



Creativity and Arts in Digital Social Innovation



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New Dimensions of the Disruptive Impact on the Art and Creativity in Digital Social Innovation

Cooperation for innovation and exchange of good practices

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<p>Abstract</p>	<p>There is the multifaceted relationship between creativity, art, digital social innovation, education, and their implications for the future of work. This book explores the sources of innovation and creativity, with a focus on the role of creativity in the arts. Furthermore, it discusses how digital social innovation has become a catalyst for novel forms of creative expression and collaboration. It also examines the potential impact of these trends on the future of work and the skills needed to thrive in an evolving landscape. The intersection of creativity, art, digital social innovation, and education is a dynamic field that shapes our understanding of innovation and its impact on society. This book aims to highlight key themes and explore their interconnectedness. Understanding the sources of innovation and creativity is crucial for fostering a culture of innovation in various domains. The role of curiosity, interdisciplinary collaboration, and diverse perspectives as essential drivers of innovation and creative thinking has been mentioned in this work. Artistic expression has long been recognized as a wellspring of creativity. The book delves into the relationship between creativity and the arts, exploring how artistic practices, such as visual arts, music, and performing arts, enhance innovative thinking, problem-solving skills, and imagination. The rise of digital technologies has revolutionized creative processes, enabling new forms of collaboration, communication, and artistic expression. The concept of digital social innovation and how it facilitates collective creativity, open-source collaborations, and participatory engagement in the digital realm has been reported. The Future of Work Advancements in technology, automation, and artificial intelligence are reshaping the future of work. The book examines the evolving landscape and discusses creativity, artistic skills, and digital social innovation in current and future workplace. It also explores the need for adaptability, critical thinking, and interdisciplinary competencies in a rapidly changing professional landscape. The integration of creativity into educational frameworks and pedagogical practices, emphasizing the importance of fostering creativity from an early age and promoting arts-based education has been reported. In summary, this book sheds light on the importance of creativity, art, digital social innovation, and education in driving innovation and preparing individuals for the future of work. It emphasizes the transformative power of creativity and the arts and highlights the potential of digital social innovation as a force for positive change in society.</p>
<p>Keywords</p>	<p>Creativity; arts; adult education; creative thinking; critical thinking; problem-solving; lifelong learning; digital social innovation; digital technologies; interactive art; creative teaching; creativity innovation; social creativity; types of creativity; creativity at work; inclusive education; social inclusion; social-emotional learning</p>



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PART 1: THEORETICAL PART

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Introduction

Digital social innovation describes the application of digital methods and technologies to social and environmental problems and entails utilizing technology to develop fresh methods of service delivery, collaboration, and organization that can handle challenging societal issues. Crowdfunding websites, citizen science initiatives, open data programs, and online communities connecting people with similar interests to work together on social and environmental issues can be listed as some of the examples. However, creating novel solutions to social and environmental problems frequently entails a broad range of stakeholders, including government agencies, non-profit organizations, businesses, and individuals.

Digital social innovation and creativity are two interrelated concepts that have become increasingly relevant in today's society. With the advancement of technology, digital social innovation has provided new ways to tackle social challenges and promote inclusion. Creativity has always played a key role in our personal and professional lives, which has important social impact. Creativity is an essential skill for the future of work. Promotion of social and educational inclusion is made possible with creativity and the arts, which are powerful tools.

One of the main advantages of digital social innovation is its speedy scaling and ability to reach a global audience. Digital technologies enable connections between people and organizations that span national and cultural boundaries, enabling them to cooperate and share resources to tackle difficult social and environmental issues. All things considered, the field of digital social innovation is an exciting one that is expanding quickly and has the potential to completely change how we approach some of the most important social and environmental issues of our time.

Creativity and arts in education have enormous impact on students. Creative activities can stimulate their imagination and foster critical thinking, problem-solving, and collaboration skills. By promoting creativity and artistic expression, students can develop a deeper understanding of themselves and their world, and they can learn to communicate their ideas effectively. Creativity and the arts, becoming increasingly relevant to the future of work, are also considered to help promote educational inclusion by creating a more diverse and inclusive learning environment.

Although the rise of automation and artificial intelligence indicates that routine tasks will be replaced by machines, creative and artistic skills such as critical thinking, problem-solving, and communication will always be in high demand. The ability to think creatively is and will be crucial in developing innovative solutions to complex problems. Therefore, teaching creativity and the arts in schools can help prepare students for the future of work and promote social inclusion by providing them with the necessary skills to thrive in a rapidly changing world. This book explores digital social innovation and creativity, explains the value of creativity and art in education, tackles the importance of these concepts for the promotion of social inclusion, and explains how they can be used effectively to promote social inclusion.



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Chapter 1. Digital social innovation and creativity

Authors: Yeliz NUR AKARCA, Alpaslan AKILLI, Emine ANLAR

Abstract

Social innovation, which can be described as new ideas that meet unmet needs, has always been in our world around us. 'New ideas that work' distinguishes innovation from improvement, which implies only incremental change. Digital social innovation is a successful organizational model with social goals and objectives. Any innovative act is associated with creativity. This section provides information on digital social innovation and creativity by providing further information about the concept of digital social innovation and its main components. Digital social innovation is a highly important topic; hence, its use in educational contexts is also worth exploring. Creativity and its relationship with innovation can pave the way for more developments if they are used effectively.

Introduction

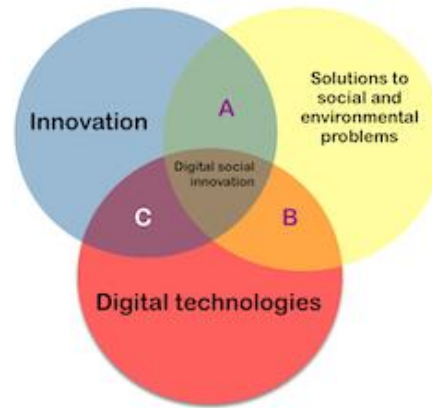
The Internet has been in our world for decades, and its ability to generate societal and economic value is well understood. Online innovation developed specifically to effect significant positive social change is arguably still in its infancy, with only a few services reaching a global scale. As a result, Digital Social Innovation (DSI) is a new field of study, with little existing knowledge on how digital tools are used to improve the world. Innovations have the potential to change the world, including our health, businesses, and processes. Social innovations address social needs and address pressing societal issues. Technology innovation represents both challenges and opportunities for inclusive education. Such digital innovation aids in the preparation of learners of all ages, particularly those with special needs (disability, immigrant background, poor family) for integration into education. It is necessary to consider how digital innovations affect traditional learning models and the balance between skill development and knowledge accumulation. Individuals can use digital technologies to access information, manage their own learning, communicate with peers and mentors, and innovate, create, and share new materials. Digital Social Innovation (DSI) is a new concept that refers to social innovation efforts that use the potential of digital technology to co-create solutions to a wide variety of social problems.

1.1. The concept of digital social innovation

Digital Social Innovation (DSI) is a new concept that refers to social innovation efforts that use the potential of digital technology to co-create solutions to a wide variety of social problems.

Digital Social Innovation is the use of digital technology to enable or support social innovation. Its innovation is *social* in its purpose and *digital* in its solution. This means that

- it provides some solutions to make the worlds of people who are left out or behind better (social part);
- the solution to the problem involves something new (innovation part); and
- the solution includes something with computers (digital part).



Source: <https://theconversation.com/what-are-digital-social-innovations-79066>

Digital social innovation intersects three domains:

- innovation,
- social and environmental issues, and
- digital technologies.

The first area is innovation. It refers to the creation and spread of a technological, social, etc., novelty that is not yet in use in the location where it is being introduced. The second sphere is concerned with the solutions put in place to address social and environmental problems, such as public policies, research projects, new practices, civil society actions, business activities, or decentralizing power and resources through social movements.

Social inclusion measures facilitate, enable, and open doors for people to participate in social life regardless of their age, gender, disability, race, ethnicity, origin, religion, or socioeconomic status (e.g. the positive discrimination measures that enable minority students to enter universities).

Finally, the third sphere is concerned with digital technologies, which include hardware and software used to collect, process, and disseminate information.

Definition of DSI

There have been various definitions of DSI in the literature since 2000s.

- Warschauer, for example defined is as “Technology as a mechanism of social inclusion.”
- Ananina (2014) provided the following definition : Web platforms and the new forms of interactions promote value generating collaborations and social progress, which changes individual behaviours for the better.”
- Gordon (2015) focused on civic media and defined the term as “the mediated practices of designing, building, implementing or using digital tools to intervene in or participate in civic life”.
- Kaletka (2015) defined DSI as a type of social and collaborative innovation in which end users and communities engage via digital platforms to create solutions for a wide range of problems.

Other definitions of Digital Social Inclusion focused on different aspects.

- Shea (2015) described the term as the support and development of new digital solutions to address social challenges, yet, in terms of civic media, added that the term could be “The mediated practices of designing, building, implementing or using digital tools to intervene in or participate in civic life.”



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- Maiolini (2016) focused more on the social aspect and defined the term as “Novel solutions coming from information technology (IT) applications and tools to tackle social problems that are more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than a private individual.”
- According to Gaggioli (2017), it is an emerging approach in social innovation that leverages digital tools to address societal and environmental challenges.”

All the definitions provided in the literature included three main contexts:

- a) **Digital context:** social technology, digital technology, civic media, internet ecosystems, etc.
- b) **Social context:** social embeddedness of technology, digital commons, etc.
- c) **Innovation context:** new technologies, social innovation, technological innovation, etc.

Some key points should be taken into consideration while making the definition of the term Digital Social Innovation.

Firstly, because most definitions originated in the sphere of social innovation, the social aims and means (Mulgan, 2012) should be included in the theoretical foundation review. Digital social innovation is an effective organizational model whose ends and means are social.

Secondly, the communities supported by the digital tools enable everyone to connect with everyone else. All-channel or full-matrix networks are the names for these cooperative networks (Arquilla J, 2001). The term may thus be characterized as follows:

Digital social innovation is an effective organizational network model leveraged by information and communication systems (ICTs) whose ends and means are social.

Digital technologies

Humanity has witnessed an astonishing increase in initiatives and organizations leveraging digital technologies. Some examples include open hardware, open data, and crowdsourcing to confront social concerns. Digital social innovation is the same as social innovation, but if done correctly, it may make it faster, cheaper, and better - and hence more socially inventive. Thus, digital social innovation, like social innovation, is a cross-cutting issue that cuts across all policy domains, social demands, and societal concerns. In this context, a set of policy enablers is needed to equip and empower social innovators with relevant skills and understanding, to ensure that the public sector is digitally and socially innovative and can support social innovators, and to ensure that larger partnerships such as private, public, civil sectors, and research institutions are in place to curate the use of digital technology in social innovation.

Many industrial and commercial developments, such as Industry 4.0 and smartphones, are being driven by technology and the Internet. Digital technologies enable new forms of collaboration. Communication among social actors is also improved by digital technologies. They also assist them in addressing major social issues. The variety of "digital social innovations" (DSI) is amazing. "From social networks for those living with chronic health conditions to online platforms for citizen participation in policymaking, to using open data to create more transparency around public spending," according to the DSI (Bria, 2015). DSI is defined as follows:

a type of collaborative innovation in which innovators, users, and communities co-create knowledge and solutions for a wide range of social needs by leveraging the Internet's network effect" (Digital Social Innovation, 2014, EU- Project homepage).

It is known that there is a rapid growth in the number of people who use digital technologies to combat social challenges in various areas including, for example, education, healthcare, environment, citizenship, etc. The purposes of DSI include the followings:



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- * to actively use digital activities to improve lives and reorient technology towards more social ends,
- * to help citizens to incto help citizens to increase their power to take more control over their lives
- * to help citizens to use their collective knowledge and skills for positive effect,
- * to make government more transparent and accountable,
- * to provide alternatives to the dominant technological and business models,
- * to provide a more environmentally sustainable society using technology.

DSI has expanded dramatically in recent years, and there are now hundreds of projects and organizations working in the subject throughout and beyond Europe. To mention a few, DSI employs open hardware, peer-to-peer platforms, citizen sensing, crowdsourcing, apps, open data, social networks, etc. And it is being utilized to address issues in practically every sector, including education, healthcare, democracy, transparency, and accountability, the environment, and migration, as well as inequality, poverty, justice, and housing.

It is crucial to explain why the concept of digital social innovation is so important for social transformation. Citizens, communities, and social entrepreneurs can use digital tools to assist them in solving social problems. Thus, the services provided to people through information and communication technologies can profit from the network effect created by the Internet, and one example is that the benefit of a network and its critical mass of users is that they increase faster than the expenses of using the network.

We can see how digital technology can readily be adapted to aid civic action by allowing the exchange of resources, mobilization of numerous people, and the distribution of power. Thus, technological entrepreneurs and civil society innovators have begun to produce viable digital solutions for social change, a process known as Digital Social Innovation. As an example, consider online platforms that enable citizens to engage in decision-making and have access to public information, hence increasing transparency in public procurement and other areas.

Digital social innovation and social impact

As technology and innovation-driven communities of practice, digital social innovation is a popular topic, involving innovation agencies and various sorts of intermediary social NGOs. Governments and international funding agencies are increasingly interested in these new communication technology development projects. DSI leverages information and communication networks to address critical social issues through social innovation. The premise is that web platforms and new kinds of connection foster value-generating collaborations and societal advancement, which improves individual behavior. DSI is organized as a public-private partnership based on citizens' active participation and the use of cutting-edge information technology to engage citizens, facilitate stronger links (data interchange, visualization), and therefore increase the potential influence of the initiative.

Nowadays, the linked world enables the development of numerous technologies that pool crowdsourced talent to create value for individuals, groups, and organizations. The Digital Social Innovation Ecosystem promotes the formation of online communities and strategic networks that broaden the range of viable organizational activities for value creation.

DSI is generally more about social innovation than technological innovation because social innovation includes a process of finding innovative, effective, and sustainable solutions to societal challenges. These challenges are listed in sustainable development goals (SDGs). Technology may seem to be available anywhere anytime, yet its application is novel in social problems such as poverty, social exclusion, inequality, poor healthcare, etc. Cross-sector partnerships and multiple stakeholders from government agencies, non-government organizations, and corporate social responsibilities are needed to take DSI initiatives



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DSI empowers businesses, non-governmental organizations (NGOs), government agencies, and social entrepreneurs to use digital technologies to generate positive social impacts. These entities can collaborate using digital technologies to co-create knowledge and solutions to address a wide range of social needs in disadvantaged, socially excluded, and marginalized groups in ways which were unimaginable before internet.

Digital social innovations exist at the intersection of the three spheres. Thus, DSI can be defined as novelties that employ, develop, or rely on digital technologies to address social and/or environmental issues. They are a diverse group of digital platforms that enable peer-to-peer interactions and mobilization of people to solve social and/or environmental problems. Some examples of DSI applications include neighborhood information systems, civic engagement platforms, volunteered geographic information systems, and crowdfunding platforms for sustainability or social issues.

Any DSI implementation must take into account social context and social hierarchies. DSI research should account for the complex Web of social structures, informal institutions, and intersectionality that results in social and digital exclusion, as opposed to digital divide research, which is primarily concerned with access issues due to a lack of digital infrastructure, digital literacy, and other relevant skills. Access to digital technologies, while important, is only the first step. Even when physical devices are available, social structures frequently prevent meaningful participation. Thus, in order to have any meaningful social impact on selected sustainable development goals, DSIs must prioritize addressing social issues over technological finesse. This approach is known as the social-first approach. The societal approach is distinguished by the social-first approach.

Additional resources

Cultiv Bria F. (2015). Growing a digital social innovation ecosystem for Europe. DSI Final Report. European Commission.

Rodrigo, L., Palacios, M., & Ortiz-Marcos, I. (2019). Digital social innovation: Analysis of the conceptualization process and definition proposal. *Direccion e Organizacion*, 67, 59-66.

Video materials

What is Digital Social Innovation?: <https://www.youtube.com/watch?v=Uv2DSCIMqCA>

Digital Social Innovation Lab 2019 : <https://www.youtube.com/watch?v=FzJVwgoVk1A>

1.2. Digital social innovation and education

Innovation has an important role in transforming formal and non-formal education. Education plays a critical role in preparing students to become entrepreneurs and digital social innovators. Digital technologies can also link the goals and work of innovators. The process of educational innovation should take advantage of digital platforms and forums that promote open communication and collaboration. Community and networked technology alter how people access information, work, and participate in the community, either physically or online.



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Source: <https://opensourcelab.dfki.de/digital-social-innovation-manifesto/>

Inclusive education

According to Facer (2009), technological progress provides both difficulties and opportunities for inclusive education. Such digital innovation aids in the preparation of learners of all ages, particularly those with special needs (disability, immigrant origin, poor family) for integration into education. It is vital to analyze how digital advances affect traditional learning methods and the balance between skill development and knowledge accumulation. Individuals can use digital technology to access knowledge and control their own learning, to engage with peers and mentors, and to invent, produce, and share new resources.

Inclusive education is a process of strengthening the capacity of the education system to reach out to all learners. As an overarching premise, it should govern all education policies and practices, beginning with the fact that education is a basic human right and the foundation for European countries; trained teachers and social workers, as well as methodology, are lacking (European Commission, 2014).

Increasing expectations for inclusive education necessitate considerable adjustments in all educational settings; thus, mainstream schools must adapt to varied groups of pupils with varying needs (O'Gorman 2005; IstenicStarcic, 2009). Learning methods must be customized for a diverse population, and technologies that help with this element must be integrated. Digital innovations play an important role in creating efficient, accessible, and adaptable learning environments, particularly in inclusive classrooms; however, most existing hardware and software do not consider different competencies/capabilities, particularly of people with special needs innovators and entrepreneurs, and fostering cross-disciplinary communities of educators and experts.

The digital transformation of society and industry needs innovative approaches in education to prepare students for technological change. DSI is a new field with a minimum knowledge of digital social innovators, the organizations and activities that support them, as well as the use of digital tools for social change. Education must be central to society's response to these massive forces. Because technology skills are crucial for global citizenship, digital social innovations, and corresponding skills should be applied in all education and training sectors.

Information technology

Information technology is a good resource, and education may help create chances for each citizen group to improve their quality of life and inspire social innovation by integrating them into society and education. Governments, non-profit organizations, and the business sector are making attempts, but present the educational systems and teaching methods are inadequately adapted to meet the rapidly changing challenges and expectations of today. Education projects should take the issue of inclusion more seriously and create open and extendable learning systems, as well as cross-cultural networks of DSI, innovators, and entrepreneurs, and cultivate cross-disciplinary communities of educators and



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experts. This is also the goal of future work by the authors of this paper, as well as relevant organizations and programs (Hamburg and Bucksch (2017)).

The field of education includes many digital and social innovations. Some examples include the projects mapped by the European DSI on education and skills, Web 2.0, which is considered to be a driver for inclusion in learning, social media, which enables learners to learn collaboratively and cooperatively, and OER (Open Educational Resources), which are licensed learning and teaching resources considered another significant type of DSI. OER includes a wide range of materials ranging from learning management systems software to textbooks, courses, curricula, videos, etc. OER can be revised, reused, remixed and redistributed (Wiley, Green & Soares, 2012).

DSI are novelties that use, develop, or rely on digital technologies to address social and/or environmental problems. They are a diverse group of digital platforms that enable peer-to-peer interactions and the mobilization of people to solve social and/or environmental problems. Some examples of DSI applications include neighborhood information systems, civic engagement platforms, volunteer geographic information systems, and crowdfunding platforms for sustainability or social issues.

There are some DSI examples from around the world. For instance, the Plume Labs founded in 2004 had a vision of clean air for everyone. They created the smart tools to help people avoid air pollution and stay healthy. Using advanced hardware and artificial intelligence, they enabled people to have the information they need to perfect their daily routine, explore the environment they live, and clean air wherever they go. Another example is Airbnb. Airbnb is a good example of digital social innovation. The digital platform enables travelers to find cheaper accommodations while discovering local people and lifestyles. The platform provides its users with tailored services.

Any DSI implementation must take into account social context and social hierarchies. DSI research should account for the complex web of social structures, informal institutions, and intersectionality that results in social and digital exclusion, as opposed to digital divide research, which is primarily concerned with access issues due to a lack of digital infrastructure, digital literacy, and other relevant skills. Access to digital technologies, while important, is only the first step. Even when physical devices are available, social structures frequently prevent meaningful participation. Thus, DSI must prioritize addressing social issues over technological finesse in order to have any meaningful social impact on selected SDGs. This is known as the social-first approach. The societal platform is distinguished by its social-first approach.

Social impact

The social-first approach is another component in DSI. DSI researchers should strive for the greatest possible social impact; if a simple and primitive digital technology can accomplish this, so be it. As a result, DSI should follow the principle of technoficing. Technoficing can be defined as the purposeful pursuit of social objectives using a technology that is good enough and appropriate for the purpose, based on the concepts of technoficing and socialficing. In fact, when compared to advanced technology that is simply thrust on communities, a simple technology implemented after embedded engagement with the community can go a long way toward achieving goals.

Today, the humanity can be considered to be in the midst of an educational revolution. For the first time in human history, people have the means to provide everyone with the education they desire. The best part is that this education is almost free. The key to this learning revolution is open education resources, or OER. OER are educational materials created by one party and licensed for free use by others. OER can take many forms, including curriculum, homework assignments, and textbooks. OER are available for all levels of education, from kindergarten to college. OER is making their way into the public consciousness through initiatives such as the Khan Academy, MIT Open Courseware, and Washington's Open Course Library.



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Open educational resources are educational materials that are either licensed under an open copyright license, such as Creative Commons or are freely available in the public domain. You have free (no-cost) access to the OER in both cases, as well as free (no-cost) permission to engage in the "4R" activities when using them, which include:

- **Revise:** adapt and improve the OER to better meet your requirements.
- **Reuse:** put the original or your new version of the OER to use in a variety of contexts.
- **Remix:** combine or "mashup" the OER with other OER to create new materials.
- **Redistribute:** make copies of the original OER or your new version and share them with others.

In the context of technological advancement, the idea of incorporating digital media in the search for solutions to social needs becomes a significant challenge for communities all over the world.

Europe is working on developing innovative practices to encourage community participation in the construction and improvement of social welfare through the use of digital technologies.

The general public can use digital technologies to address social, political, and environmental issues. The availability of a diverse set of technologies - collaborative platforms, machine learning, open hardware, and citizen sensing - enables citizen empowerment. The phenomenon known as Digital Social Innovation (DSI) has the potential to transform public service performance, empower citizens in civil life, and enable them to be active participants in social challenges. In this sense, the configuration of DSI projects, in which each of the social actors - public institutions, private investors, political decision-makers, and the community as a whole - collaborates from their role in mutual coordination, has been necessary for the benefit of the communities.

The EU Chic project, in collaboration with the DSI4EU project and other groups of European innovators, developed the Manifesto for Digital Social Innovation, a policy outreach document at the EU level that aims to increase citizens' participation in democratic and social processes, as well as to provide recommendations for political representatives in the development of the European Digital Single Market to meet social challenges and to be sustainable.

The following points summarize the Manifesto's fundamental parameters:

Transparency and openness: It is deemed critical that citizens of the digital world have free access to data innovation platforms such as open networks, open data, open hardware technology, and open knowledge.

Democracy and decentralization: Decentralization raises social awareness of the importance of individual or community expression through digital tools that are decentralized data governance models independent of Internet monopolies.

Experimentation and adoption: Pilot tests are required to investigate and demonstrate the true efficacy of DSI in society.

Digital skills and multidisciplinary: Participation of all social actors is required, as is the facilitation of digital knowledge through education programs.

Sustainability: Funding assurance is critical for the growth of digital social innovation.

The Manifesto-proposed initiative aims to collaborate among communities, projects, and organizations to maximize the benefits of the DSI and overcome the challenges to its expansion and success. Without a doubt, it is.

Today's world includes so many social innovations and digital social innovations, and education must be at the core of society's response to these powerful forces. A collective progress can be achieved if everyone applies knowledge and skills, particularly scientific knowledge and skills, to address these issues. This can be achieved by developing a pervasive culture of innovation, not only inside schools, colleges and universities but also within and across communities of students and



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educators. Such change is believed to pave the way for positive social, economic and technological changes.

Additional resources

Hamburg, I., & Bucksch, S. (2017). Inclusive education and digital social innovation. *Advances in social sciences research journal*, 4(5).

Watkins, A. (2014). Model policy for inclusive ICTs in education for persons with disabilities. UNESCO.

Video materials

Digital Innovation in Education – Learning in a Digital Society:

<https://www.youtube.com/watch?v=GvP6RblszNE>

Education 4.0 – transforming the future of education:

<https://www.youtube.com/watch?v=aVWHp8FsV1w>

1.3. Creativity and digital social innovation

The proliferation of digital technologies has resulted in a significant increase in the number of ways people can tell their stories and express their creativity. Virtual reality, AI, social media, 3D modeling and printing, blogs and vlogs, YouTube videos, and audio podcasts have all become the new norm for personal expression and storytelling. Digital data transmission is increasingly dominating creative production processes, making it simple to connect people, ideas, and creative processes within collaborative and co-creative environments. Human creative abilities are being enhanced by technology. This means that in the business world, newer and faster forms of innovation are possible, at a much lower cost of iteration.

From computer-aided design (CAD) to 3D printing, the cost of innovation in the digital world is significantly lower than in the analog world. Constant iteration is a critical success factor in creative excellence, and digital platforms undoubtedly provide an environment for experimentation before investing in an idea. With all of the warnings about the effects of digital technology on human cognition, there has been less discussion about what we have gained from it. Human-machine networks are enabling new areas of creativity in which art emerges as works of collaboration and tools. Historically, creativity has always been nurtured and challenged, and it thrives as a result of cultures and technologies.

With digital technology, one can be active or passive, just as one can be active or passive with physical technology. Historically, creativity has always been nurtured and challenged, and it thrives as a result of cultures and technologies. With digital technology, one can be active or passive in the same way that one can be active or passive with a pen and paper. Digital devices provide insights into how the world works, and they encourage rather than stifle creativity.

Creativity

Creativity enables us to view and solve problems in a more open and innovative manner and stimulates the mind. A society that has lost touch with its creative side is imprisoned, as such loss causes generations of people to be closed minded. Creativity broadens our perspectives and can aid in the removal of prejudices. If we advanced as a society, it was largely due to the creativity that drove us to innovate and make our lives easier and better. Creativity is the ability to use one's imagination and think outside the box in order to create something new.



Source: <https://www.forbes.com/sites/peterbendorsamuel/2018/06/06/trends-in-third-party-service-providers-transitioning-to-digital-services/>

Although the convergence of the creative and digital worlds has the potential to produce transformative change, it is critical to keep the true human spirit at its core in order to maintain perspective. Social media is one example. While Social Media (SM) platforms have transformed the way businesses can effectively and affordably market their brand and products, there is undoubtedly a downside in a broader societal context. Overuse of social media by people of all ages can lead to a false sense of connectivity and impair humans' ability to distinguish between meaningful relationships and meaningless casual encounters. What began as a forum for self-expression has evolved into a forum for seeking validation from perceived personas in the virtual world.

However, the rapid emergence of the Digital era is unprecedented, and as with anything that disrupts the way we think, act, and live, there is bound to be a negative side effect. At the end of the day, human cognition has to be the game changer in terms of how we adapt to and benefit from the enormous digital strides we're making every day. Anand Mahindra, leading industrialist and Chairman of the Mahindra Group, when asked at a conference last year, "Will technology save the world?" said in response, "No, it will be poets, writers, and musicians". The convergence of two worlds - creative and technical, art and science - will have a long-term and disruptive impact in the digital age.

Creativity and business

Creativity is important also in business world. To survive in today's hypercompetitive market, businesses must also be creative and innovative. Digital technology has opened up new opportunities for businesses and allowed thousands of new businesses to enter the market. Creativity is a continuous process that requires both parties to work hard and constantly improve their ideas and solutions. A creative person will work hard by gradually changing and refining their work. Entrepreneurial creativity includes aspects of the organization's environment such as team climate, teamwork, and others.

Creativity and innovation go hand in hand. There can be no innovation without creativity. While creativity is the ability to generate new and distinct ideas, innovation is the application of that creativity, which is the introduction of a new idea, solution, process, or product.

To address societal challenges, we must tap into the collective innovation capacity of society. Design thinking and creativity are essential for the acceptance of new applications and technology. It's all about encouraging people to act in a sustainable manner.

The innovation cycle is becoming increasingly rapid, so there is a need for developing a new innovation policy. Innovation is a continuous iterative open process. It is not surprising, then, that innovations



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emerge from horizontal, distributed networks rather than solely from universities and corporate research labs.

Creativity must be applied before innovation can occur. Creativity is "a successful step into the unknown, getting away from the main track, breaking out of the mould, being open to experience and permitting one thing to lead to another, recombining ideas or seeing new relationships among ideas". Creativity results in the creation of new knowledge, products, services, and other advancements that help to improve human life and solve problems (Baron & Shane, 2008). Creativity is primarily the result of two cognitive processes. The first cognitive process involves stretching or expanding the internal cognitive frameworks that humans build to organize information, while the second involves the operation of various facets of human intelligence.

Some researchers believe that creativity is influenced by factors other than the characteristics of creative people. Culture, rewards, support, team effectiveness, and the freedom to do whatever one wants all have an impact on an individual's creativity. According to other researchers, factors such as challenging the status quo, detachment, synthesis, cognition, association and communication, awareness, similarity, external motivation, sensitivity, experimentation and combination, dimensional thinking, problem-solving, religion, culture, country of origin, family, and uniqueness can be used to measure creativity and may influence the creative behavior of social innovators.

Innovation

In all circumstances, innovation entails a struggle against vested interests, 'contagious courage' that persuades others to change, and pragmatic persistence that transforms promising ideas into real structures. For many innovations, the stages of the new truth include being ridiculed, being opposed, and then being accepted as self-evident. Innovations move through a variety of stages, beginning with idea development and progressing through prototyping and piloting to scaling up and learning. However, in various sectors, important stages are missing or under supported.

Individuals can be creative, or groups can be creative; networks bring people together. This is an important realization because 'collaborative webs' are defined by regular team interaction and multiple discoveries. Knowledge and information exchange in groups, in particular, is becoming increasingly important in innovation development. But knowledge alone does not define creativity. To increase their creativity, innovators must be able to reflect on and apply their knowledge and experience in practice. Creativity is derived from acquiring new knowledge, or from gathering information that can later be used in the process of innovation development.

Even the most challenging problems can be solved with creativity and successful innovation tools. You can reinvent your framework and generate more solutions by changing how you think about problem-solving. Fueling creative thinking can be a difficult task, especially in the workplace. Creativity does not always come naturally, and it is common for employees to feel stuck at times, especially when deadlines are approaching and other stressors are present. Coming up with new ideas and solutions, also known as solution ideation, and managing creativity can be difficult tasks. Creativity and innovation may appear to be similar concepts but differ significantly due to their focus.

Here are some creativity-boosting methods you can try in a team:

Rapid ideation: Everyone in a group writes down as many ideas as they can in a set amount of time. None of these concepts need to be fleshed out or thoroughly thought out. Having bad ideas can pave the way for good ones.

Brainstorming in various mediums and settings: Encouraging the creative process collectively in various settings and with various tools. Individually and in groups, brainstorm ideas.

Figure storming: Choose a famous person and try to imagine how they would solve your problem. You'll be able to approach your problem from a new angle.



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Starburst: Determine who, what, when, where, and why the problem exists. You'll have a better chance of finding a solution if you understand the problem from the inside out.

There are a few steps you can take to develop a good problem-solving method and become a creative master. The following is a step-by-step example of an innovation process.

You come across a problem that needs to be solved:

- Correctly define the problem.
- Choose a brainstorming activity to help you get your creative juices flowing.
- Gather relevant material and work through it, considering various solutions and approaches to the problem.
- Discuss the viability of your idea with your teammates.
- Before returning to the problem, take a break.
- Begin putting your plan into action.

Naturally, innovation cannot occur in the absence of creativity. Only with innovative and effective solutions can one be truly innovate. Coming up with creative innovation requires actively seeking inspiration. When you can start coming up with creative solutions to problems, many people find that this skill quickly lends itself to leadership roles.

Individual and team creativity

Creativity is defined as the generation of novel and useful ideas in any domain. To be considered creative, a product or idea must be distinct from what has come before. However, the product or idea cannot simply be different for the sake of being different; it must also be appropriate to the goal at hand, correct, valuable, or expressive of meaning. The successful implementation of creative ideas within an organization is referred to as innovation. Individual and team creativity, in this view, is a starting point for innovation; it is a necessary but not sufficient condition. Other factors influence successful innovation, and it can stem not only from creative ideas generated within the organization, but also from ideas generated elsewhere (as in technology transfer).

Because there are so many misconceptions about creativity, it is essential to consider what it is not:

- Exotic personality: True creative work is not only original, but also appropriate. Furthermore, it is far more useful to think of creativity as a behavior that results in a specific product or idea—rather than thinking of creativity as a personality trait (which implies that whatever a "creative person" does must be creative).
- Art (or The Arts): Creativity is novel and appropriate behavior in any domain of human activity, including business management, scientific discovery, fiction writing, child-rearing, social interaction, painting, and so on.
- Intelligence: Intelligence, as traditionally defined, is the set of abilities measured by IQ tests or school courses. Certainly, intelligence can help with creativity. However, research indicates that there is much more to creativity than "smarts." In fact, there is no clear relationship between intelligence and creativity above moderately high IQs.
- Good: Novel and goal-appropriate behaviors can be used for evil and destructive purposes just as well as for good, responsible, and constructive purposes.

