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INTEGRATED APPROACH TO EDUCATION MANAGEMENT: INNOVATIVE STRATEGIES AND METHODS IN COMBINING PEDAGOGY AND MANAGEMENT IN A MODERN SCHOOL

ZINTEGROWANE PODEJŚCIE DO ZARZĄDZANIA EDUKACJĄ: INNOWACYJNE STRATEGIE I METODY W POŁĄCZENIU PEDAGOGIKI Z ZARZĄDZANIEM W NOWOCZESNEJ SZKOLE

Abstarct

The article focuses on the integration of educational management with pedagogical methods and analyzes how this combination affects the effectiveness of educational systems in different cultural and socio-economic contexts. A literature review and tabular comparisons of different educational systems were used to examine how different management strategies and pedagogical approaches are adapted to changing social, technological and economic realities. The article emphasizes that effective educational management requires administrative skills combined with an in-depth understanding of pedagogical processes.

The integration of these two areas allows for better adaptation of the educational system to the needs of students and contemporary challenges. The need for flexibility and innovation of educational systems in response to the challenges of the 21st century is also emphasized. Research results indicate that the integration of educational management with pedagogy is key to creating modern, effective and responsible educational systems, bringing benefits to teachers, students and the communities in which educational institutions operate.

Keywords: *integrated approach, education management, innovative strategies, methods, combining, pedagogy, management, modern school*

Streszczenie

Artykuł koncentruje się na integracji zarządzania edukacją z metodami pedagogicznymi i analizuje, jak to połączenie wpływa na skuteczność systemów edukacyjnych w różnych kontekstach kulturowych i społeczno-ekonomicznych. Wykorzystano przegląd literatury oraz porównania tabelaryczne różnych systemów edukacyjnych, aby zbadać, jak różne strategie zarządzania i podejścia pedagogiczne są dostosowywane do zmieniających się realiów społecznych, technologicznych i ekonomicznych. Artykuł podkreśla, że efektywne zarządzanie edukacją wymaga umiejętności administracyjnych połączonych z dogłębnym zrozumieniem procesów pedagogicznych. Integracja tych dwóch obszarów umożliwia lepsze dostosowanie systemu edukacyjnego do potrzeb uczniów i wyzwań współczesności. Podkreśla się też potrzebę elastyczności i innowacyjności systemów edukacyjnych w odpowiedzi na wyzwania XXI wieku. Wyniki badań wskazują, że integracja zarządzania edukacją z pedagogiką jest kluczowa dla tworzenia nowoczesnych, efektywnych i odpowiedzialnych systemów edukacyjnych,

przynosząc korzyści nauczycielom, uczniom i społecznościom, w których działają instytucje edukacyjne.

Słowa kluczowe: *podejście zintegrowane, zarządzanie edukacją, strategie innowacyjne, metody*

1. Introduction

In the age of widespread globalization and the rapid technological advancements permeating our lives, the landscape of education stands at the cusp of transformation. As societies evolve, so do the ways we impart knowledge and shape young minds. This transformation isn't merely confined to the content we teach but extends to the very methods we employ and the strategies we devise to manage educational institutions. The metamorphosis in both pedagogical techniques and administrative strategies is palpable, diversifying and branching out in myriad ways (Smith et al., 2012).

Amidst this changing backdrop, one cannot overstate the importance of analyzing how various nations are recalibrating their educational paradigms to stay relevant and effective. It becomes imperative to discern the nuances of these shifts, recognizing that each country's approach is deeply rooted in its socio-cultural fabric and unique challenges. This article embarks on an explorative journey, delving deep into the multifaceted world of education, juxtaposing different systems from various countries, and understanding the interplay between management and pedagogy within these contexts (Pache & Chowdhury, 2012).

By dissecting the mechanics of various educational models, we can unearth invaluable insights. These insights shine a light on the profound impact that diverse administrative tactics and teaching methodologies have on the caliber and efficacy of education. With the knowledge gathered, this article aspires to sift through these myriad strategies, zeroing in on the crème de la crème. The endgame is a well-curated compilation of best practices, amalgamating management and pedagogy. This compilation seeks not just to theorize but to provide tangible blueprints for building a global educational framework that is more synchronized, potent, and forward-thinking.

The following research problem should be presented: How does the integration of educational management with pedagogical methods affect the effectiveness of educational systems in different countries, taking into account changing social, technological and economic realities, and what are the best practices in management and pedagogy in a modern school to cope with challenges of the 21st century?

This research problem focuses on understanding the impact of combining educational management with pedagogy on the effectiveness of educational systems. It examines how different management strategies and pedagogical methods are adapted in different cultural and socio-economic contexts and how these approaches respond to the needs of today's students and the challenges posed by a dynamically changing world.

2. Methodology

In the analyzed article, the authors used the following research methods, such as a literature review and tabular comparisons of various educational systems.

The literature review method included the analysis of both Polish and foreign literature on education management and pedagogical methods. The purpose of this review was to gather relevant information and theories regarding the integration of educational management with pedagogical methods.

