Froebel USA (Bilewicz-Kuźnia 2014: 6) and The International Froebel Society. IFS develops Friedrich Froebel education theory and practice by creating space for research, discussion and debates within this area. Their members are representatives of Germany, Great Britain, Ireland, New Zealand, USA, Canada, Japan, China (http://www.ifsfroebel.com). Moreover, they manage accreditation, evaluation and supervision of educational activity of Froebel thought supporters. Every two years the society organizes an international conference for practitioners, researchers and enthusiasts of Froebel pedagogy (its 8th edition took place on 6th – 8th September 2018 in Hiroshima, Japan).

Froebel's pedagogy concept in Poland

Froebel's concept of kindergartens reached also Poland. First of them was set up in 1870 in Warsaw by Teresa Mleczkowa (1831-1885), who, at the same time, was teaching future educators on Froebel's system (Bilewicz-Kuźnia 2014: 12). However, it is Maria Weryho-Radziwiłowiczowa (1858-1944), a pedagogue, publicist and social activist, who is considered the Polish main propagator of the idea. She graduated from Bestużew-Riumin Higher Pedagogical Courses for Women in Russia (four year studies majoring in Physics and Mathematics) after which she lived in Germany, France, Belgium and Switzerland (it was there, that she learnt the Froebel's garden working method and took special interest in games and exercises) and a two year Froebel course during which she met Justyna Strzemeska, her future coworker

(Moliere 1982: 451). In 1884 Weryho came back to Poland, she worked as a teacher in Henryka Czarnocka's boarding house and three years later she opened her own Froebel institution in Warsaw (in 1896 in Poland there were 16 such institutions), where not only children were educated, but also future teachers (Moraczewska 2015: 219). Journalistic activity of the Polish pedagogue had a big impact on popularizing pre-school education and Froebel's ideas. The first important publication on the subject was the methodology of working with pre-school age children Wychowanie przedszkolne. Podręcznik dla wychowawców (eng. Pre-school education. A guidebook for teachers) that she wrote with J. Strzemeska. The authors made a critical analysis of Froebel's system, adopted his methods for Polish conditions, rejected excessive rigorism and rigidity, concentrating on the role of free play, the observation of the surrounding environment and the child's initiative in organizing activities (Strzemeska, Weryho 1895). M. Weryho published articles and books about pre-school education, she was involved with magazines *Pedagogical Review* (where she run a column entitled Children's Garden, that popularized Froebel's pedagogy), Pre-school Education and Preschool (cooperation with Zofia Żukiewiczowa).

M. Weryho was not only a pedagogue and a publicist, but also an education activist. She became the head of the Preschool Department at the Ministry of Religion and Public Education. The main task of the institution was to reorganize the activity of child-care institutions for children at pre-school age and to unify their organizational forms. They were named pre-schools, in contrary to children's gardens and child care centers (Moliere 1982: 525). Another area of the pedagogue's involvement was related to the popularization of the profession of being a pre-school teacher. Weryho led to the equalization of status of pre-school teachers with school teachers, which constituted a breakthrough in the history of Polish pre-school education. Her understanding of the teacher's role corresponded directly with Friedrich Froebel's views, according to which the teacher should play a secondary role, create a friendly atmosphere close to home environment, introduce the child into the world of values and social life. In a space like that, the student discovers the world by himself during the course of independent exploration (Moraczewska 2015: 227).

Maria Weryho-Radziwiłowiczowa moved Friedrich Froebel's pedagogical concept to Polish area, proving the validity of his theoretical framework. However, she did not follow him uncritically, she adjusted his methods to children's needs, enriched his pedagogy with her own ideas and solutions. Not only M. Weryho-Radziwiłowiczowa and J. Strzemeska popularized the views on pre-school education in the spirit of Froebel's pedagogy. Other exceptional pedagogues joined the movement: Stefania Marciszewska-Posadzkowa, Natalia Cicimirska, Zofia Bogdanowiczowa, Janina Krasucka-Bużycka, Zofia Żukiewiczowa (Bilewicz-Kuźnia 2017: 11). The influence of Froebel's pedagogical thought was visible in the publications of Z. Żukiewiczowa *Wychowanie Przedszkolne. Wskazówki metodyczne uwzględniające zainteresowanie dziecka* (eng. *Pre-school education. Methodology instructions taking into account the child's interest*) (1924) and in the article *Pre-school didactics* published in the second volume of *The encyclopedia of upbringing* (1934) and also in N. Cicimirska's textbook *My Child Care Center* (1928) where the author emphasized the significance of knowing the child's soul, urge to move and learn, using a system of games, creative activities and *gifts* (Bilewicz-Kuźnia 2017: 11-12).

