



## **Biz4Fun - Let's have fun with the business start-up**

ERASMUS + 2018-1-SK01-KA202-046271

# **O4 - HANDBOOK FOR BIZ4FUN SOCIAL GAME OR HOW TO MAKE ENTREPRENEURSHIP MORE UNDERSTANDABLE**



**KA2 Strategic Partnership**

*The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## TABLE OF CONTENTS

INTRODUCTION .....	7
1 OVERVIEW OF THE HANDBOOK .....	8
1.1 Who is this handbook for? .....	8
2 GBL: DEFINITION AND BENEFITS OF LEARNING .....	10
2.1 Why use social games in education/training? .....	11
3 BIZ4FUN VWSG: THE SOCIAL GAME DYNAMICS.....	13
4 AN INTRODUCTION TO THE BIZ4FUN WVSG .....	14
4.1 Learning scenario n.1: Introduction to Entrepreneurship .....	16
4.2 Learning scenario n.2: Business opportunities and market trends .....	17
4.3 Learning scenario n.3: Business Models .....	17
4.4 Learning scenario n.4: Business Plan.....	18
4.5 Learning scenario n.5: Collaborative tools for designing or innovating a business model.....	19
4.6 Learning scenario n.6: Marketing.....	19
4.7 Learning scenario n.4: Digital Marketing .....	20
4.8 Learning scenario n.8: Analysis on the best marketing strategies for small businesses .....	21
4.9 Learning scenario n.9: Financial Management .....	21
4.10 Learning scenario n.10: Human Resource Management.....	22
4.11 Results of the piloting events.....	23
5 THE BIZ4FUN 3D VIRTUAL WORLD AND SOCIAL GAME: HOW DOES IT WORK? .....	31
5.1 Account creation .....	31
5.2 Installation of 3D Viewer software .....	31
5.3 Connect to the 3D World .....	32
5.4 Movement and camera control.....	33
5.5 Navigation.....	35
5.6 Inventory.....	35
5.7 Adjusting your appearance .....	36
5.8 Communication.....	37
5.9 NPC characters.....	40
5.10 Presentation panels .....	41
5.11 Activities .....	41
5.12 Social Media Functionality .....	42
5.13 Reward System.....	43
6 INTEGRATING THE BIZ4FUN 3D VWSG INTO THE LEARNING PROCESS .....	45
6.1 BIZ4FUN methodology .....	45

6.2	Pedagogical tools, events and actions .....	46
6.3	What are the key steps to implementing the biz4fun 3d vwsg in formal and non-formal education? .....	47
6.4	The innovation potential of the Biz4fun 3D VWSG.....	48
7	RECOGNITION AND CERTIFICATION.....	50
7.1	KickOff Event .....	50
7.2	Initial or pre-course learning activity.....	50
7.3	Learning standards for Biz4fun 3d Virtual World Courses Learning standards for Biz4Fun 3D Virtual Worlds courses .....	50
8	CONCLUSIONS .....	54
9	REFERENCES .....	56
HOW TO DEVELOP A SUCCESSFUL BUSINESS (COURSE CURRICULUM AND CONTENT) .....		57
1	COURSE PURPOSE.....	58
2	LICENSE.....	58
3	COURSE OBJECTIVE.....	58
4	COURSE POLICIES .....	58
5	TECHNICAL REQUIREMENTS/ SUPPORT: .....	58
6	GRADING POLICY .....	59
7	COURSE SYLLABUS AND LEARNING SCENARIO TEMPLATE .....	59
8	LEARNING OUTCOMES .....	62
9	COURSE OUTLINE .....	63
9.1	Course 1. INTRODUCTION INTO THE ENTREPRENEURSHIP .....	63
9.2	Course 2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND EUROPE .....	65
9.3	Course 3. BUSINESS MODELS.....	67
9.4	Course 4. BUSINESS PLAN .....	68
9.5	Course 5. COLLABORATIVE TOOLS FOR DESIGNING OR INNOVATING A BUSINESS MODEL .....	70
9.6	Course 6. MARKETING.....	71
9.7	Course 7. DIGITAL MARKETING .....	73
9.8	Course 8. ANALYSIS ON THE BEST MARKETING STRATEGIES FOR SMALL BUSINESSES.....	74
9.9	Course 9. FINANCIAL MANAGEMENT .....	76
9.10	Course 10. HUMAN RESOURCE MANAGEMENT.....	78
REPORT ON THE PILOT EVENT (GREECE) .....		80

REPORT ON THE PILOT EVENT (ITALY) .....	97
REPORT ON THE PILOT EVENT (TURKEY).....	122
REPORT ON THE PILOT EVENT (SLOVAKIA).....	141
REPORT ON THE PILOT EVENT (CZECH REPUBLIC).....	154
REPORT ON THE PILOT EVENT (ROMANIA) .....	161

## ABBREVIATIONS

CTE	Asociatia Centrul de Training European
EUC	Edu Consulting
EGINA	European Grants International Academy
OER	Open Educational Resources
GBL	Game-Based Learning
HE	Higher Education
IOs	Intellectual Outputs
MNLA	Akdeniz Naturel Yaşam Derneği
NPC	Non-Player Character
SBA	Slovak Business Agency
SUA	Slovak University of Agriculture in Nitra
UPAT	University Patras
VET	Vocational Education and Training
VWSG	Virtual World and Social Game

## CONTACTS

### Slovakia

*Slovak University of Agriculture in Nitra - SUA (Project Coordinator)*

Website: [www.uniag.sk](http://www.uniag.sk)

Project Manager: Zuzana Palková Email: [zuzana.palkova@uniag.sk](mailto:zuzana.palkova@uniag.sk)

*Slovak Business Agency – SBA*

Website: [www.sbagency.sk](http://www.sbagency.sk)

Project Manager: Jarmila Dubrovayova Email: [dubrovayova@sbagency.sk](mailto:dubrovayova@sbagency.sk)

### Czech Republic

*Edu Consulting, z.ú – EUC*

Website: [www.edu-consulting.eu/](http://www.edu-consulting.eu/)

Project Manager: Marta Harnicarova Email: [eucprojekty@gmail.com](mailto:eucprojekty@gmail.com)

### Greece

*University Patras - UPAT*

Website: [www.upatras.gr](http://www.upatras.gr)

Project Manager: Ioannis Hatzilygeroudis Email: [ihat@ceid.upatras.gr](mailto:ihat@ceid.upatras.gr)

### Italy

*European Grants International Academy - EGInA Srl*

Website: [www.egina.eu](http://www.egina.eu)

Project Manager: Irene Morici Email: [irenemorici@egina.eu](mailto:irenemorici@egina.eu)

### Romania

*Asociatia Centrul de Training European - CTE*

Website: [www.etcenter.eu](http://www.etcenter.eu)

Project Manager: Sorin Ionițescu Email: [office@etcenter.ro](mailto:office@etcenter.ro)

### Turkey

*Akdeniz Naturel Yaşam Derneği – MNLA*

Website: [www.naturelder.org](http://www.naturelder.org)

Project Manager: Avni Taşyürek Email: [avnitasyurek@yahoo.com](mailto:avnitasyurek@yahoo.com)

## INTRODUCTION

The *Let's have fun with the business start-up - Biz4Fun* project aims to increase the competitiveness of young, mostly unexperienced people, and facilitate their integration in the labour market. Young people usually have innovative ideas, but it is very difficult to realize those projects due to lack of courage, funds or capacities.

The project has developed four intellectual products:

- *I01 - Course Curriculum and Content – how to develop a successful business*

The Curriculum is based on the study and analysis of best practices in the development of technology incubators and successful entrepreneurial activities.

- *I02 - 3D Virtual World and Social Game (3D VWSG)*

The educational tool is available for free to and it can be used and it for youngsters' self-learning purposes. The concept of the game is based on the real start-up company. The learner/avatar will be able to establish a start-up company and manage it from the beginning.

- *I03 - Online Open Educational Resources*

The Biz4Fun 3D VWSG is an online platform with OERs (presentations, multimedia, 3D objects etc.) aimed to support young practitioners through the learning topics and skills most needed to establish and manage a business company.

- *I04 - Handbook for Biz4Fun Social game or how to make entrepreneurship more understandable*

The Handbook contains information about the Biz4Fun VWSG and its functionalities of the 3D world and intends to support teachers, trainers and decision/policymakers to use an innovative learning approach derived from the use of serious games.

Besides providing an overview of the learning scenarios and available activities, the Handbook intends to highlight the innovation potential of the Biz4Fun Project, providing suggestions for the improvement of the learning process through virtual learning environment and social game for non-formal and informal education.

## 1 OVERVIEW OF THE HANDBOOK

This Handbook is a guidance document designed to provide detailed information about GBL with the purpose of promoting the use of the Biz4Fun WSG as an innovative learning approach derived from the use of serious games.

In particular, the Handbook aims at providing:

- an introduction to GBL,
- an overview of the instructions and functionalities of the Biz4Fun 3D VWSG,
- a review of learning material and activities available in the Biz4Fun 3D VWSG,
- recommendations for exploitation of virtual learning environment and online social games in the field of VET/HE,
- suggestions for the recognition and certification of the knowledge and competencies acquired through the Biz4Fun VWSG.

For any queries or feedback about the content of this Handbook please contact the National Project Managers (see Section n.2).

### 1.1 Who is this handbook for?

“Nowadays, competence requirements have changed with more jobs being subject to automation, technologies playing a bigger role in all areas of work and life, and entrepreneurial, social and civic competences becoming more relevant in order to ensure resilience and ability to adapt to change” ([Council recommendation on key competences for lifelong learning](#)).

Further strengthening key competences in VET curricula and Open and innovative education are the main priorities addressed to the Biz4Fun Project. According to the European Commission, the European economic growth depends on its ability to support the growth of enterprises. Considering that the most important sources of employment in the EU are Small and Medium-sized Enterprises, Biz4Fun intends to encourage young people to become entrepreneurs, acquiring the skills and competencies needed to set up and grow their businesses.

The project aims to promote entrepreneurship, defined as “an individual’s ability to turn ideas into action. It includes creativity, innovation, risk taking, ability to plan and manage projects in order to achieve objectives” ([Promoting entrepreneurship](#)).

With the purpose of facilitating learners in the acquisition/development of skills and competencies needed to run a business and be a successful entrepreneur, four IOs have been developed throughout the project.

The first three IOs are primary addressed to young people (EQ level from 3 to 7); this Handbook (IO4) is designed to help teachers, trainers and decision/policymakers (accreditation organizations, decision making bodies, local governments, umbrella organizations responsible for ECVET/ECTS etc.) use the Biz4Fun VWSG exploring its innovation potential.



The ultimate goal of the Handbook is to provide target groups with a detailed overview of the methodology and results of the Biz4Fun project, with the purpose of encouraging their use in the field of VET/HE.

## 2 GBL: DEFINITION AND BENEFITS OF LEARNING

This section aims at introducing the principles of GBL and investigating into the potential of educational games in the field of education and training. It focuses on the significance of gaming in education and training and gives an overview of social games underlying what makes a social game different from other games.

Most students need effective and interactive experiences that motivate them to actively participate in the learning process. GBL can be an effective tool to support students in developing skills and competencies. Although GBL is not a new concept in education, it has gained more popularity in recent years with the purpose of creating an engaging learning environment. Digital game-based learning can be defined as an “instructional method that incorporates educational content or learning principles into computer or video games with the goal of engaging learners” (Coffey H.).



### 1.) COMPETITION

**Games can provide motivation to students/players to engage and finish an activity. It doesn't need to be against another participant.**

### 2.) ENGAGEMENT

**Games that are fun to play significantly improve learning performance.**



### 3.) REWARDS

**Rewards aid in the learning process by keeping the participant invested and coming back for more**

### 4.) REINFORCEMENT AND FEEDBACK

**Feedback in a game context is instantaneous and scoring can be standardized to allow comparisons.**



#### 1. What defines an effective digital educational tool?

According to Nick O'Neill, “social games are a structured activity which has contextual rules through which users can engage with one another. Social games must be multiplayer and have one or more of the following features: turn-based, are based on social platforms for providing users with an identity and are “casual”.

So, a social game has to be *multiplayer*: it refers to a mode of play for computer games and video games where two or more gamers can play in the same game at the same time, co-operatively as a team or head-to-head competitively ([Webopedia](#)).

We could therefore assume that a social game is one that is most fun when you play with your other players. The player can choose to play with others or against others.



## 2. What makes a good social game

### 2.1 Why use social games in education/training?

We can now focus on the benefits of learning through gaming, so that teachers, trainers and policymakers may understand the potential of the Biz4Fun educational gaming learning platform and its impact on the learning process.

It is widely acknowledged that games are valued sources of play for many learners. The use of gaming can indeed generate benefits in the learning process.

Digital GBL can provide unique opportunities for developing, range of abilities and benefits associated with play:

- Memory Capacity improvement

Playing digital games may boost our memory and this not only relates to games whereby players have to remember aspects in order to solve the game or memorize critical sequences.

- Hand-Eye Coordination Development

Researchers suggest that digital games sharpen eye-hands coordination skills (Sensorimotor skills)

- Social and psychological benefits

Educational games can develop users' soft skills and play a key role in increasing the players' sense of self-esteem and improve socialization skills, leadership skills and team building.

Digital GBL can also be an effective tool for stimulating different users to work in teams. Players are required to collaborate to achieve a common goal, so they have the chance to improve their communication skills. Most of these students develop their interpersonal skills as they collaborate in teams and work in tandem with their peers.

- Critical thinking

Players engagement with digital educational games improves their critical thinking as it helps them make evaluative decisions to solve problems.

- Computer & Simulation Fluency

Playing digital games allows players to improve their digital fluency.

- Motivation

The theory of intrinsic motivation in games by Malone and Lepper is based on experimental manipulations of different games. The theory suggests that games are rewarding due to a combination of key factors, such as: challenge, fantasy, and curiosity. To conclude, digital games can be powerful learning environments because they encourage active learning and participation within "affinity groups" (Gee, 2004).

Iacovides, I.; Aczel, J.; Scanlon, E.; William, JW, point out that "through gaming, players learn to participate in *semiotic domains* made up of words, pictures, and/or anything that is used to communicate different types of meaning. These domains are associated with specific *affinity groups* of players whose knowledge, skills, tools and resources contribute to form complex systems of distributed parts. These essentially make up a community of practice where players can gain resources from fellow members to help them to solve problems within, and sometimes outside of, the specific domain".

### 3 BIZ4FUN VWSG: THE SOCIAL GAME DYNAMICS

The Biz4Fun 3D VWSG is an educational learning platform designed to engage students with real world scenarios and phenomena.

Our learning platforms aims to stimulate players to play together and enhance interaction. From our perspective, doing is better than watching for learning. So, the Biz4Fun 3D VWSG, provides players with the opportunity of watching videos and answering quiz, but not only. In fact, players have the opportunity to walk through a 3Dscenarios and decide what to do and how to do.

The Platform has been created focusing on the following features:

- Customization: as a successful game should provide multiple paths to success, the VWSG has been designed to offer choice for users. The Platform enables players to customize or make changes to the experience to meet their specific needs/interests. The final mission to accomplish is the creation of a startup and for doing this, the player has the opportunity to choose the scenarios and paths to experience within the 3D world. Our WSG is therefore customized to individualized teaching.
- The Platform provides opportunity for feedback and practice
- Multiplayer (sharing items, invite new players to join etc) /messaging (external APP groups for players: e.g. discord)
- Social Platform Integration: possibility of posting pictures on Social Media platforms from the VWSG
- Challenging (levels, achievements, rewards, final ranking, pathways)

#### 4 AN INTRODUCTION TO THE BIZ4FUN WWSG

The online platform provides the player with 10 learning scenarios and a broad array of OERs (textbooks, presentations, multimedia, 3D objects) and interactive learning material created and/or gathered by the Consortium to enable learning and improve performance.

The 3D VWSG also includes functionalities for gamification and carrying out virtual sessions like conferences and seminars, a media library and other learning activities.

By using the OERs available on the learning platform, users will have the mission to create and manage a start-up company.

The online platform has been designed as a Virtual world. It can be defined as a “synchronous, persistent network of people, represented as avatars, and facilitated by networked computers. VWs can really enrich learning and empower the learners mainly because they have the potential to support multimodal -using different senses- communication among all participants in the educational process” (Tramontana, M. Zheleva, M.).

The Biz4Fun 3D Virtual World and social game includes:

- 30 multimedia interactive scenarios,
- 20 3D constructions demonstrating procedures,
- 15 learning scenarios in the 3D Virtual World.

The 3D VWSG is broken up into several areas. Players go through these areas, and take up various challenges and tasks. To complete the Game, players must perform specific tasks and multimedia activities.

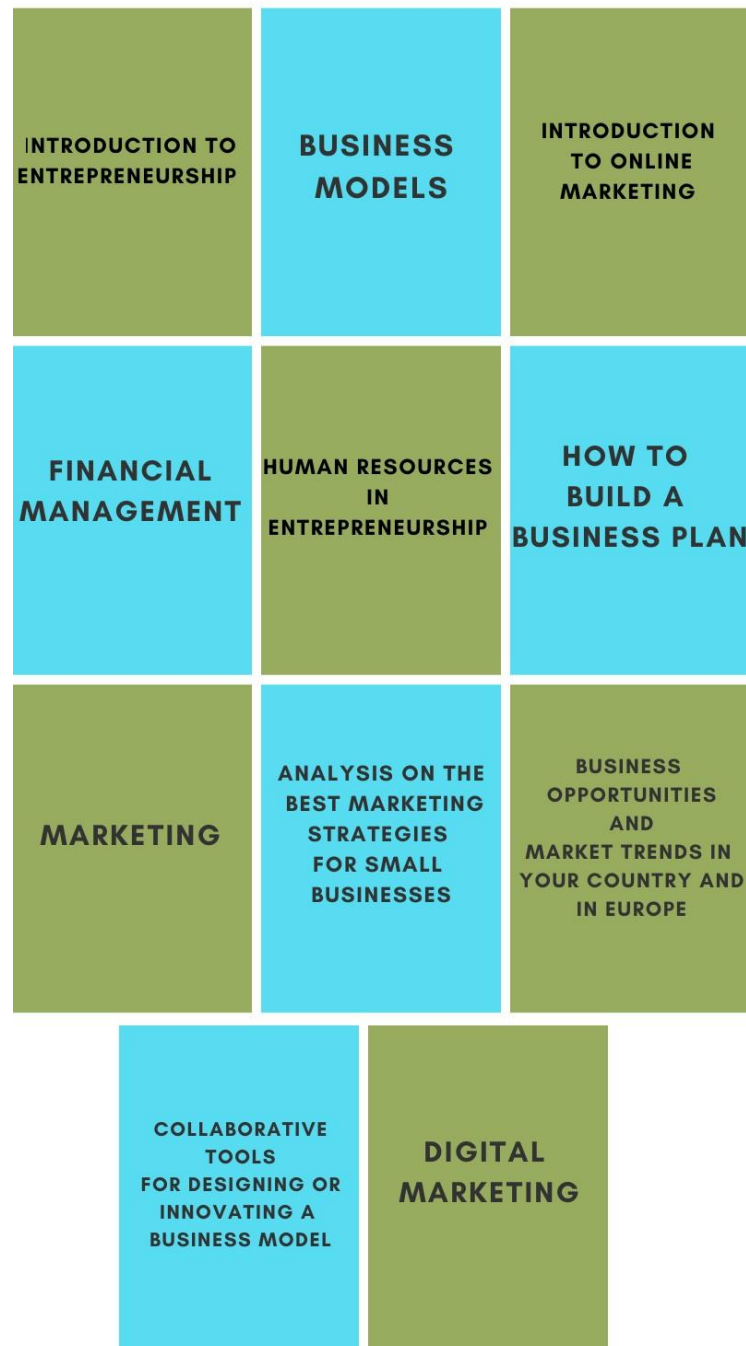
In order to allow users to customize the play experience to their own tastes and preferences, the platform addresses to new entrepreneurs (EQF level 3) until professional CEO (EQF level 6-7).

In fact, the game focuses on entrepreneurship essentials for building and financing new ventures

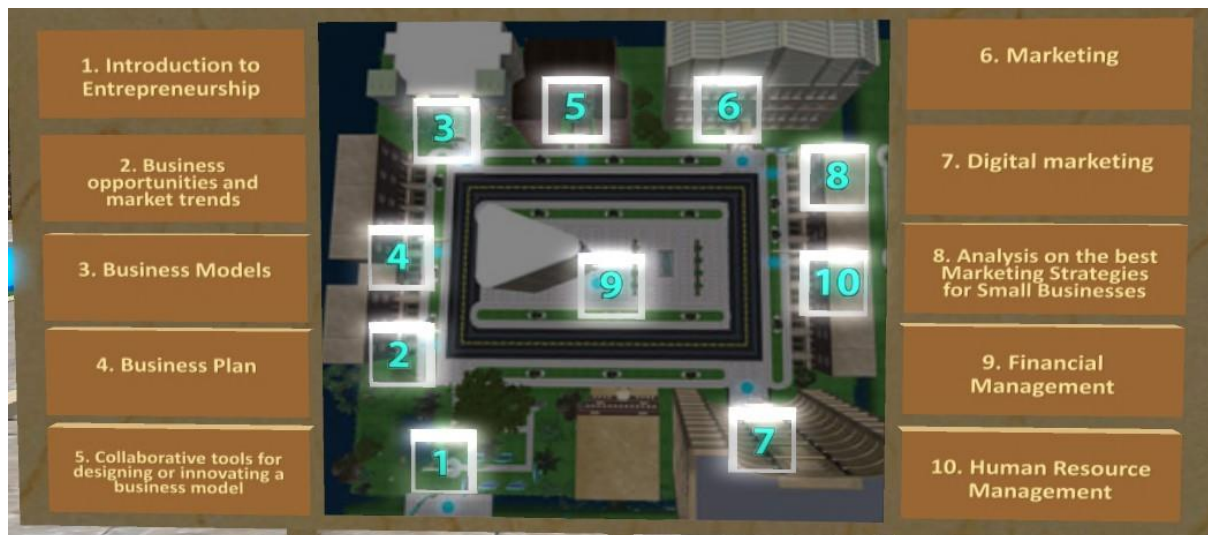
The 3D VWSG is mostly free online learning platform addressed and available to users (mostly unexperienced young people) around the world for self-enrichment.

Biz4Fun supports the development of truly blended education as well as self-study. Users can use the online platform for self -study, while teachers and trainers are encouraged to integrate the learning environment provided by 3D VWSG in teaching.

By exploring the platforms, users also have the chance to improve their ICT skills.



3. Biz4Fun WVSG Learning Scenarios



4. Biz4Fun WVSG Map

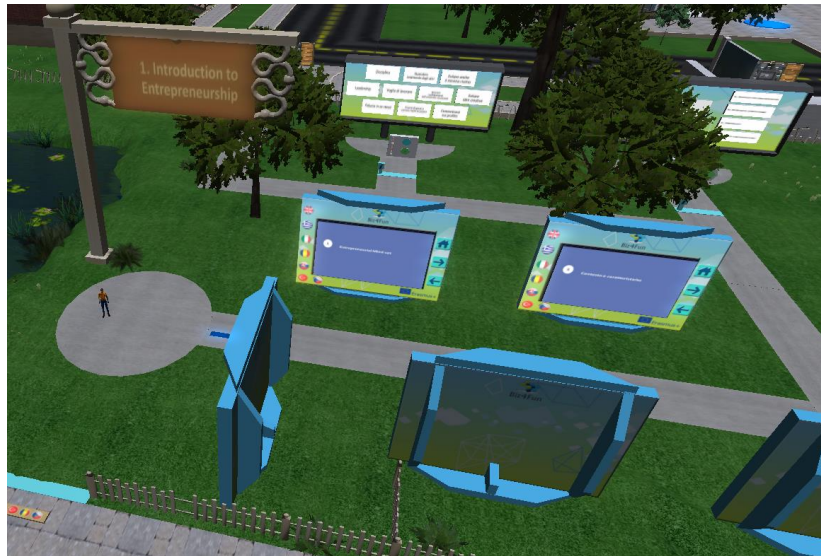
The learning paths available on the online platform correspond to the training contents developed through IO1 (see Annex I):

1. INTRODUCTION INTO THE ENTREPRENEURSHIP
2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND EUROPE
3. BUSINESS MODELS
4. BUSINESS PLAN
5. COLLABORATIVE TOOLS FOR DESIGNING OR INNOVATING A BUSINESS MODEL
6. MARKETING
7. DIGITAL MARKETING
8. ANALYSIS ON THE BEST MARKETING STRATEGIES FOR SMALL BUSINESS
9. FINANCIAL MANAGEMENT
10. HUMAN RESOURCE MANAGEMENT

#### 4.1 Learning scenario n.1: Introduction to Entrepreneurship

The users arrive at a park and are welcomed by an NPC character, who guides them through the 6 theory panels. Then they must complete 2 assessment activities to complete the scenario.





#### 4.2 Learning scenario n.2: Business opportunities and market trends

There are multiple rooms in a building and in each one of them, the user studies theory presentations, has meetings with NPCs and then takes a quiz activity.



#### 4.3 Learning scenario n.3: Business Models

The user enters a building and there is an area with 9 distinct parts on the floor (one for each part in the business model canvas). An NPC character is near and approaches the user. He directs the user to visit each one of the areas, to receive information about the corresponding part of the business model canvas. when the user enters one of the areas, information appears. there is also a presentation about the business model canvas. here is also an assessment (group) activity. There is an empty canvas and 9 cards around it. the user (or group of users) must place each one of the cards to the correct place in the canvas.



#### 4.4 Learning scenario n.4: Business Plan

In all the 5 activities, the avatar studies the theory (presentations / videos) and then they sit in a table and have dialogue with npc characters in the form of quiz questions. Apart from multiple choice questions (select the correct answer), there are also questions where the avatar needs to select more than one options (e.g identify the 5 odd ones). there are also 'offline' activities for the student to work out of the 3d world (e.g find a slogan) and be evaluated by the teacher.

- Activity 1. recognize the successful business ideas
- Activity 2. identify business ideas according to market's needs
- Activity 3. identify the fundamentals elements of a business plan and how to build it
- Activity 4. define the business plan according to your business ideas and market needs
- Activity 5. define a marketing strategy for your business idea



#### 4.5 Learning scenario n.5: Collaborative tools for designing or innovating a business model

In this scenario, the user enters a large building, separated into three rooms that cover the three topics. In each one of the rooms there are theory presentations, an NPC that interacts and guides the user and multiple Assessment activities (quizzes, form sentences, classify items e.t.c).



#### 4.6 Learning scenario n.6: Marketing

The user arrives at a room with two doors: basic definitions, needs of the people. an NPC character (marketing guide) introduces himself and provides instructions.

The user has the option to select only the door about 'basic definitions of marketing'. the npc follows the user and shows a presentation about that topic. the user gets a quiz then in the form of selecting the suitable answer(door) for each question (room).

After completing this quiz and getting out of the rooms about the first topic, the user can select from three other doors: marketing mix instruments; promotion; customer service. For the first two rooms, there is a table where the user takes a quiz.

For the "customer service" room, the user arrives at a car shop and takes the role of a car seller. he sits at a computer and views a presentation about customer service. There are cars in the room. the user takes a quiz where each answer is associated with a score at the end of the quiz he is evaluated and gets relevant feedback.



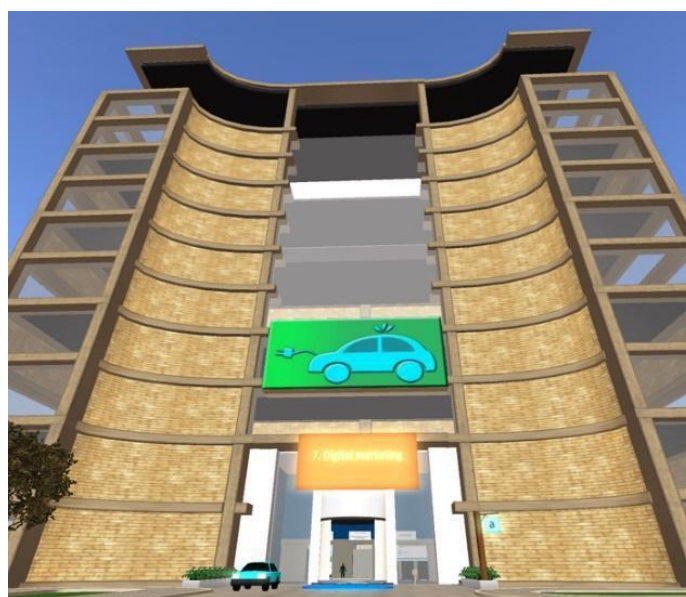


#### 4.7 Learning scenario n.7: Digital Marketing

The user arrives at a labyrinth-like area (or room with 3 doors). Each door has the name of one of the topics: Effective online marketing tools, Web and Promotion, Social Media. An NPC character (marketing expert) introduces and gives instructions about what they should do. The user selects one of the three doors and enters a room. The NPC follows the user and shows a presentation about that topic.

For each one of the topics there are quizzes. These quizzes are represented as doors inside a maze. There is a room for each question and doors for each one of the possible answers. The user needs to select the correct answers (doors) to get out of the maze.

The user must complete all three quizzes (maze rooms) to complete the module.



The user can then teleport to a nearby building and learn about Marketing Automation.

They enter in a digital marketing department, where three NPC characters work on:

- Email Newsletters,
- Social Media Pos
- Scheduling Lead-nurturing workflows

When the user approaches each one of the NPC characters, they give him a description of their tasks. After studying the theory, the user enters a room and takes a quiz.

Finally, the user is teleported outside, where they can learn about Digital Metrics / Evaluation. An NPC character approaches and talks with the user (dialogue). The user studies the material (presentations). After studying the user can take a quiz activity, accompanied by images.

#### **4.8 Learning scenario n.8: Analysis on the best marketing strategies for small businesses**

The user enters a building with multiple room. In each one of them the user can study the theory presentations and then take various roles and interact with NPC characters. There are various assessment activities such as quizzes and filling gaps of sentences.



#### **4.9 Learning scenario n.9: Financial Management**

The player arrives at a bank-like space with three NPC characters waiting at their desks (helpdesk, cleric, counter). Before getting to them another npc character (bank guide) introduces and guides the user on what they must do. First, they speak to the helpdesk NPC, that shows a presentation about: financial terminology. Then they speak to the bank cleric NPC, that shows a presentation about: financial planning. Finally they speak to the bank counter NPC, that shows a presentation about: financial management. after that, the bank guide NPC, approaches the user and directs him to an office where the CEO of the bank waits. the CEO asks 11 questions. if the student answers all of them correctly, he receives the funding.

There is a second floor that covers the additional topic of Funding Opportunities for a business.



#### 4.10 Learning scenario n.10: Human Resource Management

In each one of the 5 activities the avatar studies the theory (presentations / videos) and then they sit in a table and have dialogue with NPC characters in the form of quiz questions.

- Activity 1: Human capital power of market
- Activity 2: Business Internal supply qualification
- Activity 3: Human resources informational system as a database
- Activity 4: Gathering human capital from external environment
- Activity 5: Business' human resources educational plan



The mission of the player is to create his/her own startup. For doing this, he/she has the chance to go through the different learning pathways:

1. Marketing Pathway: C1, C2, C6,C7 ,C8
2. Business Planner Pathway: C1, C2,C3,C4, C5
3. Financial Pathway: C1, C4, C9
4. HR Pathway: C1, C4, C10
5. Manager Pathway: Badge 1+Badge 2+ Badge 3+ Badge 4 OR go through all the Courses (from 1 to 10)

The player must choose one of the specialization paths to get the badge (e.g. Marketing Pathway) If the player gets all the 4 badges, he/she will get the Manager badge.

#### 4.11 Results of the piloting events

The Biz4Fun Piloting events carried out in partner countries have been crucial for analysing experiences during gameplay and reviewing the 3D VWSG.

#### General information

**Greece** - 33 people participated in the online piloting event of Biz4fun in Greece, consisting of 17 learners, 10 VET/HE institutions and 6 policymakers.

Learners completed a questionnaire after a VET teacher made a demonstration for them, almost the same happened with another VET professor for some teachers and finally with individual people (VET institutions and policymakers) that received the documents and questionnaires.

**Turkey** - 23 people involved in the Turkish side. 12 of them were learners, 8 from VET/HE institutions and 3 policymakers.

**Czech Republic** - 21 people took part in the online event, consisting of 17 learners, 3 people from VET/HE institution and one policymaker.

**Italy** - 41 people participated in the online event of Biz4fun in Italy: 20 of them were learners, 18 were people from VET/HE institutions and 3 Italian policymakers.

**Slovakia** - 14 people were involved in the slovak online piloting event of Biz4fun. 7 of them were learners and the other 7 came from the world of business, start-ups and policymakers.

TOTAL: 132 people involved

- Learners: 73
- VET/HE institutions: 39
- Policymakers: 20

### Results of the online evaluation for Learners and VET/HE institutions

The first area focuses on the clarity of instruction and explanation provided by the Staff introducing the BIZ4Fun Project and 3D Virtual World and social game.

Questions/Participants	Learners	VET/HE institutions
How clear were the explanations about the BIZ4Fun Project?	<b>GRE</b> 64.7% very clear <b>TUR</b> 75% <b>CZE</b> 47% <b>ITA</b> 80% <b>SVK</b> 43%	<b>GRE</b> 80% very clear <b>TUR</b> 75% <b>CZE</b> --- <b>ITA</b> 28% (+67% clear) <b>SVK</b> ---



How clear were the explanations for the rules of the BIZ4Fun Virtual World and Social Game?	<b>GRE</b> 70.6% very clear <b>TUR</b> 58'3% <b>CZE</b> 35% <b>ITA</b> 70% <b>SVK</b> 29%	<b>GRE</b> 77.8% very clear <b>TUR</b> 50% <b>CZE</b> --- <b>ITA</b> 17% (+66% clear) <b>SVK</b> ---
It is easy to use the BIZ4Fun Virtual World and Social Game	<b>GRE</b> 100% easy <b>TUR</b> 100% <b>CZE</b> 53% <b>ITA</b> 80% <b>SVK</b> 29%	<b>GRE</b> 100% easy <b>TUR</b> 100% <b>CZE</b> --- <b>ITA</b> 50% <b>SVK</b> ---
How would you rate the BIZ4Fun Virtual World and Social Game graphic design?	<b>GRE</b> 41.2% very good <b>TUR</b> 58'3% <b>CZE</b> 24% <b>ITA</b> 40% <b>SVK</b> 43% good	Are there any prerequisites (prior knowledge) needed to use the game? <b>GRE</b> 90% not <b>TUR</b> 37.5% <b>CZE</b> --- <b>ITA</b> 67% <b>SVK</b> ---
Did the game progress smoothly?	<b>GRE</b> 94.1% yes	<b>GRE</b> 100% yes

	<b>TUR 66'7%</b>  <b>CZE 35%</b>  <b>ITA 45%</b>  <b>SVK 29%</b>	<b>TUR 100%</b>  <b>CZE ---</b>  <b>ITA</b>  <b>SVK ---</b>
Did you learn something new?	<b>GRE 100% yes</b>  <b>TUR 100%</b> <b>CZE 71%</b>  <b>ITA 95%</b>  <b>SVK 72%</b>	Please describe the main playful and educational features of the game
		Inventive- Interesting –Analytical  The step-by-step systematic game
Would you like to use the BIZ4Fun Virtual World and Social Game for your studies at School/University?	<b>GRE 88.2% yes</b>  <b>TUR 91.7%</b> <b>CZE 71%</b>  <b>ITA 70%</b>  <b>SVK 72%</b>	
Would it be useful to use the BIZ4Fun Virtual World and Social Game for school/ academic purposes?	<b>GRE 94.1% yes</b>  <b>TUR 100%</b>  <b>CZE 71%</b> <b>ITA 80%</b>  <b>SVK 72%</b>	

The Biz4Fun VW and Social Game can be an effective tool for acquiring/developing competencies needed for starting a successful business	<b>GRE</b> 82.4% yes  <b>TUR</b> 100%  <b>CZE</b> ---  <b>ITA</b> 70%  <b>SVK</b> 86%
---	---

What is the greatest strength of the BIZ4Fun VW and Social Game?	<ul style="list-style-type: none"> <li>– -Pleasant and beautiful experience.</li> <li>– -Conversation with others.</li> <li>– -The NPC'S.</li> <li>– -The usefulness.</li> <li>– -Good design.</li> <li>– -Good organization.</li> </ul>
What is the greatest weakness of the game?	<ul style="list-style-type: none"> <li>– Tedious and sometimes incomprehensible content.</li> <li>– Slow servers.</li> <li>– Graphics.</li> <li>– Movement with avatar.</li> <li>– The installation.</li> <li>– User experience in some quizzes.</li> </ul>
Your support counts! What would you change/improve in the BIZ4Fun VW and Social Game?	<ul style="list-style-type: none"> <li>– -Simpler content (6%)</li> <li>– -Shorter presentations (6%)</li> <li>– -Better graphics (23%)</li> <li>– -I wouldn't change anything (29%)</li> <li>– -The chat process (6%)</li> <li>– -Software running efficiency (6%)</li> <li>– -Show completion rate for each course (6%)</li> <li>– -Random selection of quiz questions (6%)</li> <li>– -Show right answers (12%)</li> </ul>

<b>Policymakers</b>	<b>Answers</b>
<b>Greeks</b>	<ul style="list-style-type: none"> <li>– Enough content, which satisfactorily meets the needs of the learners.</li> <li>– Training tool in the spectrum of entrepreneurship. The brainstorming setting contained in the game is familiar in their daily lives.</li> <li>– Team collaboration and interaction is an important lesson for participants in a game. Also the integration of the virtual world as a teaching method and approach.</li> <li>– A demo video of the basic features for those who are using this kind of virtual worlds for the first time.</li> </ul>
<b>Turkish</b>	<ul style="list-style-type: none"> <li>– "This is an invaluable resource for young people. Especially since today's young people are not a generation that picks up and reads books, there is a need for such fun and educational applications.</li> <li>– The fact that it is free increases its usability. It can be used in various fields depending on whether it has a technologically flexible structure. We can consider using it in cooperation with Naturelder in our entrepreneurial activities.</li> <li>– The idea and application of bringing education to a 3D environment is interesting. The widespread use of this type of training will help both reduce the reaction of young people to the current education system and increase the efficiency of education.</li> <li>– One of our participants drew attention to the lack of technical infrastructure. Another said, "In addition to the educational materials in the game, the game itself needs to be translated into Turkish. English can be a social obstacle, especially for young people in the disadvantaged group.</li> </ul>

<b>Czechs</b>	<ul style="list-style-type: none"> <li>– Only one czech policymaker took part in the event, so the most relevant information is:</li> <li>–The Biz4Fun 3D Virtual World has the potential to be a supporting tool for the education process.</li> <li>–Teachers at primary/secondary schools do not have capacity to “waste their time” with the complicated installation.</li> <li>– Problem should also be the insufficient hardware of some pupils/students.</li> <li>–Positive is that there is a “game” element and in the future the closer cooperation with the teachers can bring very interesting results at the end.</li> </ul>
<b>Italians</b>	<ul style="list-style-type: none"> <li>– The platform content seems well-calibrated for secondary school students and potentially represents an excellent starting point for developing entrepreneurial skills.</li> <li>– Participants do not see any obstacles in terms of application and economic aspects. However, they underlined the fact that it would be crucial to involve motivated teachers who believe in entrepreneurship education and the possibility of learning by playing.</li> <li>– BIZ4Fun Social Game should be a starting point to develop business ideas, moving from virtual to reality, or at least to a simulation of real life. After having played and learned, you should put into practice what you have learned at school.</li> <li>– Interactivity could also be developed, foreseeing a wider range of activities to be done on the platform beyond the training material and quizzes.</li> </ul>

<b>Slovaks</b>	<ul style="list-style-type: none"> <li>– During playing the game, the game covered the basics of entrepreneurship. Platform environment provides us with a wide range of content that can be modified according to the needs of the target group. It provides a good base at this stage.</li> <li>– The game is not built properly enough to use it in any useful way. There is no clarity what the Game intends to do, controlling the character is difficult, some basic functions are missing, while there are plenty of useless functions present making it more difficult to grasp.</li> <li>– An easier way to register and start the Game, the current children do not have enough patience with a long installation. The great idea , it only needs to be improved</li> </ul>
----------------	---

## Results of the online evaluation for Policymakers

The questions of policymakers online evaluation were 4:

1. *To what extent do the learning platform, the virtual world and the social game Biz4Fun, but also its content correspond to the business skills of the target group*
2. *How could you use the Biz4Fun VW and Social Game platform in your context and what would be, in your opinion, its main benefits and obstacles in your training practice?*
3. *That ideas, approaches, tools of the Biz4Fun VW and Social Game would be worth adapting in related (local) strategies and practices and why?*
4. *What would you improve on the Biz4Fun VW and Social Game online learning platform (technicalities, functionalities, content) and how?*

Concluding, we can say that policy makers' online evaluation shows that the degree of satisfaction, in general terms, in relation to the BIZ4Fun VW and Social Game is good.