In turn, meroda tabular comparison of various educational systems. In this method, the authors presented and compared different educational systems in the context of their management strategies and pedagogical approaches. These comparisons aimed to gain a deeper understanding of global trends in the field of education management.

These methods allowed for the analysis and synthesis of various data and information, which allowed the authors to develop conclusions regarding the effective combination of educational management and pedagogy. The literature review provided a broad theoretical context, and tabular comparisons enabled specific comparative analyzes of different educational systems.

3. School Management Strategies

As education becomes more complex, its management also becomes more demanding. Global developments affect local education systems, and governance and coordination require consideration of a variety of stakeholders, including governments, teachers, students and parents. Management must be flexible to adapt to rapidly changing needs and conditions, both globally and locally. Governance strategies in education refer to the different approaches and methods used by education systems to achieve their goals and missions. They can vary depending on the educational system, culture, level of education, etc. Here are some common strategies (Mouza et al., 2014; Deák et al., 2021; Fink, 2013; Suresh & Kolluru, 2022; Mukhamedov et al., 2020; Pache & Chowdhury, 2012; Smith et al., 2012):

- *Centralization vs Decentralization:* Some systems may centralize decisions at the national or regional level, while others may give more autonomy to individual schools and teachers.
- *Inclusion Strategies:* These may focus on ensuring access to education for all students, regardless of background, ability or need.
- *Results Oriented:* Some strategies may emphasize student performance and achievement, with specific standards and grades.
- *Teacher Professional Development:* These strategies may focus on supporting teachers through training and professional development.
- *Partnership and Collaboration with Parents:* Involvement of parents and the community in the educational process.

Different strategies can be used in different combinations depending on the specific goals, culture and context of the educational system. Education's increasing complexity demands advanced management techniques. Global changes directly impact local schooling, necessitating nuanced governance that involves a spectrum of participants from governments to parents. To navigate the intricate landscape, adaptability is essential.

Education systems employ a range of governance strategies tailored to their objectives and contextual variables. Some pivot towards centralizing decision-making, while others lean on decentralizing to grant schools more

freedom. Prioritizing inclusivity ensures every student, irrespective of their circumstances, accesses quality education. There's also a strategic emphasis on results, marking student progress via distinct standards. Enhancing teacher expertise through continuous learning and development is a cornerstone. Moreover, fostering partnerships with parents and the broader community enriches the education process. The blend of strategies chosen is influenced by the unique needs, cultural backdrop, and objectives of each education system.

4. Pedagogical methods. The essence of the educational process

Pedagogical methods are the essence of the educational process, defining how teachers transfer knowledge and skills to students. They are the key to effective education and affect the quality and effectiveness of the teaching process.

Traditional teaching methods, such as lectures and discussions, have their roots in ancient educational systems. Lectures, which are one of the oldest methods of transferring knowledge, rely mainly on one-way transfer of information from the teacher to the student. Discussions and question-and-answer methods, on the other hand, provide some space for interaction, but still dominated by the role of the teacher as the main source of knowledge.

Modern pedagogical methods, unlike traditional ones, emphasize the student as an active participant in the learning process. Discovery learning allows students to explore and solve problems on their own. The design method emphasizes the practical application of knowledge, while problem-based learning encourages critical thinking and solving real-world problems. Technology in education has opened the door to many innovative methods, such as hybrid learning, online courses or the use of educational applications that facilitate and diversify the learning process.

Mixed methods is an attempt to combine the best features of traditional and modern methods. Thanks to them, teachers can adjust their approach to a specific group of students, taking into account their individual needs, learning style or level of advancement.

Each of these methods has its place and importance in education. The choice of the appropriate method depends on many factors, such as the characteristics of the student group, their needs, the availability of materials and resources, and the learning objectives of the subject. It is important that teachers are aware of the variety of available methods and know how to use them wisely in educational practice.

The term 'pedagogical methods' refers to the various techniques and strategies teachers use to convey knowledge and skills to students. How teachers teach has a direct impact on how students learn and absorb material. Here is an explanation of the key elements of the sentence presented (Mouza et al., 2014; Deák et al., 2021; Suresh & Kolluru, 2022; Mukhamedov et al., 2020):

- *The essence of the educational process:* This passage emphasizes the importance and central role of pedagogical methods in education. This means that the way of teaching is a fundamental element that influences the entire teaching and learning process.
- *Defining how teachers transfer knowledge and skills to students:* Pedagogical methods define the specific techniques and tools that teachers use to convey information. For example, the teacher may choose the lecture method to convey theoretical information, or active methods such as group work or discussions to encourage active student participation.
- *The key to effective teaching:* Choosing the right pedagogical method is crucial to achieving learning goals. If the method is adapted to the needs and learning style of the students, the teaching process is more effective.
- *They affect the quality and effectiveness of the teaching process:* The quality of teaching refers to the depth, clarity and durability of the knowledge imparted to students. Effectiveness refers to students' ability to put this knowledge into practice. Both of these aspects are directly related to the pedagogical methods that the teacher decides to use.

