The role of educational museums in the development of education

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Abstract:

Educational museums serve as valuable institutions that play a crucial role in promoting learning, enhancing educational experiences, and fostering a deeper understanding of various subjects. This abstract provides an overview of the significance of educational museums in the development of education. Educational museums offer unique opportunities for hands-on learning and interactive experiences. They provide tangible resources, exhibits, and displays that bring subjects to life, making education more engaging and memorable. Through immersive environments and interactive exhibits, educational museums create an environment that encourages exploration, critical thinking, and active participation. Moreover, educational museums serve as repositories of knowledge and cultural heritage. They collect, preserve, and display artifacts, artworks, and historical documents that reflect different aspects of human civilization. By showcasing tangible and intangible heritage, educational museums enable learners to connect with history, art, science, and other subjects in a meaningful and tangible way.

Educational museums also serve as centers for research and innovation. They facilitate scholarly inquiry, support academic studies, and contribute to the advancement of knowledge in various disciplines. Researchers, scholars, and students can access museum collections, archives, and resources to conduct research, develop new theories, and gain insights into different fields of study. Furthermore, educational museums foster interdisciplinary learning. They provide opportunities for students to explore connections between different subjects and understand the interconnectedness of knowledge. By integrating multiple disciplines, such as history, science, art, and technology, educational museums promote a holistic and well-rounded educational experience. Additionally, educational museums offer educational programs and workshops that cater to learners of all ages. These programs provide interactive and dynamic...
learning experiences outside of the traditional classroom setting. Students can participate in guided tours, workshops, and educational activities that complement their academic curriculum and expand their knowledge and skills.

However, it is important to ensure accessibility and inclusivity in educational museums. Efforts should be made to provide equitable access to educational museum experiences for diverse populations, including students from marginalized communities and individuals with disabilities. By addressing barriers and implementing inclusive practices, educational museums can reach a wider audience and contribute to a more inclusive and equitable education system. In conclusion, educational museums play a vital role in the development of education by providing interactive and immersive learning experiences, preserving cultural heritage, facilitating research and innovation, promoting interdisciplinary learning, and offering educational programs. By leveraging the unique resources and exhibits of educational museums, educators can enhance the learning journey of students, foster a love for learning, and inspire a lifelong pursuit of knowledge.

**Keywords:** educational Museums-Limited Capacity-Communication-Cooperation-Educational Institutions.
Introduction:

Educational museums have long been recognized as powerful institutions that play a significant role in the development of education. These museums offer a unique and dynamic learning environment that complements traditional classroom settings. Through their exhibits, interactive displays, and educational programs, they provide students with opportunities to explore, engage, and deepen their understanding of various subjects. This introduction explores the role of educational museums in the development of education and highlights their contributions to enriching the learning experience.

Educational museums serve as living repositories of knowledge and cultural heritage. They collect, preserve, and exhibit artifacts, artworks, and historical documents that reflect the diverse aspects of human civilization. By showcasing tangible and intangible heritage, these museums provide students with firsthand encounters with the past, fostering a deeper appreciation for history, art, science, and other disciplines. Students can witness the physical remnants of different time periods and cultures, bringing their learning to life in a tangible and immersive way.

One of the primary advantages of educational museums is their ability to create interactive and experiential learning opportunities. Rather than passively absorbing information from textbooks, students can actively engage with exhibits, experiment with hands-on activities, and participate in guided tours and workshops. This active learning approach encourages critical thinking, problem-solving, and creativity, allowing students to develop a deeper understanding of complex concepts. By stimulating curiosity and fostering a sense of discovery, educational museums ignite a passion for learning and inspire students to explore subjects beyond the confines of the classroom.