## Conclusion

The rating of the Greek and Turkish piloting reports is – overall – very good overall and a broadly positive approval has been received by learners, VET institutions and policymakers from both countries.

The Italian report shows strong support from the majority of participants and gets a good rating.

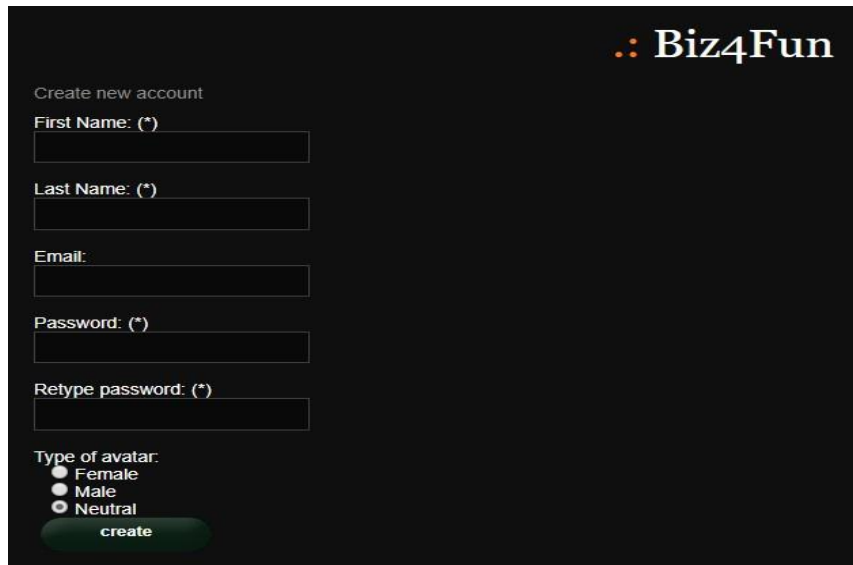
The Czech and Slovak reports are ranked quite well, although slightly less well received than the other three participating countries.

## 5 THE BIZ4FUN 3D VIRTUAL WORLD AND SOCIAL GAME: HOW DOES IT WORK?

### 5.1 Account creation

You can create an avatar account (Firstname, Lastname, Password) here: <http://virtualworld.sch.gr:9000/>

In the Main Menu, there is an option “CREATE ACCOUNT” that leads to the Avatar creation form.



**Biz4Fun**

Create new account

First Name: (\*)

Last Name: (\*)

Email:

Password: (\*)

Retype password: (\*)

Type of avatar:

☐ Female

☐ Male

☐ Neutral

create

5. Biz4Fun WVSG Account Creation

The combination of “Firstname” and “Lastname” will be the name of the avatar inside the World. You must remember these along with the Password to be able to log in the world later.

The Email field is optional. You can also select one of the three types of avatars (Female, Male, Neutral) that will adjust your initial appearance.

Finally click on the “create” button to create an account. If the account has been created successfully, you should get a success message.

### 5.2 Installation of 3D Viewer software

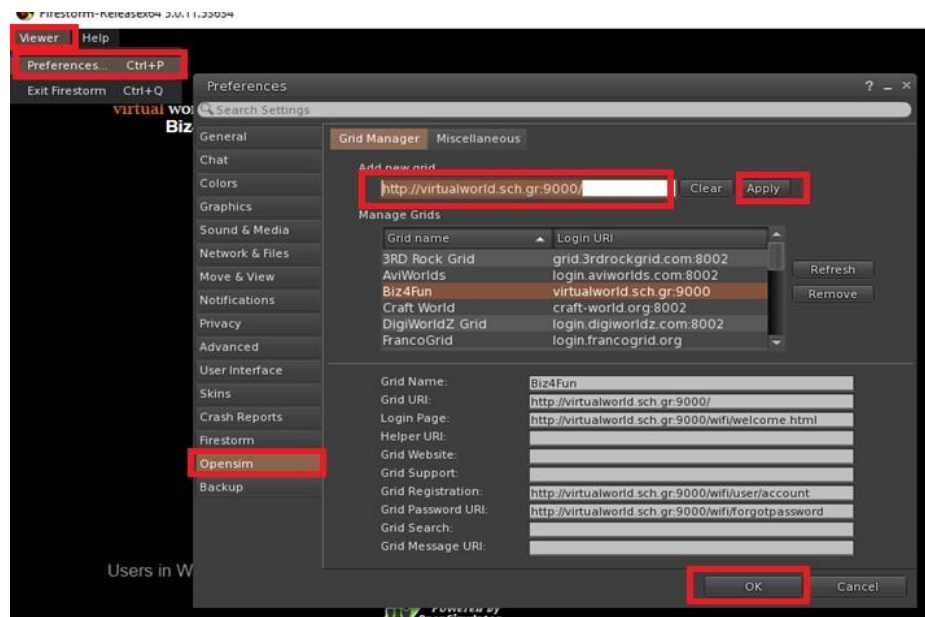
To connect to the 3D World with the avatar you created, you need 3D Viewer Software such as Firestorm or Kokua. We recommend using Firestorm. You can download the version for OpenSim here: <https://www.firestormviewer.org/os-operating-system/>

Select your Operating System and download the suitable version.



6. 3D Viewer Software Download

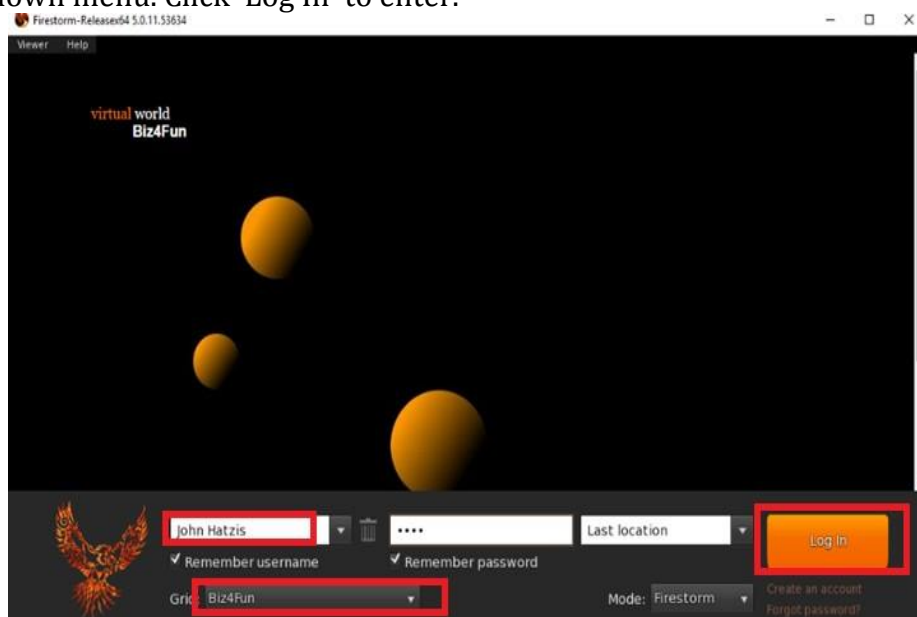
Execute the downloaded file and follow the instructions to complete the installation.



7. 3D Viewer Software Installation

### 5.3 Connect to the 3D World

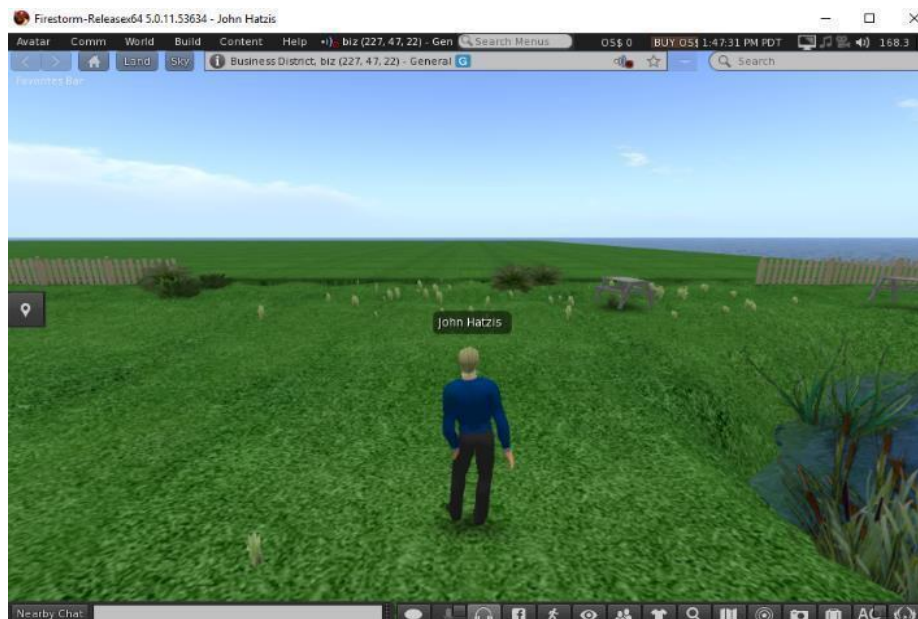
Use your username "First name Last name" and password and select "Biz4Fun" grid from the drop down menu. Click 'Log In' to enter.



8. Biz4Fun VWSG Login

After connection is made you will be inside the virtual world with your avatar.

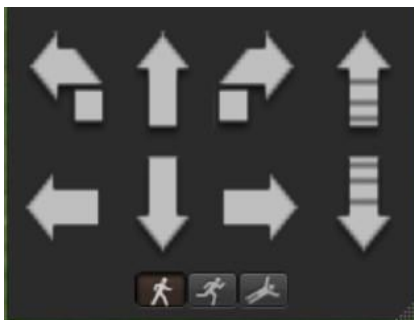




9. Avatar

## 5.4 Movement and camera control

One way to move the avatar and control the camera is using two small windows offered by the ED Viewer, that contain all the necessary buttons.



10. Graphical Move Control



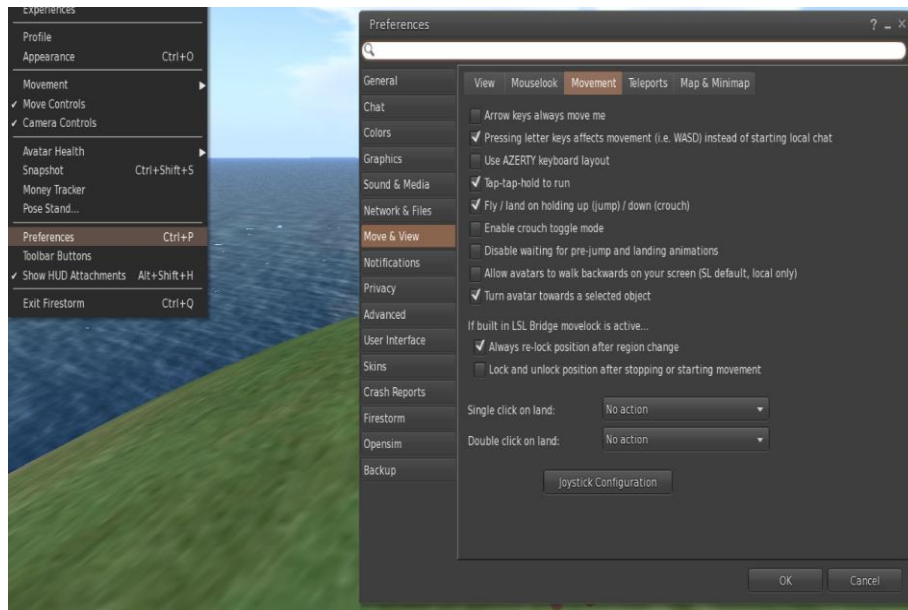
11. Graphical Move Control

If these windows do not appear, you can enable them from the top menu:

- - **Avatar > Move Control**
- - **Avatar > Camera Control**

This is not an easy way, so we suggest to use the keyboard controls. For movement you can use the arrow keys or the WASD keys. For WASD to work correctly, you have to enable it from the Preferences

Options:



12. Preference Options

- You can use F to Begin Fly mode:
- You can use E to go Higher
- You can use C to go Lower

MOVEMENT CONTROLS	
Key	Function
A or Left	Turn left
Shift-A or Shift-Left	Move left
C or PgDown	Crouch / Fly down
D or Right	Turn right
Shift-D or Shift-Right	Move right
E or PgUp	Jump/Fly up
F or Home	Fly on/off
S or Down	Walk backward
W or Up	Walk forward
Space	While moving, press Space for slow motion (WASD must be enabled)

13. Useful keyboard moving controls

CAMERA CONTROLS	
Key	Function
Alt-up/down arrow	Zoom camera
Alt-left/right arrow	Rotate camera left/right
Alt-Ctrl-up/down arrow	Rotate camera up/down
Alt-Ctrl-Shift-arrows	Pan camera

14. Useful camera controls

## 5.5 Navigation

There are two kind of maps you can use for navigation:

### World > Minimap

- It shows a small map where you can Identify your location and it updates according to Avatar movement
- It acts as a compass
- You can use this map to teleport to another point by Double Clicking required location

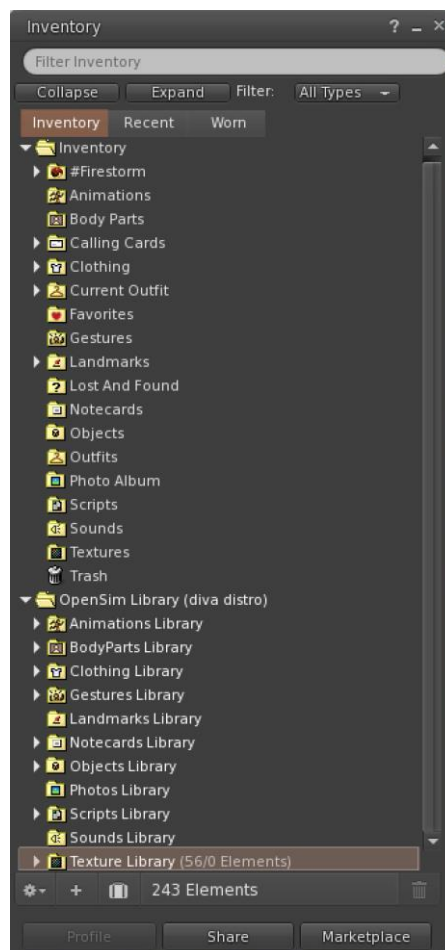
### World > World Map

- Larger overview of the region with filtering feature
- You can zoom in/out to find more regions nearby

## 5.6 Inventory

Each avatar has an inventory of files organized by file type:

- - **Avatar > Inventory (Ctrl + I)**



15. Inventory

You can create files for your avatar's appearance (BodyParts and Clothing folders), you can find or create text files with notes (Notecards folder) or find Objects that you have received from the activities (Objects folder).

## 5.7 Adjusting your appearance

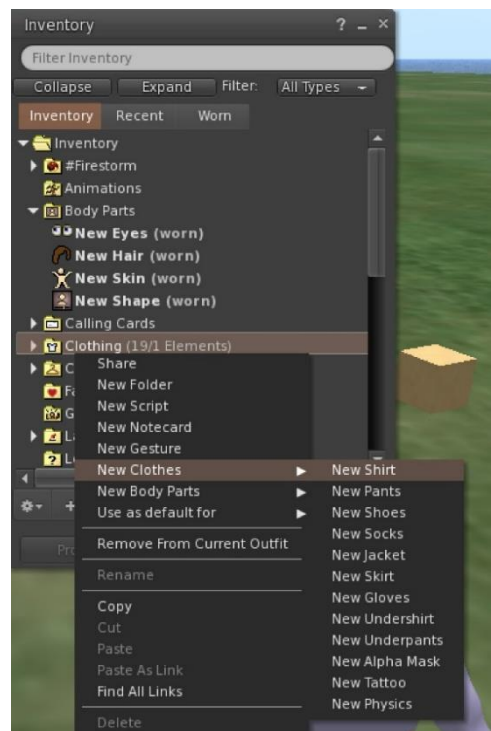
For customizing your body 4 types of objects need to be created/edited:

- Eyes - double click on it for replacing current
- Skin - double click on it for replacing current
- Shape - double click on it for replacing current
- Hair - double click on it for replacing current



16. Customization

You can further customize outfit by **right click on your avatar > appearance > edit outfit**. You can create custom clothes, by creating clothes files in your Inventory and double clicking them. **Inventory > Clothing > (right click) new clothes > choose type of outfit.**

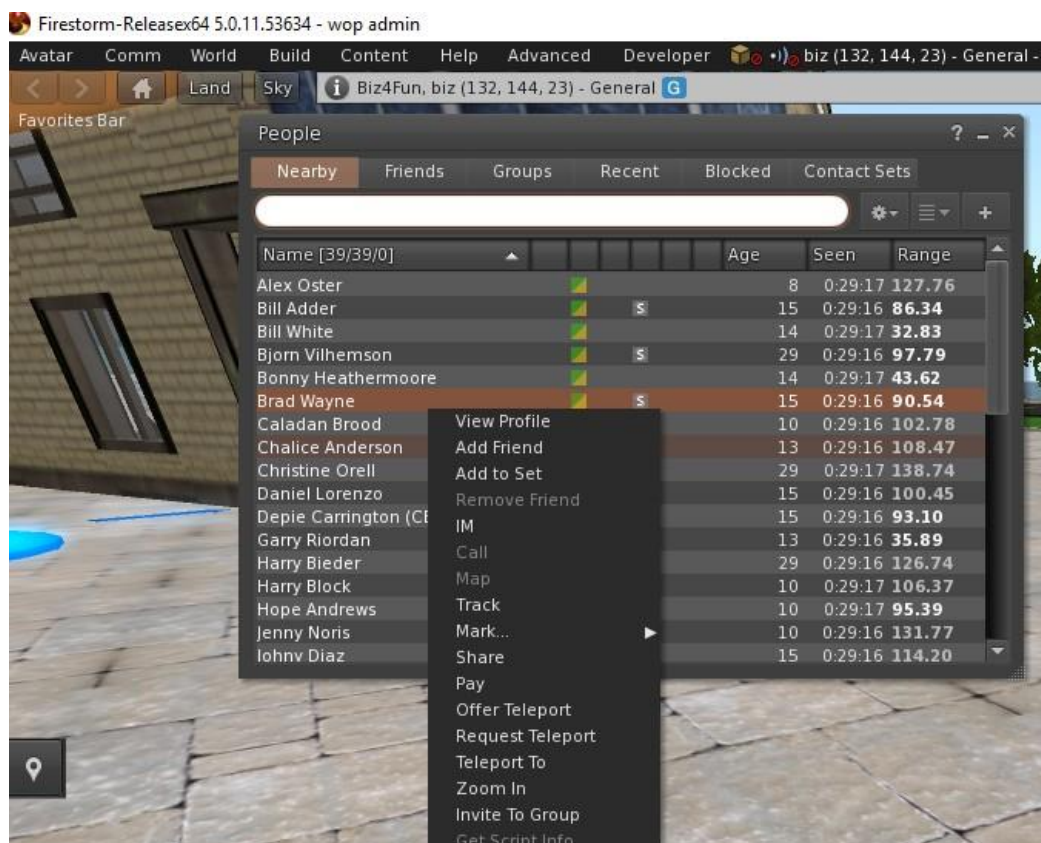


Then right click and select edit to adjust the appearance of each clothe as you desire.



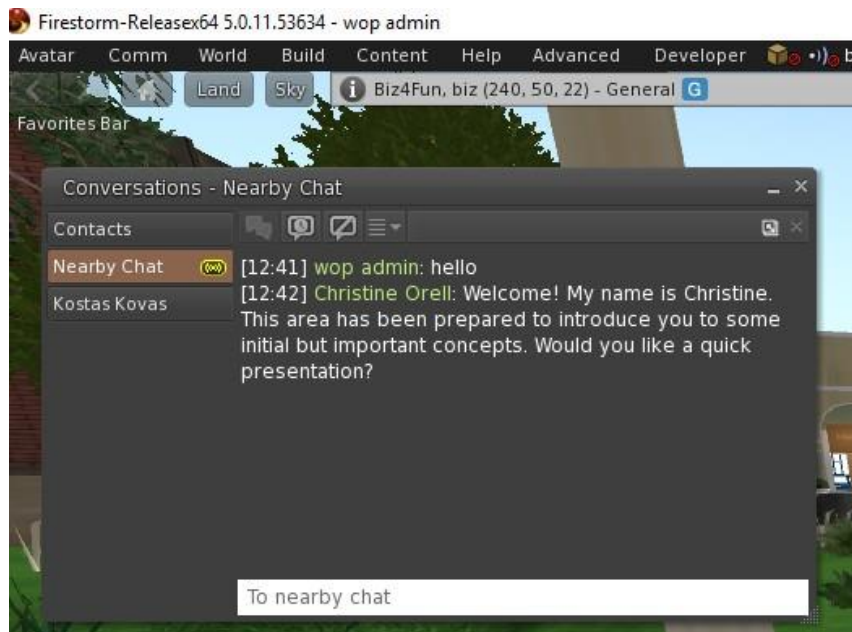
## 5.8 Communication

You Can add other user avatars as friends to easily find them and be able to teleport to them. From the Viewer's navigation bar, select **Comm -> People**, to open a window that display a list with all nearby users. Right click on one of the users and you get the option to view their Profile, add them as a friend, send a private instant message (IM), request that you teleport to them (Request Teleport) or that they teleport to you (Offer Teleport), and to create a distinct marker on his place to easily find him (Track).





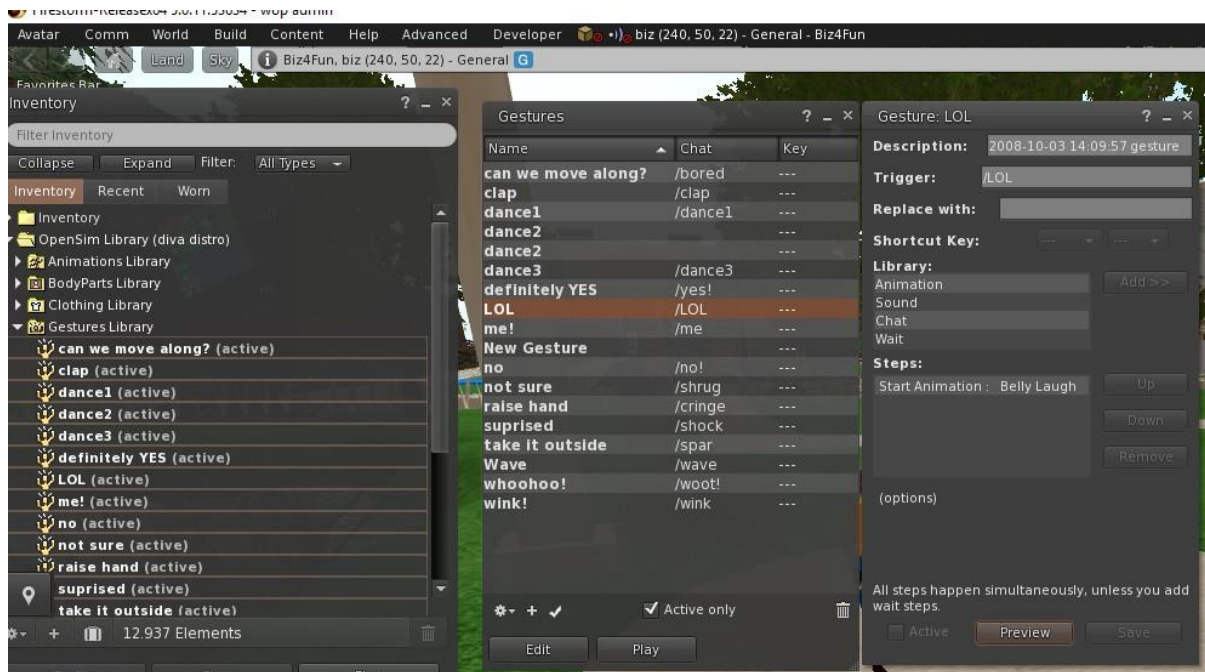
If you have already added some user as a friend, you can find them in the 'Friends' tab, even if they are not online at the moment. You can send them a private message and they will be able to see it as soon as they log in the virtual world.



You can open the chat window (**Comm -> Chat**) to view and participate in conversations. The default '**Nearby Chat**' displays all discussions that happen near your avatar. There is also a shortcut for righting quick messages that nearby avatars will receive by using the chat bar on the bottom left of your screen.

You can configure and use Gestures to be used with chat. Gestures are animations performed by your avatar to indicate or emphasize your attitude or your emotions. You can associate specific Gestures with specific words, so when you include them in your chat messages, your Avatar will perform the animations.

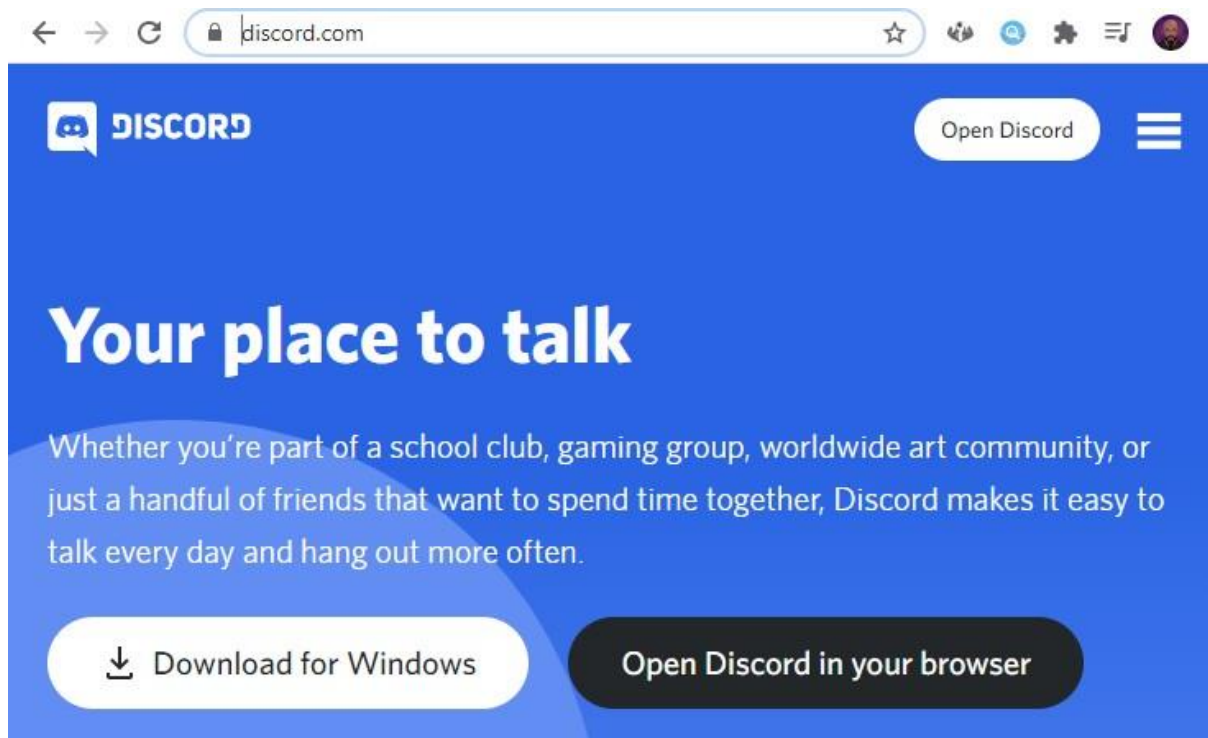
First, open your Inventory (**Avatar -> Inventory**) and locate the "**Gestures Library**" folder, under "Opensim Library". There are several gesture files in that folder, and you can right click and select "Activate" the ones you want your avatar to be able to perform.



Then open the Gestures Window (**Comm -> Gestures**) and you will see the Gestures you have activated. Double click on one of the Gestures and you will see your avatar performing the animation. Select a Gesture and click the **"Edit"** button to view the details. There is a Trigger field that shows the command to use in chat to perform the Gesture. For example, you can write **/LOL** in the chat menu to make your avatar perform a laughing animation.

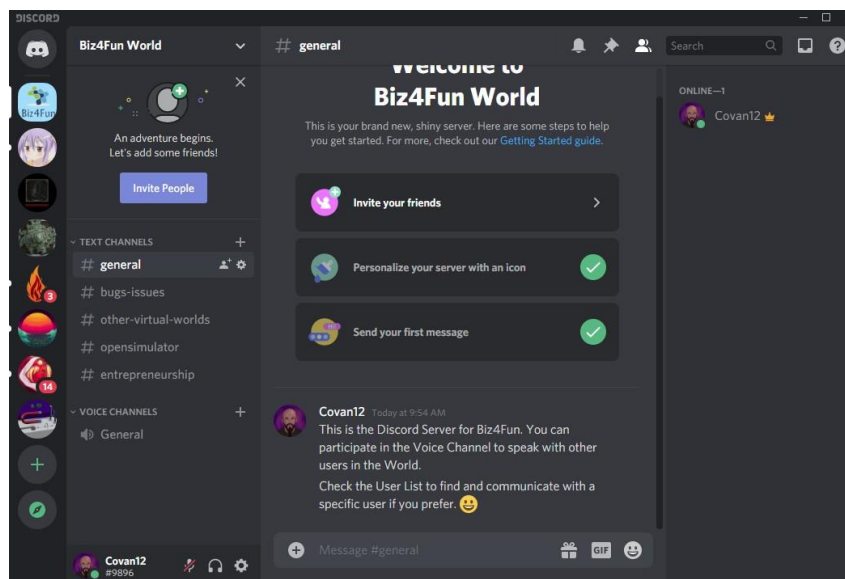
You can use the groups window (**Comm -> Groups**) to join or create a Group with other users to communicate with.

Voice communication is not enabled in the Biz4Fun World, however users can use software like Discord to speak through the microphone with other users. We have created dedicated server in Discord for the Biz4Fun World. You can create an account in Discord for free and then enter the Biz4Fun World server to participate in the general discussion or to find and communicate with other users. There are applications for every operating system, or you can use a Web Browser.



You can use the following invite link to find and join the Discord server:  
<https://discord.gg/rGdBXdk>

When you are in the Biz4Fun server you can participate in the TEXT CHANNELS about the project on the top left. You can enter the VOICE Channels to use your microphone to speak with other users connected in the Biz4Fun voice server. On the user list on your right, you can find all users that have joined the Biz4Fun Discord server (even if they are not inside the 3D World at the time) and find and communicate with specific ones if you prefer to.



## 5.9 NPC characters

Many scenarios include characters controlled by scripts that you can interact with.

These characters usually approach you when you get near and you will see some dialogue options that you can use. NPC characters may provide instructions or hints, guide you to other areas, test your knowledge or give you objects such as rewards.





17. NPC

### 5.10 Presentation panels

Presentation panels are used in most scenarios to display the theory of the topic. You can interact with the buttons to navigate through the slides or change language:



18. Biz4Fun Presentation Panels

### 5.11 Activities

Each activity inside the World may have different ways to interact with. The instructions are specific to each Activity and you should find them next to the activity itself.

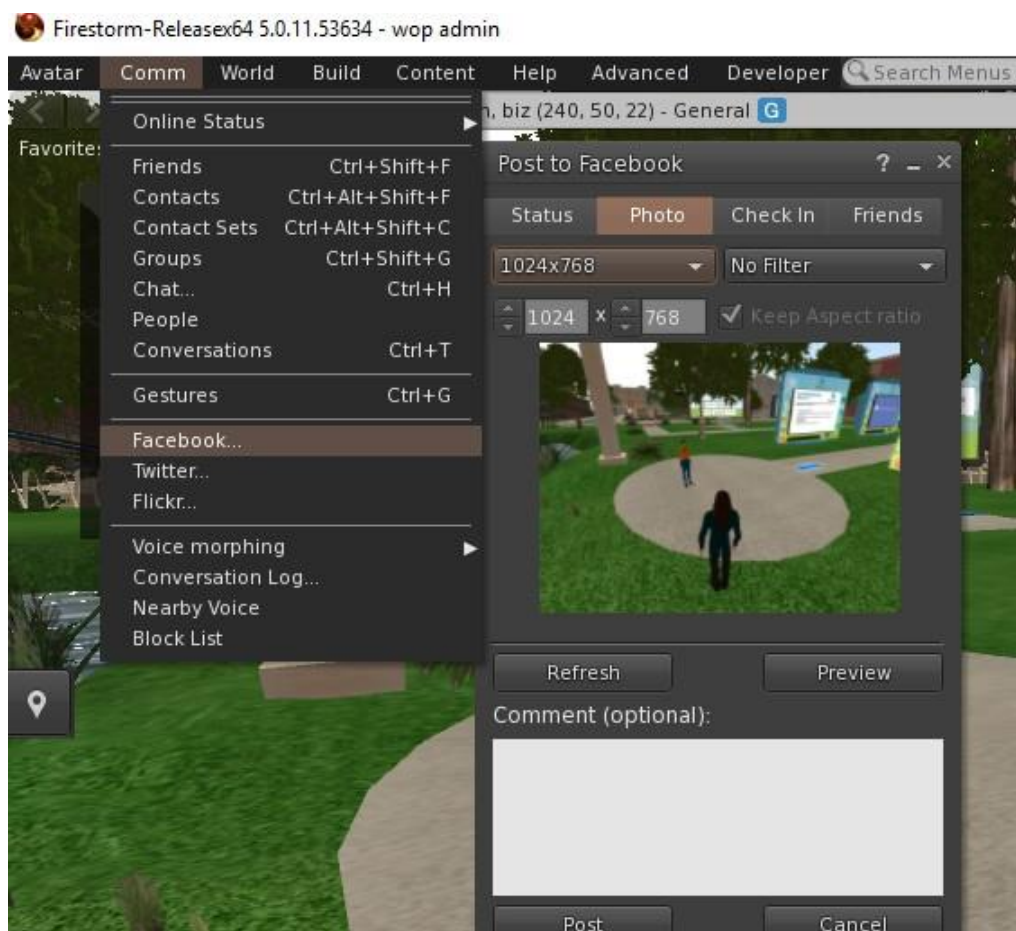


19. Biz4Fun Activities

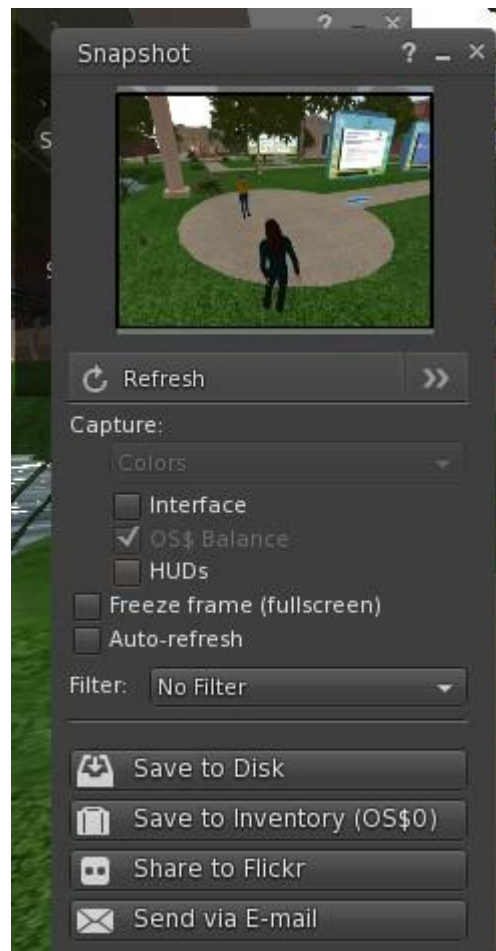
## 5.12 Social Media Functionality

The 3D Viewer you are using, may offer specialized functionality to quickly share your activities in social media.

Check the options under the **“Comm”** menu, to find the integrated functionality to quickly post Status, Photos or Check In, to social platforms like Facebook, Twitter, and Flickr.



You can also manually take screenshots, using the snapshot window (Avatar -> Snapshot), and save them on your computer (or your inventory) to share later. You can also select to send the image via E-mail message or to share it on Flickr.



### 5.13 Reward System

On the starting area of Biz4Fun, you can find a BOX that you can click to receive a HUD item. Find the HUD item in your Inventory under the “Objects Folder” and a fixed window will appear on the top right of your screen.

This object tracks your activities in the 3D World and your progress regarding the 10 BizFun Courses. There is a bar for each course, and it will have a different color based on your progress. A red bar means that you have not completed any activities for the specific course. A yellow bar means that you have completed some of the activities and a green bar that you have completed all the activities for the specific course.

When you have completed the activities for a course, you can click on the bar to receive as reward an item. You can then find the reward item on your inventory. Reward items may be sticker images or promotional clothing you can wear in the 3D World (e.g a Biz4Fin T-Shirt with a relevant message).





## 6 INTEGRATING THE BIZ4FUN 3D VWSG INTO THE LEARNING PROCESS

It is widely acknowledged that GBL has revolutionized education and training. Research has continuously shown the benefits of GBL, pointing out that such approach can allow students to focus well enough to learn better, enhancing and reinforcing the learning and teaching process.

Considering the 21st-century students differ from those of the preceding decades, GBL can help teachers and educators work with them. Digital games are indeed a tool that teachers, facilitators and adult educators can use to create a more engaging and connected environment students may benefit to acquire/strengthen a set of skills and transversal competencies.

This chapter serves three aims.

