



Educators' Guide to Video Games and Social Entrepreneurship













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This educator's guide offers a comprehensive way of integrating game creation into learning activities. This integration will equip learners with digital skills, social entrepreneurial abilities and an understanding of the importance of inclusivity. With the world's increasing focus and dependence on technology, game creation can offer a new learning experience in which we learn creatively and hands-on. Game design and development allows learners to dive deeper into the theoretical concepts, focusing on coding, storytelling and design. Moreover, critical thinking skills are also at the core of this learning, requiring problem-solving, teamwork and innovative thinking to increase learners' sense of responsibility and engagement with the world.

For game creation to succeed in education, educators must actively embrace digitality, collaboration and creating inclusive and creative learning environments. This guide includes practical strategies to help educators navigate this new project-based and interdisciplinary learning terrain. It provides information on teaching social entrepreneurship and focuses on ensuring an accessible learning experience for every learner. The ultimate goal of creating an innovative and welcoming learning environment is reached through combining game creation, social entrepreneurship and inclusive, hands-on learning. Through this learning, learners will gather technical competencies and contribute to the world in meaningful and long-lasting ways.

This guide is divided into two parts, each designed to support educators in different ways. The first part offers a framework for integrating game creation into educational settings, focusing on developing digital and social entrepreneurial skills. Building on this foundation, the second part provides practical worksheets and workshop scenarios that help turn theory into practice. This combination of theory and practice helps foster a dynamic and interactive learning environment where participants can apply their skills in real-world contexts.



Integrating Social Entrepreneurship into Education



Defining Social Entrepreneurship

What is social entrepreneurship?

Social entrepreneurship is a concept that blends the principles of business with a commitment to addressing social, environmental, or cultural issues. Social entrepreneurs identify problems that affect communities or society as a whole and work to develop innovative solutions that create positive, sustainable change. Unlike traditional businesses, which primarily focus on financial profit, social enterprises are driven by a social or environmental mission, aiming to make a measurable impact while maintaining financial sustainability.

The core purpose of social entrepreneurship is to address a social need or challenge, such as poverty, education, healthcare, or environmental conservation and for this reason social entrepreneurs often come up with creative, new solutions to old problems, whether it's through new products, services, or business models. The success of a social entrepreneur is measured not just by financial performance, but by the positive social, environmental, or cultural outcomes they achieve.

Social entrepreneurs profile

Social entrepreneurs are individuals who combine business acumen with a strong desire to address social, environmental, or cultural issues. Their approach to solving societal challenges requires a blend of personal qualities, skills, and values that drive them to create sustainable impact. These qualities not only help them navigate the complexities of social innovation but also enable them to stay resilient and adaptable in their pursuit of meaningful change.

Very often social entrepreneurs are deeply motivated by a personal or societal issue they feel strongly about. They reflect on the issues that resonate with them most, whether it's poverty, education, climate change, or inequality. Engaging in community work or volunteering can help deepen their connection to these causes. Like entrepreneurs in general, social entrepreneurs think beyond the present and envision a future where their solutions have transformed society.

Social entrepreneurs must understand and care about the needs and challenges of the people they aim to serve. Empathy allows them to design solutions that are truly aligned with the needs of communities and stakeholders. In order to develop this quality, for example entrepreneurs could practice active listening. They could take the time to listen without judgment and with the intent to learn from others, especially from people who experience the problems they are trying to solve.



While driven by social goals, social entrepreneurs must also run their ventures effectively. This includes budgeting, financial planning, fundraising, and understanding how to create a sustainable business model. For this purpose, entrepreneurs could take in account different models like hybrid organizations, B Corps, or social enterprises to learn how to balance social impact with profitability. Social entrepreneurs must be able to build strong relationships with a variety of stakeholders, including investors, donors, collaborators, and the community they serve. Effective networking helps unlock resources, knowledge, and support. In order to develop this, they should join networks, attend events, and participate in forums where social impact is discussed. Collaborating with others can broaden their influence, provide new insights and allow them to focus on long-term relationships. Trust and credibility are key to attracting support for their mission.

Social entrepreneurs as inspiring models

Social entrepreneurship can be a powerful source of inspiration for young people, especially when it comes to innovative fields like video game development. Video games have become an influential medium for both entertainment and storytelling, and through social entrepreneurship, young developers can use games as tools for raising awareness, solving real-world problems, and creating positive social impact. By blending social missions with creative gameplay, young developers can not only entertain but also inspire and drive real-world change.

For example, Terra Nil is a videogame that focuses on environmental sustainability, where players manage a virtual ecosystem, make decisions to reduce carbon emissions, or plant forests. Through this gameplay, young players can learn the importance of environmental stewardship, which may inspire them to take action in the real world.

This principle can be also applied in game design by creating multiplayer or cooperative games that encourage teamwork, collective action, and social problem-solving.

As an example, "Sea Hero Quest," is a game designed to help researchers collect data to combat dementia that allows players to participate in research simply by playing a fun game. The success of this game illustrates how video game mechanics can be used to directly support scientific research while also raising awareness about critical health issues.

By learning about social entrepreneurship and the potential impact of games, young developers can be inspired to create their own ventures that tackle the issues they care about. The "Global Game Jam" is an annual event that brings together game creators around the world to create games on a specific theme, often related to social causes. Young people can draw inspiration from such initiatives and use their skills to create games that speak to the issues they are passionate about.

The Potential of Education in Fostering Social Entrepreneurship

As youth educators, helping young people discover their potential as social entrepreneurs requires more than teaching definitions or principles. It involves creating learning experiences that ignite curiosity, build confidence and encourage action. Think of entrepreneurship education as a journey that provides learners with practical skills, promotes creativity and helps them see challenges as opportunities. By focusing on hands-on activities, storytelling and real-world connections, you can guide them to develop not only their skills, but also their identity as changemakers ready to tackle social challenges with innovative solutions.

A holistic approach to entrepreneurial education

Start by teaching how to identify opportunities, asking learners to observe their local communities, list unmet needs and brainstorm potential solutions. Guide them through case studies or invite guest speakers who have turned social challenges into impactful businesses. Instead of abstract definitions, present activities in which learners actively identify problems and propose creative solutions.