The relationship between creativity and digital work is also ambiguous. Carr (2011) has referred to 'digital Taylorism' when discussing the cognitive abilities required of the new labor force: only rarely is digital work truly more autonomous, self-organized, varied, and creative than Fordist work; the performance of workers is organized by planners in a way similar to how engineers streamlined material work in the Fordist economy. The work frequently consists of incorporating the worker's memory, mind, and identity into technology (computers, software, and the Web): digital media



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require lower levels of attention, elaboration, and depth than traditional alphabetical thought, and they favor a cognitive routine focused on immediate decision-making and problem-solving.

The specific component of knowledge work and work performance associated with new technologies is a set of primarily applicable skills linked to specific situations, technologies, and work processes. As a result, the hypothesis of an inversion of the hierarchy between living labor and fixed capital appears exaggerated. The process can also be observed in reverse: it is productive work based on the use of machines, standardized processes, and software that incorporate working and productive intelligence, thus subsuming tasks and professional identities.

Additional resources

DSI: An overview and research framework:

<https://onlinelibrary.wiley.com/doi/full/10.1111/isj.12362>

Digital Social Innovation: <https://www.nesta.org.uk/project/digital-social-innovation/>

Video materials

What next for digital social innovation: <https://www.youtube.com/watch?v=jw4Z5V1-M2o>

Inspired by Technology: Award Winning Creativity: <https://www.youtube.com/watch?v=xfJxitgR4ZI>

Summary

The Internet has been in our lives for decades, and its ability to generate societal and economic value is well known. Online innovation aimed specifically at bringing about significant positive social change is arguably still in its infancy, with only a few services reaching a global scale. As a result, Digital Social Innovation (DSI) is a relatively new field of study, with little existing knowledge on how digital tools can be used to better the world.

Social innovation, defined as new ideas that address unmet needs, has always existed in our world. Innovative concepts that work... This distinguishes innovation from improvement, which implies only a small amount of change. A successful organizational model with social goals and objectives is digital social innovation. Creativity is associated with any innovative act.

This chapter discussed digital social innovation and creativity. The first part defined the concept of digital social innovation and its key components. The second part discussed the application of digital social innovation in educational settings, and the third part discussed creativity and its relationship with innovation. The ability to innovate has the potential to change the world. Social innovations address both social needs and pressing societal issues. We are in the midst of a major transformation that will affect both society and the economy, and it is being fueled by the rapid evolution of ICT. Over the next ten years, more than 5 billion more people will connect to the Internet. Digital Social Innovation (DSI) is a new concept that refers to social innovation efforts that use the potential of digital technology to co-create solutions to a wide variety of social problems.



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Chapter 2. The value of creativity and the arts in education

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Abstract

This chapter focuses on the impact and methods by which creativity and the arts can help teachers and learners to reach their true potential. We'll look at the concept of creativity and the ways in which it expresses itself through us and shapes our thinking so that we are better able to create, solve problems, and be inspired by the world around us. Creativity is not an attribute you have or don't have, it exists in each of us, but we need the context for it to be put into practice. Through techniques inspired by research on creativity, such as theories about design thinking or typologies of creative people, or through methods that come from the arts, adult educators and their learners will benefit from useful practices and notions to create an environment conducive to personal development through creativity.

Introduction

The first question would be, What does creativity have to do with adult education?. In adult education, individuals engage in systematic and ongoing self-educational activities to acquire new types of knowledge, skills, attitudes, or values. So, it is often a voluntary endeavour, and it must be encouraged precisely through methods that provide motivation and confidence that people can create and feel useful to society at any age. Here, creativity is indeed beneficial for everyone and improves the well-being of life. At the same time, lifelong learning can refer to any type of learning that individuals do outside of formal education, from the acquisition of fundamental literacy skills to achieving personal fulfillment. Adults who want to continue to perfect their skills or who want to improve their own techniques must understand that creativity is an indispensable part of life. From a scientific perspective, as we will see later, certain parts of the brain determine the type of creativity you have and how you can use it. This determines the fact that everyone is creative in one way or another. At the same time, creativity, like memory, is a muscle that needs to be trained. There are various educational practices that increase creativity among learners and encourage self-discovery. Self-discovery is closely related to creativity because the better you understand the way you perceive problems and the world around you and how you choose to act, the more you will find new ways through which you can think more creatively. Creativity itself shapes thinking, and design thinking is a whole system that structures the way we can reach an innovative product. Creativity and art, once introduced in a non-formal educational framework, promote among students the joy of learning, experimenting with new practices, and collaboration towards understanding everyone's needs, problems, and points of view. Therefore, an optimal context for innovating and rethinking to improve something for personal or societal good.



Source: <https://www.gsb.stanford.edu/>



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2.1. The sources of innovation and creativity

First of all, we should define what creativity means in order to find out where it comes from and what methods we should apply to access it more easily. The reality is that there is no single definition, and the subject of creativity has been and continues to be debated in philosophy. The Cambridge Dictionary defines creativity as "the ability to produce or use original and unusual ideas". Often, creativity is defined as an ability, and if it is a skill, it can be perfected. Another perspective is that creativity is the capacity to rise above the mundane. To do this, "think outside the box" to come up with unique solutions to challenges thanks to your critical thinking abilities.

To better understand what creativity means, we should first understand that it can be perceived in many ways. In fact, both creativity and art are very much related to perception. Perception is closely linked to how we relate to our surroundings, how it helps us solve problems and how we form our own life philosophy. Why is education with and about creativity and perception important? Once you broaden your horizons and see a situation from more than one point of view, you are more likely to use the same attitude when you want to create something. For example, California State University provides a more comprehensive definition of creativity: "Creativity is defined as the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others." To be a creative person, you don't always have to innovate in a field; you don't have to be an artist or invent a new patent that solves a big problem in society. Creativity can be used every day to solve problems and give you an overall perspective on things. Because there are multiple thinking mechanisms and everyone reacts differently or finds inspiration in something else, there are even more types of creativity. For example, to be able to enhance creativity in your learners, it would be good to identify these types and how to respond to them according to personal needs.

And, last but not least, if creativity means bringing something new to society, let's identify together what this "new" represents nowadays. If Plato and Socrates both believed that divine inspiration was the source of creativity, researchers have identified other categories of creativity and inspiration that can potentiate innovation. It's not just about what the creative person experiences when the Muses breathe into them and temporarily drive them insane, as was believed in ancient philosophy. The new theories don't necessarily deny such a paradigm, but broaden the area of study on creativity towards other branches, such as neuroscience, sociology and education studies.



Source: <https://www.freepik.com/>

Types of creativity

It has been demonstrated that creativity is also closely linked to the body, especially the brain, where it activates connections with other parts related to language and expression. In his research,



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neuropsychologist Arne Dietrich found 4 types of creativity according to the functions creativity performs in brain activity and in our lives:

- **Deliberate and cognitive:** the creativity that is the result of hard work in a certain subject.
- **Deliberate and emotional:** creativity that comes from sitting quietly and contemplating on the circumstances or situation and stimulates inspiration.
- **Spontaneous and cognitive:** creativity that uses the brain's basal ganglia, which is a portion of the brain that stores dopamine and acts outside of conscious awareness. It is also a region of the brain that is primarily responsible for processing movement-related data.
- **Spontaneous and emotional:** the most elusive sort of creativity, one that you either "have or don't have" that special mechanism of artistic geniuses or inventors.

Deliberate and cognitive creativity

This form of creativity is housed in the prefrontal cortex (PFC). The PFC is one of three sections of the frontal cortex, which is located just below your brow and houses language, memory, reflection, and superior executive brain processes.

In more concrete terms, it enables you to achieve two things: concentrate your efforts and make connections in your brain's stored information.

The important feature of deliberate and cognitive creativity is possessing a body of knowledge that allows you to mix existing material in new and unique ways. Obviously, acquiring this level of understanding takes time. As a result, it is critical to provide numerous possibilities for study and learning for these types of creative thinkers. They must then be given adequate time to find an innovative answer.

Deliberate and emotional

This form of creativity, according to Dietrich, is purposeful and emotive. These types of creatives are likely to experience "a-ha" moments in which they appear to extract a solution from thin air. However, most people fail to recognize that the idea does not come from nowhere, but rather from time spent contemplating and asking questions, as opposed to research and time spent studying. The cingulate cortex—a part of the brain that connects our emotions to the PFC—is responsible for this form of creativity.

To assist persons whose creativity falls on this scale, it is critical to allow them time to ponder. You can ask them questions and provide ideas, but don't expect them to have a solution instantly. Instead, show items to them and invite them to return later to express their comments.

Spontaneous and cognitive

The person that possesses this type of creativity is considered to need time to do something different, allowing their subconscious to continue working on the problem. An example of this style of creative thinking is how Isaac Newton came up with the concept of gravity while watching a falling apple.

It does require prior information, but the notion is that while someone is doing something unrelated, their brain is working on a solution to their problem. Solutions may emerge when doing domestic activities or strolling outside. It is preferable for these individuals to develop a creative concept in stages, and they may wish to set up the problem but then return later to find a solution.



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Spontaneous and emotional

These are the types of creatives who have profound and emotional (from the amygdala) creative moments that appear to be epiphanies or even religious experiences. It is more difficult to incorporate these moments into our daily life, yet a high level of competence is frequently necessary.

When dealing with team members of this type, it's critical to foster an environment in which they may refine their abilities and collect new ideas, even if the applications aren't immediately apparent.

We can say that the richest source of creativity is your brain and the way you expand your way of thinking. Another approach to creativity is provided by Dr. James C. Kaufman and Dr. Ronald Beghetto, who have identified four further categories of creativity based on how people use them. In "Fundamentals of Creativity" and in other works by the two researchers, the following aspects of creativity are theorized:

Mini-c creativity

Mini-c arises when you demonstrate reasoning diversity, cleverness, and novelty. Creating a new link between existing knowledge and a new piece of information that allows you to better comprehend the subject might be considered a mini-c innovation such as a student's new understanding of how to solve a math exercise.

Little-c creativity

This type refers to daily creativity and is about acting with versatility, knowledge, and innovation in everyday situations. As a result, something new with originality and significance is created. Advances are created with enough input over a long period of time, and what is generated may be useful to others. For example, a middle school student's research results in an original project that has a real impact on the community.

Pro-C creativity

At this level, one can be creative on a professional level and in a professional setting. Many years of conscious practice and training would have been completed by this stage. Although not everyone at the Pro-c level can make a career from their creative endeavors, it is often the desire of people at this level to support themselves doing something they enjoy. This level of originality has taken time and work to cultivate (usually 10 years). For example, in the field of education, this type of creativity can be linked to the innovative idea of the flipped classroom created by teachers Aaron Sams and Jonathan Bergmann or an artist who was gifted as a child and has graduated from an art university to gain knowledge and perform in the field.

Big-C creativity

Creativity with a capital "C" goes beyond simple problem solving. It is about significant advancements made in fields like science, technology, and the arts. Big-C creativity refers to the results of a select group of innovators who have changed their field. Even though it was contentious when it was originally published, their work has since gained widespread acclaim for being groundbreaking.

Most of us lack the ability to create in the Big-C style, and those who do are exceptional individuals and this type of creativity is related to the spontaneous and emotional use of the creativity that geniuses possess.

Creative environment

As we can see, creativity may manifest itself in a variety of ways and in a range of settings. Individuals with diverse personal features and backgrounds embody it. The only guideline appears to be that there are no hard and fast laws about the sources of creativity.



So, creativity emerges from the interaction of these factors:

- **Knowledge:** All applicable understanding that an individual brings to a creative activity.
- **Creative Thinking:** This refers to how people tackle challenges and is affected by their personality and thinking/working style.
- **Motivation:** It is widely understood that motivation is essential for creative production, and the most crucial motivators are inherent enthusiasm and interest in the task itself.
- **Environment:** A non-threatening, non-controlling environment favourable to thought combination and recombination, such the intersection of different cultural values.

In “Creativity as a Decision” Robert J. Sternberg's suggestion echoes the sentiments of other theorists in the idea that educational systems should not only attempt to enhance creativity, but also directly teach students about the field of creativity itself, so they gain an explicit awareness of their own creative potential as well as an understanding of methods of enhancement. With this information, people may make an informed decision to pursue creativity while also better controlling and directing the growth of their abilities.

If knowledge, creative thinking, and motivation are more personal aspects that can be shaped, the learning environment contributes and provides the context for them to develop or, on the contrary, stagnate the creative process. A creative learning environment is distinguished by the value placed on ideas, implying that students are not only permitted but also encouraged to take reasonable risks and make mistakes during the learning process; As a result, students are well supported in reaching their creative potential.

These are just ten steps to make your classroom a more creative space:

1. Create a welcoming and useful teaching environment and provide flexible seating and modular furniture to be able to move the pieces of furniture once in a while depending on the activities you want to maintain or to get rid of the monotony or to get your students out of their comfort zone in order to develop new creative ideas.
2. Promote respect and empathy and try creative grouping when you facilitate group activities to make sure that the groups are diverse depending on the culture, background and preconceived opinions that the students have.
3. Create visual objectives using white boards, posters, drawings and colours to highlight the work stages and encourage learners to express themselves.
4. Find unique resources using digital technologies and be open to research topics that the learners want to do.
5. Use your imagination when it comes to classroom management.
6. Accept alternative assessments such as quizzes, puzzles and team projects.
7. Encourage independence by presenting learners with a set of relevant assignments and asking them to accomplish the task they believe will be most beneficial to them.
8. Encourage debate and collaboration by doing group work activities.
9. Use methods such as icebreaker games to revive the atmosphere.



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10. Be open to experiment with your teaching methods, you can include theater techniques such as role-playing, music or visual arts, such as teaching with educational videos and tasks that include drawing.

By building a friendly and safe learning environment for your students to enhance the creative ideas they have, you can directly contribute to their creativity. For example, in education, they can advance in the type of creativity they use, so something that some time ago was at the stage of mini-c creativity can easily develop into a pro-c creativity idea as they gain more knowledge.

Additional resources

Cultivating Creativity in Adult Literacy Education Settings:

<https://files.eric.ed.gov/fulltext/EJ1246114.pdf>

You Can Teach Someone to Be More Creative: <https://hbr.org/2015/02/you-can-teach-someone-to-be-more-creative>

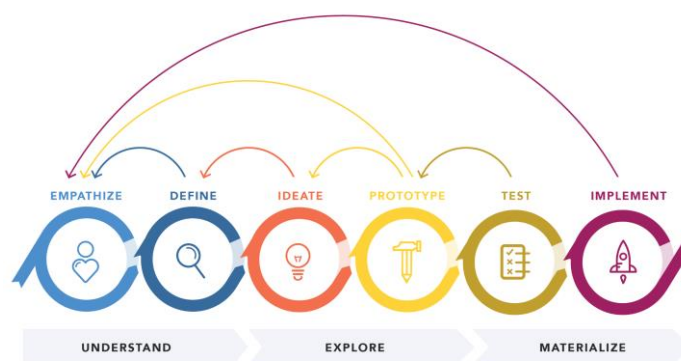
Video materials

What is Creativity?: <https://www.youtube.com/watch?v=rnC1GMbKeW0>

David Lynch on Where Great Ideas Come From: https://www.youtube.com/watch?v=mFsBaa_MEzM

2.2. Creative thinking as a tool

Creative thinking is a skill that makes things happen. Out of the multitude of ideas that come to us every day, how many do we put into practice? Or in fact, what can help us put these ideas into practice that can be truly innovative if we give them attention and time. All of this relates to how we can use our creative thinking. Innovation is a word that is taken from the Latin word *innovare*, this means "into new". Doing anything different is the most basic definition of innovation. A new concept, product, device, or novelty can also be defined as innovation. It is a state of mind, a method of thinking that extends beyond the present and into the future. Innovation is directly related to the ability to conceive and implement a solution to a problem that exists and impacts many people. Another way is to rethink how an object can change people's perception of representation, for example, the two famous art pieces: Marcel Duchamp's "fountain" and René Magritte's "Ceci n'est pas une pipe" (French for "This is not a pipe."). However, innovation is not limited to technology or art; it corresponds to each field, and through it, society evolves. In the following, we will see the processes by which a simple idea can reach the status of innovation.



Source: <https://vocationmatters.org/>



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The creative process

One of the first formal models of the creative process was provided by Graham Wallas in *The Art of Thought*. The mechanism he theorized laid the foundations for creative thinking, and it contains the stages an idea goes through until it materializes into a creative solution. Thus, he identified four stages:

- **Preparation:** when the idea is investigated and examined from several perspectives.
- **Incubation:** this is the part of the process where we stop consciously thinking about the problem and let it work in the subconscious.
- **Illumination:** the flash of inspiration where the solution to the problem appears.
- **Verification:** both the validity of the idea is tested, and the idea itself is reduced to exact form.

The Wallas method helps us solve problems first and understand that implementing an idea takes time. Creative problem-solving helps overcome unforeseen challenges and find solutions to unconventional problems. They learn to look at challenges from a fresh perspective. As a result, they take more calculated risks. If students practice problem-solving consistently, they can develop greater situational and social awareness. In addition, they learn to manage time and develop patience.

Another model for looking at the creative process is **design thinking** itself. However, what is design thinking? Design thinking refers to the set of cognitive, strategic, and practical techniques employed by designers during the design process, as well as the body of information developed about how people reason when confronted with design challenges. This way of thinking does not only apply to designers and people working in creative fields, it can be put into practice when you want to materialize an idea and take it to the stage of innovation in any field. It can also be used in school projects to teach students this method so they don't get stuck in the creative process. What design thinking is about is starting from the real needs that are found in society through a period of research and can be applied collaboratively.

Empathize: Conduct research to gain a better understanding of what your users do, say, think, and feel.

Assume you want to improve the onboarding process for new users. During this stage, you will interview a variety of actual users. Directly observe what people do, how they think, and what they want, and ask yourself questions such as 'what inspires or discourages users?' or 'where do they encounter frustration?' The idea is to collect enough observations to actually begin to sympathize with your users and their points of view.

Define: Combine all of your findings and look for areas where your users are having difficulty. Begin to emphasize chances for innovation as you identify your users' demands.

Consider the onboarding example once more. Use the data acquired during the empathize phase to gain insights during the definition phase. Organize your observations and make analogies between them and your consumers' current situations. Is there a common pain point shared by a large number of users? Determine unmet user needs.

Ideate: Come up with a bunch of wild, innovative concepts to answer the unmet user needs discovered in the description step. Allow yourself and your team complete freedom; no concept is too far-fetched, and quantity trumps quality.

Bring your team members together at this point and brainstorm a variety of ideas. Then have them share their ideas with one another, mixing and remixing and expanding on one another's.

Prototype: Create physical representations of a selection of your ideas. The purpose of this phase is to figure out which parts of your ideas work and which don't. Through feedback on your prototypes, you begin to analyze the effect versus feasibility of your ideas in this phase.



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Make your concepts tangible. Create a wireframe for a new landing page and solicit comments internally. Change it in response to feedback, then prototype it in short and dirty code again. Then, distribute it to another group of people.

Test: test and return to your users for feedback after testing. 'Does this solution suit the needs of the users?' and 'Has it benefited their feelings, thoughts, or performance?'

Put your prototype in front of real customers to ensure that it meets your objectives. Has the user experience improved during onboarding? Is the new landing page increasing the amount of time or money spent on your site? Continue to test along the way as you carry out your concept.

Implement: Putting the vision into action. Ensure that your solution becomes a reality and has an impact on the lives of your end customers.

This is the most fundamental aspect of design thinking, although it is often overlooked. Design thinking does not exempt you from actual design execution. The ability of conceptual thinking to transform one area of the end-user's life is crucial to its success.

The steps of this method keep alive the desire to create something useful or to rethink how an existing design with potential can be taken to a higher standard. Some of the advantages of design thinking in education focus on developing the various skills of learners:

- Understanding the value of collaboration and feedback and viewing failures as valuable learning opportunities,
- Incorporating auxiliary methods such as brainstorming to generate valuable ideas,
- Appreciating the value of hard work and persistence,
- Developing self-belief as problem solvers,
- Developing empathy,
- Developing a growth mindset,
- Developing entrepreneurial and community-minded behaviors are all important components of this focus.

As a trainer or teacher, to encourage creativity in the classroom, you should also focus on how you give feedback to students. Do not judge and stop the creative process of a learner and give them sufficient time to incubate the idea. Rely on new and non-formal ways of solving problems, and involve other students in the process by developing a free and reasoned dialogue. To help the learner come up with educational resources, he can research and recommend ways he can break out of his creative block. Last but not least, show him empathy and encourage him to continue implementing his idea.

Creative styles working as a team

Does being creative just mean that you are the author of your creation, or is this concept more about how you approach to creativity? There are many ways to relate to the creative process. Apart from the methods mentioned above, there are many more ways in which people come up with innovative ideas. As a trainer, you can identify in your learners what skills they have and what their creative mindset is. That's why when you put your learners to work in teams; you need to pair people with different perspectives, from visionaries to pragmatic people who find solutions in a smart way, not with hard work. Moreover, based on the personality types below, you can create quizzes to help your learners find out what creative mindset they have and based on that, start collaborating with people they can make a good team with. In this way, they can motivate each other, because motivation is very important to achieving a result.



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The Artist

These kinds of people are driven by a desire to express and change the world, and they are full of ideas and visions. That's not always an easy task, but it gives you the ability to produce works that deeply engage with others and stimulate fresh perspectives on the world. They have a strong aesthetic orientation due to their love of beauty and connection to the senses, and they long for spaces that have been thoughtfully designed. Some are born with an artist's sensibility, others acquire these visions in the course of development, and others draw on knowledge of a particular field and express themselves artistically.

Together, the artist and the producer are a potent creative team with the will and vision to bring ideas to life on a grand scale. In order to increase their impact and see their projects through to completion, make them look for opportunities to collaborate with the vivacious and practical producer.

The Producer

The producer is the archetypal "doer" among all creative individuals. They have a very creative personality that is complemented by a grounded realism and a "get it done" attitude. They are dynamic, people-oriented and analytical. They are goal-oriented and believe that an idea only has true significance when it is transformed into something that others can use and enjoy. They naturally gravitate into leadership and collaboration responsibilities since they are good motivators and inspirer of others.

Their greatest strength is the ability to maintain composure and a single-minded focus while you work through any difficulties that may emerge during the creative process, in addition to their superior intellect and strong work ethic. Finding a deeper sense of purpose to ground your productivity in is their biggest obstacle. That's why they need to seek out the company of idealistic and creative dreamer types who will serve as a constant reminder of your own infinite capacity for inspiration.

The Thinker

For the thinker, the life under examination is the only one that is actually worthwhile. Being lifelong learners, they see the world as a never-ending source of knowledge and opportunities for exploration and truth-seeking. They're content to spend a lot of time alone, reading about subjects that interest them and engaging with their inner world of ideas, because few things satisfy their inquisitive minds like a well-formulated question or an elegant solution.

Pair them with adventurer types because they are the ideal complement to their reflective and analytical personalities. The adventurer's contagious enthusiasm and fun nature serve as a gentle reminder to enjoy the creative process and not be afraid to get their hands a bit messy.

The Dreamer

In the eyes of a dreamer, the world is a place of wonder and beauty. They notice symbolism, analogies, and underlying meanings, while others only see data and statistics. They are classic idealists and romantics and have a strong emotional and intuitive side as well as a creative imagination. Their greatest talent is their depth of empathy and sensitivity, which enable them to express common human emotions in a way that really affects people. Their biggest issue is learning to strike a balance between dreaming and deliberate action, which begins with returning to the present.

Look for opportunities to team up with people like innovators who share your lofty ideals and a dedication to practical solutions. The grounded energy of the innovator might motivate them to use creativity to bring about change in the real world.



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The Innovator

The innovator views everything through the prism of opportunities and advancement, as well as challenges and solutions. When they're utilizing their brain and imagination to come up with new and better methods to do things, they feel most authentic. Their attention is mostly on the environment around them, and they are continually investigating its structures and systems to see opportunities to advance things. They naturally take risks and have an insatiable desire to push limits and discover unexplored territory without following tradition.

When innovators perfect the follow-through, they are able to reach their full potential. Observing the maker in action serves as a reminder that taking things slowly rather than racing to the end is a much more creative approach.

The Maker

The maker has perfected the art of making ideas and visions come to life in three dimensions because they are driven, committed, and focused on the creative process. The maker create the systems, structures, tools, and innovations that the rest of us rely on, and society substantially benefits from their efforts. One of the hardest workers of all the types, the maker is virtually constantly occupied with resolving issues, progressing toward personally significant objectives, and finishing tasks. They're motivated by measurable outcomes, and they are skilled providers.

Join together with the resourceful visionary to push the boundaries of your imagination. The visionary's vivid imagination empowers the maker to dream bigger, to picture the unthinkable, and to bravely take risks in order to realize it.

The Visionary

They like to look at things as they can be rather than as they are because they live in a world of unlimited possibilities. You are motivated to push the boundaries of everything since they are aware that life is only constrained by the bounds of their own ideas. They have a strong desire to positively impact society and the ability to recognize the potential of all and of all, while encouraging others to do the same.

To help them approach their creative work with a grounded, logical perspective, seek out the "voice of reason" of the thinker personality type. The bright consciousness and curious mind of the thinker give an enormous clarity that can help them see more clearly.

The Adventurer

The adventurer's passionate creative pursuit and insatiable curiosity could go anywhere. Their boundless energy enables them to pursue a wide range of interests, pastimes, academic specialties, and creative pursuits. They are quick learners with the capacity to pick up new abilities and manage a variety of tasks and responsibilities. Adventurers are empathic and profoundly emotional individuals who naturally create and interpret stories.

Find artists to collaborate with them so that they can both explore new creative frontiers. They will be motivated to channel adventurous spirits toward journeys of self-discovery by the artist's connection to deeper sources of inspiration.

Additional resources

What is Design Thinking?: <https://www.ideo.com/blogs/inspiration/what-is-design-thinking>

What is Design Thinking in Education?: <https://designingschools.org/2022/04/18/what-is-design-thinking-in-education/>



Video materials

Creative Thinking: How to Increase the Dots to Connect:

<https://www.youtube.com/watch?v=cYhgllTy4yY>

WHERE GOOD IDEAS COME FROM by Steven

Johnson: <https://www.youtube.com/watch?v=NugRZGDbPFU>

2.3. Creativity and arts into practice

The study of aesthetics focuses on unique and uncommon ways of viewing and experiencing the world, not just works of art but also natural objects and everyday activities. However, we can advance significantly if we apply the extremely complex and nuanced conceptual framework of philosophy of perception to issues in aesthetics. But to introduce the arts into education, you don't have to approach them exactly. It is true that a great advantage of the arts in education is the way in which people educate their way of looking at both an artistic object and everyday life.



Source: <https://www.brooklynpaper.com/>

The fact is that everyone has the ability to make art or express themselves artistically. Art comes with that much-needed unusualness that takes us out of our routines and chisels out certain sensitivities within us. Art, however, is also a means of expression, and its means have become extremely useful in the education of all ages. Some of the benefits of art in education can be:

- Participate in class and decrease stress
- Develop social-emotional and interpersonal skills
- Enhance learners' experiences through new ways of communicating
- Handle constructive criticism
- Improve academic achievement
- Improve focus

Through art, you can play while discovering non-formal ways to communicate and learn. An artistic movement that was based on this way of "playing" was Dada. After World War I, Dada artists favored methods of chance, spontaneity, and irreverence in an effort to undermine established and frequently authoritarian standards of order and logic. Another movement that offered methods for developing creativity was surrealism. By rejecting logic and embracing a perspective that placed a strong emphasis on the unconscious and dreams, these surrealist painters aspired to rethink the meaning of the human experience. In the following, we will see how we can adapt these games and practices into classroom activities.



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Exquisite Corpse

Exquisite Corpse was a Surrealist game devised in the 1920s in which phrases or drawings were generated by a number of people, each of whom was blind to the work of the previous participants. A collaborative, motivational work of art is the end product. On a folded sheet of paper, four people would often take turns drawing various bodily parts: first the head, then the chest, then the hips, and lastly the legs. Everyone wasn't aware of what the contributors before them had drawn. The resultant image was frequently humorous and absurd.

We initially thought of Exquisite Corpse as a delightfully lighthearted distraction for serious artists. Maybe just a little amusement before they returned to their actual duties. However, the Surrealists took this approach seriously. They used it to explore the effects of many authors, sequencing, chance, and the unconscious on their art, which helped them better understand the creative process. You can practice this activity in many ways; for example, you can replace drawing with writing. Each student has to continue the sentence without seeing what was written before. In the end, you, as a teacher, read all their creations, which might not make so much rational sense. Through activities like this, you can motivate and encourage your students.

Automatic Drawing

Surrealists used automatic drawing as one tactic. Students should draw constantly for many minutes on a blank piece of paper without considering what they are going to draw. Allow their hands to move freely, without self-censorship, over the paper. This was done by surrealist painters to give the subconscious control. You can hopefully expose your actual psyche by releasing yourself from planning and censorship. This can be an example of an icebreaker activity with your class. You can ask your learners to find and color in various shapes they see in the random abstract drawing they did before to enhance their creativity and make them more energetic.

Dadaist Poem

To make a Dadaist poem:

Take a newspaper.

Take a pair of scissors.

Choose an article as long as you are planning to make your poem.

Cut out the article.

Then cut out each of the words that make up this article and put them in a bag.

Shake it gently.

Then take out the scraps one after the other in the order in which they left the bag.

Copy conscientiously.

The poem will be like you.

And here are you a writer, infinitely original and endowed with a sensibility that is charming though beyond the understanding of the vulgar.

--Tristan Tzara, one of the representatives of the Dada movement

This technique promotes a type of creative awareness and can lead to valuable discussions with your learners. For example, if the activity relies heavily on selection, you can adapt it so that it is not so random that you say you are giving your learners in-class materials from which they can take their pieces of text. They will choose and combine them according to their conscious choices. At the end of



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the activity, after everyone has read their poem, open up a discussion with them about how they selected those pieces. Have them reflect for themselves on the choices they have made in the creative process, and you will awaken their analytical thinking.

Collage

Collage was extremely important in dadaist art and it was re-evaluated in postmodernism. Dada artists embraced chance, accident, and improvisation in their critique of rationality. Such forces subverted elements in their creation of collages, assemblages, and photomontages. It served as a means of individual protest and a critique of the increasingly brutal and automated environment in which they lived. Dada artists could critique the society with distortions of its own media imagery by drawing on such techniques and exploiting representations from magazines, newspapers, and other printed mass media. To make a collage you don't have to make the same political statement, but the practice itself still has echoes in contemporary art. One thing that collage teaches us, and which is beneficial for everyone to know, is that originality does not come from something completely new.

Learners are encouraged to explore collage, but they are also encouraged to consider composition in great detail. It's a fantastic introduction to get people trying out visual storytelling. It is a good technique to develop creativity for all ages, although it is more common in primary school. Adults can also practice this technique and improve the way they communicate visually through the associations and selections they make in the collage. Collage is also a conscious practice in which you select, arrange, and develop a concept from material that already exists. It can help you to look in perspective and create a unified whole out of a mess.

The above practices were also based in one way or another on randomness. We can introduce **randomness and spontaneity** into many practices, including teaching, not just the activities that learners do. The spontaneity with which these practices come about better connects learners and gets them interacting in class. These practices remove monotony, thus creating a more creative learning environment.

Spin the Wheel

For example, you can generate a wheel through educational platforms such as Mentimeter and use it in multiple ways: you can write down the names of the learners and have the wheel choose who presents a project first or what project topic they have been assigned; you can randomly choose how to evaluate at the end of the lesson; you can even choose the topic for discussion or debate that day with your class; you can write down concepts you have taught and invite the learners to spin the wheel to present something about the lesson. You can think of more creative ways than this and implement them to encourage learners to become more and more engaged to generate new ideas.

Riddles

Choose five words, concepts, or notions on which you will base your class that day. Use those words to make riddles that are in the area of teaching. At the beginning of the lesson draw a word from a hat and let the students guess it. When you have extracted all the words have them guess the topic of the lesson and then start teaching. This can be a good ice breaker with which to start the class creatively.

You can also use art through the multitude of **artistic techniques** that exist in other arts besides drawing and writing, as we have seen in the cases above.

Role-play

A very common and effective case in teaching is role-playing which has its origins in theatre. This practice promotes empathy and makes you see directly to understand another point of view. Through role-playing you can make learners understand the needs of a specific group. Let's take an example



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from adult education. Divide the learners into age groups if there are big age differences. Have the younger learners reflect on the needs of the older ones and the senior or older learners to play the younger ones. Such a technique can also diminish preconceptions that exist about certain social groups and promote communication in which everyone understands each other's problems. By giving them certain roles, it then gets learners to solve problems and work in groups to develop new creative ideas.