- It introduces the Biz4un Methodology.
- It attempts to identify and describe the steps that teachers and educators should implement to gain the most from the Biz4Fu VWSG, taking advantage of gaming technologies to build a fun, stimulating and interactive virtual learning environment that promotes the acquisition of skills and competencies needed to be a successful start upper.
- It also outlines the main innovation potential for the Biz4Fun online learning platform.

### 6.1 BIZ4FUN methodology

The aim of the Biz4Fun project is to increase the competitiveness of young, mostly unexperienced people, on the job market in partners' countries.

The learning environment adopts a pedagogical approach that, through 3D virtual reality, offers winsome, fun, and effective educational opportunities. Biz4Fun offers a 3D virtual environment designed to help broadening the young people economic knowledge, shaping the basics of entrepreneurship, and reducing gaps in the knowledge of financial tools.

According to the constructivist theory of Jean Piaget people build their knowledge through the experiences and internal re-elaboration that each individual works in relation to their sensations, knowledge, beliefs, and emotions.

From this perspective, the learning process is also the result of a continuous interaction between the information to be learned and the interpretation built based on previous knowledge, the context and the personal meaning attributed to them. Many educational strategies are based on the principle of constructivism; one of the most effective for science education is the strategy called Inquiry Based Science Education (IBSE). It refers to a teaching methodology aimed to an active learning that leads to a profound knowledge and not only to memory. This methodology considers the scientific investigative nature and the manner in which students learn and start from the idea that the heart of scientific learning is the direct experience. The learners show a natural curiosity that is an expression of an attempt to understand the world around them and they build their knowledge by reflecting experience. The IBSE methodology gives great importance not only for experimentation but also for collaboration, the ability to reflect, discuss, document, present and share the results of the investigations.

Adopting this training method allows learners to develop an understanding of the scientific aspects of the world through the development and use of investigative skills. In particular, the IBSE bases its principles on some general rules, primarily on the belief that the student is able to control his own learning process by working as scientists, by performing experiments, collecting and analysing data.

The characteristics of this learning process are therefore linked to the exploration of the environment, to creating hypotheses to be refuted through experimentation.

Starting from these considerations, the project Biz4Fun is providing an environment of innovative virtual reality for the education of entrepreneurship, funded by the European Union under the Erasmus+ program. The aim of the project is to accompany learners in the study and learning of entrepreneurship through new educational technologies. Biz4Fun offers a 3D interactive virtual environment designed to help learners learn about starting up new business using the IBSE strategy and virtual environment.

Learners can: visit the virtual classes of Biz4Fun, carry out experiments, explore procedures and deepen their knowledge through educational content and resources. Moreover, learners have "non-player characters" available to help them analyse and understand the entrepreneurship processes simulated in the virtual world.

Summarising, 3D virtual learning environments can motivate learners through innovative and engaging study experiences. Furthermore, virtual worlds encourage learner's empowerment through more interactivity and more constructive ways of learning.

## 6.2 Pedagogical tools, events and actions

In general, objects in OpenSimulator have different states. While in a state, the object waits (or listens) for specific events to occur (e.g. someone touches or approaches the object) that trigger it, it executes some actions (e.g. rotate or display a label above) or changes state. As an example, a lamp is initially in a state called "off" and waits for the event of some user clicking/touching it. When a user clicks it then it executes an action that makes the lamp turn on and then changes to another state called "on". While on state "on" the object waits for a user to click it so it turns off and returns to state "off".

### **Some events that an object can wait to happen:**

- user touches (clicks) an object,
- user wears or equips/attaches an object,
- user takes a copy of an object,
- user approaches an object,
- user collides with an object,
- user selects an option in a dialogue menu or types some text in a dialogue text box,
- user writes some message in a chat channel,
- wait for an object to be attached to an avatar,
- event repeats every X seconds (timer).

### **Some actions that an object can execute after some event:**

- object changes position, size, color, opacity, texture, rotates etc.,

- the texture assigned to the object moves/animates (e.g. running water),
- object "says" some text in chat or plays a sound,
- label/text is displayed on top of an object,
- make a plane of the object glow,
- play a sound file (up to 10 seconds) stored in its inventory,
- create a dialogue menu for a specific avatar to provide an answer to a question,
- play a sound file (up to 10 seconds) stored in its inventory,
- object stops/sleeps X seconds between two actions,
- user avatar is teleported to another position in the region or in another region,
- the walking speed of the avatar is reduced/increased,
- an object is given to the avatar (becomes available in his inventory).

### Examples:

- A door is initially closed and opens (action: rotate) when the user clicks (event: touch) on it (the door can be locked so user needs to first make some action e.g. type a password).
- The user is asked to select a color in a dialogue menu (event: option in dialogue menu) and the object is then painted with it (action: change color).
- An elevator moves to another floor (action: move to target) when the user clicks (event: touch) a button.
- On a presentation screen, the next slide is loaded (action: change texture) when user clicks Next button (event: touch)
- On a presentation screen, the next slide is loaded automatically every 10 seconds.
- When the user approaches an object (or area) he receives a text message.

## 6.3 What are the key steps to implementing the biz4fun 3d vwsg in formal and non-formal education?

The more efficient and consistent way to bring the Biz4Fun Social Game into the curriculum is to have a plan and a clearly defined goal. Here are some recommendations for incorporating GBL into lesson plans or programs:

- Step 1. Determine the Purpose of GBL

Teachers and educators should first determine if they want to use the 3D VWSG for

- Intervention: the tool can be used to address students' trouble spots.
- Enrichment: once the learner master core material, the VWSG can be an effective tool for presenting content through different media
- Reinforcement: the class can play to reinforce curriculum content.

- Step 2. Test the Biz4Fun 3D VWSG before using it

While playing, teachers and educators should pay attention to some key criteria (customization, engagement, content) to make sure that the platform and its content is aligned with learning goals.

- Step 3: Dedicate Time to GBL

To gain the most from Biz4Fun 3D VWSG, teachers and educators should use GBL in a systematic and consistent way.

With GBL, the whole process is a well-organized learning environment within a game where players are, they are keen on social interaction with people who are entitled to help them to deal with the challenge.

Biz4Fun supports the development of truly blended education as well as self-study.

So, users can use the online platform for self -study, while teachers and trainers are encouraged to integrate the learning environment provided by 3D VWSG in teaching.

According to Ivanova, gamers are usually seeking for challenges and appreciate feedback of their actions. They are keen on social interaction with people who are entitled to help them to deal with the challenge. She claims that gamers are perfect learners.

The researcher points out that teachers and educators need feedback, as well as strong social relationships, and they are willing to overcome the *challenge of learning*. And students need the same. They need a challenge, their teacher's/educator's feedback, and a thoughtfully designed learning environment.

The use of the Virtual World for Educational which "provides sensory immersive experience, exploratory hands-on learning, collaborative social interaction, experiential learn-led activities and active role-play that go beyond the traditional classroom setting" plays a key role in modern education practices" (Tramonti, Michela and Zheleva, Mariya). The Biz4Fun VWSG represents and educational models and a GBL approach aimed to facilitate the development of a new collaborative e-learning approaches and to provide opportunities for an effective distance and online education through the support of groups or communities bringing together experts, teachers and students from different countries or locations.

#### **6.4 The innovation potential of the Biz4fun 3D VWSG**

The Biz4Fun project aims to support innovation in VET, reshape the tools around the needs of learners and employers.

With the purpose of providing students the skills and competencies needed to turn ideas into innovations and promoting greater employer engagement, the Partnership of the Biz4Fun project has been committed to work on combining technological innovation and a new pedagogical approach.

Based on such innovative approach, the Biz4Fun 3D VWSG can conceptually be seen as can be seen as an education tool dedicated tool to tackle societal challenges across various expertise. The Platform addresses such challenges supporting the acquisition/development of skills and competences needed to build the own innovation capacity of the students.

The innovative aspects of the Biz4Fun project concern open and innovative education and embedded in the digital era. In particular, the Biz4Fun 3D VWSG:



- provides access to effective learning scenarios,
- brings practical experiences from real-life best practices into digital learning,
- focuses on a pedagogical approach that covers all aspects of learning preferences of young people (short but consistent information, videos, interactivity, etc.).

## 7 RECOGNITION AND CERTIFICATION

The courses in Biz4Fun 3D Virtual Worlds should be organized into sessions, which can follow the scenario structure or be organized according to the study plan of the VET provider. Before starting the learning activities, the organisation of following events is recommended:

### 7.1 KickOff Event

The KickOff event introduces the course/scenario goals and the expected activities in 3D Virtual World. It should motivate the participants and provide an overview of the activities and methods that will be used through the course. This event can be realized in an auditorium and it can include a video or a podcast message.

### 7.2 Initial or pre-course learning activity

An initial learning activity can be proposed to participants before the course officially starts. This pre-course activity could be, for example, self-discovering the Biz4Fun 3D Virtual World or thinking about the activities that student's company will focus on. It is very important that the initial learning activity makes a good impression on participants, and they will be familiar with the 3D Virtual World. This is also a good opportunity for administrators to see if there are any technical problems.

### 7.3 Learning standards for Biz4fun 3d Virtual World Courses

<i>Name of the course/scenario</i>	INTRODUCTION INTO THE ENTREPRENEURSHIP
<i>EQF level</i>	3
<i>Expected learning outcomes</i>	Understand the concept of entrepreneurship and identify the needs of a project.
<i>Tools and outcomes methods for evaluation of the learning</i>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Critical reflection</li> </ul>

<i>Name of the course/scenario</i>	BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND EUROPE
<i>EQF level</i>	4
<i>Expected learning outcomes</i>	Learn how to identify and analyze the business opportunities in correlation with the consumer behavior.
<i>Tools and outcomes methods for evaluation of the learning</i>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Self-assessment</li> <li>• Practical project</li> <li>• Examination</li> </ul>

<i>Name of the course/scenario</i>	BUSINESS MODELS
<i>EQF level</i>	5
<i>Expected learning outcomes</i>	Learn how to design the business flow at the strategic level in order to deliver value to the customers.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Self-assessment</li> </ul>

<i>Name of the course/scenario</i>	BUSINESS PLAN
<i>EQF level</i>	4
<i>Expected learning outcomes</i>	Learn how to design the business flow at the strategic level in order to deliver value to the customers, to identify collaborative approaches and equipment reconstruction. Also is included a management approach of the business plan.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Self-assessment</li> <li>• Examination</li> </ul>

<i>Name of the course/scenario</i>	COLLABORATIVE TOOLS FOR DESIGNING OR INNOVATING A BUSINESS MODEL
<i>EQF level</i>	6
<i>Expected learning outcomes</i>	Learn how to create, deliver and capture value for the company and customer using new and modern technologies.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Self-assessment</li> <li>• Examination</li> </ul>

<i>Name of the course/scenario</i>	MARKETING
<i>EQF level</i>	4
<i>Expected learning outcomes</i>	Learn how to promote, sell and distribute a

	product or service in order to obtain added-value in your company.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Self-assessment</li> <li>• Practical projects</li> </ul>

<i>Name of the course/scenario</i>	DIGITAL MARKETING
<i>EQF level</i>	4
<i>Expected learning outcomes</i>	Learn how to use digital technologies (SEO, content marketing, content automation, social media etc.) in order to engage people and drive business awareness.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Self-assessment</li> <li>• Practical projects</li> <li>• Peer review</li> </ul>

<i>Name of the course/scenario</i>	ANALYSIS ON THE BEST MARKETING STRATEGIES FOR SMALL BUSINESSES
<i>EQF level</i>	4
<i>Expected learning outcomes</i>	Learn how to identify and choose the correct marketing strategy that best fits for the proposed business objectives.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Case studies</li> <li>• Self-assessment</li> <li>• Practical project</li> <li>• Multiple-choice tests</li> <li>• Peer review</li> </ul>

<i>Name of the course/scenario</i>	FINANCIAL MANAGEMENT
<i>EQF level</i>	5
<i>Expected learning outcomes</i>	Learn how to search what sort of capital to obtain in order to fund the company's assets.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Multiple-choice tests</li> <li>• Self-assessment</li> </ul>

<i>Name of the course/scenario</i>	HUMAN RESOURCE MANAGEMENT
<i>EQF level</i>	6
<i>Expected learning outcomes</i>	Learn how to increase the employee performance and gain a competitive advantage on the market.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Self-assessment</li> <li>• Peer review</li> <li>• Practical project</li> </ul>

<i>Name of the course/scenario</i>	HUMAN RESOURCE MANAGEMENT
<i>EQF level</i>	6
<i>Expected learning outcomes</i>	Learn how to increase the employee performance and gain a competitive advantage on the market.
<i>Tools and methods for evaluation of the learning outcomes</i>	<ul style="list-style-type: none"> <li>• Self-assessment</li> <li>• Peer review</li> <li>• Practical project</li> </ul>

## 8 CONCLUSIONS

The Biz4Fun VWSG gives participants the change of accessing virtual contexts at the same time through their own avatars. The online learning platform has been designed as a social game, allowing players (mostly young inexperienced people) to interact with digital artefacts and communicate with other players. Designed with the purpose of providing learners with the skills and competencies needed to create a manage a startup, the online platform recreates experiences providing students the capacity to solve problems similar to the real ones.

Being an educational online tool aimed to educate their users about entrepreneurship covering EQF level from 3 to 7, the Biz4Fun VWSG can address to a wide range of users: from young people (most of them are fascinated with GBL) to their teachers/educators, VET/HE representatives but also business world representatives.

This Handbook highlighted some of the benefits and key issues related to motivation, engagement in relation to playing digital games. Although there is a need for further empirical studies to assess how the issues relate to each other and how to design more effective and enjoyable learning environments also in informal and non-formal education, it is widely acknowledged that using technology for educational purposes can be beneficial to both learners and teachers/educators.

If educational digital games can be successfully used to improve both learning and teaching, what do the users of Biz4Fun VWSG get out of the experience?

The Biz4Fun VWSG aims to promote innovation in education, encouraging teachers/educators and learners to explore, research and use new tools to uncover something new. The online platform designed and created during the Biz4Fun projects intends to further strengthen key competences in VET curricula and Open and innovative education, providing users with:

- a virtual world providing an immersive learning experience, “exploratory hands-on learning, collaborative social interaction, experiential learn-led activities and active role-play that go beyond the traditional classroom setting.”
- a social game: the online platform provides users with a learning environment activity which has contextual rules through which users can engage with one another.

Within the Biz4Fun project the development of the learning environment, methodology and OERs aim to promote innovation in informal and nonformal education.

Considering that the “One-size-fits-all” approach no longer applies in education and training, the Biz4Fun VWSG has been designed to provide students with *customized learning*. It empowers them to learn by giving them the freedom to determine when, where, and how they learn and to focus on.

To conclude, we assume that the Biz4Fun VWSG *can* be successfully used to improve both *learning and teaching*.

Students have the chance to understand the application of skills and knowledge to solve real-life problems with help of effective learning process. The platform allows learners to think outside the box while acquiring/developing the skills and competencies needed to become a successful start upper.

And what about teachers and educators? According to Prensky, they must adapt their instruction to meet the needs of students, making use of computer or digital-based games as learning tools in the classroom.

Therefore, they can use the Biz4Fun VWSG as an educational support tool to complement traditional teaching methods to improve the learning experience of the learners, with a special focus on the acquisition and development of entrepreneurial mindset.

Entrecomp, the Entrepreneurship Competence Framework develop by the European Commission, describes entrepreneurship as a lifelong competence and as a transversal competence, which can be applied by citizens to all spheres of life from nurturing personal development, to actively participating in society, to (re)entering the job market as an employee or as a self-employed person, and to starting up ventures (cultural, social or commercial).

We have a lot to learn about the use of new technologies for educational purposes. However, as there is not innovation without experimentation, all the actors involved in informal and nonformal education should be encouraged to use innovative educational tools such as the Biz4Fun VWSG.

The role of such experimentation is crucial in shaping education policy as well as providing learners the opportunity to enhance the entrepreneurial competencies which are crucial for personal development and for raising inclusion into the labour market.

## 9 REFERENCES

1. [Council recommendation on key competencies for lifelong learning](#), European Commission
2. [Promoting entrepreneurship](#), European Commission
3. [EntreComp, the European Entrepreneurship Competence Framework](#), European Commission
4. The benefits of gaming in education: the build a world case
5. [Features of digital game-based learning](#)
6. [Digital Pedagogy - A Guide for Librarians, Faculty, and Students](#)
7. [Study/research on game-based entrepreneurial learning methodologies in Europe](#), ENGAGE Project
8. [Digital Pedagogy - A Guide for Librarians, Faculty, and Students](#) Camiller, M.A [The Students' Perceptions of Digital Game-Based learning](#) Burks, R. Video games sharpen eye-hand coordination skills/ Study
9. Deubel, P. [Game on! T.H.E. Journal \(Technological Horizons in Education\)](#) Guido, M. [Steps to implementing game-based learning in the classroom](#)
10. [Iacovides, I.; Aczel, J.; Scanlon, E.; William, JW. Motivation, engagement and learning through digital games. International Journal of Virtual and Personal Learning Environment](#) Kowert,R. [Benefits of social online play](#)
11. Swallos, E. [What makes a good social game?](#) Coffey, H. [Digital game-based learning](#)
12. Serrano, K. [The effect of digital game-based learning on student learning: A literature review](#)
13. Malone, T.W. [Toward a theory of intrinsically motivating instruction. Cognitive Science: A Multidisciplinary Journal](#)
14. Tramontana, M., Zheleyeva, M. [Uses of the Virtual World for Educational Purposes](#)





## **Biz4Fun - Let's have fun with the business start-up**

ERASMUS + 2018-1-SK01-KA202-046271

## **HOW TO DEVELOP A SUCCESSFUL BUSINESS (COURSE CURRICULUM AND CONTENT)**



**KA2 Strategic Partnerships**

## 1 COURSE PURPOSE

Do you want to start or grow your own business, go international, or avoid bankruptcy?

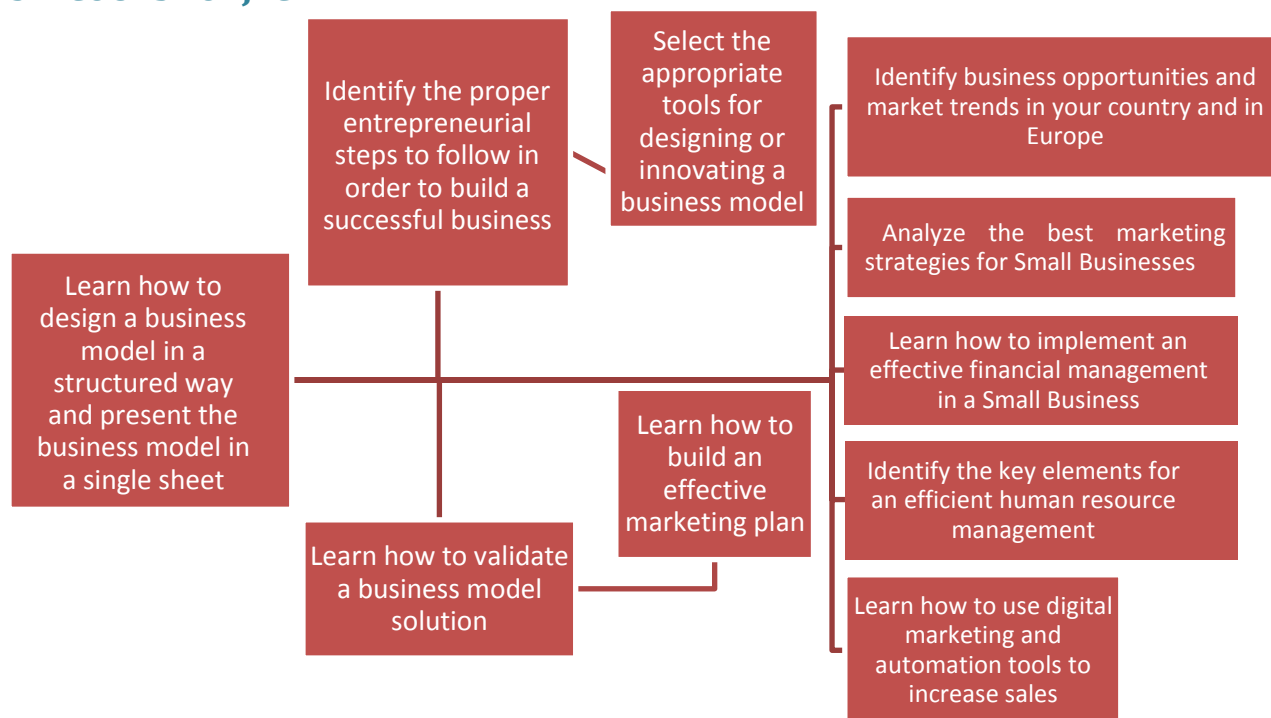
In this business and management course, you will learn the key concepts and steps needed to design or innovate your own business model. You will learn about the trade-offs to be made, and the design issues that are critical for a viable and sustainable business model.

This course will help you answer questions like, "How do I create a simple business model in a structured way?" and "How do I engage my users and how do I create value for my customers as well as revenue for my company?"

## 2 LICENSE

*The course materials of this course are protected under Copyright in the Project "BIZ4FUN - Let's have fun with the business start-up" (ERASMUS + 2018-1-SK01-KA202-046271) and are licensed under the Creative Commons Attribution-NonCommercial-ShareAlike (CC-BY-NC-SA) 4.0 International License.*

## 3 COURSE OBJECTIVE



## 4 COURSE POLICIES

All students must be honest and forthright in their academic studies. To falsify the results of one's research, to steal the words or ideas of another, to cheat on an assignment, or to allow or assist another to commit these acts corrupts the educational process. Students are expected to do their own work and neither give nor receive unauthorized assistance. Any violation of this standard could lead to automatic withdrawal from the course without credit or refund.

Course should be taken in a quiet, distraction free area.

## 5 TECHNICAL REQUIREMENTS/ SUPPORT:

Course is compatible with all major web browsers. A high-speed Internet connection is

recommended.

## 6 GRADING POLICY

In order to receive credit for the course, participants must complete 100% of the course activities with satisfactory responses and spend the required minimum time in the course. If an assignment is found to be unsatisfactory, the student must revise and re-submit by the due date given by the instructor. Course activities are comprised of discussion board postings, readings, study groups, activities and short quizzes. End of module quizzes must be passed with 100%. You may take the quizzes as many times as needed to pass.

Upon completion all students will receive a course completion certificate.

## 7 COURSE SYLLABUS AND LEARNING SCENARIO TEMPLATE

1. **Introduction into the entrepreneurship** - Theoretical courses.
2. **Business opportunities and market trends in your country and in Europe** - The theoretical objective of this learning topic is to learn how to identify and analyze the business opportunities in correlation with the consumer behavior.
3. **Business Models** - The theoretical objective of this learning topic is to learn how to design the business flow at the strategic level in order to deliver value to the customers.
4. **Business Plan** - Practical courses.
5. **Collaborative tools for designing or innovating a business model** - The theoretical objective of this learning topic is to learn how to create, deliver and capture value for the company and customer using new and modern technologies.
6. **Marketing** - Practical courses.
7. **Digital Marketing** - Practical courses.
8. **Analysis on the best Marketing Strategies for Small Businesses** - The theoretical objective of this learning topic is to learn how to identify and choose the correct marketing strategy that best fits for the proposed business objectives.
9. **Financial Management** - Practical courses.
10. **Human Resources management** - Practical courses.

## Learning Scenario Template

<b>Lesson Basic Data</b>	
<b>Subject</b>	
<b>Lesson Title</b>	

<b>Prerequisites</b>	
<b>Subject</b>	
<b>Topic</b>	
<b>Knowledge</b>	

<b>List of Activities / Material</b>		
<b>Name</b>	<b>Short description</b>	<b>Type</b>

<b>Relevant Topics</b>	
<b>Learning Topic Name</b>	<b>Connection Description</b>

<b>Pedagogical Methods (choose relevant)</b>
<input type="checkbox"/> Concept mapping <input type="checkbox"/> Participatory Learning in Action (PLA) Techniques <input type="checkbox"/> Questioning <input type="checkbox"/> Drill and Practice <input type="checkbox"/> Tutorials <input type="checkbox"/> Games <input type="checkbox"/> Story Telling <input type="checkbox"/> Simulations <input type="checkbox"/> Role-playing <input type="checkbox"/> Discussion <input type="checkbox"/> Small group activities <input type="checkbox"/> Social media activities (Facebook, Twitter, Youtube)
Other:
<b>3D Activity Description (one table for one activity – copy as much as you need)</b>
<b>3DActivity Objectives</b>
<b>Keywords</b>

<b>3DActivity Duration</b>
<b>Learning</b> <b>Activity</b> <b>Description</b>
<b>Assessment</b>
<b>Graphic Description</b>
<b>Information text</b>
<b>Work Instructions</b>
<b>Info</b>
<b>References</b>

## 8 LEARNING OUTCOMES

In terms of ability to develop a successful business, the student will be able to:

- use new tools and technologies for promoting the business to different types of stakeholders;
- search, choose and develop the most appropriate business model that economically best fits to his proposed objectives and needs;

- identify attractive market that can be reached economically;
- use business automation as an innovative tool for design a new business model;

In terms of demonstrating the understanding of how to develop a successful business, the student will be able to:

- design appropriate a business model;
- recognize appropriate financing models for his/her entrepreneurial career;
- articulate an effective elevator pitches to gain support for the venture;
- develop a well-presented business plan that is feasible for the student;
- develop a multi-target marketing strategy;

## 9 COURSE OUTLINE

### 9.1 Course 1. INTRODUCTION INTO THE ENTREPRENEURSHIP

1	<b>Type</b>	Theoretical
2	<b>Course description</b>	The main objective is to spread the enterpeneurial culture among young people and to develop entrepreneurship behavious through the activation of practical experience of learning. Will represent set of information that allow to develop learning materials focusing on start-ups' key areas like: Developing a business idea; Building a team; Creating a business plan; Customers, sales and marketing, Forms of investments etc.
3	<b>European Qualifications Framework (EQF)</b>	3
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• entrepreneurship support and/or transfer of innovation to the practice;</li> <li>• how to choose the business model;</li> <li>• strategic outcome;</li> </ul>



5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials, videos;</li> <li>• methodologies and techniques: Collaborative Learning, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA);</li> <li>• ICT environments and tools: Concept Mapping, Drill and Practice, Social Networking;</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	UPAT - PANEPISTIMIO PATRON (EL)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The theoretical objective of this learning topic is to understand the concept of entrepreneurship and identify the needs of a project.
11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Case studies;</li> <li>• Critical reflection;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• Questionnaires;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Drucker PF (1993) Innovation and entrepreneurship: practice and principles. HarperCollins, New York.</li> <li>• Alvarez, S.A., Busenitz, L.W. (2001). The entrepreneurship of resource-based theory. Journal of Management.</li> <li>• Kuratko, D. (2009). Introduction to Entrepreneurship. South Western Educational Publishing.</li> </ul>

## 9.2 Course 2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND EUROPE

1	<b>Type</b>	Theoretical
2	<b>Course description</b>	Business opportunities and market trends in your country and in Europe Course, integrating aspects of marketing, management and finance aims to deliver the knowledge and abilities for identifying opportunities in market trends by engaging students in simulations, detection exercises, and group work to explore the economic, social, and political megatrends both in their countries and Europe.
3	<b>European Qualifications Framework (EQF)</b>	4
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Administrative process &amp; potential risks;</li> <li>• Consumer segmentation;</li> <li>• Purchase situation analysis;</li> <li>• Direct &amp; indirect competition analysis;</li> <li>• Analysis of complementary products &amp; services;</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials, videos;</li> <li>• methodologies and techniques: Collaborative Learning, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA); desk research;</li> <li>• ICT environments and tools: Quizzes, Concept Mapping, Social Networking;</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	SUA – Slovak University of Agriculture In Nitra (SK), SBA - Slovak Business Agency (SK), EUC - Edu Consulting, z.ú (CZ), CTE - Asociatia Centrul de Training European (RO),

		UPAT - PANEPISTIMIO PATRON (EL), EGINA - European Grants International Academy S.R.L. (IT), MNLA - Akdeniz Naturel Yaşam Derneği (TR)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The theoretical objective of this learning topic is to learn how to identify and analyze the business opportunities in correlation with the consumer behavior.
11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Case studies;</li> <li>• Self-assessment;</li> <li>• Practical project;</li> <li>• Examination;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Gibson I., Rosen D., Stucker B. (2015) Business Opportunities and Future Directions. In: Additive Manufacturing Technologies. Springer, New York, NY.</li> <li>• Chesbrough, H. (2010). Business Model Innovation: Opportunities and Barriers. Long Range Planning, Volume 43, Issues 2–3, pp. 354-363.</li> <li>• Brandon A. Mueller, Dean A. Shepherd (2016). Making the Most of Failure Experiences: Exploring the Relationship between Business Failure and the Identification of Business Opportunities. Entrepreneurship Theory and Practice, Volume: 40 issue: 3, pp. 457-487.</li> </ul>

### 9.3 Course 3. BUSINESS MODELS

1	<b>Type</b>	Theoretical
2	<b>Course description</b>	Designed to approach either a personal or corporate challenge, the Business Models Course aims to identify and communicate the key elements of a business model, to enhance the ability to choose the appropriate business model in order to meet the goals and to approach the strategic outcome as a key attribute of the business in an interactive way, using a range variety of learning resources.
3	<b>European Qualifications Framework (EQF)</b>	5
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Different types of business models;</li> <li>• How to choose the business model;</li> <li>• Strategic outcome;</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials;</li> <li>• methodologies and techniques: Questioning, Semi-Structure and Free Discussions;</li> <li>• ICT environments and tools: Quizzes, Concept Mapping;</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	SUA – Slovak University of Agriculture In Nitra (SK)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The theoretical objective of this learning topic is to learn how to design the business flow at the strategic level in order to deliver value to the customers.

11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Case studies;</li> <li>• Self-assessment;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Spiekermann, S., Acquisti, A., Böhme, R. et al. Electron Markets (2015)25: 161. <a href="https://doi.org/10.1007/s12525-015-0191-0">https://doi.org/10.1007/s12525-015-0191-0</a>.</li> <li>• Täuscher K., Sven S.M. (2018). Understanding platform business models: A mixed methods study of marketplaces. European Management Journal, Volume 36, Issue 3, pp. 319-329.</li> <li>• Wirtz, B., Pistoia A., Ullrich S., Göttel V. (2015). Business Models: Origin, Development and Future Research Perspectives. Long Range Planning, Volume 49, Issue 1, pp. 36-54.</li> </ul>

#### 9.4 Course 4. BUSINESS PLAN

1	<b>Type</b>	Practical
2	<b>Course description</b>	The course contains all aspects of the entrepreneurship from the preparation basic business plan, through building a team, looking for financing and finishing on the marketing.
3	<b>European Qualifications Framework (EQF)</b>	4
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• development of successful business plan;</li> <li>• how to establish business company, how to manage financial affairs;</li> <li>• strategic outcome;</li> </ul>

5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials;</li> <li>• methodologies and techniques: Questioning, Semi-Structure and Free Discussions;</li> <li>• ICT environments and tools: Quizzes, Concept Mapping;</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	EGINA - European Grants International Academy S.R.L. (IT)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The practical objective of this learning topic is to learn how to design the business flow at the strategic level in order to deliver value to the customers, to identify collaborative approaches and equipment reconstruction. Also is included a management approach of the business plan.
11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Case studies;</li> <li>• Self-assessment;</li> <li>• Examination;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Shepherd, D. A. 1999. Venture capitalists' introspection: A comparison of "in use" and "espoused" decision policies. Journal of Small Business Management, 37(2): 76 – 87.</li> <li>• Baron, R. A. 2008. The role of affect in the entrepreneurial process. Academy of Management Review, 33: 328 –340.</li> <li>• Burns, P. 2001. Entrepreneurship and Small Business. Basingstoke: Palgrave.</li> </ul>

## 9.5 Course 5. COLLABORATIVE TOOLS FOR DESIGNING OR INNOVATING A BUSINESS MODEL

1	<b>Type</b>	Theoretical
2	<b>Course description</b>	Tools for designing or innovating a business model Course provides to students an overview about the most common business models, the challenges in the digital era and the opportunities provided by new technologies in order to enhance the efficiency of the business model they have chosen for their own business.
3	<b>European Qualifications Framework (EQF)</b>	6
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Comparing business models</li> <li>• Assessing the business model</li> <li>• Modern tools for innovating the business (business automations &amp; platforms)</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials</li> <li>• methodologies and techniques: Collaborative Learning, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA)</li> <li>• ICT environments and tools: Quizzes, Concept Mapping, Drill and Practice</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	CTE - Asociatia Centrul de Training European (RO)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The theoretical objective of this learning topic is to learn how to create, deliver and capture value for the company and customer using new and modern technologies.



11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Case studies;</li> <li>• Self-assessment;</li> <li>• Examination;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• Questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Schaltegger, S., Hansen, E., Lüdeke-Freund, F. (2015). Business Models for Sustainability: Origins, Present Research, and Future Avenues. Organization &amp; Environment, Volume: 29 issue: 1, pp. 3-10.</li> <li>• Saebia, T., Fossab, N. J. (2015). Business models for open innovation: Matching heterogeneous open innovation strategies with business model dimensions. European Management Journal, Volume 33, Issue 3, pp. 201-213.</li> <li>• Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E., Barlow, C. Y. (2017). Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models. Business Strategy and the Environment, Volume26, Issue 5, pp. 597-608.</li> </ul>

## 9.6 Course 6. MARKETING

1	<b>Type</b>	Practical
2	<b>Course description</b>	Marketing course aims to provide to students the key principles in branding, customer centricity, go-to-market strategies and the opportunities to blend the old marketing technics with the new ones in order to achieve the full potential in promotional activities.
3	<b>European Qualifications Framework (EQF)</b>	4

4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Attracting customers and activating them;</li> <li>• Marketing mix;</li> <li>• Growth marketing;</li> <li>• Online marketing;</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials, videos;</li> <li>• methodologies and techniques: Collaborative Learning, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA);</li> <li>• ICT environments and tools: Quizzes, Concept Mapping, Drill and Practice, Social Networking;</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	EUC - Edu Consulting, z.ú (CZ)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The practical objective of this learning topic is to learn how to promote, sell and distribute a product or service in order to obtain added-value in your company.
11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Case studies;</li> <li>• Self-assessment;</li> <li>• Practical project;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>

13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Kotler, P., Armstrong, G., Trifts, V., &amp; Cunningham, P. H. (2018). Principles of marketing. Brantford, Ont.: W. Ross MacDonald School Resource Services Library.</li> <li>• Fill, C. (2013). Marketing communications: Brands, experiences and participation. Harlow: Pearson.</li> <li>• Lee, K., &amp; Carter, S. (2005). Global marketing and advertising: Understanding cultural paradoxes. New York: Oxford University Press.</li> <li>• Malhotra, N. K. (2010). Study guide and technology manual: Marketing research an applied orientation. Upper Saddle River, NJ: Prentice Hall.</li> </ul>
----	--	--

## 9.7 Course 7. DIGITAL MARKETING

1	<b>Type</b>	Practical
2	<b>Course description</b>	Digital Marketing Course provides an enhanced approach of digital tools that are revolutionizing the world of marketing by shifting the balance of power from firms to consumers and explores several aspects of the new digital marketing environment.
3	<b>European Qualifications Framework (EQF)</b>	4
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Facebook advertising;</li> <li>• Google AdWords;</li> <li>• Content marketing;</li> <li>• Organic social media;</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials, videos</li> <li>• methodologies and techniques: Role-Playing, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA), Collaborative Learning</li> <li>• ICT environments and tools: Quizzes, Simulations, Story-Telling, Social Networking</li> </ul>

6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	CTE - Asociatia Centrul de Training European (RO); SBA - Slovak Business Agency (SK)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The theoretical objective of this learning topic is to learn how to use digital technologies (SEO, content marketing, content automation, social media etc.) in order to engage people and drive business awareness.
11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Self-assessment;</li> <li>• Practical project;</li> <li>• Peer review;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Strauss, J., &amp; Frost, R. (2009). E-marketing. Upper Saddle River, NJ: Pearson Prentice Hall.</li> <li>• Tuten, T. L., &amp; Solomon, M. R. (2018). Social media marketing. Los Angeles: Sage.</li> <li>• Chaffey, D., &amp; Ellis-Chadwick, F. (2018). Digital Marketing. Los Angeles: SAGE.</li> </ul>

## 9.8 Course 8. ANALYSIS ON THE BEST MARKETING STRATEGIES FOR SMALL BUSINESSES

1	<b>Type</b>	Theoretical
---	-------------	-------------

2	<b>Course description</b>	Analysis on the best marketing strategies for small businesses Course gives an integrated approach of marketing strategies and tools in a digital era, engaging students in practical exercises, simulations and study cases.
3	<b>European Qualifications Framework (EQF)</b>	4
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Design thinking and strategy;</li> <li>• Online advertising &amp; social media;</li> <li>• Web analytics &amp; data visualization;</li> <li>• Search Engine marketing (SEM);</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials, videos;</li> <li>• methodologies and techniques: Collaborative Learning, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA), Role-Playing;</li> <li>• ICT environments and tools: Quizzes, Concept Mapping, Drill and Practice, Social Networking, Story-Telling;</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	CTE - Asociatia Centrul de Training European (RO); SUA – Slovak University of Agriculture In Nitra (SK); EUC - Edu Consulting, z.ú (CZ)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The theoretical objective of this learning topic is to learn how to identify and choose the correct marketing
		strategy that best fits for the proposed business objectives.

11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Case studies;</li> <li>• Self-assessment;</li> <li>• Practical project;</li> <li>• Multiple-choice tests;</li> <li>• Peer review;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Anderson, James C. and James A. Narus (1984), A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships, Journal of Marketing, 48 (Fall), 62.</li> <li>• Geyskens, Inge, Jan-Benedict E.M. Steenkamp, and Nirmalya Kumar (1998), Generalizations About Trust in Marketing Channel Relationships Using Meta-Analysis, International Journal of Research in Marketing, 15 (3), 223.</li> <li>• Young, Joyce A., Faye W. Gilbert, and Faye S. McIntyre (1996), An Investigation of Relationalism Across a Range of Marketing Relationships and Alliances, Journal of Business Research, 35 (2), 139-51.</li> </ul>

## 9.9 Course 9. FINANCIAL MANAGEMENT

1	<b>Type</b>	Practical
2	<b>Course description</b>	Financial management Course aims to develop the students' abilities to plan and evaluate the financial resources according with the business strategies, to understand capital markets and institutions from a financial perspective, covering fundamentals of strategic management.