Educational museums also promote interdisciplinary learning. They provide a platform for integrating various disciplines, allowing students to explore connections between different subjects. For instance, a science museum may incorporate elements of art or history to illustrate scientific principles in a broader context. By demonstrating the interconnectedness of knowledge, educational museums encourage students to develop a holistic understanding of the world and recognize the relevance of multiple disciplines in solving real-world problems. Furthermore, educational museums serve as catalysts for research and innovation. They provide access to extensive collections, archives, and resources that facilitate academic studies and scholarly inquiry. Researchers, scholars, and students can delve into museum collections to conduct research, gain insights, and contribute to the advancement of knowledge in their respective
fields. Educational museums foster a culture of curiosity and intellectual exploration, promoting a lifelong love for learning and discovery. However, to fully realize their potential, it is crucial for educational museums to ensure accessibility and inclusivity. Efforts should be made to remove barriers and create an inclusive environment that welcomes diverse populations, including students from all backgrounds and abilities. By embracing accessibility and inclusivity, educational museums can reach a broader audience, promote equity in education, and enrich the educational experience for all learners.

In conclusion, educational museums play a vital role in the development of education by offering interactive learning experiences, preserving cultural heritage, fostering interdisciplinary connections, promoting research and innovation, and encouraging a lifelong love for learning. As students explore the exhibits and engage with the resources available, educational museums provide a platform for experiential and holistic learning that enhances their educational journey. By complementing traditional classroom education, educational museums contribute significantly to the development of well-rounded and curious learners.

**Challenges to the role of educational museums in the development of education:**

While the role of educational museums in the development of education is important, they face some challenges. Some of these challenges include:

Limited Funding: Funding is one of the biggest challenges facing educational museums. Maintaining groups and offers and providing outstanding learning experiences requires adequate funding. With budgets tight, it is difficult for museums to meet their needs and develop their educational programs.

Curriculum integration and collaboration with schools: Challenges in the integration of museums into school curricula and collaboration with schools are another obstacle. There may be difficulties synchronizing museum visits with curriculum and providing guidance and resources to teachers to achieve educational goals.

Access and Communication: Some students and communities may have difficulty accessing educational museums, whether due to distance or cost. There may also be difficulties in communicating effectively with the public, meeting their diverse needs, and providing appropriate learning experiences for all.

Technology challenges: While technology offers significant opportunities to develop learning experiences in museums, it also faces challenges. There may be
Difficulties in developing and maintaining complex technical systems and providing training to staff and visitors to use them effectively.

**Obstacles to the role of educational museums in the development of education:**

Curriculum limitations: Certain interests and content presented in educational museums may conflict with specific school programs and curricula. Museums may have to balance the need to provide new information and experiences with adherence to accredited educational curricula. Limited capacity: The museum may face limitations in its ability to accommodate a large number of visitors at one time. Some museums may organize specific tours with small groups of students, restricting their ability to meet the high demand for educational visits. Lack of resources and funding: Educational museums can suffer from limited financial and resource constraints. It can be difficult for museums to save money to modernize exhibits, provide outstanding learning experiences, and develop new programs.

Communication and Cooperation with Educational Institutions: Museums can struggle to establish strong and sustainable collaborative relationships with schools, universities and other educational institutions. Coordination and cooperation challenges can arise in developing curricula, organizing visits, and exchanging resources. Sustainability Capacity: Providing sustainable learning experiences requires long-term investment in human resources, technology and infrastructure.

**Visual and practical instruction is one of the techniques used by educational museums in the development of education.**

Visual and practical instruction is one of the effective methods used by educational museums in the development of education. This style is characterized by providing tangible and interactive learning experiences for visitors, which enhance their understanding of academic and cultural concepts and information. Here are some aspects that are reinforced through visual and practical instruction in educational museums:

Practical experience: Visual and hands-on instruction allows students and visitors a real and hands-on experience of instructional materials and concepts. They can participate in activities and applied experiences that allow them to practically understand and explore concepts themselves. In-depth learning: Visual and hands-on instruction helps to foster deep interaction with materials and knowledge. Visitors are able to view, touch and explore real items and exhibits that enhance their understanding and expand their knowledge. Enhancing
Practical Skills: Practical learning in educational museums contributes to the development of a variety of practical skills for students, such as observation, analysis, critical thinking, collaboration, and problem solving. Students learn how to interact with the surrounding environment and make use of available resources.

