

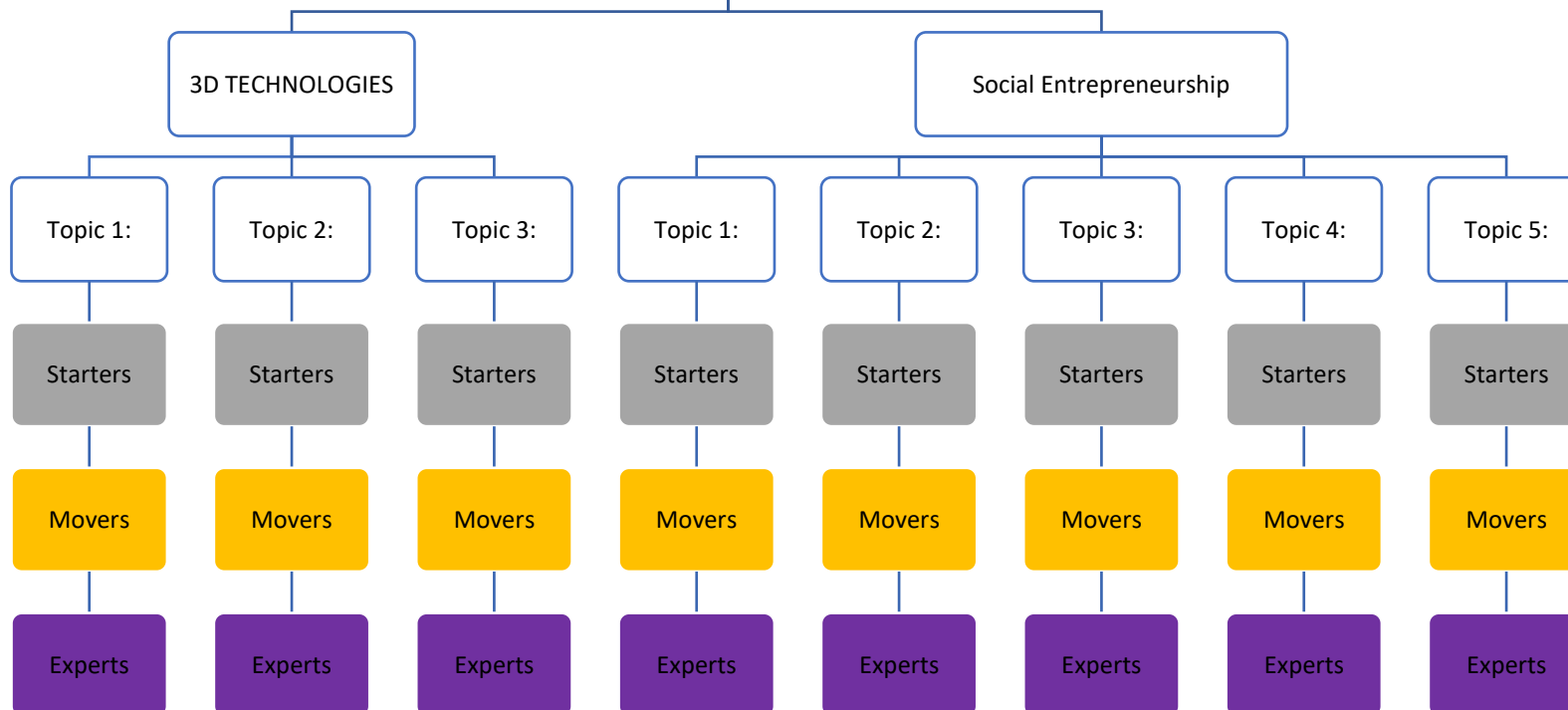


Promoting digital transformation and social innovation in VET
for better access of deaf students to the labour market

2022-1-PL01-KA220-VET-000086953

DUAL COMPETENCE FRAMEWORK





Module: 3D TECHNOLOGIES

Topic 1: Introduction to 3D design & 3D printing

- *What is 3D printing*
- *Areas where 3D is involved and future of 3D printing*
- *How does 3D printing work for the deaf people*