To emphasize employability, show learners how entrepreneurial skills such as critical thinking, collaboration, and adaptability are valuable in any career. Involve them in group projects where they have to tackle real problems, such as organizing a community event or creating a prototype for a sustainable product.

Building a strong entrepreneurial identity requires helping learners see themselves as agents of change. Encourage them to reflect on their strengths and passions by asking them, "What problems are you most passionate about?" or "How could you make a difference?". Celebrate their ideas and help them visualize the impact they could have, promoting a sense of ownership and purpose.

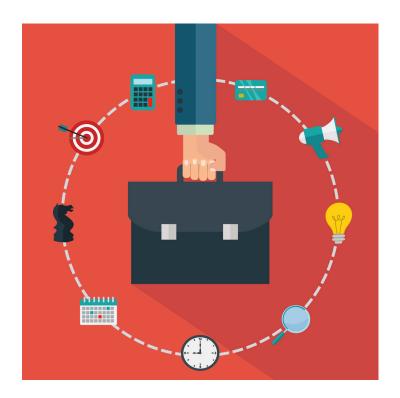
When focusing on creativity and innovation, use methods such as brainstorming and design thinking. Challenge learners to re-imagine everyday problems with new perspectives: "How would you solve this problem if resources were unlimited?" or "What would happen if we approached this problem completely differently?". Provide tools and frameworks, but leave room for imaginative thinking and experimentation.

Experiential learning and critical management of events are key to making social entrepreneurship lessons effective. Give learners opportunities to apply what they have learned in real-world settings, such as internships, community projects or social hackathons. Create simulations in which they must handle unexpected challenges, such as a sudden budget cut or a change in team dynamics, to prepare them for the realities of social entrepreneurship. After these experiences, encourage reflective discussions, "What did you learn from this experience?" or 'How would you approach it differently next time?' These critical reflections help learners turn challenges into valuable learning moments.

Finally, ensure that learners develop resilience and ethical thinking by incorporating real-life challenges into their learning. For example, simulate scenarios in which they must make difficult decisions to balance social impact and financial sustainability. Reflective discussions on questions such as "What values drive your decisions?" or "How would you handle setbacks in pursuing your goals?" can cultivate a mindset of perseverance and integrity.

Training for a changing job market: transferable skills and adaptability

Preparing young people for the complexities of today's job market means focusing on more than just academic knowledge: we need to foster adaptable and versatile individuals ready to thrive in diverse professional environments. Social entrepreneurship education does exactly that, combining hands-on learning with a focus on social impact. By equipping learners with transferable skills, educators can open doors to a variety of career paths while cultivating a mindset that can solve real-world challenges.



Social entrepreneurship education not only prepares learners to start their own businesses, it also builds skills that are highly valued in a variety of careers:

Social entrepreneurs: Students learn to identify problems and develop solutions
that balance social impact with financial sustainability. Activities such as creating a
business plan for a social cause or designing a prototype for a service that
addresses a community need can prepare them for entrepreneurial success. Skills
acquired in social entrepreneurship, such as opportunity identification, creativity,
risk management, and the ability to work as part of a team, are highly valued by
companies seeking internal innovators and change agents.

- Nonprofit professionals: Managing a nonprofit organization requires project
 planning, resource management and social impact measurement, all skills
 developed through social entrepreneurship training. Engage learners in exercises
 such as writing grant proposals or organizing charity events to help them
 develop these skills.
- Professionals in established companies: Even in traditional business roles, entrepreneurial skills such as creativity, teamwork and adaptability are highly valued. Provide opportunities for learners to act as "intrapreneurs," designing initiatives or campaigns that address social challenges within a business context.

Cultivating key skills for success in the job market

Through education in social entrepreneurship, learners acquire a balanced mix of technical and soft skills that prepare them to successfully meet the challenges of an ever-changing job market. They learn how to manage the practical aspects of a project, such as financial planning, marketing and operational organization, through hands-on experiences that help them translate ideas into reality: for example, they could create a budget for a community initiative or design a social media campaign to promote a cause. At the same time, they develop essential interpersonal skills such as problem-solving, teamwork, and leadership, qualities that are fundamental to collaborating effectively with others and leading change. Activities like managing team dynamics during a collaborative challenge help foster these essential qualities.

It is not just about practical skills, but also about cultivating an entrepreneurial mindset: a resilient, creative and action-oriented spirit that enables them to tackle real-world problems and to deal confidently with uncertainty and seize hidden opportunities. Ask questions like, "What did you learn from this project?" or "How did you overcome challenges?"

In addition, building professional networks allows learners to connect with professionals in the field, organizations and potential mentors, broadening their perspectives and opening new doors for the future: try to encourage them to take part in internships, guest lectures, or community projects.

This integrated approach transforms learning into a path of personal and professional growth, making learners not only competent but also ready to make their mark in the world.

Social entrepreneurship education, in line with EntreComp's principles and enriched by practical experiences and collaborations, is a valuable investment in the future of learners and entrepreneurs. It prepares them not only for diverse and rewarding careers, but also to become active and responsible citizens capable of contributing to building a better world. An educational approach that embraces the EntreComp principles and cultivates the essential qualities of social entrepreneurs can train a new generation of leaders, innovators and change agents: these individuals will be equipped with the skills needed to meet the challenges of the 21st century, creating positive social impact and helping to build a more equitable, sustainable and prosperous future.



Video Game Creation as an Educational Journey



Why use video game creation as a learning experience in youth work

Project-based learning: a booster of engagement, creativity, and achievement

Project-based learning is an educational approach where learners actively explore real-world problems and challenges by working on practical projects that they develop over time. In the case of creating video games for good, the concrete project would be for participants to create a video game themselves, or at least to work on specific steps of video game creation as a social entrepreneurship project.

This approach is highly effective for young people: it engages them directly with real-world tasks, making learning experiences more relatable and impactful. Here are some of the areas where project-based learning has a high added value.

