Rural Canvas Project

Fostering Rural Resilience through Creativity and Arts-driven Entrepreneurship

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Introduction

The overall aims and desired impact of the RURAL CANVAS Toolkit are to foster innovative pedagogical practices to boost the relevant entrepreneurial and 21st century skills (21CS) in students, to create adequate responses to current rural needs and to raise awareness of the necessity of integrating entrepreneurial competences and fostering 21CS for arts and creative industry (Project Proposal, p.108).

By using the RURAL CANVAS Toolkit, the skills provided by the Skill Prioritisation Map will be effectively promoted and imposed. Those skills derive from the table used by EntreComp and is further categorized in entrepreneurial and 21st century soft skills (EntreComp, 2016). There is a comprehensive set of tools, aimed at developing these skills of adult learners coming from arts and creative industries. These tools will be integrated into training modules, which can also be converted to MOOCs and be placed onto RURAL eCANVAS. Therefore, the RURAL CANVAS Toolkit will provide a step-by-step guidance for facilitators and study managers (Project Proposal, p.107). Both categories of entrepreneurial and 21st century soft skills were prioritised given the needs and characteristics of artists in rural areas.

The Toolkit will provide thorough and focused guidance on innovative teaching methods to stakeholders in the creative industry. It is aimed at artists and creative workers of all categories and sectors that are not by nature business oriented. Moreover, the Toolkit is addressed to facilitators, trainers and study managers who teach adult artists in rural areas. However, our aim is to draw the attention of all relevant audience that may be interested in or actively involved in building entrepreneurial and 21CS in the art industry in order to equip creative workers with the required competences.

The Skill Prioritisation Map, which preceded the Toolkit, gave insights on rural artists' opinions in terms of each skill's usefulness and necessity. For each prioritised skill there will be at least 5 different tools which will aid in teaching the given skill. The tools will be analysed and thoroughly explained in order to clarify which skill they are targeted at, as well as the way and the time it would be preferable to be used. It is also important to specify the learning methods and the resources that could be needed for their implementation. Furthermore, we should be able to predict the learning outcomes as well as possible variations, after having established the advantages and disadvantages of each tool.

The tools proposed in this Toolkit were based on innovative teaching methodologies depending on the needs of regions. Since learning is so fast-paced and rapidly evolving, trainings need to adapt to current demands and challenges. It is necessary to provide artists

and adult creative learners with up-to-date content based on modern techniques, which respond to the needs of each case so as to be able to deliver relevant results. Therefore, finding ways to bring informal learning into education plays an important role in this toolkit. This not only enhances motivation, but also creates new experiences that can have a practical use in real life, fulfilling their purpose. These innovative methodologies have to do with theories and practices of teaching and learning for the modern, technology-enabled world (Open University Innovation Report 4, 2015).

Toolkit

1. Evidence Based Learning

General Information

Evidence Based Learning is learning through tried-and-true practices and examples and it is supported by intensive research rather than subjective case studies and untested theories. An example of Evidence Based Learning in a Non-Fiction Text. A Non-Fiction Text is any text which isn't fiction and is based on facts. These texts can be found everywhere in life and they can range from a magazine picture to a newspaper article. Another way of Evidence Based Learning is through argumentation. Argumentation helps students attend to contrasting ideas, which can deepen their learning. It makes technical reasoning public, for all to learn. It also allows students to refine ideas with others.

When to use

Evidence Based Learning is a great way for teachers to establish where students are in their learning, decide on teaching techniques and monitor their progress as well as their teaching effectiveness. It is also used when there is the need to persuade or inform an audience. Learning through argumentation is an effective teaching tool to use when having an interactive class where students have to communicate with each other as well as with the teacher, or even with other members involved in the educational process. The purpose of an argument is to change an opinion or persuade.

Learning Outcomes

Their main purpose of Non-Fiction Text aims to inform about factual events or information, whilst entertaining the learner. Defining new terms will become easier when they can use contextual clues. It is a great tool for making real-world connections to build on learner's knowledge and personal experiences. Argument teaches learners how to evaluate conflicting claims and judge evidence and methods of investigation. They also help them learn to clarify thoughts and articulate them honestly and accurately as well as to consider the ideas of others in a respectful and critical manner. Argumentation promotes conceptual gains, equips learners with the ability to overcome misconceptions, promotes real-world problem solving, and prepares children to participate in authentic scientific reasoning.