3	<b>European Qualifications Framework (EQF)</b>	5
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Financial planning, monitoring, evaluation and learning;</li> <li>• Financial control;</li> <li>• How to allocate specific financial resources;</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER), tutorials;</li> <li>• methodologies and techniques: Problem solving, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA);</li> <li>• ICT environments and tools: Quizzes, Simulations;</li> </ul>
6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	SBA - Slovak Business Agency (SK)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The practical objective of this learning topic is to learn how to search what sort of capital to obtain in order to fund the company's assets.
11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Self-assessment;</li> <li>• Multiple-choice tests;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>



13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Grable, J.E., Park, J., Joo, S. (2009). Explaining financial management behavior for Koreans living in the United States, <i>Journal of Consumer Affairs</i>, 43(1): 80-105.</li> <li>• Parrotta, J.L., Johnson, P.J. (1998). The Impact Of Financial Attitudes And Knowledge On Financial Management And Satisfaction Of Recently Married Individuals, <i>Financial Counseling and Planning</i>, 9(2): 59-75.</li> <li>• Robb, C.A, Sharpe, D.L. (2009). Effect of personal financial knowledge on college students' credit card behavior, <i>Journal of Financial Counseling and Planning</i>, 20(1): 25- 43.</li> </ul>
----	--	---

### 9.10 Course 10. HUMAN RESOURCE MANAGEMENT

1	<b>Type</b>	Practical
2	<b>Course description</b>	Human resources management Course aims to help learners to have a deeper understanding of the fundamentals in human resources and consider alternative approaches in managing and evaluating human resources of a business.
3	<b>European Qualifications Framework (EQF)</b>	6
4	<b>Learning activity content</b>	<ul style="list-style-type: none"> <li>• Intellectual capital;</li> <li>• Organizational behavior and culture;</li> <li>• Talent management;</li> </ul>
5	<b>Pedagogical Models, Strategies and ICT tools</b>	<ul style="list-style-type: none"> <li>• type of content: Open Educational Resources (OER);</li> <li>• methodologies and techniques: Role-Playing, Semi-Structure and Free Discussions, Participatory Learning in Action (PLA);</li> <li>• ICT environments and tools: Quizzes, Simulations;</li> </ul>

6	<b>Language of the course</b>	EN and translations
7	<b>Names of the lectures</b>	to be decided
8	<b>Supervisor</b>	MNLA - Akdeniz Naturel Yaşam Derneği (TR)
9	<b>Mode of delivery</b>	online learning
10	<b>Learning outcomes</b>	The practical objective of this learning topic is to learn how to increase the employee performance and gain a competitive advantage on the market.
11	<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Self-assessment;</li> <li>• Practical project;</li> <li>• Peer review;</li> </ul>
12	<b>Feedback for evaluation</b>	<ul style="list-style-type: none"> <li>• questionnaires;</li> <li>• feedback from students through focus-group meetings;</li> </ul>
13	<b>Recommended or required reading</b>	<ul style="list-style-type: none"> <li>• Elkjaer, B. (2000). Learning and getting to know: the case of knowledge workers. Human Resource Development International, 3(3), 343-359.</li> <li>• Schippman, J. S., Ash, R. A., Battista, M., Car, L., Eyde, L. D., Hesketh, B., Kehoe, J., Pearlman, K., Prien, E. P. &amp; Sanchez, J. I. (2000). The practice of competency modeling. Personnel Psychology, 53(3), 703-740.</li> <li>• Stewart, T. A. (1997). Intellectual capital: the new wealth of organizations. Doubleday, New York.</li> </ul>



## **Biz4Fun - Let's have fun with the business start-up**

**ERASMUS + 2018-1-SK01-KA202-046271**

### **REPORT ON THE PILOT EVENT (GREECE)**



**KA2 Strategic Partnership**

## 1 GENERAL INFORMATION ON IMPLEMENTATION

1. Partner, Country	UPAT/Greece
1. Start date of the pilot	21/4/2021
2. End date of the pilot	13/6/2021
4 Number of participants taking part in the Piloting Event	40
4 Number of participants testing the Biz4Fun VWSG	33

### 1.1 Short Description of the Piloting event

We followed Option B (Online) of the Piloting Plan, due to covid-19 health conditions in Greece. We delivered in the period 21/4/2021 to 28/4/2021 to key persons two documents. One was describing possible ways of piloting process and was giving basic information about Biz4Fun and its courses, concentrating on courses 1, 8 and 9. The second included technical information, about what participants should setup to be able to get into the Biz4Fun 3D Virtual World and implement the piloting process. We had short sessions with key persons to answer any questions about the use of the platform. Then, a key person who was a VET teacher distributed the documents to her students and made a demonstration to them. Most of the students afterwards used the platform and completed corresponding questionnaire. A key person who was a teachers' consultant, did the same with teachers under his supervision. Finally, the documents were sent to individual persons from VET/IHE institutions and policy makers. Some of them responded and filled in corresponding questionnaires.

### 1.2 Participants - number of participants which tested the learning scenarios

Socio-demographic variables	Number of participants
<b>1. Gender</b>	
<i>Male</i>	17
<i>Female</i>	16
<b>Total:</b>	<b>33</b>
<b>2. Profile</b>	
<i>Learners</i>	17
<i>VET/HE Institutions</i>	10
<i>Policy Makers</i>	6
<b>Total:</b>	<b>33</b>

### 1.3 Learning scenarios piloted

Course	Course piloted during the Piloting event
1. INTRODUCTION INTO THE ENTREPRENEURSHIP	X
2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND EUROPE	
3. BUSINESS MODELS	
4. BUSINESS PLAN	
5. COLLABORATIVE TOOLS FOR DESIGNING OR INNOVATING A BUSINESS MODEL	
6. MARKETING	
7. DIGITAL MARKETING	
8. ANALYSIS ON THE BEST MARKETING STRATEGIES FOR SMALL BUSINESSES	X
9. FINANCIAL MANAGEMENT	X
10. HUMAN RESOURCE MANAGEMENT	

## 2 RESULTS OF THE ONLINE EVALUATION

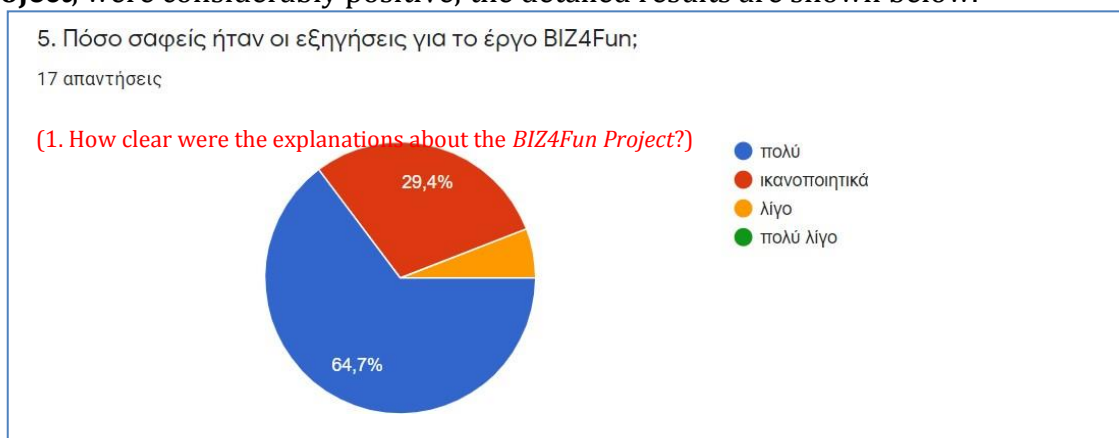
UPAT shared three online evaluation questionnaires addressed to the different target groups (Learners, VET/HE Institutions, policy makers) and aimed at gathering important information about the testing of the 3D Virtual World and social game developed throughout the BIZ4Fun Project.

### 2.1 Learners' online evaluation (17 participants)

The respondents were asked to answer 17 questions. The first area focuses on the clarity of instruction and explanation provided by the Staff introducing the BIZ4Fun Project and 3D Virtual World and social game.

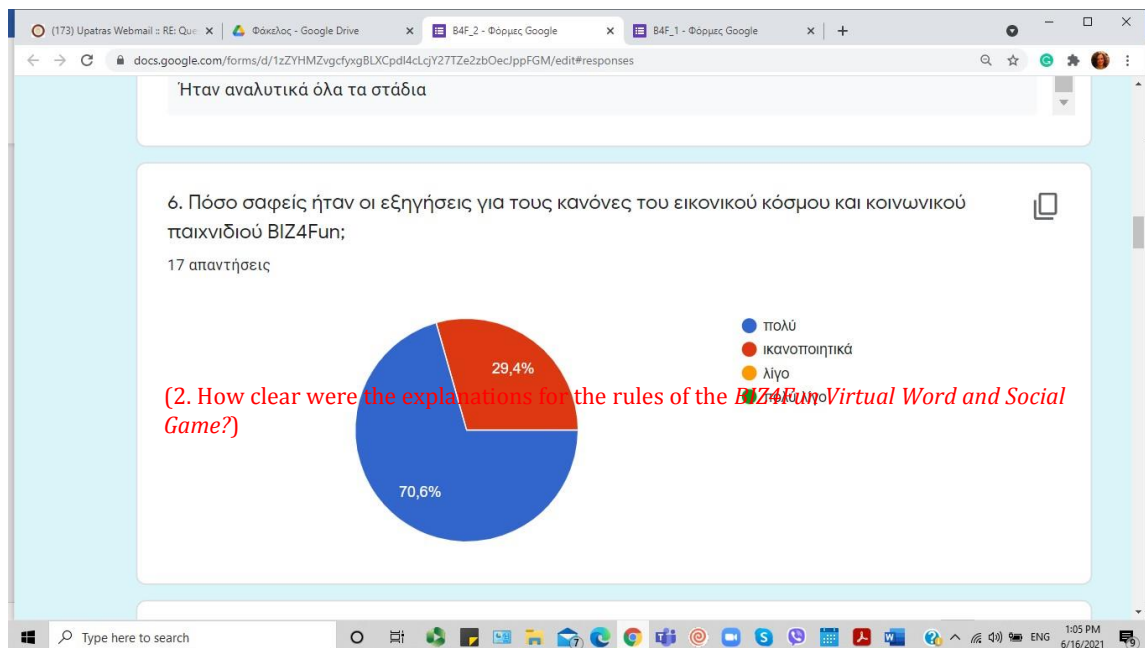
*Notice: The numbering of questions in the Greek version implemented in Google Docs is different from that in the common (e.g. English) version because we put demographic questions at the start of the questionnaire. So, non-demographic questions start from No 5. Below, under the question in Greek in the plot image, we give the No and the question in English within parentheses in red. We also put the common question No besides the Greek numbered question label in red.*

**Q5 (Q1).** The results about the **clarity of explanation provided about the Biz4Fun Project**, were considerably positive; the detailed results are shown below.



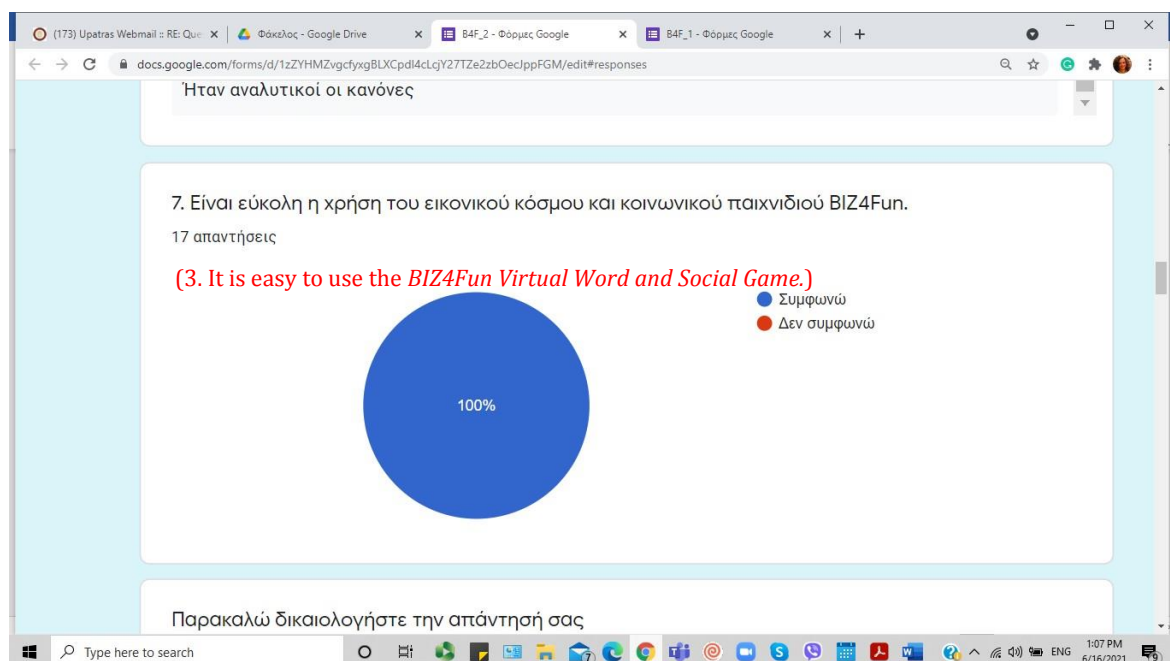
64,7% of the respondents stated that the explanation was very clear and 29,4% that it was satisfactory. Specifically, the participants easily understood the aim and the structure of the project and did not find any particular difficulty. However, there were some that because of the distance, they had some troubles.

**Q6 (Q2).** Also, the results about the **clarity of instruction and explanation** about the 3D Virtual world and social game, were very positive.



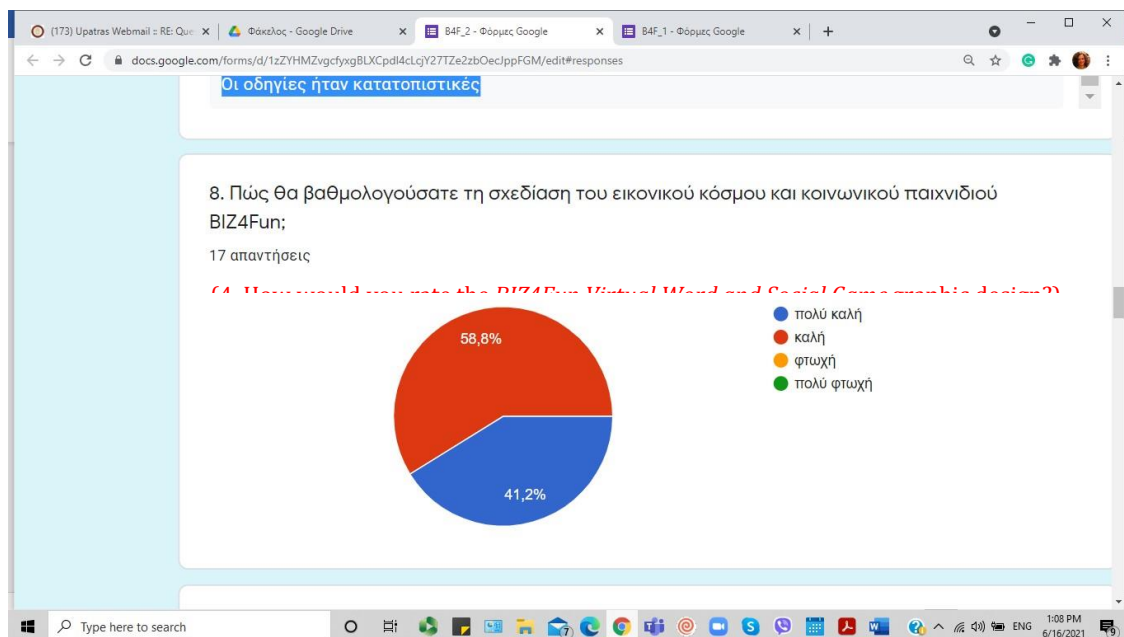
70,6% of the respondents stated that the instructions and explanation was very clear and 29,4% that it was satisfactory. The participants *didn't face any particular problem* and they stated that *"the rules were analytical and clear"*. They also *easily understood what they needed to do*. One participant stated that *he wanted more information about the quizzes*.

**Q7 (Q3).** The results about the **ease of use** of the virtual world and the social game were perfectly positive.



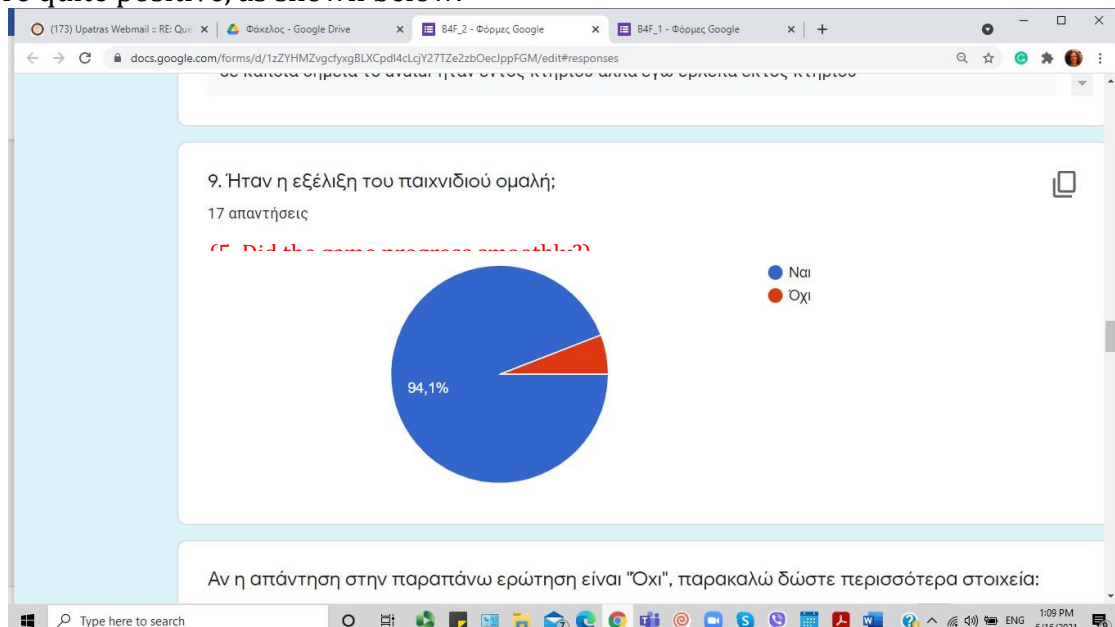
All of the respondents (100%) found the use of the virtual world and the social game easy. They didn't face any difficulties either because some of them have experience with other videogames, or because the instructions were informative. Some of them stated that there were some small bugs and freezes with the character, but nothing too serious.

**Q8 (Q4).** The overall assessment of the **graphics** is very positive. 100 % of the respondents rated the graphic between “very good” and “good”.



More specifically 41,2% of the respondents found the graphics very good and 58,8% good enough. Some participants found *the user-environment interaction very interesting* and others think that *the design of the game achieved it's goal*. The majority of them think that *the overall graphics were great but there is still room for improvement*.

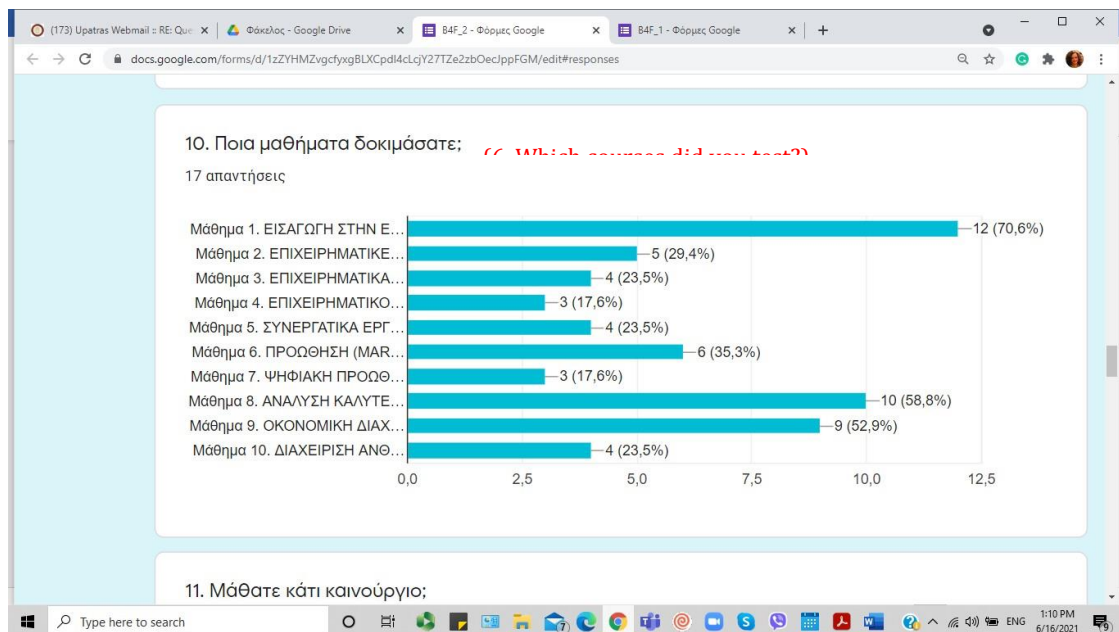
**Q9 (Q5).** With regards to the **user-friendliness** of the Platform, the results registered were quite positive, as shown below.



94,1% of the respondents were positive about the user-friendliness of the platform, but there is always the odd case where *there are some freezes*.



**Q10 (Q6).** Regarding **which courses they tried**, most of the participants tried the first, the eighth and ninth course, as instructed, but some of them preferred some other courses.



70,6% tried Course 1. INTRODUCTION INTO THE ENTREPRENEURSHIP.

29,4% tried Course 2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND EUROPE.

23,5% tried Course 3. BUSINESS MODELS

17,6% tried Course 4. BUSINESS PLAN

23,5% tried Course 5. COLLABORATIVE TOOLS FOR DESIGNING OR INNOVATING A BUSINESS MODEL

35,3% tried Course 6. MARKETING

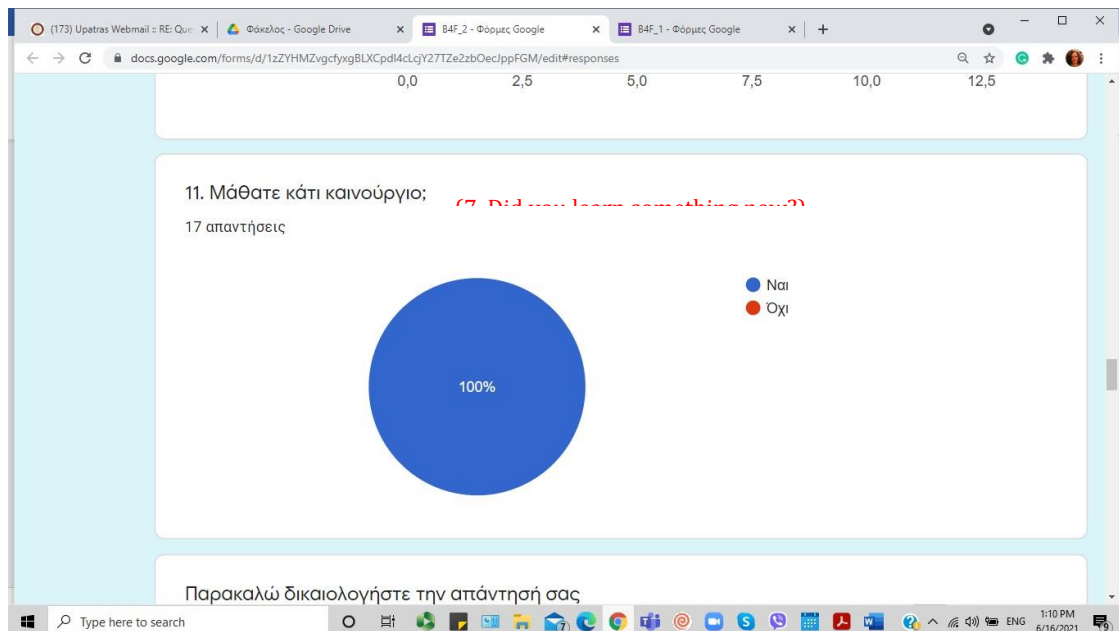
17,6% tried Course 7. DIGITAL MARKETING

58,8% tried Course 8. ANALYSIS ON THE BEST MARKETING STRATEGIES FOR SMALL BUSINESS

52,9% tried Course 9. FINANCIAL MANAGEMENT

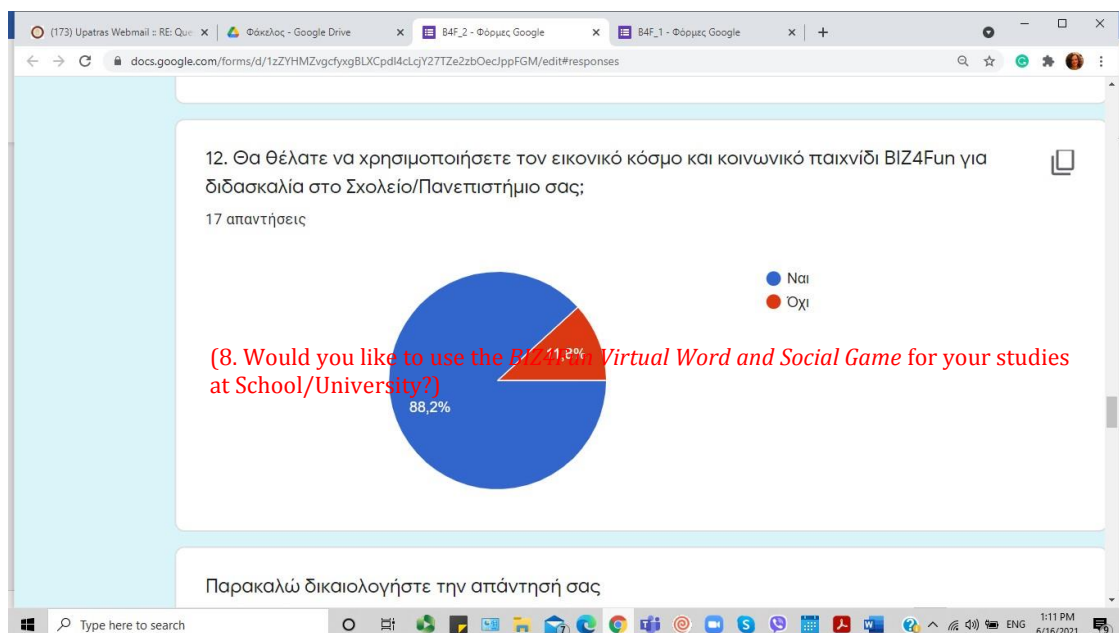
23,5% tried Course 10. HUMAN RESOURCE MANAGEMENT.

**Q11 (Q7).** All the respondents claimed that the game can be a valuable **learning tool**, as they all learned something new.



Exactly 100% of them learned something new. Some of them did not have any previous experience around the context of the project and others did not know some entrepreneurship concepts, but they all agree that *they saw and tried new things and make themselves familiar with the new concepts*.

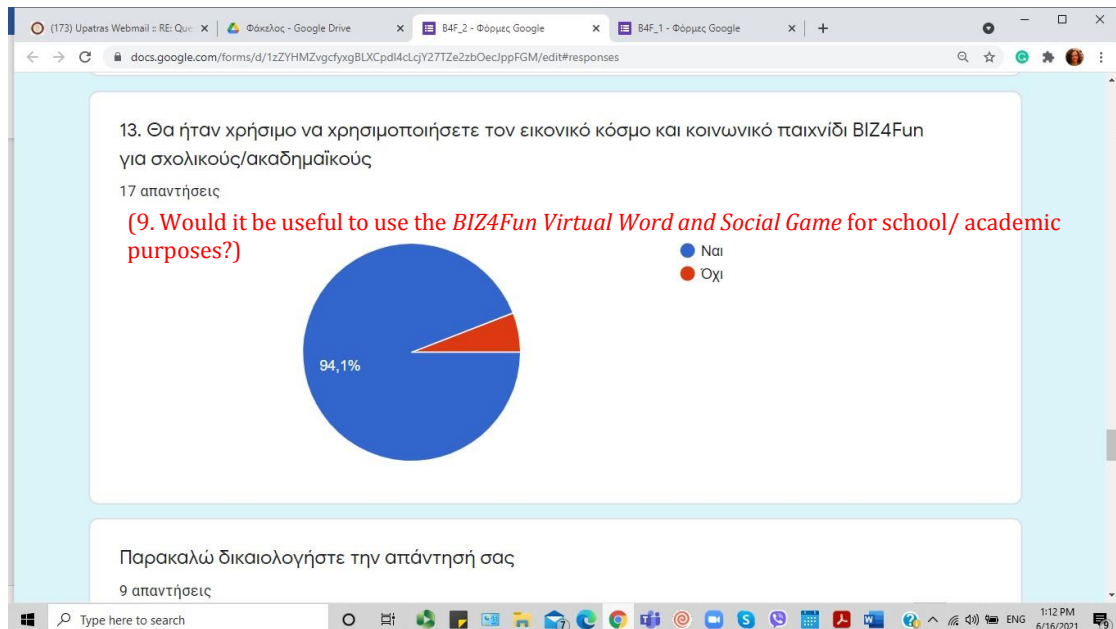
**Q12 (Q8).** With regards to the **interest in using the BIZ4Fun Virtual Word and Social Game for their studies**, the results were incredibly positive.



88,2% of the participants wanted to use *the BIZ4Fun Virtual Word and Social Game* in their school/university. Some of them stated that: *“you can learn by playing”* and that it is a

*pleasant, interactive, alternative and easy way of learning, which will help further the teaching procedure. However, one of them thought that the lecture in amphitheater is irreplaceable and another one that he didn't believe that the BIZ4Fun Virtual Word and Social Game is going to help with the studies.*

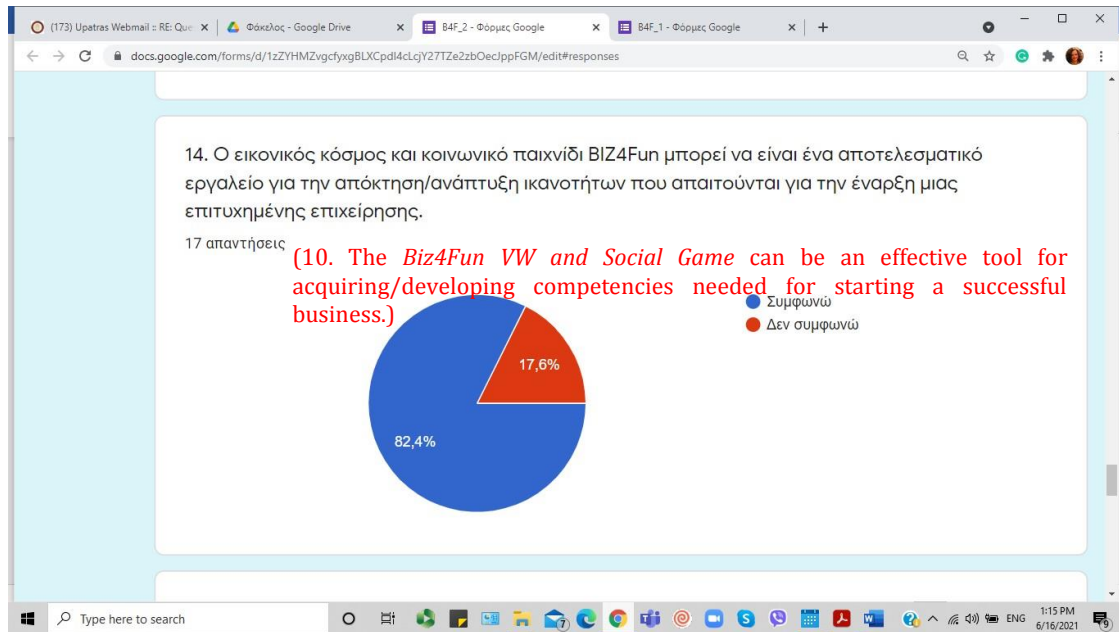
**Q13 (Q9).** In the question about the **usefulness** of the *BIZ4Fun Virtual Word and Social Game* for academics, the extreme majority thought that it will be usefull.



94,1% of the respondents think that *the BIZ4Fun Virtual Word and Social Game* will be usefull for the academics. More specifically, some of them stated that it is very usefull and the teaching becomes more pleasant. “*You can learn different things*”, “*the virtual world can also act as a chance of repetition*”, and “*some of the more theoretical lessons could become more attractive*”, were some of the participants answers.

**Q14 (Q10).** With regards to the **effectiveness of the tool**, the results were also very positive.

82,4% of the participants were positive that *the BIZ4Fun Virtual Word and Social Game* can be efficient for developing skills needed for starting a successful business. Some of the attendants answered that “*it is a good test of knowledge*”, and that it “*offers a lot of information and helps you learn the basics*”. However, some of them noticed that “*it isn't enough*” and that *a lot more information is needed for a successful business*.



**Q15 (Q11) & Q16 (Q12).** They are about the greatest **strength and weakness** of the *BIZ4FUN VW and social game*.

15. Ποιο είναι το πιο δυνατό στοιχείο του εικονικού κόσμου και του κοινωνικού παιχνιδιού *BIZ4Fun*;

(11. What is the greatest strength of the *BIZ4Fun VW and Social Game*?)

16. Ποιο είναι το πιο αδύνατο στοιχείο του εικονικού κόσμου και του κοινωνικού παιχνιδιού *BIZ4Fun*;

(12. What is the greatest weakness of the game?)

The feedback provided by the respondents is summarized in the following table.

<b>strengths</b>	Pleasant and beautiful experience	Conversation with others	The NPCs	The usefulness	Good design	Good organization
<b>weaknesses</b>	Tedious and sometimes incomprehensible content	Slow servers	Graphics	Movement with avatar	The installation	User experience in some quizzes

**Q17 (Q13).** At a final stage, the respondents were also asked to suggest some **aspects they would change/improve** in the *VW and Social Game*.

17. Η υποστήριξή σου μετρά! Τί θα άλλαζες/βελτιώνες στον εικονικό κόσμο και κοινωνικό παιχνίδι *BIZ4Fun*;

(13. Your support counts! What would you change/improve in the *BIZ4Fun VW and Social Game*?)

The feedback provided can be summarized as follows:

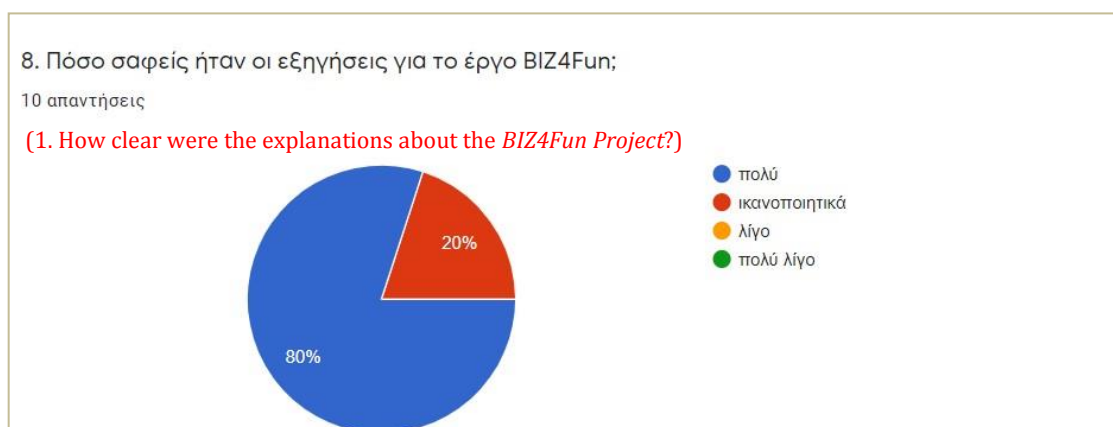
Simpler content (1/17)	Shorter presentations (1/17)	Better graphics (4/17)	I wouldn't change anything (5/17)	The chat process (1/17)	Software running efficiency (1/17)	Show completion rate for each course (1/17)	Random selection of quiz questions (1/17)	Show right answers (2/17)
---------------------------	---------------------------------	---------------------------	--------------------------------------	----------------------------	---------------------------------------	--	--	------------------------------

## 2.2 VET/HE Institutions' online evaluation (10 participants)

The ten (10) respondents were staff from eight (8) different Greek institutions, either of HEIs (30%) or of secondary education (VET Schools) (70%) (as extracted from Q3, Q4 and Q5). They were asked to answer 14 questions. The first area focuses on the clarity of instruction and explanation provided by the Staff introducing the BIZ4Fun Project and 3D Virtual world and social game.

Notice: Again, here Q1-Q7 concern demographic and institutional data.

**Q8 (Q1).** The results about the **clarity of provided explanation** about the Biz4Fun Project, were considerably positive; below the detailed results are shown.



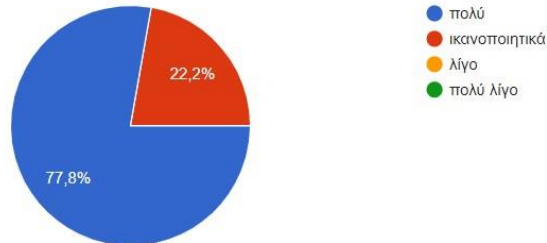
80% of the respondents were very positive and 20% positive. Specifically, it is stated that *"the pilot application guide had all the necessary information"*, as well as that *"the instructions for creating an avatar, for navigating the platform, and the purpose of the project was absolutely clear"*. The participants also state that *"there were very clear explanations, since at each point there were explanatory instructions"*. As it is also mentioned *"there was no difficulty somewhere and everything I needed was well presented"*. In fact, it is mentioned by someone that *"I believe that the environment, due to the clear explanations, will be easily perceived by the students when there is guidance"*.

**Q9 (Q2).** As for results about the **clarity of instruction and explanation** about the 3D Virtual world and social game, they were very positive. 77,8 % of the respondents gave a very positive feedback and 22% a satisfactory/good one.

9. Πόσο σαφείς ήταν οι εξηγήσεις για τους κανόνες του εικονικού κόσμου και κοινωνικού παιχνιδιού BIZ4Fun;

9 απαντήσεις

(2. How clear were the explanations for the rules of the *BIZ4Fun Virtual Word and Social Game*?)



Specifically, they stated that *"both the technical instructions and the pilot guide had clear explanations"*, *"the rules were given clearly so I did not have any difficulty in understanding the instructions and seeing how to move my avatar"*. Regarding their students, they stated that *"the environment will be easily perceived by the students when it is done under guidance"*. It was mentioned as a remark that should be taken into account that *"at some points in the game I had to stop to determine the next step (e.g. in the Bank after the interactions with the employees it was not clear to me how to continue)"*.

**Q10 (Q3).** With regards to the **user-friendliness** of the Platform, the results registered were totally positive, while 100% of the respondents agreed on that.

10. Είναι εύκολη η χρήση του εικονικού κόσμου και κοινωνικού παιχνιδιού BIZ4Fun.

10 απαντήσεις

(3. It is easy to use the *BIZ4Fun Virtual Word and Social Game*.)



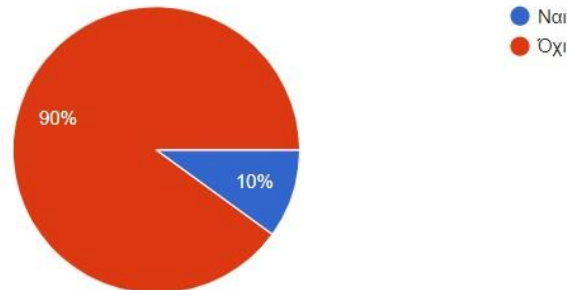
It is stated that *"although I used virtual world for the first time, I did not have any particular difficulties"*, *"I believe that someone who is not familiar with virtual worlds would not have much difficulty"* and that *"with step by step you can do it, especially if he is familiar with virtual worlds"*. In fact, the participants become even more specific in their comments when they state that *"navigating between sites / sections is easy thanks to the teleportation board"*.