Module: 3D TECHNOLOGIES
Topic 1: Introduction to 3D design & 3D printing

Main objective: *The main objective of this topic is to gather basic knowledge on what 3D printing is and how it can be useful for deaf people.*

| Module and Topic: | Learning Outcomes | | |
|-------------------|--|---|--|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-topic 1: What is 3D printing | | |
| | What is 3D 3D software Types of 3D print | Developing 3D imagination and skills Knowledge of types of software and libraries available online Ability to point to main 3D printing methods | 3D thinking, imagination of form and scale of the object in 3D dimension Field-oriented sources of tools Awareness of 3D printing technologies characteristics |
| MOVERS | Sub-topic 2: 3D print involvement areas and the future of 3D printing | | |
| | Areas where 3D printing is used Knowledge on what is the future of 3D print | Implementation of 3D techniques in various fields and their developing role | The consciousness of the growing presence of 3D printing now and in the future |

| Sub-topic 3: How does 3D printing work for the deaf people | | | |
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| EXPERTS | What deaf people can use the 3D for. Understand the use of 3D to help deaf people | Problem-solving skills | Widening everyday life experience for deaf people through the presence of 3D printing Educational and practical values of 3D print for disabled |

Module: 3D TECHNOLOGIES

Topic 2: The 3D Printing Process

- Introduction to Tinkercad online software (theoretical part)
- Introduction to CURA slicing software (theoretical part)
- Preparation of 3D Printer

Module: 3D TECHNOLOGIES
Topic 2: The 3D Printing Process

Main objective: *The main objective of this module is to provide the theoretical knowledge necessary for preparing the 3D print of an object; from designing the model using Tinkercad, and preparing the file using Cura online software, to configuring the 3D printer.*

| Module and Topic: | Learning Outcomes | | |
|-------------------|--|--|---|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-topic 1: Introduction to Tinkercad online software (theoretical part) | | |
| | Introduction to the basic concepts of Tinkercad online software | Developing the ability to model 3D objects before printing requires knowledge of various measurements and the assembly of joined pieces. | Creating the shapes and scale of the object in 3D dimension Utilizing tools in the software Awareness of materials for assembly |
| | Sub-topic 2 : Introduction to CURA slicing software (theoretical part) | | |

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| MOVERS | Introduction to the basic concepts CURA software | Understanding the temperature, material replacement, support during printing, and processing time. | Awareness during printing and the time process, the final result of the 3D material. |
| EXPERTS | Sub-topic 3: Preparation of 3D Printer (material to be used, the temperature of nozzle/bed etc.) | | |
| | The participants need to be familiar with the types of materials used in the 3D printing process. | Understanding the types of materials and how they could be used based on needs, as well as managing material space in the 3D printer. | Understanding the printer temperature, the use of materials for finalization, and the requirements. |

Module: 3D TECHNOLOGIES

Topic 3: Hands-on practice on software

- Introduction to Tinkercad online software & CURA slicing software (practical part)
- Create your own design
- 3D printing (finalization)

Module 3D TECHNOLOGIES
Topic 3 - Hands-on practice on software

Main objective: The main objectives of this topic are for the teachers to design and visualize 3D designs/objects, functional prototyping using Tinkercad, customization and personalization using both Tinkercad and Cura online software, finalization of the 3D designs and printing the end product.

| Module and Topic: | Learning Outcomes | | |
|-------------------|---|---|--|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-Topic 1: Introduction to Tinkercad online software & CURA slicing software (practical part) | | |
| | How to use the TinkerCad interface How to add and customize different shapes Introduction to Cura software | Know how to use TinkerCad Know how to use Cura | Functionality Simplicity Durability Accessibility Sustainable design |
| MOVERS | Sub-Topic 2: Create your own design | | |
| | How to use the TinkerCad interface How to add and customize different shapes How to design the mobile phone stand | Know how to use TinkerCad Know how to design a 3D object | Functionality Simplicity Durability Accessibility Sustainable design |

| Sub-Topic 3: 3D printing (finalization) | | | |
|--|---|---|--|
| EXPERTS | How to use the TinkerCad interface How to add and customize cube shape How to use Cura software to slice the 3D object How to print the 3D object How to use this object to store tools | Know how to use TinkerCad Know how to use Cura Know how to print a 3D object Know how to finalize the object | Functionality Simplicity Durability Accessibility Sustainable design |

Module: Social Entrepreneurship

Topic 1: Introduction to Social Entrepreneurship

- Introduction to entrepreneurship & important skills of an entrepreneur
- Introduction to social entrepreneurship for deaf people
- Differences between ideas and opportunities

