Pedagogical Implications of the Concepts of the Classroom in Europe: The Key Historical Layers, Tendencies and Influential Lines

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Abstract
Viewed historically, for a thorough understanding of the development of pedagogical concepts it is necessary to study all important contextual elements that have contributed to the achievement of certain conditions under which educational work with students occurred, and to study all the qualitative components that lie at the essence of this pedagogical process.

This paper examines the interdependence of pedagogical movements and classroom environment for the elementary education in the European historical context. The authors' analysis of historical trends in the development of pedagogical ideas and movements has identified two influential currents, in which implications related to the origins and final form of the highlighted school architecture in Europe have been analyzed.

The key finding of this study is that, given the different socio-cultural circumstances, the level of development of the classroom in Europe is conditioned primarily by the continuity and quality of perception of pedagogical movements, as related to the appropriate environment in which the pedagogical process is to be implemented.

Keywords: classroom; education; pedagogy; school architecture; teaching

1. Introduction
Over time, from ancient philosophers, especially the Sophists, until the present day, the most prominent educational figures have influenced the development of education as a whole and the school system in various ways, by developing educational goals, principles, methods and systems. However, reflections of different pedagogical ideas have always been conditioned by historical, cultural, and other general social circumstances, which largely influenced the degree of their implementation and further development of the organizational forms of schools. A principal objective of this paper is to discover the historical thread that connects past and present pedagogical thought and practice, and analyze their implications on the organizational forms of schools, primarily the classroom as the basic element in school architecture. In relation to the effects of these social phenomena, one should especially bear in mind the role and importance of the European context as a starting position in the dissemination of pedagogical ideas on a global level.

The authors have focused on the historical context of development of and changes in the classroom environment for elementary education starting from the Modern Era, when the first scientific discussions on the spatial characteristics of the school building essentially started. The selection of crucial historical layers has been made based on the dynamics of social changes and development of pedagogical conceptions. On the other hand, the analysis considered as relevant how widespread the pedagogical conceptions were and how much they were applied in practice, as adequately followed by school architecture.

1.1 A Research Framework
Few movements in pedagogy have extended and promoted the ideas and achievements of previous ones. Most innovative pedagogical ideas have offered new organizational forms of the school and its pedagogical methods, in such a way as to criticize the pedagogical doctrine of previous schools and their internal organization. This tendency has influenced the architectural aspect of school buildings. In this paper, by using the historical method the authors have conducted a comparative analysis of the interdependence of pedagogical movements and the

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classroom in the context of historical development. Having in mind various social and cultural circumstances, pedagogical implications have been considered based on: the period in which they emerged, the innovativeness of the pedagogical concept, how widespread they were, and how accepted they were in relation to their forms applied to classrooms. In this way, the principles and tendencies of the development of school architecture in Europe from the Modern Era to the present day have been determined. The results have been systematized by using the inductive-deductive method.

2. The Origins and Development of School Architecture

Traces of the first literacy, and therefore the roots of the school architecture can be found in ancient civilizations, in old scribe schools in ancient Egypt which worked within shrines (temples). However, when it comes to an organized system of education, the starting position is found in antiquity.

The manifestations of the first complete system of education can be recognized in ancient Greece (6th century BC), especially in its most developed parts - Sparta and Athens. Prominent ancient Greek philosophers, especially sophists like Socrates (469-399), Plato (427-348) and Aristotle (384-322), provided the largest contribution to the development of pedagogical theory and practical pedagogical work (Marrou, 1956; Vlahovic, 2001; Munn, 2002; Djuric, 1973; Coulson, 1999). Teaching facilities in ancient educational institutions were playgrounds, gyms, porches and buildings with bathrooms, which were built in the complex of thermae. Archaeological research of palaestrea – Olympia, Epidaurus, Pompeii; and gymnasiuims (Aleksandreia, Hierapolis, Ephesus and others) shows that the first school buildings had identical architectural features as other public buildings of the time. (Kaltasas, 2004; Bajbutovic, 1983) This phase of development of pedagogy is characterized by a defined and well arranged social system in which, among other things, the importance of educational buildings is recognized. The opening of schools, libraries, museums, observatories and other facilities for education, training and research is just part of the reason why the ancient period is considered very important for the general development of civilization.