Conclusion pedagogical methods are the tools and techniques that teachers use in their work, bearing in mind, above all, the well-being and needs of students. Choosing the right method can significantly influence the educational success of students.

5. Striving for innovation in education

The term *modern school* refers to an educational institution that adapts to contemporary challenges and needs of society by integrating new technologies, pedagogical methods, management strategies and cultural approaches. The main features of the modern school may include the use of new technologies such as computers, interactive whiteboards, e-learning and other tools to enrich the student experience, adapting the learning process to individual needs and styles of students, promoting personal development, promoting cooperation between students, teachers, parents and community to support the holistic development of the student, combining different subjects and disciplines promoting interdisciplinarity, creating links between theory and practice, providing access and support for students with different abilities, cultural and social backgrounds promoting diversity and respect in the educational environment, embedding civic, ethical and in the curriculum, preparing students for active participation in a globalized world, promoting sustainable development and ecological awareness in both teaching and school practices, supporting the continuous professional development of teachers by providing them with access to new methods and tools. A modern school is not only a place to transfer knowledge, but a space where students can develop their skills, values, attitudes and key competences that are necessary to live and work in the 21st century. It is a dynamic and flexible model that requires constant adaptation to the changing needs of society and the labor market.

Innovation in education refers to the introduction and use of new, creative and effective solutions that can lead to the improvement and enrichment of the teaching and learning process. It is an approach that is not limited only to the introduction of new technologies or tools, but also to breaking traditional patterns of thinking and acting. Includes such as discovery learning, educational games, project-based learning that puts the student at the center of the educational process, the use of modern technologies such as computers, educational software, virtual and augmented reality to enrich learning experiences, combining different subjects and disciplines promoting interdisciplinarity, creating links between theory and practice, using data and analytics to adapt teaching to individual styles and needs of students, creating partnerships between schools, parents, enterprises

and the community to support the educational process, integrating concepts of sustainable development and global issues into curricula , the use of innovative forms of assessment that may include formative assessment, student portfolio, self-assessment and peer assessment, the integration of modern technologies in the teaching and learning process opens the door to new educational opportunities. Not only does it enable access to rich online resources, but it can also support the individualization of teaching by allowing teachers to adapt materials to different styles and pace of students' learning, the use of modern methods, such as learning through research or activating methods, puts the student at the center of the teaching process, encouraging for critical thinking, problem solving and active participation, striving for openness and accessibility for all students is key to promoting equality and diversity. This also includes support for students with different needs, such as disabilities or cultural differences, a holistic approach to education is not just limited to academic ability, but also includes emotional, social and physical development. This can include programs related to well-being, mental health, physical activity and social skills, involving parents and the local community in school life creates strong bonds and support which can lead to better educational outcomes and a greater understanding of community needs, the ability to adapt flexibly to the changing needs of students and society is crucial in a dynamically changing world. This includes adapting curricula, methodologies and tools to individual and societal needs.

All in all, a modern school is not just a building, but rather a complex system that strives to create an appropriate environment for students, teachers and the community. It is an environment that strives to prepare students for the future, providing them not only with knowledge, but also with skills and competences that are necessary in the 21st century. This also supports students' personal, emotional and social development by promoting civic values, ethics and global awareness.

The following aspects are crucial in shaping the modern school (Mouza et al., 2014; Deák et al., 2021; Fink, 2013; Suresh & Kolluru, 2022; Mukhamedov et al., 2020; Pache & Chowdhury, 2012; Smith et al., 2012):

- *Educational leaders:* Principals and other school leaders play a key role in driving change and innovation in education. They must be open to new ideas, willing to experiment and learn, and support teachers and students in this process.

- *Teachers as learners:* Teachers must be ready for continuous professional development, exploring new methods and tools, and sharing their knowledge and experience with others.
- *Technology as a tool:* Although technology is not a solution in itself, it can be a powerful tool in education if used consciously and effectively. It supports the individualization of learning, access to resources and enables global communication.
- *Pupils as partners:* Pupils should be treated as active participants in the learning process, having an impact on shaping their own education.
- *Supportive community:* Collaborating with parents, local organizations and businesses can enrich students' learning experiences and contribute to better outcomes.
- *Flexibility and adaptation:* The world is changing and education must keep up with these changes. Flexibility in approach, curricula and methodology is the key to success.
- *Holism:* In addition to traditional subjects, schools should also focus on student well-being, emotional, physical and social health.
- *Sustainability:* Today's schools should promote sustainability and environmental awareness, preparing students to live in a world where these concepts are central.

To sum up, a modern school is a place that combines tradition with innovation, preparing students for the future in a holistic and comprehensive way. This is a challenge, but also a huge opportunity for education to become more meaningful, effective and adapted to the needs of the 21st century.