Resources/Equipment needed

Evidence Based approaches require continuous data collection and analysis. However, it can rely on existing data and does not necessarily require extra investment. Non-fiction texts can include advertisements, reviews, letters, diaries, newspaper articles, information leaflets, magazine articles as well as sources of graphs, diagrams, tables and charts.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Evidence Based Learning allows learners and teachers to get into deeper cognitive areas. Therefore, it can have great impact and results. For example, "Non-fiction text" provides the ability to relay interesting facts and figures and not only to relay, but discuss, regardless if the other person is at the same point in the book or has even read it. Non-fiction reading is conducive to conversation, and is therefore also an interrogative and stimulating process. argumentation shifts the student from memorizing to understanding and reasoning plus Argumentation develops skills needed to solve problems in real-world situations.

Competences

- Spotting Opportunities
- Motivation & Perseverance
- Financial & Economic Literacy
- Ethical & Sustainable Thinking
- Mobilizing Resources
- Mobilizing Others
- Critical Thinking, problem solving, reasoning, analysis, interpretation, synthesizing information
- Perseverance, self-direction, planning, self-discipline, adaptability, initiative
- Global awareness, multicultural literacy, humanitarianism
- Civic, ethical and social-justice literacy
- Environmental and conservation literacy, ecosystems understanding

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2. Ideation Techniques

General Information

Ideation techniques provide an effective way to generate ideas in order to then choose the one that suits best. It is a combination of conscious and unconscious thoughts and imagination with the aim to understand, define and find solutions to problems. The most frequent practice of ideation is brainstorming.

When to use

This innovative tool is providing the learners a combination of two different learning environments, giving them the chance to foster all theoretic knowledge and boost it by putting it into practice. It is a creative process of forming new ideas. It is important to keep in mind to match the techniques with the ideas generated. These techniques need to also match the state of creativeness and productivity of the team members.

Learning Outcomes

Ideation techniques aim to develop the broadest possible range of creative options and ideas, to evaluate and to select the best of them. Brainstorming will offer better solutions to an issue or proposal because a wider range of options has been offered. It is a problem-solving activity where students build on or develop higher order thinking skills. It allows the exploration of multiple potential solution.

Resources/Equipment needed

There are no requirements.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

These sessions are a great learning method for students to voice their thoughts without having to worry about right or wrong. It is a great way to get a fresh view on different topics and discover new directions. This process promotes a creative feed through mutual stimulation of participants. However there needs to be a balance between team members in order for all to have an equal voice.

Competences

- Spotting opportunities
- Vision
- Planning & Management
- Creativity
- Taking the initiative

- Critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information
- Perseverance, self-direction, planning, self-discipline, adaptability, initiative
- Creativity, artistry, curiosity, imagination, innovation, personal expression

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3. Computational Thinking

General Information

Computational thinking is a powerful approach to thinking and problem solving. It involves breaking large problems down into smaller ones (decomposition), recognizing how these relate to problems that have been solved in the past (pattern recognition), setting aside unimportant details (abstraction), identifying and developing the steps that will be necessary to reach a solution (algorithms) and refining these steps (debugging).

When to use

Since computational thinking skills are beneficial for every sector, it is essential for instructors to use this type of tool for the cultivation of financial literacy or problem-solving skills and critical thinking.

Learning Outcomes

Computational thinking skills can be valuable in many aspects of life, ranging from writing a recipe to share a favourite dish with friends, through planning a holiday or expedition, to deploying a scientific team to tackle a difficult challenge like an outbreak of disease. The aim is to teach students how to structure problems so that they can be solved. Computational thinking can be taught as part of mathematics, science and art or in other settings. The aim is not just to encourage learners to be computer coders, but also to master an art of thinking that will enable them to tackle complex challenges in all aspects of their lives.

Resources/Equipment needed

There are no requirements.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Computational thinking runs through every aspect and function of a modern business. It has become more crucial in the 21st century workplace as so much is now data-driven. This runs in analysing consumer behaviour, in the movement in financial markets or in the performance of public services, like health or policing. There are a few job roles that require individuals to be able to think through problems in a way that a computer could understand.

Competences

- Planning & Management
- Critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information

- Information and communication technology (ICT) literacy, media and internet literacy, data interpretation and analysis, computer programming

Sources

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4. Public Speaking

General Information

Public speaking is a presentation given live before a crowd of people covering a wide range of topics. The objective of the speech might be to instruct, influence, engage, educate, or entertain the listeners.

When to use

Public speaking will often be in order to persuade others. This can be in a debate or formal speech, but can also be minor persuasions. It is a great way to get out of the comfort zone and develop communication skills. When public speaking is performed as part of an educational process, the speaker becomes used to it and can later use it more efficiently in the business arena.