In contrast to developed systems of education in ancient times, education in the Middle Ages was a major step backwards in terms of both quality and development. Religious buildings (churches, monasteries, cathedrals...) became centres of literacy and culture, and education itself was based on the authority of teachers, strict discipline and harsh punishments. (Baird, 2010; Kacapor, 1996)

Subjugation to ecclesiastical norms and formality in the medieval concept of education did not require special solutions in terms of school architecture. The reasons for that were quite simple. First of all, it should be noted that scholastic classes were theological in nature, reduced to formal-logical considerations, which impeded the development of critical and creative spirit. In such a generally accepted context one could not expect much from school architecture.

The epoch of humanism and the Renaissance was marked by a return to ancient values, based on which new routes in culture, art and science were sought. The most prominent humanist educators were: Vittorino Da Feltre (1378-1446), Erasmus von Rotterdam (1469-1536), Thomas More (1478-1535), Francois Rabelais (1494-1553), Tommaso Campanella (1568-1639), Michel de Montaigne (1533-1592) and others (Zlebnik, 1970; Filipovic, 1982; Vlahovic, 2001).

2.1 The Modern Era: A New Development

The first scientific review of spatial characteristics of the school building began in the middle of the seventeenth century. One of the pioneers in dealing with the architecture of school buildings, Joseph Furtenbach (1591-1667), in his work "Teutsches Schulgebäw" from 1649, pointed out the importance of air and sunshine in the classroom (Engel and Dahlmann, 2001).

The originator and inspirer of the class-lesson system, J. A. Komensky (1592-1670), in the seventeenth chapter of his work "Didactica magna", formulated the educational demands related to school premises. Defining the school as a place that offers a pleasant picture to the eye, the interior of the school as bright, clean and decorated with many pictures, J. A. Komensky ascribed particular importance to outdoor activities, from walking, through playing to physical education (Engel and Dahlmann, 2001; Bajbutovic, 1983). After Komensky, a series of theorists gave a strong impulse to the development of modern era pedagogy. In the Enlightenment, in 17th and 18th centuries, John Locke (1632-1704) had an important role in the development of pedagogical thought, foregrounding the importance of individual education. (Locke, 1675) Among others, one can point out the orientation of Jean Jacques Rousseau (1712-1778) toward the education that suits the nature of the child, or to the individual approach to the child and its free development and education (Kacapor, 1996; Tesic, 1962; Zaninovic, 1988).

The beginning of the nineteenth century led to the establishment of the first standardized models of school space in accordance with the system of teaching. Organization of the educational process was characterized by a collective form of teaching in different variants. In England, the teaching was performed by the monitory system, also known as the Lancasterian system (Fig.1.), under which a large number of students was educated (Lancaster, 1821). The system of mutual instruction, also known as Bell's system, was similar. It was practiced in religious schools. These concepts of education had specific
requirements about the layout of a classroom based on the number of students and arrangement of furniture.

The monitorial system was modified under the influence of Samuel Wilderspin (1791-1886) and David Stow (1793-1864) in the 1820s and '30s (Burke and Grosvenor, 2008).

Therefore, in accordance with the change in the teaching process, a new type of building appeared, where there was one teacher with two extra teachers, whose duty was to supervise writing, arithmetic etc. (Stow’s system), and thereafter, in 1846, a system was introduced in which each group of children had their special teachers (Robson, 1874; Bajlon, 1972). Initially, a long and narrow room divided by curtains into several parts was used for this purpose (Fig.2.). "This structural division of the school space enabled a new form of pedagogy to evolve, that of the 'simultaneous method', in which the master instructed all the children in the room at the same time" (Burke and Grosvenor, 2008) (Fig.3.).

During this period, the first state regulations on the design and construction of school buildings were adopted. The regulations defined the relationship between the size of classrooms and the number of students in one class and also the basic technical requirements for the design of school buildings (Robson 1874, Bajbutovic 1983).

When considering this period in the development of school architecture Dudek especially emphasizes: "Whilst school system in some shape or form has been developing throughout the world from the earliest part of the enlightenment, there was no coherent idea as to how an architectural and educational theory should be integrated to create a new form of school building appropriate to its special function. Treatises on the subject were either written from a purely architectural perspective (with an emphasis on the external style rather than internal pragmatic viewpoint emphasising the health and safety needs of the children during their time in school)" (Dudek, 2008).