**Q11 (Q4).** With regards to any **prerequisites (prior knowledge)** to use the game only 10% of the respondents expressed this opinion while the majority believed that there is *"no need to know something about it before playing the game"*.

11. Χρειαστήκατε καθόλου προαπαιτούμενα (προηγούμενη γνώση) για να χρησιμοποιήσετε το παιχνίδι;

10 απαντήσεις

(4. Are there any prerequisites (prior knowledge) needed to use the game?)

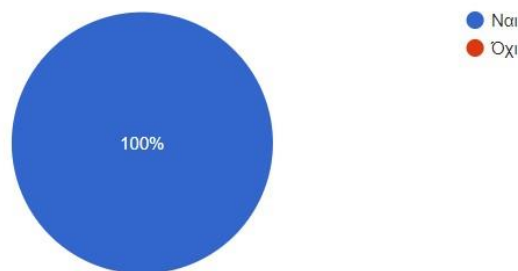


**Q12 (Q5).** In respect to the development of the **game smoothness** all (100%) of the respondents agreed on that.

12. Ήταν η εξέλιξη του παιχνιδιού ομαλή;

10 απαντήσεις

(5. Did the game progress smoothly?)



***Notice:** Q6 of common questionnaire ("Is this a tool you see playing in the classroom of your VET/HE institution?") was not included in our questionnaire, given that the answer is known in advance (No).*

**Q13 (Q7).** This question regards the main **playful and educational features of the game**.

13. Παρακαλώ περιγράψτε τα κύρια παιγνιώδη και εκπαιδευτικά χαρακτηριστικά του παιχνιδιού.

(7. Please describe the main playful and educational features of the game.

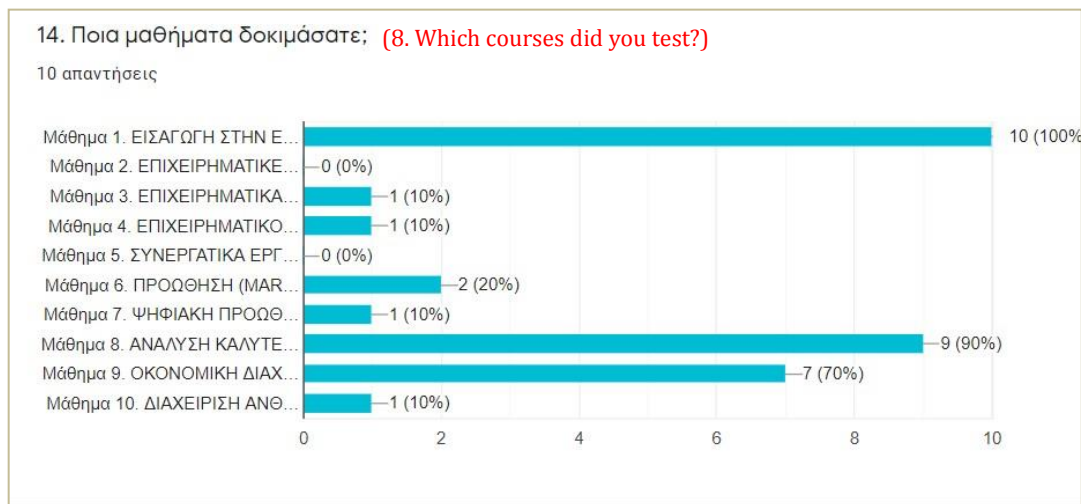
The feedback provided by the respondents can be summarized as follows:

Inventive - Interesting – Analytical
Instant feedback, reward for learning effort through a pleasant game environment
Presentations, quizzes, NPCs, dialogues, levels
The interaction with the "non-player" and the available information.



The degree of guidance
The constructiv approach to information through the acquisition of knowledge through playfulness
Interaction, repeatability, test feedback, 3D sensing, navigation capability
Interaction with virtual characters, elements of knowledge discovery, existence on a level
Beautiful graphics - you could adjust your avatar as you wanted by setting the tone of the game but at the same time there were the tables with the educational part and the evaluation tests that covered the educational process

**Q14 (Q8).** Most of the participants played **with three courses** (1,8,9), as they were asked to do, however few of them tried other courses too (3,4,5,6,7).



## 2.3 Policy makers' online evaluation (6 participants)

Six (6) Policy Makers took part in the piloting, coming from six(6) different organizations:

- Vice-Chair of the Research Committee of the University of Peloponnese
- CEO of KNOWLEDGE BROADBAND SERVICES company
- Vice-President of the Computer Technology Institute and Press Diophantus (a consultant institution of the Ministry of Education) and Coordinator of the Greek Schools Network
- VET Apprenticeship Coordinator for the Western Greece region
- Educational Task Coordinator of the Regional Directorate of Primary and Secondary Education of Ionian Islands
- Informatics Educational Task Coordinator and Organizational Coordinator of the Regional Center for Educational Planning of Western Greece.

They were asked to answer four (4) open type questions.

*Notice: Again, here Q1-Q6 in our questionnaire concern demographic and institutional data.*



**Q7 (Q1).**

7. Σε ποιο βαθμό η πλατφόρμα μάθησης *εικονικός κόσμος και κοινωνικό παιχνίδι Biz4Fun* και το περιεχόμενό της ανταποκρίνονται στις επιχειρηματικές ικανότητες της ομάδας στόχου (ανάγκες των τελικών χρηστών)

(1. To what extent do the learning platform, the *virtual world and the social game Biz4Fun*, but also its content correspond to the business skills of the target group (to the needs of the end users))

It is mentioned that the *virtual world and the social game Biz4Fun* "covers the need of the users" with "content that is particularly useful and usable for the target audience" and "to a significant degree". It is also stated that the platform has enough content, which "satisfactorily meets the needs of the learners" and that "the architecture of the virtual world platform allows the easy addition of new content, if required in the future."

Therefore, the strong interaction of the user (teacher-student) with the content (learning), its usefulness in meeting the needs of learners, the flexible user-technological interface and something very important, such as the possibility of transformation (renewal, addition) of the material, if necessary, are the main benefits of the system.

**Q8 (Q2).**

2. Πώς θα μπορούσατε να χρησιμοποιήσετε την πλατφόρμα *εικονικός κόσμος και κοινωνικό παιχνίδι Biz4Fun* στο περιβάλλον σας και ποια θα ήταν, κατά τη γνώμη σας, τα κύρια πλεονεκτήματα και τα εμπόδια στην πρακτική της κατάρτισης; (Τα συμφέροντα των εξωτερικών ενδιαφερομένων, τα οφέλη, η χρησιμότητα, η αποτελεσματικότητα, η συνάφεια, η σχέση κόστους/αποτελεσματικότητας, η βιωσιμότητα)

(2. How could you use the Biz4Fun VW and Social Game platform in your context and what would be, in your opinion, its main benefits and obstacles in your training practice? (External stakeholders' own interests; benefits, usefulness, effectiveness, relevance, cost effectiveness/efficiency, sustainability))

The answers were varied and very interesting.

It is stated that "for us this virtual world is a basic educational tool, but at the same time it could be used as a self-evaluation tool". It was stated, of course, very correctly that "we would like to see its use in depth, estimating its efficiency in the long run". Then, the reference object of the educational content was specified, when it was mentioned that "it could be used as a training tool in the concepts related to the spectrum of "entrepreneurship" with significant advantages for the target groups".

It is proposed the pedagogical utilization of the environment in "concepts that they encounter every day in their work, the employees, with which they acquire a new dimension through the educational content, but also intense interest to deal with them, to get to know them better through the "game".

It is also mentioned that the 'brainstorming setting' contained in the game is familiar in their daily lives, and that is why the students will explore it with interest".

One of the participants in the research noted that "I presented the game to students of the postgraduate program - in an audience of 25 people - and I intend to repeat it in the future in the undergraduate program - audience of 150 people - because the game has many advantages!".

It is further stated that *"the main advantages of the platform are its "playful" and friendly character and the immersion factor, elements that especially push young people to use this game"*

Another use of the virtual world is mentioned by a participant, that of the *"educational tool with simultaneous evaluation of knowledge and skills"*. Interesting, but also so close to the educational reality in Greece is the view that the environment they saw could be utilized *"in training seminars, which will offer an attractive learning environment by utilizing playfulness in adult training."*

Of course, it is good to take into account the comment that states *"as an obstacle, although not serious, could be considered the need to use a special browser for browsing the virtual world."*

### Q9 (Q3).

3. Ποιες ιδέες, προσεγγίσεις, εργαλεία του εικονικού κόσμου και κοινωνικού παιχνιδιού BIZ4Fun αξίζει να προσαρμοστούν σε σχετικές (τοπικές) στρατηγικές και πρακτικές και γιατί; (Επιπτώσεις στον στρατηγικό σχεδιασμό)

(3. What ideas, approaches, tools of the Biz4Fun VW and Social Game would be worth to adapt in related (local) strategies and practices and why? (Impact on strategic planning))

A very interesting point of view was mentioned by the participant who wrote that *"the whole tool is a structural feature of training and strategy formulation in its field of application"*. He added that *"team collaboration and interaction is an important 'lesson' for participants in a game"*. This is justified by the view that *"the playful element is necessary in the social development of young professionals, since it is an element of their daily life since childhood, although it is not obvious to us who do not have these experiences."*

Participants in the research suggest also the integration of the virtual world as a teaching method and approach *"but without moving away from providing educational content with the required breadth and depth, when a study of a field is required."*

It is also proposed *"regular training in small specialized groups and individual topics of programming learning, through the virtual environment"*. Furthermore, very positive is the statement of a participant saying about *"virtual world tools, which are worthwhile and each adds a portion of value to the overall value chain of the platform"*.

### Q10 (Q4).

3. Τι θα βελτιώνατε στην ηλεκτρονική πλατφόρμα εκμάθησης εικονικός κόσμος και κοινωνικό παιχνίδι BIZ4Fun (τεχνικές λεπτομέρειες, λειτουργικότητες, περιεχόμενο) και πώς; (Αδυναμίες, εμπόδια, ανακολουθίες, ποιότητα, σαφήνεια, προσέγγιση, εργαλεία κλπ.).

(3. What would you improve on the Biz4Fun VW and Social Game online learning platform (technicalities, functionalities, content) and how? (Weaknesses, barriers, inconsistencies, quality, clarity, approach, tools etc).)

One of the participants states that *"at this stage I could not suggest anything different"*. But there are some very useful tips, which are suggested to be taken into account for the optimization of the virtual world. The following are mentioned: *"I will add a demo video of*

*the basic features for those who are using this kind of virtual worlds for the first time", to make the movement of avatars more obvious to the average unfamiliar user; "I would improve the quality of textures (graphics), so that the virtual world is more realistic" and "it would be useful to add voice dictation to the texts, but also to use a camera".*

Concluding, we can say that policy makers' online evaluation shows that the degree of satisfaction in relation to the Platform is very good. Few minor remarks were noted. The results about the end users' needs were considerably positive. According to the respondents, the platform and its content well address the entrepreneurial competencies of the target group. Participants pointed out that the BIZ4Fun Virtual World and Social Gaming platform is a valuable tool to engage students in entrepreneurship education. With regards to the possible use of the Biz4Fun VW and Social Game platform, the main benefits and obstacles in training practice, the respondents underlined the enhancement of the tools to the training process. As for the ideas, approaches, tools of the Biz4Fun VW and Social Game that would be worth to adapt in related (local) strategies and practices, the respondents agreed about VW and Social Gaming Biz4Fun Platform's integration to the educational system.



## **Biz4Fun - Let's have fun starting a company**

**ERASMUS+ 2018-1-EN01-KA202-046271**

### **REPORT ON THE PILOT EVENT (ITALY)**

## 1 GENERAL INFORMATION ON IMPLEMENTATION

Partner, landscape	EGInA Srl, Italy
Start date of the pilot project	05.06.2020
End date of the pilot project	16.06.2020
Number of participants who took part in the pilot project	41
Number of participants testing VWSG Biz4Fun	24

### 1.1 Brief description of the first pilot event

A two-hour webinar was held on 5 June at 16:00 CET to give participants a deeper understanding of the entrepreneurial culture and the Biz4Fun project.

*EGInA conducted a webinar via Zoom video conferencing service on*

Entrepreneurship learning and online gaming, which was attended by approximately 40 participants. This webinar provided an overview of entrepreneurship and its importance in lifelong learning. The aim of the webinar was to introduce the Biz4Fun project and to inform the participants on how to test the virtual word and social game (description of the learning scenarios, steps to take to create an avatar account, install the necessary software and connect to the 3D world, etc.).

Participants had two weeks to test the three courses and complete online evaluation questionnaires.

The implementation of the webinar was coordinated by three EGInA members who held different roles: Irene Morici led the online section on entrepreneurship and the presentation of the Biz4Fun project. EGInA ICT experts (Giuseppe Mura and Skender Troka).



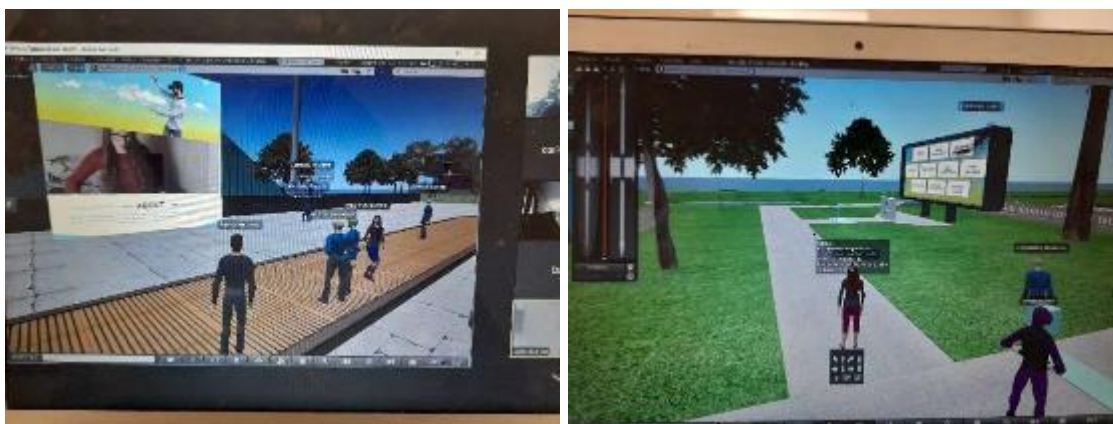
### 1.2 Brief description of the second pilot event

The second pilot session was held on 30 April 2021 from 09:00 to 13:00. **Istituto di**

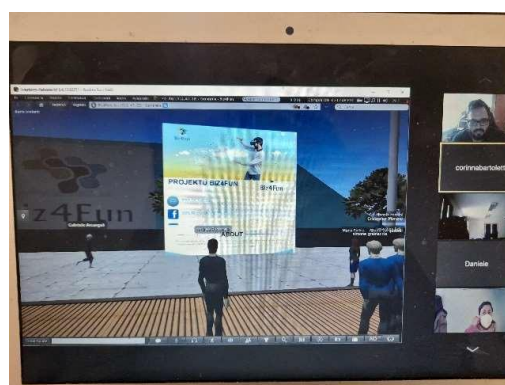
**Istruzione Superiore "Ciuffelli-Einaudi"** was involved with three different classes. "Ciuffelli-Einaudi" is a technical and vocational high school for students between the ages of 14 and 19. It is located in the medieval town of Todi in the centre of Italy.

The aim of the Institute is to provide students with quality science and technology training on a European scale in order to assess different types of intelligence. The school is also committed to contributing to the Sustainable Development Goals through education. The School is the oldest agricultural institute in Italy, founded in 1864 as an agricultural colony to disseminate agricultural culture and knowledge.

Approximately 35 students and 7 teachers participated in the testing of the game. At the beginning, the students and teachers were explained how the video game and the platform works. Then, at the end of the beta testing and bug finding, the participants responded to a report in which they evaluated the positive and negative aspects.



The implementation of the meeting was coordinated by three EGINA members who had different roles: Corinna Bartoletti took care of the presentation of the Biz4Fun project and together with EGINA ICT experts (Andrea Succhielli and Valentina Brilli) explained and carried out the pilot projects.



### 1.3 PARTICIPANTS - Number of participants who tested the learning scenarios

Socio-demographic variables	Number of participants
<b>1. Gender</b>	
<i>Men</i>	23
<i>Women</i>	14
<i>Not specified</i>	4
<b>Total:</b>	<b>41</b>
<b>2. Profile</b>	
<i>Pupils</i>	20
<i>Vocational education and training/education institutions</i>	18
<i>Policy makers</i>	3
<b>Total:</b>	<b>41</b>

### 1.4 PILOTED LEARNING SCENARIOS

Course	Course piloted during piloting event
1. INTRODUCTION TO BUSINESS	X
2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND IN EUROPE	X
3. BUSINESS MODELS	X
4. BUSINESS PLAN	X
5. COLLABORATIVE DESIGN TOOLS OR BUSINESS MODEL INNOVATION	X
6. MARKETING	X
7. DIGITAL MARKETING	X
8. ANALYSIS OF THE BEST MARKETING STRATEGY FOR SMALL BUSINESSES	X
9. FINANCIAL MANAGEMENT	X
10. HUMAN RESOURCE MANAGEMENT	X

## 2 ONLINE EVALUATION RESULTS

At the end of the testing, participants were asked to complete an online questionnaire.

EGInA Srl, as lead partner for the evaluation, designed three online evaluation questionnaires addressed to different target groups (students, VET institutions, policy makers), aiming to gather relevant information about the testing of the 3D virtual world and social game developed within the BIZ4Fun project.

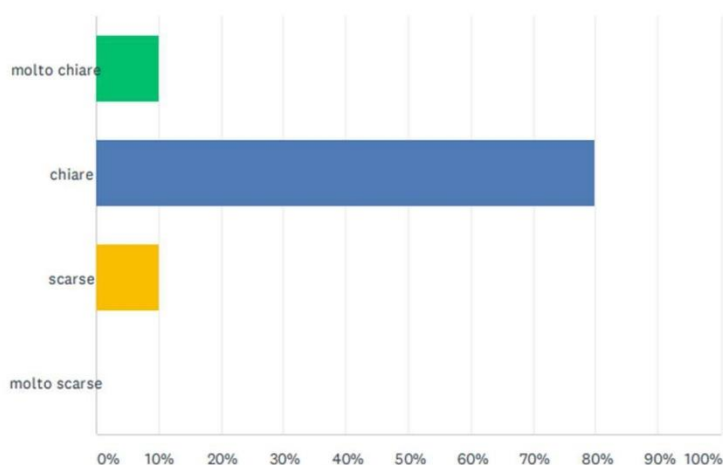
### 2.1 Online evaluation of participants

Respondents were asked to answer 16 questions.

The first area focuses on the clarity of the instructions and explanations provided by the staff when introducing the BIZ4Fun project and the 3D virtual world and social game.

#### D5 Quanto sono state chiare le spiegazioni riguardanti il Progetto BIZ4Fun?

Risposte: 20 Saltate: 0



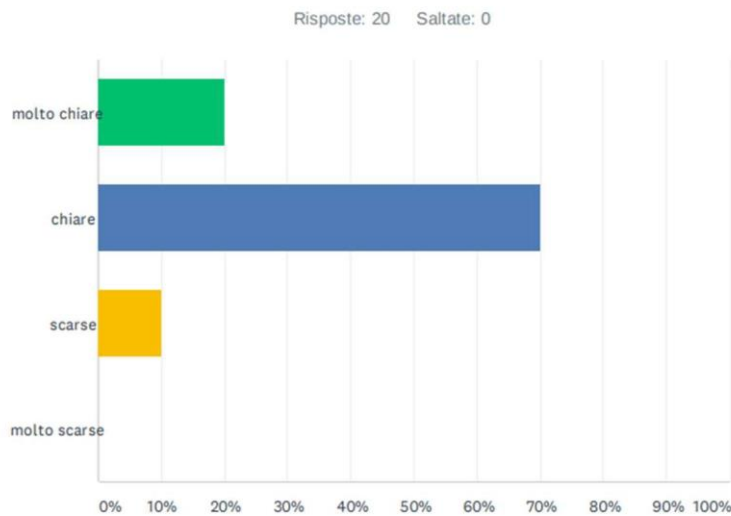
OPZIONI DI RISPOSTA	RISPOSTE	
molto chiare	10.00%	2
chiare	80.00%	16
scarse	10.00%	2
molto scarse	0.00%	0
TOTALE		20

The results regarding the **clarity of the explanation provided about the Biz4Fun project** were significantly positive,<sup>1</sup> and the detailed results are summarised below.

**The results regarding the clarity of instructions and explanation of the 3D virtual world and social game** were also very positive.



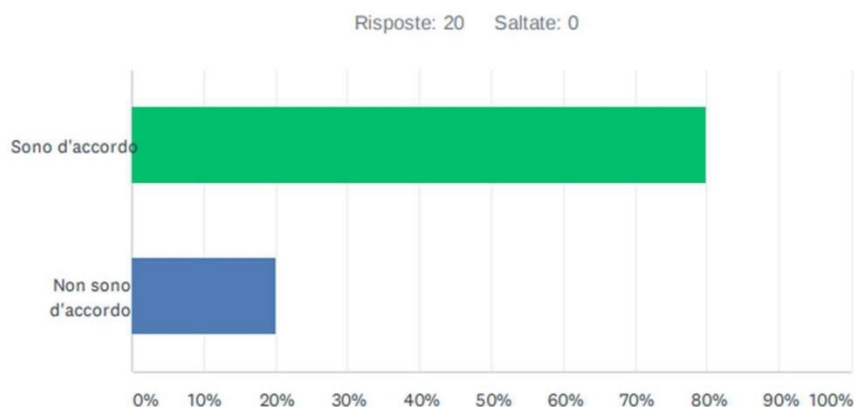
### D6 Quanto sono state chiare le spiegazioni riguardanti le regole del Mondo Virtuale e Gioco Sociale BIZ4Fun?



OPZIONI DI RISPOSTA	RISPOSTE	
molto chiare	20.00%	4
chiare	70.00%	14
scarse	10.00%	2
molto scarse	0.00%	0
TOTALE		20

In terms of the **user-friendliness of the platform**, the results recorded were quite positive, as shown below:

### D7 E' facile utilizzare il Mondo Virtuale e Gioco Sociale BIZ4Fun.



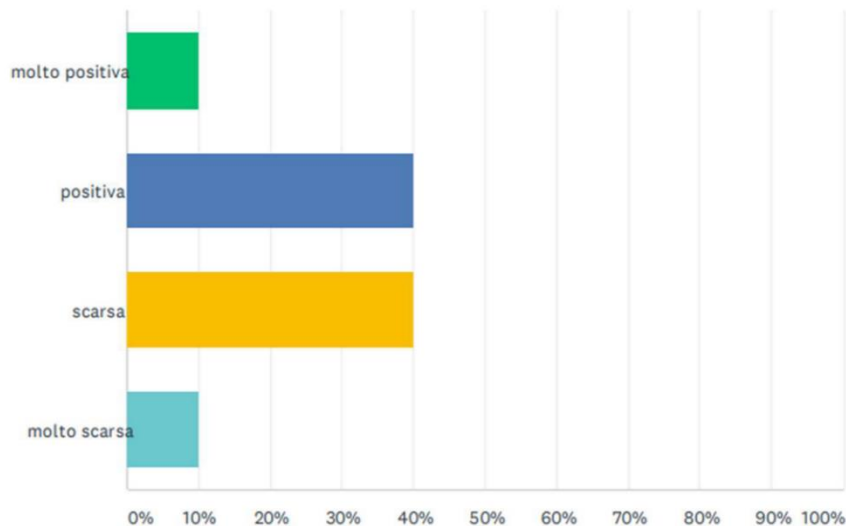
OPZIONI DI RISPOSTA	RISPOSTE	
Sono d'accordo	80.00%	16
Non sono d'accordo	20.00%	4
TOTALE		20

Again, we have 80% positive responses on the chart. The 20% pointed to the fact that the platform is not always intuitive. One respondent pointed out that some of the dashboards are hard to read and there is a lack of educational feedback (informing users of their mistakes).

On the other hand, the overall **assessment of the graphics is** positive. It can be seen below that 40% of respondents rated the graphics as "good" and 10% as "very good". On the other hand, 40% rated the graphics as 'poor' and 10% as 'very poor'.

### D8 Come valuteresti la grafica del Mondo Virtuale e Gioco Sociale BIZ4Fun?

Risposte: 20 Saltate: 0



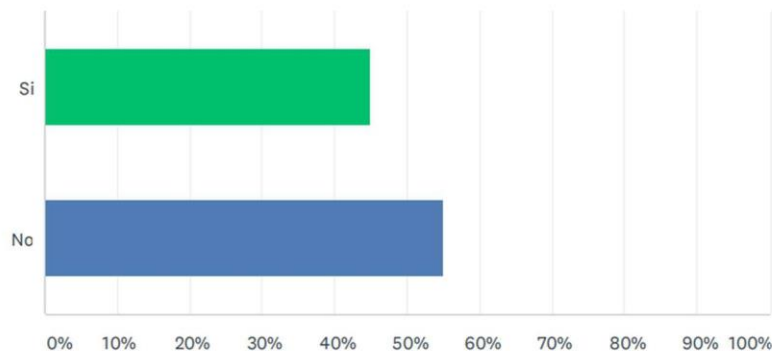
OPZIONI DI RISPOSTA	RISPOSTE	
molto positiva	10.00%	2
positiva	40.00%	8
scarsa	40.00%	8
molto scarsa	10.00%	2
<b>TOTALE</b>		<b>20</b>

Some respondents pointed out that the game doesn't have the best graphics because "it doesn't have realistic graphics" and "there are a lot of polygons and the slow loading of the environment is too slow". Nevertheless, one pupil pointed out that although the graphics are not exceptional, they are effective for the aim of the game.

As shown below, half of the users had some problems when playing the game.

## D9 Il gioco è avanzato senza problemi?

Risposte: 20 Saltate: 0

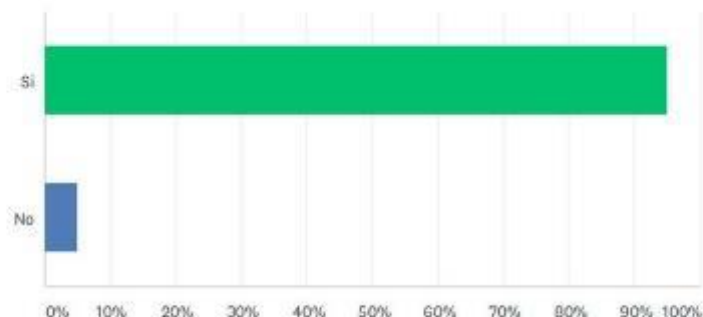


OPZIONI DI RISPOSTA	RISPOSTE	
Si	45.00%	9
No	55.00%	11
TOTALE		20

In general, there were complaints about some of the flaws in the game: some respondents pointed out that they had problems with the learning scenarios. n.7 Digital marketing. "I experienced difficulties with two topics in course n.7: 'Optimising web promotion for research systems (SEO)' and 'Social media'. The problem is that my avatar, once it entered the central door of course #7 (i.e., the door corresponding to the topic "Optimizing Web Promotion for Research Systems (SEO)"), did not teleport. In addition, both topics were marked as incomplete. In my procedure regarding course number 7, only 3 of the 5 topics are completed. I also discussed this with my friend who tested the game, and he experienced the same problems. The person also had different language on different characters inside the game".

## D10 Hai imparato qualcosa di nuovo?

Risposte: 20 Saltate: 0



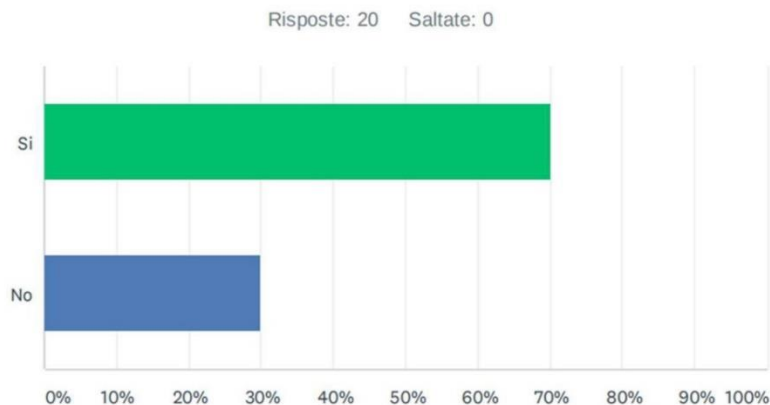
OPZIONI DI RISPOSTA	RISPOSTE	
Si	95.00%	19
No	5.00%	1
TOTALE		20

Almost all respondents claimed that the game can be a valuable **learning tool** because **they** all learned something new, with only one person claiming the opposite.

One of the respondents of the virtual platform BIZ4fun states that the game "introduced me to the concept of entrepreneurship in a very interesting and new way. In particular, the three courses that I tried (i.e. number 1, number 4 and number 7) gave me a lot of information that I did not have about the topic of entrepreneurship and key aspects of entrepreneurship".

Regarding interest in **using the virtual word and social game BIZ4Fun for studying**, a majority of 70% would like to use it.

#### D11 Ti piacerebbe utilizzare il Mondo Virtuale e Gioco Sociale BIZ4Fun per i tuoi studi a Scuola/Università?



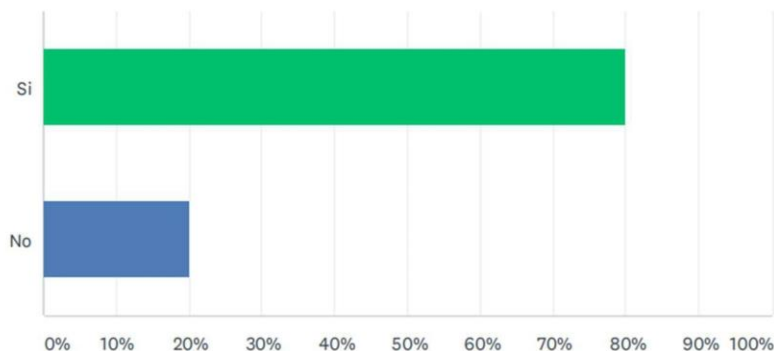
OPZIONI DI RISPOSTA	RISPOSTE	
Si	70.00%	14
No	30.00%	6
TOTALE		20

Some respondents claimed, "Personally, I am very interested in the idea of integrating this kind of platform into my own school studies because I think it is a very effective means of learning" and "it is a clear and fun learning tool" as well as "a new and engaging tool". Among the negative responses, one complained that the game can be too distracting to really learn anything.

**The table shows a high level of agreement among respondents that the virtual word and social game BIZ4Fun can be useful for educational purposes.**

### D12 Sarebbe utile utilizzare il Mondo Virtuale e Gioco Sociale BIZ4Fun per scopi scolastici/accademici?

Risposte: 20 Saltate: 0

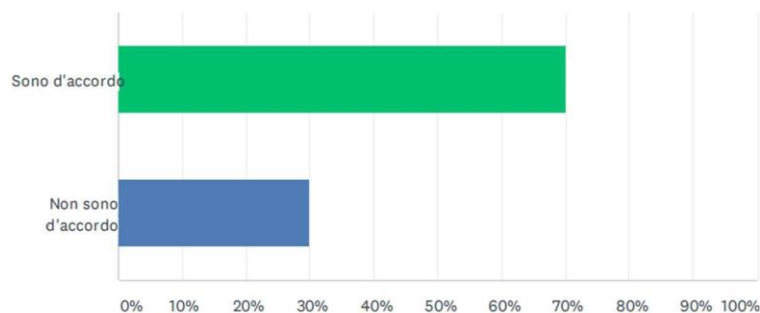


OPZIONI DI RISPOSTA	RISPOSTE	
Si	80.00%	16
No	20.00%	4
TOTALE		20

Respondents pointed out that play is an engaging and effective learning tool. "I believe that this type of platform has huge potential and in my opinion could be used for school or academic purposes as it allows for interactive and effective learning, even in relation to complex topics, concepts and themes". He also argues that it could involve students more. One negative comment was nevertheless encouraging: much more potential should be harnessed for students on this platform.

### D13 Il Mondo Virtuale ed Gioco Sociale BIZ4Fun può essere uno strumento efficace per acquisire/sviluppare le competenze necessarie per avviare un'impresa di successo.

Risposte: 20 Saltate: 0



OPZIONI DI RISPOSTA	RISPOSTE	
Sono d'accordo	70.00%	14
Non sono d'accordo	30.00%	6
TOTALE		20

**In terms of the effectiveness of the game on acquiring/developing the competences needed to start a successful business, the results were overwhelmingly positive.**

One respondent pointed out that "the game cannot provide high-level competence". On the other hand, few think that play can be useful as an educational pathway and that it is good for stimulating a sense of enterprise.

In addition to expressing their level of satisfaction with various features of the game, respondents were also asked to provide feedback.

On the **strengths and weaknesses** of VW and the BIZ4FUN social game, the feedback from respondents can be summarised as follows:

STRENGTHS	WEAKNESSES
Option to participate remotely	It can be considered as a simple game without any serious aspect.
Learning and fun at the same time	Too old-fashioned graphics
Easy to use, easy to learn	A lot of errors
Creativity, teamwork and fun	Computer skills required not accessible to everyone
Discovering unfamiliar topics through play	Not always very understandable
Learning complex concepts the easy way	Sometimes it is not easy to use it
Participant involvement	/
It is an engaging and effective learning tool	/
Helps to understand complex concepts/topics	/
Can be used in an educational environment	/

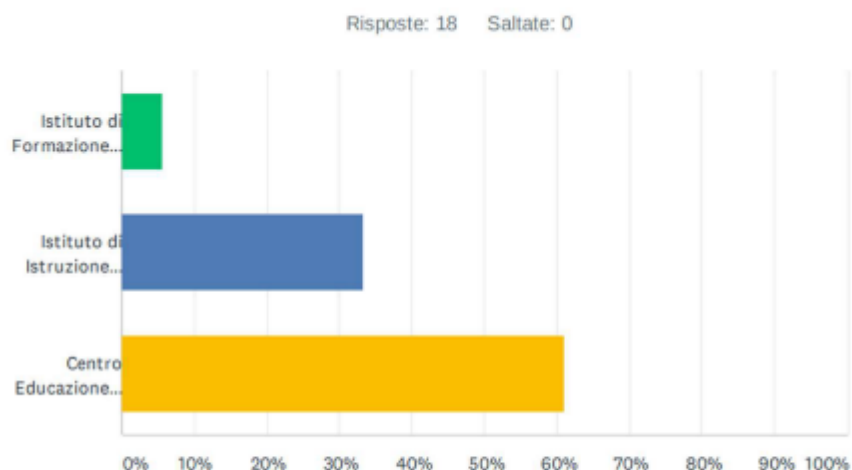
In the final stage, respondents were asked to suggest some aspects they would change/improve within the VW and social game. The feedback provided can be summarised as follows:

- I would improve the graphics of the game (especially the third-person view: if I want to change the visuals, I have to click on the avatar). I would also add the ability to mark which modules have been created and completed, by adding a bar that shows the build percentage.
- Problems with Course 7
- Improving fluidity
- Providing educational feedback that informs you of your mistakes.
- I would improve the graphics
- I would add some videos to the theoretical material.

## 2.2 Online evaluation of VET/FEI institutions

Respondents were asked to answer 20 questions. When asked to define their **school of origin**, many came from an adult vocational education and training centre (61.11%), a higher education institute (33.33%) and a vocational education and training school (5.56%).

### D4 Si prega di selezionare la tipologia del proprio Istituto



OPZIONI DI RISPOSTA	RISPOSTE	
Istituto di Formazione Professionale	5.56%	1
Istituto di Istruzione Superiore/Educazione Superiore	33.33%	6
Centro Educazione Adulti	61.11%	11
TOTALE		18

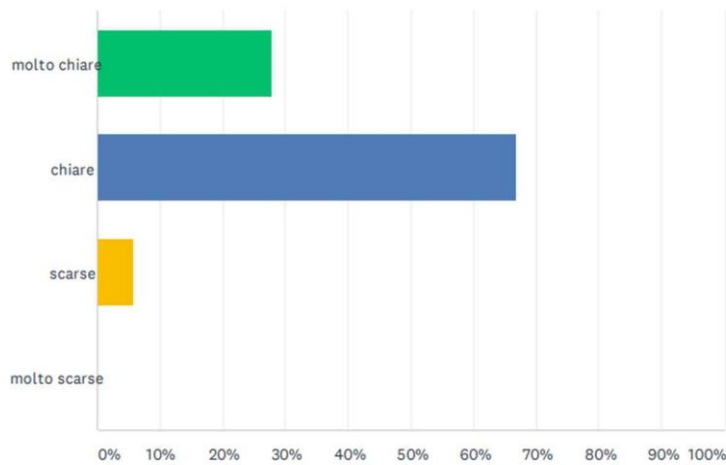
Most of the participants are teachers. There are also two administrative staff, the director of the institute and the project manager.

The first part focuses on the **clarity of the instructions and explanations provided by** the staff when introducing the BIZ4Fun project and the 3D virtual world and social game.

The results regarding the clarity of the explanations provided about the Biz4Fun project were considerably positive, detailed results are presented below. Almost 95% of respondents gave positive feedback (approximately 28% very good and 66% good).