Module 2: Social Entrepreneurship
Topic 1: Introduction to social entrepreneurship

Main objective: The aim of this module is to give an overall introduction to theoretical and practical aspects of social entrepreneurship concept and process and give

| Module and Topic: | Learning Outcomes | | |
|-------------------|---|--|---|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-topic 1: Introduction to entrepreneurship & important skills of an entrepreneur | | |
| | Introduction to the basic concepts of social entrepreneurship and to the basic skills of an entrepreneur | Identify and describe: <ul style="list-style-type: none"> • Social entrepreneurship • Innovative thinking • Problem-solving | In-depth knowledge of entrepreneurship and skills |
| MOVERS | Sub-topic 2: • Introduction to social entrepreneurship for deaf people | | |
| | Have a better understanding of social entrepreneurship. Have a basic understanding of the deaf and hard of hearing community | Improve skills to deal with difficulties Draw conclusions from the examples | Recognize and improve autonomously differences and similarities between „entrepreneurship" and „social entrepreneurship". Improve autonomously the entrepreneurial processes |

| Sub-topic 3: Differences between ideas and opportunities | | | |
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| EXPERTS | <p>Have a better understanding of the differences between ideas and opportunities</p> <p>Identify the points that should be focused on according to the objectives</p> | <p>Develop and evaluate the transformation from ideas into opportunities</p> <p>understand and appreciate the value of ideas</p> | <p>Be able to transform for further success</p> <p>Develop strategies to make the most of the value generated by ideas</p> <p>Set new goals, and develop new vision</p> |

Module: Social Entrepreneurship

Topic 2: Creativity & Vision in Social Entrepreneurship

- Introduction to creativity and why creativity is important for deaf people.
- Creativity and social entrepreneurship
- Develop a vision to turn ideas into action

Module 2: Social Entrepreneurship
Topic 2: Creativity & Vision in Social Entrepreneurship

Main objective: *The main objective of this module is to explore creativity and its significance for deaf individuals.*

| Module and Topic: | Learning Outcomes | | |
|-------------------|--|---|--|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-topic 1: Introduction to creativity and why creativity is important for deaf people. | | |
| | <p>Creativity on 3D printing applied to social entrepreneurship.</p> <p>Social perspective on benefits, challenges and advantages of 3D technologies.</p> <p>Getting basic 3d designs thinking on social ideas.</p> | <p>Imagination</p> <p>Divergent thinking</p> <p>Communication (both listening and speaking skills)</p> <p>Organizational skills</p> | <p>Flexibility/Adaptability</p> <p>Situational awareness</p> <p>Focus on a specific task</p> |

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| | Sub-topic 2: Creativity and social entrepreneurship | | |
| MOVERS | 3D models acquisition from (free) online repositories and promoting social value . Basics of modelling in 3D adding <u>creativity value</u> thinking on business opportunities taking the reduced financial risk. | Creativity Divergent thinking Teamwork Collaboration skills Communication (both listening and speaking skills) Problem-solving | Information discovery and retrieval. Critical thinking Flexibility/Adaptability Experimenting Improvisation Situational awareness Focus on a specific task Goal setting Patience |
| | Sub-topic 3: Develop a vision to turn ideas into action | | |
| EXPERTS | 3D design choices and their implementation in social entrepreneurship plan . Scenarios where experimentation, solutions generation, and problem-solving day-to-day life. | 3D design choices and their implementation Experimentation, solutions generation, and problem-solving Ability to export 3D model files from TinkerCAD. | Imagination Creativity Resourcefulness Divergent thinking Communication (both listening and speaking skills) Organizational skills Problem-solving Decision making Critical thinking Flexibility/Adaptability Experimenting Improvisation Situational awareness Focus on a specific task Time management Goal setting Patience |

Module: Social Entrepreneurship

Topic 3: Mobilizing resources

- Introduction to mobilizing resources
- What resources are needed for a social entrepreneur (material, non-material and digital)
- How to use resources responsibly