After World War II the pedagogical concept of Friedrich Froebel and of Froebel teachers was criticized by Polish educational circles for it routine, boring exercises on gifts and the overuse of stories, which are a form that hands over knowledge. Socialism which dominated in Poland displaced play with work, formed the vision of a teacher who leads, corrects mistakes and has monopoly on knowledge. That stood in opposition to Froebel's view on self-education of children by free cognitive activity. Froebel, similarly to his *gifts*, vanished from textbooks and pre-school curriculums, their presence lasted only in publications of a historical nature. B. Bilewicz-Kuźnia, a Froebel's pedagogy researcher, points out, that (similarly like J. W. Dawid and S. Kot) what also contributed to that situation, was the way Froebel's pedagogy was carried out. Differences between child care centers and kindergartens disappeared, educators' work started to be schematic and overly didactic. The deterioration of quality of pre-school education in the gardens was, according to the authors, connected to financial difficulties, lack of a properly trained staff, which as a result caused the creator's idea not to be furthered and developed, but taken in in a very narrow and literal manner, which led to the *mechanization of activities in the gardens*. Polish pedagogy of the 20th century practically crossed Froebel out from all areas of action, ideas and philosophy.

21st century is the time of change in different areas of social life, among others in education and upbringing. Spreading individualization, which was connected with the increase of significance of subjectivity, agency and creativity of children, moving

away from the dominant behaviorism pushed towards searching for new solutions or reviving old ones, but in a modernized interpretation. Friedrich Froebel was dug up from library shelves and his thought was again popularized in Polish pre-school education.

The renaissance of Friedrich Froebel's pedagogical views occurred thanks to Barbara Bilewicz-Kuźnia, her research and the fact that she discovered again the publication of M. Weryho-Radziwiłowiczowa and J. Strzemeska *Pre-school education*. *A guidebook for teachers*) (1895), as well as the analysis of foreign works of J. Liebschnera, T. Bruce, H. Tovey, presenting the life, work, activity, philosophy of Froebel and his influence on worldwide pedagogy (Bilewicz-Kuźnia 2017: 196).

B. Bilewicz-Kuźnia introduced an educational innovation *Gift of play* based on the pedagogical and philosophical ideas of Froebel and at the same time including civilizational and cultural changes of the 20th century and educational and developmental needs of a modern child. The researcher started it by popularizing an interpretation of Froebel's thought in educational circles in the area of lubelskie voivodeship (which was preceded with studies in foreign literature on F. Froebel, travels, training in the USA and in Great Britain where Froebel's thought was widely spread). The next step was implementing the innovation in 2013-2014 in five public pre-schools in Lublin, registered in Polish Regional Education Authority under the name *Gift of play, alternative methods and forms of working on the basis of F. Froebel's concepts* (Bilewicz-Kuźnia 2017: 201).

The Gift of Play's premise was a model of organization of pre-schools, new curriculum, methods and educational materials. Everyday work of groups was, pursuant to the holistic model, aimed at free play, constituting the basic activity of a child. It was supplemented by classes in the *Morning circle*, activities in play-task groups (creative, economic, research and gifts), open-air education and cooperation with the local environment (Bilewicz-Kuźnia 2017: 200, Bilewicz-Kuźnia, Kustosz, Małek 2017: 40-46). Research conducted by Bilewicz-Kuźnia showed, that the premise of Froebel's pedagogy nowadays may be carried out on a pre-school education level and furthermore meet the present requirements regarding individualization, subjectivity and holistic view of a child. The researcher, having introduced the innovation, also observed an increase in team work among peers, cooperation and empathy in children (Bilewicz-Kuźnia 2017: 203).

Bilewicz-Kuźnia included the pedagogy of Friedrich Froebel adjusted to modern

requirements in form of a proprietary pre-school education programme *Gift of Play* to which she created methodology and proposals of activities to carry out with children. The new programme, pursuant to the current core curriculum, was created with the participation of *Froebel.pl* similarly like educational materials in the form of *gifts*. *Froebel's gifts* include classic educational toys created in the 19th century numbered 1-6 and subsequent ones established as 1.1, 1.2., 5B, 5P, 7, 8, 9,10 – geometric mosaics, plastic pin, shoelaces, wooden boards, sticks, rings and half-rings, wooden pulleys – which were created by F. Froebel's followers (Bilewicz-Kuźnia 2014: 19-40).