Learning Outcomes

Public Speaking overall objective is to speak more confidently in front of an audience, utilising a variety of delivery skills such as eye contact, gestures, movement & vocal variety. It is an effective way to improve communication skills, increase self-esteem as well as the power of persuasion. It is an effective way to win over a crowd, motivate and inform people.

Resources/Equipment needed

There are no requirements.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Public speaking is one of the most important and most dreaded forms of communication. As communication is the backbone of any society, it allows us to form connections, influence decisions, and motivate change. Speaking events give positive pressure as people speak to an audience. Entrepreneurs do this when pitching to investors or speaking to customers.

Competences

- Vision
- Motivation & Perseverance
- Mobilizing Resources
- Mobilizing Others
- Taking the initiative

- Leadership, teamwork, collaboration, cooperation, facility in using virtual workspace

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5. Collaborative Learning

General Information

Encouraging student collaboration for various projects is an innovative method of teaching. Living in a globalized world, collaboration is an essential life skill that is important for all careers and enterprises. Trainers can help foster collaborative learning in the classroom by allowing students to learn, study and work in groups. For instance, by assigning group homework or encouraging students to work together on plays, presentations and other reports, collaboration is encouraged. Today, collaboration as a form of teaching is gaining acceptance as a powerful teaching tool where once again the responsibility is on the group of learners, as the educators play the role of guides, mentors, supervisors for the students.

When to use

Team work and the context of synergy are key features of business environments. The intended consequence of accomplishing tasks together is to help students learn the complexities of solving a problem and promote deeper learning through practise while developing the feeling of belonging to a group.

Learning Outcomes

Collaborative teaching techniques help in the development of higher-level thinking, oral communication, self-management as well as in gaining leadership skills. The intended consequence of accomplishing tasks together is to help students learn the complexities of solving a problem and promote deeper learning through doing.

Resources/Equipment needed

For this tool learners have to work in pears or as part of a group or a community.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience. For this tool the target audience is advised to work in groups.

Advantages & Disadvantages

Collaborative learning reinforces student motivation by offering more freedom while promoting student-faculty interaction. It also helps in the increase of student retention, self-esteem, responsibility and understanding of diverse perspectives. It also creates a small-scale simulation of real life social and employment situations.

Competences

- Motivation & Perseverance
- Mobilizing Resources

- Mobilizing Others
- Perseverance, self-direction, planning, self-discipline, adaptability, initiative
- Leadership, teamwork, collaboration, cooperation, facility in using virtual workspace
- Creativity, artistry, curiosity, imagination, innovation, personal expression

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6. Incidental Learning

General Information

Incidental learning refers to any learning that is unplanned or unintended. It develops while engaging in a task or activity and may also arise as a by-product of planned learning. Incidental learning can imply that the acquisition of knowledge is unconscious in nature. It is what happens when someone learns something new from watching television, reading a book, talking with a friend, playing a video game or, as many language students do, travelling to another country and surrounding ourselves with the language.

When to use

Incidental learning can occur in different concepts and time points through the educational process, as it emerges from everyday life as well as from each individual's personal and professional experience. The trainer can take advantage of naturally occurring events in order to build proper conditions for the learners.

Learning Outcomes

Incidental learning can result in improved competence, changed attitudes, and growth in interpersonal skills, self-confidence, and self-awareness. By using everyday tangible and intangible material students gain a better and more practical understanding of the course's objective.

Resources/Equipment needed

There are no requirements.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Incidental learning promotes active participation, encouraging curiosity and learning, while taking place in different and less restricted environments. However, the instructor can encourage the learning objective when organizing the lesson, taking into account the student's individual preferences. When the learner demonstrates an interest in an item or activity, the teacher encourages that interest by questioning or prompting the student.

Competences

- Spotting Opportunities
- Creativity
- Perseverance
- Leadership, teamwork, collaboration, cooperation, facility in using virtual workspaces

- Creativity, artistry, curiosity, imagination, innovation, personal expression

Sources

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7. Problem-Based Learning

General Information

Problem-Based Learning is a way to gain knowledge and skills by working on a problem case or scenario, trying to investigate and respond to engaging questions or challenges. Students identify a problem and then develop a solution. Problem-based learning is an active method of learning where students gain mastery through the application of their knowledge rather than rote memorization. Thus, it is not just about problem solving but also about using the appropriate situation to increase knowledge.

When to use

As it is a a flexible and engaging learning method it can be used when designing new lessons or improving existing ones and it can be applied in several contexts.