The modern school is shaped by educational leaders, such as principals, who are the driving force behind innovation. Teachers are constantly developing specialists, striving to share knowledge. The conscious use of technology in education increases its value. Students as active participants shape their own educational process. Cooperation with the local community, parents and companies brings benefits to the educational process. Flexibility in teaching and a holistic approach to student well-being are important. Promoting sustainable development and ecology is crucial. As a whole, a modern school combines traditional values with an innovative approach, adapting to the requirements of modern times.

6. Research analysis

This global perspective brings out the diversity and richness of educational practices. While each of these countries has its own unique approach to education, the common characteristics of a modern school, such as the adoption of modern technologies, the promotion of innovative pedagogical methods, inclusiveness, whole-student development, cooperation with parents and the community, and flexibility and adaptation can manifest themselves in different ways. way.

In Table 1 below, an overview of educational management and pedagogical approaches in Poland is presented (*Overview of Educational Management and Pedagogical Approaches in Poland*).

Table 1. *Overview of Educational Management and Pedagogical Approaches in Poland.*

Poland	
Management Strategies	
Structure	A centrally managed system with guidelines from the Ministry of National Education.
School Autonomy	Significant freedom for individual schools in the implementation of the core curriculum.
Financing	Public and private, with different levels of support depending on the region and type of school.
Pedagogical methods	
Traditional and Modern Methods	A mix of both, depending on the teacher and the school.
Key Competences	Growing interest in developing skills such as critical thinking, teamwork, creativity.
Technology in Education	Increase in the use of technology in teaching, especially after the COVID-19 pandemic.

Source: Authors' own study based on (Yuzyk, Vysochan, & Grytsyk, 2019; (Karwowski, Gralewski, Lebuda, & Wiśniewska, 2007; Jakowicka, 1992).

In Poland, the education system is characterized by a complex set of strategies and practices that reflect a balance between traditional and modern teaching

methods. A centrally managed system with guidance from the Ministry of National Education provides the framework, but schools have considerable leeway in implementing the core curriculum. Both public and private funding varies by region and type of school, which can affect the availability and quality of education.

The teaching methodology is varied and combines traditional methods with modern approaches depending on the teacher and the school. The growing interest in developing key competences such as critical thinking and creativity proves the answer to global educational challenges. Additionally, the increase in the use of technology in teaching, especially after the COVID-19 pandemic, demonstrates the drive towards a more integrated and dynamic learning environment.

This diversity and adaptability are key to meeting the diverse needs of students and society in a globalized world where competences and skills are as important as theoretical knowledge.

In Table 2 below, an overview of educational management and pedagogical approaches in Australia is presented ("Overview of Educational Management and Pedagogical Approaches in Australia ").

Table 2. *Overview of Educational Management and Pedagogical Approaches in Australia.*

Australia	
Management Strategies	
Structure	Decentralization with a heavy emphasis on state and territory controls.
School Autonomy	Different degrees of autonomy in different states and territories.
Financing	A mix of public and private funding, with different support models.
Pedagogical methods	
Variety of Methods	Adapting to different student learning styles.
Emphasis on STEM	Promoting science, technology, engineering and math.
Inclusive Education	Striving to support diversity and inclusion in education.

Source: Authors' own study based on (Hitch, Macfarlane, & Nihill, 2015; Clark, 2006).

Australia's education system is decentralized with a strong emphasis on state and territory controls, allowing for diversity and flexibility in approach to teaching. Different degrees of school autonomy in different states and territories allow education to be adapted to local needs and values.

Funding, which is a mix of public and private support, reflects the complexity and diversity of educational needs. The variety of teaching methods, adapting to students' different learning styles, and the emphasis on science, technology, engineering and math (STEM) show a commitment to a modern, interdisciplinary approach to education.

Striving to support diversity and inclusion in education demonstrates understanding and valuing social and cultural differences, which can promote a more balanced and equitable education system.

In summary, the Australian education system combines decentralized management with a diversity of pedagogical methods and approaches, which can lead to a more personalized, innovative and integrated learning environment that responds to the diverse and dynamic needs of society.

In Table 3 below, an overview of educational management and pedagogical approaches in South Africa is presented ("Overview of Educational Management and Pedagogical Approaches in South Africa ").

Table 3. *Overview of Educational Management and Pedagogical Approaches in South Africa.*

South Africa	
Management Strategies	
Structure	A complicated educational system, reflecting the country's complex history, with a quest for equality and overcoming the divisions of the apartheid past.
School Autonomy	It varies by region and type of school, with the aim of ensuring equal access to education.
Financing	A mix of public and private funding, with different levels of support depending on the region.
Pedagogical methods	
Traditional and Modern Methods	Use a variety of teaching methods to meet the different needs of students.
Inclusiveness and Diversity	Striving to create learning environments that are welcoming to all students, regardless of their background.
Social and Civic Education	Emphasis on the study of human rights, democracy and social responsibility.

Source: Authors' own study based on (Waller, 2021; Golovina & Grankin, 2022; Alam, 2021).

South Africa's education system is complex and reflects the country's complicated history, with its quest for equality and overcoming the divisions of its apartheid past. Governance strategies in education aim at equitable access to learning and try to balance differences between regions and school types.