### D8 Quanto sono state chiare le spiegazioni riguardanti il Progetto BIZ4Fun?

Risposte: 18 Saltate: 0

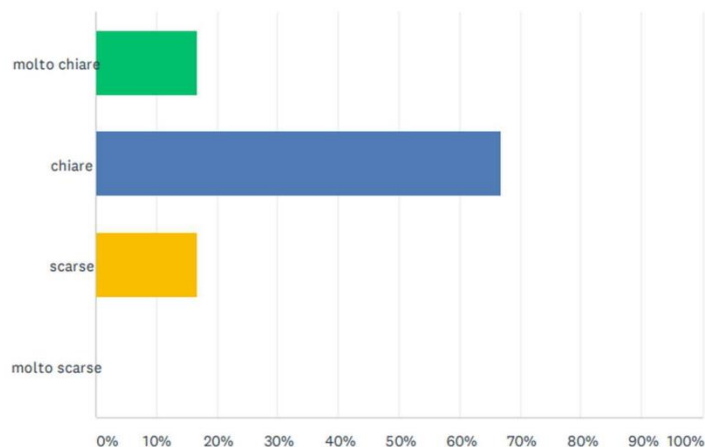


OPZIONI DI RISPOSTA	RISPOSTE
molto chiare	27.78% 5
chiare	66.67% 12
scarse	5.56% 1
molto scarse	0.00% 0
TOTALE	18

**Regarding the results regarding the clarity of instructions and explanation of the 3D virtual world and the social game, they were also very positive (16.67% very good and 66.67% good).**

### D9 Quanto sono state chiare le spiegazioni riguardanti le regole del Mondo Virtuale e Gioco Sociale BIZ4Fun?

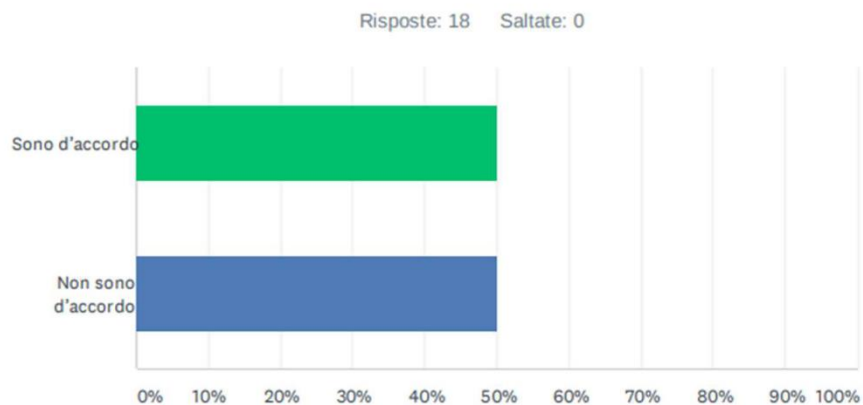
Risposte: 18 Saltate: 0



OPZIONI DI RISPOSTA	RISPOSTE
molto chiare	16.67% 3
chiare	66.67% 12
scarse	16.67% 3
molto scarse	0.00% 0
TOTALE	18



## D10 E' facile utilizzare il Mondo Virtuale e Gioco Sociale BIZ4Fun.



OPZIONI DI RISPOSTA	RISPOSTE
Sono d'accordo	50.00% 9
Non sono d'accordo	50.00% 9
<b>TOTALE</b>	<b>18</b>

#	SI PREGA DI MOTIVARE LA RISPOSTA	DATE
1	Comandi difficoltosi nei movimenti dell'avatar e n muoversi nel mondo	5/11/2021 12:15 PM
2	Bisogna avere dimestichezza con il mondo dei videogiochi e della programmazione	6/30/2020 11:02 PM
3	E' difficile capire il percorso da seguire all'interno del gioco	6/20/2020 10:39 PM
4	non sono riuscita ad orientarmi e a controllare bene i comandi	6/19/2020 1:53 PM
5	seguendo le istruzioni io ho faticato a trovare tutti riferimenti	6/19/2020 11:37 AM
6	Ho avuto difficoltà di movimento e visualizzazione dei pannelli	6/7/2020 8:25 PM
7	Per chi è appassionato ai giochi digitali	6/7/2020 7:01 PM
8	È chiaro	6/7/2020 6:58 PM
9	Ci si orienta e si capisce ciò che si deve fare abbastanza facilmente	6/7/2020 6:27 PM
10	simil videogame	6/6/2020 8:20 PM
11	con il mac non funziona.. ho provato tutte le versioni anche le old ma nulla. Sono dovuto andare a casa di un collega per usare il suo pc con windows	6/6/2020 12:49 AM

In terms of the **user-friendliness of the platform**, the recorded results were balanced. In fact, 9 users agreed and 9 disagreed.

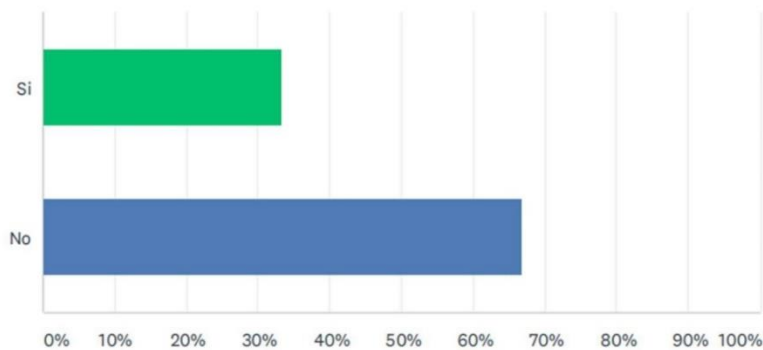
As some respondents noted, this may be due to two main problems:

- The game requires the user to be familiar with the world of video games and programming.
- Difficulties with movement, displaying panels and understanding inputs
- Unable to play on Mac

As shown below, two thirds of respondents say that there are no **specific prerequisites** needed to play the game.

### D11 E' necessario disporre di conoscenze preliminari per utilizzare il gioco?

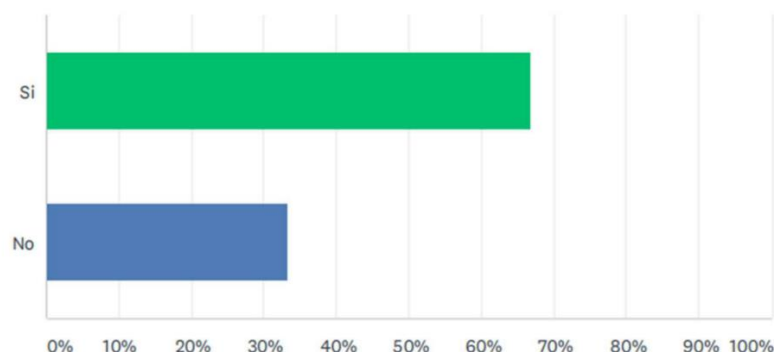
Risposte: 18 Saltate: 0



OPZIONI DI RISPOSTA	RISPOSTE
Si	33.33% 6
No	66.67% 12
TOTALE	18

### D12 Crede che questo strumento possa essere utilizzato dagli studenti della sua Organizzazione?

Risposte: 18 Saltate: 0



OPZIONI DI RISPOSTA	RISPOSTE
Si	66.67% 12
No	33.33% 6
TOTALE	18

Also, nearly 67% of respondents said Biz4Fun WV is a **tool they see playing in their institution's classroom** (D12). One of them explained that he thought the tests were too short. Another stated that it would be too difficult for his students. On the other hand, however, one respondent pointed out that the platform can "provide guidance on the theoretical concepts of entrepreneurship and some practical advice on starting a business".

In terms of the main **playful and educational elements of the game, the feedback** from respondents can be summarised as follows:

## D13 Si prega di descrivere le principali caratteristiche ludiche e didattiche del gioco

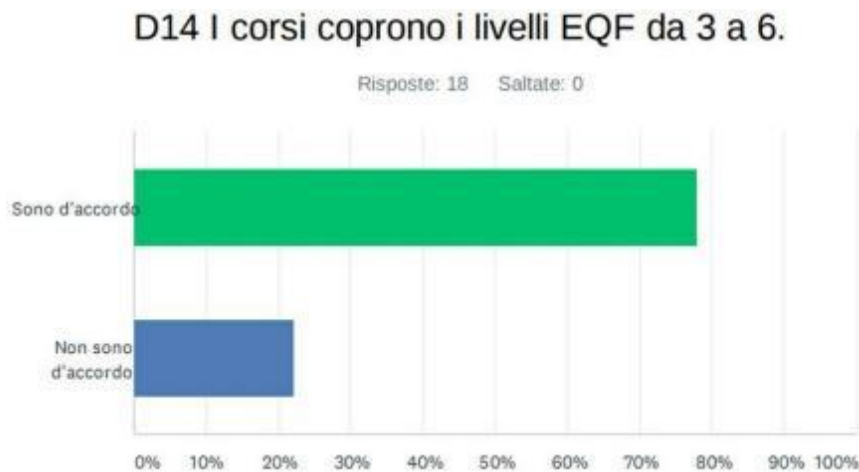
Risposte: 18 Saltate: 0

#	RISPOSTE	DATE
1	L'aspetto ludico è sintetizzabile nella possibilità di giocare e personalizzare l'avatar. Per le caratteristiche didattiche non riesco ad individuarne molte perchè il tempo del test è stato breve e abbiamo posto attenzione soprattutto agli aspetti critici. Probabilmente se si potesse utilizzare questo strumento non solo per esplorare il mondo virtuale ma per crearlo potrebbe essere un'ottima palestra soprattutto per i ragazzi che studiano Informatica	5/12/2021 9:10 PM
2	Far divertire gli studenti insegnando nel contempo alcuni concetti complicato da affrontare	5/11/2021 12:15 PM
3	Simulazioni come role play; realtà virtuale; alunno al centro del processo di apprendimento problem solving	6/30/2020 11:02 PM
4	per gli adolescenti abituati ai giochi virtuali è bello ma la didattica è troppo difficile e sono troppe le informazioni date nei vari step	6/20/2020 10:39 PM
5	Le caratteristiche ludiche mi sembrano scarse, sono state inserite delle presentazioni e dei piccoli questionari in una realtà virtuale ma non c'è un "vero gioco".	6/19/2020 1:53 PM
6	dal punto di vista ludico, l'adolescente sicuramente potrà divertirsi perchè si troverà ad esplorare un mondo virtuale, dove potrà decidere che personaggio creare, come vestirlo, ecc dal punto di vista didattico, esplorando con il suo avatar personalizzato potrà imparare o consolidare i concetti fondamentali della disciplina	6/19/2020 11:37 AM
7	Suggestivo ambiente di formazione ed istruzione.	6/10/2020 6:19 PM
8	FACILITA' DI UTILIZZO	6/8/2020 10:15 PM
9	stimolo alla logica e alla creatività e a muoversi nello spazio	6/8/2020 4:34 PM
10	Il volo e le altre attitudini non inerenti alle fase dei questionari	6/7/2020 8:25 PM
11	Far conoscere ai giovani le idee sull' imprenditorialità con specifici giochi	6/7/2020 7:01 PM
12	Fare un percorso educativo, interattivo e didattico	6/7/2020 6:58 PM
13	Movimenti sufficientemente fluidi, buona grafica, forse migliorerei il modo di spostarsi (consentire alla telecamera di spostarsi anche con i movimenti del mouse). Le informazioni fornite prima di rispondere ai quiz sono sufficientemente esaustive.	6/7/2020 6:27 PM
14	sviluppo competenza sociale, fantasia e creatività, competenza psico affettiva e attitudinale( stare con gli altri, socializzare e rispettare le regole)	6/7/2020 5:44 PM
15	imparare divertendosi	6/6/2020 8:20 PM
16	Applicabile alla didattica	6/6/2020 7:58 PM
17	imparare giocando ed interagire	6/6/2020 12:49 AM
18	Apprendere facendo, con l'uso di un gioco	6/6/2020 12:03 AM

Development of social competences, imagination and creativity, psychoaffective and attitudinal competences (staying with others, socialising and respecting rules)

- Learning by doing
- Fun while learning
- Graphic design
- The tool can be used for educational purposes
- The (theoretical) information provided before answering the quizzes is comprehensive enough.
- On the other hand, one of them said that it could be difficult to teach using the game because there is too much information in the steps.

In the graph below, the majority of respondents agree that the courses cover **EQF levels 3 to 6**.



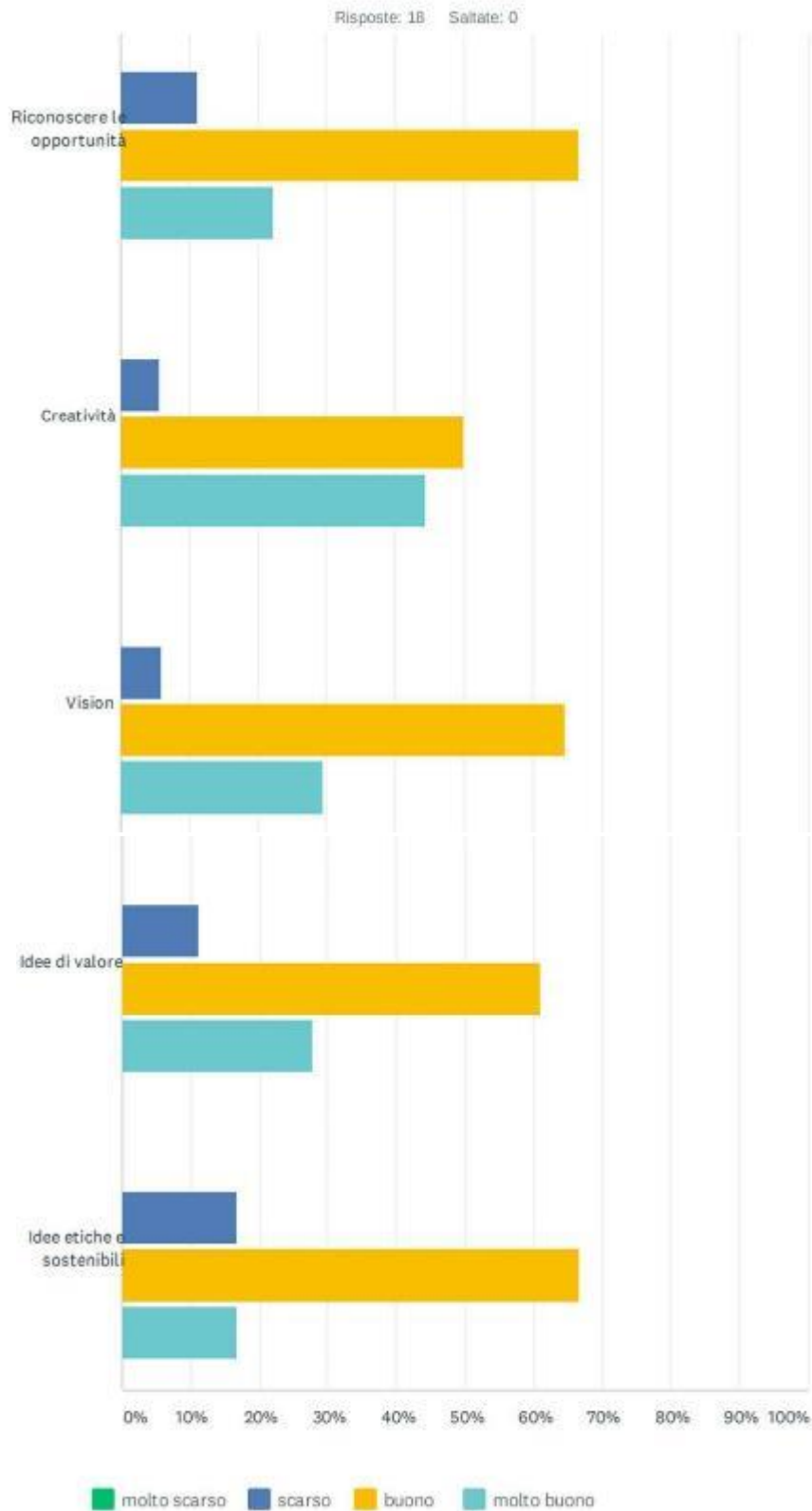
OPZIONI DI RISPOSTA	RISPOSTE	
Sono d'accordo	77.78%	14
Non sono d'accordo	22.22%	4
TOTALE		18

Respondents were also asked to rate the potential of the BIZ4Fun virtual world and social game based on 3 areas identified by the [Entrecomp Framework](#).

Regarding the area of "**Ideas and Opportunities**", most respondents rated the potential for play in the range of "very good" to "good" in terms of the 5 competencies listed below:

- Search for opportunities
- Creativity
- Vision
- valuing ideas
- Ethical and sustainable thinking

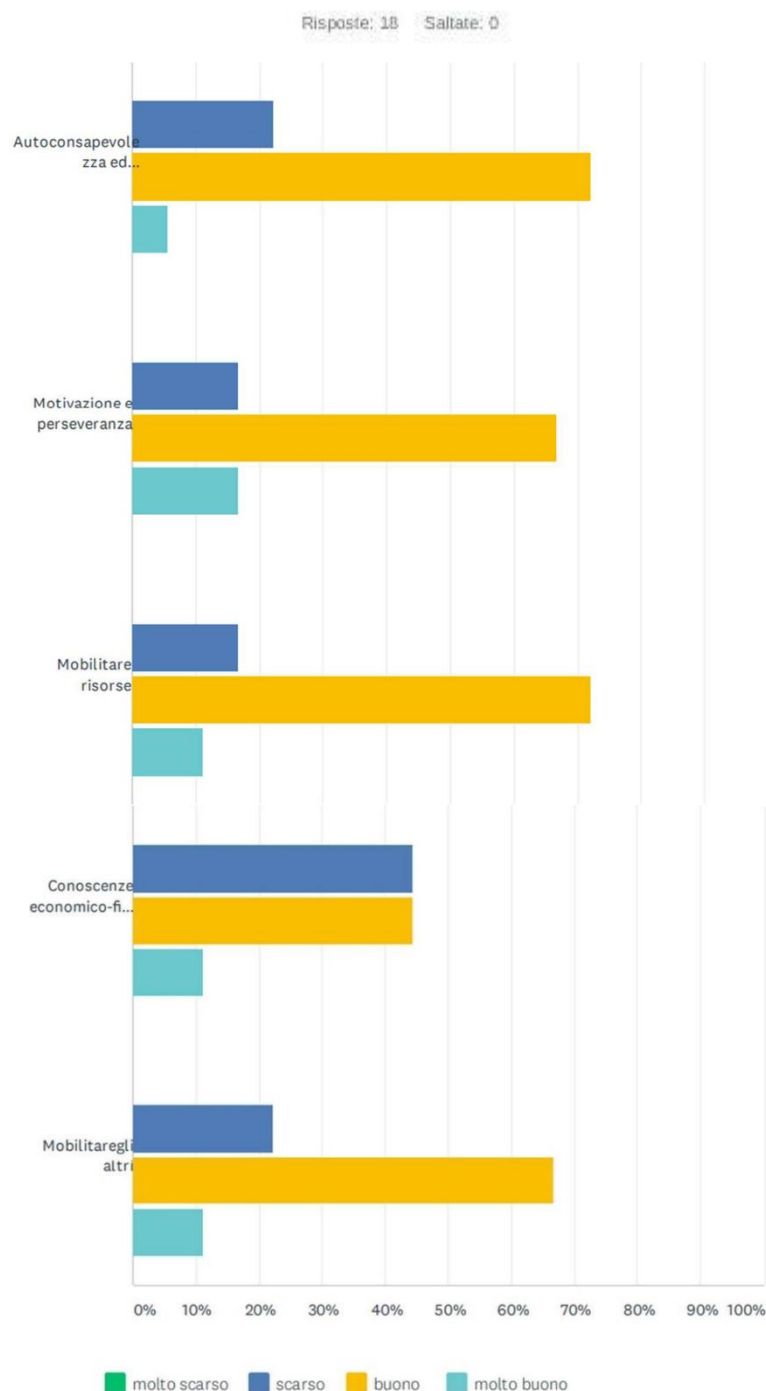
**D15 Valutazione delle potenzialità del Mondo Virtuale e Gioco Sociale  
BIZ4Fun basata sull'Area "IDEE ED OPPORTUNITÀ" del Framework  
Entrecomp.(Scala di valutazione 1-4, dove 1 è 'molto scarso' e 4 è  
'molto positivo')**



Regarding the "**Resources**" area, most respondents rated the potential of the games in the range of "very good" to "good" in terms of:

- Self-awareness and self-efficacy
- Motivation and perseverance
- Mobilisation of resources
- Ethical and sustainable thinking

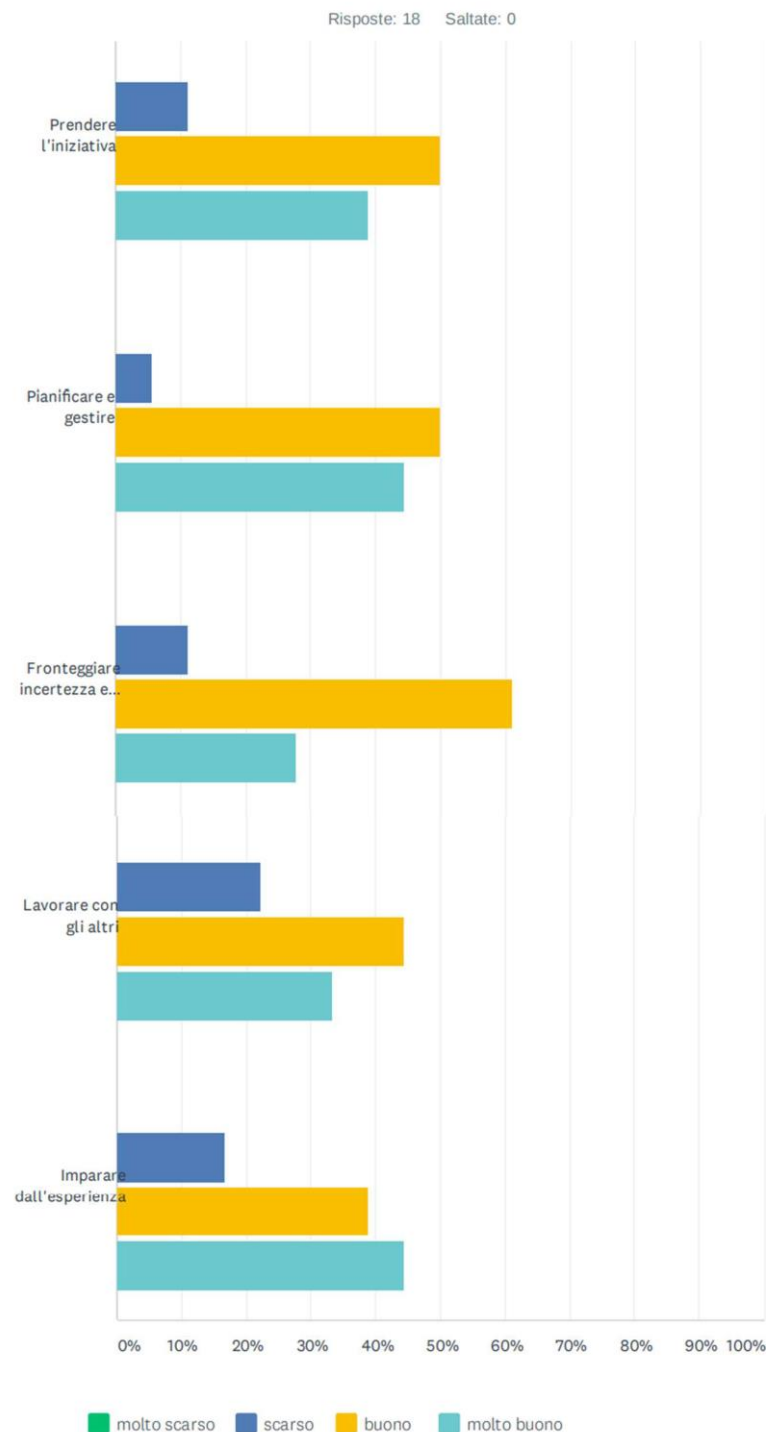
**D16 Valutazione delle potenzialità del Mondo Virtuale e Gioco Sociale BIZ4Fun basata sull'Area "RISORSE" del Framework Entrecomp. (Scala di valutazione 1-4, dove 1 è 'molto scarso' e 4 è 'molto positivo')**



We can still conclude that for some respondents the importance of the game in terms of financial and economic literacy is weak.

The results regarding the potential of the platform in the area of **"Do Action"** were considerably positive. Below are the detailed results.

D17 Valutazione delle potenzialità del Mondo Virtuale e Gioco Sociale BIZ4Fun basata sull'Area "IN AZIONE" del Framework Entrecomp. (Scala di valutazione 1-4, dove 1 è 'molto scarso' e 4 è 'molto positivo')



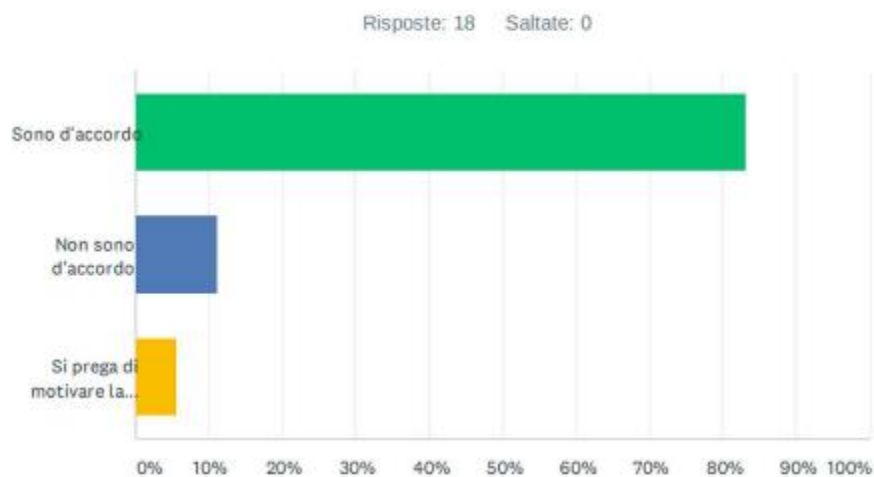


The majority of respondents rated the potential of the games between "very good" and "good" in terms of:

- Taking the initiative
- Planning and management
- Managing ambiguity, uncertainty and risk
- Cooperation with others
- Learning through experience

Some 'weak' rates were noted in the 'working with others' section. Nevertheless, positive responses accounted for more than 75% of the total.

**D18 Il Mondo Virtuale ed il Gioco Sociale BIZ4Fun possono essere uno strumento efficace per acquisire/sviluppare le competenze necessarie per avviare un'impresa di successo.**



OPZIONI DI RISPOSTA	RISPOSTE	
Sono d'accordo	83.33%	15
Non sono d'accordo	11.11%	2
Si prega di motivare la risposta	5.56%	1
TOTALE		18

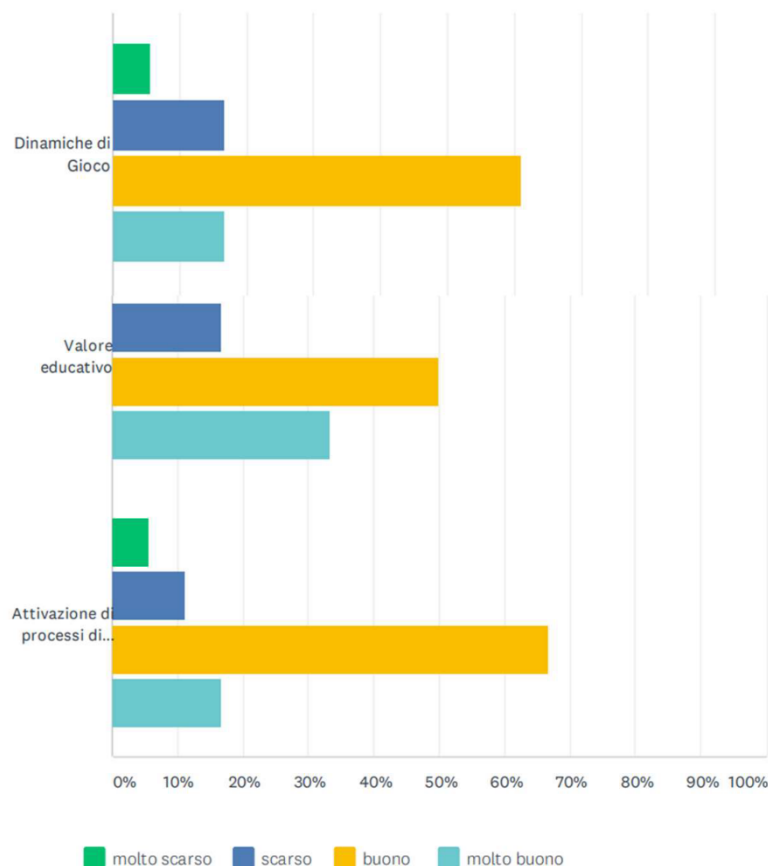
The results on the **effectiveness of the platform** for acquiring/developing the competencies needed to start a successful business were significantly positive.

Respondents were also asked to assess some **key aspects of the platform, such** as: the dynamics of the game, the learning value and its role in activating business learning processes.



**D19 Si prega di valutare ciascuno dei seguenti soggetti su una scala di valutazione 1-4, dove 1 è 'molto scarso' e 4 è 'molto positivo':**

Risposte: 18 Saltate: 0



	MOLTO SCARSO	SCARSO	BUONO	MOLTO BUONO	TOTALE	MEDIA PONDERATA
Dinamiche di Gioco	5.56% 1	16.67% 3	61.11% 11	16.67% 3	18	2.89
Valore educativo	0.00% 0	16.67% 3	50.00% 9	33.33% 6	18	3.17
Attivazione di processi di apprendimento imprenditoriale	5.56% 1	11.11% 2	66.67% 12	16.67% 3	18	2.94

More than 75% of the participants rated the dynamics of the game as "very good" to "good".

More than 80% of participants rated the educational value of the game as "very good" to "good".

There were also positive results regarding the role of play in activating entrepreneurial learning processes. More than 80% of the respondents rated the effectiveness of play in supporting the activation of entrepreneurial learning as either 'very good' or 'good'. In the case of those who marked "very poorly", they criticized the fact that the game can be too complex with too much information at the same time.

In addition to expressing their level of satisfaction with each game feature, respondents were asked to suggest their comments most through the **strengths and weaknesses of VW** and the social game BIZ4FUN.

STRENGTHS	WEAKNESSES
Connects students with each other in a friendly way	It is a game and can only be considered a simple game
Facing serious arguments through play	Fluidity of movements, poor graphics, difficult interaction
Teaching complex content through step-by-step apprenticeships	The proposed content may be complex without precise details
Simplicity	Difficult to use
Opportunity to develop entrepreneurial competences	For those who are not too used to this way of learning, it could be boring.
Clear content and objectives to be achieved	For those who have these procedures, it can be a challenging tool
Creativity	Biz4Fun excludes a range of recipients, such as people who are not avid video game players or the elderly.
Easy orientation and the possibility of immediate testing of the acquired knowledge	/
Intuitive	/
Didactic value	/
Experimenting and overcoming social barriers. virtual is not so virtual.	/

The evaluation of VET institutions shows that the level of satisfaction with the platform is mostly good.

Some also believe that a few minor comments have been noted, namely graphics, or not always ergonomic, depending on the parts of the game and/or the users.

The detailed results of the evaluation are presented in Annex I to this report.

### 2.3 Online assessment for policymakers

The online evaluation of policy makers shows that the satisfaction rate with the platform is very good. A few minor comments were noted, namely the lack of feedback in the area of education. As feedback is information provided to students to improve learning through, it is crucial to tell them their mistakes.

The detailed results of the evaluation are presented in Annex III to this report.

The results regarding the **needs of end-users** were significantly positive. According to the respondents, the platform and its content address well the business competences of the target group. One participant stated that "the platform content seems well calibrated for high school students and potentially provides an excellent starting point for developing entrepreneurial skills. The online environment promotes student interest through playful and interactive elements. Some of the features and steps are sometimes not very

clear and can slow down progression through the courses.

Even if the interactive environment is stimulating for the students, the actual digital skills of the teachers should be tested or at least a digital facilitator should be present during the class." Participants pointed out that the virtual world and social gaming platform BIZ4Fun is a valuable tool to engage students in entrepreneurship education.

Regarding the potential uses of the Biz4Fun VW platform and social game, the **main benefits and barriers in** educational practice, respondents argued that the platform and game could be used in both curricular and extra-curricular contexts. These activities promote innovation and stimulate young students' active learning towards cross-cutting skills that are increasingly needed nowadays. One interviewee pointed out that "as mentioned earlier, there are still some barriers to developing such activities: digital skills and tools, reluctance to innovative teaching methods, and the need to find resources to integrate digital skills courses into the current curriculum". Participants do not see any barriers in terms of application and economic aspects. However, they highlighted the fact that it would be crucial to engage motivated teachers who believe in entrepreneurial education and the opportunity to learn through play.

In terms of **ideas, approaches and tools from** the Biz4Fun VW project and the social game that could be adapted into related (local) strategies and practices, respondents agreed on the power of entrepreneurial education. "Whether it will be conveyed through the platform and the online game, or through traditional frontline lessons, content is needed more than ever in today's learning pathways. The playful-interactive approach certainly adds value and encourages innovative teaching methodologies. Having a game as an essential tool to be used in afternoon business skills courses would help to engage young people and expose them to an environment that is too often confused with entrepreneurship. The spirit of initiative, entrepreneurship, proactivity are skills that can be developed through entrepreneurial skills."

Another participant stressed that "the BIZ4Fun social game should be a starting point for the development of business ideas that go from virtual life to reality or at least to a simulation of real life. After you have played and learnt, you should put into practice what you have learnt in school.

The final questions of the survey aimed to get more meaningful feedback on how **to improve the platform in terms of** technical aspects, functionality and content. All participants pointed out that, given the educational purpose, a feedback system should be included after the answers have been given and the exercises have been completed, so that learners can improve. As mentioned earlier, some passages are not very user-friendly, especially if it is a user with no previous experience with video games. Interactivity could also be developed, which would imply a wider range of activities that could be carried out on the platform beyond the learning materials and quizzes (e.g. missions that could be completed, or competition with other participants, etc.).

One participant suggested that "in addition to reading the instruction manuals at the beginning, teachers who are less used to playing with video games can be guided by the students themselves. Then teachers should encourage students to reinforce what they have learned in each section. I would reinforce the social aspect of the game and invite students to take the course together so that they can exchange their thoughts and impressions. They could also play together with students who come from other schools."

All participants argued that it would be necessary to insist on incorrect answers (give a

reason why the question was not correct). One participant stated that the BIZ4Fun platform is a first and well-executed attempt that could be implanted in the future as "BIZ4Fun 2", aimed at creating a real business plan with the same methodology.

## 2.4 General conclusions

In conclusion, the individual surveys have shown mainly positive aspects of these tools. Indeed, both students and teachers were positive about the future of the game for educational purposes.

Obviously, some minor issues still need to be fixed, such as bugs and delays. The graphics may also need to be updated to improve fluidity and readability.

However, the result is that for the largest part of the respondents the game successfully fulfils the functions for which it was created, therefore the result is positive and satisfactory both for the students and for the teachers who are considering using it in the future.



## **Biz4Fun - Let's have fun with the business start-up**

**ERASMUS+ 2018-1-EN01-KA202-046271**

### **REPORT ON THE PILOT EVENT (TURKEY)**

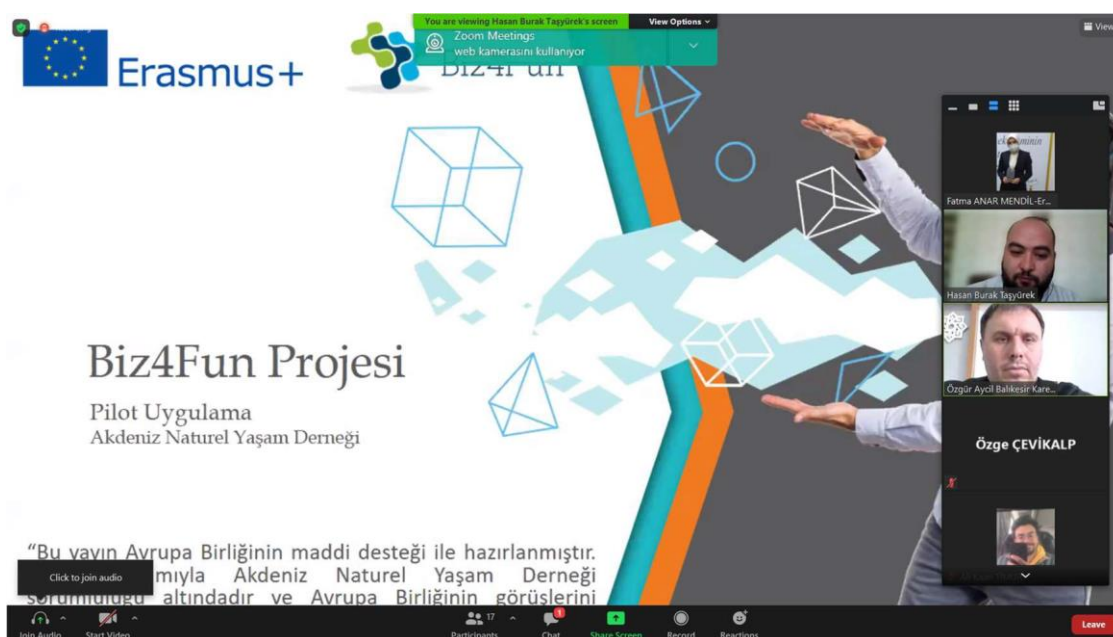


## 1 GENERAL INFORMATION ON IMPLEMENTATION

Partner, landscape	Turkey
Start date of the pilot project	17.06.2021
End date of the pilot project	27.06.2021
Number of participants who took part in the pilot project	34
Number of participants testing VWSG Biz4Fun	23

### 1.1 Brief description of the pilot event

The pilot event took place on 17 June 2021 as a meeting split into two sessions at 10:00 and 14:00 Turkish time. Pupils, students and stakeholders interested in entrepreneurship were invited to the 10:00 session. Representatives of higher education institutions, representatives of vocational training institutions and policy makers were invited to the session at 14:00.



At both meetings, a representative of Naturelder explained the nature of the business to approximately 34 participants. He explained the importance of entrepreneurship for young people, the reasons for the creation of the Biz4Fun project, its objectives, the partnership established and the intellectual output of the project.

In addition, 3D virtual world training was presented to the participants. The registration of the game, the installation of the game, the initial settings of the game and how to use the game were explained. Afterwards, the participants of the event tested the game.

They had one week to try the game themselves.

Naturelder board member Hasan Burak Taşyürek was responsible for the presentation and 3D presentation of the virtual world, while Özgür Aycil and Hamdi Ayyıldız provided

support.



## 1.2 Participants - number of participants who tested the learning scenarios

Socio-demographic variables	Number of participants
<b>1. Gender</b>	
<i>Men</i>	11
<i>Women</i>	12
<b>Total:</b>	<b>23</b>
<b>2. Profile</b>	
<i>Pupils</i>	12
<i>Vocational education and training/education institutions</i>	8
<i>Policy makers</i>	3
<b>Total:</b>	<b>23</b>

### 1.3 Piloted learning scenarios

Course	Course piloted during piloting event
1. INTRODUCTION TO BUSINESS	X
2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND IN EUROPE	
3. BUSINESS MODELS	X
4. BUSINESS PLAN	X
5. COLLABORATIVE TOOLS FOR BUSINESS MODEL DESIGN OR INNOVATION	
6. MARKETING	
7. DIGITAL MARKETING	X
8. ANALYSIS OF THE BEST MARKETING STRATEGIES FOR SMALL BUSINESSES	
9. FINANCIAL MANAGEMENT	
10. HUMAN RESOURCES MANAGEMENT	



## 2 ONLINE EVALUATION RESULTS

At the end of the testing, participants were asked to complete an online questionnaire.

EGInA Srl, as lead partner for the evaluation, designed three online evaluation questionnaires addressed to different target groups (students, VET institutions, policy makers), aiming to collect relevant information about the testing of the 3D virtual world and social game developed within the BIZ4Fun project.