Learning Outcomes

The most effective way to prepare learners for realistic scenarios is using learning methods that are based on real life problems. This will reinforce for students the notion that they can break down problems into their component parts and take the lead to process the problem in order to find a solution. Problem-Based Learning is a method that combines the acquisition of knowledge with the development of competences.

Resources/Equipment needed

Trigger material can be used in order to engage learners in Problem-Based Learning, such as photographs, video clips, articles, journals etc.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Problem-Based Learning is a student-centered learning strategy that helps the student in many aspects. By making them take the initiative and the responsibility for their own learning they get more engaged in the learning process. In this sense, self-learning is being promoted and learners get deeply involved in the with real world problems. However, this can always be challenging as there is little guidance.

Competences

- Spotting Opportunities
- Planning & Management
- Ethical and sustainable thinking
- Taking the initiative
- Critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information

- Information and communication technology (ICT) literacy, media and internet literacy, data interpretation and analysis, computer programming
- Global awareness, multicultural literacy, humanitarianism
- Civic, ethical, and social-justice literacy
- Environmental and conservation literacy, ecosystems understanding

Sources

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8. Adaptive Learning

General Information

Even though all learners are different, most educational procedures and materials are the same for all. This creates a learning problem, putting a burden on the learner to figure out how to engage with the content. This means that some learners will be bored, lost, and very few are likely to discover the correct paths through which the result will be optimal. Adaptive learning offers a solution to this problem. It uses data about a learner's previous and current learning to create a personalized road through educational material.

When to use

Adaptive learning systems recommend the best places to start new contents and when to review old ones. It builds on longstanding learning practices, such as textbook reading, and add new layers such as computer-guided support. When having a group of learners with different backgrounds, skills and competences, the most important thing to do is to make relevant adjustments to the learning process in order to assure that all learners are treated with equity.

Learning Outcomes

It is aimed at achieving a common instructional goal with learners whose individual differences, such as prior achievements, aptitude, or learning styles differ. It is the delivery of custom learning experiences that addresses the unique needs of an individual through just-in-time feedback, paths, and resources

Resources/Equipment needed

Adaptive Learning is a personalized learning path that need to be customized in each case.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

The most important benefit of Adaptive Learning is that the teachers adapt the teaching methodology and material to respond to the strengths and needs of all learners. Data such as time spent reading and self-assessment can form a basis for guiding each learner through educational materials. Adaptive teaching can either be applied to classroom activities or in online environments where learners control their own pace of study.

Competences

- Spotting Opportunities
- Ethical & Sustainable Thinking
- Perseverance, self-direction, planning, self-discipline, adaptability, initiative

- Global awareness, multicultural literacy, humanitarianism
- Civic, ethical and social justice literacy
- Environmental and conservation literacy, ecosystems understanding

Sources

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9. Learning Analytics

General Information

Learning Analytics is a method used for the measurement, collection, analysis and reporting of data of learners and their environment. In this way, it helps in understanding and optimizing learning processes. Moreover, Analytics of Emotions can be perceived as part of Learning Analytics. Automated methods of eye tracking and facial recognition can analyze how students learn, and then respond differently to their emotional and cognitive states. More generally, students have mindsets, strategies and qualities of engagement that affect the way they gain knowledge.

When to use

Learning Analytics can be used for tracking progress and adapting activities and educational processes to the needs of the learner.

Learning Outcomes

Gathering and analysing data enables trainers to form new teaching and learning paths that respond to the learner needs. Learning analytics can capture data generated by learners and offer different learning engagement trends. The analysis of these trends can uncover learning behaviours and help identify learning attitudes. In the case of Analytics of Emotions, identifying and analysing the full human emotional spectrum in relation to their preferences

Resources/Equipment needed

It is important to use skilled data analysts and programs in order to have the best possible results. Databases and screening tools such as measure key indicators are necessary for such learning strategies. A promising approach is to combine computer-based systems for cognitive training with the expertise of trainers in order to be able to respond to students' emotions and needs, so that trainings can become more targeted to each learner.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

In Learning Analytics, it is important to be able to work with a variety of different datasets in order to optimize learning outcomes. Profiling a learner without taking into account the emotional aspects that may hinder the learner's progress, can only offer an incomplete view of the learning experience. Therefore, Analytics of Emotions take into account both mental and emotional perspectives of each learner.

Competences

- Motivation & Perseverance

- Creativity
- Leadership, teamwork, collaboration, cooperation, facility in using virtual workspace
- Information and communication technology (ICT) literacy, media and internet literacy, data interpretation and analysis, computer programming
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Sources

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10. "Real-World" Learning

General Information

Infusing real-world experiences into learning instructions can enrich the learning experience. Relating education to true conditions and demonstrating through real-life situations can make the educational material easy to comprehend and work with. It also sparks learners' interest and gets them motivated and involved. Real-World Learning can occur when learners get involved with community members or local ecosystems for example by researching local businesses or by volunteering.