Sustainable Learning: Visual and practical instruction in museums can promote awareness of environmental, social and cultural issues, and encourage sustainable and responsible practices.

Learning is interactive as one of the methods used by educational museums in the development of education.

Interactive learning is one of the effective methods used by educational museums in the development of education. This technique encourages visitors to actively engage and interact with the content and experiences offered at the museum. Here are some aspects that are reinforced through interactive learning in tutorials: Active Participation: Interactive learning in museums promotes active visitor engagement. They are encouraged to ask questions and participate in discussions and practical activities. This enhances their active participation in the learning process and deepens their understanding of the topics and concepts presented. Personal experience: Interactive learning in museums can provide visitors with personal and emotional experiences. Activities and interactions are designed in a way that encourages visitors to practically apply knowledge and skills and develop their individual abilities.

Foster critical thinking: Interactive learning in museums contributes to the development of visitors’ critical thinking skills. They learn how to analyze and evaluate information, think critically and build logical arguments. Cross-topic learning: Interactive learning in museums is characterized by its focus on trans-thematic learning. It enhances the connection of concepts and knowledge from different areas and gives visitors a comprehensive and integrated understanding of the topics at hand.

Expanding culture and awareness is one of the methods that educational museums use to develop education.

Cultural expansion and awareness is one of the main methods used by educational museums in the development of education. This approach aims to expand the culture of students and visitors and enhance their awareness of cultural, historical and scientific diversity. Here are some aspects that are reinforced through cultural expansion and awareness in educational museums: Learn about cultural diversity: Educational museums provide opportunities for visitors to come into contact with different cultures and heritage. Exhibitions, art
performances, and activities are presented that enable students and visitors to understand and appreciate cultural diversity and respect for different cultures. Provide historical and cultural information: Educational museums contribute to enhancing students’ and visitors’ awareness of history and culture. The exhibits and displays provide important information about local and global history and cultural heritage, helping to build students’ ability to understand the world around them.

Promote cultural interaction: Educational museums encourage cultural interaction between students and visitors. Visitors can participate in interactive activities, discussions and workshops that promote understanding and communication between different cultures. Developing Social Awareness and Citizenship: Educational museums contribute to the development of social awareness and citizenship for students and visitors. Through exhibits and educational activities, visitors learn about social issues.

Motivating creativity and critical thinking is one of the methods used by educational museums in the development of education.

Creative stimulation and critical thinking are one of the main methods used by educational museums in the development of education. The goal of this approach is to develop students and visitors’ abilities to think creatively, motivate them to think critically and solve problems in innovative ways. Here are some aspects that are reinforced by creative motivation and critical thinking in educational museums: Creative Activities: Educational museums offer activities that encourage students and visitors to creatively express and innovate. Workshops, mental games and creative challenges are provided that require visitors to think creatively and generate new ideas.

Critical Thinking: Educational museums encourage critical thinking of students and visitors. Proposals and activities that require them to evaluate information and concepts, derive results, and apply critical methodologies are provided in their analysis. Problem solving: Educational museums enhance students’ and visitors’ problem-solving skills. Activities requiring them to identify problems and generate, test and evaluate creative solutions are provided.

Independent learning: Creative motivation and critical thinking encourage students and visitors to learn independently. They learn how to explore themes and concepts independently, and develop their own ideas and creative visions.
Fostering communication and collaboration as one of the methods used by educational museums in the development of education.