The combined power of engagement and confidence

When young people are actively engaged and able to see their achievements in real time, they're more likely to develop a positive, empowered approach to learning. This dual impact—feeling involved in the process and capable in their abilities—creates a strong foundation for both academic and personal growth. Both aspects are necessary when creating a video game, and they reinforce one another: when you create a game, you have a safe space to experiment and to develop your skills, and you must get engaged into the process to make your vision come true. This, in turn, strengthens your confidence in your own skills, and makes you even more engaged in the game creation process.

Active engagement in the learning process

Project-based learning engages young people by connecting what they study to real-world applications, making learning relevant and meaningful as students see the purpose behind their efforts. Hands-on tasks like projects and experiments shift them from passive listeners to active learners, enhancing focus and helping them internalize concepts through direct experience. Additionally, project-based learning fosters curiosity, allowing students to freely explore, experiment, and investigate, which makes learning feel like discovery and builds genuine excitement for the subject.

Confidence Building Through Achievement

Aside from connecting theory and practice, project-based learning also builds confidence by showing students immediate, tangible results. These visible successes affirm their abilities, fostering a sense of achievement and potential. Through trial and error, youth learn that mistakes are part of the process and challenges are growth opportunities. This builds resilience and perseverance as they overcome setbacks and adapt to continuously improve.

Video game creation to teach digital and entrepreneurship skills in youth work

One common challenge in the youth sector is how to engage the youth. Non-formal or social activities seem more inviting to some participants, as they deem activities related to entrepreneurship or inclusion too difficult for them. This can be even worse for youth who are eager to do something but are uncommitted to any specific area.

Enter video games. Statistics show youth's involvement in the medium. In 2023, 53% of the population aged 6-64 years old played video games. 22% of players are aged 15-24, and 43,5% are women. 78% of Europeans aged 15-24 play video games (Video Games Europe, 2024). Not all of these Europeans will be hardcore gamers, nor will they all play the same games on the same platforms. Regardless of personal preferences, these statistics show that there is a certain familiarity with the medium in younger generations. This provides an opportunity to link something they are familiar with, with the development of digital and social entrepreneurial skills.

Video Game Creation and Social Entrepreneurship

The similarities between video game creation and social entrepreneurship

Creating a video game, whether as a creative project or business project, is an entrepreneurial journey. Many aspects need to be taken into consideration: analysing the target group, thinking about game design, developing a narrative, choosing which characters are – or aren't – represented, thinking about the player's experience and how to instruct them, and, of course, creating the game itself technically, whether programming or using no-code video game creation tools. There are also many creative skills needed for developing graphics (for characters, environment, user interface elements), sound (music, ambient sound, player feedback, voice), writing, etc. It is generally impossible for one person, especially a beginner, to singlehandedly develop this large variety of tasks. Therefore, social entrepreneurial cornerstones like teamwork, recruitment and project management are needed.



Video game projects require to design the game and approach while considering all aspects: creative, artistic, marketing, all balanced with human and financial resources.

Needs analysis or design thinking are also essential to both video game creation and social entrepreneurship. In any entrepreneurship project, including social projects, you must think about your end user or target group, and aim to answer their needs. When you create a video game, one of the first steps is to quickly define your target group and conduct a market study on similar games to ensure that someone is going to play your game. This is even more essential for commercial games, as you need to make sure that you can compensate at least part of the time and money you invested into your project.

Creating a **business plan, managing finances and business development** are key in video game creation, especially when creating a studio. Studio managers must ensure economic viability to compensate the invested time and money, or, when they do not aim to pay themselves nor to make money from the game they created, to have enough money to pay freelancers (artists, developers, etc), or fixed material and commercial costs (computers, listing your game on a store, translation and localization, playtesting, advertising, etc). This is also important to answer to funding calls for projects.

Another way to ensure economic viability is through the social entrepreneurial skills of communication and marketing. The existence of a game needs to be promoted outside of the creators' circle.

Sufficient **digital skills** are vital in video game creation. Programming, graphics and sound are often seen as the most essential skills. However, many more digital skills are needed such as project management tools and supporting business operation tools, both of which are rooted in social entrepreneurship.

Digital literacy is also required. The online game developer community is very active, and while the industry is competitive, many people are also eager to share their experience and help others.

The need for **creative skills** may seem obvious in video game creation considering the importance of art (visuals, sound, narration, etc), but they might seem less obvious in relation to social entrepreneurship. However, whether applied to arts, design (of products or services) or business, creative skills are applied everyday by entrepreneurs and are identified as vital in EntreComp. It is not necessarily enough for an illustrator to just draw.

When designing, for example, characters, there are many aspects to consider. This relates to **problem-solving skills:** how do I ensure this character is relatable? How do I make them appear realistic enough, even though they wear extravagant clothes in their world? How do I ensure that I illustrate a character in a way that can be efficiently replicated by others? What do I need to know to make this character part of their world? Creative skills consist equally of creativity and an awareness of the needs and constraints of video game production.

Social and environmental impact are as essential in a video game studio as in a social enterprise. Let's start with social impact: a video game depicts characters and a specific setting which come with social representations, whether intentional or not. Therefore, developers must pay attention to the way they represent diversity in their games and educate themselves on how to avoid stereotyping and excluding groups from their player base. Inclusivity is important regarding diversity and accessibility to players with diverse abilities. On top of that, it is also important to have a diverse team, which can serve as a source of creativity.

Finally, the environmental impact of video games should not be ignored. Mitigating your environmental impact as a video game studio is not just important for the planet, but it is occasionally also a condition for public funding, For example with the French Centre National du Cinema.



All aspects in creating a video game are connected. For instance, when drawing a character: who do you represent? What colour atmosphere do you choose? What do the clothes and accessories tell about the world they live in? What art style can you affort in relation to the overall budget? These are some of the practical questions that you have to think about with all the creative skills.

To go further

Practical guidance on activities and workshops in video game creation for good in the youth sector will be created during this project. If you wish to implement classroomstyle video game creation activities right now, you can get inspiration from Erasmus+Gaming for Skills' video game creation guide on creating video games with high school students.

https://www.gaming4skills.eu/resources/game-creators/

A previous experience from YuzuPulse on video game creation and social entrepreneurship skills

Project partner YuzuPulse has organised several video game creation activities with youth in the North of France. We share an example that shows how even a one-hour activity on one aspect of video game creation – designing a video game protagonist – allowed young learners to express their creativity.