When to use

When the option of involving real business actors that are willing to participate in teaching activities, or getting learners go outside of the classroom, then real world stimulation becomes an educational process. When trying to make a real linkage between education and job market, it is essential to get them both involved at an early stage.

Learning Outcomes

Real World learning gives learners the opportunity to apply their knowledge to problems outside of a classroom environment. Experiential learning programs promote interdisciplinary understanding, relationship management and develop practical and intellectual skills that are in high demand by employers. What is more, by taking advantage of practices existing in the community, trainers can improve knowledge retention, skill acquisition, and business orientation because students can be given more opportunities when applying learning in practical settings.

Resources/Equipment needed

In order to promote Real World Learning, various resources have to be exploited. Those resources derive from the community in different contexts.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience. Community services and community workers are also key stakeholders.

Advantages & Disadvantages

Learners can take in new knowledge in unpredictable settings, even uncomfortable environments, so that they can be forced to focus on many things at once, seeing the bigger picture. They become more interested concepts and more inspired to learn, if academic study is connected to practical issues, and contexts. Working with people in the community helps to make meaningful contact with stakeholders such as employers, employees and customers. Students engage with real-life problems, developing a better understanding of how theory can be turned into practical action.

Competences

- Vision
- Financial & Economic Literacy
- Planning and Management
- Ethical & Sustainable Thinking
- Mobilizing Resources
- Mobilizing Others
- Taking the initiative
- Global awareness, multicultural literacy, humanitarianism
- Civic, ethical and social justice literacy
- Environmental and conservation literacy, ecosystems understanding

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11. Learning through Technology

General Information

The use of technology in the learning process helps in the engagement of the learner with different kinds of stimuli and creates an environment of interactive learning. It makes the educational content more interesting and makes learning more fun. For trainers, technology offers a variety of resources that they can tap into depending on the learners needs. When looking for effective teaching methods in a classroom, turning towards the latest technology will offer a vast number of solutions. The use of cloud computing is one such method where teachers can save vital classroom resources such as lesson plans, notes, audio lessons, videos, and assignments details on the classroom cloud. Moreover, instead of taking the students through a somewhat boring class, the trainers can use 3D technology and virtual reality to explore new environments.

When to use

Online education and the use of digital platforms is preferred by individuals who may not be able to attend classes in traditional settings. It provides an interactive and innovative solution to traditional teaching and learning. It can be used for remote classes as learners and teachers can access the teaching material through the internet. As part of Learning through Technology, Virtual Reality would be an effective teaching tool as it annihilates time and distance. It can be used for the recreation of real-life structures and places or even for the creation of illusions.

Learning Outcomes

Bringing technology into the classroom allows educators to experiment with innovative methods of teaching. Most of the time, most of what is being taught in a course is forgotten within a week or two after the end of classes. Knowing how to find information online ensures that learning materials are always available to all, making them easier to revise. What is more, online courses foster self-discipline as the motivation to study in an online course comes from the individual.

Resources/Equipment needed

Teaching through Technology requires first of all connection to the internet as well as a device such as a smartphone, a tablet or a computer. Smart devices such as smart boards may also be the case in this learning procedure. Through this tool, the educational process becomes more interactive by using a common teaching instrument such as the blackboard and turning it into an interactive experience. Moreover, when involving virtual reality experience, there is a necessary equipment required that consists of cables and VR headsets.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience. As this tool

involves the use of digital material, there participants involved require certain technological literacy.

Advantages & Disadvantages

Online education offers both students and teachers a variety of benefits. First of all, it is a flexible method that promotes remote education providing solutions to time management. It also reduces the costs of commuting and transportation. It also offers networking opportunities as learners get the chance to work with peers across nation. Moreover, all the information that students need are safely stored in an online database. Free sites that are used by entrepreneurs to establish platforms and grow audiences can be also used by learners in order to practice the same methods that modern entrepreneurs use to promote their work. Smart devices promote an enriched learning experience by projecting visual elements. However, the use of online platforms should not replace student and teacher live interaction as it may alienate the educational process and its learning outcomes.