Occupational therapy

The term "occupations" in occupational therapy refers to the routine tasks that people perform alone, with their families, and in their communities to pass the time and give their lives meaning and purpose. Occupations include things people need to, want to, and are expected to do. If you want to promote creativity in the classroom, let students experiment with different media. In the first phase, you can incorporate one type of art, such as drawing, playing music, dancing, cooking, writing, crafts, photography, filming, or any other hobby they want to pursue

Here we have to look at two aspects: 1) adults in particular need to keep their desire alive to practice a hobby with pleasure and 2) art itself is a method of self-discovery and has a therapeutic value and helps to manage stress and emotions in the long term.

So how can it be put into practice? Choose with your learners a type of activity, from drawing to dance, sculpture to poetry writing, basically anything in the artistic and creative spectrum. Arrange or rearrange the classroom, choose materials and create an environment in which the activity can take place. You can use this technique for example if you are teaching about a particular culture or historical period or social problem. Encourage learners to have this in mind when they start the activity. They can create dances or drawings inspired by the chosen theme or, why not, a small theatre play.

But creating a creative environment also requires **communication and collaboration** to develop innovative ideas and new skills. Because creativity doesn't just stop at the artistic medium, there are also collaborative education techniques for problem solving and design thinking.

Brainstorming

It is beneficial to work on an idea together with other people, the more different perspectives on a problem the better. Brainstorming is one of the most popular methods for stimulating creativity and needs special consideration. According to studies, less ideas are created in brainstorming groups due to evaluation fear and blockage than if individuals thought alone and wrote ideas down. Brainstorming sessions should begin with 15-20 minutes of everyone thinking alone and writing their ideas on an anonymous piece of paper, which is then handed to the facilitator. If you want to put this technique into practice, come with a positive attitude and be open to even the most unusual ideas, because that is the starting point in creating a creative process in the group.

SCAMPER

SCAMPER comes from Substitute, Combine, Adapt, Modify (also amplify and minify), Put to Another Use, Eliminate, and Reverse. SCAMPER is a lateral thinking strategy that encourages you to question the status quo and consider alternative outcomes. This is helpful because numerous challenging assignments require on learners to develop original answers. SCAMPER supports students in this creative process by assisting them in the producing cognitive process within the Create stage, which is the process of considering many alternatives and developing a variety of ideas. When coming up with ideas for a research article, experiment, or project, learners should apply this procedure.



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Additional resources

5 Visionary Surrealism Games for Art Students of Any Age:

<https://theartofeducation.edu/2022/05/18/may-5-visionary-surrealism-games-for-art-students-of-any-age/>

Non-Formal Adult Education and motivation for Lifelong Learning:

<https://epale.ec.europa.eu/sites/default/files/motivation-for-lifelong-learning.pdf>

Video materials

Six Creative Ways To Brainstorm Ideas: <https://www.youtube.com/watch?v=yAidvTKX6xM>

What is Art?: <https://youtu.be/yAidvTKX6xM>

Summary

As we can see, creativity has always been used to accomplish tasks in the same way it has helped us innovate. Over time, it has become a whole area of study for researchers. With scientific developments, we can now access information about how creativity works in our brains and how it affects the way we think and perceive reality. Thanks to this, we can learn how to use it to create more benefits in educational practices and to facilitate environments where people can reinvent themselves and innovate new techniques. Creativity helps us in communication, and not only in communication through art, but also in the communication we undertake in collaborative settings. We can create new connections and open our horizons by having a different perspective on how things are. This motivates us to learn at any age because the benefits are also tangible. For example, in adult education, the motivation and the way an educator makes adults stay active regardless of age can have a very beneficial impact on them.

Whether it is the introduction of artistic practices in education, or whether the teaching method itself encourages the creative potential of each type of creative people, having this environment in which educators create activities aimed at increasing creativity has a direct contribution on the well-being of learners. Through activities designed to make students create something through art, they explore new means of expression that they have not had contact with before or that they have left over time. For adults, a hobby-type activity where you can relax while creating and learning is a method that can be easily incorporated into their routine. Again, to break the monotony that stagnates the creative process, sometimes they have to be taken out of their comfort zone through spontaneity. Educators can gradually introduce these ways of thinking and creative practice to get students to open up at first and to eliminate a possible reluctance. Basically, adults have to relearn to play like children again and find happiness in the process of learning. Only now maybe in a much more conscious way, where people realize how they can use all the skills they learn from the optimal use of creative thinking on a daily basis.

Besides all these methods in this chapter, as an educator, teacher, or trainer, don't forget to use games and other non-formal methods. You can use online applications, educational videos made by specialists, or create new contexts for your learners to create and be creative. Because, in the end, the lifelong educational environment is just a context for development for both learners and educators.



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Chapter 3. Creativity and arts and the future of works

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Abstract

Over the past few decades, the world of work has undergone significant changes. Advances in technology have transformed the way we work, and the pace of change is only accelerating. As we move into the future, creativity and the arts will play an increasingly important role in shaping the world of work. Creativity is the ability to think outside the box, to come up with new and innovative ideas, and to solve problems in novel ways. It is a skill that has always been valued in the arts, but now it is becoming essential in a wide range of industries, from marketing to technology. In this chapter, we explore the relationship between creativity, the arts, and the future of work. We examine how creativity and the arts can be used to drive innovation and improve job performance. We also explore the challenges and opportunities that the changing nature of work presents for artists and creatives.

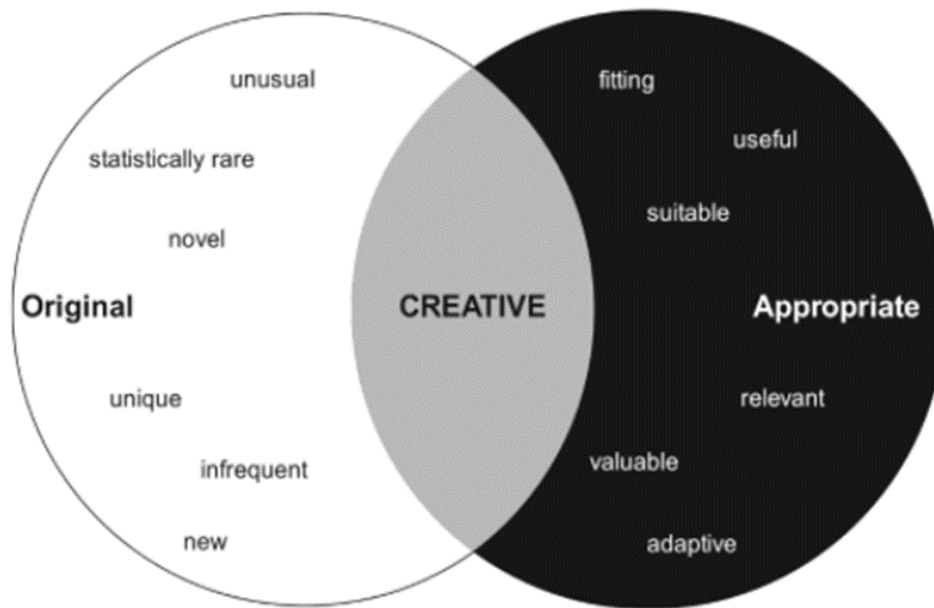
Introduction

The world of work is undergoing a significant transformation, and creativity is becoming an increasingly sought-after skill. Rapid technological advancements, automation, and the rise of the gig economy are changing the way we work, and creativity is emerging as a key differentiator in the workforce. The arts have always been a source of inspiration for innovation and creativity, and the intersection of the arts and the future of work is becoming more apparent (Marzano, 2022). Creative pursuits, such as writing, painting, and music, are no longer just hobbies or pastimes; they are now seen as valuable skills that can differentiate individuals in the workforce. The benefits of creativity in the workforce are numerous. Creative individuals are often better problem solvers, more adaptable, and better able to work in teams. They bring fresh perspectives and innovative ideas to the table, which can lead to improved performance, increased productivity, and a better bottom line. However, there are also challenges that come with this shift towards creativity in the workforce. The first is the need for a creative mindset, which can be difficult to cultivate. Creativity requires a certain level of risk-taking, and individuals must be willing to fail and learn from their mistakes. The second challenge is the need for continuous learning and upskilling. As technology continues to advance, individuals must be able to adapt and learn new skills to stay relevant in the workforce. Despite these challenges, the benefits of creativity in the workforce far outweigh the drawbacks. The future of work is becoming more dynamic, and individuals who possess creativity and an artistic mindset are well-positioned to thrive in this new environment. Overall, the intersection of creativity, arts, and the future of work is an exciting and rapidly evolving field. It offers endless opportunities for innovation, growth, and personal development. As we move forward into this new era of work, it is essential that we embrace creativity and the arts as valuable tools for success. In this chapter, we will explore the intersection of creativity, arts, and the future of work in more detail. We will examine the role of creativity in the workforce, the benefits and challenges of cultivating a creative mindset, and the ways in which the arts can be used to enhance creativity in the workplace.

3.1. Creativity, arts and innovation

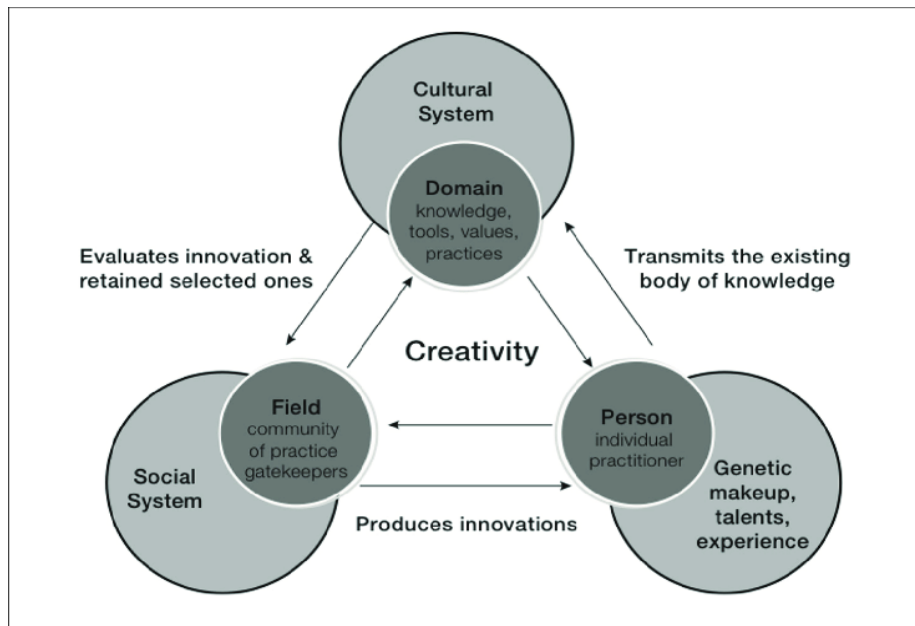
Creativity is the ability to generate new and innovative ideas, concepts, or solutions to problems, and it is a critical component of human cognition and behaviour. The literature throws up various definitions of creativity but it is generally understood to involve originality, usefulness, and aesthetic or emotional appeal. The widely accepted view is that creativity is the capability to develop both *original* and *valuable* ideas. Original things should be effective to be creative, while effectiveness

should take the form of value. Figure below shows the contribution of originality and appropriateness in creativity according to the most commonly followed definitions of creativity (Abraham, 2018).



Definitional elements of creativity. Source: (Abraham, 2018)

One definition of creativity comes from the renowned psychologist Mihaly Csikszentmihalyi, who defined it as "a process of generating novel and useful ideas that are valued by society" (Csikszentmihalyi, 1999). This definition emphasizes the importance of both novelty and utility in creative thinking and suggests that creativity is not merely about producing something new but also about producing something that has value and relevance to others. Another definition of creativity comes from the Harvard psychologist Teresa Amabile, who defined it as "the production of novel and useful ideas by individuals or teams" (Amabile, 1988). This definition highlights the importance of individual and collective contributions to creativity and suggests that creativity can emerge from group interactions as well as individual efforts. Creativity can take many forms, including artistic expression, scientific discovery, entrepreneurial innovation, and problem-solving in various domains. At its core, creativity involves a combination of divergent thinking, which is the ability to generate multiple possible solutions to a problem, and convergent thinking, which is the ability to evaluate and select the best solution from among the options. Creative individuals are often characterized by their openness to experience, willingness to take risks, and ability to see connections between seemingly unrelated ideas or concepts. Creativity can be expressed in various ways, including through writing, music, visual arts, design, and entrepreneurship. It is a critical component of human cognition and behaviour, and it plays an essential role in driving innovation, problem-solving, and personal fulfilment. Overall, creativity is a complex and multifaceted phenomenon that involves both individual and contextual factors. By understanding the nature and processes of creativity, we can better harness its potential to drive innovation and solve pressing problems in various domains. Creative thinking can help individuals and work organizations to adapt to changing circumstances, find new opportunities, and generate breakthrough ideas.



Csikszentmihalyi's systems model of Creativity. Source: (Csikszentmihalyi, 1999)

Studies have shown that creative thinking is associated with a range of cognitive processes, such as divergent thinking, flexibility, and fluency (Runco & Jaeger, 2012). In addition, creativity is closely linked to well-being and personal fulfilment, as engaging in creative activities can provide a sense of meaning, purpose, and accomplishment (Csikszentmihalyi, 1996). There is a growing body of research on creativity that explores its cognitive, social, and cultural dimensions. In fact, creativity is not the product of individual genius but 'is a phenomenon that is constructed through an interaction between producers and audience' (Csikszentmihalyi, 1999). Csikszentmihalyi's research (1999) identifies how creative work of individuals and groups is generated through interactions with others and the domain or culture (Fig. 2). Other research has examined the role of social and cultural factors in creativity, such as the influence of social networks, organizational climate, and cultural values (Shalley & Zhou, 2008). Overall, creativity is a complex and multifaceted phenomenon that has significant implications for individual and societal well-being. By understanding the nature and processes of creativity, we can better harness its potential to drive innovation and solve pressing problems in various domains.

Creativity and arts

Creativity and the arts are closely intertwined, as artistic expression often involves generating new and innovative ideas and forms of expression. Artistic creativity can take many forms, including painting, sculpture, music, theatre, dance, and literature, among others. One of the key features of artistic creativity is the ability to generate novel and original ideas, which can challenge existing norms and conventions. For example, a painter may experiment with new techniques or subject matter, while a composer may develop innovative musical structures or styles. This process of exploration and experimentation is essential to the creative process in the arts. Another important aspect of artistic creativity is the ability to communicate ideas and emotions through a variety of media. Artists use various techniques and forms of expression to convey meaning, evoke emotions, and engage with their audience. This process of communication is a fundamental aspect of artistic creativity, as it allows artists to connect with others and share their unique perspectives on the world. Research has shown that engagement with the arts can have a range of positive effects on individuals and communities. For example, studies have found that participation in the arts can enhance cognitive and emotional development, improve well-being and quality of life, and promote social cohesion and community engagement (Hanna, 2018; Throsby & Zednik, 2010). In addition, artistic creativity can play a critical



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role in driving innovation and cultural change, as artists often challenge established ideas and push the boundaries of what is possible. Moreover, the study of creativity and the arts has been a longstanding area of research within psychology and other disciplines. Researchers have explored various aspects of artistic creativity, including the cognitive processes involved in creative thinking, the role of emotions in artistic expression, and the social and cultural factors that influence artistic creativity (Sawyer, 2011). These studies have shed light on the nature of creativity and its role in human experience and development. Furthermore, engagement with the arts has been found to have positive effects on various aspects of cognitive and emotional development. For example, research has shown that children who engage in the arts exhibit higher levels of creativity and critical thinking skills, as well as better emotional regulation and social skills (Winner, 2000). Additionally, participation in the arts has been associated with improved cognitive function and memory in older adults (Park & Bischof, 2013). The benefits of artistic creativity are not limited to individual development, but also extend to social and cultural outcomes. Artistic expression can foster greater understanding and appreciation of diverse cultures and perspectives, promote social justice and advocacy, and inspire civic engagement and community building (Kretzmann & McKnight, 1993). In addition, the arts can play a critical role in promoting sustainable development and environmental conservation (UNESCO, 2013).

Creativity and arts and their relation with science

At the same time creativity is a fundamental aspect also in science, and it plays a crucial role in advancing knowledge and understanding in both arts and science fields. In fact, the creative process is often described as a key driver of innovation and progress in science, just as it is in the arts (Solina, 2022).

While there are certainly differences in the way creativity is expressed in these two fields, many of the underlying principles are similar. For example, both artists and scientists often rely on imagination, curiosity, and a willingness to take risks in order to generate new ideas and insights (Charyton, 2015). Moreover, many of the most notable creative individuals in history have been equally accomplished in both art and science. For instance, Leonardo da Vinci was not only a master painter but also a pioneering inventor, engineer, and scientist. Similarly, Albert Einstein was known for his groundbreaking work in physics, but he was also an accomplished musician and amateur philosopher (Solina, 2021). Research has also shown that creativity can be enhanced through various practices and techniques, such as brainstorming, meditation, and exposure to diverse perspectives and experiences. By fostering creativity in both art and science, we can unlock new possibilities and push the boundaries of what is possible in each field (Charyton, 2015). In summary research confirms that creativity is a crucial key for both art and science (Fig.3). The relationship between art, science, and creativity is a complex and multifaceted one, but it is clear that each field has much to offer the other. By embracing creativity and exploring the intersection between these two disciplines, we can continue to push the boundaries of our knowledge and understanding of the world around us, his advance and the future of works (Marzano, 2022).



Creativity, art and science. Source: <https://www.aussietheatre.com.au/news/which-is-more-creative-the-arts-or-the-sciences-research-confirms-creativity-is-key-for-both>

Additional resources

Amabile, T. M. (1996). Creativity in context: Update to "The Social Psychology of Creativity." Westview Press.

The impact of culture on creativity:

<https://keanet.eu/wpcontent/uploads/2019/09/impactculturecreativityfull.pdf>

Video materials

How social context affects creativity: <https://www.youtube.com/watch?v=cmZ2g6DuGIE>

Creativity and innovation: <https://www.youtube.com/watch?v=TfucaNzI554>

3.2. The future of work

In the past, many jobs were focused on repetitive tasks that could be easily automated. However, as technology advances, more and more of these tasks are being taken over by machines. This means that the jobs that will be in demand in the future will require skills that cannot be easily replicated by artificial intelligence. Creativity is one of these skills. Creativity is not just important in artistic fields. It is also essential in fields such as marketing, design, and technology, where companies need to constantly innovate in order to stay ahead of the competition. Creative thinking allows individuals to come up with new ideas and solutions that others may not have thought of, giving them an edge in a crowded market. In addition, creativity is becoming more important in the workplace because of the changing nature of work itself. In the past, many people worked in traditional jobs with set hours and responsibilities. However, today's workplace is much more fluid, with many people working remotely or on a freelance basis. This means that individuals need to be able to think creatively in order to adapt to new situations and find new opportunities. Creativity is also important in leadership roles, where individuals need to be able to inspire and motivate their team members in order to achieve their goals.

How the arts can help develop and foster creativity at work

The arts have long been recognized as a powerful tool for developing and fostering creativity. By engaging in artistic pursuits such as painting, music, or writing, individuals can learn to think outside the box and come up with new ideas. In addition, the arts can help individuals develop skills such as



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problem-solving, communication, and collaboration, which are all essential in the modern workplace. Studies have shown that individuals who engage in the arts are more likely to be creative and innovative in their work. This is because the arts help to develop what is known as "divergent thinking," which is the ability to come up with multiple solutions to a problem. This type of thinking is essential in a world where problems are becoming increasingly complex and there is no one right answer.

The future of work is a complex and dynamic topic that has gained increased attention in recent years. Advancements in technology, changes in the global economy, and demographic shifts are altering the nature of work and employment, and these trends are likely to continue in the coming years (Hearn, 2020). In this article, we will examine the key trends that are shaping the future of work and their implications for workers, organizations, and society. One of the most significant trends that is transforming the world of work is the rise of automation and artificial intelligence (AI). Advances in robotics, machine learning, and other forms of AI are enabling machines to perform tasks previously done by humans, leading to concerns about job displacement and the future of work. While some experts predict that automation will lead to widespread job losses, others suggest that it will create new opportunities and jobs, particularly in areas that require creativity, social intelligence, and problem-solving skills (Bessen, 2018; Brynjolfsson & McAfee, 2014). Another trend that is reshaping the world of work is the growth of the gig economy and other forms of flexible work arrangements. Advances in communication technologies and changes in labor laws are enabling workers to work remotely, on a freelance basis, or through online platforms, providing greater flexibility and autonomy. However, this trend also raises concerns about job security, income volatility, and access to benefits (Kalleberg, 2018).

Demographic changes are also impacting the workforce, as aging populations and declining birth rates are leading to a shrinking workforce in many countries. This trend is leading to increased competition for skilled labor and may require organizations to adopt new recruitment and retention strategies (OECD, 2018). Moreover, social and environmental factors are playing an increasingly important role in shaping the future of work. Consumers and investors are placing greater emphasis on corporate social responsibility, environmental sustainability, and ethical business practices, which may require organizations to adapt their operations and strategies (Elkington & Hartigan, 2018). The COVID-19 pandemic has accelerated many of these trends, particularly the adoption of remote work and other forms of digital collaboration. This has highlighted the importance of flexibility, resilience, and adaptability in the face of unexpected disruptions, and may have long-lasting effects on the nature of work and employment. The implications of these trends for workers, organizations, and society are significant. Workers will need to acquire new skills and adapt to changing work environments in order to remain employable, while organizations will need to be agile, innovative, and able to manage a diverse and changing workforce in order to remain competitive.

Work and technology

The relationship between work and technology is a complex and dynamic topic that has attracted increasing attention in recent years. Advances in technology, particularly in the areas of automation and artificial intelligence (AI), have the potential to transform the nature of work and employment in profound ways. One of the most significant trends that is transforming the relationship between work and technology is the rise of automation and AI. These technologies are enabling machines to perform a growing range of tasks, from routine manual labor to complex decision-making, leading to concerns about job displacement and the future of work (Bessen, 2018). However, some experts argue that automation and AI will create new opportunities and jobs, particularly in areas that require creativity, social intelligence, and problem-solving skills (Brynjolfsson & McAfee, 2014). Another trend that is reshaping the relationship between work and technology is the growth of the gig economy and other forms of flexible work arrangements. Advances in communication technologies and changes in labor laws are enabling workers to work remotely, on a freelance basis, or through online platforms,



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providing greater flexibility and autonomy. However, this trend also raises concerns about job security, income volatility, and access to benefits (Kalleberg, 2018). Moreover, technological advancements are also changing the way work is organized and managed. The use of data analytics, machine learning, and other forms of AI are enabling organizations to optimize their operations, reduce costs, and improve productivity. At the same time, these technologies are also generating new challenges, such as data privacy concerns and ethical considerations related to the use of AI in decision-making processes (Davenport & Kirby, 2015). The implications of these trends for workers, organizations, and society are significant. Workers will need to acquire new skills and adapt to changing work environments in order to remain employable, while organizations will need to be agile, innovative, and able to manage a diverse and changing workforce in order to remain competitive. Policymakers and other stakeholders will also need to address the social and economic challenges posed by these changes, including income inequality, job displacement, and access to education and training (OECD, 2019).

Looking to the future through creativity

Looking to the future through creativity is an area of growing interest in psychology, neuroscience, and the arts. The ability to think creatively is increasingly viewed as a key skill for individuals and organizations to navigate complex challenges and adapt to rapidly changing environments. In this article, we will explore the role of creativity in anticipating and shaping the future, and its potential implications for personal and societal development. One of the fundamental features of creativity is its ability to generate new ideas and possibilities. By thinking outside the box and exploring unconventional solutions, individuals and organizations can uncover new opportunities and insights that may not have been apparent before (Amabile, 1996). This can be particularly valuable in contexts where traditional approaches have become ineffective or outdated, such as in the face of technological disruption, social and environmental crises, or geopolitical shifts.

Moreover, creative thinking can help individuals and organizations to anticipate and prepare for future challenges by fostering greater flexibility, adaptability, and resilience. By developing the ability to generate and experiment with a range of ideas and solutions, individuals and organizations can become more nimble and agile in the face of uncertainty and change (Bilton, 2007). This can help to mitigate the risks and challenges associated with disruptive events and prepare for a range of potential futures. Furthermore, creative thinking can also play a critical role in shaping the future by inspiring innovation and driving progress. By imagining and exploring new possibilities, individuals and organizations can create and develop new technologies, products, and services that can transform the way we live and work (Csikszentmihalyi, 1996). Moreover, creative expression through the arts can inspire new cultural movements, social change, and civic engagement, helping to shape the direction of society in positive ways (Kretzmann & McKnight, 1993).

The implications of these trends for personal and societal development are significant. Individuals and organizations that are able to develop and leverage creative thinking skills are likely to be better equipped to adapt to changing circumstances and anticipate future challenges. Moreover, fostering a culture of creativity and innovation can promote sustainable economic growth, social progress, and cultural vitality (Florida, 2002). However, there are also potential challenges and barriers to promote creativity in various settings. For example, individuals may face resistance or disapproval from others for deviating from established norms or traditions, or may struggle to overcome cognitive biases that inhibit creative thinking (Sternberg & Lubart, 1999). Organizations may also face challenges in promoting creativity, such as the need to balance creativity with efficiency and stability, or the risk of investing resources in unproven or uncertain ideas (Bilton, 2007).

To address these challenges, there is a growing body of research and practice focused on promoting creativity in individuals and organizations. For example, educational programs that emphasize creativity and innovation can help to develop these skills in students from an early age (Runco &



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Jaeger, 2012). Organizational practices such as design thinking, brainstorming, and cross-functional teams can also foster creative problem-solving and innovation (Martin, 2011). Moreover, there is a growing recognition of the importance of diversity and inclusivity in promoting creativity and innovation. By embracing diverse perspectives and experiences, individuals and organizations can generate a wider range of ideas and solutions that are more relevant and effective in a rapidly changing world (Hong & Page, 2004). In addition, inclusive practices such as equitable access to education and training, flexible work arrangements, and diverse leadership can promote a more diverse and creative workforce (OECD, 2021).

Additional resources

Why do societies need art and creativity to survive?: <https://brilliantio.com/why-do-societies-need-art-and-creativity-to-survive/>

Science, Art, and Creativity: <https://www.americanscientist.org/blog/from-the-staff/science-art-and-creativity>

Video materials

The art of creativity: <https://www.youtube.com/watch?v=pL71KhNmnlS>

Creativity in art and creativity in science: <https://www.youtube.com/watch?v=7HsgDHAHLiQ>

3.3. Creative arts at work

Creative arts at work are a topic that is gaining increasing attention in the fields of psychology, management, and organizational studies. The use of creative arts such as music, theater, dance, and visual arts in the workplace is being recognized as a way to promote employee well-being, creativity, and collaboration. In this chapter, we will explore the role of the creative arts at work and its potential implications for individuals and organizations. One of the key features of the creative arts at work is its ability to enhance employee well-being and reduce stress. Research has shown that engaging in creative activities can have a positive impact on mental health, reducing symptoms of depression and anxiety, and improving overall well-being (Fancourt & Finn, 2019). This can be particularly valuable in high-stress work environments, where employees may face demanding deadlines, long hours, and intense pressure.

Moreover, the creative arts at work can also promote creativity and innovation by providing employees with new perspectives and experiences. By engaging in creative activities, employees can develop new skills, explore different ways of thinking, and generate novel ideas that can inform their work (Hennessey & Amabile, 2010). This can be particularly valuable in contexts where creativity and innovation are highly valued, such as in the technology, design, and arts industries. Furthermore, creative arts at work can also promote collaboration and teamwork by providing opportunities for employees to engage in shared experiences and develop a sense of community. By working together on creative projects, employees can build relationships, develop communication skills, and enhance their ability to work effectively in teams (Linstead & Höpfl, 2006). This can be particularly valuable in contexts where collaboration and teamwork are essential for success, such as in the healthcare, education, and nonprofit sectors.

The implications of these trends for individuals and organizations are significant. Incorporating the creative arts into the workplace can help to promote employee well-being, creativity, and collaboration, potentially leading to increased job satisfaction, innovation, and productivity. Moreover, promoting a culture of creativity and well-being can help organizations to attract and retain top talent, enhance their reputation, and promote a positive work environment.



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However, there are also potential challenges and barriers to implementing creative arts at work, such as the need to balance creativity with productivity, cost considerations, and the risk of alienating employees who may not be interested in or comfortable with creative activities. It is therefore important for organizations to consider their goals, resources, and culture when designing and implementing creative arts programs in the workplace. To address these challenges, there is a growing body of research and practice focused on promoting the creative arts at work. For example, some organizations have implemented arts-based training programs, where employees learn creative skills through experiential learning and collaborative projects (Shaw & McLean Parks, 2013). Other organizations have incorporated art and music into their physical workspaces, creating an aesthetically pleasing and inspiring environment for employees (Hemlin & Allwood, 2009). Moreover, there is a growing recognition of the importance of diversity and inclusivity in promoting creative arts at work. By embracing diverse perspectives and experiences, organizations can generate a wider range of ideas and solutions that are more relevant and effective in a rapidly changing world (Hong & Page, 2004). In addition, inclusive practices such as equitable access to arts-based education and training, flexible work arrangements, and diverse leadership can promote a more diverse and creative workforce (OECD, 2021).

How to enhance creativity at work

Creativity is an essential skill in today's fast-paced and ever-changing work environment (Ohly, 2018). Individuals who are able to think creatively and come up with innovative solutions are highly valued by employers. However, creativity is not just a talent that some people are born with. It is a skill that can be developed and enhanced through practice and training.

Workplace creativity can be enhanced through various practices and techniques. Positive affect from coworkers, job design, and creativity techniques are some of the factors that can improve creativity in the workplace (Lee, Byun & Kim 2021). Coworkers' helping behavior can increase individuals' knowledge sharing and creative performance. Job design can also impact workplace creativity (Fig. 4). Jobs that are designed to be challenging, interesting, and meaningful can lead to increased creativity in the workplace (Joo, McLean & Yang, 2013).

Meaningfulness in the workplace is another factor that can increase creativity. When work is perceived as meaningful by employees, they are more likely to engage in creative problem-solving and decision-making (Meitar, Abraham, & Waldman, 2009). It is important for organizations to foster a culture of creativity and provide employees with the necessary resources, tools, and support to be creative. By enhancing creativity in the workplace, organizations can gain a competitive advantage and improve overall performance.



Workplace design and creativity. Source: <https://www.wired.co.uk/article/bc/how-workplace-design-can-foster-creativity>

Below some strategies to enhance creativity at work are indicated.

Develop a Growth Mindset. One of the most important things you can do to enhance creativity at work is to develop a growth mindset. This means to believe that intelligence and creativity are not fixed traits, but rather can be developed and improved through practice. By adopting a growth mindset, you will be more open to find new strategies and trying new things, which is essential for creativity.

Create a stimulating atmosphere. Setting up a “creativity-oriented atmosphere” provides a stimulating environment for employees, helping spark new ideas and facilitate creative thinking. From clever office design to providing the tools teams need to brainstorm ideas, there are lots of ways you can set up a creative workplace atmosphere. For example, businesses renowned for their creativity, such as design agencies, entertainment companies like Netflix, and children’s brands like Lego, tend to reside in offices purpose-built to encourage creativity.

Allow for failure. It’s important to let your employees know that perfection is not expected or thoroughly polished ideas and projects each and every time they are asked for their creative contributions. Staff members need to be allowed to come up with plans that go awry and to be able to take risks without negative consequences. Managers and companies learn from mistakes, and failing wisely helps avoid catastrophic errors.

Take Breaks. Research has shown that taking breaks can actually enhance creativity. When we take breaks, our brains are able to rest and recharge, to approach problems from different angles which can help us to think more creatively and come up with new solutions when we return to our work.

Collaborate with Others. Collaborating with others can be a great way to enhance creativity at work. When you work with others, you have access to a wider range of ideas and perspectives, which can inspire new and innovative solutions.

Celebrate innovation. Reward the employees for thinking experimentally, even if their ideas fall flat or proposed projects don't pan out as planned. Acknowledge original designs or suggestions verbally in meetings, and bring up fresh ideas you’ve noticed from employees during reviews.



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Continue to hire diverse talent. Diversity contributes to an atmosphere of creative thinking. It's good for business to have employees from different fields, different schools, and different backgrounds. Employees with too many similarities in education and experience can often come up with ideas that start to sound repetitive after a while.

Besides all these methods in this chapter, as an educator, teacher or trainer don't forget to use games and other non-formal methods. You can use online applications, educational videos made by specialists or create new contexts for your learners to create and be creative. Because, in the end, the lifelong educational environment is just a context for development for both learners and educators.

Additional resources

Creativity at work: <https://www.creativityatwork.com/>

Hearn, G. (2020). *The Future of Creative Work: Creativity and Digital Disruption*. Edward Elgar Publishing, Cheltenham.

Video materials

Coding, creativity, and the future of work: <https://www.youtube.com/watch?v=bSVPTFg-Pg0>

HR Innovation and Future of Work: <https://www.youtube.com/watch?v=vTZHQqEK-CE>

Summary

As we can see, creativity has always been used to accomplish tasks in the same way it has helped us innovate. Over time, it has become a whole area of study for researchers. With scientific developments, we can now access information about how creativity works in our brains and how it affects the way we think and perceive reality. Thanks to this we can learn how to use it to create more benefits in educational practices and to facilitate environments where people can reinvent themselves and innovate new techniques. Creativity helps us in communication, and not only in communication through art, but also in the communication we undertake in collaborative settings. We can create new connections and open our horizons by having a different perspective on how things are. This motivates us to learn at any age because the benefits are also tangible. For example, in adult education, the motivation and the way an educator makes adults stay active regardless of age can have a very beneficial impact on them.