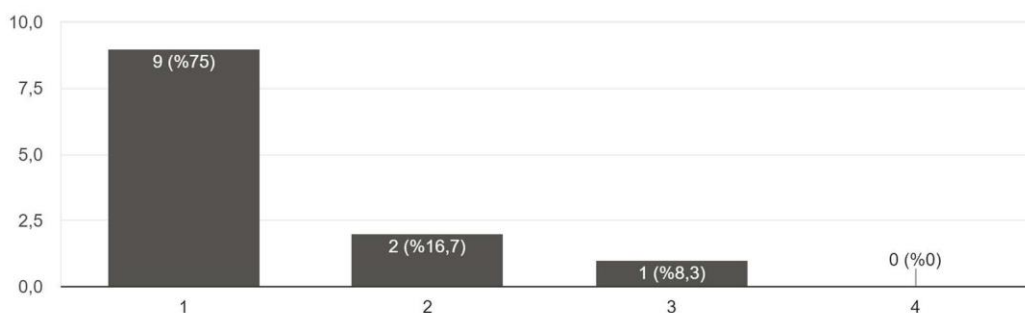
### 2.1 Online pupil assessment

An evaluation questionnaire was presented to the participants to assess the pilot activity and their experience. The questions of the questionnaire and the answers of the participants are as follows;

#### 2.2 How clear were the explanations about the BIZ4Fun project?

Biz4Fun Projesi ile ilgili açıklamalar ne kadar açıktı?

12 yanıt



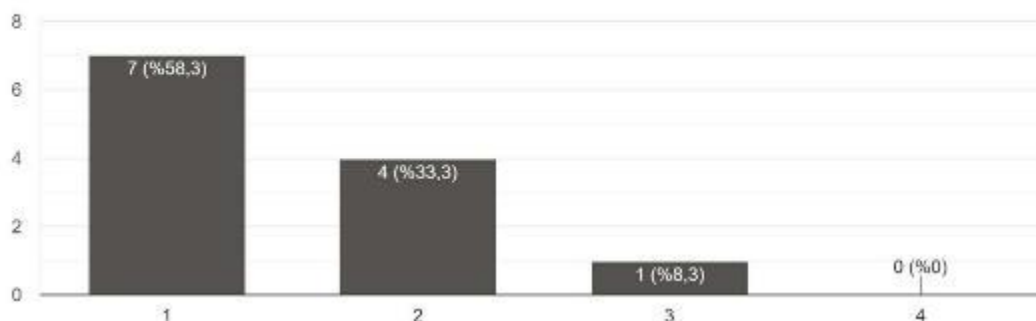
1: very good, 2: good, 3: bad, 4: very bad

The results regarding the clarity of the explanation of the Biz4Fun project were very **positive**.

#### 2.3 How clear was the explanation of the rules of the virtual world and social game BIZ4Fun?

Biz4Fun Sanal Dünya ve Sosyal Oyun kurallarının açıklamaları ne kadar netti?

12 yanıt

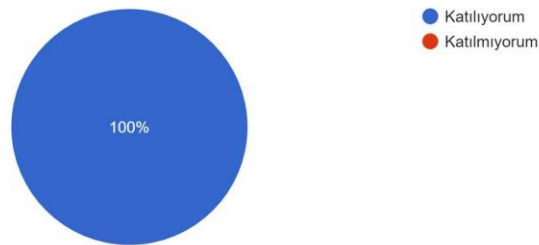


1: very good, 2: good, 3: bad, 4: very bad

The results regarding the clarity of instructions and explanation of the 3D virtual world and the social game were very **positive**.

## 2.4 Using the BIZ4Fun virtual word and social game is easy.

Biz4Fun Sanal Dünya ve Sosyal Oyununu kullanmak kolaydır  
12 yanıt



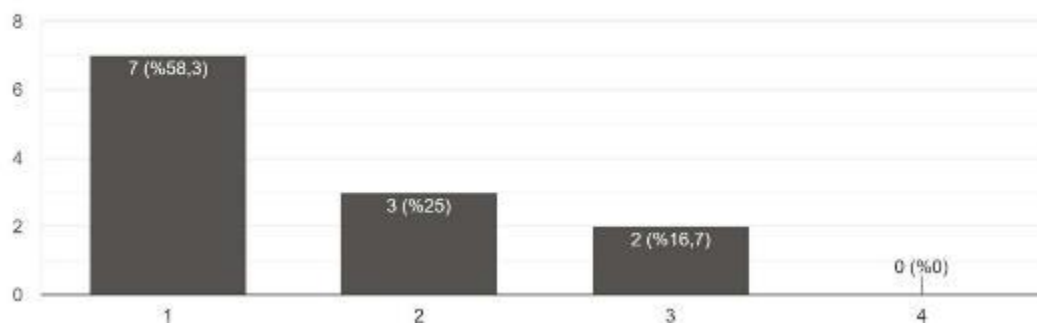
*Katılıyorum: Agree, Katılmıyorum: Disagree*

All participants find the virtual world and social game Biz4Fun easy to use.

## 2.5 How would you rate the graphic design of the virtual word and social game BIZ4Fun?

Biz4Fun Sanal Dünya ve Sosyal Oyun grafik tasarımını nasıl değerlendirirsiniz?

12 yanıt



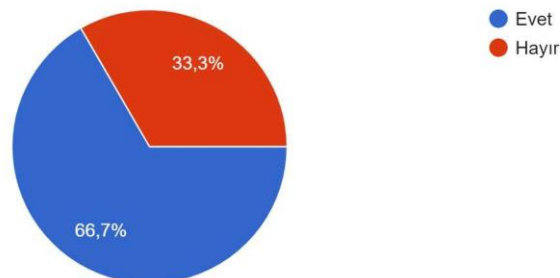
*1: very good, 2: good, 3: bad, 4: very bad*

Most participants think that the graphics of the Biz4Fun virtual world and social game are sufficient. However, some participants believe that there is still room for improvement.

## 2.6 Did the game go smoothly?

Oyun sorunsuz ilerledi mi?

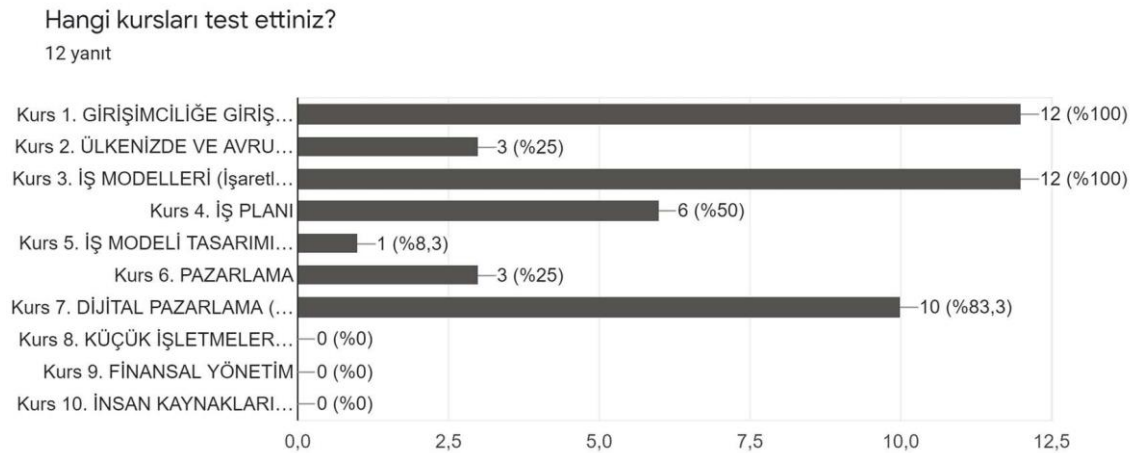
12 yanıt



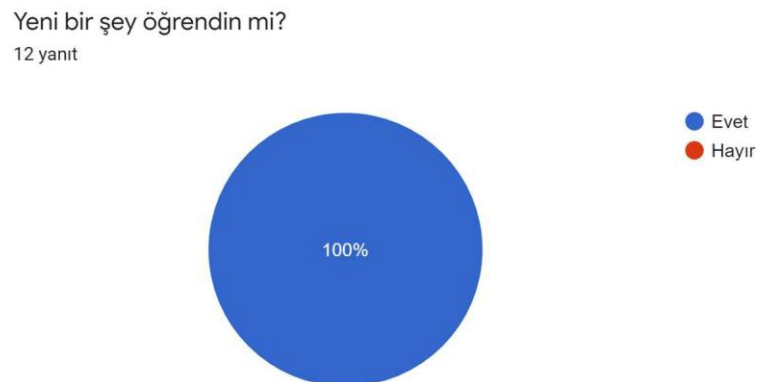
*Evet: Yes, Hayır: No*

While the majority of participants played the game without any problems, **33.3%** said they had problems with the game. They reported that the game sometimes crashes.

## 2.7 Which courses have you tested?



## 2.8 Did you learn anything new?



*Evet: Yes, Hayır: No*

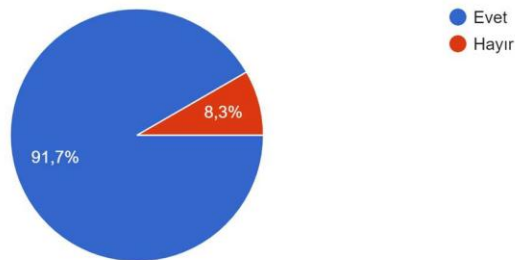
All participants reported that they had learned something. We can summarise them as follows;

- Business details
- Idea generation process
- Areas of use of the virtual world

## 2.9 Do you want to use the virtual word and social game BIZ4Fun while studying at school/university?

Biz4Fun Sanal Dünya ve Sosyal Oyununu Okul / Üniversite deki çalışmalarınız için kullanmak ister misiniz?

12 yanıt



Nearly 92% of respondents said Biz4Fun WV is a tool they would like to see in their institution's classroom.

## 2.10 Would it be useful to use the virtual word and social game BIZ4Fun for school/academic purposes?

Biz4Fun Sanal Dünya ve Sosyal Oyununu okul / akademik amaçlar için kullanmak yararlı olur mu?

12 yanıt



All respondents indicated that it would be useful to use Biz4Fun WV for school/academic purposes.

## 2.11 VW and the social game Biz4Fun can be an effective tool for acquiring/developing the competences needed to start a successful business.

Biz4Fun Sanal Dünya ve Sosyal Oyun, başarılı bir iş kurmak için gereken yetkinlikleri elde etmek / geliştirmek için etkili bir araç olabilir.

12 yanıt



### **2.12 What is the greatest strength of VW and the BIZ4Fun social game?**

Participants commented on the strengths of Biz4Fun VW. We can summarize them as follows;

- be a good source of information.
- Accessible to everyone.
- A fun taste in 3D.
- Interactive play.

### **2.13 What is the biggest weakness of the game?**

Participants commented on the weaknesses of Biz4Fun VW. We can summarize them as follows;

- Connection problems.
- Low level of graphics.
- Reduction of intimacy due to virtuality.

### **2.14 Your support counts! What would you change/improve about VW and the BIZ4Fun social game?**

Participants' suggestions for Biz4Fun VW are in line with what they see as the problem. In summary, these suggestions are as follows:

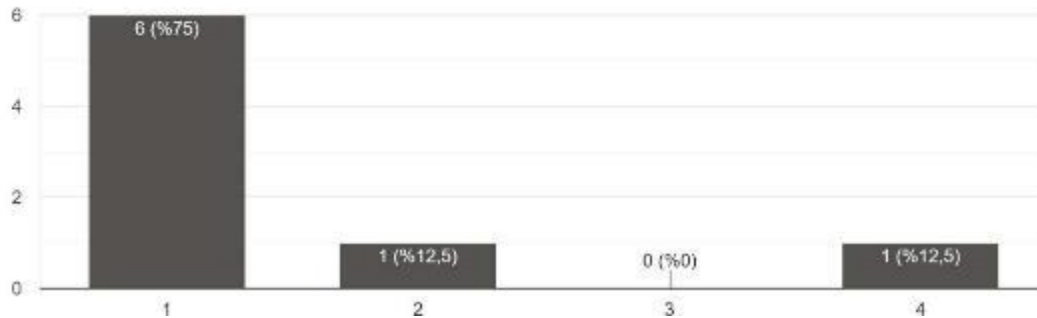
- Troubleshoot connection problems.
- Improved graphics level.
- Correction of some marks that remained in Greek.
- Adding more miscellaneous features.
- Adding more scenarios.

### 3 ONLINE EVALUATION OF OVP/EU INSTITUTIONS

#### 3.1 How clear were the explanations about the BIZ4Fun project?

Biz4Fun Projesi ile ilgili açıklamalar ne kadar açıktı?

8 yanıt

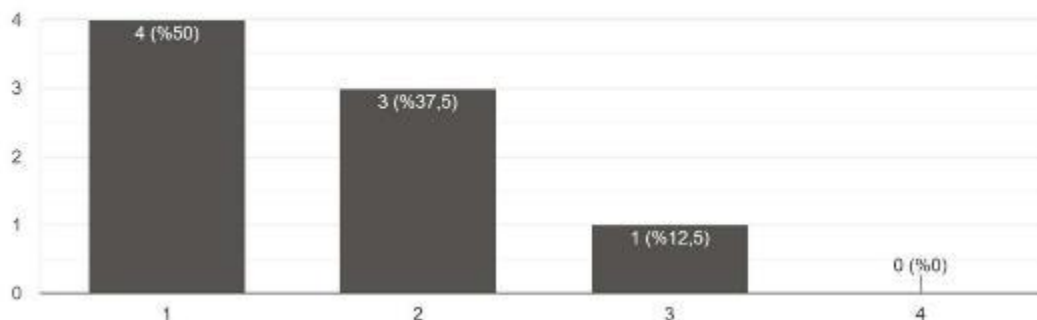


Most participants found the explanations of the project easy to understand. One participant stated, "The scope and information on the subject of the project was clear. these explanations could have been more linked to the sustainability objectives of the project."

#### 3.2 How clear was the explanation of the rules of the virtual word and social game BIZ4Fun?

Biz4Fun Sanal Dünya ve Sosyal Oyun kurallarının açıklamaları ne kadar netti?

8 yanıt



Most participants found the explanations of the Biz4Fun VW rules to be easy to understand. One participant commented: "The rules of the virtual world and the social game were clear enough, all the rules had their counterpart in the game."

#### 3.3 Using the BIZ4Fun virtual word and social game is easy.

Biz4Fun Sanal Dünya ve Sosyal Oyununu kullanmak kolaydır

8 yanıt

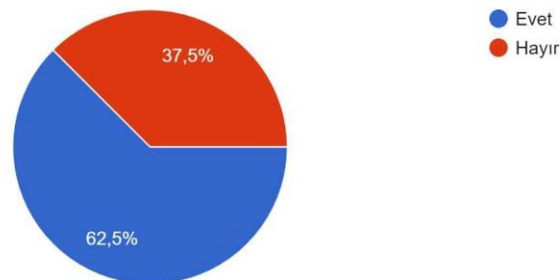


All participants find Biz4Fun VW easy to use. One of them stated that "the game is well

designed and very easy to play".

### 3.4 Are there any prerequisites (prior knowledge) required to use the game?

Oyunu kullanmak için herhangi bir önkoşul (ön bilgi) gerekli mi?  
8 yanıt



Almost 63% of participants think that there are prerequisites for using the game. It is stated that "Basic knowledge of games and computer use is necessary due to knowledge of virtual concepts, experience of using computer games and computer movements". The general idea is that some basic knowledge of computers and games is needed.

### 3.5 Did the game go smoothly?

Oyun sorunsuz ilerledi mi?  
8 yanıt

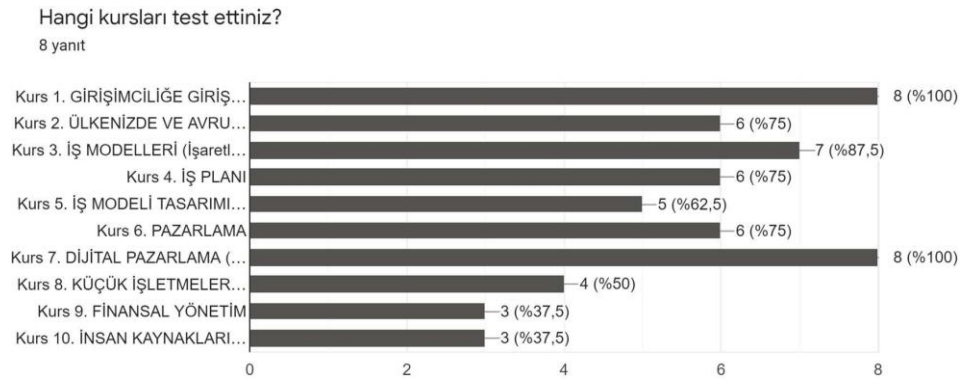


All participants used the game without any problems.

### 3.6 Please describe the main playful and educational elements of the game

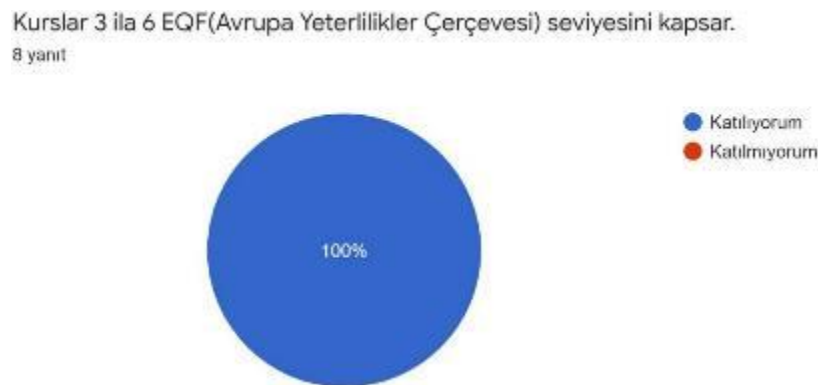
The fact that the game is 3D was identified by many participants as a fun element. It was also stated that "the fact that it can be implemented with the participation of many people in the form of a game in a virtual environment can create a fun environment." and "The systematic step-by-step character progression makes the game fun." and "Exploration by flying, communication with NPCs, playing the story make the game fun."

### 3.7 Which courses have you tested?



All participants tested the Introduction to Entrepreneurship course. Then they apparently tried different courses by exploring.

### 3.8 The courses cover EQF levels 3 to 6.



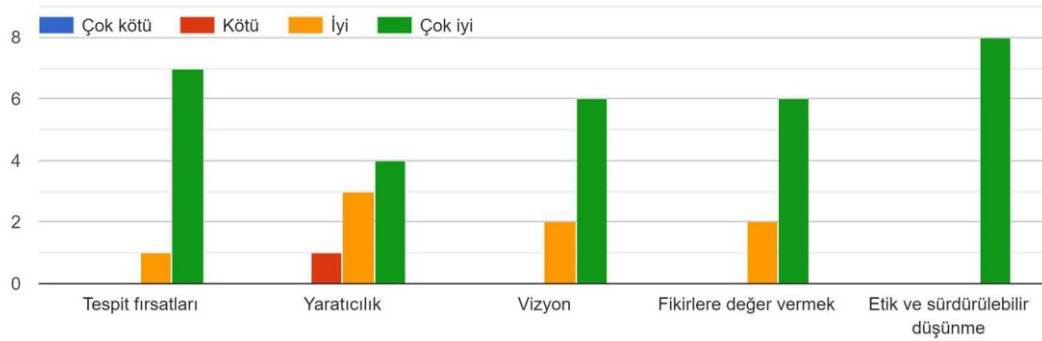
Participants agreed that the courses cover EQF levels 3-6. In addition, it is stated that "The courses that meet the skills to be delivered under the EQF are very well prepared."

**Assessment of the potential of the virtual word and social game BIZ4Fun based on the IDEAS AND OPTIONS domain of [the Entrecomp framework](#) (rating scale 1-4, where 1 is "very poor" and 4 is "very good").**

- Perception of opportunities
- Creativity
- Vision
- Valuing ideas
- Ethical and sustainable thinking



Biz4Fun Sanal Dünyası ve Sosyal Oyununun potansiyellerinin Entrecomp.(Avrupa Girişimcilik Yetkinlik Çerçevesi) "FİKİRLERİ VE FIRSATLARI" teme... 4'ün 'çok iyi' olduğu 1-4 derecelendirme ölçeği).



Regarding the "Ideas and Opportunities" area, most participants rated the potential of the games as "very good" to "good" in terms of:

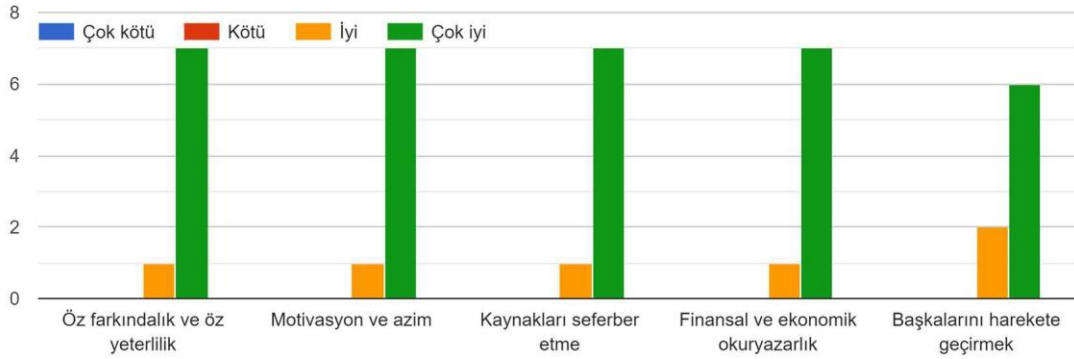
- Search for opportunities
- Creativity
- Vision
- Valuing ideas
- Ethical and sustainable thinking

Participants' responses indicate that a little more freedom is expected, especially in the area of creativity.

**Evaluation of the potential of the virtual word and social game BIZ4Fun based on the "RESOURCES" domain of [the Entrecomp framework](#) (rating scale 1-4, where 1 is "very poor" and 4 is "very good").**

- Self-awareness and self-efficacy
- Motivation and perseverance
- Mobilising resources
- Financial and economic literacy
- Mobilising others

Biz4Fun Sanal Dünyası ve Sosyal Oyununun potansiyellerinin Entrecomp (Avrupa Girişimcilik Yetkinlik Çerçevesi) "KAYNAKLARI" temel alınarak de... 4'ün 'çok iyi' olduğu 1-4 derecelendirme ölçeği).



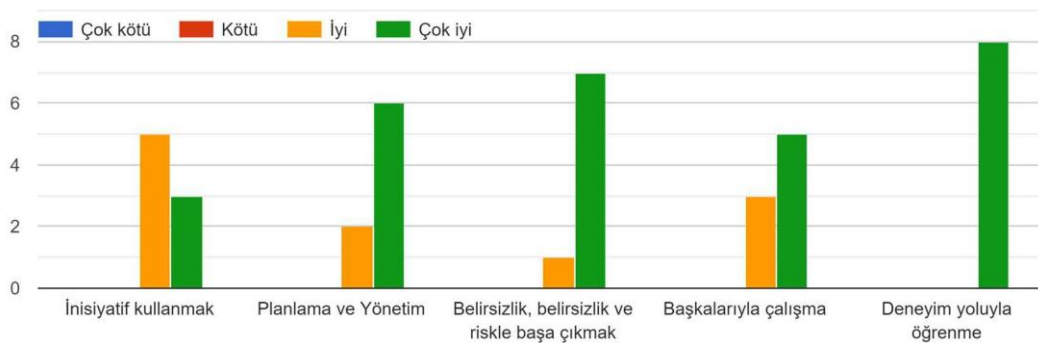
Regarding the "Resources" area, most participants rated the potential of the games in the range of "very good" to "good" in terms of:

- Self-awareness and self-efficacy
- Motivation and perseverance
- Mobilisation of resources
- Financial and economic literacy
- Mobilising others

**Evaluation of the potential of the virtual word and social game BIZ4Fun based on the "INTO ACTION" domain of the Entrecomp framework (rating scale 1-4, where 1 is "very poor" and 4 is "very good").**

- **Taking the initiative**
- **Planning and management**
- **Managing uncertainty, ambiguity and risk**
- **Cooperation with others**
- **Learning through experience**

Biz4Fun Sanal Dünyası ve Sosyal Oyununun potansiyellerinin Entrecomp (Avrupa Girişimcilik Yetkinlik Çerçevesi) "EYLEM İÇİN" temel alınarak de...e 4'ün 'çok iyi' olduğu 1-4 derecelendirme ölçeği).

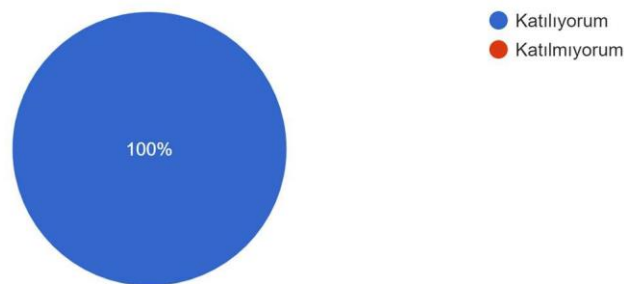


Regarding the 'Into Action' area, most participants rated the potential of the games between 'very good' and 'good' in terms of:

- Taking the initiative
- Planning and management
- Managing uncertainty, ambiguity and risk
- Cooperation with others
- Learning through experience

### 3.9 VW and the social game BIZ4Fun can be an effective tool for acquiring/developing the competences needed to start a successful business.

Biz4Fun Sanal Dünya ve Sosyal Oyun, başarılı bir iş kurmak için gereken yetkinlikleri elde etmek / geliştirmek için etkili bir araç olabilir.  
8 yanıt

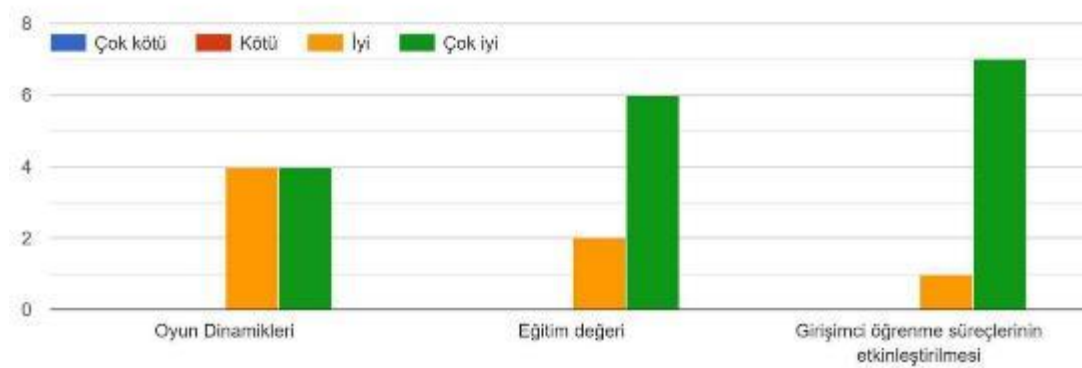


Respondents think that Biz4Fun VW can be used as an effective tool to acquire/develop the competencies needed to build a successful business. One participant commented: "I agree because it offers opportunities to people". Another commented that "it can be used to prepare the necessary infrastructure that can be used in the creation of entrepreneurial knowledge"

**Please rate each of the following items on a scale of 1 to 4, where 1 is "very poor" and 4 is "very good": (very poor - poor - good - very good)**

- **Dynamics of the game**
- **Educational value**
- **Activating entrepreneurial learning processes**

Lütfen aşağıdaki nesnelerin her birini 1-4 arasında derecelendirin, burada 1 'çok zayıf' ve 4 'çok iyi' (çok kötü - kötü - iyi - çok iyi)



The dynamics of the game were rated as "very good" and "good" by 50% and 50% of the participants, respectively. The educational value of the game was rated as 'very good' by more than 75% of the participants and 'good' by the rest. The results regarding the role of play in activating entrepreneurial learning processes were quite positive. More than 80% of the respondents rated the effectiveness of play in activating entrepreneurial learning as 'very good'.

### 3.10 What is the greatest strength of the virtual word and social game BIZ4Fun?

Participants commented on the strengths of Biz4Fun VW. We can summarize them as follows;

- Providing a fun learning environment.
- Promoting the concept of participatory entrepreneurship.
- Availability as open source.
- It is unique and provides a different feel in the learning process.
- Reaching young people through entertainment.
- It is free and available to everyone.

### 3.11 What is the biggest weakness of the virtual word and social game BIZ4Fun?

Participants commented on the weaknesses of Biz4Fun VW. We can summarize them as follows;

- Thanks to its story, it offers creativity in a limited space.
- The graphics and connectivity infrastructure is weak.
- If it is not played with under control, it can encourage addiction to technology.
- The use of business simulation for technology diffusion has not taken off sufficiently.
- It is not yet possible to customize.

### **3.12 What would you change/improve about the virtual world and social game BIZ4Fun?**

We asked participants what needs to be done to improve Biz4Fun VW. Their answers can be summarised as follows;

- Expanding story paths and a more interactive structure will increase the effectiveness of the tool.
- Translation development, Turkish translation of the whole game including the game interface.
- A system in which scenarios can be adapted will be very beneficial for trainers and training institutions.

### **3.13 Online assessment for policymakers**

Our three participants, who attended as policy makers, showed great interest in the Biz4Fun VW Game. They stated that Naturelder and other project partners should continue to develop and update the game and that they would participate in the development of new projects and activities related to the game to improve youth entrepreneurship.

### **3.14 To what extent the Biz4Fun VW platform and social game and its content address the business competencies of the target group (end-user needs)**

Participants were asked to what extent the virtual world and social game platform Biz4Fun and its content address the entrepreneurial competencies of the target group. One of our participants stated that it is "suitable for today's generation".

Another said: "It is very attractive to young people. However, I don't think it is very suitable for middle-aged and above." And another participant commented: "It's an invaluable source of information for young people. Especially since today's young people are not a generation that picks up and reads books, there is a need for such entertaining and educational apps. The information in the app should be enriched day by day and keep up with the times."

### **3.15 How could you use the Biz4Fun VW and Social Game platform in your context and what do you think would be its main benefits and barriers in your training practice? (Own interests of external stakeholders; benefits, usefulness, effectiveness, relevance, cost-effectiveness/efficiency, sustainability)**

We asked our participants how you can use Biz4Fun's virtual world and social gaming platform in your context and what you think are the main benefits and barriers for your educational practice. One of our participants pointed out the cost-effectiveness of it being free. Another stated, "The fact that it is free increases its usability. It can be used in different areas depending on whether it has a technologically flexible structure. We may consider using it in collaboration with Naturelder in our business activities." And another participant said: "The app will definitely be useful because it is interesting. The fact that it is free is one of the most important factors that will increase its use and effect. Cost is one of the biggest problems especially for our young people. Constantly updating and adding new information and new features will keep the app alive".

### **3.16 Which ideas, approaches, tools of Biz4Fun VW and Social Game could be adapted into related (local) strategies and practices and why? (Impact on strategic planning)**

We asked participants which ideas, approaches, tools, relevant (local) strategies and practices of the Biz4Fun virtual world and social game are worth adapting and why. One of our participants pointed out that this can be beneficial for young people in terms of technological development. Another stated, "The idea and application of bringing learning into a 3D environment is interesting. The widespread use of this type of learning will both help to reduce young people's reactions to the current education system and increase the effectiveness of education." And another participant commented: "We always try to support young entrepreneurs within the scope of our community. Our young entrepreneurs are the cornerstone of our society and economy. In this regard, I think the app will be a useful tool."

### **3.17 What would you improve on the Biz4Fun VW and Social Game online learning platform (technical aspects, features, content) and how? (Weaknesses, barriers, inconsistencies, quality, clarity, access, tools, etc.)**

We asked our participants what you would improve about the online learning platform Biz4Fun VW and Social Game (technical aspects, features, content) and how. One of our participants pointed out the lack of technical infrastructure. Another stated, "In addition to the educational materials in the game, the game itself needs to be translated into Turkish.

English can be a social barrier, especially for young people from disadvantaged backgrounds. However, it would be advisable to facilitate the installation phase of the game. In its current form, the game is suitable for use in an educational setting under the supervision of an instructor. Of course, the game should be well explained by the instructor". And another participant commented: "The app contains some general information because it was the result of an international project. The conditions and procedures in each country or region are different. At the same time, they believe that the possibility to adapt to the region will increase the use and effectiveness of the app."

## 4 CONCLUSION AND COMMENTARY

Surveys showed that VW's social game Biz4Fun was generally well received. Students and teachers alike expressed positive views and hoped that the game would be educational in the future. However, some minor issues such as bugs, crashes and delays still need to be corrected. The graphics may also need to be updated to increase interest and provide a more modern look. Another important conclusion is that the game should be updated and continue to evolve.

For the majority of participants, it can be said that the game successfully fulfils the functions for which it was created, so the result is a positive factor for both students and teachers who are considering using it.



## **Biz4Fun - Let's have fun starting a company**

**ERASMUS+ 2018-1-EN01-KA202-046271**

### **REPORT ON THE PILOT EVENT (SLOVAKIA)**



**KA2 Strategic Partnership**



## 1 GENERAL INFORMATION ON IMPLEMENTATION

Partner, landscape	SlovakBusinessAgency, Slovakia
Start date of the pilot project	12.5. 2021
End date of the pilot project	25.6. 2021
Number of participants who took part in the pilot project	Not applicable - online testing
Number of participants testing VWSG Biz4Fun	

### 1.1 Brief description of the pilot event

At the end of April and during May and June, the Slovak Business Agency started online testing of the virtual world and the social game. We did not organize webinar meetings. Approximately 50 questionnaires were sent to the potential target group: 8 to VET providers, 9 to policy makers and entrepreneurs/start-ups and 35 to students (30 of them through their teachers). Feedback was received from 6 students, 2 policy makers and 5 entrepreneurs and start-ups. They tried to call these people, ask them to play the game, through emails, phone calls, etc.

### 1.2 Participants - number of participants who tested the learning scenarios

Socio-demographic variables	Number of participants
<b>1. Gender</b>	
<i>Men</i>	9
<i>Women</i>	5
<b>Total:</b>	<b>14</b>
<b>2. Profile</b>	
<i>Pupils</i>	7
<i>Vocational education and training/education institutions</i>	0
<i>Policy makers, start-ups, enterprises</i>	7
<b>Total:</b>	<b>14</b>

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (TVORCOVIA STRATÉGIE)

## D4 Uvedte prosím svoju pozíciu v inštitúcii

Risposte: 5 Saltate: 0

#	RISPOSTE	DATE
1	majiteľ, konateľ	5/15/2021 11:46 AM
2	Sales manager	5/14/2021 11:43 AM
3	Obchodný zástupca	5/13/2021 10:58 AM
4	majiteľ	5/9/2021 8:11 PM
5	referent	4/20/2021 5:57 PM

## 1.3 Piloted learning scenarios

Course	Course piloted during piloting event
1. INTRODUCTION TO BUSINESS	X
2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND IN EUROPE	X
3. BUSINESS MODELS	
4. BUSINESS PLAN	X
5. COLLABORATIVE TOOLS FOR BUSINESS MODEL DESIGN OR INNOVATION	
6. MARKETING	X
7. DIGITAL MARKETING	X
8. ANALYSIS OF THE BEST MARKETING STRATEGY FOR SMALL BUSINESSES	
9. FINANCIAL MANAGEMENT	
10. HUMAN RESOURCES MANAGEMENT	X

## 2 ONLINE EVALUATION RESULTS

Participants were asked to complete an online questionnaire.

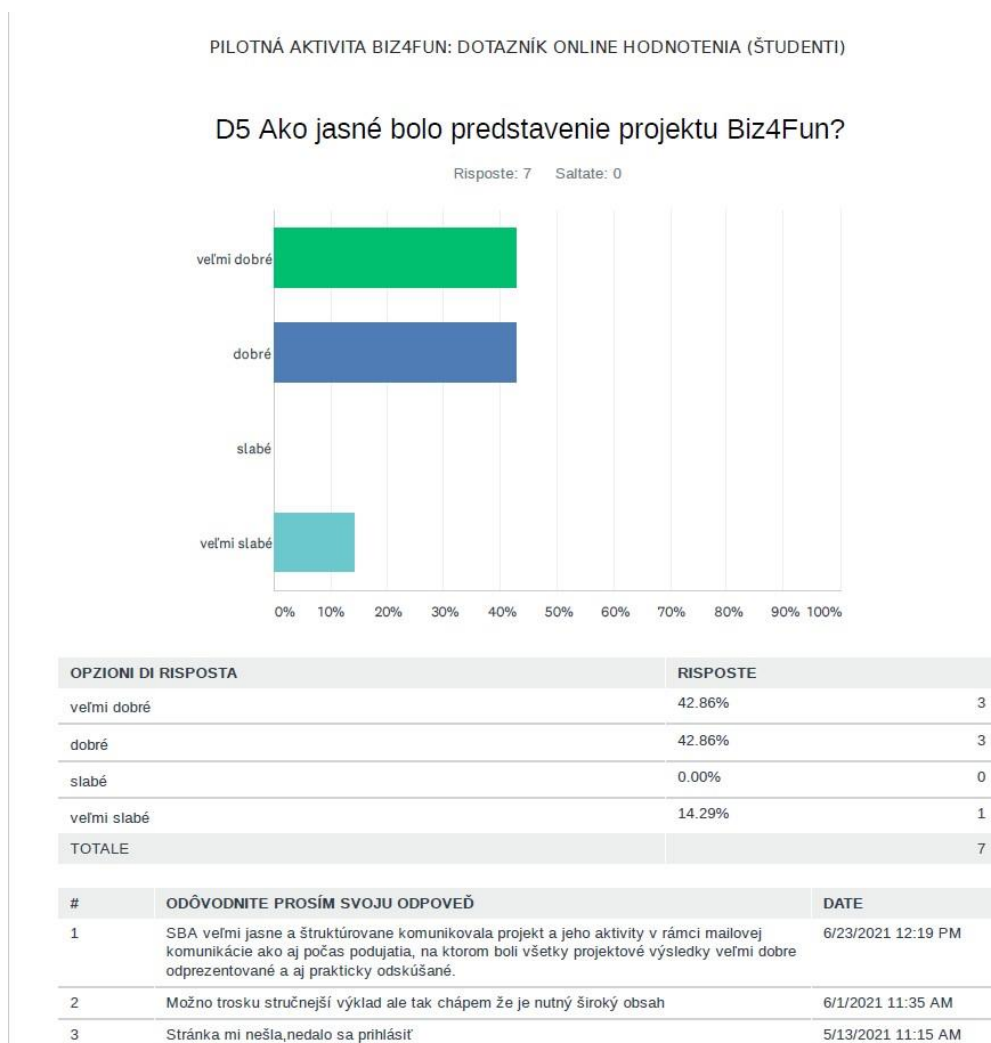
Three online evaluation questionnaires were developed for different target groups (students, VET institutions, policy makers) to gather relevant information on the testing of the 3D virtual world and social game developed within the BIZ4Fun project.

### 2.1 Online pupil assessment

Respondents were asked to answer 16 questions.

The first area focuses on the clarity of the instructions and explanation of the BIZ4Fun project and the 3D virtual world and social game.