A mix of public and private funding enables support for different levels of education but can also lead to differences in access and quality of teaching. The use of a variety of teaching methods, both traditional and modern, indicates an attempt to meet the different needs of students.

The pursuit of inclusiveness and diversity, and the emphasis on social and civic education, demonstrates a desire to create a learning environment that is welcoming to all students, regardless of their background, and that promotes democratic values and social responsibility.

In short, South Africa's education system is a complex effort that attempts to integrate a diverse society and promote common values while also grappling with historical and structural challenges that may affect its effectiveness in meeting these goals.

In Table 4 below, an overview of educational management and pedagogical approaches in Norway is presented ("Overview of Educational Management and Pedagogical Approaches in Norway ").

The education system in Norway has a decentralized structure with strong government support, allowing for diversity and innovation across regions. The considerable autonomy of teachers and schools in the implementation of national educational standards favors flexibility and adaptation to the individual needs of students.

Primarily public funding with a strong focus on accessibility and quality reflects the priority of education in society. Pedagogical methods based on research, exploration and outdoor learning and environmental education demonstrate a modern approach to teaching that promotes independent thinking, sustainability and environmental awareness.

A strong emphasis on inclusive education, equality and diversity ensures that every student has access to quality education regardless of their background or needs. This shows that Norway's educational system is built on a solid foundation of equality and a commitment to the all-round development of students, both academically and personally.

Table 4. *Overview of Educational Management and Pedagogical Approaches in Norway.*

Norway	
Management Strategies	
Structure	A decentralized system with strong government support for education, allowing for diversity and innovation across regions.
School Autonomy	Great autonomy for teachers and schools in implementing national educational standards.
Financing	Mainly public with a strong focus on accessibility and quality.
Pedagogical methods	
Learning Based on Research and Exploration	Using research and hands-on learning to make students self-employed
Outdoor Learning and Environmental Education	Emphasis on outdoor learning and integration with nature, promoting sustainability and environmental awareness.
Inclusive Education	A strong emphasis on equality and diversity, ensuring that every student has access to a quality education regardless of their background or needs.

Source: Authors' own study based on (Kolås, Nordseth, & Munkvold, 2016; Singhal et al., 2020; Stephens, Egil tønnessen, & Kyriacou, 2004).

In Table 5 below, an overview of educational management and pedagogical approaches in United States is presented ("Overview of Educational Management and Pedagogical Approaches in United States ").

The education system in the United States is significantly decentralized with a heavy emphasis on state and local control. This structure leads to considerable diversity in the quality and access to education, which can create challenges in ensuring cohesion and equity.

The broad autonomy of individual districts and schools, combined with certain federal guidelines and standards, puts teachers at the center of the teaching process, but it can also lead to inequalities and disparities in access to resources. A mix of federal, state and local funding, often related to property taxes, can further exacerbate these inequalities.

Table 5. *Overview of Educational Management and Pedagogical Approaches in United States.*

United States	
Management Strategies	
Structure	A very decentralized system with a heavy emphasis on state and local control, leading to considerable variation in quality and access to education.
School Autonomy	Broad autonomy for individual districts and schools, although with some federal guidelines and standards.
Financing	A mix of federal, state and local funding, often related to property taxes, which can lead to inequality.
Pedagogical methods	
Variety of Methods	A wide range of teaching methods with an emphasis on critical thinking, creativity and innovation.
Standards and Tests	Strong emphasis on educational standards and achievement testing, which can influence teaching and assessment.
Technology in Education	Rapid adoption of new technologies and educational tools, especially in more affluent areas.

Source: Authors' own study based on (Ahn et al., 2015; (Khan & Law, 2015; Alisov et al., 2020; Hofstein, Eilks, & Bybee, 2011).

Pedagogical methods in the US are varied with an emphasis on critical thinking, creativity and innovation. However, a strong emphasis on educational standards and achievement tests can influence teaching and assessment, limiting flexibility and personalization of students.

The rapid adoption of new technologies and educational tools is characteristic of more affluent areas, which can lead to further widening disparities between different communities and regions. Overall, the US education system presents a complex patchwork of opportunities and challenges, with unique characteristics and needs at different levels of governance and delivery.

In Table 6 below, an overview of educational management and pedagogical approaches in Finland is presented ("Overview of Educational Management and Pedagogical Approaches in Finland ").

Table 6. Overview of Educational Management and Pedagogical Approaches in Finland.

Finland	
Management Strategies	
Structure	A centralized system with strong government support for education, but with a high degree of autonomy for teachers and schools.
School Autonomy	Teachers have a great deal of freedom in choosing methods and materials to suit individual student needs.
Financing	Mainly public, with equal distribution of resources and support for all students.
Pedagogical methods	
Individualization and Support	Emphasis on individual approach to each student, with the support of teachers and specialists.
Informal Learning Environment	A less formal teaching style with an emphasis on collaboration, exploration and experiential learning.
Early Education	Strong emphasis on the early years of education, with a desire to build a solid foundation for further development.