During an event at creative industries hub Plaine Images in Tourcoing, France, we facilitated 2 workshops for 15 high school students on character creation. After collaboratively creating a world and life for this character – in this case, a metal scrapper living on a planet with a sand landscape in a space opera universe –, participants were put in pairs to express their vision for this character by modelling it on MetaHuman Creator. They experimented with the platform ("we can do this?!"), communicated with their partner, discussed their choices ("if they live in the desert, we can give them wrinkled skin!") and created characters ("we're in a space opera; nothing says men can't wear shiny makeup!").

Then, each pair presented their character. Interestingly, participants created a wide diversity of characters in terms of gender, skin colour, age, body type, etc. We challenged them to justify their choices during debriefing, and they mostly gave justifications related to what the character's environment and job entailed, expressing their own view of this fictional society. Others just answered that they picked what looked cool or original, which is a testament to their creativity and engagement.





Practical Applications for Educators



Integrating social entrepreneurship into youth initiatives provides a meaningful way to engage with the world. Social entrepreneurship should extend beyond technical business skills, focusing on cultivating a mindset grounded in social responsibility. This approach emphasises the importance of empathy, ethical decision-making and sustainable thinking, which are crucial for developing ventures prioritising social impact. By connecting theory to practice through activities, learners can become socially aware innovators ready to face challenges.

This chapter consists out of three pillars that provide a practical and accessible guide to building social entrepreneurial skills. The proposed activities are closely aligned with the worksheets featured in the second part of the guide, ensuring a seamless transition from theory to practice to help learners develop social entrepreneurial competencies. These activities constitute the first pillar and will be combined with multidisciplinary learning and the EntreComp Framework as the second and third pillars. Here are some more details about the pillars:

- 1. Activities to Teach Social Entrepreneurship: This pillar introduces six engaging, hands-on activities that connect learners with real-world social issues. Social entrepreneurial skills are acquired through each activity.
- 2. Encouraging Multidisciplinary Learning: This pillar explores how integrating multidisciplinary learning into a social entrepreneurship curriculum enriches learners' understanding of the theory. By working from business, social sciences and technology perspectives, learners gain insights into different perspectives and develop the collaborative skills necessary for creating sustainable solutions.

3. Introducing the EntreComp Framework: The final pillar outlines the EntreComp Framework, a comprehensive model for building entrepreneurial competencies. The framework has three main branches: Ideas and Opportunities, Resources, and Into Action, which highlight the skills necessary for learners to turn concepts into impactful ventures.

Activities to Teach Social Entrepreneurship

Active, hands-on learning is important in cultivating an entrepreneurial mindset focused on social impact. Engagement with societal challenges can make them more real and pressing to a learner. Consequently, this engagement can hone problemsolving skills, spark creativity and improve communication and cooperation skills. An increase in abilities often increases a learner's confidence, which is vital if we want to create a generation of social entrepreneurs who are eager to address complex global challenges. The following six activities are aimed at connecting the theory with the outside world, offering learners opportunities to actively engage and reflect.

Community Problem Identification and Solution Development

This activity is focused on small-scale problem-solving within the learner's own community. Youth must first identify and research a social issue within their community. They will then actively engage with their community through interviews and data collection to come up with sustainable solutions. For example, a group might investigate the problem of excessive litter in local parks. They could interview park visitors to understand their experiences, survey residents about recycling awareness, and partner with the municipality to propose a community cleanup event or the installation of recycling bins. Learners build on their empathy and creativity by working with different stakeholders in their community, and build confidence by coming up with feasible solutions. At the same time, this approach also increases critical thinking skills as it connects theory to real-world problems.

When applying this activity to a video game creation curriculum, learners could be asked to identify issues raised by a game's online community. They will then have to take steps to avoid these problems in their own projects.



Social Enterprise Role-Play

In this activity, learners assume roles within a fictional social enterprise (e.g. CEO, marketing lead, financial officer). They will be required to brainstorm solutions to issues within their company. This offers practical and low-risk experience by simulating decision-making, collaboration and leadership. For example, the issue could be reducing food waste. The marketing lead might brainstorm ways to promote a new app that connects surplus food from restaurants with food banks. The financial officer could calculate cost savings for the restaurants while the CEO coordinates the overall strategy. The repetition of this practice can help learners become confident in the social entrepreneurial qualities required for diverse roles.

Within a video game curriculum, this exercise can involve taking on different roles within the creation process and experiencing what these roles entail.

• Business Plan Competitions

In this activity, participants interact with social entrepreneurs in a business plan competition. They will first develop business plans, which will be pitched to the social entrepreneurs. There is a constant feedback loop that provides learners with advice and encouragement from both peers and industry experts. This setting will help refine and present ideas in a familiar yet competitive environment. An example of a business plan could be creating an eco-friendly delivery service using bicycles instead of motor vehicles. This requires research into urban delivery, calculating costs and savings and outlining a strategy to attract businesses. This exercise fosters social entrepreneurial skills like creativity and strategic thinking, together with effective communication skills.

This activity can be easily adjusted to a video game creation setting by focussing it on indie game developers as social entrepreneurs. Planning skills and effective pitching are equally vital in the gaming industry.

Self-Reflection Exercises

In this activity, participants are asked to keep a journal in which they set personal goals, track their progress and reflect on the development of their social entrepreneurial skills. For example, a participant might reflect on their experience leading a community workshop on reducing single-use plastics. Their journal could detail how they overcame communication challenges, adjusted their approach to engage attendees, gained confidence in public speaking or the ways in which initial plans had to be altered. As this activity is more self-directed, it encourages taking responsibility and being self-aware.

This activity can be incorporated in a video game creation setting without any adjustments.

Field Visits to Social Enterprises

In this activity, participants observe the day-to-day operations of a social entrepreneurial organisation and meet with entrepreneurs. An example could be visiting an organisation focused on upcycling, learning how material is sources, products are created and diverse employees are accommodated. Learners can then discuss how these ideas can be applied to their own ideas and ventures. The best way to adjust this activity to video game creation is by visiting a gaming studio.