2.2 The 20th Century: In Search of a New Concept

At the turn of the 19th and 20th century, reform pedagogy appeared. Popkewitz observes the following: "By the first decades of the twentieth century, school subjects formed around particular disciplinary knowledge with the new science of psychology providing its pedagogical principles" (Popkewitz 2011).

At the end of the nineteenth and in the early twentieth century there was a significant change in the traditional concept of classrooms. During this period, there were two forms of traditional school architecture which correspond to the pedagogical system of class teaching and subject teaching. The main architectural features of the traditional school emerged as a result of preference for one of the two principally different pedagogical approaches.

However, the beginning of the twentieth century was of particular importance in considering the interdependence between pedagogical ideas and the classroom. Significant changes in the treatment of school buildings especially began with the development of the modern architecture movement (the second decade of the twentieth century), whose postulate was the truthfulness of architectural expression. It emphasizes the function of the building, a new aesthetical relationship to the architectural tradition, the new technical features of the construction system and of the materials used. Also, as opposed to socially acceptable (institutionalized) pedagogical concepts, new pedagogical ideas occurred. The formation of alternative pedagogical movements led to new implications for school architecture.

In 1896, Maria Montessori (1870-1952) was the first woman to graduate from a medical school in Italy. As an Italian child psychiatrist and educator, influenced by the ideas of F. Frobel, JH Pestalozzi and French physician Édouard Séguin (1812-1880), she developed her own pedagogical system. She presumed, based on her observation, that a child's intelligence was not an anchor, that learning could be provoked or suppressed by the child's individual adventures, and that children learned...
best through their own direct sensory experiences of their world. The Montessori approach focused on a child-sized classroom, full of specially designed learning materials that were progressively complex. She opened her first casa dei bambini (children's house) in Rome in 1907 (Kramer, 1988). The Montessori classrooms were divided into 3-year age groups: 0-3, 3-6, and 6-12. Children learn through experience, by observing and working. The overall approach of the Montessori program aims at helping children develop and refine their sensory perceptions of sight, sound, touch, smell, and taste. They practice practical life skills, which enable children to care for themselves as well as for their environment, gardening and building skills that will stay with them throughout their lives. The principles of Montessori are tools for achieving liberty and freedom, since the child is always seeking to expand his/her own personality (Sanoff, 1995). Montessori classrooms incorporate space suited to group activity, and areas where a student can settle in alone. Parts of the classroom are open and spacious to create movement in the space and reduce disruptive behaviors. Maria Montessori's pedagogical ideas, as well as her concept of spatial organization of the classroom, significantly influenced the overall development of the movement for education reform in Europe, especially in Italy, Switzerland, Germany and the Netherlands.

One of the most important alternative pedagogical directions is Waldorf education. Waldorf schools were called Steiner schools by Rudolf Steiner (1861-1925), the founder of Waldorf pedagogy, and the first such school ("Die Freie Waldorfschule") was founded in 1919 in Stuttgart, Germany. It was based on a holistic education, that involves a comprehensive approach to the human being, observation of the child as a person in a certain stage of development, and recognizing the importance of the environment in which a human being develops. From the beginning, Steiner insisted that the school should be open to all children, and that teachers must be fully versed in the design and implementation of curricula, with the least impact of state or some other systems. The aim of the Waldorf pedagogy is education in a free, stimulating environment that helps every human being to develop his or her full potential. In children, it encourages independent thinking and creativity (Steiner, 1995). The interior in Waldorf schools and kindergartens looks quite different from standard school buildings, and the accent is on natural, soothing colors and natural materials. "The Waldorf buildings follow Steiner's claim whereby 'school must be a utilitarian building which demands an artistic form' (Raab and Klingborg, 1983). The built environments are designed in a most peculiar fashion, inherent to Steiner's pedagogy, in which right angles and symmetries are avoided both horizontally and vertically and colour and light are manipulated in a specific manner, in accordance with Steiner's colour plans for ages and activities" (Castro and Andrade, 2011).