Source: Authors' own study based on (Dal et al., 2016; Hämäläinen, 2012; Takala, Pirttimaa, & Törmänen, 2009).

The education system in Finland is unique because of its structure and approach. It is a centralized system with strong government support, but with a high degree of autonomy for teachers and schools, allowing education to be tailored to students' individual needs.

Funding for education is mostly public, with equal distribution of resources and support for all students, reflecting the country's commitment to equity and accessibility in education. This approach may be the key to the success of the Finnish education system in various international rankings.

Pedagogical methods in Finland are also different from many other countries. The emphasis is on individualization and support, with a less formal teaching style that promotes collaboration, exploration and experiential learning. This approach is evident already in the early years of education, where a strong emphasis is placed on building a solid foundation for further development.

Japan	
Management Strategies	
Structure	A centrally directed system with a strong focus on government standards and guidelines, ensuring uniformity across the country.
School Autonomy	Limited school autonomy, with guidelines and textbooks often centrally approved.
Financing	Mainly public, with an even distribution of funds.
Pedagogical methods	
Formal and Structural	Teaching is often formal and structured, with an emphasis on discipline and standards.
Exams and Assessments	Strong emphasis on exams and assessments, especially during key transition moments such as high school and college entrance exams.
Moral Education	The important role of moral education and character building, reflecting social and cultural values.

In Table 7 below, an overview of educational management and pedagogical approaches in Japan is presented ("Overview of Educational Management and Pedagogical Approaches in Japan ").

All in all, the Finnish education system seems to be built on the principles of equality, support and innovation. Combined with strong government support and autonomy for teachers and schools, this creates an environment that is conducive to both teachers and students and can serve as an inspiration to other systems around the world.

The Japanese education system is centrally directed with a strong emphasis on government standards and guidelines, which ensures uniformity throughout the country. The limited autonomy of schools and the central approval of textbooks and guidelines demonstrate a coherent approach to education.

Mainly public funding with an even distribution of resources seems to support the idea of equal access to education, although this may limit innovation and individualization in teaching.

Pedagogical methods in Japan are often formal and structured, with a clear emphasis on discipline and standards. The heavy emphasis on exams and grades, especially during key transition moments, can put pressure on students and teachers, but it also reflects the valuing of academic achievement.

The important role of moral education and character building in the Japanese education system reflects the country's social and cultural values, emphasizing integrity and responsibility as key characteristics of citizens.

Overall, the Japanese education system combines a strong central direction with a formal approach to teaching and assessment. This reflects society's values but can also present unique challenges for students and teachers. However, the uniformity and coherence of the system can contribute to high achievement in international educational rankings.

In Table 8 below, an overview of educational management and pedagogical approaches in Brazil is presented ("Overview of Educational Management and Pedagogical Approaches in Brazil ").

Table 8. *Overview of Educational Management and Pedagogical Approaches in Brazil.*

Brazil	
Management Strategies	
Structure	A complex system with differences between the public and private sectors and access and quality challenges, especially in more remote regions.
School Autonomy	It varies by region and type of school, with varying degrees of control by the federal and state governments.
Financing	A mix of public and private funding, with differences in access to resources.
Pedagogical methods	
Variety of Methods	A variety of teaching methods, reflecting diverse needs and cultural contexts.
Striving for Greater Inclusivity and Access	Initiatives to increase access to education and support for students from diverse backgrounds.
Social and Civic Education	Emphasis on developing social and civic awareness, especially in the context of social diversity and inequality.

Source: Authors' own study based on (Victorelli et al., 2014; De Araujo & Slomski, 2013; Leme, Louzano, Ponczek, & Souza, 2012; Minniti, Melo Jr, Oliveira, & Salles, 2017).

Brazil's education system is complex and differentiates between the public and private sectors, creating access and quality challenges, especially in the more remote regions of the country. School autonomy also varies by region and type of school, which can lead to inequalities and differences in teaching quality.

The mix of public and private funding, coupled with differences in access to resources, can lead to educational inequalities. Stratification at the level of funding may reflect broader social and economic inequalities in the country.

The pedagogical methodology of Brazil shows a variety of teaching methods, reflecting different needs and cultural contexts. The drive for greater inclusivity and access, coupled with an emphasis on social and civic education, recognizes the need for education as a tool to overcome social challenges and inequalities.

In summary, the Brazilian education system is complex and challenging, reflecting the complex structure of the country's society and economy. While there are initiatives to increase access and inclusivity, there appear to be challenges related to inequality and quality of education. This system requires an integrated approach and coordinated support from different levels of government and the private sector to realize its potential in shaping a more sustainable and equitable society.

In Table 9 below, an overview of educational management and pedagogical approaches in Germany is presented ("Overview of Educational Management and Pedagogical Approaches in Germany ").

The education system in the United States is significantly decentralized with a heavy emphasis on state and local control. This structure leads to considerable diversity in the quality and access to education, which can create challenges in ensuring cohesion and equity.