Whether it is the introduction of artistic practices in education, or whether the teaching method itself encourages the creative potential of each type of creative person, having this environment in which educators create activities aimed at increasing creativity has a direct contribution on the well-being of learners. Through activities designed to make students create something through art, they explore new means of expression that they have not had contact with before or that they have left over time. For adults, a hobby-type activity where you can relax while creating and learning is a method that can be easily incorporated into their routine. Again, to break the monotony that stagnates the creative process, sometimes they have to be taken out of their comfort zone through spontaneity. Educators can gradually introduce these ways of thinking and creative practice to get students to open up at first and eliminate any possible reluctance. Basically, adults have to relearn to play like children again and find happiness in the process of learning. Only now, maybe in a much more conscious way, where people realize how they can use all the skills they learn from the optimal use of creative thinking on a daily basis.

In conclusion, creative arts at work are a dynamic and evolving topic that requires ongoing research and practice. The use of creative arts in the workplace has important implications for employee well-being, creativity, and collaboration, and it is important for individuals and organizations to recognize and promote the value of creativity and well-being in their work and lives.



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Conclusions

Author: Yeliz NUR AKARCA

The term "digital social innovation" (DSI) describes the application of digital technologies to solve social problems and add value to society. In recent years, DSI has drawn attention as a potentially effective strategy for addressing complex societal issues like climate change, social inequality, and health problems. The ability to imagine and design creative solutions to these problems makes creativity a key component of DSI. Digital social innovation (DSI) is a potent force for change that uses the strength of social networks and technology to tackle difficult social and environmental issues. However, DSI needs to be informed by creativity and the arts in order to make a meaningful and lasting impact.

Digital social innovation (DSI) has had a transformative and disruptive effect on the arts and creativity. On the one hand, DSI has given artists and creatives fresh chances to interact with audiences and produce new media that is more approachable, interactive, and participatory. On the other hand, it has also questioned conventional approaches to the creation, exhibition, and consumption of art, leading to significant concerns about how technology influences artistic expression and cultural identity. Artists and creatives can now collaborate and engage in interdisciplinary exchange thanks to DSI, which has also opened up new opportunities for these activities. New forms of artistic expression include data-driven art, socially engaged art, and art-science collaborations, which combine artistic expression with scientific research, activism, and social justice. DSI has had a disruptive as well as transformative effect on the arts and creativity. It has given artists and creatives new chances to interact with audiences, work with others, and try out novel artistic expressions. At the same time, it has also questioned conventional approaches to the creation, ownership, and distribution of art, posing significant issues regarding the influence of technology on cultural practices.

For DSI to succeed, creativity is necessary because it enables original and cutting-edge responses to social problems. DSI can address social issues in a way that is not only effective but also meaningful and pertinent to the communities they serve thanks to the combination of creativity and the arts. According to research, exposure to the arts and creative pursuits can improve cognitive abilities like communication, problem-solving, and critical thinking. Additionally, the arts can offer a platform for self-expression and personal development, helping people find their identity and purpose.

Creativity and the arts will continue to be important in the future. The nature of many jobs is predicted to change due to the rise of automation and artificial intelligence, making creativity and innovation more valuable than ever. It is less likely that complex problem-solving, design thinking, and originality-required jobs will be automated, and workers with these skills will likely be in high demand. Furthermore, as the world becomes more interconnected, it will be more crucial than ever to be able to communicate across cultures, languages, and viewpoints. Beyond their use in DSI, creativity and the arts are valuable in other contexts. They are essential elements of education as well because they help students grow intellectually and emotionally. Students gain the ability to think critically, communicate clearly, and become more empathetic and culturally aware as a result of exposure to the arts.

In conclusion, creativity and digital social innovation go hand in hand, with the latter being a crucial component of the former. The arts and creative pursuits play a crucial role in education by helping to shape well-rounded people with a variety of skill sets. Success will depend on creativity and innovation, making arts education more important than ever. The future of work, education, and social innovation in the digital sphere all depend heavily on creativity and the arts. We can create solutions that are not only practical but also culturally aware and emotionally compelling by incorporating these components into DSI. We can encourage the growth of people with the skills required for success in a rapidly changing world by promoting creativity and the arts in education.



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PART 2: PRACTICAL PART

Author: Nida AKCEVİZ OVA

Introduction

Creativity and art hold immense importance in various aspects of human life. They are essential for personal expression, cultural preservation, social progress, and individual and collective well-being. Creativity allows individuals to think outside the box, find innovative solutions, and bring imagination to life. Through art, people can express their thoughts, emotions, and experiences in ways that words alone often cannot capture. Art serves as a universal language, transcending cultural and linguistic barriers, and connecting people from diverse backgrounds. It fosters critical thinking, problem-solving, and emotional intelligence. Moreover, creativity and art enrich society by challenging the norms, sparking dialogue, and offering new perspectives. They provide a platform for social commentary, cultural exchange, and self-reflection. In education, creativity and art promote holistic development, nurture imagination, and encourage a lifelong love for learning. Ultimately, creativity and art inspire us, bring beauty to the world, and have the power to transform individuals and communities for the better.

In our diverse and interconnected world, the pursuit of social inclusion has become a fundamental goal in education. It is essential to provide every individual with equal opportunities to participate, contribute, and thrive in society. This chapter explores the transformative power of teaching creativity and the arts as a means to promote social inclusion, focusing on how social educators and teachers can effectively utilize these tools in their educational practices. Teaching creativity and the arts encompasses a broad spectrum of disciplines and these creative outlets offer unique opportunities for self-expression, exploration, and cultural engagement. By integrating creativity and the arts into education, social educators and teachers can create inclusive learning environments that celebrate diversity and foster a sense of belonging.

In today's educational progress, the role of social educators and teachers extends far beyond imparting academic knowledge. They are entrusted with the responsibility of creating inclusive learning environments that foster social inclusion and promote the holistic development of students. Recognizing the transformative power of creativity and the arts in this pursuit becomes essential. By integrating creative expression and artistic practices into their teaching methodologies, educators can unlock a world of possibilities for nurturing social inclusion among students.

In traditional educational settings, the focus often remains on delivering standardized curricula and achieving academic benchmarks. However, it is crucial to recognize that education encompasses more than just the acquisition of knowledge and skills. Students also require a sense of belonging, acceptance, and emotional well-being to thrive in their educational journey. This is where creativity and arts play a pivotal role, providing a medium through which social educators and teachers can bridge gaps, break down barriers, and foster a sense of belonging within their classrooms.

This part of the multimedia book will examine the ways in which social educators and teachers can leverage creativity and arts to foster self-expression, break down barriers, challenge stereotypes, and promote empathy and understanding among students. By embracing these powerful tools, educators can create inclusive spaces where every student feels valued, empowered, and part of a diverse community working towards a shared vision of social inclusion.



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Chapter 4. Teaching creativity and arts to promote social inclusion

Author: Helena AREVALO MARTINEZ

Abstract

An inclusive classroom can be defined as a space where students with and without learning differences are capable of learning together in the Least Restrictive Environment (LRE). To ensure this, Universal Design for Learning (UDL) is designed so that any kid can follow and no one is left behind in the curriculum agenda. The creation of an inclusive classroom is a matter of collaboration between the cultural, educational, and social environments.

To approach this goal, creative settings have been proven to be successful tools. When no specific rules need to be followed, and any form of expression is valid, it is way easier to guarantee inclusion, as in creation there is no "right answer". This builds an atmosphere of acceptance, de-stressing, and trust in the classroom, with the learning benefits this leads to. Moreover, technological tools nowadays allow a wide range of artistic expressions so that everyone can participate in their own way and feel included.

Introduction

Inclusion is critical to society. Developing an inclusive mindset or creating an inclusive environment is about ensuring that everyone feels valued and respected as an individual. This means that every person should be allowed to learn or work in a way that suits them if the results and outcomes equally follow the required agenda.

This is especially important in the younger ages when psychological areas are still not fully developed and behaviours still need to be learned making kids the most vulnerable to the environment they are growing into. Inclusive classrooms and Least Restrictive Environments (LRE) are the keys to ensuring children grow up in an atmosphere that is capable of accepting differences, flexible with the delivery methods, and able to create an environment in which no one is left behind or discriminated against, allowing every kid to learn, express themselves, socialize, and build their future as well as any other. Feeling included is a key aspect of human life.

Even if the curriculum cannot change for anyone, the approach to it definitely can. This means flexibility is the key to inclusivity. It's about fostering the ability to come up with different solutions and unique ideas to different problems, encouraging students to continue on their journey to discover. That is exactly why embracing creativity in the classroom is a great way to challenge the notion of static learning and make sure everyone is capable of keeping up with the agenda while being comfortably included.

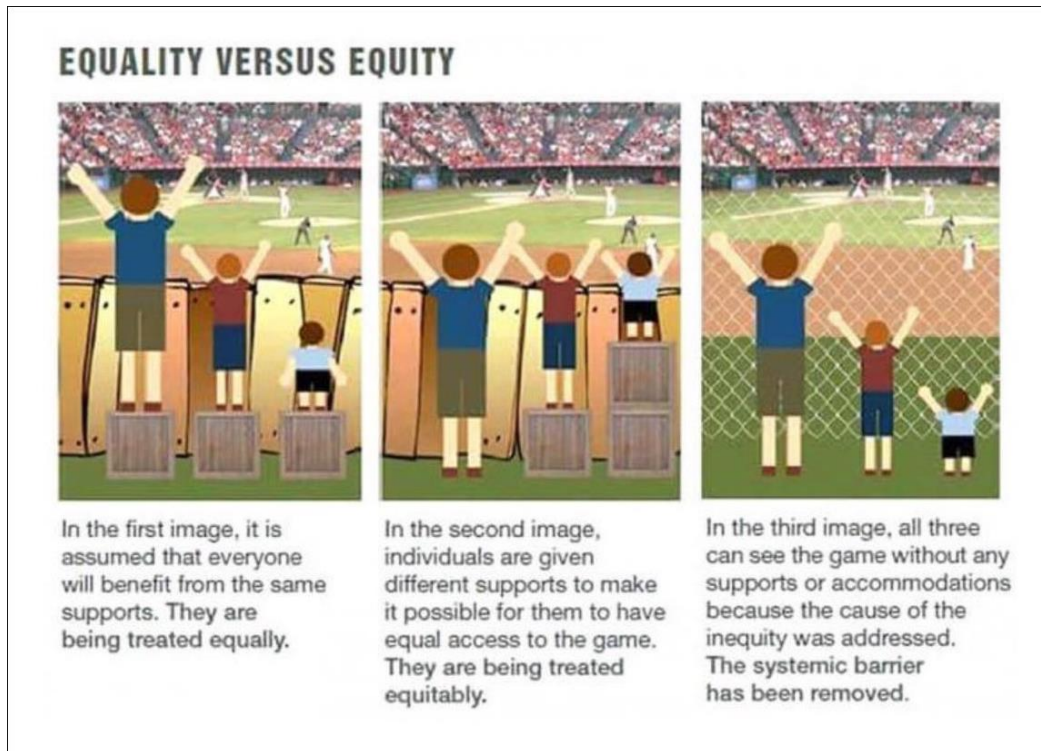
4.1. How to work in an inclusive way in the classroom?

An inclusive classroom is defined as a general education classroom where students with and without learning differences are capable of learning together. Inclusive classrooms are welcoming and support the diverse academic, social, emotional, and communication needs of all students.

When children feel accepted and supported by their school community, it builds a solid foundation where all students can learn and thrive socially, emotionally, and academically.

With inclusive education, no student is left behind, deprived of education, or discriminated against due to any circumstance, leading to a reduction in stigma among the students. Moreover, bringing

inclusivity into the classroom strengthens the ability of all kids to work together, understand and value different points of view, and think critically.



All students learn differently. This is a principle of inclusive education. There's no "one size fits all" approach to it.

In an inclusive classroom, teachers weave in specially designed instruction and support that can help students make progress without losing quality education. Inclusive schooling practices embrace the idea that since everyone is an individual, it is needed to organize schools, teaching, and learning so that each student gets a personalized learning experience.

When creating an inclusive environment, teaching staff need to be aware of these differences in order to provide an adequate inclusion strategy that can guarantee equal learning outcomes. Neither every child has the same needs, nor will all of them respond the same way to the methods or plans used to ensure inclusion.

That is what classroom management plans are for. Those plans are made up of routines and protocols that are meant to be consistent and effective. But in an inclusive class, they must also be flexible so that they can adjust according to the diverse needs of the students in the class. In these types of classes, plans must be responsive to students with learning differences, physical challenges, or social or emotional needs.

For further information about how inclusion works and guidelines to its implementation you can read the book "Inclusion in Action" by Nicole Eredicts.

[Least restrictive environment](#)

When talking about special education, we shouldn't think about separate lessons, classes, or even schools that offer specialized education only to kids with any learning disability. Public schools are supposed to have kids who get special education services learn in the same classrooms as other kids as much as possible, there is no other way to ensure inclusion.



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In some educational systems, this is defined as the “Least Restrictive Environment (LRE)” which means kids who get special education should be in the same classrooms as other kids as much as possible.

The goal is to make sure that kids who receive special education are included in the general education classroom as often as possible, especially at young ages. But agreeing on how that happens isn't always easy, but it can always be possible if effort is made.

Some common LRE scenarios:

- General education classroom with support. A child spends the entire day in a general education class and gets support and services like accommodations, assistive technology, related services.

This is the most common one and the most recommended. It ensures 100 % inclusion and benefits all the other kids, as they do not consider anyone to be treated as “different”.

- Partial mainstream/inclusion classroom. A child spends part of the day in a general education class. The child gets some individual or small-group instruction in a special education class or is pulled out of class for some services.

Often used with kids with behavioural differences or deep learning difficulties at older ages.

- Special education class. This is a program with specialised instruction for kids with similar learning needs.

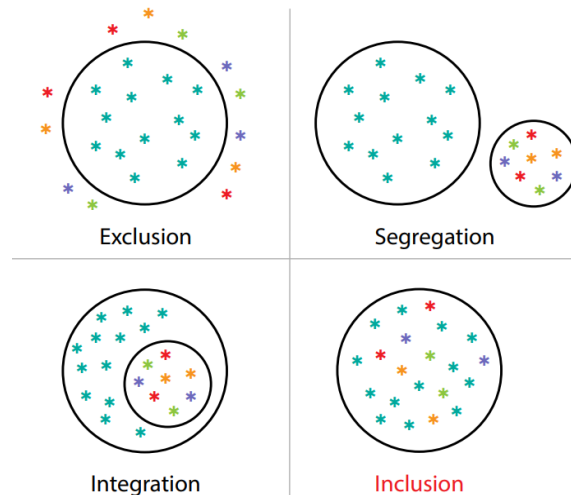
Not recommended if not strictly needed as the kid does not interact with age-related kids.

Whenever inclusion in the same classroom is possible, it should be implemented. This ensures the kid socializes and blends into the classroom dynamics. For this last step, some adaptations should be made to ensure proper learning outcomes. More and more effort is being pursued to find a unique and inclusive way of teaching that guarantees no kid is left behind.

Universal design for learning

“Universal Design for Learning is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. It has been created to help make learning inclusive and transformative for everyone.”

It mainly consists of guidelines that can be used by educators, curriculum developers, researchers, parents, and anyone else who wants to implement the UDL framework in a learning environment. These guidelines offer a set of concrete suggestions that can be applied to any discipline or domain to ensure that all learners can access and participate in meaningful, challenging learning opportunities.



This technique is known as "differentiation." Differentiation can be created by making small changes in the classroom environment. Changes can take place in many ways in the classroom, depending on the student's needs, educational background, teacher's level of knowledge, interest, and resources, and the support of school personnel.

They are classified as suggestions to approach different learning difficulties such as Action & Expression, Representation, and Engagement among others. Moreover, they focus on areas of action that can be worked on or improved when facing concrete learning difficulties or behaviours (eg: Comprehension, Expression, Self-Regulation...).

An overview of some general practices that can assure inclusion would involve:

- Adapting time schedules; every person has their own biorhythm so do not expect every child to perform equally each hour. Adapt the schedules so that it benefits the "focus time/rest time" of the children is balanced.
- Adapting the space arrangement; move the tables so that every child feels "involved" in the classroom, and avoid making those with learning difficulties sit at corners if they may feel excluded.
- Adapting the delivery method of the class, especially if the topic to be treated may be dense or hard to keep up with.
- Adapting the resources used; every person has a different type of memory, so make sure there is room for all of them in your classroom.
- Adapting the grade-level expectations or the number of tasks required; not all of the kids learn at the same speed. Little progress is still progress!
- Adapting the delivery product, allowing assignments to be held in any form as long as they meet the expected requirements.
- Using different materials in activities; dynamics do not always have to follow the same rules, be creative when designing them.
- Pay attention when grouping, the more comfortable they are with those who are around them, the better performance you will obtain.
- And last but not least, ask for advice! There may be experts in the teaching staff.



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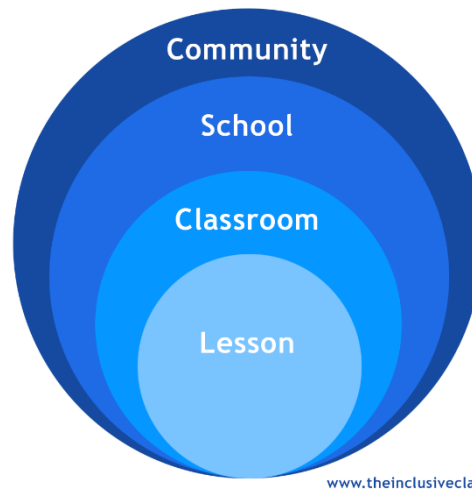


For further information, about concrete actions that can be taken in specific learning or behaviour areas, take a look at the founders of the UDL website at: <https://www.cast.org/about/about-cast>

A matter of collaboration

Providing an inclusive education is not only a matter of a teacher or educator adapting their lessons or their classroom to ensure every kid is involved and learning along with their classmates. To properly provide this kind of education, a wide range of people needs to be aware, capable, and willing to develop it.

The Layers of Inclusion



If any of these pillars involved does not collaborate, the efforts the other ones are making may not be enough to achieve the goal.

First of all, the parents of these children should communicate as soon as possible that the kid requires specialized treatment in any learning step so that the teaching staff is aware of it and can design an individualized academic plan.

Parents, most of the time, are aware of the kids' special needs or at least are capable of explaining their background, behavior at home, treatment requirements, or any other information that should help educators understand the child. If they are involved in this step, this should lead to fluent communication between the school and the parents, and help both to monitor progression and adapt education according to the child.

Nevertheless, not all special needs are easily identified or have been diagnosed at some age. That is why teaching staff and educators should also pay attention to the signals of a child behaving or responding differently to the education given.

For example, some learning disabilities such as dyslexia may be easier to be identified at schools rather than at home. As a teacher, education isn't just about lessons, marking school work, and preparing tests. It's also about keeping track of a million little details about the classroom dynamics. Teachers should invest time to focus on getting to know their students.

Lessons, as previously mentioned, can be adapted in order to meet everyone's limitations without the need of pointing them out. Normalizing differences at an early age can lead to reducing discrimination and enforcing team spirit among children.

Last but not least, an environment of respect, tolerance, and empathy is needed in the classroom. Children with or without learning difficulties should all look for this main objective of inclusion



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regardless of any differences among them. Creating this atmosphere is, indeed, a collaborative project that requires everyone's participation.

Spending time not only on lessons but in team-building activities is the key to creating bonds and breaking stigmas in the class. Structuring classroom conversations to encourage respectful and equitable participation or provide alternative means for participation can be beneficial in this step.

In brief, UNICEF sums up this idea by stating that: "At the school level, teachers must be trained, buildings must be refurbished, and students must receive accessible learning materials. At the community level, stigma and discrimination must be tackled, and individuals need to be educated on the benefits of inclusive education. At the national level, governments must align laws and policies with the Convention on the Rights of Persons with Disabilities, and regularly collect and analyze data to ensure children are reached with effective services".

For more information, take a look at Understood's website containing resources for students/teachers/ parents who want to help in making a more inclusive world, discover their potential, and embrace their differences: <https://www.understood.org/>

Additional resources

Eredics, N. (2018). Inclusion in action: Practical strategies to modify your curriculum. Brookes Publishing: <https://products.brookespublishing.com/Inclusion-in-Action-P1050.aspx>

Understood - for learning and thinking differences: <https://www.understood.org/>

About. Until learning has no limits: <https://www.cast.org/about/about-cast>

Video materials

Universal Design for Learning: <https://www.youtube.com/watch?v=pGLTJw0GSxk>

TED Talk; Weird or just Different?: <https://www.youtube.com/watch?v=1K5SycZjGhI>

4.2. Creativity as a tool for inclusion in the classroom

There are an estimated 240 million children with disabilities worldwide. Like all children, children with disabilities have ambitions and dreams for their futures, therefore, they need quality education to develop their skills and realize their full potential, as any other kid.

Most of the known learning difficulties include children with dyslexia (a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling), attention deficit hyperactivity disorder (ADHD), dyspraxia (a disorder in which children do not develop the motor skills that are expected for their age), and dyscalculia (a specific and persistent difficulty in understanding numbers). But some others can include speech difficulties, non-verbal learning difficulties, oral or written language disorders, or many others.

But not only learning difficulties must be mentioned, some disabilities such as mobility disabilities, medical disabilities, psychiatric disabilities, traumatic brain injury (TBI), and post-traumatic stress disorder (PTSD) or visual impairments among others, are people with zero understanding difficulties, meaning they are as capable of learning as any other child.

Nevertheless, children with disabilities or learning difficulties are often overlooked in policymaking, limiting their access to education. Worldwide, these children are among the most likely to be out of school. They face persistent barriers to education stemming from discrimination, stigma, and the routine failure of the government to incorporate disability in school services.

UNESCO states that: "The right to education aims to ensure everyone achieves their human right to access quality education throughout life. An inclusive approach to education means that each



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individual's needs are taken into account and that all learners participate and achieve together. It acknowledges that all children can learn and that every child has unique characteristics, interests, abilities, and learning needs. [...]



The emphasis is on how to transform existing systems rather than how some learners can be integrated into them. It promotes education systems that are based on gender equality, respect diverse needs, abilities, and characteristics, and eliminate all forms of discrimination in the learning environment.

Inclusive education is the most effective way to give all children a fair chance to go to school, learn and develop the skills they need to thrive. With this idea, this project would like to promote creativity as a tool to achieve this goal, so that every kid ends his school life with equal learning outcomes regardless of their background.

A hopeful future

Nowadays, there are many resources available and infinite ways to approach a class. From standardized tutoring lessons to non-formal education, all of them have their strong and weak points. Many of these tools can be perfectly used to conduct a class, ensuring inclusivity. One example could be technology, which is vital to the 21st-century classroom, and its importance will be further developed in the following pages. Not only does it allow students to keep up with our changing world, but it also provides accessibility to the curriculum for learners with special needs. Highly engaging, technology appeals to most groups of students and supports inclusion in numerous ways.

Another one could be visual aids, which are undoubtedly, very important items in the inclusive classroom, especially for those children that struggle with memorising or reading comprehension. Visual aids attract student interest, explain an idea, or help a student understand a lesson.

Games such as card games, board games, and classroom games are often used by teachers to reinforce a new concept. However, they also play a large role in teaching students social skills and teamwork.



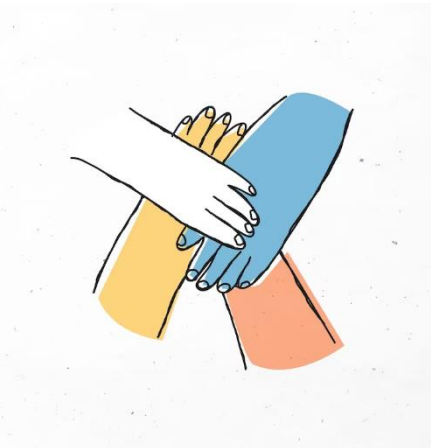


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Because game choices are endless, they provide many different ways a student can participate. Most importantly, games can allow students to relax in the learning environment, enjoy one another's company, and form relationships helping these kids with social difficulties.

But also, some kids might find interest in manipulatives, as they prefer a “hands-on” approach to help them understand lessons. Manipulatives can support this process by allowing students to demonstrate their knowledge, develop new levels of understanding, and explore deeper concepts. Useful for all ages, manipulatives are an easy way to make a classroom more inclusive.



As mentioned before, these resources can be perfectly used to guarantee inclusivity in the classroom. Still, most of them are “qualifiable”, “objective” activities. You can achieve the goal or not. You can learn how to play a card game or you can not. There is no mid-point in these examples; the children cannot develop the skill at their rhythm without feeling the pressure of having to achieve a certain level of knowledge to be included (eg: if you do not learn the rules for this game, you cannot play with the other classmates).

And that is the point where creativity enters the room. In a drawing, for example, there is no certain rule to follow. When talking about art, no certain level needs to be achieved, just the freedom to pursue the goal as much as you want. When given a blank piece of paper, some kids may just draw 5 lines, others 20, but both of the drawings will be equally considered “pieces of art”.

When no specific rules need to be followed and any form of expression is valid, as is a “subjective” activity, it is way easier to guarantee inclusion, as there is no “right answer”. Encouraging creativity in the classroom is hugely beneficial. When a teacher makes developing creativity a part of the school day, students can have greater long-term success in a variety of areas. They can become more comfortable and skilled with self-expression and creating and executing original ideas.

Benefits of creativity in the classroom

Embracing creativity in the classroom is a great way to challenge the notion of static learning: the idea that there's merely one correct way to solve a problem or come to a solution. While one plus one will always equal two, there are a multitude of ways to teach that concept and many other ways to learn it.

Flexibility is crucial when it comes to encouraging creativity. It's about fostering the ability to come up with different solutions and unique ideas, encouraging students to continue on their journey to discover when their first idea doesn't work, investigating alternatives, and keeping on trying.

Creative problem-solving is one of the most required soft skills in the business world. Developing it at a young age is needed. Facing kids to approach a problem differently, leads to the kid understanding the different needs of people in society and aiming for a sense of caring and being aware of them. Especially if the kid is faced with a problem he has not even realized could be a problem before (e.g.,

stairs for people in wheelchairs, non-verbal communication for mute people). Through this process of creation, or thinking creatively, a kid also develops empathy. It is proven that, when teaching kids how to think out-of-the-box, they grow up with not only better problem-solving skills but also fewer stigmas and an inclusive mindset.



This results in students being more resilient and having more confidence when it comes to independent problem-solving. When students are focused on a creative goal, they become more absorbed in their learning and more driven to acquire the skills they need to accomplish it.

Creativity gives students the freedom to explore and learn new things from each other. That is why it is also a useful tool to promote inclusion, “no one can do it wrong if there is not only one way to do it right”. As they overcome challenges together and bring their creative ideas to fruition, students begin to see that they have limitless boundaries. “That, in turn, creates confidence. It helps with self-esteem and emotional development.”

It is also proven that bringing creative ideas into the classroom reduces stress and anxiety, which some kids with learning difficulties might suffer from if they are frustrated at not being able to achieve the same learning goals as other kids. Working with creative projects might help them break these walls and learn in alternative ways.

To sum up, creativity has proven to be the perfect tool to implement in a classroom with or without kids with special requirements. Not only can it be helpful to ensure inclusion, but it also brings many benefits for the kids to learn in a different and funny way.

Some of the outstanding points may include:

- Helping them to learn without the pressure of learning. Some teaching techniques such as storytelling and skits are a good resource, not only to work on the fixed curriculum but also to mention social/emotional/sensitive topics without a direct approach.
- Regarding this idea, open-ended questions, brainstorming sessions, and debates about a topic enhance a strong creative mind from a young age. Encouraging productive discussions as well as making the classroom layout more flexible matters a lot in gearing up a creative classroom atmosphere.



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- Team building activities can be organized so as to promote creative thinking in groups and help them to learn about accepting others' ideas and differences and how everyone should be listened to.
- Not only that, but they also learn how to be better communicators, expressing their own ideas, and hearing from others is essential for them to learn how to respond to and respect accurately to different points of view.
- Creative classrooms help kids to truly express themselves; not every kid is good at writing stories, and some of them might be better at drawing them or even acting them. Giving the kids this freedom of choice motivates them into the assignment. A creative approach to learning makes them more open and gives them a feeling of accomplishment and pride.
- Also, when some time is set aside for creativity in between study time, it takes a lot of stress away from students. This sense of joy keeps them relaxed and reduces their anxiety which in turn helps them to focus well later on.
- Creative expression is important for a kid to trigger their personal and interpersonal emotional development. Can be helpful to explore freely without setting any boundaries and being free to ask as much as they want to.
- Bringing up the inclusivity topic, a creative classroom allows kids to strengthen boundaries with diverse classmates, understand mates' needs, and consider them not something anyone should be discriminated against for.
- Finally, creativity in class can make kids happy. Breaking the routine and allowing them to follow their passions, whether it is dance, music, theater, or art... will have long-term benefits as they are free and have time to discover what they truly like.



Additional resources

UNICEF Article + Resources about the meaning of Inclusive Education and how to guarantee an Inclusive Environment: <https://www.unicef.org/education/inclusive-education>

Creativity in the Classroom:

<http://13.87.204.143/xmlui/bitstream/handle/123456789/7281/The%20Cambridge%20Handbook%20of%20Creativity.pdf?sequence=1#page=455>

Video materials

TED Talk; Do Schools kill creativity?: <https://www.youtube.com/watch?v=iG9CE55wbtY>

4.3. Methodology

When the learning environment in class is designed to make students stronger learners, problem solvers, critical thinkers, and innovators, it's preparing them for greater success beyond the classroom. And this can be perfectly achieved through the implementation of creative tools in the classroom.

It can start from the very beginning following a classroom theme to immerse them into the topic while having fun. When explaining different topics, or as an excuse to further align with them, have them decorate the classroom with a theme (eg: Ancient Greece or Egypt). Not only can they have fun with it, but it will also be a good indirect way of learning.

Empower your students to set their own goals and map out ideas in their original ways. Teach them how to use different types of graphic organizers like mind maps, Venn diagrams, visual timelines, and other resources. Even when reviewing ideas or handling tasks, allow freedom in the assignment format, this will also help the teacher to identify the way their students' minds are structured.



Team-building activities are also a really good way to build trust and create bonds among the students. There aren't right or wrong answers in team-building — just cooperative strategies that allow children to think, communicate and create together.

Hands-on learning provides students with an arena to express new ideas, think critically, and voice their opinions, ultimately engaging them on a deeper level. The trick is similar to the one used when decorating the classroom to let students dive into the real thing first, and then introduce the theory.

For an IT class, let students create their websites before discussing web design principles. For a maths lesson, have students build paper airplanes and use “flight” info to estimate things like speed.



Encouraging creativity is not only about drawings or crafts, for example, incorporating music-related activities in the classroom is a great way to spark creativity. Having students write their own lyrics to



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a song or create a melody to help them memorize a definition or math equation are just some ideas; even using it to reinforce team-building can be beneficial.

Wrap up the day with creative journalism. This can encourage reflection through creativity. Students can create anything from a video diary to an art journal where each sketchbook page is a catchall for combining ideas of the day and notes with different art techniques.

As all needs to be said, it has been stated that many of these resources can only be applied if certain measures are taken. "At the school level, teachers must be trained, buildings must be refurbished, and students must receive accessible learning materials." Support from the directors is required, and the teaching staff must be willing and trained to implement and support inclusion in the class.

Rely on technology

The digital revolution is an unstoppable force sweeping across every facet of society, allowing millions of resources and information to be found on the net. Not only that, but the digital world has also proven its enormous benefits for helping people. From videos to apps to games to "Alexas" to the empowerment of AI (Artificial Intelligence) or VR (Virtual Reality). All of these are just a few "clicks" away from anybody with minimum access to the net and making their lives easier.

There is increasing recognition of the value of inclusive education and the role of universal design for learning in supporting it. Technology has considerable, but largely unused potential to support inclusive education for disabled people and other minority groups, and what is the best, easily accessible.



Technology plays a significant role in making a classroom inclusive. Adaptive lesson plans are adjusted based on the needs of each student's abilities. One student can work ahead (preventing boredom), while other students can spend more time mastering specific concepts. With adaptive tools, students with and without learning disabilities can study next to each other, improving their social-emotional development while growing academically.

Moreover, technology has the power to use multiple types of learning on one platform, so regardless of the types of learners in your classroom, almost every student can connect with digital materials. Not to forget that, also, distance education has the potential to increase educational access, which can be helpful for those struggling to physically go to the classroom due to any reason, but it still gives them the feeling of belonging to the system.

A whole new generation of tech tools is ready to meet those special needs and learning challenges. Technology can provide multiple means of presenting, representing, and expressing learning, and through AT enable disabled learners to overcome barriers they would otherwise experience to participating in the curriculum, leading to increased enjoyment and motivation.