Module 2: Social Entrepreneurship
Topic 3: Mobilizing resources

Main objective: *Topic 3 covers the identification of material, non-material, and digital resources, emphasizing responsible utilization. The goal is to empower participants for successful social entrepreneurship ventures within the deaf community.*

| Module and Topic: | Learning Outcomes | | |
|-------------------|--|---|---|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-topic 1: Introduction to mobilizing resources | | |
| | Comprehend the fundamental concepts of resource mobilization in the context of social entrepreneurship. | Develop the ability to identify various types of resources required for social entrepreneurship, including material, non-material, and digital resources. | Foster a sense of responsibility and ethical consideration in resource utilization for sustainable social entrepreneurship. |
| | Understand the significance of effective resource utilization for the success of entrepreneurial ventures. | Acquire the skill to analyze and prioritize resources based on their relevance and impact on the sustainability of entrepreneurial endeavors. | Instill a proactive and resourceful mindset, encouraging participants to seek innovative solutions to overcome resource-related challenges. |
| | Gain insight into the role of resource mobilization in fostering economic | Cultivate a strategic mindset for leveraging resources to address | Cultivate a positive attitude toward resource mobilization as a tool for empowerment and |



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| | independence within the deaf community. | challenges and capitalize on opportunities in the business landscape. | community development within the deaf entrepreneurship context. |
| | Sub-topic 2: What resources are needed for a social entrepreneur (material, non-material and digital) | | |
| MOVERS | <p>Acquire a comprehensive understanding of the diverse resources essential for a social entrepreneur, spanning material, non-material, and digital realms.</p> <p>Identify specific examples of material resources, recognizing their tangible impact on business operations and sustainability.</p> <p>Grasp the significance of non-material and digital resources in enhancing the effectiveness and reach of social entrepreneurship initiatives.</p> | <p>Develop the skill to assess and prioritize material resources, understanding their role in product/service development, production, and distribution.</p> <p>Acquire proficiency in leveraging non-material resources, such as networks, relationships, and knowledge, to enhance the overall impact of social entrepreneurship endeavors.</p> <p>Cultivate digital literacy skills, enabling effective utilization of digital resources for marketing, communication, and organizational efficiency.</p> | <p>Foster an appreciation for the diversity of resources and their potential to drive positive social change.</p> <p>Instill a mindset of resourcefulness, encouraging participants to creatively source and utilize various resources to address challenges.</p> <p>Cultivate an attitude of adaptability, recognizing the dynamic nature of resource needs in the evolving landscape of social entrepreneurship.</p> |
| | Sub-topic 3: How to use resources responsibly | | |
| EXPERTS | <p>Understand the principles of responsible resource management in the context of social entrepreneurship.</p> <p>Grasp the environmental, social, and economic implications of resource</p> | <p>Develop skills in assessing the environmental impact of resource utilization and implementing strategies for sustainable practices.</p> <p>Acquire the ability to make informed decisions on resource allocation, considering long-term</p> | <p>Instill a sense of social responsibility, emphasizing the positive impact of resource-conscious entrepreneurship on communities.</p> <p>Foster ethical values in decision-making, encouraging</p> |

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| | <p>utilization and its impact on the sustainability of ventures.</p> <p>Acquire knowledge of ethical considerations and best practices for responsible resource use.</p> | <p>effects on the community and business operations.</p> <p>Cultivate negotiation and collaboration skills for responsible resource-sharing within the entrepreneurial community.</p> | <p>participants to prioritize responsible resource use over short-term gains.</p> <p>Cultivate a mindset of innovation and adaptability, inspiring participants to explore environmentally friendly and socially responsible alternatives in their business practices.</p> |
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Module: Social Entrepreneurship

Topic 4: Business Model Canvas

- What is a Business Model Canvas – introduction
- What to pay attention to and what to avoid
- How to create your own canvas – step by step

Module 2: Social Entrepreneurship
Topic 4 : Business Model Canvas

Main objective: *The purpose of this topic is to collect information about the business model canvas tool, its specifics and how to use it to make it easier for deaf people to start their own businesses.*

| Module and Topic: | Learning Outcomes | | |
|-------------------|---|---|---|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-topic 1: What is a Business Model Canvas – introduction | | |
| | A theoretical introduction to the topic What is a business model canvas What elements does the canvas consist of? Advantages of canvas | Development of knowledge about company management Identification of canvas elements and its advantages | Understanding the principles and ideas of how the company operates Awareness of various solutions in business planning Getting information Knowledge development |
| MOVERS | Sub-topic 2: What to pay attention to and what to avoid | | |
| | Practical tips to start working with canvas | Formulating your business | Awareness of ones advantages and disadvantages |