Competences

- Planning & Management
- Leadership, teamwork, collaboration, cooperation, facility in using virtual workspace
- Information and communication technology (ICT) literacy, media and internet literacy, data interpretation and analysis, computer programming

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12.   Learning through Prototyping

General Information

Trainers looking for innovative methods of teaching can adopt Learning through Prototyping. This method is fast gaining wide acceptance, especially when trying to make complex concepts easy to understand. Content that was previously taught via textbooks, can be further explained through prototyping in order to help students gain a better understanding of the concept since prototypes provide the abstract representation for many stimuli. Prototypes help in determining the effectiveness of a design solution before the final product is produced.

When to use

When a concept is not that easy to comprehend theoretically, prototyping is an effective way to visualize and work on it. Unlike conventional learning concepts where learners can easily lose their interest, they become active and engaged participants through the conception, design, and execution of their projects and interacting with prototyping.

Learning Outcomes

Prototypes improve the overall understanding of a context or design. It can be perceived as a bridge between the physical and the digital world. Visualizing abstract such as exploring geometric shapes in 3D and seeing the behaviour of physical structures under different loads and environmental conditions can be quite beneficia. Cognitive areas and daily choices can also be visualized more easily through prototyping. It improves the educational process by providing students with memorable and immersive experiences that would otherwise not be possible.

Resources/Equipment needed

Prototyping requires some digital or handicraft competence. Depending on the case, different tools can be used, including computers, magnifying lenses, constructing materials etc.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience. As this tool may involve the use of digital material, the participants involved require certain technological literacy.

Advantages & Disadvantages

This method involves producing an early, inexpensive, and scaled down versions of the product in order to reveal any problems with the current design. It offers students the ability to experience their projects from the model stage to the actual creation of the final

outcome. It also provides learners with opportunities to experiment with ideas, expanding and growing their creativity.

Competences
• Creativity • Creativity, artistry, curiosity, imagination, innovation, personal expression

Sources

Fedena (2019). Innovative Methods of Teaching Strategies : That Will Help Every Teacher In The Classroom. Retrieved from: https://fedena.com/blog/2019/02/innovative-methods-of-teaching-strategies-that-will-help-every-teacher-in-the-classroom.html

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13.   Gamification

General Information

Gamification is a technique that introduces game play in non-gaming environments such as a classroom. It is an innovative, interactive and collaborative learning tool that brings together game strategies in learning environments in order to increase the learner's engagement. Game based elements such as keeping score, fulfilling tasks or building teams are key features for Gamification.

When to use

Gamification is used to encourage learners to follow certain content through action taken by themselves, to influence and motivate their behavior.

Learning Outcomes

Gamification techniques make learning more engaging for the learner. They orientate specific goals and provide immediate feedback to the players-learners as the results are ultimate; they win or lose. With the introduction of game elements such as scores, rewards and badges, the learner get highly motivated to proceed.

Resources/Equipment needed

Gamification techniques use a variety of different tools that are found in gaming context such as, software, video or board games.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

What is one of the most characteristic assets of gamification is that it brings gaming in educational environments, making the learning process more fun. With gamification, students experience autonomy as they get ownership of their learning. Having different sets of tasks to accomplish, makes the player-learners adopt managerial competences. What is more. it gives the learners the opportunity to lose or fail without the negative repercussions as they can get back to the game right away.

Competences

- Financial & Economic Literacy
- Information and communication technology (ICT) literacy, media and internet literacy, data interpretation and analysis, computer programming

Sources

Kapp, K., (2012), The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education, Pfeiffer, ISBN 978-1118096345.

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14.   Business Model Thinking

General Information

Business Model Thinking is based on non-traditional approaches. It focuses on educational processes that train individuals on how to identify opportunities, create business ideas and develop business plans. It is a process of breaking down all the parameters that form a business plan that can then be synthesized in order to build a whole business. Business Models can form the concept of a business, its framework, processes, requirements, challenges and opportunities and its performance in the market.

When to use

Business Model Thinking is addressed to those who want to get actively involved with business management in general and seek knowledge on such related topics.

Learning Outcomes

Business Model Thinking is considered necessary when getting involved with business management and when creating a sustainable entrepreneurial plan. Through this approach, learners get the opportunity to get the appropriate training on professional behavior and sustainable management.

Resources/Equipment needed

There is a wide range of Business Models that can be used when setting an outline of a business and can be considered the architectural skeleton of a business. Here we propose the Business Model Canvas which sets the framework within which the stakeholders can operate.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Business Model Thinking serves as a method that enables individuals to fully understand the concept of a business as it sets the basis for the preparation of a business plan. It encourages the recognition of crucial strategic components and boosts understanding of entrepreneurial concepts. It can be used in various contexts as it sets the general framework on which any business can be based. However, it needs to go beyond the theoretical parts and take into account all practical aspects of building a business in order to be considered successful.