The broad autonomy of individual districts and schools, combined with certain federal guidelines and standards, puts teachers at the center of the teaching process, but it can also lead to inequalities and disparities in access to resources. A mix of federal, state and local funding, often related to property taxes, can further exacerbate these inequalities.

Table 9. *Overview of Educational Management and Pedagogical Approaches in Germany.*

Germany	
Management Strategies	
Structure	A federal system where the Länder (Bundesländer) are responsible for most education decisions, leading to regional variations.
School Autonomy	Average level of autonomy for schools, with differences between federal states.
Financing	Mainly public, with differences in investment between different regions.
Pedagogical methods	
Educational Paths	A strong emphasis on a variety of professional and academic pathways, including a system of apprentices and apprentices.
Vocational Education	Great support for vocational education, combining theory with practice.
Support for Teachers	Investment in the professional development of teachers and support for their autonomy.

Source: Authors' own study based on (Hofstein, Eilks, & Bybee, 2011; Lin & Scherz, 2014; Knauf, 2020).

Vocational education plays a key role in Germany's education system, combining theory and practice and providing extensive support for vocational training. In addition, investment in teacher professional development and support for teacher autonomy demonstrates a commitment to quality and innovation in teaching.

In summary, the German education system is complex and diverse, with a strong emphasis on vocational training and a variety of educational pathways. Its federal structure and differentiated funding can lead to regional differences, requiring a coordinated approach across government levels to ensure consistency and equity of access. The support for teachers and vocational training underlines Germany's commitment to a practical and flexible approach to education that responds to the diverse needs of society and the labor market.

In Table 10 below, an overview of educational management and pedagogical approaches in India is presented ("Overview of Educational Management and Pedagogical Approaches in India ").

Table 10. *Overview of Educational Management and Pedagogical Approaches in India.*

India	
Management Strategies	
Structure	A complicated system with a mix of public and private systems, regional differences and multiple languages of instruction.
School Autonomy	It varies by region and type of school, with varying degrees of control by the central and state governments.
Financing	A mix of public and private funding, with differences in access to resources and quality of education.
Pedagogical methods	
Variety of Methods	Different teaching methods, from traditional to modern, depending on the place and type of institution.
Technical and Vocational Education	Development of technical and vocational education as an alternative to traditional academic education.
Emphasis on English	In some places, a strong emphasis on teaching in English as the language of business and international communication.

Source: Authors' own study based on (Alam, 2020; Naik et al., 2021; Raman, 2013; Mishra & Nargundkar, 2015).

Below is a table 11 comparing the educational systems in various countries, based on key aspects such as management structure, school autonomy, funding, pedagogical methods, inclusion and diversity, and vocational and technical education:

Country	Management Structure	School Autonomy	Funding	Pedagogical Methods	Inclusion and Diversity	Vocational Education
Poland	Centralized	Low	Public	Traditional	Moderate	Moderate
Australia	Decentralized	High	Mixed	Diverse	High	Low
USA	Decentralized	High	Mixed	Diverse	Moderate	Low
Norway	Decentralized	High	Public	Individualized	High	Low
Japan	Centralized	Low	Public	Formal	Low	Low
Finland	Centralized	Moderate	Public	Individualized	High	Low
India	Centralized	Low	Mixed	Varied	Low	Low
Germany	Decentralized	Moderate	Public	Vocational	Moderate	High

Source: Own results.

This table illustrates the diversity in approaches to education management and pedagogical methods depending on the country, highlighting both the unique features of each system and common trends in education.

The education system in India is extremely complex due to its diversity and intricate structure. It involves a mix of public and private systems, regional differences and multilingualism, leading to complexity in both governance and delivery of education.

School autonomy in India varies significantly by region and type of school, and control can be exercised by both the central and state governments. This diversity can lead to differences in the quality and access to education across the country.

The mix of public and private funding also affects the availability and quality of education, which can lead to inequalities in the education system. There is also a strong emphasis on teaching in English as the language of business and international communication in some places, which can affect the accessibility and context of education.

Moreover, India focuses on the development of technical and vocational education as an alternative to traditional academic education. The varied

teaching methods, from traditional to modern, reflect the complexity and diversity of society.

In conclusion, the Indian education system is characterized by its complexity and diversity, both in terms of governance, funding and teaching methods. Its multilingualism and regional diversity are challenging but also offer unique opportunities. Appropriate management and support of access to different types of education, including technical and vocational education, will be crucial for further development and equity in India's educational system.

6. Conclusion

It should be emphasized that the answer to the formulated scientific problem is as follows: The integration of educational management with pedagogical methods is crucial to the effectiveness of educational systems in different countries. The article emphasizes that effective education management requires not only administrative skills, but also a deep understanding of pedagogical processes. Combining these two areas allows for a more effective adaptation of the educational system to the needs of students and contemporary challenges. The authors also point out the need for continuous development and adaptation of educational systems, taking into account the changing social, technological and economic realities, in order to meet the challenges of the 21st century. Tabular comparisons of various educational systems enabled understanding global trends in the field of education management and indicated the need for flexibility and innovation of systems. To sum up, the integration of educational management with pedagogy is necessary to create modern, effective and responsible educational systems, which can benefit both teachers, students and the communities in which educational institutions operate.