Encouraging Multidisciplinary Learning

As an educator, you've likely experienced how collaboration across disciplines can enrich a project. Whether you have worked with an art teacher to add a creative touch to lessons or an IT colleague to introduce new technologies, these partnerships demonstrate how diverse perspectives lead to stronger outcomes. For learners, multidisciplinarity will help develop a broader understanding of how to create effective, sustainable solutions to complex social issues.

Multidisciplinarity is valuable in a video game creation setting as it reflects the many different disciplines required to produce a game. Designers bring artistic skills, programmers handle coding, and marketers manage product promotion. Learning can be enriched by assigning different roles or by inviting colleagues with expertise in various areas. For example, someone in the arts can guide visual design, an IT specialist could teach coding basics and a business consultant could focus on marketing and strategy. Together, you can create a multidisciplinary project that reflects real-world collaboration and encourages learners to be creative.



Aside from technical skills, students also build on their empathy, critical thinking and systems thinking through multidisciplinarity. They learn to navigate diverse viewpoints, adapt to challenges and find solutions that integrate different perspectives. Imagine a group where one member excels at storytelling, another focuses on data analysis and a third is passionate about climate change. Together, they could design an engaging game that raises awareness about environmental issues.

EntreComp Framework

The EntreComp Framework offers a practical guide for learners to develop essential social entrepreneurial skills. The first cornerstone, Ideas and Opportunities, encourages spotting opportunities, embracing creativity and thinking ethically and sustainably. As an educator, you can help participants explore their unique perspectives to identify solutions to local challenges. Guiding them to brainstorm together can foster a sense of ownership and creativity while showing how diverse viewpoints enrich problem-solving. By encouraging participants to centre ethical and sustainable thinking, you're helping them understand how their projects can have meaningful social impacts.

The second cornerstone, Resources, emphasises self-awareness, perseverance and mobilising people and materials. Helping learners identify their strengths, while understanding when they should rely on others, builds their confidence and resilience. Help youth understand the power of building a network to both connect with people and gather resources.

The last cornerstone is Into Action, which focuses on planning, initiative, teamwork and learning through experience. Multidisciplinary projects provide the perfect environment for participants to practice these skills, whether developing a timeline, creating contingency plans, or managing communication among team members. As an educator, you can guide them to reflect on their progress, learning from both successes and setbacks. By using the EntreComp Framework as a foundation, you equip participants with practical tools to tackle social challenges and thrive as changemakers in any setting.

Supporting >>>>> Educators in Digital Skills

This chapter highlights the importance of up-to-date digital skills. It offers practical strategies and a focus on integrating tools such as video games to foster engagement and innovation. Collaboration and co-creation with young people are highlighted as key approaches to building digital skills and tackling real challenges through social entrepreneurship. By fostering peer-to-peer learning, gathering feedback and reflecting on practice, youth workers can create an environment that empowers both themselves and young people to thrive technologically.

Increasing digital skills

The rapid development of digital technologies in recent years has transformed many industries, including youth work. However, youth workers sometimes face challenges in adapting to and integrating these technologies into their daily practice. A significant barrier is the disparity in digital skills between youth workers and youngsters.

Why focus on digital skills?

Youth workers are in a unique position to promote change at a local level. Unlike formal education systems that often lag in adopting new technologies, youth work offers the flexibility to experiment and innovate. By embracing digital tools, youth workers can empower young people to navigate the digital world confidently, critically, and creatively.

For example, video games, already a cornerstone of many young people's lives, offer untapped potential for promoting digital skills, teamwork, problem-solving and even storytelling. Imagine integrating a strategy game to teach planning and resource management or using an interactive platform to simulate real-world challenges that young people can solve collaboratively. These approaches can make learning relevant and engaging, while also helping youth workers build their own confidence with technology.

Practical strategies for building digital skills

1. Leverage existing frameworks

EU frameworks like DigiCompEdu provide a roadmap for youth workers to assess and improve their digital skills by setting realistic goals. For example, understanding how to create interactive content or manage online communities can enhance their ability to engage young people effectively.

2. Focus on practical applications

Incorporating digital tools into everyday activities can be as simple as using a collaborative platform for planning group projects or introducing apps for creative storytelling. By curating practical guides and templates, youth workers can see how digital tools directly enhance their work and share this knowledge with other educators

3. Explore video games as a resource

Video games can be a powerful tool for engagement. Platforms like Minecraft Education or gamified learning apps allow youth workers to design activities that resonate with young people's interests while fostering critical skills. These tools not only engage young people but also serve as an accessible entry point for youth workers to explore and experiment with technology.

4. Cultivate a growth mindset

Building digital skills requires a mindset shift. Youth workers should view technology not as a challenge but as an opportunity to enrich their practice. Creating a culture of experimentation—where trying new tools, learning from mistakes, and sharing successes is encouraged—can make the integration of digital skills less daunting.

Resources for educators

Navigating the vast landscape of digital education resources can be overwhelming. Educators need a clear, practical approach to identify their specific needs and find the right tools or courses to address them. Rather than focusing on individual platforms, this section outlines a step-by-step framework for educators to assess their digital skills and identify relevant learning opportunities.

Step by step approach

1. Evaluate your current skills

Begin by evaluating your existing digital skills. Use frameworks like DigiCompEdu to self-assess your skills in areas such as digital communication, content creation, and technology integration. This reflective process will help you identify strengths and areas for growth.

2. Define goals

Clearly outline what you aim to achieve. Are you looking to enhance learner collaboration, create engaging multimedia content, or better manage online assessments? Defining these goals ensures that your learning efforts are focused and effective.



3. Explore tailored learning opportunities

Once you understand your needs, seek out relevant resources. For EU educators, platforms like European Schoolnet Academy and EPALE (Electronic Platform for Adult Learning in Europe) offer free courses and training specifically designed for European contexts. These platforms provide tools and strategies that align with regional standards and practices.