Competences

- Spotting Opportunities
- Vision
- Financial & Economic Literacy

- Planning & Management
- Mobilizing Resources
- Mobilizing Others
- Taking the initiative
- Critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information
- Information and communication technology (ICT) literacy, media and internet literacy, data interpretation and analysis, computer programming

Resources

Becker, Marco; Bröcker, Jan-Oliver (2021) : Business Model Canvas - Overview of the main advantages and disadvantages, IUCF Working Paper, No. 6/2021, ZBW - Leibniz Information Centre for Economics, Kiel, Hamburg

Demil, B., Lecocq, X. & Warnier, V. (2018). "Business model thinking", business ecosystems and platforms: The new perspective on the environment of the organization. M@n@gement, 21, 1213-1228. https://doi.org/10.3917/mana.214.1213

Murphy, R., Sharma, N. & Moon, J., (2012), Empowering Students to Engage with Responsible Business Thinking and Practices, Business & Professional Ethics Journal, 31:2,2012,

15. Reflective Learning

General Information

Reflective Learning can be perceived as an educational technique that is based on learning experiences. The learners should be aware of all learning processes and their performance in them, in order to be able to reflect on and assess their gained knowledge.

When to use

When trying to engage learners in the teaching process, making them develop, assess and reflect on their own competences is an effective educational approach.

Learning Outcomes

Reflective learning concentrates on building up competences through an inward process of exploring areas of strength and areas of improvement. Therefore, it is linked to personal growth as it relies on assessing a situation and thinking critically about what is being learned, in order for someone to create and learn from their own feedback.

Resources/Equipment needed

There is no equipment needed.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Reflective learning helps the learner assess and monitor their own learning. Thus, it directs the student's needs by introducing a relative autonomy in the educational process. The most important aspect of reflective learning is that it creates the right conditions to promote a better understanding of both cognitive outcomes and the student's strengths and weaknesses. However, reflection is not always an easy process as it requires taking a step back so as to digest and work through everything.

Competences

- Motivation & Perseverance
- Ethical & Sustainable Thinking
- Perseverance, self-direction, planning, self-discipline, adaptability initiative
- Global awareness, multicultural literacy, humanitarianism
- Civic, ethical and social-justice literacy
- Environmental and conservation literacy, ecosystems understanding

Resources

Patrick, F., (2011). Handbook of Research on Improving Learning and Motivation. p. 1003. ISBN 978-1609604967.

Moon, J. (2004). A Handbook of Reflective and Experiential Learning:Theory and Practice. London: Routledge Falmer. p. 126.

Boser, U., (2018). Learning Is a Learned Behavior. Here's How to Get Better at It. Harvard Business Review

16.   Learning by Doing

General Information

In Learning by Doing approach, learners interact and get actively engaged with the learning environment and processes. In this way, learners get a hand on experience of the subject and are not limited to theoretical knowledge. Learning by Doing is considered an experiential and activity-based learning technique, as it is developing all outcomes on the active involvement and gained experience of the learner.

When to use

Learning by Doing has the greatest possible results when the learner has laid some initial foundations on which to develop practical experience. It is thus a process that is constantly evolving.

Learning Outcomes

The main outcome of the Learning by Doing approach has to do with the direct way in which knowledge is acquired, as the learner is practically working on the subject. All theoretic knowledge can be supported and complemented by practices.

Resources/Equipment needed

In Learning by Doing many resources might be needed, depending on the learning approach. For example, a learner can get the experience needed by participating in workshops, working in laboratories or by engaging with the community.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

For this technique, it is necessary for the learner to break out of the knowledge offered by a book and interact with the natural and social environment. Therefore, it promotes getting out of the comfort zone and of traditional learning practices and live the learning experience.

Competences

- Spotting Opportunities
- Motivation & Perseverance
- Financial & Economic Literacy
- Planning & Management
- Creativity
- Ethical & Sustainable Thinking
- Mobilizing Resources

- Taking the initiative
- Critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information
- Perseverance, self-direction, planning, self-discipline, adaptability, initiative
- Information and communication technology (ICT) literacy, media and internet literacy, data interpretation and analysis, computer programming
- Global awareness, multicultural literacy humanitarianism
- Civic, ethical and social-justice literacy
- Environmental and conservation literacy, ecosystems understanding
- Creativity, artistry, curiosity, imagination, innovation, personal expression

Resources

Abuzandah, S. (2021). Philosophy of Learning by Doing and Pay Attention to Content. Asian Journal of Sociological Research, 4(3), 41-44.