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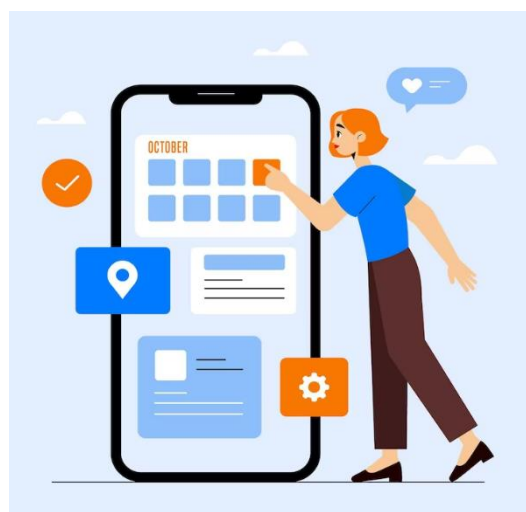


Any school should be equipped with touch screens, wireless keyboards, and gesture-based recognition equipment to allow teachers to provide a more balanced learning experience to students with mobility impairments.



And in terms of applications, some of the worldwide spread might include Voice Recognition Software or Screen Readers, but understanding the latest EdTech trends and how these tools work is critical for educators and EdTech companies looking to provide the best possible learning solutions for children with disabilities. So here are a few good examples of applications that are developed and ready to be used in a class to ensure inclusivity.

- Enuma: A wearable picture-based scheduler students with autism may benefit from.
- The Social Express: Helps kids learn appropriate responses in different social situations and with different kinds of people, from parents and teachers to classmates and playmates.
- Spell Better: A literacy support tool that can help students with dyslexia to engage with class content.
- Khan Academy Kids: a free award-winning app for young students that can be used with older students who are lower functioning academically.
- Class Dojo: Engages students, reinforces them, and also connects the classroom to parents.
- SymbolSupport: Especially helpful to students who struggle with words or have cognitive and reading disabilities, this app translates words into symbols and pictures.
- Otsimo: The app has AAC-related games for those with communication difficulties and those who are non-verbal in several different languages.





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These are just a few examples of how good use of technology can be helpful in classrooms. Promoting the use of these tools as a resource for teachers is not only a way to approach the classroom and the curriculum in a creative manner but also a more effective way to make every child learn at their own speed and according to their needs.



For example, video games can engage students by providing problem-finding and problem-solving situations. They can offer challenges with different levels of complexity according to the age group or the kids' special requirements, establishing an interactive world where students have to make choices about how they complete tasks.

More and more educational environments are changing from paper to digital tools, as they are the future of these kids learning goals. But this is also causing controversy, as many think that technology is "killing" creative expression, but they cannot believe that technology is helping to boost hundreds of new ways to "create".

Technology has made it a lot easier to bring creative minds and ideas closer and take those ideas further at the same time. This mixing of technology and creativity has brought innovative new ideas and avenues through which people can express themselves, regardless of their condition.

That is why, as mentioned, creativity opens a path for every child to find their own way of learning. Due to the huge influx of creative ideas and thoughts, technology allows more people to share their ideas and enrich their own thanks to their classmates.



According to Kamylyis and Berki (2014, p. 6): "Creative thinking is defined as the thinking that enables students to apply their imagination to generating ideas, questions, and hypotheses, experimenting with alternatives, and evaluating their own and their peers' ideas, final products, and processes." Digital learning tools allow children to engage and interact with content, forcing students to harness their creativity to overcome challenges, create content, and personalize their own learning experience. Research shows that both students and teachers value having technology-based creativity-fostering approaches across the curriculum.



Computer screens should not simply be seen as information machines, but also as a new medium for creative design and expression.

According to the TTCT, creativity includes four factors namely, fluency (the number of relevant responses), flexibility (the number of different sets of relevant responses), elaboration (the quality of details in the response), and originality (the uniqueness of the response).

Technology can be helpful to work on all of them. For example, as mentioned it is important in an inclusive classroom to allow diverse task delivery methods, thanks to tech, students choose how they show what they've learned, It can be a video, a blog, a picture, or a voice record for example. All of them are perfectly affordable and comfortable if schooling environments are equipped with technological tools.

Connecting with others creates memorable learning experiences. Another example is not only reading or scrolling through classmates' materials to share ideas and create bonds between them to promote inclusivity and acceptance in class, but also how technology might allow one class in South Africa to connect with another class in Taiwan. This can be an eye-opening experience for kids to learn about their differences and build a tolerant environment.

When getting to know your students, allow them to introduce themselves in creative manners, one might be more comfortable just writing a few lines about their hobbies, but some others could be more engaged with the idea of creating a vlog or filming their room. Technology allows students to express themselves in even more creative ways.

Not only that, but there's also a good amount of applications especially designed to focus on and allow creative content creation. These can be used in an inclusive classroom, as children can use "the amount" of them they are comfortable with. That's the magic of creation, there is no minimum or maximum effort required to "pass the task".



Many more resources and ways to integrate creativity through technology to help create inclusive classrooms can be found at: <https://www.weareteachers.com/topics/creative-classroom/>

- Keynote and Pages are apps to create engaging lessons or presentations that encourage interaction and creativity.
- Slidestory and StoryBird are tools to help students create their own digital stories.
- Camstudio and Jing are video tools perfect for creating vlogs.
- Simple Physics: lets you design complex structures for everything from tree houses to Ferris wheels and then simulates your design with a sophisticated physics engine.
- Brilliant: Learn maths, science, and computer science through fun, interactive problem-solving
- Procreate: A suite of innovative artistic tools— has everything you need to create expressive sketches, rich paintings, gorgeous illustrations, and beautiful animations.



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- Werdsmith: An app that turns your iPhone, iPad, Mac, and Apple Watch into a powerful writing studio that inspires you to write.
- Animatic: It is the best way to create hand-drawn animations. It was designed to offer creators an elegant experience in bringing their ideas to life through moving images.
- FlipaClip: FlipaClip's powerful and fun animation tools make frame-by-frame animation easy.

So many of the tools approached facilitate blended learning experiences in classrooms. That is why it is important to explore the potential of all the tools that surround the 21st century so that they can be used for good. Not only technology is helpful to ensure inclusion in the classroom but also to develop a creative environment in which children might learn together but are free to express themselves in their own way and learn according to their own needs.

Additional resources

Espark Learning; Games, digital activities, and learning material that can be adapted to every child's need: <https://www.esparklearning.com/>

Boots Trap World; An awarded organization that makes user interfaces friendlier: <https://www.bootstrapworld.org/>

Video materials

Flexible Classrooms: <https://www.youtube.com/watch?v=4cscJcRKYxA>

Summary

As it has been shown, inclusion comprehends people's involvement and empowerment. When people and kids are and feel included, their worth is recognized and respected leading to a feeling of belonging.

Government, society, parents, and schools should all pursue the goal by adopting and adapting values to make inclusion a reality. And this should start from the very beginning, making changes in the schooling ages, implementing the Universal Design of Learning (UDL), and promoting education in the Least Restrictive Environment (LRE).

With this idea, it has been proven how little changes can make a huge impact. Even if it is just a distribution rearrangement in the classroom or changing slightly the delivery methods or giving freedom of expression can make a kid feel part of the whole.

Regarding the last mentioned, encouraging creativity in the classroom is hugely beneficial. By both teachers and children, building a creative atmosphere in the classroom inclusion is possible. When a teacher makes developing creativity a part of the school day, students can have greater long-term success in a variety of areas. Not only are they not being judged as different, as creations are never wrong or right, but they get better at developing inter and intrapersonal values.

Apart from helping with self-expression, teaching in a creative way makes kids learn without the pressure of learning, develop skills in creative thinking, grow up being better communicators, and develop empathy towards others.

Moreover, technology makes this process even easier, as every child has access to a personalized experience, they can learn at their own rhythm and using their preferred method. Some kids may be better at expressing themselves in videos, others in pictures, and some others through voice recordings, and allowing all of them is the key to building a creative and inclusive environment.

As seen, it is not difficult to make simple changes for good, as a small modification in the classroom can make a big impact on a child's life. Because feeling included matters.



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Chapter 5. Promoting social and educational inclusion through the arts

Authors: Hacı KURT, İbrahim KOCA

Abstract

The arts can be a powerful tool in promoting social and educational inclusion, as they have the ability to bring people from diverse backgrounds together and provide a safe and supportive environment for creative expression. Inclusive arts education can benefit students with disabilities or special needs, those who are learning a second language, or come from different language-speaking backgrounds. Through exploring different cultures and perspectives through artistic expression, students can develop a greater understanding and appreciation of diversity, while breaking down stereotypes and prejudice. However, achieving inclusive arts education requires sustained effort and investment in adapting teaching strategies, curricula, and resources to meet the needs of diverse learners.

Introduction

“The arts, it has been said, cannot change the world, but they may change human beings who might change the world.”

Maxine Greene, Author, Social Activist, Teacher

Social inclusion and inclusive education are essential elements of a just and equitable society. Unfortunately, not all students have equal opportunities to participate in educational and social activities. This can be due to a range of factors, including socio-economic status, disability, ethnicity, or language barriers. The Arts Council Reports from 2003, such as Reports 2003a and 2003b, illustrate a significant shift in the perception of the value of the arts in education and society. The emphasis has now changed to highlight how the arts can contribute to social inclusion, marking a substantial change over the past five years (Karkou & Glasman, 2004). In this context, the arts can play a vital role in promoting social and educational inclusion.

The concept of inclusive development involves prioritizing the needs of the most marginalized groups in society, including the poor, vulnerable, disadvantaged, women, and elderly, in a non-discriminatory manner with the aim of reducing inequalities (Development Bank, 2005).

The arts have the power to bring people together, regardless of their backgrounds, abilities, or identities. By engaging in creative activities such as music, dance, drama, and visual arts, students can express themselves and connect with others in a safe and supportive environment. This can be particularly important for students who feel marginalized or excluded from mainstream educational and social activities. Educational practices are deemed successful when they not only impart knowledge and skills related to specific subjects but also provide experiences that are fulfilling and valuable beyond the immediate context. This dual approach, where the acquisition of subject-specific knowledge is coupled with the development of broader life skills, is often seen as a hallmark of effective education (Karkou & Glasman, 2004).

The arts can also provide a unique platform for exploring issues of diversity, equity, and social justice. By examining different cultures, traditions, and perspectives through artistic expressions, students can develop a greater understanding and appreciation of the richness of human diversity. This can help to break down stereotypes and prejudice, and promote greater empathy and understanding between people from different backgrounds.

Moreover, inclusive arts education can provide opportunities for students with disabilities or special needs to participate in educational and social activities on an equal basis with their peers. The arts can



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provide alternative modes of expression and communication, which can be particularly important for students who struggle with traditional academic subjects. Additionally, the arts can promote social and emotional development, which can be essential for students with disabilities or mental health challenges.

Inclusive arts education can also benefit students who are learning a second language or come from other language speaking backgrounds. By engaging in creative activities, students can develop their language skills in a context that is fun, engaging, and interactive. Moreover, the arts can provide a platform for cultural exchange and dialogue, which can be essential for promoting greater understanding and respect between students from different linguistic and cultural backgrounds.

However, it is essential to recognize that inclusive arts education requires a deliberate and sustained effort to address the barriers to participation that many students face. This may involve adapting teaching strategies, curricula, and resources to meet the needs of diverse learners. It may also require investment in professional development and training for educators to support the implementation of inclusive arts education practices.

In conclusion, social and educational inclusion are essential for creating a just and equitable society. Inclusive arts education can play a vital role in promoting social and educational inclusion by providing a platform for creative expression, promoting cultural understanding, and facilitating the participation of diverse learners. However, inclusive arts education requires a deliberate and sustained effort to address the barriers to participation that many students face. By investing in inclusive arts education practices, we can help unlock the creativity and potential of all students, regardless of their background, abilities, or identities.



Inclusive Arts. Source: <https://handbook.floeproject.org/>

5.1. Learning in and through the arts

Studies have demonstrated that integrating arts education into the curriculum can have a beneficial impact on students' motivation and learning. When students participate in artistic activities, they tend to develop a personal attachment to their education, which can result in a rise in motivation and interest in the subject matter. Additionally, the abilities and knowledge acquired through arts education can be utilized in various settings, enabling students to apply what they have learned in different contexts. As a result, utilizing arts education as a tool for increasing student engagement and achievement in education can be highly advantageous.

One of the primary benefits of using the arts in education is that it fosters creativity and imagination. Students who participate in artistic activities are encouraged to think outside the box, to experiment with different materials and techniques, and to come up with unique solutions to problems. This type



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of thinking can help students in all areas of their academic and personal lives, as they learn to approach challenges with a more open and creative mindset.

In addition to promoting creativity, the arts also encourage self-expression and communication. Through artistic activities, students can express their thoughts, feelings, and ideas in a variety of ways. This not only helps them develop stronger communication skills but also promotes self-awareness and emotional intelligence. Participating in the arts can also build confidence and self-esteem. When students engage in artistic activities, they have the opportunity to showcase their talents and abilities. This can help them feel more confident in themselves and their abilities, which can translate into other areas of their lives. The benefits of the arts in education also extend to cognitive and emotional development. Research has shown that participating in the arts can enhance cognitive development by improving memory, attention, and other executive functions.

Additionally, the arts can improve emotional development by promoting empathy, compassion, and understanding of different cultures. Another benefit of incorporating the arts into education is that it can improve critical thinking and problem-solving skills. When students engage in artistic activities, they are often presented with challenges and obstacles that require them to think creatively and critically to find solutions. These problem-solving skills can then be applied to other areas of their academic and personal lives.

Lastly, the arts can promote cultural understanding and empathy. By learning about different cultures through the arts, students can develop a greater appreciation for diversity and gain a deeper understanding of the world around them. This can help to promote empathy and understanding, which is essential for creating a more inclusive and tolerant society. In conclusion, the use of arts in education has many benefits that cannot be ignored. By promoting creativity, self-expression, confidence, cognitive and emotional development, critical thinking and problem-solving skills, and cultural understanding, the arts can play a valuable role in helping students to succeed in all areas of their lives. It is important for educators and policymakers to recognize the importance of the arts in education and to continue to support and promote their use in schools.

Here are some activities that can be useful for learning through the arts:

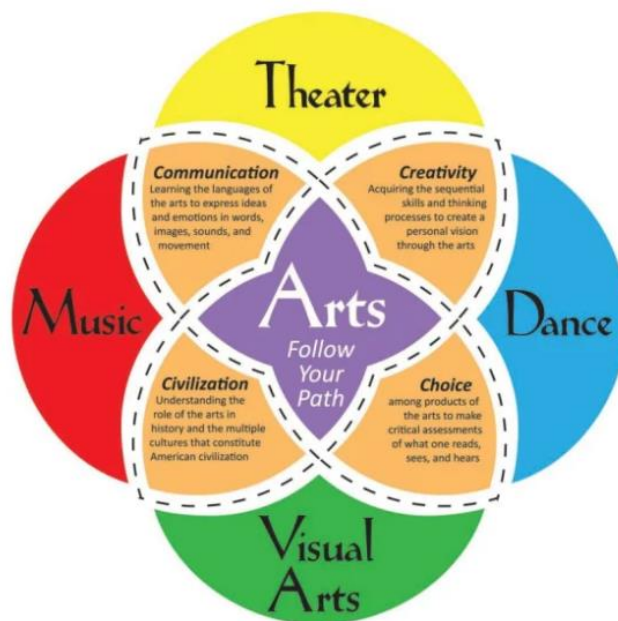
- **Music Activities:** Music is a powerful tool for learning, and it can be integrated into various subjects to support learning outcomes. Activities such as singing songs or learning musical instruments can enhance students' comprehension of different concepts. For example, learning the melody of a song can help students remember facts, dates, or historical events. Additionally, music can be used to promote collaboration, social skills, and teamwork.
- **Visual Arts Activities:** Visual arts such as painting, drawing, and sculpture can be useful for promoting creativity and critical thinking skills. Activities such as creating artwork that represents a scientific or historical concept can help students to develop a deeper understanding of the topic. Moreover, the visual arts can be used to promote self-expression and communication skills. For example, students can create a piece of artwork that represents their thoughts and feelings about a specific issue.
- **Drama Activities:** Drama can be used to promote critical thinking, communication skills, and creativity. Activities such as role-playing, improvisation, and storytelling can be used to engage students and enhance their understanding of different concepts. Moreover, drama activities can be used to promote empathy and understanding by allowing students to step into different roles and see things from different perspectives.
- **Dance Activities:** Dance can be used to promote physical activity, creativity, and emotional expression. Activities such as creating dances that represent different emotions or cultural traditions can help students to develop a greater understanding and appreciation of diversity.

Additionally, dance can be used to promote teamwork and collaboration, as students work together to create a dance routine.

- **Multidisciplinary Activities:** Multidisciplinary activities involve integrating different art forms to support learning outcomes. For example, creating a play that involves music, dance, and drama can help students to develop a deeper understanding of different concepts while promoting creativity and collaboration. Moreover, multidisciplinary activities can be used to promote critical thinking, problem-solving, and communication skills.

By adopting a broad definition of the arts, there are various opportunities that arise. When a wide range of activities are considered art, it eliminates the need for aesthetic value judgments, thus reducing pressure to create something of high quality. This perspective on the arts makes art-making an activity that is accessible to all, regardless of their level of skill in music, drawing, acting, or dancing. Consequently, this approach promotes egalitarianism, and people are given "permission" to engage in artistic activities, leading to the first level of social inclusion (Karkou & Glasman, 2004).

Learning through the arts can provide an engaging and effective way to promote creativity and enhance learning outcomes. By integrating different art forms into educational experiences, students can develop a deeper understanding of different concepts while promoting critical thinking, collaboration, and communication skills. The activities mentioned above are just a few examples of the many ways that the arts can be used to enhance educational experiences and promote creativity.



Art and Learning Relationships (Drama and Art in Education, n.d.)

Improve Impact

- **Increased exposure:** One way to improve the social and educational impact of the arts for teenagers is to increase their exposure to different types of art forms. This could involve providing access to museums, galleries, concerts, theater productions, and other cultural



events. Exposure to a wide range of artistic experiences can broaden their horizons, stimulate their creativity, and help them develop an appreciation for the arts.

- Incorporating the arts into education: Another way to improve the impact of the arts on teenagers is to incorporate them into their educational curriculum. This could involve integrating art classes into the standard school day, providing opportunities for students to participate in after-school arts programs, or organizing field trips to art museums or cultural events. Incorporating the arts into education can help students develop their creative and critical thinking skills, enhance their communication abilities, and increase their cultural awareness.
- Providing mentorship opportunities: Teenagers can benefit greatly from having a mentor who is experienced in the arts. Mentors can provide guidance, encouragement, and support, as well as help teenagers develop their artistic skills and build their confidence. Providing mentorship opportunities through arts programs or community organizations can be a powerful way to improve the social and educational impact of the arts for teenagers.
- Collaborative projects: Encouraging teenagers to participate in collaborative arts projects can help them develop important teamwork and communication skills, as well as foster a sense of community and connection. This could involve organizing group art projects or theater productions, or providing opportunities for teenagers to work together on community service projects that involve the arts.

By implementing these strategies, we can improve the social and educational impact of the arts on teenagers, helping them to develop important skills, broaden their perspectives, and enrich their lives.

Some Examples of Projects

- Community Art Project: A community art project can involve students working together to create a piece of public art that reflects the diversity of their community. This could involve painting a mural, creating a sculpture, or designing a community garden. The art project can be a powerful way to promote social inclusion by bringing together students from different backgrounds and encouraging them to work together to create something that benefits the wider community.
- Cultural Exchange Program: A cultural exchange program can involve students from different cultural backgrounds coming together to share their traditions and customs through the arts. This could involve organizing workshops on dance, music, or visual arts that reflect the students' cultural backgrounds. This can be a powerful way to promote cultural understanding and foster a sense of community among students from different backgrounds.
- Poetry Slam Project: Students work in groups to write and perform poetry that addresses social issues such as inequality, discrimination, and racism. This project not only allows students to express themselves creatively but also promotes critical thinking, empathy, and social awareness.
- Theatre Production: A theatre production can involve students working together to create a play or performance that reflects their experiences and perspectives. The play can be a powerful way to promote educational inclusion by exploring topics that are relevant to the students' lives and encouraging them to think critically and creatively about these issues.
- Photography Project: Students work in groups to take photographs that highlight different themes such as community, diversity, or social justice. This project not only allows students to express themselves creatively but also promotes visual literacy, critical thinking, and social awareness.



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- **Documentary Project:** Students collaborate to create a documentary that explores different social issues such as environmental conservation, human rights, or poverty. This project not only allows students to develop their filmmaking skills but also promotes research, critical thinking, and social awareness.
- **Visual Arts Exhibition:** A visual arts exhibition can involve students working together to create an exhibition of their artwork. This could involve organizing a gallery space, curating the artwork, and creating an opening event. The exhibition can be a powerful way to promote social inclusion by showcasing the diversity of the students' perspectives and experiences.

By engaging in collaborative art projects that promote educational and social inclusion, students can develop important social and educational skills, express themselves creatively, and gain a sense of pride and accomplishment from their work. These projects can also promote understanding and empathy among students and help build a more inclusive and equitable society.

Additional resources

Arts Education Partnership: <https://www.aep-arts.org/>

Edutopia: <https://www.edutopia.org/>

Teaching Tolerance: <https://www.learningforjustice.org/>

Video materials

PSB LearningMedia: <https://www.youtube.com/@PBSLearningMediaORG>

National Gallery of Art: <https://www.youtube.com/@NationalGalleryofArtUS>

5.2. Social and educational inclusion: Unlocking creativity

In recent years, social and educational inclusion has become important issues that require attention and action. One way to address these challenges is by unlocking creativity in individuals and communities. Creativity has the power to promote inclusivity and bring people together by breaking down barriers and fostering a sense of connection and belonging.

Creativity can be defined as the ability to generate original and innovative ideas, think outside the box, and approach challenges and problems in new and different ways. It is a skill that can be developed and nurtured, and it is not limited to artistic pursuits. In fact, creativity can be applied in all areas of life, including education, work, and personal relationships. Creativity is more than just a skill; it's an attitude that involves being open to change and novelty, embracing new ideas and possibilities, and having a flexible mindset. It requires enjoying what's good while striving to make it better. Unfortunately, we're often socialized to limit ourselves to what's considered normal or acceptable.

At its core, creativity involves transforming a symbolic domain in our culture. This could mean coming up with a new solution to a problem, inventing a new device or method, or creating an entirely new work of art. Okpara, (2007) defines creativity as something that is both new and useful, while Blanchard et al. describe it as the ability to use our mental capacity to generate new ideas or concepts. Education can be a major source of creativity, and that technical and tertiary education can provide opportunities for individuals to engage in activities that foster creativity. By exposing students to diverse perspectives, challenging them to think critically, and providing them with the tools and skills necessary to explore and experiment with new ideas, educational institutions can help to foster a culture of creativity.

In the context of social and educational inclusion, creativity can play a valuable role in promoting diversity, equity, and belonging. By encouraging individuals to think creatively and approach problems from different perspectives, we can promote a more inclusive and tolerant society. Creativity can help



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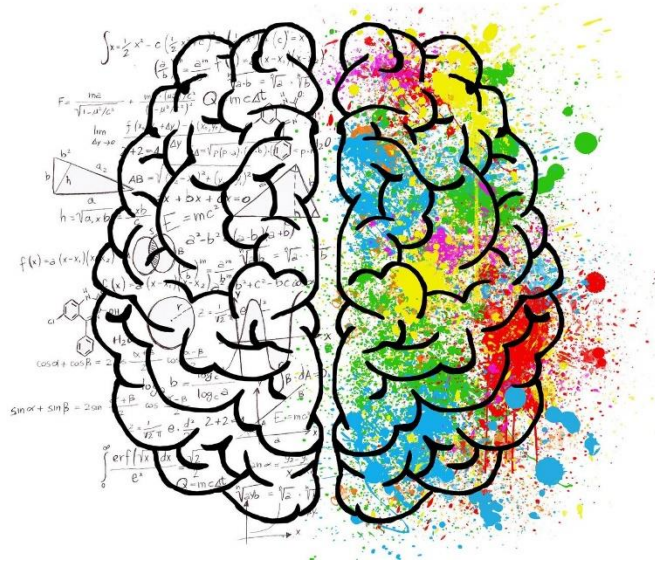
individuals recognize and appreciate different perspectives and embrace diversity as a strength rather than a weakness.

Furthermore, creativity can be a powerful tool for promoting educational inclusion. By incorporating creative and innovative approaches to teaching and learning, educators can engage students who may be struggling or disengaged. Creative approaches can help students connect with the material in new and different ways, making learning more engaging and accessible. Moreover, creativity can help to promote a sense of community and belonging in educational settings. When students are encouraged to think creatively and express themselves through artistic and other creative pursuits, they can develop a sense of connection and shared identity. This can help to promote a positive learning environment and foster a sense of belonging for all students.

Apart from promoting social and educational inclusion, creativity can have many personal benefits. For example, individuals who are more creative tend to be more resilient, adaptable, and innovative. They are better able to navigate challenges and find creative solutions to problems. Creativity can also promote well-being and mental health by providing an outlet for self-expression and a sense of purpose and accomplishment. To unlock creativity and promote social and educational inclusion, it is essential to create environments that support and encourage creativity. This can be achieved in a variety of ways, such as through arts education programs, innovative teaching approaches, and the promotion of creativity in the workplace. It is also important to recognize and value the contributions of diverse individuals and communities and actively seek out and incorporate different perspectives and ideas.

The cultivation of creativity typically involves exploring materials, expressing ideas, and discovering new concepts (process), as well as producing and presenting final artworks and designs (products) (Vaughan et al., 2013). According to Cologon et al. (2019), these activities promote inclusive education by creating a friendly and secure environment that encourages effective communication among all students. Such an environment motivates students to work collaboratively and productively in groups, make decisions, and solve practical problems in their communities through creative and artistic expression. After learning about various meanings associated with art, students can reflect on their own cultures and consider how these meanings might relate to their own experiences.

In conclusion, creativity has the power to promote social and educational inclusion by breaking down barriers, fostering a sense of community and belonging, and promoting diversity, equity, and tolerance. By unlocking creativity in individuals and communities, we can promote a more inclusive and innovative society that benefits all members. It is important for educators, policymakers, and employers to recognize the importance of creativity and to actively promote its development and application.



Creative Mind. Source: <https://www.ytcstudios.com/blog/2020/3/23/creativity-the-coveted-skill-of-the-future>

Promote Inclusion Using Creativity

- Create an inclusive classroom environment: Teachers can create an inclusive classroom environment by setting clear expectations for respectful behavior, encouraging student participation and collaboration, and using inclusive language. By creating a welcoming and inclusive environment, teachers can help students feel valued and respected.
- Incorporate diverse perspectives: Teachers can incorporate diverse perspectives into their teaching by using a variety of materials, including literature, art, and music, that represent different cultures and perspectives. This can help to broaden students' understanding of the world and promote empathy and understanding.
- Use creative teaching methods: Teachers can use creative teaching methods to engage students and promote critical thinking. This could involve using role-playing, visual arts, or storytelling to explore complex topics. By using creative teaching methods, teachers can help students to express themselves in different ways and encourage them to think outside the box.
- Provide opportunities for creative expression: Teachers can provide opportunities for creative expression by incorporating art, music, and drama into their lessons. This can help students to express themselves in different ways and provide an outlet for self-expression.
- Encourage collaboration and teamwork: Teachers can encourage collaboration and teamwork by assigning group projects and activities that require students to work together. This can help students to develop important social skills and learn how to work effectively with others.

By using creativity to promote social and educational inclusion, teachers can help to create a classroom environment that is welcoming and inclusive for all students. This can help to promote understanding and empathy among students, and foster a more equitable and inclusive society.

Some Examples of Creative Methods

- Role-playing and drama: Role-playing and drama can be used to explore complex social issues and promote empathy and understanding. Teachers can assign roles to students and have



them act out scenarios that promote inclusion and address issues like bullying, discrimination, and stereotyping.

- **Visual arts:** Visual arts can be used to promote social and educational inclusion by encouraging students to explore their own identity and perspectives. Teachers can provide art supplies and encourage students to create artwork that represents their cultural background, personal experiences, and unique perspectives.
- **Creative writing:** Creative writing can be used to promote social and educational inclusion by encouraging students to express themselves in written form. Teachers can assign writing prompts that encourage students to reflect on their own identity and experiences, and explore issues related to social justice, equality, and inclusion.
- **Music and dance:** Music and dance can be used to promote social and educational inclusion by encouraging students to express themselves through movement and sound. Teachers can provide music and dance activities that celebrate diversity and encourage students to learn about different cultures and traditions.
- **Collaborative projects:** Collaborative projects can be used to promote social and educational inclusion by encouraging students to work together towards a common goal. Teachers can assign group projects that require students to collaborate and communicate effectively, and encourage them to reflect on their own biases and assumptions.
- **Community garden:** Students can work together to create a community garden that promotes environmental sustainability and social inclusion. This project can involve designing the garden, planting and maintaining the plants, and using the garden to host community events and workshops.
- **Art exhibit:** Students can work together to curate an art exhibit that showcases their artwork and promotes creativity and social inclusion. This project can involve selecting the artwork, designing the exhibit space, and promoting the exhibit to the wider community.

By using creative teaching methods to promote social and educational inclusion, teachers can create a more engaging and inclusive learning environment that encourages students to express themselves creatively, explore their own identity and perspectives, and develop important social skills.

Impacts of Creativity

- **Increased engagement:** Creative activities can help to engage students who may not be as interested in traditional academic subjects. By promoting creativity, teachers can create a more inclusive learning environment that caters to a wider range of students.
- **Improved social skills:** Collaborative creative projects can help students develop important social skills, such as communication, teamwork, and empathy. These skills can help students build relationships with their peers and promote social inclusion.
- **Enhanced critical thinking:** Creativity requires students to think outside the box and come up with innovative solutions to problems. By promoting creativity, teachers can help students develop their critical thinking skills, which can improve their academic performance and prepare them for future success.



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- Increased cultural awareness: Creative projects can promote cultural awareness and understanding by encouraging students to explore their own identity and perspectives, as well as those of their peers. By promoting cultural diversity, teachers can help to build a more inclusive and equitable society.
- Improved mental health: Engaging in creative activities can have positive effects on mental health by reducing stress, anxiety, and depression. By promoting creativity, teachers can create a more supportive and positive learning environment that promotes overall wellbeing.

Overall, creativity is an important aspect of education, and technical and tertiary education can provide opportunities for individuals to engage in activities that foster creativity. By encouraging individuals to think critically, take risks, and challenge established norms and conventions, educational institutions can help to create a culture of creativity that can benefit individuals and society as a whole.

Additional Strategies

- Integrate creative activities into the curriculum: Schools and educational institutions can integrate creative activities such as music, dance, visual arts, and theatre into their curriculum. This will provide students with opportunities to develop their creative skills and express themselves in innovative ways. By valuing and promoting creativity, educational institutions can help to foster a culture that values diversity and celebrates individual differences.
- Collaborate with community organizations: Educational institutions can collaborate with community organizations such as arts councils, museums, and theatre companies to provide students with opportunities to engage in creative activities outside of the classroom. This will expose students to a broader range of artistic and cultural experiences and help to build bridges between different communities.
- Provide professional development opportunities for teachers: Teachers can be provided with professional development opportunities that focus on integrating creativity and the arts into their teaching practices. This will help to build their skills and confidence in teaching creative activities, and enable them to better support the diverse needs of their students.
- Foster a culture of inclusion: Educational institutions can foster a culture of inclusion by valuing diversity and celebrating the unique strengths and talents of each student. This can be achieved by implementing inclusive policies, creating safe and welcoming environments, and promoting positive attitudes towards diversity.
- Provide access to resources and materials: Schools and educational institutions can provide students with access to resources and materials that support their creative activities. This can include art supplies, musical instruments, theatre costumes, and props. By providing students with the necessary resources, they can fully engage in creative activities and develop their skills and talents.
- Encourage collaboration and teamwork: Creative activities often require collaboration and teamwork. Educational institutions can encourage collaboration and teamwork by providing opportunities for students to work together on creative projects. This will help to develop important social and emotional skills, and promote a sense of community and belonging.

In summary, to improve the impact of creativity and arts on promoting social and educational inclusion, educational institutions can integrate creative activities into the curriculum, collaborate with community organizations, provide professional development opportunities for teachers, foster a



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culture of inclusion, provide access to resources and materials, and encourage collaboration and teamwork. By valuing and promoting creativity, educational institutions can help to build a more inclusive and equitable society.

Additional resources

The Creative Aging Resource: <https://creativeagingresource.org/resource/>

The Creative Education Foundation: <https://www.creativeeducationfoundation.org/>

Student-Centered Learning Resources and Research: <https://studentsatthecenterhub.org/>

Video materials

Edutopia: <https://www.youtube.com/@edutopia>

The Global Teacher Prize: <https://www.youtube.com/@GlobalTeacherPrizeGTP>

5.3. Innovation as a tool to promote social and educational inclusion through arts

Innovation has become increasingly important in promoting social and educational inclusion through the arts. The arts have always been a powerful tool for bringing people together and promoting understanding and empathy between different cultures, backgrounds, and identities. However, with the advancement of technology and the increasing use of digital media, new opportunities have emerged to engage young people in creative activities and foster inclusion.