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| | <p>How to define your business</p> <p>What mistakes to avoid</p> | <p>Selection of the area of activity and related aspirations</p> <p>Paying attention to possible errors and problems</p> | <p>Determining ones needs and goals</p> <p>Critical thinking</p> <p>Imagination</p> <p>Preparation</p> <p>Analysis</p> <p>Planning</p> |
| EXPERTS | Sub-topic 3: How to create your own canvas – step by step | | |
| | <p>Introducing the canvas template</p> <p>Going through subsequent elements and steps to be performed</p> <p>Detailed steps on how to create a business plan</p> | <p>Creating your own business model</p> <p>Identification of needs, opportunities, problems</p> <p>Conducting discussions</p> <p>Team management</p> <p>Division of responsibilities and areas of activity</p> | <p>Creativity</p> <p>Imagination</p> <p>Analytical thinking</p> <p>Decision-making</p> <p>Setting goals</p> <p>Teamwork</p> <p>Communication</p> <p>Independence</p> <p>Taking responsibility</p> |

Module: Social Entrepreneurship

Topic 5: Financial and economic literacy

- Introduction to financial and economic literacy
- Basics of budgeting
- Make a plan for the financial sustainability of a value-creating activity

Module 2: Social Entrepreneurship
Topic 5: Financial and economic literacy

Main objective: *Topic 5 covers essential economic aspects for an aspiring deaf social entrepreneur such as the fundamentals of budgeting and guides participants in creating a strategic financial plan for sustaining value-driven initiatives.*

| Module and Topic: | Learning Outcomes | | |
|-------------------|--|---|---|
| | Knowledge and understanding | Skills | Values and attitudes |
| STARTERS | Sub-topic 1: Introduction to financial and economic literacy | | |
| | Fundamental concepts of financial literacy, include income, expenses, assets, and liabilities. | Ability to interpret financial statements and understand key financial indicators. | Recognition of the importance of financial responsibility and accountability. |
| | Overview of economic principles, such as supply and demand, market dynamics, and the role of entrepreneurship. | Proficiency in using budgeting tools and techniques to manage personal and business finances. | Cultivation of a proactive mindset towards economic challenges and opportunities. |
| | Insight into financial systems and institutions, emphasizing their impact on individual and community economic well-being. | Analytical skills to assess economic trends and make informed financial decisions. | Appreciation for ethical considerations in financial decision-making, promoting integrity and transparency. |

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| | Sub-topic 2: Basics of budgeting | | |
| MOVERS | <p>Grasp of the basic principles of budgeting, including income planning and expense tracking.</p> <p>Understanding the significance of creating realistic and achievable financial goals within a budget.</p> <p>Knowledge of different budgeting approaches, such as zero-based budgeting or the 50/30/20 rule.</p> | <p>Proficiency in developing and maintaining a personal or business budget.</p> <p>Ability to prioritize spending categories and allocate resources effectively.</p> <p>Skills in adapting and revising budgets in response to changing financial circumstances.</p> | <p>Cultivation of discipline and diligence in adhering to budgetary constraints.</p> <p>Appreciation for the role of budgeting in achieving financial independence and long-term stability.</p> <p>Encouragement of a proactive and positive attitude toward financial planning and resource management.</p> |
| | Sub-topic 3: Make a plan for the financial sustainability of a value-creating activity | | |
| EXPERTS | <p>Understanding the concept of financial sustainability and its importance for long-term success.</p> <p>Knowledge of key components of a financial sustainability plan, including revenue streams and cost management.</p> <p>Familiarity with risk assessment and contingency planning within the context of financial sustainability.</p> | <p>Ability to conduct a thorough analysis of income sources and identify potential funding or investment opportunities.</p> <p>Skills in developing strategic financial plans that align with the mission and goals of a value-creating activity.</p> <p>Proficiency in creating financial projections and conducting scenario planning for different business outcomes.</p> | <p>Cultivation of a forward-thinking mindset focused on the continuous improvement and adaptation of financial strategies.</p> <p>Recognition of the ethical dimensions of financial decision-making in sustaining a socially impactful enterprise.</p> <p>Fostering a commitment to responsible financial practices that contribute to the longevity and positive impact of the value-creating activity.</p> |



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