Framework

European Digital Playground

November 2023

CONTENT ....**Virhe. Kirjanmerkkiä ei ole määritetty.**

1. Introduction

This framework is a guideline with practical conditions and success factors to organise, implementand run a digitally carried out business game. The framework has been developed by evaluating good practices and collecting success factors and by testing the framework in both a fully online (remote) setting and offline.

This Framework is intended for educators who want to support students in developing entrepreneurial, business, language and international competence and transversal skills such as teamwork and communication and digital skills, using digital means and a rich work-based learning context. The idea is that this is done by means of a digitally carried out business game and that this game can be run, both fully remote (online) as in a blended setting, combining the remote (online) working together with a physical exchange of students and teachers.

This document starts with a definition/description of digital business simulations in paragraph 1.1 and then continues with the aimed learning outcomes set for a digitally carried out business game in paragraph 1.2.

1.1 Digital business game

A digital business game refers to a computer-based simulation or virtual environment that allows students to engage in a simulated business setting. It provides a platform to make strategic decisions, manage resources, and experience various aspects of running a business in a controlled and interactive manner.

In a digital business game, students typically assume the role of business managers and are presented with a range of challenges and opportunities. These challenges may include market fluctuations, competition, resource allocation, product development, pricing strategies, and financial management. The game incorporates realistic business scenarios, market dynamics, and economic factors to create an immersive experience.

Students interact with the game through a user interface, which includes visual displays, charts, graphs, and decision-making interfaces. They analyze data, evaluate options, and make decisions based on the information available to them. The game responds to their actions and decisions, generating outcomes and consequences that mirror real-world business scenarios.

This digital business game provides a safe and dynamic learning environment where students can explore different business strategies, test their decision-making skills, and learn from the consequences of their actions. This game promotes critical thinking, problem-solving, teamwork, and strategic planning, helping students to develop a deeper understanding of business concepts and practices in a hands-on and engaging manner.

As an outcome students learn to operate transnationally in an interconnected online simulation that enables business VET students to learn in a work-based environment, which encourages and stimulates them to learn more about entrepreneurship and working in a multicultural environment.

The aim is also to improve students' digital readiness. Studies show that gamification gives students actionable and clear tasks, and by completing the task, an instant reward, instead of a promise of a vague long-term benefit. Business simulations provide rich contexts for this to gain experience and

develop skills and knowledge in running a business and all aspects involved. Discovering and learning by doing leads to autonomy, which leads to engagement.

1.2 Learning outcomes

The aimed learning outcomes for students that participate in this digitally carried out business game are the following:

Entrepreneurial & business competence
- Gain practical experience in running and working in a business.
- Learn about the effect business decisions have on the business results, image of the company, etc...
- Conduct the procurement of resources needed in order to sell goods and services in an (inter)national setting
- Gain a better understanding of how an organization operates in all the different departments and how one affects the other.
- Use calculations to evaluate the financial and economic situation of a company, based on annual statements of accounts in an (inter)national context.
- Learn to make decisions about strategies, pricing, suppliers, marketing, financing, quality etc, make well founded make-or buy decisions
- Understanding of managing the storage of materials
- Research and evaluate information about market trends

International competence
- Improved international competence; students are aware of cultural dimensions in order to live, study and work in another cultural environment.
- Students can adapt to different cultural settings and other ways of communication while acknowledging differences in norms and values
- Students can participate actively in cross-cultural projects/simulations/debates with s/teams of students and teachers from other countries

Language competence
- Ability to communicate and work in international business environment

Teamwork, working life and communication skills
- Develop employability skills, such as teamworking, project management and strategical and analytical skills
- Social and practical experience

Digital skills
- Communication tools such as Microsoft Teams
- Excel for analytics
- Information searching

2. Framework

2.1 Practical conditions

In order to run a digital international business simulation an organisation needs:

1. **Partnerschool abroad**
   - In order to offer an international business game at least one partner school abroad needs to be found/selected, contacted.

2. **Student selection and Common time frame:**
   - Schools have to decide preferably in the beginning of the studies of the chosen student groups when the gaming will be implemented as they need to train the students before the gaming and participate in the game within the same time frame.
   - Decide how many rounds will be played and decide on the timing for game rounds. The optimal number of rounds is eight. The first two rounds should last 1 hour each and the rest 45 min.
   - Reserve time during the Business Game to support students to analyze and evaluate results, to enable students to ask for help, demand driven learning, and make decisions in the game. This will give the students a deeper understanding of running a business.

3. **Financial resources**
   - Teacher resource, license fee of the game per student, optional training for business game, mobility option.

4. **Technical resources**
   - License for all participating students
   - Access to internet
   - Laptops/PC for students
   - Communication platform (MS Teams/Zoom/ Moodle, etc.)

5. **Selection of a business game**

   If you are new to business games, then it's advisable to start with a less complex game that teaches students the basics of decision making and enables international cooperation. This could be an ideal start for first year business students.
   Example: *The Sports Company- Edumundo*

   As a follow-up or for students that already have experience with the concept of a business game or have already played the basic game, we recommend a more challenging version of the game (2nd. Or 3rd year students).
   Example: *Sneakers Start-up - Edumundo.*

   Give choices on creative marketing like posters, social media posts or videos.