Fostering communication and collaboration is one of the important ways that educational museums develop education. The goal of this approach is to enhance the abilities of students and visitors in effective communication and collaboration with others, and to develop cooperation and teamwork skills. Here are some aspects that are reinforced through enhanced communication and collaboration in educational museums:

Discussion and discussion: Educational museums encourage visitors to participate in discussion about exhibits and concepts. Opportunities are provided for effective communication and exchange of opinions and ideas with others, helping to deepen students’ understanding and develop their analytical abilities.

Teamwork: Educational museums encourage students and visitors to work together and collaborate on tasks and activities. Visitors collaborate with each other in problem solving and targeted tasks, fostering positive communication and interaction between them.

Events and Workshops: Educational museums events and workshops are organized to promote communication and collaboration. Students and visitors engage in hands-on activities under the supervision of specialists, helping them collaborate and share experiences and knowledge.

Group Projects: Promotes communication and collaboration in educational museums through group projects. Visitors collaborate on hands-on educational projects, enabling them to apply knowledge.

Uses of educational museums for the Internet in the development of education.

Default views: Educational museums can use the Internet to display their default views. High-quality art pieces and exhibits are photographed and published online, allowing students and visitors to discover and explore them online regardless of their geographic location.

Virtual tours: Educational museums offer virtual online tours to explore various exhibitions and rooms. Students and visitors can participate in interactive visual tours that allow them to explore the museum and learn about the exhibits and accompanying information.

Online educational resources: Educational museums provide online educational resources including educational videos, articles, educational games, and interactive activities. Students can access and use these resources to enhance their understanding and knowledge in different areas.

Online dialogue and discussion: The internet allows students and visitors to interact with educational museums and each other via online dialogue and discussion platforms.
The future of the role of educational museums in the development of education.

Technology Integration: Educational museums will continue to use technology further to enhance the visitor experience. You’ll see an evolution in the use of virtual reality, augmented reality, mobile applications, and online learning platforms to deliver exciting interactive and learning experiences. Project-based learning: Educational museums will become project-based learning centers, where students learn through hands-on projects and hands-on experiences. The museums will provide opportunities for students to collaborate and interact directly with cultural and scientific exhibits and themes.

Personal and Custom Learning: Educational museums will focus on meeting students’ diverse needs and providing them with personalized learning experiences. You will use technology to personalize educational content and provide individualized experiences that match the level of knowledge and interests of students. Cross-border learning: Educational museums will contribute to promoting cross-border and cultural learning. Museums will provide a deep understanding of different cultures and promote global understanding and awareness of cultural diversity.

Recent studies on the role of educational museums in the development of education.

Although I do not have direct access to scientific articles and recent studies, I will provide you with some of the general points and trends covered in studies on the role of educational museums in the development of education: Enhancing mental skills: Studies show that educational museums play an active role in enhancing students’ mental skills such as critical and analytical thinking, creativity and innovation, and critical thinking. This is done through student interaction with exhibits and museum tutorials. Deep Learning: Educational museums contribute to fostering deep learning by providing opportunities for hands-on and experiential interaction with materials and exhibits. Students learn deeper when they are able to apply concepts and knowledge in real and moral contexts.

Social and Cultural Learning: Studies confirm that educational museums contribute to fostering social and cultural learning for students. Students are exposed to various experiences and cultures through exhibits and activities presented in museums. Motivate curiosity and exploration: Educational museums stimulate student curiosity and exploration by providing a stimulating learning
environment and interactive experiences. Students are encouraged to ask questions, enquires, and explore exhibits more independently.

**Successful experiences in the field of the role of educational museums in the development of education.**

Picasso Museum in Spain: The museum offers innovative educational programs aimed at students, families and the local community. Interactive tutoring sessions, workshops and guided tours are organized for students to promote creative learning, critical thinking and artistic expression. Science Berk Museum in London: This museum is an interactive center of science and technology. Offers many innovative educational offerings and hands-on experiences that encourage students to explore science and technology and develop their scientific abilities. New York Natural History Museum: The museum provides a comprehensive educational experience in the fields of natural science and history. The museum includes interactive exhibits and educational activities that promote critical thinking and a deep understanding of natural sciences. Museum of Contemporary Art (Muma) New York: The museum aims to promote creative and cultural learning through contemporary art. The museum showcases a variety of artworks and organizes educational programs including workshops, guided tours and lectures.