Also at the beginning of the twentieth century, a movement called Open Air School was formed, in order to prevent the development of tuberculosis in children. The intentions of this movement were to establish schools in which, in addition to the education of children in the natural environment, medical supervision was present. Also, the Open Air Schools movement (or Schools of the Woods) was based on the pedagogical ideas that were originally represented by the humanist Vittorino da Feltre, and then Jean Jacques Rousseau, Georg Kerschensteiner (1854-1932) and other representatives of labor and active school. In the first decade of the twentieth century, under the influence of this movement a larger number of open-air schools were opened in England. The first such school in Germany operated since 1904, entitled the Waldeschule (Forest school), in Charlottenburg, near Berlin, founded by Dr. Bernhard Bendix (1863-1943) and pedagogue Hermann Neufert (1858-1935). According to the ideas of the open air school, "the architecture had to provide wide access to the outdoors, with large bay windows and a heating system that would permit working with the windows open. The most remarkable of these schools were in Amsterdam, Holland by architect Jan Duiker (1929-1930), in Suresnes, France by Eugène Beaudoin and Marcel Lods (1931-1935), and Copenhagen, Denmark by Kai Gottlob (1935-1938)" (Châtelet, 2008; Châtelet et al., 2003). Requests that the school environment should be directly connected to the natural environment, in order to improve the hygienic conditions of the area where children stayed for a prolonged period of time, influenced the development of the pavilion system of school architecture. It created, among other things, the possibility for the differentiation of certain functional parts of the school building, according to children's age and forms of organization of the educational process. Although the Open Air Schools movement weakened after the Second World War, it turned out that in the second half of the twentieth century too the pavilion system of school construction was being implemented in various forms in many European countries.

In the period between the two world wars, the general social development improved the hygiene conditions for the work of students and teachers. "This period is characterised by social democratic politics of health and hygiene and major shifts in educational theory and policy" (Gorp, 2012). Significant progress was made in establishing technical standards regarding the orientation of the school building, especially the orientation of educational facilities - classrooms, ways and intensity of providing natural light in the school building, natural ventilation and ways of achieving effective air change in the school premises (Fig.4.). Revolutionary social changes at the end of the first and beginning of the second half of the twentieth century caused intense theoretical debates about pedagogy and education.
By 1963, the municipality of Reggio Emilia started setting up its own network of educational services for children from birth to 6 years. The schools are characterized by a set of progressive learning theory, and by a deep commitment to honor the rights of parents, teachers, and children. This philosophy key ideas are that children are individuals with the right to the best education available, that education is based on relationships, and that education is based on the interaction of children working and playing together in small groups. Curriculum aims are based on teachers' observations of the children. Teachers are 'partners' and work with the children (Gandini, 1988). The classroom is set up to promote partnerships, social interaction, and constructive learning. It demonstrates the belief that children have a right to be educated in thoughtfully designed spaces. Children in the Reggio Emilia schools are learning to become perceptually aware through the support of the environment designed for multi-sensory learning. Schools are built with skylights and plenty of windows to supply the space with natural light and provide transparency (Valentine, 1999).

In the second half of the twentieth century, especially in its last decades, there was an inevitable adaptation of pedagogical ideas of the traditional school to new circumstances, which allowed the partial renouncement of the monofunctional and rigid spatial conception of the school in favour of frontal whole class teaching.

In most developed countries views of contemporary architectural models of elementary schools are not always coherent. On the one hand, there are strong efforts to completely remove the walls inside the school building, while on the other scientifically based beliefs that show many advantages of the traditional concept of space for classes are present.

One can say that the second half of the twentieth century was characterized by numerous instances in which authors "wandered" in terms of the introduction of new and for that time modern architectural concepts of the school. A number of theories about the school were created, and the search for different schools continued.

In a number of economically developed countries experimental, alternative schools were established. These initiatives were especially prominent in the US, and were adopted in England, Western Europe, Japan... In the beginning of the eighties a number of new types of alternative spatial school structures was created, under different names: the "open-plan schools", "schools without walls", "free schools", "schools without classes" and others (Vlahovic, 2001). However, in such situations, theoretical models were often imposed on teachers, while "flexibility" was interpreted as unproductive openness. Partly as a result of it, conflicts arose between those who supported and those who opposed the "open planning" of education, especially where this was considered, or implied, not as a natural act, but as a change in the way of teaching. "A report by the National Union of Teachers (NUT England – 1974) and the detailed survey of Bennett et al. (1980) note some of the problems, including noise levels, teachers lacking specific training for this environment and worries that for some children open-plan spaces might be inappropriate, producing behaviour problems and lack of involvement" (Woolner et al., 2005). Also, but bearing in mind the US context, Brubaker has argued that: "The open plan idea and its concept of flexibility were an important innovation in the 1960s, but unfortunately, the idea was unacceptable to some teachers, administrators, and architects who didn't want to change. In the following years most open plan schools returned to the old and comfortable programs" (Brubaker, 1998).