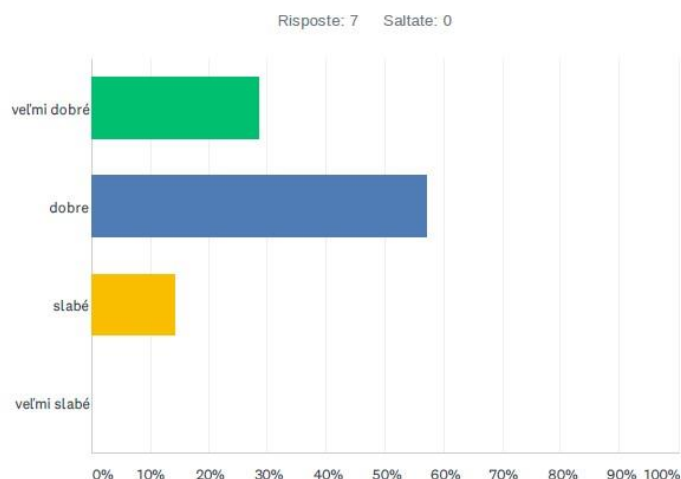
The results regarding the clarity of the explanation of the Biz4Fun project were significantly positive, with more than 40% of respondents considering the Biz4Fun project to be very good. The detailed results are summarised below.



The results regarding the **clarity of the instructions and explanation of the 3D virtual world and the social game** were as follows: 30% of the students considered it very positive, almost 60% considered it positive and only 10% considered it not very good.

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

## D6 Ako jasné bolo vysvetlenie pravidiel Virtuálneho sveta a Sociálnej hry Biz4Fun?



OPZIONI DI RISPOSTA		RISPOSTE	
veľmi dobré		28.57%	2
dobré		57.14%	4
slabé		14.29%	1
veľmi slabé		0.00%	0
TOTALE			7

#	ODŮVODNĚTE PROSÍM SVOJÍ ODPOVĚĎ	DATE
1	Vysvetlenie hry a manuál bol dobre popísaný, avšak mala som komplikácie pri pripojení, ktoré boli do veľkej mier spôsobené mojimi chýbajúcimi skúsenosťami s hrami a virtuálnym svetom.	6/23/2021 12:19 PM
2	Pravidla boli stručné a jednoduché	6/1/2021 11:35 AM

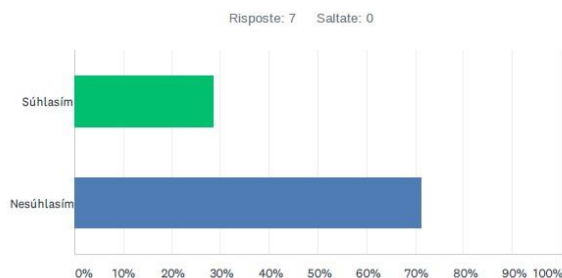
In terms of the **user-friendliness of the platform**, the results were not very positive, as shown below. The most important reasons are the following:

- *"Lengthy installation - need to simplify entry, may deter some people from continuing"*
- *"cluttered language settings"*
- *"Avatar is not very easy to control"*
- *"The game itself has no problem, the problem I see is that there are too many unnecessary steps to log in and download the game itself that are not always understandable."*

A positive aspect of the platform is that *"the biggest advantage of the virtual world and social game Biz4Fun is the educational potential"*.

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

## D7 Virtuálny svet a Sociálnu hru Biz4Fun možno ľahko používať.



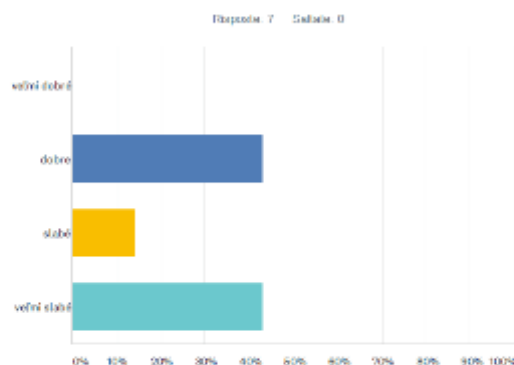
OPZIONI DI RISPOSTA	RISPOSTE
Súhlasím	28.57% 2
Nesúhlasím	71.43% 5
TOTALE	7

#	ODŮVODNITE PROSÍM SVOJOU ODPOVĚD	DATE
1	Odpoveď je subjektívna, prihladenie na moje chýbajúce skúsenosti a zručnosti s digitálnymi hrami bolo spustenie hry ako aj samotná hra komplikovanejšie.	6/23/2021 12:19 PM
2	Ovládanie je jednoduché priam až blbuvzdorné len by sa hodilo povedať že je základné nastavenie pohybu na šipkách a nie W,A,S,D	6/1/2021 11:35 AM
3	Stránka nebola zabezpečená a nedalo sa tam prihlásiť	5/13/2021 11:15 AM
4	Zdlhavá inštalácia - je potrebné zjednodušiť vstup do hry, neprehľadné nastavenie jazyka hry, avatar sa ťažšie ovláda	5/8/2021 11:59 PM
5	Hra ako taká nemá problém. V čom vidím problém je že na samotné prihrasenie a stiahnutie hry je príliš veľa zbytočných a nie vždy jasných krokov. Aj keď sa jedna o medzinárodný a nie špičkovu financovaný projekt. Väčšina "indehier" má lepšie spracovanie	4/19/2021 10:16 PM

**Graphic design rating** - 40% of respondents rated the graphics as *"good"* and the same percentage (40%) as *"very poor"*. More than 10% of respondents rated the graphics as *"poor"*. According to them, *"the graphics do not match the quality of 2021"*.

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

## D8 Ako by ste ohodnotili grafický dizajn Virtuálneho sveta a Sociálnej hry Biz4Fun?



OPZIONI DI RISPOSTA	RISPOSTE
veľmi dobré	0.00% 0
dobré	42.86% 3
slabé	14.29% 1
veľmi slabé	42.86% 3
TOTALE	7

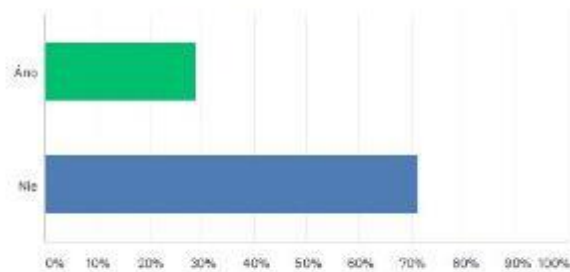
#	ODŮVODNITE PROSÍM SVOJOU ODPOVĚD	DATE
1	Grafika nebola úplne napakujúca, ale z môjho pohľadu to nevadí.	6/23/2021 12:19 PM
2	Na rok 2021 z grafického hľadiska nič moc ale tak na vzdelávaciu hru v pohode	6/1/2021 11:35 AM
3	Grafika neodpovedá kvalite roku 2021	5/8/2021 11:59 PM

When it comes to **playing the game**, 70% of respondents pointed out that the game is difficult. It took a long time to get involved and start playing the game. Mostly at the very beginning.

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

## D9 Mala hra hladký priebeh?

Risposte: 7 Salto: 0



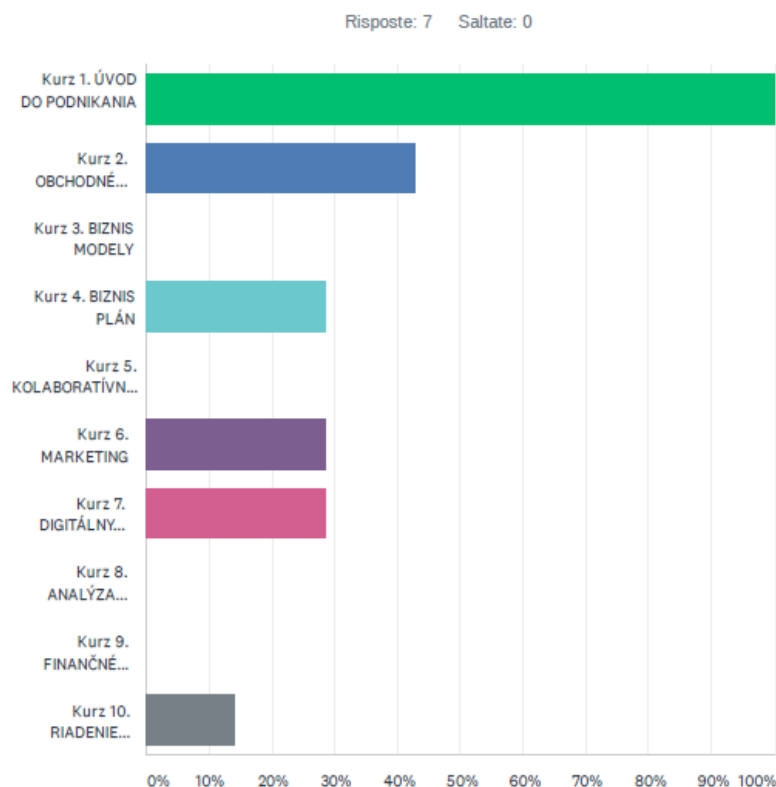
OPZIONI DI RISPOSTA	RISPOSTE	
Áno	28.57%	2
Nie	71.43%	5
TOTALE		7

#	AK JE ODPOVEĎ NA VYŠŠIE UVEDENÚ OTÁZKU "NIE", UVEĎTE ĎALŠIE INFORMÁCIE NIŽŠIE	DATE
1	Ako som už uviedla, trvalo mi kým sa zorientujem ale to aj preto lebo hry bežne nehávam	6/23/2021 12:19 PM
2	Neboli mi hneď na začiatku celkom jasné pravidlá ako aj smer hry /princíp	6/1/2021 11:38 AM
3	Zložitejšie ovládanie, občasné miznulé quizov, neprehľadnosť	6/1/2021 11:28 AM
4	Neviedla som ju spustiť	5/13/2021 11:15 AM
5	Pokiaľ má hra zaujať mladých ľudí, ktorí sú zručná v digitálnych hrách, treba hru ešte dotlačiť	5/8/2021 11:59 PM

Respondents chose 6 topics for testing. 100% of them chose the topics Introduction to Business. More than 40% tested the topics Business Models, almost 30% tested the topics Business Plan, Marketing and Digital Marketing. Only 10% chose to test the topic Human Resource Management. This can be seen in the table below.

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

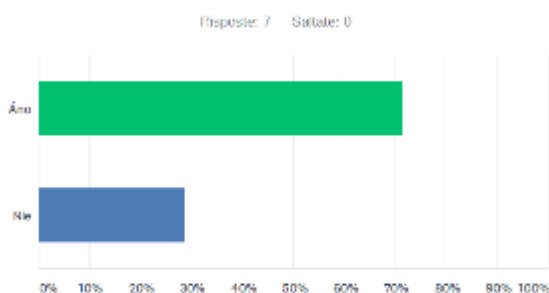
D10 Ktoré kurzy ste testovali? Prosím vyberte 3 testované kurzy:



When asked if they had **learned anything new**, 70% of respondents answered "yes" and 30% "no". The content of the game was informative. It contained a lot of useful information and definitions.

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

D11 Naučili ste sa niečo nové?



OPZIONI DI RISPOSTA		RISPOSTE
Áno		71.43% 5
Nie		28.57% 2
TOTAL F		7

#	ODÓVODNITE PROSÍM SVOJU ODPOVEĎ	DATE
1	Obsahovo je hra dobrá a náučná, niektoré časti boli ťažšie formulované.	6/23/2021 12:19 PM
2	V hre je uvedených veľa užitočných informácií a definícií	6/1/2021 11:38 AM
3	Hra je po odbornej stránke poučná	5/31/2021 11:59 PM

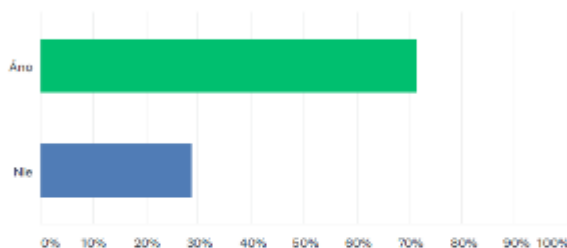
Another question was about the use of the virtual world and the social game Biz4Fun for the purpose of studying at university. 70% of the respondents would like to use it

for their studies, but the game will need to be improved.

PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

D12 Chceli by ste použiť Virtuálneho sveta a Sociálnej hry Biz4Fun pre vaše štúdium na škole /univerzite?

Risposte: 7 Seltate: 0



OPZIONI DI RISPOSTA	RISPOSTE
Áno	71.43% 5
Nie	28.57% 2
TOTALE	7

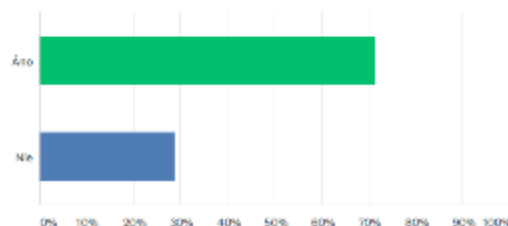
#	ODOVODNITE PROSIM SVOJU ODPOVEĎ	DATE
1	Bolo by to zaujímavé ozvláštnenie výučby a zlepšila by som si moje hrácke zručnosti.	6/23/2021 12:19 PM
2	Učíte hlavne pri distančnom vzdelávaní by to bola pecka	6/1/2021 11:35 AM
3	iba ak bude v lepšom stave	6/1/2021 11:26 AM
4	Hra má potenciál a je veľmi dobrý štud. ale v tomto štádiu by som to nedoporučoval	4/19/2021 10:16 PM

70% of the respondents in the table below find the game a very useful and effective tool for learning, especially for the younger generation.

PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

D13 Bolo by užitočné používať Virtuálneho sveta a Sociálnej hry Biz4Fun pre školské / akademické účely?

Risposte: 7 Seltate: 0



OPZIONI DI RISPOSTA	RISPOSTE
Áno	71.43% 5
Nie	28.57% 2
TOTALE	7

#	ODOVODNITE PROSIM SVOJU ODPOVEĎ	DATE
1	Hlavné pre mladšiu generáciu študentov by táto forma mohla byť atraktívna.	6/23/2021 12:19 PM
2	Študenti by sa mali možnosť naučiť niečo nové a ziskovať digitálnu gramotnosť	6/1/2021 11:35 AM
3	iba ak bude v lepšom stave	6/1/2021 11:26 AM

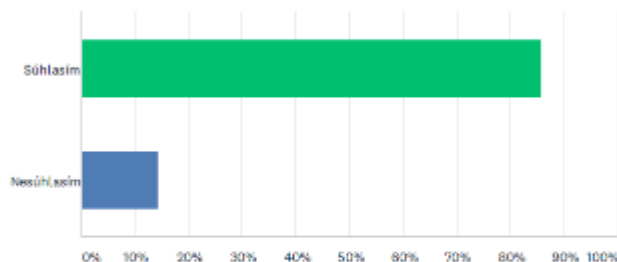
More than 80% of respondents agree that virtual worlds and social gaming can be an effective tool for developing the knowledge or competences needed to start a successful business.



PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (ŠTUDENTI)

D14 Virtuálny svet a Sociálna hra Biz4Fun môže byť účinným nástrojom pre získanie / rozvoj kompetencií potrebných pre začatie úspešného podnikania.

Risposte: 7 Saltate: 0



OPZIONI DI RISPOSTA		RISPOSTE	
Súhlasím		85.71%	6
Nesúhlasím		14.29%	1
TOTALE			7

#	ODŮVODNĚTE PROSÍM SVOJÍ ODPOVĚĎ	DATE
1	Nájdú v nej užitočné informácie.	6/23/2021 12:19 PM
2	Doplnačoval by som hlavne doladiť odpovede a s materiálmi lebo pri niektorých otázkach boli odpovede zavádzajúce.	6/1/2021 11:35 AM

Respondents were also asked to provide us with these **strengths and weaknesses**:

STRENGTHS	WEAKNESSES
Quality educational materials	More difficult to log in to the game
A playful way to gain useful knowledge	Non-competitive graphics and actual bugs that will likely be fixed after feedback.
User-friendly and when more people play, it can be fun	In some places there is no correct Slovak translation, poorly worded questions and answers
Originality	Technical deficiencies
A simpler form of receiving new information	Technical processing - complicated introduction to the game, which may discourage playing/continuing the game.
Educational potential	Graphic processing

In the final stage, respondents were asked to suggest some aspects that would change or improve the virtual world and the social game. The feedback can be summarized as follows:

- By adding music to the game, the player can turn the sound on/off. So the sound of frogs would not be heard.
- Graphic design, simplification of controls, bug fixes, game clarity

- Better translation
- The introduction needs to be simplified so as not to discourage players from continuing.

## 2.2 Online assessment for policymakers

Another category of respondents were policy makers, start-ups and entrepreneurs: CEO, founder, owner, business manager, sales representative. They answered the following questions:

*To what extent does the Biz4Fun virtual world and social game platform meet the needs or expectations of end users?* Respondents answered:

- while playing the game, the game dealt with the basics of business. The platform environment provides us with a wide range of content that can be modified according to the needs of the target group. At this stage, it provides a good foundation.
- She would still like to fine-tune the needs of the end users.
- Partly there is a lot of professional educational information, I recommend to simplify their use.

PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (TVORCOVIA STRATÉGIE)

D7 Do akej miery rieši platforma Virtuálneho sveta a Sociálnej hry Biz4Fun a jej obsah podnikateľskej kompetencie cieľové skupiny (potreby koncových užívateľov)

Risposte: 5 Salta: 0

#	RISPOSTE	DATE
1	Čiastočne	5/15/2021 11:46 AM
2	Platforma poskytuje prostredie použiteľné pre širokú škálu obsahu, ktorý je možné modifikovať podľa potrieb cieľovej skupiny. V tejto fáze poskytuje dobrý základ.	5/14/2021 11:43 AM
3	chcelo by to este doladiť potreby koncových užívateľov	5/13/2021 10:58 AM
4	Čiastočne	5/9/2021 8:11 PM
5	Čiastočne, veľa odborných školiacich informácií, odporúčam zjednodušenie	4/20/2021 5:57 PM

*How could you use the virtual world and social game platform in your context and what obstacles do you see?* Here are the most important answers:

- The game is not built properly enough to be used in any useful way. It's not clear what the game intends to do, character control is difficult, some basic features are missing, and there are a lot of unnecessary features present that make it difficult to understand.
- The game serves as a tool to increase the young generation's interest in entrepreneurship. Arousing interest can help make it easier to manage the replacement of two generations in a family business.
- The game is a good starting point for further improvement of this tool.

- It should make the most of the gamification elements, drawing the user into the action and injecting a bit of tension and a dimension of competition that I found a bit lacking.

PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (TVORCOVIA STRATÉGIE)

**D8 Ako by ste mohli používať platformu Virtuálneho sveta a Sociálnej hry Biz4Fun vo vašom kontexte a aké by podľa vás boli hlavné výhody a prekážky vo vašej školiacej praxi? (Vlastné záujmy externých zainteresovaných strán; prínosy, užitočnosť, účinnosť, relevantnosť, nákladová efektívnosť / účinnosť, udržateľnosť)**

Risposte: 5    Saltate: 0

#	RISPOSTE	DATE
1	Pomoc vzbudiť záujem mladšej generácie k podnikaniu a učiť ich čeliť podnikateľskému riziku. Vzbudenie záujmu môže pomôcť ľahšie zvládnuť generáciu obmeny v rodinných podnikoch.	5/15/2021 11:46 AM
2	Virtuálny svet v našom kontexte musí byť čo najjednoduchšie použiteľný pre kohokoľvek, kto sa ho rozhodne využívať. V prípade ak jeho obsah vystihne potreby je efektívnym nástrojom kopírujúcim reálne prostredie v ktorom človek pracuje. Výhodou je možnosť prispôsobiť vzdelávací obsah konkrétnym potrebám študentov / zamestnancov. Podľa môjho názoru je kľúčom obsah. Forma prostredníctvom virtuálneho prostredia je OK.	5/14/2021 11:43 AM
3	nemohol	5/13/2021 10:58 AM
4	nákladová efektívnosť, návratnosť	5/9/2021 8:11 PM
5	Výhodou je vyvolanie záujmu, gamifikácia. Nevýhodou menej zrozumiteľné niektoré zastavenia v hre.	4/20/2021 5:57 PM

*What would you improve about this virtual world and social game platform?*

The answers were as follows:

- Easier way to register and start the game, the current children do not have enough patience with the long installation. Great idea, just need to tweak it.
- The game needs to be technically improved. The main obstacle is the complicated start.
- The number of user functions needs to be limited. Don't focus on flying, running and jumping, but on working with content - solving tasks. In case of user success, I wouldn't hesitate to reward the user to keep them motivated.

## PILOTNÁ AKTIVITA BIZ4FUN: DOTAZNÍK ONLINE HODNOTENIA (TVORCOVIA STRATÉGIE)

**D10 Čo by ste vylepšili na online vzdelávacej platforme Virtuálneho sveta a Sociálnej hry Biz4Fun (technickú stránku, funkcie, obsah) a ako? (Slabiny, bariéry, nekonzistentnosť, kvalita, jasnosť, prístup, nástroje atď.).**

Risposte: 5 Salrate: 0

#	RISPOSTE	DATE
1	Jednoduchší spôsob registrácie a "rozbehania" hry. Deti momentálne žijú v podstatne rýchlejšom svete, ako žili generácie pred nimi a nemajú dostatok trpezlivosti s inštaláciou a spúšťaním hier. Nápad vynikajúci, len ho treba zdokonaľovať.	5/15/2021 11:46 AM
2	V pivom rád by som obmedzil to množstvo užívateľských funkcií na jednoduchú situáciu v ktorej by som sa nesústredil na licencie, beh s skoky ale na prácu s obsahom - riešenie úloh a v prípade úspechu by som neváhal odmeniť používateľa tak, aby bol motivovaný.	5/14/2021 11:43 AM
3	technickú stránku, bariérov je komplikovaný začiatok	5/13/2021 10:58 AM
4	zjednodušiť, a časovo skrátiť	5/9/2021 8:11 PM
5	Asi zjednodušiť niektoré príliš odborné texty; na začiatku vysvetliť, o čo v hre pôjde, postup; občas sú šípky stále červené; možno osvetliť prostredie	4/20/2021 5:57 PM



## **Biz4Fun - Let's have fun with the business start-up**

ERASMUS+ 2018-1-EN01-KA202-046271

### **REPORT ON THE PILOT EVENT (CZECH REPUBLIC)**



KA2 Strategic Partnership

## 1 GENERAL INFORMATION ON IMPLEMENTATION

Partner, landscape	Edu Consulting, z.ú.
Start date of the pilot project	1 April 2021
End date of the pilot project	31 May 2021
Number of participants who took part in the pilot project	NA - online
Number of participants testing VWSG Biz4Fun	

### 1.1 Brief description of the pilot event

Edu Consulting, z.ú. started to organize the pilot evaluation in March 2021 and the invitation was sent to people during April 2021. The invitation included a short presentation of the project with a special focus on the 3D virtual world and a guide on how to apply for the 3D virtual world. On Friday 16 April 2021, the EUC organised a short virtual meeting where participants in the pilot project could meet EUC researchers and ask them about the project and its outputs.

### 1.2 Participants - number of participants who tested the learning scenarios

Socio-demographic variables	Number of participants
<b>1. Gender</b>	
<i>Men</i>	15
<i>Women</i>	6
<b>Total:</b>	<b>21</b>
<b>2. Profile</b>	
<i>Pupils</i>	17
<i>Vocational education and training/education institutions</i>	3
<i>Policy makers</i>	1
<b>Total:</b>	<b>21</b>

### 1.3 Piloted learning scenarios

Course	Course piloted during the pilot event
1. INTRODUCTION TO BUSINESS	X
2. BUSINESS OPPORTUNITIES AND MARKET TRENDS IN YOUR COUNTRY AND IN EUROPE	
3. BUSINESS MODELS	X
4. BUSINESS PLAN	X
5. TOOLS FOR COLLABORATIVE BUSINESS MODEL DESIGN OR INNOVATION	
6. MARKETING	X
7. DIGITAL MARKETING	
8. ANALYSIS OF THE BEST MARKETING STRATEGIES FOR SMALL BUSINESSES	
9. FINANCIAL MANAGEMENT	
10. HUMAN RESOURCES MANAGEMENT	x

## 2 ONLINE EVALUATION RESULTS

At the end of the testing, participants were asked to complete an online questionnaire.

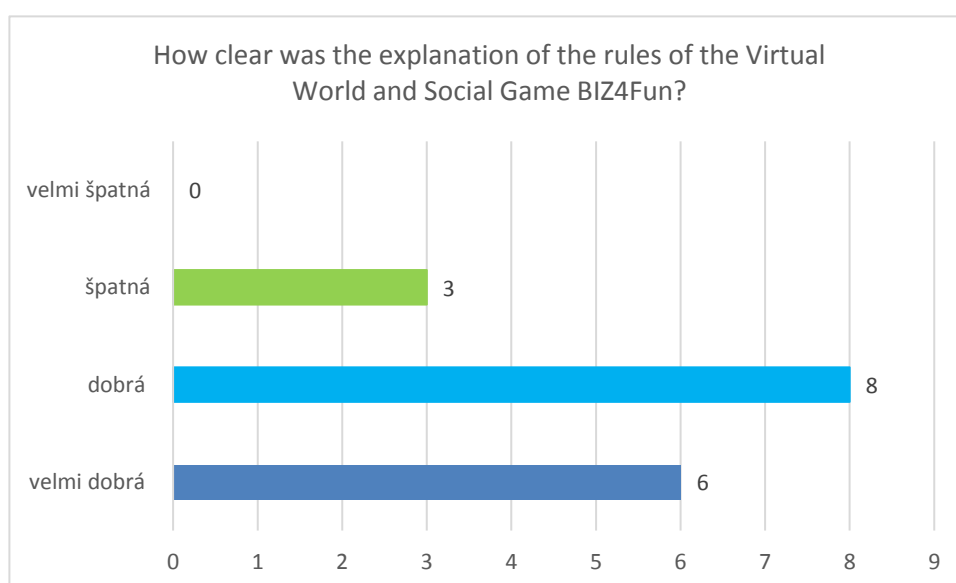
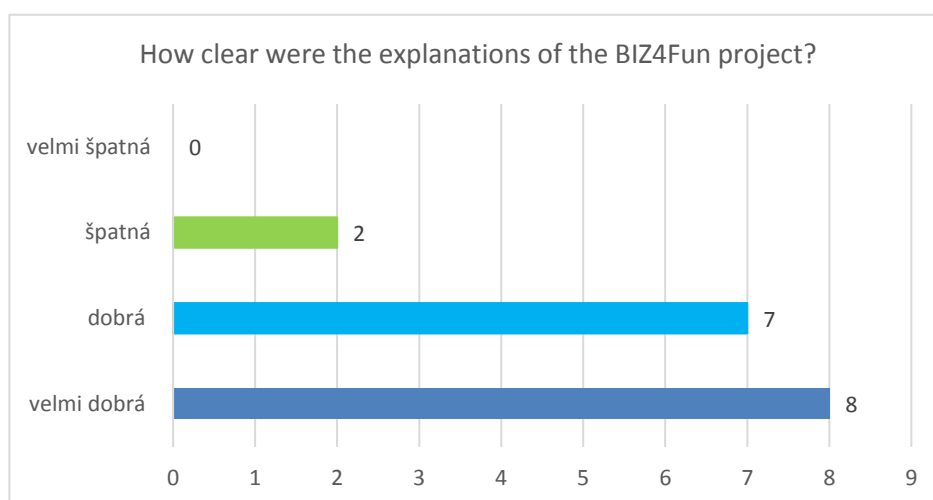
EGInA Srl, as lead partner for the evaluation, designed three online evaluation questionnaires addressed to different target groups (students, VET institutions, policy makers), aiming to collect relevant information about the testing of the 3D virtual world and social game developed in the framework of the BIZ4Fun project.

### 2.1 Online pupil assessment

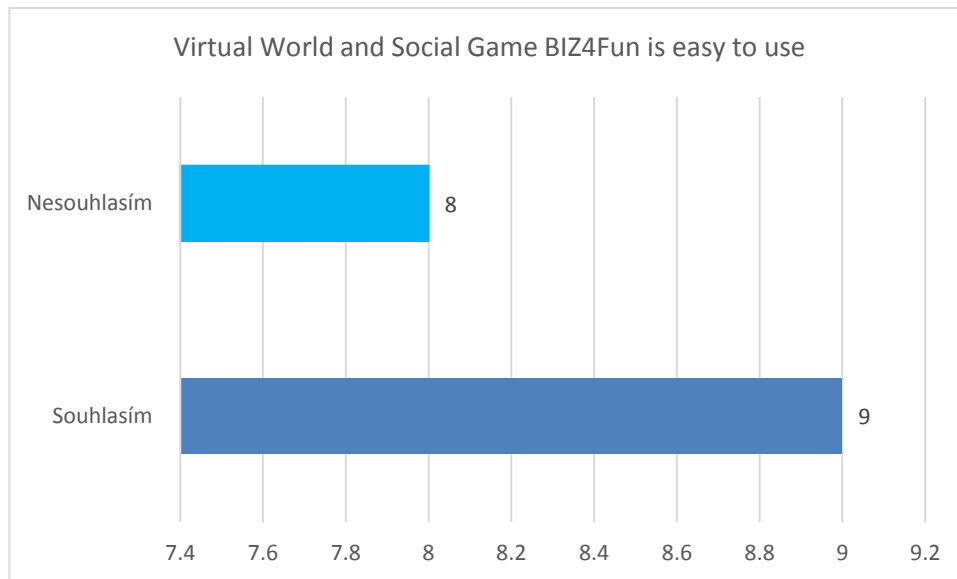
Respondents were asked to answer 16 questions.

The first area focuses on the clarity of the instructions and explanation of the BIZ4Fun project and the 3D virtual world and social game.

The results regarding the clarity of the explanation of the Biz4Fun project were significantly positive, with more than 88% of respondents considering the Biz4Fun project to be very good or good. The detailed results are summarised below.

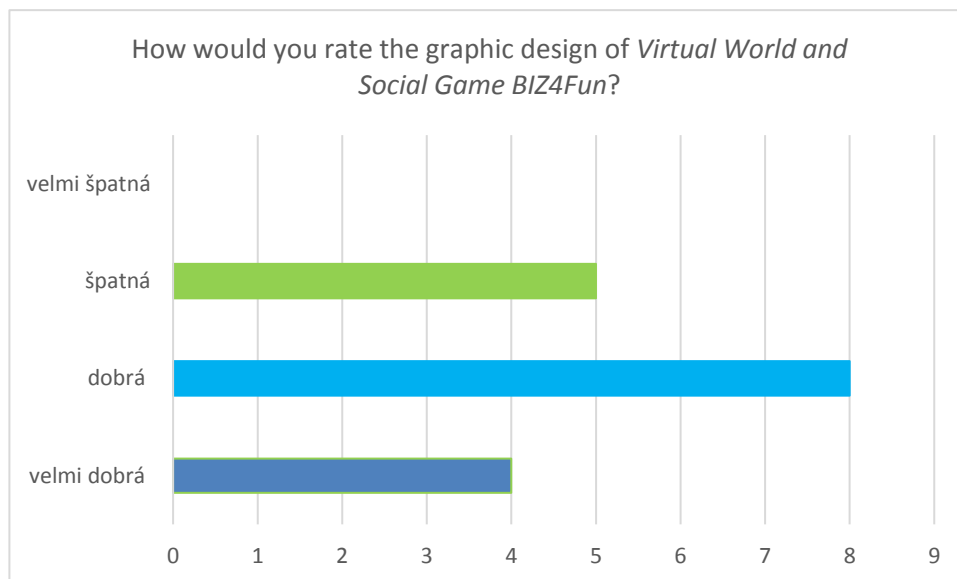




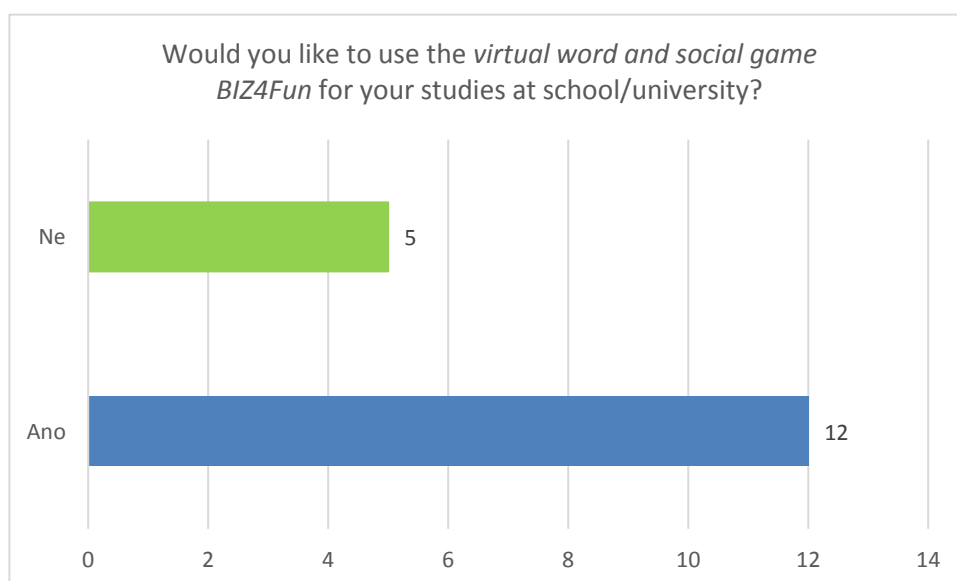
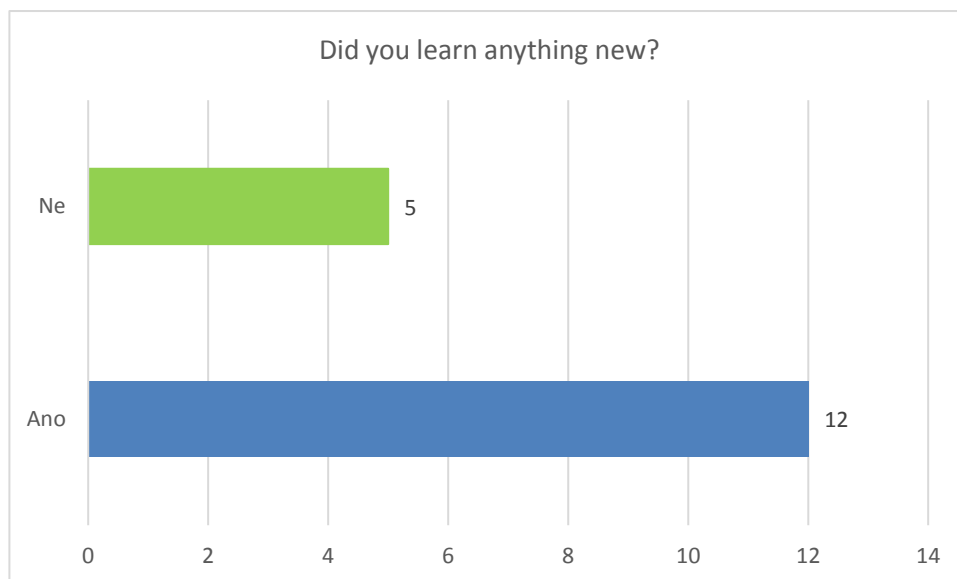
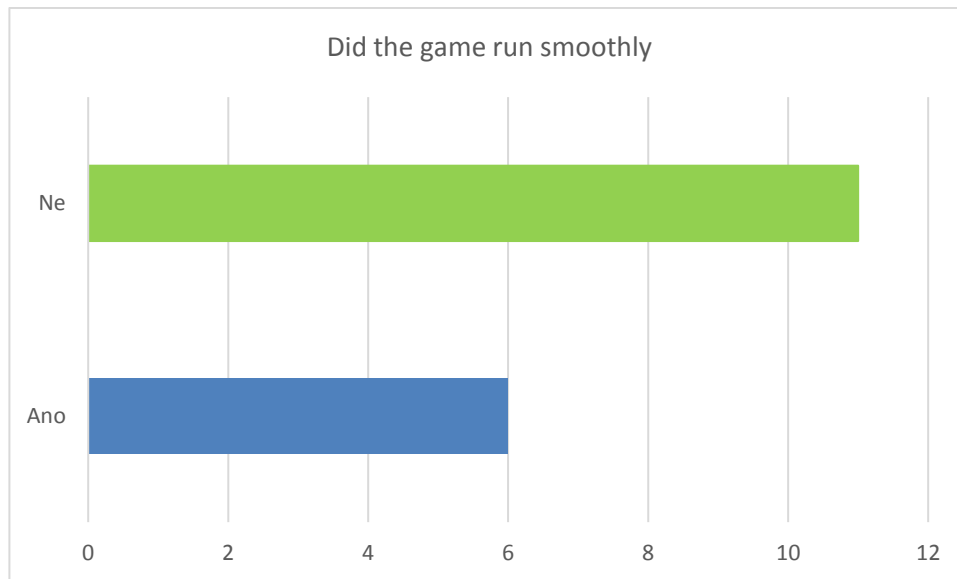


The most critical comments are found on this issue and relate to the complicated installation and login process.

Even the pupils - mostly young people - pointed to the fact that real online 3D games are easier to control the player characters. On the other hand, participants emphasise the positive aspect that this way of presenting educational content has a lot of potential.



At the beginning of the game, participants usually had technical or avatar control problems. However, by the end most of the problems were solved.



Although participants in the pilot evaluation had some technical difficulties and needed

time to learn how to use the avatar, more than 70% would recommend the 3D virtual world and social game as an educational tool for schools.

### **Strengths:**

- an interesting channel for presenting educational content,
- novelty and original approach,
- in line with the preferences of the younger generation,
- great potential as a support channel for the delivery of educational content.

### **Weaknesses:**

- technical skills are required,
- translation needs to be improved, some presentations are in English,
- complex installation - it should work in a "download and play" way.

## **2.2 Online evaluation of VET/FEI institutions**

As two teachers and one VET institution representative were too busy with their daily school life after the COVID project, we did not ask them to fill in the questionnaire, but summarised their comments and ideas presented during the expert consultation:

- Very complicated installation of the game,
- The 3D virtual world and the social game have the potential to be an interesting tool to increase the interest of pupils/students in the topic. In closer cooperation with schools, very interesting materials can be created, e.g. in biology, physics or chemistry.
- Improving some features, e.g. sound/communication between players, can bring valuable potential.

## **2.3 Online assessment for policymakers**

As only one politician - a local MP - took part in the survey, we did not use an online questionnaire, but interview questions. The most important information is presented below:

- The 3D virtual world Biz4Fun has the potential to be a supportive tool for the educational process.
- Primary/middle school teachers do not have the capacity to "waste time" with complicated installation.
- The lack of hardware of some pupils/students should also be a problem.
- The positive is that there is a "game" element and in the future closer cooperation with teachers can yield very interesting results in the end.



## **Biz4Fun - Let's have fun with the business start-up**

ERASMUS+ 2018-1-EN01-KA202-046271

### **REPORT ON THE PILOT EVENT (ROMANIA)**



**KA2 Strategic Partnership**

Download from: [http://etcenter.eu/biz4fun/EN\\_Pilot\\_event\\_report\\_Romania.pdf](http://etcenter.eu/biz4fun/EN_Pilot_event_report_Romania.pdf)