According to Lester and Piore (2004), innovation as a tool involves two processes: analysis and interpretation. Analysis is a rational decision-making process, which is commonly used in science and technology. This process is effective when the possible outcomes are well-defined and clearly understood. In contrast, interpretation involves mutual understanding through exploratory conversations with various collaborators. Lester and Piore argue that interpretive processes are more appropriate when the possible outcomes are unknown and when the task is to create new outcomes. This process requires a willingness to take risks, tolerance of ambiguity, and the involvement of brokers who can interpret across disciplinary boundaries. (Oakley et al., n.d.)

One example of innovative technology being used to promote social and educational inclusion through the arts is the use of virtual and augmented reality. These technologies allow students to explore different environments and perspectives, providing a unique opportunity for them to experience cultures and communities that they may not have access to in their physical environment. For example, students can use virtual reality to explore a historical site or take a virtual tour of a foreign city, allowing them to experience different cultures and ways of life in a more immersive and engaging way.

Another innovative approach is the use of social media and digital platforms to connect students from different parts of the world and promote collaboration and creativity. Platforms like Instagram, TikTok, and YouTube have become popular tools for young people to share their creative work and engage with others. Teachers can use these platforms to encourage students to create and share their own art projects, while also engaging with others who may have different backgrounds and perspectives. This can help break down barriers between different communities and promote greater understanding and empathy.

In addition, innovative approaches can also be found in the ways that arts education is being delivered in classrooms. Many schools are now incorporating technology into their art classes, allowing students to experiment with digital media and tools. For example, students can use software like Photoshop or digital drawing tablets to create their own artwork. This approach not only promotes creativity but also helps to develop digital skills that are becoming increasingly important in today's workforce.

Another example of innovative arts education is the use of interdisciplinary projects that integrate art with other subjects such as science, technology, engineering, and mathematics (STEM). These projects can help to demonstrate the real-world applications of the arts and promote a greater understanding of the important role that creativity plays in fields beyond the arts. For example, a science class could include a project that requires students to create a piece of artwork that demonstrates a scientific concept or theory.

The benefits of these innovative approaches to social and educational inclusion through the arts are many. For teenagers and students, they provide opportunities to explore and express their creativity in new and exciting ways, while also promoting a greater understanding and appreciation of different cultures and perspectives. They also provide valuable skills that can help prepare them for success in the future.

For teachers, these approaches can help to create more engaging and dynamic classrooms that foster creativity, collaboration, and inclusivity. By embracing innovation in arts education, teachers can help to break down barriers and promote social and educational inclusion for all students.

In conclusion, innovation is a powerful tool for promoting social and educational inclusion through the arts. By embracing new technologies, digital platforms, and interdisciplinary approaches, educators can create more engaging and inclusive learning environments that promote creativity, collaboration, and empathy. As technology continues to evolve, it is essential that educators continue to explore new and innovative ways to use the arts to promote social and educational inclusion.



Innovation with Thoughts <https://handbook.floeproject.org/>

Steps for Increasing Innovations

- Foster a culture of innovation: Educational institutions can foster a culture of innovation by creating an environment that encourages creativity, experimentation, and risk-taking. This can be achieved by providing opportunities for professional development, encouraging collaboration and teamwork, and recognizing and rewarding innovative ideas and practices.
- Build partnerships with external organizations: Educational institutions can build partnerships with external organizations such as non-profits, government agencies, and private sector



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companies to leverage their expertise and resources in promoting social and educational inclusion. These partnerships can help to create new and innovative approaches to education, as well as provide access to funding and other resources.

- **Encourage interdisciplinary collaboration:** Encouraging interdisciplinary collaboration between different fields such as education, technology, and social sciences can lead to the development of new and innovative approaches to promoting social and educational inclusion.
- **Invest in research and development:** Investing in research and development can help to identify new and innovative approaches to promoting social and educational inclusion. Educational institutions can allocate resources to research projects that focus on developing innovative solutions to educational challenges, while also promoting social inclusion.
- **Empower students to drive innovation:** Educational institutions can empower students to drive innovation by creating opportunities for them to participate in designing and implementing innovative solutions to educational and social challenges. This approach can help to develop the next generation of innovators and leaders who are committed to promoting social and educational inclusion.

In summary, to increase innovations in promoting social and educational inclusion, we can foster a culture of innovation, build partnerships with external organizations, encourage interdisciplinary collaboration, invest in research and development, and empower students to drive innovation. By taking these steps, we can create new and innovative approaches to education that are more inclusive and equitable for all students.

Be Sustainable

- **Monitoring and evaluation:** It is important to monitor and evaluate the impacts of innovative approaches on social and educational inclusion. This can help identify areas for improvement and ensure that the impacts are sustained over time.
- **Scaling up:** Innovative approaches that have proven successful should be scaled up to reach more students and have a greater impact. This can be achieved by replicating successful approaches in other schools or communities, or by expanding programs and initiatives to reach more students.
- **Partnership building:** Building partnerships with stakeholders such as parents, community organizations, and local government can help sustain the impacts of innovative approaches by building support and ensuring long-term commitment.
- **Continuous professional development:** Providing ongoing professional development opportunities for educators can help sustain the impacts of innovative approaches by ensuring that teachers are equipped with the skills and knowledge needed to implement these approaches effectively.
- **Communication and advocacy:** Communication and advocacy can help sustain the impacts of innovative approaches by raising awareness and building support for these approaches among the broader community. This can be achieved through public relations campaigns, social media, and other forms of outreach.



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In summary, sustaining requires monitoring and evaluation, scaling up successful approaches, building partnerships, providing continuous professional development, and communication and advocacy. By taking these steps, we can ensure that innovative approaches have a lasting impact and help create a more inclusive and equitable education system.

Possible Future Works

- **Developing personalized learning approaches:** Developing personalized learning approaches that take into account the unique needs and learning styles of individual students can help promote social and educational inclusion. By providing students with customized learning experiences, we can ensure that they have access to the resources and support they need to succeed.
- **Leveraging technology:** Technology can be leveraged to promote social and educational inclusion by providing students with access to educational resources, facilitating communication and collaboration between teachers, students, and parents, and enabling personalized learning experiences.
- **Addressing the social determinants of education:** The social determinants of education, such as poverty, discrimination, and inequality, can have a significant impact on students' educational outcomes. Future works of innovation could focus on addressing these social determinants by providing students with access to resources such as healthcare, nutrition, and social services.
- **Encouraging community involvement:** Community involvement can play a critical role in promoting social and educational inclusion. Future works of innovation could focus on building partnerships between schools, parents, and community organizations to create a more supportive and inclusive learning environment.
- **Emphasizing global citizenship:** Emphasizing global citizenship can help promote social and educational inclusion by encouraging students to understand and appreciate different cultures and perspectives. Future works of innovation could focus on developing curricula and learning experiences that promote global citizenship and cross-cultural understanding.

Innovation in promoting social and educational inclusion could focus on developing personalized learning approaches, leveraging technology, addressing the social determinants of education, encouraging community involvement, and emphasizing global citizenship. By continuing to innovate in this area, we can create a more inclusive and equitable education system that benefits all students.

Additional resources

The Innovation Center for Community and Youth Development: <https://www.youthpower.org/>

The Wallace Foundation: <https://www.wallacefoundation.org/pages/default.aspx>

Video materials

The National Endowment for the Arts: <https://www.youtube.com/@NEAarts>

Creative Education Foundation: <https://www.youtube.com/@CEFTV>



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Summary

Promoting social and educational inclusion through the arts is a critical aspect of ensuring that all individuals, regardless of their background or circumstances, have access to the transformative power of artistic expression. By creating inclusive learning environments that incorporate the arts, educators can foster creativity, critical thinking, and collaboration among students, while also helping to break down barriers that can limit access to education and the arts.

Innovation plays a key role in promoting social and educational inclusion through the arts, as it allows educators to develop new and creative approaches to teaching and learning that meet the needs of diverse learners. By embracing innovation and leveraging the latest technologies and teaching strategies, educators can create engaging and immersive learning experiences that inspire and motivate students, while also promoting social and emotional learning and building strong communities.

The arts have the power to bring people together, foster a sense of belonging, and promote understanding and empathy across cultures and communities. By incorporating the arts into education and promoting social and educational inclusion through the arts, educators can help to build a more equitable and just society, where all individuals have the opportunity to reach their full potential.

In conclusion, promoting social and educational inclusion through the arts is not only a powerful way to support student learning and development, but it is also a critical tool for building a more inclusive and equitable society. Through innovation and creativity, educators can develop new and effective strategies for incorporating the arts into education, promoting social and emotional learning, and breaking down barriers to access and participation. By working together and embracing the transformative power of the arts, we can create a brighter future for all.



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Chapter 6. How can creativity and the arts be used effectively in education?

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Abstract

Creativity is commonly described as the capacity to create objects or ideas that are novel and effective (Runco and Jaeger, 2012). It is valued highly across many disciplines and has been identified by educational institutions as an extremely important competency (Creely and Henriksen, 2019). Creativity and the arts have long been recognized as important components of a well-rounded education. However, in recent years, they have increasingly been viewed as essential elements of 21st-century learning. In this chapter, we explore three subdomains in which creativity and the arts can be used effectively in education: enhancing student engagement and fostering cultural understanding, promoting critical thinking and problem-solving skills, supporting social-emotional learning. We provide examples of how educators can incorporate creativity and the arts into their teaching practice, as well as evidence-based research supporting their effectiveness in education.

Introduction

Education is not just about acquiring knowledge; it is also about developing skills that will be useful in a rapidly changing world. One such skill is creativity, which involves the ability to think outside the box and come up with new and innovative ideas. Similarly, the arts can play a vital role in developing students' creativity as well as providing an outlet for self-expression and cultural understanding.



Source: <https://www.hiclipart.com/free-transparent-background-png-clipart-jdaqa>

Creative learning is stimulated when students learn spontaneously by actively and creatively engaging with their environment through activities such as inquiring, experimenting, searching, manipulating, and the like, rather than passively accepting knowledge from authority in the form of teachers or books (Torrance, 1970). It is an important element in the creative pedagogy framework because neglecting spontaneous creative learning and learner autonomy leads to difficulties in cultivating creativity in children (Lin, 2011).



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1. **Enhancing Student Engagement and Fostering Cultural Understanding:** One of the most significant ways in which creativity and the arts can be used effectively in education is by enhancing student engagement and fostering cultural understanding. By incorporating arts-based activities, such as visual arts, music, dance, drama, and literature, into the curriculum, educators can create a dynamic learning environment that encourages students to actively participate and express themselves.
2. **Promoting Critical Thinking and Problem-Solving Skills:** Another subdomain where creativity and the arts can be effectively used in education is in promoting critical thinking and problem-solving skills. Artistic activities inherently require students to think critically, analyze, and make decisions, thereby fostering essential cognitive skills that can be applied across different domains of learning.
3. **Lastly, Social-Emotional Learning:** Creativity and the arts can be effectively used in education to support of social emotional learning, which encompasses the development of self-awareness, self-regulation, social awareness, relationship skills, and responsible decision-making. The arts provide a unique avenue for students to explore and express their emotions, thoughts, and experiences, thus promoting social-emotional well-being.

6.1. Enhancing student engagement and fostering cultural understanding

Enhancing student engagement

One of the primary benefits of incorporating creativity and the arts into education is that it can increase student engagement. By using creative approaches to teaching and learning, educators can help students connect with the material in a meaningful way, making it more memorable and interesting. For example, using visual aids such as diagrams, videos, and pictures can help students visualize complex concepts, making them easier to understand. Additionally, incorporating creative activities such as music, drama, and art projects into the curriculum can provide students with a fun and engaging way to learn new concepts.

The use of creativity and the arts in education has long been recognized as a valuable tool in enhancing students' engagement, motivation, and overall academic performance. Creativity and the arts enable students to express themselves in new and exciting ways, providing a more interactive and engaging learning experience.

Defining Creativity and the Arts

Before delving into the benefits of creativity and the arts in education, it is essential to define what these terms mean. Creativity is often defined as the ability to generate new ideas, approaches, or solutions to problems. The arts, on the other hand, refer to various forms of creative expression, such as visual art, music, dance, and drama.

Enhancing Engagement through Creativity and the Arts

1. **Fostering a Sense of Ownership**

Incorporating creativity and the arts into the curriculum can help students feel more invested in their learning. When students are given the opportunity to create, whether it be through writing, painting, or performing, they take ownership of their work. This sense of ownership can lead to increased engagement and motivation to learn. Fostering a sense of ownership involves providing students with opportunities to take ownership of their own learning. This can include giving students choices about what they learn, allowing them to collaborate on projects, and encouraging them to take risks and



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experiment with new ideas. When students feel like they have a stake in their own learning, they are more likely to be engaged and motivated to succeed.

One effective way to foster a sense of ownership through creativity and the arts is to provide students with opportunities to create their own art. This can include anything from visual art, music, drama, and creative writing. By giving students the freedom to create their own work, they are able to express themselves in their own unique way and take ownership of their own creative process. For example, in a visual arts class, students could be given a project that allows them to create their own artwork. Rather than giving them strict guidelines or specific instructions, the teacher could provide a general theme or concept and encourage students to explore different mediums and techniques to create their own interpretation of the theme. This approach allows students to take ownership of their own creative process, experiment with new ideas, and develop their own unique artistic style.

2. Enhancing Critical Thinking

Creative and artistic expression requires students to think critically about the subject matter. For example, a student creating a piece of art about a historical event must consider various aspects of that event and how best to represent it visually. This process of critical thinking enhances students' engagement with the subject matter and encourages them to think more deeply about it. Creativity and the arts can be effective tools in enhancing critical thinking skills in education. Studies have shown that arts-based learning experiences can improve critical thinking skills, as well as other important cognitive skills such as problem-solving and decision-making (Winner, Goldstein, & Vincent-Lancrin, 2013). By engaging in creative problem-solving and developing alternative perspectives through artistic expression, students can strengthen their critical thinking abilities. Therefore, incorporating the arts into education can not only enhance creativity, but also promote critical thinking skills.

One way to use creativity and the arts to enhance critical thinking is to encourage students to engage in creative problem-solving. This involves using artistic mediums such as visual art, music, drama, and creative writing to explore complex problems and develop innovative solutions. By encouraging students to approach problems from multiple perspectives and explore a range of possible solutions, they are able to develop critical thinking skills such as analysis, evaluation, and synthesis.

For example, in a visual arts class, students could be given a project that requires them to use their creative problem-solving skills. They could be asked to create a piece of art that addresses a complex social issue such as climate change or social inequality. Rather than providing specific instructions or guidelines, the teacher could encourage students to approach the problem from multiple perspectives and explore a range of possible solutions. This approach not only allows students to engage in critical thinking, but also fosters creativity and innovation.

3. Providing a Multimodal Learning Experience

Providing a multimodal learning experience is another effective way to use creativity and the arts in education. A multimodal learning experience involves the use of multiple modes of expression such as visual, auditory, kinesthetic, and textual, to convey information and engage students in the learning process. By engaging students in a variety of different modes of expression, they are able to develop a deeper understanding of the material and make connections between different concepts.

Integrating creativity and the arts into education provides students with a multimodal learning experience. Rather than simply reading or listening to information, students are encouraged to engage with it in various ways. This approach can lead to a more profound and holistic understanding of the subject matter. Creativity and the arts can be used to provide a multimodal learning experience by incorporating visual and auditory elements into traditional classroom instruction. For example, in a history class, students could be asked to create a multimedia presentation that incorporates visual elements such as images and videos, as well as auditory elements such as music and sound effects, to



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tell the story of a historical event or figure. This approach not only engages students in the creative process, but also provides a more engaging and interactive learning experience. Similarly, in a science class, students could be asked to create a series of visual diagrams or models to help them understand complex scientific concepts.

4. Fostering Collaboration

Many creative and artistic endeavors require collaboration. This collaboration can foster a sense of community and belonging among students, leading to increased engagement in the learning process. The creative collaboration also incorporated the key elements of authentic learning practice, which include real-world relevance; an ill-defined problem; complex and sustained investigation, multiple sources and perspectives; collaboration, reflection (metacognition); interdisciplinary perspective; integrated assessment; finished products and multiple interpretations and outcomes (Lombardi, 2007). Creativity and the arts can be powerful tools for fostering collaboration in education. Here are some ways to use them effectively:

- a) **Group projects:** Assign students to work in small groups to create a collaborative project. Encourage them to use their creativity and artistic talents to bring their ideas to life. This will give them an opportunity to work together, share ideas, and develop a sense of teamwork.
- b) **Creative problem solving:** Use creative activities, such as brainstorming or improve games, to encourage students to think outside the box and come up with innovative solutions to problems. This can be done individually or in groups, and can help students develop their collaborative skills.
- c) **Cross-curricular activities:** Incorporate the arts into other subjects, such as science or social studies. For example, students could create a play or musical based on a historical event or scientific concept. This will encourage collaboration across different subject areas and help students develop a more holistic understanding of the material.
- d) **Peer feedback:** Encourage students to provide constructive feedback to their peers on their creative projects. This will help them develop their collaborative skills, as well as their critical thinking and communication skills.
- e) **Community partnerships:** Partner with local artists or arts organizations to bring their expertise into the classroom. This will give students an opportunity to learn from professionals in the field and develop a deeper appreciation for the arts. It can also help foster collaboration between the school and the community.
- f) **Increasing Motivation:** When students are engaged in a task that they find interesting and enjoyable, they are more motivated to continue learning. Incorporating creativity and the arts into education can provide students with a sense of excitement and joy, leading to increased motivation to learn.



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Source: <https://blog.bonus.ly/creating-innovative-teams>

Examples of Using Creativity and the Arts in Education

1. Arts Integration

Arts integration involves incorporating the arts into the curriculum across all subject areas. For example, a science class may have students create a piece of art that represents a scientific concept, such as the water cycle. This approach provides students with a multidisciplinary learning experience and encourages them to think creatively about the subject matter.

2. Project-Based Learning

Project-based learning involves having students work on a long-term project that requires them to apply their knowledge in a creative and meaningful way. For example, a history class may have students create a documentary about a historical event. This approach encourages students to think critically about the subject matter and fosters a sense of ownership and collaboration.

3. STEAM Education

STEAM education involves incorporating science, technology, engineering, the arts, and mathematics into the curriculum. This approach provides students with a holistic learning experience that encourages creativity and innovation. For example, a robotics class may have students design and build a robot that can create a piece of art.

Fostering cultural understanding

The arts have always been an essential part of human expression, with the potential to cross cultural boundaries and communicate across different languages. In education, the arts can be used effectively to promote cultural understanding and create a more inclusive classroom environment. By providing opportunities for creative expression and exposure to diverse perspectives, the arts can help students gain a deeper understanding and appreciation for different cultures (Carr, M. (2012). *Education, creativity and the arts*. Routledge.).

One way that creativity and the arts can foster cultural understanding is by introducing students to art forms from different cultures. This can include visual arts, music, dance, and literature. Teachers can use these art forms as a starting point to explore different cultural traditions and beliefs. For example, students can learn about traditional Japanese calligraphy, African drumming, or Native American storytelling (Robinson, K. (2013). *Out of Our Minds: Learning to be Creative*. Capstone Publishing Ltd.). By studying these forms of art, students gain a deeper appreciation for the cultures from which they originate and develop empathy towards people with different backgrounds.

Another way that creativity and the arts can be used to foster cultural understanding is by promoting creativity and self-expression. By giving students the opportunity to express themselves through the



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arts, teachers can create a safe and supportive environment where students feel comfortable sharing their own cultural experiences. This can help students feel seen and heard, and create a sense of belonging in the classroom. Additionally, by promoting creativity, teachers can help students develop critical thinking skills, problem-solving abilities, and confidence in their own ideas and perspectives.

Creativity and the arts can also be used to facilitate cross-cultural communication. Art-based activities, such as theater, music, and dance, can be used to create opportunities for students from different cultural backgrounds to collaborate and communicate with each other (Eisner, E. W. (2002). *The Arts and the Creation of Mind*. Yale University Press). This can help break down cultural barriers and promote a sense of community in the classroom. Through working together on creative projects, students can gain a better understanding of each other's perspectives, build trust, and learn to value each other's differences.

Creativity and the arts can be powerful tools for fostering cultural understanding in education. Here are some ways that they can be used effectively:

1. Introduce diverse perspectives through the arts: Teachers can incorporate art from various cultures into their lessons, such as music, dance, visual arts, and literature. This can expose students to different perspectives, beliefs, and values.
2. Encourage creativity and self-expression: By providing opportunities for students to express themselves through the arts, teachers can create a safe and supportive environment where students feel comfortable sharing their own culture and experiences.
3. Facilitate cross-cultural communication: Arts-based activities such as theater, music, and dance can be used to facilitate communication and collaboration between students from different cultural backgrounds. This can help to break down cultural barriers and create a sense of community in the classroom.
4. Explore cultural traditions and histories: Teachers can use the arts to explore the cultural traditions and histories of various communities. For example, students can learn about different forms of art such as calligraphy, traditional dance, or storytelling that are unique to certain cultures.
5. Promote empathy and understanding: By engaging with the arts, students can develop empathy and understanding towards cultures different from their own. This can help to promote tolerance and respect for diversity.

Research shows that the arts have a positive impact on student engagement and academic performance (Catterall et al. 2012). By providing students with opportunities for creative expression and critical thinking, the arts can help foster a sense of ownership over their learning, leading to higher levels of engagement and motivation. Additionally, by promoting cultural understanding and empathy, the arts can help create a more inclusive and respectful learning environment (Robinson, K. (2013) *Out of Our Minds: Learning to be Creative* Capstone Publishing Ltd.).

One way that creativity and the arts can enhance student engagement is by providing students with a variety of ways to learn and express themselves. Students with different learning styles may find the arts to be a more accessible way to engage with the material. For example, students who struggle with traditional academic subjects may find success in art-based projects or performance-based assessments (Russell-Bowie, D. E., 2017). Moreover, the arts can promote cultural understanding by exposing students to different perspectives and beliefs. Through the exploration of different cultural traditions and art forms, students can gain a deeper understanding of and appreciation for diverse



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cultures. The arts can also provide a platform for cross-cultural communication, where students from different backgrounds can work together on creative projects and learn from one another.

Engaging students in the arts can have a positive impact on their social and emotional well-being, which in turn can enhance their engagement in the educational process. According to Eisner (2002), engagement in the arts can provide students with opportunities to express themselves, develop their creativity, and engage in meaningful and relevant learning experiences. This can lead to increased motivation, curiosity, and enthusiasm for learning, which are essential factors for student engagement in the classroom.

The arts can also foster cultural understanding among students, particularly in promoting social inclusion. Through arts-based activities, students can explore diverse cultural expressions and experiences, develop empathy, and gain a deeper understanding of different cultures. As Davis (2006) notes, the arts can provide a window into the cultural world from others, allowing students to see the world through different perspectives and fostering intercultural understanding. This can help students develop a sense of appreciation, tolerance, and respect for diversity, which are essential for promoting social inclusion and creating a harmonious and inclusive learning environment.

Moreover, the arts can promote social inclusion by providing a platform for students from diverse backgrounds to come together and collaborate. According to Burton and Horowitz (2015), arts-based activities can create opportunities for students to engage in collaborative learning experiences, express their own perspectives, and listen to and appreciate the perspectives of others. This can foster positive relationships among students, regardless of their cultural background or identity, and promote a sense of belonging and community within the classroom. Through arts-based activities, students can develop self-awareness, self-regulation, empathy, and social skills, which are essential for building positive relationships and navigating social interactions. As Fiske (1999) argues, arts education can foster the development of emotional intelligence, allowing students to understand and manage their own emotions as well as those of others. This can contribute to the development of a positive classroom culture where students feel valued, respected, and included.

In conclusion, creativity and the arts can be effective tools for enhancing student engagement and fostering cultural understanding in education, particularly for promoting social inclusion. Engaging students in the arts can provide opportunities for self-expression, foster cultural understanding, promote collaboration, and support social-emotional learning. By incorporating creativity and the arts into education, educators can create an inclusive learning environment that celebrates diversity, promotes social inclusion, and fosters positive relationships among students.

Additional resources

Gaudelius, Y., & Speirs, P. (2002). Creating community: Art educators make a difference. *Art Education*, 55(6), 6-12.

Lee, J. (2018). Student engagement in art education: Examining the impact of art integration. *International Journal of Education & the Arts*, 19(13).

Video materials

"How the Arts Unlock the Door to Learning" by PBS NewsHour (6.00) :

https://www.youtube.com/watch?v=pRZQCO_BZn0

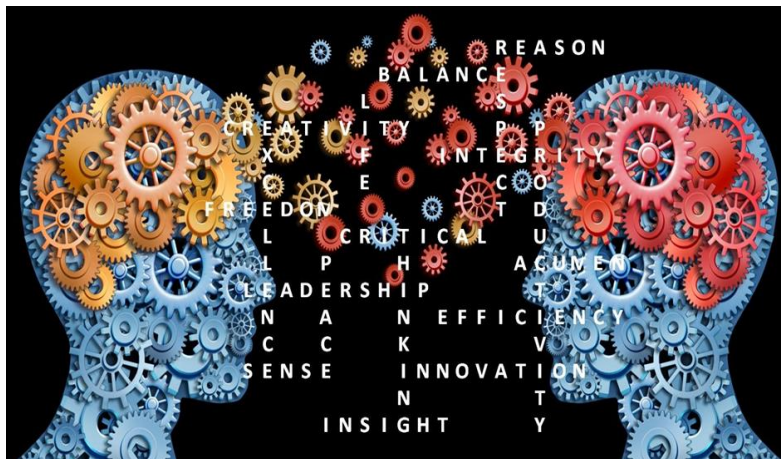
"Why Arts Education is Crucial, and Who's Doing It Best" by Edutopia (5:42) :

https://www.youtube.com/watch?v=HvV7-R_77wU

6.2. Promoting critical thinking and problem-solving skills

Creative thinking can be defined as the entire set of cognitive activities used by individuals according to a specific object, problem, or condition, or a type of effort toward a particular event or problem based on the capacity of the individuals. The EU Commission states that "Creative Europe aims to support the cultural and creative sectors, which are major contributors to economic growth and job creation, and to promote cultural diversity and social inclusion."

Nowadays, the main point of education is not to teach reading, writing or arithmetic, but it is to teach how to use thinking skills such as not only creativity (Rhodes, 1961; Runco, 2014), but also qualified problem solving skills (Segal, Chipman & Glaser, 1985), scientific and technological literacy skills (Lawless & Brown, 2015; Tortop, 2013) because these are the skills that are required for sustainability and lifelong education in addition to basic education. In the lifelong process, it is possible to say that learners are faced with many real life problems (Augustine, 2011). The goal is to guide learners to become skilled in acquiring application qualification. In modern world, to increase students' capacity for problem solving and critical thinking is presented as a goal of education in all fields (Olszewski-Kubilius & Thomson, 2015; Paul & Elder, 2012).



Source: <https://blog.learnfasthq.com/dr-martha-burns-answers-two-critical-thinking-questions-from-teachers>

Generally, creative thinking is correlated to critical thinking, and problem solving. Actually, there are three dimensions of creative thinking: synthesising, articulation, and imagination, which have the following qualities (Aslan, 2007; Rhodes, 1961; Sternberg, 2009).

- Synthesising: This dimension includes various activities such as getting benefit from analogous thinking, deducing original results from creative and critical thinking, etc. three small parts, presenting novel and authentic suggestions for the solution of the problem.
- Articulation: It involves forming the old and new knowledge or expanding the current knowledge with the help of the new one, constructing unusual relationship to produce authentic solutions and making thoughts concrete with the help of imagination and use of the materials.
- Imagination: This dimension is consisted of constructing relationship between valid and reliable thoughts, presenting flexible ways of thought with the help of imagination, to come up with different insights during idea producing process.



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In recent years, creativity has been valued as a universal capability that can be applied in everyday situations. It is interpreted as a capability of human intelligence instead of a subject. Sternberg defines creativity as an imaginative action fashioned so as to produce outcomes that are both original and valuable (Craft et al., 2006; Sternberg, 2003). Also, novelty is necessary rather than originality, meaning that "someone's idea does not have to reflect thinking that has never been thought before by anyone". This thinking should be new for that individual, not necessarily for society as a whole. "Teaching creativity and the arts is not only a means of promoting social inclusion and diversity but also a way to develop the problem-solving skills and creativity that are essential for success in the 21st century economy" (Source: Sir John Daniel, "Mega-Schools, Technology, and Teachers: Achieving Education for All").

Incorporating creativity and the arts into education can be an effective tool to promote critical thinking and problem-solving skills in students. Through the arts, students can learn how to think outside the box, explore multiple perspectives, and approach problems in innovative ways. One of the primary ways in which creativity and the arts can promote critical thinking and problem-solving skills is by encouraging divergent thinking. Divergent thinking is the ability to generate multiple solutions to a problem, as opposed to convergent thinking, which focuses on finding the single best solution. Through arts-based activities such as brainstorming, improvisation, and creative writing, students can practice generating multiple solutions to a problem, which can translate to real-life problem-solving situations.

Another way in which creativity and the arts can promote critical thinking and problem-solving skills is by encouraging interdisciplinary thinking. By integrating various art forms such as music, theater, and visual arts into academic subjects, students can learn to make connections between different disciplines, which can foster a more holistic approach to problem-solving. For example, students could use visual art to explore scientific concepts or write a play to depict a historical event, encouraging them to think critically about the subject matter and approach it from different angles.

Additionally, the arts can help students develop their ability to analyze and interpret complex information. Through activities such as close reading of literature or analyzing artwork, students can learn how to break down complex information into smaller, more manageable parts, allowing them to identify patterns and make connections between seemingly disparate ideas. This skill can be applied to real-life problem-solving situations, where students need to analyze and interpret information to come up with effective solutions (Bresler, L. (Ed.). (2014). *The Palgrave Handbook of Creativity and Culture Research*, Palgrave Macmillan).

Furthermore, incorporating creativity and the arts into education can help students develop their ability to communicate effectively. By expressing their ideas through art forms such as writing, music, or visual art, students can develop their ability to articulate their thoughts and ideas in a clear and concise manner. This skill can be invaluable in real-life problem-solving situations, where effective communication is often essential.

"The arts and creativity play a vital role in promoting social inclusion and building bridges across diverse communities. By encouraging critical thinking and problem-solving skills, the arts can help to foster empathy, tolerance, and understanding" (Elliot Eisner, "The Arts and the Creation of Mind"). Examples of how creativity and the arts can be used effectively in education to promote critical thinking and problem-solving skills can be found across a range of subjects and grade levels. For example, in a science class, students could use art to explore scientific concepts such as the water cycle or the human body, encouraging them to approach the subject matter from a different angle. In a history class, students could use creative writing to explore historical events or create a play to depict the lives of historical figures, encouraging them to think critically about the subject matter and develop empathy for those who lived in the past. Additionally, in a math class, students could use visual art to



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explore mathematical concepts such as geometry or statistics, encouraging them to make connections between seemingly disparate subjects.

To sum up, incorporating creativity and the arts in education can be an effective tool to promote critical thinking and problem-solving skills in students. By encouraging divergent thinking, interdisciplinary thinking, and developing their ability to analyze and interpret complex information and communicate effectively, students can develop the skills they need to succeed in real-life problem-solving situations. By providing opportunities for students to engage in the arts, educators can foster a more engaging, inclusive, and innovative learning environment.

In more details:

1. **Encourage exploration:** Provide opportunities for students to explore different art forms and creative activities. This can include traditional arts like drawing and painting, as well as less traditional forms like music, dance, and theater. Encourage experimentation and risk-taking to help students develop their creative abilities.
2. **Foster critical thinking:** Encourage students to think deeply and critically about the art they create and the world around them. Help them develop the ability to analyze and interpret art, and to think critically about social issues and problems.
3. **Collaborative problem-solving:** Use art projects as a way to encourage collaboration and problem-solving skills. Provide opportunities for students to work together to solve creative challenges, such as designing a community mural or creating a performance piece.
4. **Celebrate diversity:** Use the arts as a way to celebrate diversity and promote social inclusion. Encourage students to explore and appreciate different cultures and perspectives through art, and provide opportunities for them to showcase their own cultural backgrounds.
5. **Connect art to real-world issues:** Help students connect art to real-world issues by asking them to consider how a particular artwork might relate to current events or social issues. This can help them develop empathy and an understanding of different perspectives.
6. **Provide positive feedback:** Encourage and celebrate student creativity and artistic achievements. Provide constructive feedback and support to help students build confidence in their abilities and encourage them to continue exploring their creativity.

By integrating creativity and the arts with critical thinking and problem-solving skills, teachers can help promote social inclusion and empower students to become creative, engaged, and socially conscious individuals. "The arts and creativity are important for promoting social inclusion, as they can provide a means of expression and communication for individuals who may feel marginalized or excluded. By developing critical thinking and problem-solving skills through the arts, we can promote diversity and enhance social cohesion" (OECD, "Arts for Inclusion: The Role of the Arts in Achieving Social Inclusion). "Education systems should emphasize the development of creativity and problem-solving skills through the arts, as these skills are essential for success in the knowledge-based economy. By promoting social inclusion and diversity through the arts, we can also help to build stronger, more resilient communities" (OECD, "Creative Problem Solving for the 21st Century: Skills for Work and Life").