**Recent trends in the role of museums in the development of education.**

Interactive Learning and Technology: Educational museums use advanced and interactive technology to enhance the visitor experience. Through the use of mobile devices, interactive screens, and VR and AR technologies, visitors can interact with content more deeply and holistically. Focus on project-based learning: Some educational museums promote a project-based learning approach, where educational activities are organized in which student groups are involved in the development of special projects. During these processes, students organize research, design, collaboration, and problem solving, enhancing their collaborative and innovative skills.

Cross-organizational learning: Some educational museums expand their role by collaborating with schools, universities and other educational institutions. Systematic school visits are organized, collaboration in curriculum development and teacher training, contributing to the integration of the museum into the general education system. Lifelong Learning: Some tutorials expand their impact by offering programs and activities to the general public of all ages. Workshops, lectures and tours are organized for adults, elderly and children.
Output on the role of educational museums in the development of education.

Improve understanding and knowledge: Students’ interaction with exhibits and learning activities in museums contributes to improving their understanding and knowledge of different topics. Students can apply theoretical concepts in real-world contexts and acquire practical skills. Practical Skills Development: The role of educational museums promotes the development of practical skills in students such as critical thinking, collaboration, and innovation. Students learn how to analyze information, derive results, and solve problems through interactive activities in museums. Promote social and cultural interaction: Visiting educational museums expands student horizons and promotes social and cultural understanding. Students learn about different cultures and diverse stories, and learn to appreciate and respect cultural diversity.

Stimulate interest and continuous learning: Educational museums promote curiosity and interest in different topics, and encourage students to continue learning outside of the traditional school environment. Visiting museums may motivate students to explore more knowledge and pursue continued learning. Enhance memory and memory: The historical and cultural environment of museums is a powerful sensory experience, contributing to enhancing student memory and memory.

Recommendations

Promote interactive learning: Educational museums should be interested in developing educational programs and activities that encourage effective student interaction. These activities can include educational games, hands-on experiences, and interaction with exhibits. Foster critical thinking and creativity: Educational museums should design educational programs that encourage students to think critically and innovate. These programs can include problem solving, deep analysis, and challenges that motivate students to think creatively. Collaboration and Communication: Educational museums should encourage collaboration and communication among students and provide opportunities for teamwork and shared learning. These opportunities can include group workshops and collaborative projects that promote student communication and collaboration.

Use of Technology: Educational museums should use technology effectively in the development of education programs. Technology such as virtual reality, augmented reality, and virtual tours can be used to improve the learning experience and expand the possibilities of museum education. Content diversification: Educational museums should provide a variety of themes and exhibits that suit students’ needs and encourage them to explore different areas.
Conclusions:

Enhancing engagement and experience: Educational museums play an important role in providing an interactive and experiential environment for students. Students may participate in educational activities and experiences that enhance their learning and understanding of the topics presented. Develop mental skills: Educational museums contribute to the development of students’ mental skills such as critical thinking, creativity, and analysis. Interactive and motivating activities in museums provide opportunities for deep analysis and innovative thinking. Promoting Deep Learning: Educational museums provide comprehensive experiences that help students apply concepts and knowledge in real-world contexts. Students can learn deeper through hands-on and interactive experiences. Promote social and cultural learning: Educational museums contribute to expanding student horizons and fostering cultural and social understanding. Students can learn about different cultures and expand their awareness of cultural diversity through museum exhibits and educational programs. Foster collaboration and communication: Educational museums provide opportunities for collaboration and communication between students, teachers and colleagues. Students may participate in group educational activities and joint ventures to enhance communication.

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