Froebel.pl is a group of educators, teachers, academics (among others professor Ph.D. Edyta Gruszczyk-Kolczyńska, Ph.D. Barbara Bilewicz-Kuźnia), pre-school and school principals, who implement the pre-school curriculum *The Gift of Play*, based on Froebel's philosophy. Her activity is connected with publishing (at the moment of writing the article, there were 8 positions published on general pre-school education as well as mathematics, music and movement, English and education in the form of poems and drama on the basis of Froebel's pedagogy), selling didactic aids (the basis constituted by *Froebel's gifts*) and organizing training for faculty (popularizing Froebel's ideas and the *Gift of Play* curriculum). The summary of activity of Froebel.pl is the Polish Froebel Conference organized each year (its 4th edition took place on 5th – 6th October 2018 in Lublin) brining together principals and teachers, research workers, students and Froebel pedagogy enthusiasts. During the event preschools and pre-school groups receive a Froebel certificate conforming the institution's work in the analyzed context.

The philosophy and pedagogy of Friedrich Froebel, after the time it was forgotten in the 20th century, comes back in a modernized form, spreads and becomes popular in ever growing circles of pre-school education in Poland.

Conclusion

Friedrich Froebel was an extraordinary figure that had important impact on the formation of preschool education. His life experience, studies and teacher practice shaped the philosophy and pedagogy that became the basis for the creation of kindergartens, popularized as a form of educating young children all over the world. In Great Britain, USA, Germany there are institutions which through research and publications spread the Froebel thought. In Poland the situation is different. Scarcity of materials and modern analysis of the pedagogue's theories caused Froebel's concepts to be little known. B. Bilewicz-Kuźnia and Froebel.pl, a society of educators, made an attempt of making it more popular. Their activity brings together more and more pre-school teachers, thus contributing to the revival of Froebel's concepts in Polish pedagogy. Time will show if Froebel's kindergartens become popular or will they still function only as educational alternatives.

REFERENCES

- Bilewicz-Kuźnia, Barbara. 2014. *The Gift of Play's. Methods and suggestions for classes with children according to pedagogical assumptions*. Lublin: Publisher of Froebel.pl.
- Bilewicz-Kuźnia, Barbara. 2017. "Renaissance of Friedrich Froebl's pedagogical views in pre-school education of the 21st century research in action" in *Child and childhood. Selected research contexts*, edited by M. Nawrot-Borowska and D. Zając. Bydgoszcz: Publisher of University of Casimir the Great.
- Bilewicz-Kuźnia, Barbara and Sylvia Kustosz and Catherine Małek. 2017. *Preschool education program. A The Gift of Play's*. Lublin: Publisher of Froebel. pl.
- Heiland, Helmud. 2000. "Friedrich Froebel (1782-1852)." *Pedagogical Quarterly* 1-2.
- Lawrence, Evelyn. 1969. Froebel and English Education. Perspectives on the founder of the kindergarten. New York: Schocken Books.
- Manning, Joseph. 2005. "Rediscovering Froebel: A call to re-examine his life nad gifts." *Early Childhood Educational Journal* 32(6).
- Moliere, Sebastien. 1982. "Maria Weryho-Radziwiłłowiczowa life and work." *Up-bringing in Kindergarten* (9).
- Moraczewska, Barbara. 2015. "Precursor of institutional upbringing of young children in Poland – Maria Weryho-Radziwiłłowiczowa (1858–1944)." *Gdańsk studies. Visions and reality* (XII).
- Parczewska, Teresa and Barbara Bilewicz-Kuźnia. 2013. *Pre-school education in Poland and in the world. Selected Issues*. Lublin: Publisher of the Maria Curie-Skłodowska University.

- Strzemeska, Justyna and Maria Weryho. 1895. *Pre-school education. Manual for educators*. Warsaw: Bookseller Teodor Parnicki.
- Weston, Peter. 2000. *Friedrich Froebel his life, times & significance*. London: University of Surrey Roehampton.

Websites

http://www.ifsfroebel.com http://www.froebel.pl http://froebelusa.com https://www.froebel.org.uk