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17.   Learning through Narratives

General Information

Learning through Narratives means learning though stories that are told in an educational manner and are heard and recognized by the learner. The learner makes sense out of a story and therefore is able to link it to their own experience. A version of Learning through Narratives could be storyboard learning which is used as a method to tell stories in a visual way. Teachers encourage the use of storyboards as a form of communication and let the students tell a story in pictures using their imagination.

When to use

Narratives are a tool that can be used in order to create further meaning to one's experience while building their understanding in various concepts. For example, storyboards can be used when the subject requires memorization or visualization of ideas.

Learning Outcomes

Learning through Narratives is a concept that focuses on experience and reflection through the use of stories. The learners are exposed to narratives in order to understand the concepts analyzed through examination and interpretation. Learners are able to create knowledge and give feedback to themselves through narratives that boost their experience. Such visually stimulating activities can make sure that even complex ideas can be adapted to the needs and challenges of the learners.

Resources/Equipment needed

Learning through Narratives requires the use of stories. The stories used can be either imaginary or true and can be further used in activities such as role playing. In other activities such as storyboards, the teacher has to provide the learners with a storyboard template in order to help them draw pictures and write captions.

Target Audience

Art workers who want to get actively involved in the field of entrepreneurship and the business market as employees or freelancers are the main target audience.

Advantages & Disadvantages

Narratives increase the learner's understanding as they explore contexts in a more creative way. When students are exposed to narratives, it is easier for them to identify the ideas and be part of the story, so that they understand the contents and respond to the challenge. It is also an effective way for teachers to check learner's comprehension before moving on to the next task.

Competences

- Spotting Opportunities
- Vision

- Financial & Economic Literacy
- Planning & Management
- Creativity
- Ethical & Sustainable Thinking
- Mobilizing Resources
- Mobilizing Others
- Critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information
- Global awareness, multicultural literacy, humanitarianism
- Civic, ethical and social-justice literacy
- Environmental and conservation literacy, ecosystems understanding
- Creativity, artistry, curiosity, imagination, innovation, personal expression

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Conclusion

All of the abovementioned tools are used for the purposes of creating online training modules that correspond to the needs of the competence development. Therefore, 4 training modules can be developed, combining the tools and merging the necessary competences into these 4 basic categories:

- Spotting opportunities, vision, creativity, innovation, artistry, curiosity
- Financial & economic literacy, planning and management, mobilizing resources, mobilizing others, ICT literacy, Leadership
- Ethical and sustainable thinking, global awareness, civic-ethical-social-justice literacy, environmental and conservation literacy
- Motivation and perseverance, taking the initiative, perseverance

The training modules can be incorporated into courses provided by VET centers in order to boost their learners' competences and increase their chances to enter the labour market and be able to promote their work effectively. The tools provided in this Toolkit as well as the training modules are to be evaluated by a team of experts as for their effectiveness.

To ensure the long-term success of global economy, VET providers must be able to self-examine their programs and practices to make sure that learners – and future workforce- are equipped with the skills and knowledge to be up to date with entrepreneurial and 21st-century skills and methodologies. The evaluation of the learners will be conducted through pre and post assessment quizzes that will determine the progress and outcomes of the modules.

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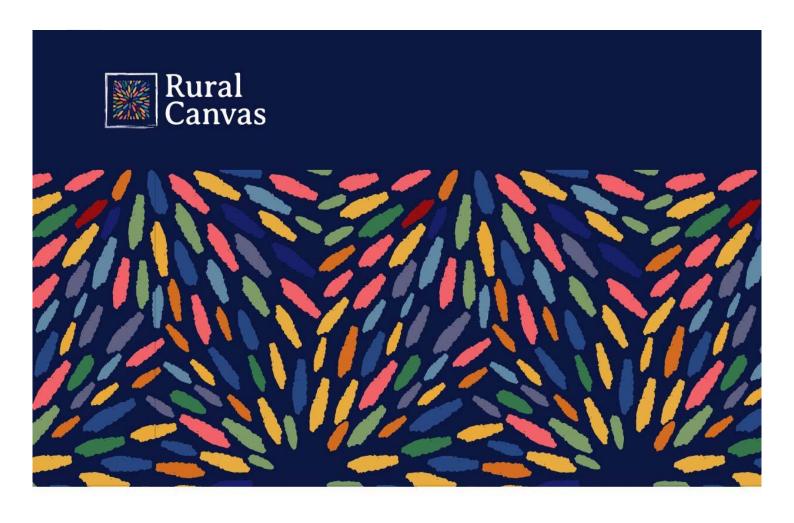
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