6. **Other practical matters**
   - Choose preferably business teachers to coach the students during the game.
   - Choose preferably students who have the basic knowledge of business (Financials, HR, marketing, PESTLE, strategic decision making)
   - Team working skills and intercultural awareness are important and should be facilitated before and during the game. Challenge is to find the time for this exercise.
   - The manual of the business game should be studied before starting the game

- Reserve enough time to instruct the students: order of operations, terms.
- Motivate the students by explaining the benefits and learning possibilities

2.2. Success factors

The six participating schools shared their best practices, in business and entrepreneurial studies. From these the practices were chosen which best support the training for the game and the gaming itself. We have collected feedback from students and teachers who participated in the business game both online and offline. We have made an analysis and evaluation of the best practices and feedback to select **success factors**. These success factors are the basis of the framework.

In order for the students to acquire the best possible **learning outcomes** from the business game experience the following success factors should to be taken into account:

2.2.1. Teachers and school organization

Commitment of the college and staff involved. Dedicated teacher(s) ready to change traditional course contents and to learn and coach business game, cooperate with other colleges. Teachers should play the business game before starting to coach the students.
Support of management: resources for teachers, budget for license costs

2.2.2. Training

Before and during the business game participants must be trained/ coached in order to achieve the learning outcomes described in paragraph 1.2.

Business competence

In general connecting the learning to real businesses students know about or news, makes it more realistic and easier to understand.

Required	Before	During	After
Finance & Control IMPORTANT SKILL	Basic theory and understanding of - Profit and loss accounts - Balance sheet - Cash flow - Business ratios (profitability, liquidity, turnover) - Price calculation	Deeper learning though evaluating results Using the dashboard. Per round focus on a specific topic. Extra assignment when evaluating, for example a specific calculation, using Excel.	Presentation of business results. Evaluating the business and decisions made.
Marketing IMPORTANT SKILL	Basic theory and understanding of - Marketing mix - Target group - Market research - Marketing strategy	Analysis of markets and use of market reaserach. Applying market strategy and seeing its results. Competitor analysis.	Evaluating the decisions made and effectiveness.
Procurement Goods & Services	Basic theory and understanding of - Inventory management - Comparison of suppliers	Applying Inventory management and solving problems.	Evaluating how well the decisions were made.
HRM	Retention of staff and motivation of staff. Importance of training.	Budgeting staff quality and hours. Decisions and investments in staff training and motivation.	Evaluation and results of the measures made.
Decision making, strategy and general business competence IMPORTANT SKILL	Learn about organizational structures, the functions of departments and the relations between them. PESTEL analysis.	After each round; take time to analyse the results and evaluate and define learning questions, think of possible changes for next round.	Concluding that all functions effect each other and seeing those effects.

International competence and team working skills

The best possible outcome is achieved when actually creating an international classroom setting, for this an exchange of a number of students is most logical/practical. By sending and receiving students you provide an international context in each college. You can also arrange game online with another college.

Required	Before	During	After
Comparison of cultures Preparing participants to collaborate and work in intercultural teams Improved international competence; student is aware of cultural dimensions in order to live, study and work in another cultural environment. Student can adapt to different cultural settings and other ways of communication while acknowledging differences in norms and values Student can participate actively in cross-cultural projects/simulations/debates with groups/teams of students and teachers from other countries	Basic theory and understanding of cultural differences. Learning about the different cultures before meeting the foreign students and teachers by using the comparison model of Hofstede, for example using: https://www.hofstede-insights.com/	Work in international teams (mix students, this can be done in an on or off-line or blended setting)	Survey to students about the experience and what they learnt of other cultures.
Country knowledge and business knowledge.	Students prepare info about their country, demographics, economics, culture etc. and present to the students of the other country. Students select an organisation in their country, that stands out in sustainability and that they have a specific interest in, explain why and present the organisation, what makes it special, USP branding, etc.

and present to the students of the other country. | Students present their countries and companies to each other. | Survey to students about the experience and what they learnt of other cultures. |
| Capability to meet new people from a different background and work efficiently with them. | Online meetings with all the participating students using icebreaking activities such as Speed dating, interviewing each other (same five questions). | In an offline event icebreaking activities such as Snowball and Speed dating.

Team building challenge which would be ranked by the business game software. And this way the team has a possibility to get higher ranking | Survey to students and teachers about the experience and what they learnt of other cultures.

Self reflection among the group of students back in your home college. |

Business English

	Before	During	After
Oral and written communication in English. Business English	Basic knowledge and understanding of business English - basic business vocabulary to understand the business simulation. However the students can play the game even with limited language skills - Capability to communicate and confidence to cooperate with foreign students and teachers.	Make the agreement that during the game/project students communicate only in English. During the game play games, such as 30 seconds with business vocabulary, to increase the vocabulary	Report in English, evaluated by both English language teacher and business teacher. Survey to students about the experience and if they improved their language skills.

Transversal skills

The EBBD student portfolio (www.ebbd.eu) provides activities and formats for developing transversal skills. This/ parts can be used to activate and evaluate the skills below.

	Before	During	After
Entrepreneurial skills			
Teamwork	Team role test for example Belbin to create the teams	Ice breaking activities Team building including defining roles, establishing collaboration and communication means Mental fitness activities	Evaluation of team working performance
Digital skills	Microsoft office especially Excel in order to acquire deeper learning during the game. Online communication platform.	Every game round use Microsoft office tools to make plans and reporti results. Practical use of online communication platform.	Survey to students about the experience and if they improved their digital skills.
Entrepreneurial skills	The concept of Entrepreneurial attitude. Entrepreneurial risk.	Active participation during the game. Evaluation of risks in decision making.	Peer assessment. Analysis which risks did materialize and how they could have been avoided.