4. Join communities of practice

Engage with professional learning communities to share knowledge and staying upto-date. Networks like eTwinning and TeachMeet offer opportunities for collaboration, while platforms such as X or LinkedIn host active groups where educators discuss challenges, share solutions, and celebrate successes.

5. Evaluate and repeat

After exploring resources and applying new strategies, take time to reflect on their impact. Regularly revisit your goals and skills assessment to ensure continuous growth and adaptability.

Additional resources

For those seeking structured support, a variety of platforms cater to diverse educational needs:

- -DigiCompEdu toolbox: Offers guides and resources aligned with the EU's digital competence framework.
- -Open Educational Resources (OER): Free and adaptable learning materials available through platforms like OpenLearn and Wikimedia Commons.
- -Professional development workshops: Many national education agencies host free or low-cost workshops to help educators integrate technology into their practice effectively.

Collaboration and improvement in learning

Collaboration is a cornerstone of effective youth work, particularly in today's digitalizing world. By fostering partnerships and co-creating learning experiences, youth workers can come up with useful solutions to technological challenges while motivating and inspiring each other. This section provides practical examples and strategies to make collaboration impactful and accessible.

Collaboration among youth workers

For example:

- -Skill sharing circles: Organize monthly meetups where youth workers demonstrate tools or share success stories, such as using video editing apps to document community projects or creating digital storytelling workshops.
- -Cross organization partnerships: Partner with other youth organizations to co-develop digital toolkits or run projects. For instance, a collaboration between two organizations could lead to creating a workshop series on social entrepreneurship through game design.

Co-creation with young people

Engaging young people as active participants in designing their learning activities enhances their sense of ownership and builds critical digital skills.

• Example 1: Video game creation

Youth workers can lead a project where participants design simple video games addressing social issues like environmental sustainability or inclusion. Using platforms like Scratch or Unity, young people learn coding basics, teamwork, and problem-solving while developing a project they're passionate about.

• Example 2: Social entrepreneurship challenges

Facilitate workshops where young people brainstorm solutions to local challenges, such as food waste or community outreach. Participants can use digital collaboration tools like Miro or Canva to create prototypes and pitch their ideas, building skills in teamwork, creativity, and digital communication.

Collecting feedback from young people ensures activities remain relevant and engaging. Digital tools like Mentimeter or Padlet can make gathering insights easy and interactive.



Building a supportive community

Peer-to-peer evaluation offers a chance for participants to give and receive constructive feedback. This is an important tool to foster a sense of responsibility, shared achievement and cooperation. This tool can also be used outside of an educational setting, for example when working together with businesses during social entrepreneurial projects. Educators could invite community leaders to showcase participants' video game projects, either digitally or in person. Through evaluation, the relevance and impact of these projects can be exemplified.

Inclusive and >>>>>> Accessible Learning for Everyone

Developing playable games for all people is an essential factor in game design and development. Accessibility and inclusivity in video games should embrace diversity in every aspect, including social background, ethnicity, interests, goals, access to resources and abilities. Accessibility can be defined as the features that designers develop in a game to enable access and usage of the game by players with a range of needs. Accessibility plays a crucial role in making games inclusive, and it is a catalyst in developing the functionality of a game.

Inclusivity can be defined as the way players identify with the content and intent of a game in a meaningful way. In video games, this can be presented through characters, storylines, and environments that represent diverse cultures and identities. A survey conducted by the international game developer's association (IGDA, 2023) found that 85% of the gamers felt that diversity is an essential component in game content and is also quintessential in developing a platform. Another study, conducted by the Entertainment Software Association (ESA), found that gamers from ethnic minorities more strongly identified with characters who share their racial and ethnic background.

Diversity, equity, and inclusion (DEI) in gaming refers to the efforts put in by video game companies to ensure that the output reflects the diversity of the community. Various cornerstones are important when representing DEI in video game development; here are a few:

Diverse Character representation: DEI is present in games as developers increasingly create characters from different backgrounds, ethnicities, genders, sexual orientations, and abilities. For instance, games such as the Unisoft Assassin's Creed series explore historical periods with diverse cultures.



Awareness: portraying underrepresented communities can engage and sensitise players from diverse backgrounds. When games engage with topics such as discrimination and inclusion, awareness is fostered and unconscious biases may be reduced. Game narratives can challenge stereotypes by immersing players in unfamiliar cultures where they encounter different characters.

Catering to Diverse Needs: games should offer a range of themes to cater to the diverse needs of players. For example, a game can have different themes at different levels or different challenges like puzzles or quizzes. This allows players to play and align the game according to their interests. Games can also focus on collaborative learning by encouraging players to play in teams. Players will simultaneously build skill while also learning from others.



Accessible Materials: as games are popular everywhere, underrepresented groups or people with disabilities need to be considered when developing a game.

Addressing the technological and educational need for equity is crucial in gaming.

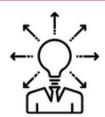
Developers should bear in mind questions like: Who will access the games? What barriers might they have?

The aspects that need to be considered while designing and developing a game are: the target audience, educational needs or the intent of the game, language requirements, finance, and support materials. A wider community can be reached by providing free-to-play models or freemium models of games.



Diverse Character Representation

Races Gender Sexual Orientation Abilities



Awareness

Stories shared
Depicted
environments
Culturally
informed
materials
Unconcious Bias



Catering to Different Needs

Different themes Various Levels Diverse Interactivities puzzles, quiz



Accessible Materials

Access to game technology Multilingual support Learning and support materials Marketing

Strategies for educators

Various strategies can be used in social entrepreneurial projects to reflect issues and allow learners to connect with them. Some of these strategies include:

Project-Based Learning – This involves learners working with real-life situations, facing complex issues and gaining practical skills. This method can aid in developing critical thinking, teamwork and problem-solving, as learners apply theory to a practical setting.

Mentorship and networking opportunities – This involves mentors from the field, like social entrepreneurs, policymakers and non-profit organisations, offering guidance and training to develop crucial skills. Aside from improving skills, mentorship can also help address the ethical implications and challenges social entrepreneurs might face.