Previous studies have left the question of whether schools of the "open plan" type, designed as such, have a good or bad influence on educational work, unanswered. Therefore only solutions which were profiled on an explicit scientific basis have survived. However, some of the basic principles of these schools, supported by new pedagogical methods, have wider application and refer primarily to the introduction of more flexible concepts into the spatial structure of educational facilities, and therefore into the spatial structure of the school as a whole.

So, it is necessary to pay special attention to the architectural design of future school buildings. This is corroborated by decades of experience of several school buildings that were built in the second half of the twentieth century. Although they were based on historical references of typical manifestations of the traditional model, the cleverly thought-out architecture of these school buildings caused them to be extremely well accepted by the students. In contrast, the need for a radically different approach to the design of the classrooms has produced a series of "architectural failures" (Fig.5.).

In a relatively short period of time, there were, as it turned out because of the lack of true concepts, attempts to establish innovative models through uniform super-systems of school buildings with huge capacities that assumed the installation of the most advanced technological achievements of that time. Because of favoritizing technological to pedagogical achievements and negligence of basic humanistic values, such concepts were doomed to failure, in the case of schools, as specific types of buildings.
In the architectural organization of school buildings, finding the right measure of flexibility is of special importance. The need for highly flexible school areas can often neglect, or impair the overall value of schools as a specific and complex architectural environment. Among other things, one should note certain viewpoints that the problem of flexibility of school buildings is not a general requirement for ensuring the high quality of a learning environment. As pointed out by professor A. Lederer, in some of the now well-established schools, built at the start of the second half of the twentieth century, by architects Eliel Saarinen (1873-1950) & Eero Saarinen (1910-1961), Hans Scharoun (1893-1972) and Arne Jacobsen (1902-1971), flexibility is equal to zero. However, all of these school buildings have been favourites of and accepted by the students for decades. It is certain that these schools today, in modern conditions, lack some facilities or some more spacious areas designed primarily for social functions, but this is definitely not related to flexibility as the main problem (Lederer, 2004a; Lederer, 2004b).

At the end of the twentieth century, caused by the dynamic social changes, new educational requirements, and the impact of new trends in the development of architecture, the structural volume of the school decomposed according to the function and purpose of the school premises. Facilities for social activities of students were added, and teaching facilities acquired a freer architectural form appropriate to the variety of learning activities and needs of children of different age and developmental characteristics (Tanic et al., 2011; Dudek, 2002). Furthermore, there was a tendency to involve local community in the process of school construction: "The staff, parents and children were continually involved in the design process which, according to the architects, helped the school take on a life of its own" (Curtis, 2003). Also, one, but not dominant part of school architecture grounds its concepts on the ideas of alternative pedagogical directions of the twentieth century, and a large number of Montessori schools, Waldorf schools, etc. were present (Fig.6.).

2.3 Today?

"From a historical point of view the schools are, above all, interesting because their architecture was connected with pedagogical intentions and hopes that are not dissimilar to such considerations today" (Kemnitz, 2005).

At the beginning of the 21st century, it can be said that earlier expectations were too pretentious. With rare exceptions, a discrepancy between pedagogical and curricular practices on one hand, and the architecture of school buildings on the other is still evident. Despite significantly altered social objectives, content and role of schools, in current architectural practice the prevailing concept is based on the pedagogical models of traditional schools. The exceptions to this are still experimental architectural designs, which express individual views and opinions of the author, and base their solutions on the concept of alternative pedagogical directions. In this sense, it is necessary to point out the efforts of the Dutch architect Herman Hertzberger, in whose realized designs of school buildings, in the last decades of the twentieth and early twenty-first century, it is possible to identify a high level of understanding of the needs of students and teachers in the modern pedagogical process.