Five key competencies are taught, practiced, and reinforced through SEL programming (CASEL, 2003):

*Self-awareness—Identification and recognition of one’s own emotions, recognition of strengths in self and others, sense of self-efficacy, and self-confidence.

*Social awareness—Empathy, respect for others, and perspective taking.

*Responsible decision-making—Evaluation and reflection, and personal and ethical responsibility.

* Self-management—Impulse control, stress management, persistence, goal setting, and motivation.

*Relationship skills—Cooperation, help seeking and providing, and communication.

SEL COMPONENTS	DESCRIPTION
SELF-AWARENESS	Having the awareness and the ability to identify and regulate emotions, identify personal strengths and weaknesses, know about areas suitable for potential growth, and identification of potential external resources and supports.
SELF-MANAGEMENT	This refers to the ability of an individual to regulate and control emotions, feelings, thoughts, and behaviors.
SELF-EFFICACY	Ability to persevere, self-motivated, self-encourage, explore and enhance own abilities, realize self-capabilities and resources.
SOCIAL AWARENESS	Developing the ability to understand, accept and empathize with the ideas, feelings, thoughts, and views of others from diverse backgrounds and cultures.
SOCIAL MANAGEMENT and RESPONSIBLE DECISION-MAKING SKILLS	Developing the individual’s ability to make safe and constructive choices about intrapersonal and interpersonal choices.
SOCIAL ENGAGEMENT	An individual has the ability to consider others and show a desire to contribute to the well-being of school and community.

(Adapted from CASEL, 2012)

SEL in the classroom

Social emotional learning (SEL) teaching process in classrooms typically involves the following steps:

1. **Setting goals:** The first step in teaching SEL is to set clear goals for what you want students to learn and achieve. These goals should be specific, measurable, and aligned with the SEL competencies and standards.
2. **Creating a safe and supportive learning environment:** Creating a safe and supportive classroom environment is essential for promoting SEL. Teachers should establish clear expectations, rules, and routines that promote respect, empathy, and positive behavior.



3. **Modeling and practicing SEL skills:** Teachers should model SEL skills such as self-awareness, self-regulation, social awareness, relationship skills, and responsible decision-making, and provide students with opportunities to practice these skills through role-playing, group discussions, and other activities.
4. **Providing feedback and reinforcement:** Teachers should provide ongoing feedback and reinforcement to help students develop and refine their SEL skills. This can include praise, recognition, and constructive feedback that helps students identify areas for improvement.
5. **Integrating SEL into the curriculum:** SEL should be integrated into the curriculum and taught across all subject areas, not just in dedicated SEL lessons. Teachers can incorporate SEL into classroom discussions, assignments, and projects to help students apply and practice their skills in real-world situations.
6. **Engaging families and communities:** Finally, teachers should engage families and communities in the SEL teaching process to ensure that students receive consistent support and reinforcement both inside and outside the classroom. This can include sharing information about SEL, inviting families to participate in SEL activities, and collaborating with community partners to promote SEL.

An SEL curriculum should provide ample opportunities for group work and create a safe learning environment to facilitate student engagement.

- **Collaborative groupwork**

Regular group work activities enable students to learn how to cooperate and negotiate, build leadership skills, and identify their strengths in a group setting. Collaborative learning can help to foster connectedness among students and increase their cultural awareness by interacting with others who are different from themselves.

- ✓ To integrate SEL into specific subjects, students can play card games in math lessons or incorporate SEL vocabulary into creative writing exercises and role-play activities. Role-playing is a great way for students to develop empathy and resolve conflicts by putting themselves in someone else's shoes.

- **Responsible decision-making**

Responsible decision-making is an important life skill that teaches students how to make constructive choices while considering potential ethical implications, safety concerns, social norms, and direct and indirect consequences. It encourages students to exercise self-control and develop their independence and self-confidence. Collaborative activities focusing on problem-solving and decision-making skills allow students to work together to identify and overcome different challenges.

- ✓ Help your students make informed decisions by using the Quality Circle Method. Follow these steps, identify the problem, evaluate the situation, brainstorm possible solutions, analyze the options and consider the potential consequences of each option for all parties involved, make a choice.

- **Growth mindset**

Fostering a growth mindset, a term coined by Dr Carol Dweck, in students is integral to SEL as it encourages students to view learning as an ongoing process. Reflection and goal-setting activities enable students to identify and critically think about their strengths and weaknesses in certain areas and track their progress.

- ✓ A useful tool in this regard would be a reflective journal writing exercise using prompts such as, What is one thing your team could do differently next time to solve this problem? Or, When



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was the last time you showed empathy to a classmate? (NEA, 2021). Teaching students to set goals, reflect on their successes, and acknowledge their setbacks allows them to celebrate their progress without focusing on the end result.

- **Other simple SEL activities:**

- ✓ collaborative storytelling
- ✓ class meetings
- ✓ random acts of kindness
- ✓ encouraging positive self-talk
- ✓ debating
- ✓ mindfulness techniques (daily emotional check-ins, gratitude journal)

In today's society, children face countless situations that can have a negative effect on their social-emotional and academic development and ultimately on their happiness in life. Social emotional learning (SEL) is closely connected to social inclusion because it helps students develop the knowledge, attitudes, and skills necessary to create and maintain positive relationships with others. Through SEL, students learn to understand and manage their own emotions, as well as empathize with others, communicate effectively, and work collaboratively.

When students have strong social-emotional skills, they are better equipped to navigate social situations and build positive relationships with their peers, regardless of their differences in race, ethnicity, culture, religion, gender, ability, or other characteristics. By promoting empathy, respect, and understanding, SEL can help create a more inclusive and supportive school community where all students feel valued, respected, and accepted. Additionally, SEL can help prevent and reduce bullying and other forms of exclusionary behavior by promoting a positive school climate where everyone feels safe and supported. By building students' social-emotional competencies, SEL can help foster a culture of kindness, compassion, and inclusion and ultimately create a more equitable and just society.

Creativity and the arts are powerful tools for supporting SEL and promoting social inclusion. The arts can promote self-esteem and self-confidence, particularly among students from marginalized or underrepresented communities. In her book "The Creativity Crisis," Kyung Hee Kim highlights the importance of arts education in promoting self-confidence and self-esteem, particularly among students who may feel marginalized or excluded from traditional academic environments (Kim, 2011). By providing opportunities for artistic expression and recognition, the arts can help students to build a sense of self-worth and self-efficacy, which in turn can help to promote positive mental health and well-being.

Artistic expression allows students to connect with others who share their interests and passions, regardless of their background or identity. By celebrating diversity and promoting empathy and understanding, the arts can help to break down barriers and create a more inclusive and equitable society. As noted in a 2018 report from the EU's Culture and Education Committee, "Art and culture are key elements of our common European heritage and provide an opportunity to connect people from different backgrounds and cultures" (European Parliament, 2018, p. 3).

One particularly powerful example of the role of the arts in promoting social inclusion is the use of theater in conflict resolution and peacebuilding efforts. In her book "Theatre for Conflict Resolution: In the Classroom and Beyond," drama educator Dr. Nanci Olive describes the ways in which theater can be used to promote dialogue and understanding among individuals from diverse backgrounds, particularly in areas affected by conflict or violence (Olive, 2010). By providing a safe and supportive space for individuals to share their stories and perspectives, theater can help promote empathy and understanding and build bridges between communities that have been historically divided. Through



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artistic expression, students are able to develop their emotional intelligence, build self-esteem, and learn important social skills. In addition, the arts promote empathy and understanding and can help break down barriers and create a more inclusive and equitable society. As such, it is essential that we continue to prioritize arts education in our schools and communities and recognize the important role that the arts play in promoting social-emotional development and social inclusion.

According to the European Commission's Education and Training 2020 strategy, social-emotional learning (SEL) is defined as "the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions." Creativity and the arts are powerful tools for supporting social-emotional learning (SEL) in several ways. First, the arts provide a safe and supportive environment for students to express their emotions and feelings. By creating art, students can explore their innermost thoughts and feelings, and develop their emotional intelligence. This allows them to better understand and manage their own emotions, as well as empathize with others. SEL is essential for developing well-rounded individuals who can thrive both academically and in their personal lives.

Creativity and the arts are powerful tools for supporting SEL because they provide a safe space for students to explore their emotions and develop their social skills. By engaging in creative activities, students learn to express themselves in different ways and develop their emotional intelligence. According to a study by the National Endowment for the Arts, students who participate in the arts are more likely to demonstrate empathy, teamwork, and self-confidence than those who do not. Also, the arts can help to build self-confidence and self-esteem. When students engage in creative activities, they have the opportunity to showcase their talents and abilities, which can be incredibly empowering. This sense of accomplishment can help students to feel more confident in their abilities, and more willing to take risks and try new things. Moreover, the arts promote teamwork and collaboration. Many creative projects require students to work together, share ideas, and support each other. By working collaboratively, students learn to communicate effectively, listen to others, and work towards a common goal. These are all essential social skills that are important for success in school and in life. The arts encourage problem-solving and critical thinking. When students create art, they must make decisions about color, composition, and form. They must also think creatively to solve problems and come up with new ideas. These skills are important for success in any field, as they enable individuals to approach challenges with creativity and innovation. Finally, the arts can help to foster a sense of community and belonging. When students participate in the arts, they become part of a larger creative community. This can be incredibly rewarding, and can help students to feel connected to something greater than themselves. This sense of belonging is important for building positive relationships and developing a sense of purpose and meaning in life. In conclusion by engaging in creative activities, students can develop their emotional intelligence, build self-confidence, promote teamwork and collaboration, encourage problem-solving and critical thinking, and foster a sense of community and belonging.

Creativity and the arts are not only powerful tools for supporting social-emotional learning, but also for promoting social inclusion. When students engage in creative activities, they have the opportunity to express themselves in unique and meaningful ways, and to connect with others who share their interests and passions. This sense of connection and community is essential for promoting social inclusion and creating a more equitable and inclusive society. One way that creativity and the arts can promote social inclusion is by providing a safe and supportive space for students to explore their identities and share their experiences. Artistic expression can help students to recognize and celebrate their differences, and to appreciate the diversity of others. By promoting self-awareness and empathy, the arts can help to break down barriers and create a more inclusive community. In addition, the arts can help to promote social inclusion by providing opportunities for students to engage with their community in meaningful ways. Through community-based art projects and performances, students



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can connect with others outside of their immediate social circles and build relationships with individuals from diverse backgrounds. This can help to create a sense of belonging and connectedness, and to foster a more inclusive and supportive community.

Research has also shown that arts education can have a positive impact on academic achievement and social-emotional development, particularly for students from underrepresented communities. A study by the National Endowment for the Arts found that students from low-income families who participated in the arts had higher academic achievement, better social skills, and a greater sense of civic engagement than those who did not participate in the arts (National Endowment for the Arts, 2012). In addition, the European Commission has recognized the importance of arts education in promoting social inclusion and cultural diversity. The Commission's 2017 Communication on "Strengthening European Identity through Education and Culture" emphasized the need for increased investment in arts education and cultural activities, particularly for marginalized communities (European Commission, 2017). By engaging in creative activities such as painting, drawing, or writing, students are able to express their emotions in a tangible way and develop their ability to recognize and manage their own emotions. In addition, through artistic collaboration and communication, students are able to develop their social-emotional skills, including empathy and communication (Jensen, 2008).

In addition to promoting SEL, the arts are also a powerful tool for promoting social inclusion. Artistic expression allows students to connect with others who share their interests and passions, regardless of their background or identity. By celebrating diversity and promoting empathy and understanding, the arts can help to break down barriers and create a more inclusive and equitable society. As noted in a 2018 report from the EU's Culture and Education Committee, "Art and culture are key elements of our common European heritage and provide an opportunity to connect people from different backgrounds and cultures" (European Parliament, 2018, p. 3).

In conclusion, creativity and the arts are powerful tools for supporting SEL and promoting social inclusion. Through artistic expression, students are able to develop their emotional intelligence, build self-esteem, and learn important social skills. In addition, the arts promote empathy and understanding and can help to break down barriers and create a more inclusive and equitable society. As such, it is essential that we continue to prioritize arts education in our schools and communities and recognize the important role that the arts play in promoting social-emotional development and social inclusion. It is the process of developing skills related to self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Here are some tips for educators on how to use creativity and the arts effectively in education to support SEL:

1. Incorporate arts-based activities: Integrate arts-based activities, such as visual arts, music, drama, and dance, into your lesson plans. These activities can help students express their emotions, thoughts, and ideas in creative ways, and can provide a safe space for self-expression and exploration.
2. Encourage self-expression: Foster an environment that encourages students to express themselves freely without fear of judgment or criticism. Allow students to share their thoughts, feelings, and ideas through different forms of artistic expressions, such as writing, drawing, painting, or performing, and provide feedback that is constructive and supportive.
3. Foster collaboration: Use arts-based group activities to promote collaboration and teamwork among students. Encourage students to work together on artistic projects, such as creating a mural, composing a song, or performing a play. Collaborative arts activities can help students develop communication skills, empathy, and a sense of community.



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4. Connect with students' interests: Incorporate arts activities that align with students' interests and passions. For example, if a student is interested in music, allow them to create their own song or compose music for a poem. Connecting arts activities to students' interests can foster engagement and motivation, and can help students develop a sense of ownership and pride in their work.
5. Use arts for reflection and self-assessment: Arts can be used as a tool for reflection and self-assessment. Encourage students to reflect on their artistic creations and how they relate to their emotions, experiences, and personal growth. This can help students develop self-awareness and self-regulation skills.
6. Create a safe and inclusive space: Ensure that the arts-based activities in your classroom create a safe and inclusive space for all students. Respect and value diverse perspectives, cultures, and backgrounds. Encourage students to appreciate and learn from each other's artistic expressions and promote a culture of inclusivity, respect, and empathy.
7. Integrate arts into other subjects: Explore ways to integrate arts into other subjects, such as using art to depict historical events, incorporating music into math lessons, or using drama to explore literature. This interdisciplinary approach can enhance students' understanding of different subjects, foster creativity, and support SEL skills.
8. Provide opportunities for reflection and discussion: Allow time for students to reflect on their arts-based activities and discuss their experiences with their peers. Reflection and discussion can help students process their emotions, deepen their understanding of themselves and others, and develop social skills, such as active listening and empathy.
9. Celebrate creativity: Recognize and celebrate students' creativity and artistic achievements. Display students' artwork in the classroom or in school galleries, organize performances or showcases to showcase students' talents, and provide feedback that acknowledges students' efforts and accomplishments. Celebrating creativity can boost students' self-esteem, motivation, and sense of belonging.

By incorporating arts-based activities, fostering self-expression, encouraging collaboration, connecting with students' interests, promoting reflection and self-assessment, creating a safe and inclusive space, integrating arts into other subjects, providing opportunities for reflection and discussion, and celebrating creativity, educators can effectively use the arts to promote SEL skills and support the holistic development of their students.

Additional resources

"Arts Integration in Education: Teachers and Teaching Artists as Agents of Change" by Gail Humphries Mardirosian and Yvonne Pelletier Lewis

"The Artful Educator: Creative, Imaginative and Innovative Approaches to Teaching" by Sue Cowley

Video materials

The Power of Arts Education in Social and Emotional Learning" by Edutopia:
<https://www.youtube.com/watch?v=FqINTOY8JzA>

"Arts Integration: Social Emotional Learning Through the Arts" by New Hampshire PBS:
<https://www.youtube.com/watch?v=fjaRfd4il4g>



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Summary

In conclusion, the integration of creativity and the arts in education holds immense potential for enhancing student engagement, fostering cultural understanding, promoting critical thinking and problem-solving skills, and supporting social-emotional learning. By recognizing the intrinsic value of artistic expression and its power to inspire, educators can create a dynamic and inclusive learning environment that nurtures students' holistic development. Through engaging in creative activities, students are encouraged to think imaginatively, take risks, and explore different perspectives. This process not only deepens their understanding of academic subjects but also cultivates essential skills such as problem-solving, communication, and collaboration. The arts provide a platform for students to confront challenges, experiment with innovative solutions, and develop resilience in the face of setbacks. Such experiences empower them to become adaptable, independent thinkers capable of navigating complex real-world situations.

Furthermore, the arts provide a unique avenue for fostering cultural understanding. By exposing students to diverse artistic traditions, music, dance, visual arts, and literature from different cultures, they gain a broader worldview and an appreciation for the richness of human expression. This exposure encourages empathy, respect, and a sense of belonging among students from various backgrounds. As they engage with different artistic forms, they learn to recognize the shared humanity and unique perspectives of others, fostering a culture of inclusivity and mutual respect.

Moreover, the arts have a profound impact on social-emotional learning. By providing a medium for self-expression, students can explore and communicate their thoughts, feelings, and experiences. This process not only enhances their self-awareness but also helps them develop empathy and emotional intelligence. The arts offer a safe and supportive space for students to express and process complex emotions, building resilience and fostering mental well-being. Through creative endeavors, students can also build confidence, develop a sense of identity, and develop positive relationships with peers and mentors.

In conclusion, integrating creativity and the arts into education is vital for the holistic development of students. By incorporating artistic experiences, educators can unlock the full potential of students, nurturing their engagement, fostering cultural understanding, promoting critical thinking and problem-solving skills, and supporting social-emotional learning. Embracing the power of creativity in education is not only a means to academic success but also an investment in shaping well-rounded individuals who are equipped to navigate the complexities of the world with empathy, resilience, and a deep appreciation for the arts.



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Chapter 7. Recommendations and tips for social educators and teaching staff

Author: Ozcan YUCEL

Introduction

As educators, we are constantly seeking new ways to engage our students and enhance their learning experiences. While traditional teaching methods may work for some students, others may struggle to retain information or find it difficult to stay focused during lectures. This is where incorporating creativity and art into the classroom can come in handy. By providing students with an opportunity to express themselves creatively, we can help them connect with the material in a way that is both engaging and memorable. The importance of art in education also links to self-esteem, expression and proper development. These are all important aspects of learning, “There is a strong connection between art and ideas” (Ebner, 2006).

Many studies have shown that incorporating creativity and art into the curriculum can have a positive impact on student learning. For example, a study conducted by the National Art Education Association found that students who participated in visual arts classes had higher GPAs, and higher test scores, and were more likely to graduate from high school. Additionally, a study published in the Journal of Educational Psychology found that incorporating art into science classes improved students' understanding of the material and their ability to think critically. There are many practical ways to incorporate creativity and art into the classroom. For example, using visual aids such as posters, infographics, and illustrations can help make learning more engaging and memorable. Encouraging students to tell stories, draw pictures, or create a visual representation of what they've learned can also help reinforce their understanding of the material.

In addition to visual aids, hands-on activities such as drawing, painting, and sculpting can provide students with a break from traditional learning methods and stimulate their creativity. This can be especially helpful for students who may struggle to focus during lectures or who learn better through hands-on activities. Another way to incorporate creativity and art into the classroom is to integrate technology. In today's rapidly advancing digital landscape, the integration of technology has become essential in transforming traditional classroom experiences into dynamic, interactive, and creative learning environments. Educators are increasingly recognizing the significant role that technology plays in fostering students' creativity and artistic expression. By leveraging technology, teachers can seamlessly merge creativity and the arts with modern educational practices, empowering students to explore their imaginations, think critically, and engage in meaningful digital experiences.

The integration of technology offers limitless possibilities for educators seeking to inspire and cultivate creativity in their classrooms. From multimedia presentations and interactive platforms to virtual reality and digital design tools, technology provides a wealth of resources that can enhance artistic expression and creative problem-solving. EU Commission show that incorporating creativity and art into the classroom can have a significant impact on student learning. By harnessing the power of technology, educators can tap into students' innate curiosity and foster a love for creativity, paving the way for innovative thinking and digital social innovation. By providing students with an opportunity to express themselves creatively, teachers can help them connect with the material in a way that is both engaging and memorable.

One particular area where technology has proven to be a catalyst for creativity and art is through the concept of digital social innovation. Digital social innovation encompasses the use of technology and creative approaches to address societal challenges and make a positive impact on communities. By merging creativity, technology, and social consciousness, students can explore how their artistic



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talents can be harnessed to bring about meaningful change in the world. With the right tools and strategies, teachers can create an environment that encourages creativity, art, and digital social innovation.

Recommendations

a) Incorporate visual aids as a key element in teaching strategies;

Visual aids can be a powerful way to help students understand complex concepts and engage with material in a more meaningful way. When using visual aids in teaching, it is essential to select visuals that support your learning objectives. For instance, when teaching history, you can use historical maps and photographs to help learners visualize the period and location being discussed. It is also advisable to use different types of visuals such as diagrams, charts, graphs, photographs, videos, and artwork to engage different learning styles and provide a more dynamic learning experience. Incorporating creativity and art into visual aids can also enhance student engagement and learning. For example, you can ask students to create their own visual aids, such as drawings, collages, or infographics, to represent the information they have learned. Making visual aids interactive can help students engage with the content and retain information better. For instance, you can use interactive whiteboards, quizzes, or games to make the visual aids more engaging. Furthermore, relating visual aids to real-life situations can help students understand the relevance and importance of what they are learning.

Here are some tools and resources for incorporating visual aids into lessons:

Canva: Canva is a free graphic design tool that can be used to create infographics, diagrams, and illustrations.

MindMeister: MindMeister is a collaborative mind mapping tool that can be used to create maps and diagrams.

Piktochart: Piktochart is an easy-to-use infographic maker that can be used to create visually appealing and informative infographics.



Source: <https://venngage.com/blog/visual-aids-for-learning-templates/>



b) To promote creativity among students, include consistent creative writing exercises in the curriculum;

Creative writing is a great way to engage students and enhance their learning, but incorporating creativity and art can take it to the next level. When teaching creative writing, there are several strategies that can be effective.

One approach is to use visual prompts, which can encourage students to think creatively and outside the box. This could involve using photographs, paintings, or other types of artwork as inspiration for writing. Encouraging the use of descriptive language is also important, as it can help students paint a vivid picture in the reader's mind. Sensory details, metaphors, and similes can all be useful in this regard. Additionally, multimedia tools such as videos and audio recordings can deepen students' understanding of their subject matter and spark creative ideas. Collaborative writing can be another effective strategy, as it encourages students to work together and build their writing and teamwork skills. Finally, showcasing students' work can help to build a positive learning community and inspire others to get creative.

Here are some tools and resources for incorporating creative writing into lessons:

You can use online tools such as **Poetry Generator** or **Scholastic's Poetry Idea Engine** to help students generate ideas for writing poetry. Additionally, you can use online tools such as **Storyboard That** or **My Storybook** to help students create digital stories or comic strips.

NaNoWriMo: NaNoWriMo is a nonprofit organization that encourages students to write novels and provides resources and support for educators.

Write the World: Write the World is a community of young writers that offers writing prompts, peer reviews, and writing contests for students.

Storybird: Storybird is a platform that allows students to create and share their own stories with illustrations and graphics.



Source: <https://nothingintherulebook.com/2016/04/04/what-is-the-point-of-creative-writing/>

c) Virtual field trips can offer students an exciting and memorable way to learn;

Virtual field trips can be a wonderful way to bring art and cultural experiences to students, but there are some strategies that can make these trips even more effective. Providing context and background information about the place or event being explored is essential to help students understand and



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appreciate the art and cultural significance of what they are seeing. After the virtual field trip, encourage students to reflect on what they learned and engage in discussion with their peers to develop critical thinking skills. Incorporating art activities that are related to the place or event being explored can enhance the creative aspect of the virtual field trip. Using multimedia resources, such as videos, images, and interactive maps, can engage students and help them better understand the place or event being explored. Finally, customizing the virtual field trip to fit the needs and interests of your students can increase their engagement and learning. By focusing on specific art styles, artists, or historical periods that your students are interested in, you can make the experience even more meaningful and engaging. By providing context, encouraging reflection and discussion, incorporating art activities, using multimedia resources, and customizing the experience, educators can help students develop critical thinking skills and a deeper appreciation for the art and cultural expressions from around the world.

Here are some tools and resources:

Google Earth: Google Earth is a free web-based tool that allows users to explore the world through satellite imagery and 3D modeling. Educators can use Google Earth to create virtual tours of different locations, historical landmarks, and natural wonders.

Nearpod: Nearpod is an interactive classroom platform that allows educators to create virtual field trips by embedding multimedia content, such as videos, 360-degree images, and quizzes. Nearpod also offers pre-made virtual field trips that educators can use or modify to suit their needs.

Skype in the Classroom: Skype in the Classroom is a free service that allows educators to connect with experts and virtual field trip providers from around the world. Educators can browse a variety of virtual field trip options, such as visits to museums, national parks, and cultural sites.

National Geographic Education: National Geographic Education offers a variety of virtual field trip resources, including virtual reality experiences and interactive webcasts. Educators can also access pre-made lesson plans and activities to accompany the virtual field trips.

Discovery Education: Discovery Education offers a variety of virtual field trip resources, including virtual reality experiences and 360-degree tours of historical landmarks and cultural sites. Educators can also access pre-made lesson plans and activities to accompany the virtual field trips.



Source: <https://www.slj.com/story/11-Free-Virtual-Field-Trips-to-tour-the-world-from-home-libraries-home-schooling-covid19-coronavirus>

d) Art projects let students explore concepts and express creativity;

Art projects can be a fun and engaging way for students to explore different concepts and express themselves creatively. Consider incorporating collages, sculptures, or photography into your lessons. When it comes to art education, there are several ways to promote creativity and engagement in students. One effective method is to give students the freedom to choose their own art projects and



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explore different materials. This can help them develop decision-making skills and build confidence in their abilities. Additionally, introducing art history and culture can deepen their understanding of art and inspire creativity. Collaborative art projects can encourage teamwork and collaboration skills while also sparking creativity. Providing opportunities for critique and reflection can help students develop their artistic skills and grow as artists. Finally, integrating art projects with other subjects, such as science or social studies, can help students connect concepts and deepen their understanding of the subject matter.

Another way to promote creativity and engagement in art education is to provide students with the opportunity to experiment with different techniques and styles. Encouraging them to explore different art mediums and techniques such as drawing, painting, printmaking, or mixed media can help them discover new ways to express themselves artistically. Teachers can also provide students with open-ended prompts that allow them to interpret and create their own unique artworks.

Incorporating technology into art education can also be an effective way to engage students. Students can use digital tools to create multimedia artworks, animations, or digital illustrations. Teachers can also incorporate virtual art galleries, online museums, or other digital resources to expose students to a wide range of art styles and periods.

Furthermore, art education can benefit from incorporating community-based projects that connect students with the broader community. For example, students can create art pieces that are displayed in public spaces or participate in community art events. This not only fosters community engagement and social responsibility but also provides students with a sense of purpose and pride in their artistic creations. Finally, providing students with a safe and supportive learning environment that encourages risk-taking and experimentation is crucial to fostering creativity in art education. Teachers can establish clear expectations and guidelines for behavior while also promoting an atmosphere of respect and openness to diverse ideas and perspectives.

In summary, there are many ways to promote creativity and engagement in art education. By providing students with opportunities to experiment with different materials and techniques, introducing them to art history and culture, fostering collaboration and teamwork through group projects, and integrating art with other subjects, teachers can create a vibrant and dynamic learning environment that inspires students to express themselves creatively and think critically about the world around them.

Here are some tools and resources:

You can use online tools such as **BeFunky** or **Fotor** to help students create digital collages that visually represent different themes or concepts. Additionally, you can use materials such as clay or recycled materials to help students create physical sculptures that represent scientific concepts or historical figures.



Source: <https://katecollins2003.wordpress.com/viii-elements-of-visual-arts-dance-music-and-theater/>

e) Collaborative Projects for developing critical thinking skills;

By incorporating project-based learning, students are able to engage with concepts through hands-on activities, providing a more active and meaningful learning experience compared to traditional lecture and text-based approaches. This approach fosters self-direction, deepens understanding of knowledge, and develops research and problem-solving skills (Edutopia, 2007). To successfully implement this approach, schools and districts must work collaboratively to develop a long-term arts education plan that is cross-curricular, aligned with existing standards and frameworks, and identifies connections between subjects (Appel, 2006), (Petersen, n.d.).

Sharing interests and group brainstorming will likely incite differences in opinion to emerge. It is important that these differences aren't seen as roadblocks, but instead opportunities for creativity and dialogue. Still, they can prove difficult for students to navigate on their own, so prompts should be provided to "diffuse" or "de-escalate" efforts (Brunson, 2002), (Sinclair, n.d.).

Collaborative art projects can enhance learning and engagement by encouraging teamwork and sparking creativity. Here are some ways to incorporate collaborative projects in the classroom:

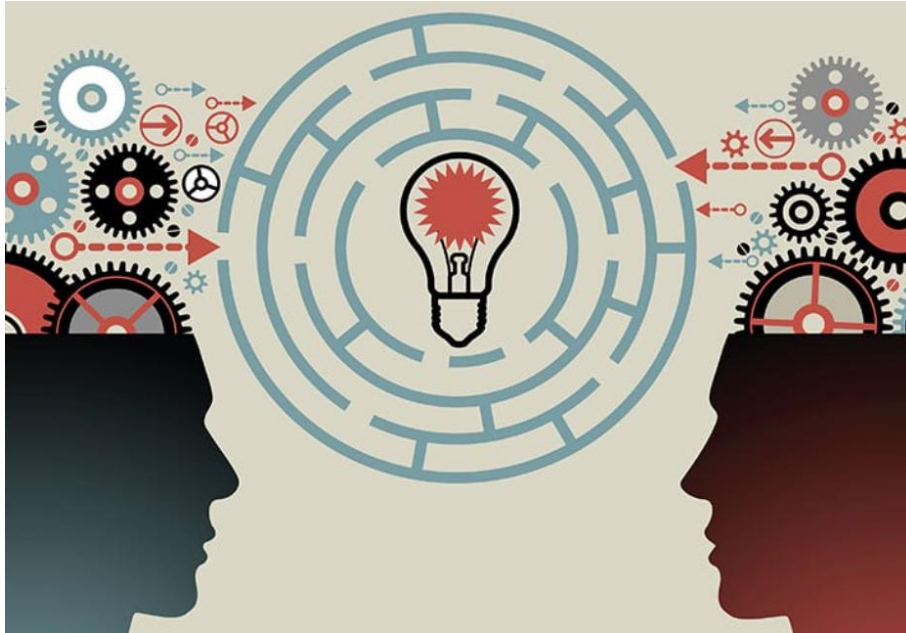
Assign group projects: Assigning group projects can encourage students to work together and bounce ideas off each other. For example, you can assign groups of students to create a collaborative mural or sculpture, where each student contributes a piece.

Group critique and feedback: Providing opportunities for critique and feedback can help students develop their artistic skills and learn from their peers. Encourage groups to provide constructive feedback to each other and reflect on how they can improve their collaborative project.

Collaborate with other classes: Collaborating with other classes, such as music or drama, can provide a unique learning experience and help students develop their interdisciplinary skills. For example, you can assign students to work with a drama class to create props and costumes for a play.

Online collaboration: Online collaboration tools can allow students to work together on art projects outside of the classroom. For example, students can use a virtual whiteboard to brainstorm ideas and create collaborative sketches.

Incorporating creativity and art into lessons can be a powerful tool for educators looking to engage students and enhance learning. By providing opportunities for students to express themselves creatively and explore concepts visually, educators can help foster a deeper understanding of a variety of subjects. From using visual aids and encouraging creative writing to incorporating art projects and collaborative projects, there are a variety of ways to incorporate creativity and art into lessons. By doing so, educators can create a more dynamic and engaging learning experience for students, helping them to develop critical thinking skills, teamwork, and a love of learning. So, as an educator, consider incorporating these tips and tools into your lessons to help engage and inspire your students.



Source: <https://blog.futurefocusedlearning.net/10-great-critical-thinking-activities-that-engage-your-students>

f) The Power of Music and Dance;

Music and dance provide excellent opportunities for educators to incorporate creativity and art into the classroom and engage students in their learning. To improve music and dance lessons, there are several ways to incorporate creativity and art. First, encouraging exploration by introducing a variety of musical genres and dance styles and allowing students to experiment with their own interpretations can spark creativity and engagement. Second, incorporating movement and props into lessons can add a visual component and enhance creative expression. Third, collaborative music and dance projects can encourage teamwork and collaboration skills while also sparking creativity. Fourth, introducing music and dance from different cultures can deepen students' understanding of the world and inspire creativity. Lastly, providing performance opportunities can help build confidence and motivation by allowing students to showcase their skills. By incorporating these strategies, educators can effectively engage students and enhance their learning experience through music and dance.

Another way to enhance creativity and engagement in music and dance lessons is to incorporate movement and props. This can add a visual component to the lesson, which can help students understand musical concepts and express themselves creatively. Teachers can use simple props such as scarves or ribbons to help students understand concepts such as rhythm and tempo, or use movement activities to help students understand musical form and structure.

Collaborative music and dance projects are also effective in promoting creativity and teamwork skills. Teachers can design group projects that encourage students to work together to create their own

musical compositions or choreography. These projects can help students develop important communication and collaboration skills while also promoting creativity and individual expression. Introducing music and dance from different cultures is another effective way to enhance students' understanding of the world and inspire creativity. Teachers can incorporate music and dance from different cultures into their lessons, such as traditional African drumming or Indian classical dance, and help students understand the cultural context behind these art forms. This can help students appreciate the diversity of the world and develop their own creative expression.