Reflective practices and self-assessment- This strategy offers a structured way to consider the social implications of the project being developed. It can provide a different perspective and look deeper into potential social implications.

Interdisciplinary collaboration – This involves cooperation between different fields, for example social sciences, environmental sciences and public health. Tackling a social issue requires differing perspectives, making collaboration and integration essential factors for innovation.

Accessibility for Students with Learning Disabilities

Games are a medium that help learners explore and understand the world around them. It is possible to integrate technology into education, paving the way to use gamification in educational settings. Researchers have found that game-based learning is especially valuable for learners with disabilities. Implementing it into their learning involves the integration of accessible design principles and instructional strategies that meet their specific learning needs. Accessible design principles are a universal design that can be applied to games. It makes the game useable for all people without needing adaptations.

User experience (UX) can also determine the success of a video game. The UX encompasses the entire journey that a player has with a video game, from learning about it to navigating its menus and progressing through the game. UX provides developers with guidelines to create the best possible player experience. This involves not only delivering high-quality games but also maintaining the vision and overall experience of the design. Celia Hodent, an expert in UX design, examines human psychology to predict the experience of gamers.

These insights into universal design, UX principles and cognitive science form key elements in video game creation. By implementing these, developers can create games that deliver the best possible experience to players.

Here are a few ways to tailor or tweak video games based on learning requirements:

Integrating learning analytics in games: learning analytics are the measurement, collection, analysis, and reporting of learners' data for the purpose of understanding and optimising learning and the environment in which it occurs (Siemens & Long, 2011). Learning analytics can improve the teaching and learning about games and support a wide variation of learners' needs.

By embedding data collection and analysis tools in games, the experiences of each player can be monitored, assessed and enhanced according to their needs. This integration allows for personalised learning by adapting the game's content and difficulty to meet the unique needs of learners. Some of the learning analytics that can be embedded into a game are: performance metrics, personalised feedback and adaptation, support for diverse learning needs, and early identification of challenges.

- **Simplified user interface:** designing interfaces that are easy to understand and navigate is important for learners with learning disabilities. This also means reducing clutter and removing irrelevant stimuli that might overstimulate or overwhelm the learners.
- Assistive technology: using this technology improves the gaming experience through:
 - Narrating visual UI elements aloud to players.
 - Customising visuals to optimise the visibility of the game.
 - Remapping the capabilities of players.
- Hardware component accessibility: certain devices provide an accessible
 alternative to players who have difficulty using standard input devices like controllers,
 mice, and keyboards. Hardware component accessibility provides devices and
 peripherals that accommodate various cognitive, motor, and sensory needs, enabling
 players to interact with games effectively.

• **Multi-sensory feedback:** a combination of sensory experiences can be provided for learners with disabilities to improve learning and engagement. Implement providing immediate and consistent feedback to help reiterate concepts for these learners.

These are the guidelines that can be used to develop more accessible games, divided into basic intermediate and advanced levels:

Basic	Intermediate	Advanced
Avoid flickering and repetitive patterns	Provide subtitles and highlight the important words	Provide high contrast between text/UI background
Use simple clear language and clear text formatting	Provide voice chat and text for multiplayer games	Narrative and instruction replayed
Text should be easily readable default font. These are the variables: font, thickness, font colour, size, background colour and transparency	Reinforce information through visuals or speech	Avoid sudden or unexpected movements or events
Allowing the game to be started without the need to navigate through multiple levels	Allow user to control the game. Option to adjust the game speed, effects, and music	Colour and control customisation option

Basic	Intermediate	Advanced
Include interactive tutorials or hints	Provide an option to turn off / hide background movement	Provide pre-recorded video covers for all text
Avoid using or providing control to turn off the game sounds that are ringing, buzzing, whistling, low- or high-pitched noises	Assistance that allows users to skip certain complex parts and proceed in the game	Colour coded game elements and visual notification that can also have audio warnings
Use iconography in the game		Screen magnifier or a locator to identify certain elements of the game

Accessible game design tools and methods

There are many tools and devices available to make video games accessible for players with a disability. Here is a list of useful tools:

Types of disabilities	Accessibility	Description	Example
Motor	Adaptive Video Game Controllers	Controllers with customizable layouts and adjustable force to accommodate different physical abilities. Compatible with various external devices like switches.	Xbox Adaptive Controller, Logitech controllers, Hori controllers, Access Controller for PS5
Motor	Customizable Keyboards and Mice	Special keyboards and mice that can be programmed or physically adjusted to fit specific physical needs, supporting adaptive gaming.	Programmable keyboards and mice for customized input setups

Types of disabilities	Accessibility	Description	Example
Motor	Voice Control Software	Software that allows players to use voice commands to control gameplay, enabling those with limited hand mobility to play games.	VoiceBot
Motor	Eye Tracking Technology	Eye tracking technology enables players with severe physical disabilities to control games using only their eye movements, offering a handsfree experience.	Tobii Eye Tracker

Types of disabilities	Accessibility	Description	Example
Motor	Adaptive Switches	Switches designed for alternative input methods, allowing control via body movements like sipping, puffing, or single button presses for limited mobility users.	Adaptive switches compatible with online and console games
Motor	Assistive Software	Specialized programs that adapt gameplay controls for players with motor disabilities, using eye gaze, head movements, or other inputs.	Special Effect's EyeMine (for Minecraft)

Types of disabilities	Accessibility	Description	Example
Visual	High Contrast Modes	Game settings that increase contrast to improve visibility for players with low vision.	Various games' high contrast modes
Visual	Text-to-Speech (TTS) Support	Reads in-game text aloud, which can assist visually impaired players in accessing information displayed on the screen.	Text-to- Speech functions available in settings of several games
Hearing	Subtitles and Closed Captioning	Displays in-game dialogue and sound cues in text format, helping hearing-impaired players follow storylines and gameplay.	Available in many modern games, often with customizable font size