In general, in the absence of a real concept of school building organization, architects, insufficiently familiar with the matter, design schools mostly according to the same pattern, as was the case during the twentieth century. The concepts in which the classroom content is dominant, linearly arranged, of the same size and not flexible enough to fully embrace educational innovations, remains a barrier to any move away from the classic model of school architecture (Fig.7.). In the concepts of school architecture the use of modern construction processes, new materials and technological advances in the energy efficiency of buildings is emphasized. Therefore, the quality of school architecture is still not fully measured by functional and ambientally valuable space organization, and the level to which it is equipped with didactic resources, i.e. by how much it meets the requirements of modern educational practices and pedagogical innovation. In contrast, there is a tendency to measure the modernity of school building, primarily by the high cost of used materials and aesthetic pretensions of architects.

On the other hand, the exponential growth of information and communication technologies (ICT) has significantly refreshed pedagogical practices, particularly in regard to the possibility to acquire knowledge in different ways and in different places. However, modern ICT greatly alters the context in
which the process of socialization of students takes place. That is why it is likely that in the future, in addition to the educational one, the social component of school space will be especially significant, and it should be integrated in classroom concepts.

Fig.7. Linear Disposition of Classrooms. What is the Difference? Left: Tehtaanmaki Elementary School, Anvalankoski, Finland – Architect: Alvar Aalto, 1938. Right: Primary and Secondary School, Alzenau, Germany – Architects: Stephan Eberding and Stefanie Eberding, 2003 (Dudek, 2002; Eberding, Himpel, Sailer and Fischer, 2003)

In spite of the fact that in certain segments major steps have been made in the transformation of school facilities in general, due to its specific nature related to the continuity of the innovation process, the question of upbringing and education stands out as a separate category and is a subject of controversy and criticism in the field of architecture and, related to it, pedagogy, sociology and psychology. Today, it is obvious that, when it comes to exploring new concepts of school architecture, European countries that stand at the top of social, economic, scientific and technological development, are the most advanced. A common feature of these efforts is reflected in the constant actualization and questioning of the importance and role of school architecture in society and education, starting from the sphere of the individual, through the local community, to the society as a whole.

3. Conclusion

Viewed historically, there are few pedagogical movements that substantially continued and improved ideas and achievements of the past. In fact, most new pedagogical concepts, through the provision of new organizational forms of the school and "contemporary" pedagogical methods, criticized, and even denied, the pedagogical doctrine of previous schools, as well as their internal organization. Of course, all that made an impact on the organizational models of the school, and among other things, the aspect of the architecture of school buildings.

The fact is that the development of classrooms has been exposed to a number of influencing factors (social, educational, cultural, economic and technical impacts), whose character in certain historical moments was highly variable. It is enough just to consider the origins and the postulations of the main movements in pedagogy and education, to come to the conclusion that we are facing a very complex problem, which is under the constant influence of different, often conflicting, views. It can be concluded that such attitudes are, to a large extent, a consequence of the constant conflict between deeply entrenched traditional values on the one hand, and innovation and impact of new pedagogical ideas and concepts on the other.

Implications of pedagogical movements in the development of classrooms and the changes in the broader historical context can be viewed through two separate, influential lines.

The first line is predominantly represented by the development of school architecture caused by dynamic changes in the social context, and by the perception of socially acceptable pedagogical concepts. Over time, the development of society, culture, economics, science and technology has certainly had an impact on the development of pedagogical thought and school architecture. However, these influences that shaped socially acceptable models of education, directly or indirectly, were often an obstacle to their development.

The second influential line is represented by individual innovative pedagogical concepts whose field of activity included the question of the architectural organization of the educational space as an important contextual factor for the realization of the pedagogical process. The fact is that the pedagogical innovations that have proven to be successful in practice, and that were adequately followed by school architecture, were the result of individual perceptions and opinions of the author. Such views, which were largely exempt from strict social norms, have led to innovative solutions that have found wide application in practice. Some of the typical examples of this are the pedagogical movements of Marie Montessori or Rudolf Steiner, at the beginning of the twentieth century, whose concepts of spatial development were far ahead of the time, and remain modern even today.

In both cases, taking into account different socio-cultural circumstances, the level of development of school architecture in Europe is conditioned primarily by the continuity and quality of the perception of pedagogical movements, as related to the appropriate environment in which the pedagogical process is to be implemented.

Based on the observed historical layers, one can conclude that the continuity or discontinuity of innovative trends in education is the result of an intensive questioning and revision of current pedagogical trends and methods, as well as the enrichment of goals and objectives of the educational process. Certainly, in this context, one should particularly stress the matter of permanence and change in school architecture, as these are specific details that need to be further explored.
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