Finally, providing performance opportunities can help students build confidence and motivation in their music and dance skills. Teachers can organize recitals, talent shows, or other performances where students can showcase their skills and creativity in front of their peers and families. This can help students feel a sense of accomplishment and pride in their artistic abilities.

In summary, incorporating creativity and art into music and dance lessons can enhance students' learning experience and engagement. Teachers can encourage exploration and experimentation, incorporate movement and props, design collaborative projects, introduce music and dance from different cultures, and provide performance opportunities. By incorporating these strategies, educators can effectively engage students and help them develop important artistic and life skills through music and dance.



Source: https://www.freepik.com/free-vector/colourful-party-background-with-people-dancing_895060.htm#query=music%20dance&position=0&from_view=keyword&track=ais

g) Role-playing can be a fun way to incorporate creativity and art into the classroom and engage students;

Role-playing is an effective method to introduce creativity and art in the classroom and engage students while improving their learning experience. To enhance the effectiveness of role-playing activities, educators can use the following tips:

To begin with, creating an immersive environment can make the role-playing experience more interesting and inspire creativity. It involves designing a classroom space that fits the scenario or time period and providing costumes and props to enhance the experience. Secondly, allowing students to

improvise and make their own decisions during the role-play can stimulate creativity and increase engagement. Creating scenarios that can result in different outcomes based on student choices can help to achieve this. Thirdly, collaborative role-playing projects can encourage teamwork and collaboration while inspiring creativity. Educators can create opportunities for group projects like plays or historical reenactments. Fourthly, introducing different cultures and time periods can help students understand history and social issues and inspire creativity. Educators can introduce different historical periods and social issues and allow students to explore and create their own interpretations. Lastly, reflection and analysis provide opportunities for critical thinking and can help students grow as role players. Encouraging students to reflect on their own experiences and analyze the experiences of others can be beneficial.



Source: <https://business.tutsplus.com/tutorials/role-play-scenarios-for-business-conversations--cms-40746>

h) The Importance of Curriculum-Based Art in Education;

Curriculum-based art refers to art that aids students in comprehending and retaining the topic being taught. For instance, during an anatomy lesson, students could create a "body" by coloring, cutting, labeling, and pasting body parts in the correct positions. This would serve as a useful learning tool and visual aid to help them remember the different parts of the body and their locations. Not only are they engaged in a science lesson, but also in an art opportunity. On the other hand, general art is created by students for recreational purposes without a specific curriculum-based subject or theme in mind. This type of art education can be exemplified by holiday or special event projects. Both of these art opportunities allow students to express themselves creatively and learn in different ways, but neither of these methods provides students with sufficient art education. (Petersen, n.d.)

The absence of art education has a detrimental effect on all students, while integrating more art into the curriculum would yield a positive impact. It is within the power of schools and teachers to improve this situation for the betterment of their students. To accomplish this, teachers must find a means of incorporating art instruction into the established curriculum standards, ensuring that art is utilized in daily lessons. The goal is not to alter the existing curriculum, but rather to augment it by integrating art (Petersen, n.d.).



1. **Science:** Incorporate art into science projects by having students create illustrations or diagrams to demonstrate scientific concepts. Encourage students to think creatively and use different materials, such as clay or paper mache, to create 3D models of scientific concepts.
2. **History:** Use art as a way to explore different historical periods. Have students create artwork or sculptures inspired by different historical events or figures. Encourage them to research the era or the person and incorporate historical details into their artwork.
3. **Literature:** Use art to bring literature to life. Have students create illustrations of scenes from a book or create a mural that represents the theme of a story. Encourage students to think about the symbolism in the literature and incorporate it into their artwork.
4. **Social Studies:** Use art to explore different cultures and their customs. Have students create artwork inspired by different cultures and their traditions. Encourage them to research the culture and incorporate their findings into their artwork.
5. **Math:** Use art to demonstrate mathematical concepts. Have students create geometric designs using different shapes and patterns. Encourage them to use symmetry and repetition to create visually appealing designs.
6. **Music:** Use art to explore different genres of music. Have students create artwork inspired by different types of music or create album covers for their favorite bands. Encourage them to think about the mood and emotion conveyed in the music and incorporate it into their artwork.
7. **Physical Education:** Use art to explore different sports and physical activities. Have students create artwork inspired by different sports or create posters that promote physical activity. Encourage them to think about the benefits of physical activity and incorporate it into their artwork.

Overall, incorporating creativity and art into different subject areas can help students engage with the material in a meaningful way and enhance their learning experience.



Source: https://www.getty.edu/education/teachers/getty_books/artandscience.html



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Tips

This part aims to equip educators with comprehensive strategies and practical insights to effectively integrate educational multimedia, creativity, and the arts in the context of digital social innovation. By implementing these recommendations, educators can inspire students, foster their creative thinking, and empower them to make a positive impact on society through the fusion of technology, artistic expression, and social innovation.

A. Embrace the Power of Educational Multimedia

1. Utilize a diverse range of multimedia resources, including videos, images, interactive websites, and digital tools, to create an immersive and engaging learning environment.
2. Incorporate real-life examples of successful digital social innovation projects to inspire students and provide tangible evidence of the transformative power of creativity and technology.

B. Foster Multidisciplinary Collaboration

1. Encourage collaboration among students from different backgrounds, including artists, designers, programmers, and social scientists, to promote the exploration of innovative ideas and the integration of diverse perspectives.
2. Organize cross-disciplinary projects that encourage students to merge technology, creativity, and social impact, fostering teamwork and the exchange of knowledge and skills.

C. Develop Design Thinking Skills

1. Introduce students to the principles of design thinking, including empathy, problem-solving, and iteration, as a framework for creative problem-solving.
2. Guide students through the design process, encouraging them to identify social issues, brainstorm ideas, prototype solutions, gather feedback, and iterate their designs based on evaluation and reflection.

D. Promote Ethical Considerations

1. Initiate discussions on ethical implications related to digital social innovation, such as privacy, data security, and accessibility.
2. Guide students in critically evaluating the potential social impact of their projects and making ethical decisions throughout the creative process.

E. Cultivate Digital Literacy

1. Foster the development of digital literacy skills among students, including information evaluation, online collaboration, and responsible online behavior.
2. Teach students how to effectively navigate digital tools and platforms, empowering them to utilize technology for creative expression and social change.

F. Facilitate Reflection and Documentation

1. Integrate reflection activities into the learning process, encouraging students to think critically about their creative work, the challenges they faced, and the potential impact on society.



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2. Guide students in documenting their projects using multimedia formats, such as videos, images, and written reflections, to showcase their creative process, lessons learned, and outcomes achieved.

G. Engage with the Community

1. Establish connections with local organizations, nonprofits, or social enterprises engaged in digital social innovation.
2. Encourage students to collaborate with external partners, providing them with authentic learning experiences and opportunities to apply their creativity in real-world contexts.

H. Foster a Growth Mindset

1. Promote a growth mindset among students, emphasizing that creativity is a skill that can be developed through practice, effort, and perseverance.
2. Provide constructive feedback and recognition of students' efforts and achievements, fostering their confidence in their creative abilities and encouraging continuous improvement.

Summary

Incorporating creativity and art into the classroom can have a profound impact on student learning. By providing students with an opportunity to express themselves creatively, we can help them connect with the material in a way that is both engaging and memorable. Additionally, collaborative projects can help foster teamwork and communication skills while developing critical thinking abilities. With the right tools and strategies, we can create an environment that encourages creativity and enhances student learning. As creativity is what sets humans apart from other living beings, it is crucial for students to have the chance to explore their ideas and tap into the creative force that leads to a deeper understanding across different fields (Romero, 1996).

One of the key benefits of incorporating creativity and art into the classroom is that it can help students connect with the material in a way that is both engaging and memorable. When students are given the opportunity to express themselves creatively, they are more likely to retain information and develop critical thinking skills. This can be especially beneficial for students who may struggle to focus during lectures or who learn better through hands-on activities.

Another benefit of incorporating creativity and art into the classroom is that it can help foster teamwork and communication skills. When students collaborate on projects, they learn how to communicate effectively, share ideas, and work together to achieve a common goal. This can help prepare them for success in future endeavors, whether it be in the workplace or in higher education.

It's also worth noting that incorporating creativity and art into the classroom can help students develop a sense of confidence and self-expression. By encouraging students to express themselves creatively, we can help them develop a sense of pride in their work and encourage them to take risks and think outside the box.

By embracing the power of educational multimedia, fostering multidisciplinary collaboration, developing design thinking skills, promoting ethical considerations, cultivating digital literacy, facilitating reflection and documentation, engaging with the community, and fostering a growth mindset, educators can empower students to harness their creative potential and contribute to positive social change.

In conclusion, incorporating creativity and art into the classroom can have a significant impact on student learning. By providing students with an opportunity to express themselves creatively, we can



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help them connect with the material in a way that is both engaging and memorable. Additionally, collaborative projects can help foster teamwork and communication skills while developing critical thinking abilities. With the right tools and strategies, we can create an environment that encourages creativity and enhances student learning. As educators, it's up to us to find innovative ways to engage our students and help them succeed.



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Chapter 8. Examples of digital social innovation

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Innovation has an important role in transforming formal and non-formal education. Education has an important role in preparing students to become entrepreneurs and digital social innovators. Digital technologies can also link the goals and work of innovators. The process of innovation in education should use digital platforms and forums that support open communication and collaboration. Community and networked technologies change how people access information, work and participate physically or digitally in the community.

Digital social innovation is revolutionizing education by providing teachers and social educators with powerful tools and strategies to enhance learning experiences and promote positive social change. Through the use of digital technologies, educators can create engaging and interactive lessons that captivate students' attention and foster active participation. Online platforms for collaborative learning enable students to work together regardless of their physical location, promoting teamwork, communication, and problem-solving skills. Digital social innovations also facilitate global connections and cultural understanding through virtual field trips, video conferencing, and collaborative projects with students from different regions or countries. Moreover, adaptive learning and personalized instruction technologies cater to the diverse needs and learning styles of students, allowing for individualized learning experiences. By embracing digital social innovation, teachers and social educators can create inclusive and empowering learning environments that prepare students to thrive in an interconnected and rapidly changing world, while also addressing pressing social issues and nurturing global citizenship.

Here are the some examples of digital social innovation.

1. **Online platforms for collaborative learning:** Platforms like Google Classroom, Microsoft Teams, and Schoology enable educators to create virtual classrooms, facilitate discussions, and share resources. These platforms promote collaboration and engagement among students, allowing them to work together on projects, share ideas, and learn from one another. Thoroughly;
 - *Google Workspace for Education:* Google Workspace for Education (formerly known as G Suite for Education) offers a range of collaborative tools such as Google Docs, Google Slides, Google Sheets, and Google Classroom. These platforms allow students and educators to create, edit, and share documents, presentations, and spreadsheets in real-time, facilitating collaboration and teamwork.
 - *Microsoft Teams:* Microsoft Teams is a collaborative platform that provides features for online communication, document sharing, and project management. Students can collaborate on assignments, have discussions, and work on group projects using tools like chat, file sharing, and co-authoring in real-time.
 - *Canvas:* Canvas is a learning management system (LMS) widely used in educational institutions. It provides a comprehensive platform for creating and managing online courses, facilitating discussions, submitting assignments, and collaborating on group projects. Canvas offers features such as group workspaces, shared documents, and integrated communication tools.
 - *Moodle:* Moodle is an open-source LMS that offers a range of collaborative features for online learning. Educators can create interactive courses, discussion forums, and collaborative assignments. Moodle allows students to work together, provide feedback, and engage in peer-to-peer learning.
 - *Schoology:* Schoology is another popular LMS that enables collaboration and communication among students and educators. It offers features for content sharing, discussion boards, and



group projects. Schoology also integrates with external tools and platforms, providing a seamless collaborative learning experience.

- *Padlet*: Padlet is a virtual bulletin board that allows students and teachers to collaborate by posting ideas, images, videos, and documents. It promotes visual collaboration and enables participants to engage in discussions, provide feedback, and share resources.
- *Slack*: While primarily known as a communication and collaboration platform for teams, Slack can also be used in educational settings. It enables students and educators to create channels, share files, and have discussions in real-time. Slack can be particularly useful for group projects and online discussions.

2. **Collaborative Online Projects:** Engage students in collaborative online projects that promote teamwork, critical thinking, and social awareness. Tools such as Google Docs, Padlet, or Microsoft OneNote allow students to work together in real-time, share ideas, and contribute to group projects. For example, students can collaborate on a research project about a social issue, create a shared presentation, or develop a digital campaign for a cause they care about.

- *Virtual Science Fair*: Students work together to conduct experiments or research on a specific scientific topic. They document their findings, create presentations or videos, and share their projects on a collaborative platform like Google Slides or Padlet. This allows them to showcase their work, exchange ideas, and provide feedback to their peers.
- *Global Research Project*: Students collaborate with peers from different countries to investigate a common research question or global issue. They conduct research, analyze data, and share their findings through a collaborative online platform like Google Docs or Microsoft Teams. This project promotes cross-cultural understanding and encourages diverse perspectives.
- *Online Coding or Game Design Project*: Students collaborate to develop a computer program, mobile app, or video game. They divide tasks, work on different components, and integrate their contributions into a final product. Platforms like Scratch, Code.org, or Unity allow students to collaborate on coding projects and unleash their creativity.
- *Virtual Art Gallery*: Students collectively curate a virtual art gallery showcasing their artwork. They collaborate on selecting and organizing the artworks, creating descriptions, and designing the gallery space using platforms like Padlet or Canva. This project promotes artistic expression, collaboration, and appreciation for different art styles.
- *Community Service Project*: Students collaborate to identify a social issue in their community and design a project to address it. They work together to plan and implement initiatives such as fundraising campaigns, awareness campaigns, or volunteering efforts. Online collaboration platforms like Google Docs or Trello can help students coordinate tasks, share resources, and track progress.
- *Interactive Digital Presentations*: Students collaborate on creating interactive multimedia presentations using tools like Prezi, Genially, or PowerPoint Online. They divide topics, research information, and combine their slides or sections into a cohesive and engaging presentation. This project allows students to showcase their knowledge, incorporate multimedia elements, and deliver a dynamic presentation.

3. **Digital storytelling for social impact:** Tools like Adobe Spark, Storybird, or Book Creator empower educators and students to create multimedia projects that address social issues and advocate for change. Through digital storytelling, students can raise awareness, share personal experiences, and promote empathy and understanding. By integrating digital storytelling into social education by using tools like Adobe Spark, Storybird, or Canva. Encourage students to create multimedia



stories that highlight social issues, share personal experiences, or advocate for positive change, teachers can promote creativity, empathy, and critical thinking as students engage in narrative construction and communicate their perspectives.

4. **Virtual field trips and global connections:** Virtual reality (VR) and video conferencing platforms offer opportunities for students to explore different cultures, visit historical sites, and connect with peers from around the world. Platforms like Google Expeditions and Skype in the Classroom enhance cultural understanding, global citizenship, and empathy. In more details:
 - *Google Expeditions:* Google Expeditions (<https://edu.google.com/products/vr-ar/expeditions/>) is a virtual reality platform that allows students to embark on virtual field trips to various locations around the world. Students can explore landmarks, cultural sites, and natural wonders, gaining immersive experiences and a deeper understanding of different cultures and environments.
 - *Skype in the classroom:* Skype in the Classroom teachers and students with experts, authors, and guest speakers from around the world through video conferencing. Educators can invite guest speakers to share their experiences, expertise, and insights on social issues, promoting cross-cultural understanding and global connections (<https://education.microsoft.com/skype-in-the-classroom/overview>).
 - *Mystery Skype:* Mystery Skype is an educational game where classrooms connect with each other via Skype and engage in a guessing game to determine the location of the other classroom. Through this activity, students develop critical thinking, communication skills, and geographical knowledge while connecting with peers from different regions or countries.
 - *Virtual Museum Tours:* Many museums and cultural institutions offer virtual tours of their exhibits and collections. Students can explore famous museums like (<https://britishmuseum.withgoogle.com/> , <https://naturalhistory.si.edu/visit/virtual-tour>, <https://www.louvre.fr/en/visites-en-ligne>) from the comfort of their classrooms, gaining exposure to diverse artworks, artifacts, and historical contexts.
 - *Global Collaborative Projects:* Participating in global collaborative projects provides opportunities for students to connect with peers from different countries and work together on common goals. Platforms like ePals (<https://www.epals.com/>) or Global Nomads Group (<https://gng.org/>) facilitate cross-cultural collaborations, allowing students to engage in joint research, cultural exchanges, or service-learning projects that address social issues.
 - *International Pen Pals:* Connecting classrooms with pen pals from different countries through digital platforms like ePals or PenPal Schools fosters cultural exchange and promotes global understanding. Students can exchange letters, emails, or engage in online discussions to learn about each other's cultures, traditions, and perspectives on social issues.
 - *Virtual Cultural Exchange Programs:* Virtual cultural exchange programs, such as iEARN (<https://iearn.org/>) or Global Learning Exchange offer opportunities for students to engage in structured, online interactions with students from diverse backgrounds. Through collaborative projects and discussions, students explore social issues, share insights, and develop intercultural competence.

5. **Online communities and social media engagement:** Educators can create online communities, such as discussion forums or social media groups, where students can share ideas, engage in debates, and collaborate on social projects. Platforms like Edmodo, Twitter, or Flipgrid facilitate meaningful discussions and foster connections beyond the physical classroom.



- **Discussion Forums:** Online discussion forums such as Edmodo, Google Groups, or Moodle forums provide a platform for students to engage in asynchronous discussions on specific topics or assignments. Students can share their thoughts, ask questions, and respond to their peers, fostering collaboration and critical thinking.
 - **Twitter Chats:** Twitter chats are organized discussions on Twitter that use a specific hashtag to connect participants. Teachers can create Twitter chats focused on educational topics and invite students to join. This allows students to engage in real-time conversations, share resources, and connect with a wider community of educators and learners.
 - **Classroom Blogs:** Teachers can set up classroom blogs where students can publish their written work, reflections, or creative projects. Through comments and interactions on the blog, students can provide feedback, engage in discussions, and learn from one another. Platforms like Edublogs or Kidblog offer secure and controlled environments for classroom blogging.
 - **Social Media Groups:** Educators can create private or closed groups on social media platforms like Facebook or LinkedIn for class discussions and resource sharing. Students can post questions, share interesting articles or videos, and engage in meaningful conversations related to the course content or social issues.
 - **Flipgrid:** Flipgrid is a video discussion platform where students can record short video responses to prompts or questions. It allows students to express themselves creatively, engage in video discussions, and provide feedback to their peers. Flipgrid promotes collaboration, active listening, and the development of communication skills.
 - **Padlet Walls:** Padlet is an online bulletin board that allows users to post text, images, videos, or links on a virtual canvas. Teachers can create Padlet walls for specific topics or projects, and students can contribute by posting their thoughts, resources, or multimedia content. Padlet promotes collaboration, creativity, and information sharing.
 - **Instagram or TikTok Projects:** Teachers can incorporate Instagram or TikTok into assignments by asking students to create educational content related to a topic. Students can share short videos, infographics, or visual representations that communicate their understanding or raise awareness about social issues. This encourages creativity, digital storytelling, and engagement with visual media.
6. **Adaptive learning and personalized instruction:** Adaptive learning platforms, such as Khan Academy or Duolingo, use data analytics and artificial intelligence to tailor instruction to individual student needs. These platforms provide personalized learning pathways, feedback, and support, enhancing student engagement and achievement. In more detail way:
- **Intelligent Tutoring Systems:** Intelligent Tutoring Systems (ITS) use artificial intelligence algorithms to provide personalized instruction tailored to individual student needs. These systems adapt the learning content, pace, and feedback based on the student's performance, strengths, and weaknesses. Examples include platforms like Carnegie Learning and ALEKS.
 - **Learning Management Systems (LMS):** Many modern learning management systems, such as Canvas, Moodle, or Blackboard, offer adaptive learning features. These systems track students' progress, provide recommendations for personalized learning paths, and offer individualized feedback based on students' performance and learning goals.
 - **Gamified Learning Platforms:** Gamified learning platforms, like Duolingo or Khan Academy, utilize adaptive algorithms to adjust the difficulty level of the content based on students' performance. The platforms analyze students' responses, identify areas of improvement, and provide targeted practice and challenges to meet individual learning needs.
 - **Personalized Learning Apps:** Mobile applications like Khan Academy Kids, Photomath, or Quizlet offer personalized learning experiences. These apps adapt the content, activities, and



assessments based on the user's proficiency, progress, and learning preferences, allowing students to learn at their own pace.

- *Individualized Learning Paths:* Teachers can design individualized learning paths for students using various resources and technologies. By assessing students' prior knowledge, interests, and learning styles, teachers can create customized learning experiences that address their specific needs and strengths.
- *Data-Driven Instruction:* Analyzing student data through tools like learning analytics or student information systems enables educators to gain insights into students' progress, identify learning gaps, and tailor instruction accordingly. By using data, teachers can provide targeted interventions, individualized support, and adaptive instruction to meet students' unique learning requirements.
- *Differentiated Instruction Strategies:* Differentiated instruction involves tailoring instruction to meet the diverse learning needs of students. Teachers can use a variety of strategies such as flexible grouping, tiered assignments, or learning stations to provide personalized instruction that accommodates individual learning styles, interests, and readiness levels.

7. **Online volunteering and community engagement:** Educators can facilitate student involvement in online volunteering projects or community initiatives. Students can contribute their skills, knowledge, and creativity to address social challenges through platforms like UNV Online Volunteering or local community websites.

In today's rapidly evolving digital landscape, the field of education has witnessed the emergence of various digital social innovations aimed at promoting social inclusion. These innovations encompass both formal and informal learning contexts, allowing individuals to access educational opportunities regardless of their backgrounds or circumstances. Here are some examples of digital social innovation in education for life long learning:

1. **Open Educational Resources (OER):** Open Educational Resources are freely accessible learning materials available online. They include textbooks, lecture notes, videos, and interactive modules. OER has significantly contributed to social inclusion by removing financial barriers to education. Students from disadvantaged backgrounds can access quality educational resources without incurring substantial costs, leveling the playing field and promoting equitable access to knowledge.
2. **Massive Open Online Courses (MOOCs):** MOOCs are online courses designed for large-scale participation. They offer a wide range of subjects, delivered by leading universities and institutions worldwide. MOOCs have revolutionized lifelong learning, enabling individuals to acquire new skills or pursue their interests at their own pace. By removing geographical constraints and providing affordable learning opportunities, MOOCs have democratized education and empowered individuals from diverse backgrounds.
3. **Virtual Learning Environments (VLEs):** Virtual Learning Environments are online platforms that facilitate remote learning experiences. They provide interactive features such as discussion forums, collaborative projects, and multimedia resources. VLEs have been instrumental in expanding educational access beyond traditional classroom settings. They enable students with physical disabilities or geographical limitations to participate actively in learning activities, fostering social inclusion and reducing barriers to education.
4. **Gamification in Education:** Gamification involves incorporating game elements into educational contexts to enhance motivation and engagement. Digital educational games and platforms have gained popularity in recent years. They provide interactive and immersive learning experiences, making education enjoyable and accessible to diverse learners.



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Gamification in education has particularly benefited marginalized students by creating inclusive environments and catering to different learning styles.

5. **Online Tutoring and Mentoring Programs:** Digital platforms have facilitated the establishment of online tutoring and mentoring programs. These programs connect students with qualified tutors or mentors who provide personalized guidance and support remotely. Online tutoring and mentoring programs have been instrumental in bridging educational gaps and empowering learners from disadvantaged backgrounds. They offer individualized attention, academic assistance, and mentorship, thus promoting social inclusion and equal opportunities for success.
6. **Social Learning Networks:** Social Learning Networks are online platforms that facilitate collaboration, knowledge sharing, and peer learning. These networks create virtual communities where learners can connect, interact, and exchange ideas with their peers globally. Social learning networks break down geographical barriers, encourage cultural exchange, and foster social inclusion by promoting diversity and intercultural understanding.



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Conclusions

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Creativity and the arts offer powerful vehicles for addressing social and educational inequalities. By incorporating culturally diverse and socially relevant artistic content into the curriculum, educators can actively dismantle stereotypes, biases, and systemic barriers. This approach provides students with opportunities to critically examine social issues, develop empathy, and engage in meaningful discussions centered on social awareness and justice.

For social educators and teaching staff, a set of practical tips can enhance the effective utilization of creativity and the arts in education. These include providing a range of artistic opportunities that cater to diverse learning styles, cultivating an inclusive classroom culture that respects and values the contributions of all students, and encouraging collaborative and peer-based learning through artistic projects. Additionally, ensuring equitable access to arts education for all students, regardless of their socio-economic backgrounds, abilities, or cultural heritage, is crucial for promoting inclusive practices.

Teaching creativity and the arts as a means to promote social inclusion holds immense potential for fostering a more inclusive and harmonious society. By embracing the power of creativity and artistic expression, individuals from diverse backgrounds can come together, break down barriers, and build connections that transcend social, cultural, and economic differences. Through the cultivation of creativity, individuals gain the ability to think critically, problem-solve, and adapt to new situations. These skills not only enhance personal growth and development but also equip individuals with the tools necessary to actively engage in society, challenge biases, and promote social justice. Moreover, the arts provide a unique platform for marginalized groups to amplify their voices, share their stories, and reshape societal narratives.

By embracing artistic expression as a means of communication, individuals from all backgrounds are given a voice and a platform to share their experiences, perspectives, and aspirations. The arts provide a common language that transcends cultural, linguistic, and social divides, allowing for meaningful connections and dialogue. Through visual arts, music, theater, and other creative forms, individuals can celebrate their unique identities, challenge societal norms, and foster a sense of belonging and acceptance.

Moreover, the arts have a profound impact on educational inclusion. By integrating arts-based approaches into the curriculum, educators create inclusive learning environments that cater to diverse learning styles and abilities. The arts provide alternative avenues for expression and understanding, enabling students to engage with content in ways that resonate with their individual strengths and interests. This approach values and celebrates the diversity of learners, promotes equal opportunities, and removes barriers to educational success. By incorporating the arts into educational practices, teachers can create inclusive learning environments, nurture cultural appreciation, and empower students to become agents of positive change.

The connection between teaching creativity and arts and digital social inclusion lies in their ability to break down barriers and provide individuals from diverse backgrounds with the tools and resources they need to thrive in the digital age. By integrating digital tools and platforms into arts education, teachers can enhance inclusivity, expand artistic horizons, and empower individuals to express themselves and engage with the global community. Digital social innovation (DSI) has emerged as a powerful tool in the realm of education, enabling teachers and social educators to foster creativity and artistic expression among their students. The integration of creativity, the arts, and digital social innovation holds significant implications for teachers and social educators.



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First and foremost, incorporating creativity and the arts into digital social innovation allows educators to create dynamic and immersive learning experiences. By leveraging multimedia tools, virtual reality, or interactive platforms, teachers can transcend traditional boundaries and engage students in hands-on, experiential learning. Through artistic expression, learners can explore complex social issues, express their perspectives, and collaborate with peers, resulting in a deeper understanding of the world and their place within it.

Furthermore, creativity and the arts offer a powerful medium for promoting social empathy and cultural understanding among students. By encouraging artistic expression and exposing learners to diverse narratives and perspectives, teachers can foster a sense of empathy and compassion. The arts provide a safe space for students to explore and challenge their own biases and preconceptions, leading to more inclusive and respectful communities. In a digital context, teachers can facilitate virtual cultural exchanges, collaborative art projects, or storytelling initiatives that transcend geographical boundaries and nurture global citizenship.

Lastly, digital social innovation allows teachers and social educators to empower students as active agents of change. By providing platforms and tools that amplify student voices, educators can nurture a sense of agency and empower learners to tackle social issues that are important to them. Through collaborative projects, students can apply their creativity and digital skills to develop innovative solutions for real-world problems. This process not only cultivates their problem-solving abilities but also instills a sense of responsibility and civic engagement, preparing them to become active participants in shaping a better future.

In summary, for teachers and social educators, embracing the fusion of creativity, the arts, and digital social innovation opens up new avenues for transformative education. By utilizing digital tools and platforms, fostering empathy and cultural understanding, and empowering students as changemakers, educators can cultivate a generation of socially conscious, creative individuals who are equipped to address the challenges of our rapidly evolving world.



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About the partner organisations



Sarıçam Halk Eğitimi Merkezi (Sarıçam HEM) is a public institution founded in 2009 in Adana, Türkiye and affiliated with the Ministry of National Education's Directorate General for Lifelong Learning. Sarıçam HEM, which provides training services all year, including weekends and evenings, performs tasks in accordance with the principles and objectives of non-formal education. Since 2010, Sarıçam HEM has been in charge of the execution and planning of adult education services in the areas of education, training, guidance, information access, counselling, culture, arts, and sports.

Sarıçam HEM provides non-formal educational activities in collaboration with various governmental and private institutions, as well as volunteer organisations. Its main responsibilities include implementing training activities, as well as assisting and monitoring training activities. Sarıçam HEM also conducts activities aimed at ensuring the adaptation of adults who have not completed formal education to the constantly changing technological, social, and cultural conditions.



Mesleki Girişimciler ve Toplum Gönüllüleri Derneği (MEGIDER) is a non-profit governmental organization founded in 2010. It aims to create a structure for the support and development of voluntary organisations working in the areas of social inclusion, social innovation and social entrepreneurship, solidarity, promoting employment, poverty alleviation, cultural development, lifelong learning and eco-development. MEGIDER is an organisation which implements training courses particularly in the fields of social inclusion, special education, employment, migrant integration and

ICT. MEGIDER provides non-formal education to youth and adults aiming to help them acquire the skills they need to lead fulfilling and productive lives.



Karataş Halk Eğitimi Merkezi (Karataş HEM) Karataş HEM is a public institution providing non-formal education in Adana, Karataş, in the south of Turkey. They conduct high-quality, innovative activities that bring people together to foster a culture of lifelong learning and meet the needs of society. Its activities include organizing training courses and social activities for adults, the mentally and physically disabled, ethnic minorities, disadvantaged groups, the unemployed, rural youth and immigrants.



Ecoistituto del Friuli Venezia Giulia was established in 1989 and is located in Udine. It is a research non-profit organization specialized in sustainable development. Its main research scopes are:

1. Digital Social Innovation
2. Innovative teaching-learning methodologies
3. Special needs education
4. Social robotics



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DomSpain SLU is a Training and Consulting Company active on a national and international level. It offers a variety of services to the public and private sector of Spain and actively participates in international schemes through a well-established network of partners abroad. DomSpain is engaged in the EU Pact for Skills. The Training department of DomSpain develops educational programmes in four main directions: courses/workshops for adult learners, including foreign languages, ICT, and personal growth classes; VET: ICT, foreign languages, employability, work-based

learning; trainings for educators focusing on improving foreign language competences, use of digital tools and new teaching methods, blended learning; and extracurricular activities for school children and parents, including foreign languages, robotics, coding, and internet safety. The courses and trainings are implemented in our own premises as well as at 10 civic centres and 5 primary and secondary schools of the Tarragona province. We employ 40 educators and count around 1400 students each academic year. In the ICT field, DomSpain has acquired experience through many years of protection of informatics infrastructures to offer to organisations, businesses, public bodies and other entities integral solutions, which help them guarantee cybernetic security. DomSpain provides guidance and support to entities such as educational centres, public bodies, social enterprises, and NGOs in digitalising of their internal working processes. Also, DomSpain has a highly qualified team of information technology that has implemented various national and international projects, which included the development of educational platforms. DomSpain is a member of the International E-Learning Association, an international network of e-learning professionals, researchers, and students.



Yenişehir İlçe Milli Eğitim Müdürlüğü was officially established in 2008 and is located in Mersin. YIMEM is a public authority and is responsible for planning and coordinating all types of education and training activities. YIMEM is tasked with supervising all types of formal and informal educational institutions. The administrative structure within the Directorate consists of elementary school, secondary schools, vocational schools and non-formal education institutions. The Directorate's mission is to oversee the Turkish national education system, to ensure that educational institutions

operate in accordance with legislation, to meet their needs, and to supervise them. YIMEM carries out educational and training activities in accordance with contemporary principles and developments and aims to educate people who are creative, respect human rights and the environment, in accordance with EU standards, in accordance with the requirements of the digital age, by raising the quality of education in light of secular, free, democratic principles. YIMEM trains teachers in internships every year and organizes trainings for teachers in the region.



TEAM4Excellence (T4E) is a Romanian youth association aiming to improve the quality of life through education, research and consulting activities. To address societal challenges, T4E provide learning opportunities and career advice for social inclusion, development and employability of youth and adults, and equip trainers with key competences and skills to foster personal as well as professional development. Within 50+ EU funded projects, the association produces and transfers innovation, experience and know-how through cooperation with domestic and international

partners. By hosting events, training courses and conferences, T4E strengthens collaboration between people, supports organisations and bridges gaps between generations. The wide expertise in management enables T4E staff to provide consultancy to large companies and SMEs using the EFQM Model and Business Model Canvas.



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Sir John Daniel, President & CEO of COL, describes the contents of his new book, *Mega-Schools, Technology and Teachers: Achieving Education for All*, in this three-minute video. Duration:3:20

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