Types of disabilities	Accessibility	Description	Example
Hearing	Visual Sound Cues	Visual indicators for important sounds in the game, like footsteps or alerts, to provide context without audio cues.	Games that offer sound cues like Fortnite
Cognitive	In-Game Hints and Tutorials	Step-by-step instructions and guidance within games to support players who may need extra help understanding gameplay mechanics.	Built-in tutorials and hint systems
Cognitive	Adaptive Gameplay Modes	Modes that adjust gameplay speed or complexity based on player performance, making games more accessible for players with cognitive challenges.	Adaptive difficulty settings, often available in puzzle and adventure games

Types of disabilities	Accessibility	Description	Example
Cognitive	Allows players to adjust the size, colour, and arrangement of the heads-up display (HUD) and user interface (UI), improving cognitive processing.	Visual indicators for important sounds in the game, like footsteps or alerts, to provide context without audio cues.	Many modern games offer customizable HUD settings



Conclusion



This guide has offered a new approach to understanding and teaching social entrepreneurship. By focusing on game creation, it has demonstrated the importance of hands-on learning, enabling youth to develop digital and social entrepreneurial skills while nurturing creativity and critical thinking. Game design allows learners to engage with real-world issues in a familiar context, showing how technology can be a tool for social good and helping them better understand their role in addressing global challenges.

The guide has highlighted key strategies educators can use to incorporate both technical and social skill development into their approach. Central to this is project-based learning and interdisciplinary collaboration, which create an active learning environment where learners are encouraged to take ownership of their work. At the same time, these methods support educators in building their own digital literacy to teach more effectively, ensuring a deeper connection between the youth's learning experiences and the technologies they use.

Looking ahead, the second part of the guide will provide practical worksheets and workshop scenarios, offering concrete tools and resources for educators. These hands-on activities will support educators in facilitating engaging, real-world applications of the ideas shared in this guide. By combining theory with practical exercises, educators can foster a learning environment that encourages creativity, critical thinking and social responsibility, preparing learners to make a lasting, positive impact in an ever-evolving digital world.



References



- Andersen, G. & MoldStud Research Team. (2024, January 19). The role of cultural diversity in video game design: representation and inclusivity [Blog]. Retrieved from https://moldstud.com/articles/p-the-role-of-cultural-diversity-in-video-game-design-representation-and-inclusivity
- Cezarotto, M., Martinez, P., & Chamberlin, B. (2022). Developing inclusive games: design frameworks for accessibility and diversity. In S. Branislav (Ed.), Game theory from idea to practice. doi: 10.5772/intechopen.102220
- Chang, J., Benamraoui, A., & Rieple, A. (2014). Learning-by-doing as an approach to teaching social entrepreneurship.
- Dijk, J., Lox, H., Fries-Tersch, E., Schwenke, A., Manoudi, A., & Bustos, E. (2013). Mobility and migration of healthcare workers in the EU. Health Policy and Technology, 2(3), 179–192. https://doi.org/10.1016/j.hlpt.2013.06.002
- EIT Digital. (2022). The future of education for digital skills. Retrieved from https://www.eitdigital.eu/fileadmin/2022/ecosystem/makers-shapers/reports/EIT-Digital_Report_The-Future-of-Education-for-Digital-Skills.pdf
- Jadán-Guerrero, J., Avilés-Castillo, F., Buele, J., & Palacios-Navarro, G. (2023). Gamification in inclusive education for children with disabilities:
 Global trends and approaches A bibliometric review. In Gervasi, O. et al.
 Computational Science and Its Applications ICCSA 2023 Workshops
 (Lecture Notes in Computer Science, Vol. 14104). Springer, Cham.
 https://doi.org/10.1007/978-3-031-37105-9_31

- Lee, L.K., Cheung, S.K.S., & Kwok, L.F. (2020). Learning analytics: current trends and innovative practices. Journal of Computers in Education, 7(1), 1–6. https://doi.org/10.1007/s40692-020-00155-8
- Microsoft Ignite. (n.d.). Gaming accessibility fundamentals [Learning path module]. Retrieved from https://learn.microsoft.com/en-us/training/modules/gaming-assistive-technologies/01-gaming-software?ns-enrollment-type=learningpath&ns-enrollment-id=learn.gaming-accessibility-fundamentals
- Nguyen, A., Gardner, L.A., & Sheridan, D. (2018). A framework for applying learning analytics in serious games for people with intellectual disabilities. British Journal of Educational Technology, 49(4), 673–689. doi: 10.1111/bjet.12625
- Oliveira, E., Sousa, G., Tavares, T., & Tanner, P. (2014). Sensory stimuli in gaming interaction: the potential of games in the intervention for children with cerebral palsy. 2014 IEEE Games, Media, Entertainment (GEM) Conference. doi: 10.1109/GEM.2014.7243758
- Punie, Y., & Redecker, C. (Eds.). (2017). European Framework for the Digital Competence of Educators: DigCompEdu (EUR 28775 EN).
 Publications Office of the European Union.
 https://doi.org/10.2760/159770
- Smith, I.H. (2021). Developing social entrepreneurs and social innovators: A social identity and self-efficacy approach.
- Stancin, K., Hoic-Bozic, N., & Mihic, S.S. (2020). Using digital game-based learning for students with intellectual disabilities a systematic literature review. Informatics in Education, 19(2), 323–341. doi: 10.15388/infedu.2020.15

- Statista. (n.d.). European video games market overview. Retrieved from https://www.statista.com/outlook/dmo/digital-media/video-games/europe
- The Gamer's Brain. (n.d.). How neuroscience and UX can impact video game design. Retrieved from https://thegamersbrain.com/
- TrainingZone. (2021, May 25). Study reveals huge digital skills gap in teaching. Retrieved from https://trainingzone.co.uk/study-reveals-huge-digital-skills-gap-in-teaching
- Tuzlukova, V., & Heckadon, P. (2019). Teaching social entrepreneurship through problem-based learning: Pedagogy and practice in the business English classroom.
- Video Games Europe. (2024). Key facts report 2023. Retrieved from https://www.videogameseurope.eu/publication/2023-video-games-european-key-facts/
- Worsham, E.L. (2012). Reflections and insights on teaching social entrepreneurship: An interview with Greg Dees. Academy of Management Learning & Education, 11(3), 442–452.
 https://doi.org/10.5465/amle.2011.0024

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