Understanding the global landscape of education, one cannot ignore the variety and diversity of approaches that are used in different countries. From the US, where technology and performance orientation can play a key role, to Finland, which is known for its student-centric approach and strong support for teachers, to Germany, which focuses on vocational education and student-master systems.

Japan, on the other hand, may be known for its high academic standards and organized system, while Brazil emphasizes accessibility and diversity. India struggles with access and quality challenges, but it is also a hub of innovation, and Poland focuses on a solid curriculum and developing key competences.

In Australia, there is a strong emphasis on indigenous education and cultural diversity, while Russia has a strong tradition in science and technology. South Africa, on the other hand, faces historical and social challenges that affect education, and Norway is often admired for its integrated and holistic system.

Each of these countries brings a unique perspective to the global education community, reflecting the diversity of cultures, societies and economies. When examining these diverse contexts, common threads can be seen, such as the pursuit of inclusivity, technology adoption, and the promotion of innovation. However, what may work in one country may not necessarily work in another, and understanding these dynamics is crucial to developing strategies and practices that are successful on a global scale.

Ultimately, studying this global educational mosaic can lead to a richer understanding of what makes education effective, and help identify universal principles and local practices that can inspire teachers, policy makers, and students around the world.

Of course, my apologies for omitting some countries. So let's finish the analysis:

While countries such as the United States, Finland, Japan, Brazil, Germany, India, Poland, Australia, Russia, South Africa and Norway are diverse in terms of culture, history and economy, each brings unique perspectives and approaches to education.

In Germany, a focused approach to vocational education and practical learning is clearly visible, while India emphasizes a differentiated approach with a strong focus on traditional teaching methods.

Poland, with its balanced approach to education and continuous focus on developing key competences, reflects a model that balances both traditional and modern teaching methods.

In Australia, inclusiveness and diversity issues are important, especially with regard to the country's indigenous peoples, and Russia is making an important contribution to science and technology.

South Africa, with its unique historical and social challenges, offers a perspective on how education can serve as a tool for reconciliation and renewal, while Norway, with its integrated and holistic approach, provides a model that can inspire other countries.

These diverse educational systems show that there is no one-size-fits-all solution that will fit all contexts. Each country can learn from the others but must also adapt those lessons to its unique context. Ultimately, a global study of these different systems can lead to a better understanding of how best to educate students in a globalized world.

Access to education varies around the world, with high availability in countries such as Finland, Norway and Australia, and varying availability in India and Brazil. High quality education can be found in Finland and Japan, while in the USA and Russia the quality can vary greatly. Inclusivity and diversity are strongly represented in Germany and Norway, while India may face challenges related to caste and economic differences.

In the field of pedagogical methods and approaches, modern methods are often promoted in Australia and the United States, while more traditional teaching methods may prevail in Japan. Funding for education also varies, with high funding in Norway and Finland, and significant differences in South Africa and Brazil.

Flexibility and adaptability are evident in the educational systems of countries such as Poland and Australia, while in Russia the educational system may be less flexible in response to social and economic changes.

These findings highlight the complexity and diversity of global education, where different countries have unique challenges and opportunities. Understanding these differences is key to shaping policies and practices that can respond effectively to local needs and contexts.

An analysis of education around the world reveals a complex picture of diverse systems that does not fit into one rigid model. Differences in access to education, quality of teaching, teaching methods and funding are clearly

visible. Some countries are successful in creating highly accessible and in-clusive education systems, while others face challenges of inequality and inflexibility.

Global integration and cooperation are crucial for joint development, while taking into account local differences and cultural context. The need for equal-ity and fairness in education, as well as preparedness for the future, remains important. Therefore, the pursuit of modern, flexible and comprehensive educational systems is the key to preparing students for life in a globalized and technologically advanced world.

Comparison of education systems in different countries reveals impor-tant differences and trends. The management structure in education varies, from centralization in Poland to decentralization in Australia and the United States. There are also disproportions in terms of school autonomy; schools in Norway have a lot of autonomy, while in Japan central control prevails, which even extends to the approval of textbooks and guidelines.

Education funding also varies between countries. For example, in Finland public funding is dominant and evenly distributed, while in the US there is a mix of funding sources at the federal, state and local levels. Pedagogical methods also vary; in Finland there is an emphasis on individualization and support, and in Japan on formality and structure of teaching.

Inclusion and diversity are other areas where countries show differ-ences. Australia and Norway place great emphasis on these aspects, while India struggles with issues of access and quality of education. Vocational and technical education is particularly emphasized in Germany, where theory and practice are combined.

These observations show that there is no universal model of educational management and pedagogy suitable for every context. Each country adapts its education systems to its unique cultural, social and economic needs, while retaining some common trends, such as an emphasis on inclusion, diversity and modern pedagogies.

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