



Erasmus+

CASE STUDIES OF GAMIFICATION IN EU



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CONCLUSION Σφάλμα! Δεν έχει οριστεί σελιδοδείκτης.



1. INTRODUCTION

CASES OF GAMIFICATION IN EU

In order to strengthen the work of adult educators and trainers, there is a need for methodological or organizational management processes to implement innovations into traditional curricula. In doing so, organizations will be able to reach a wider scope of beneficiaries, modernize the effectiveness of outdated learning processes and train their adult educators in gamification methodology and also provide learners with tailor-made curricula that will be more interesting, effective and useful than traditional, and will - empowering their soft skills - raise their employability too.

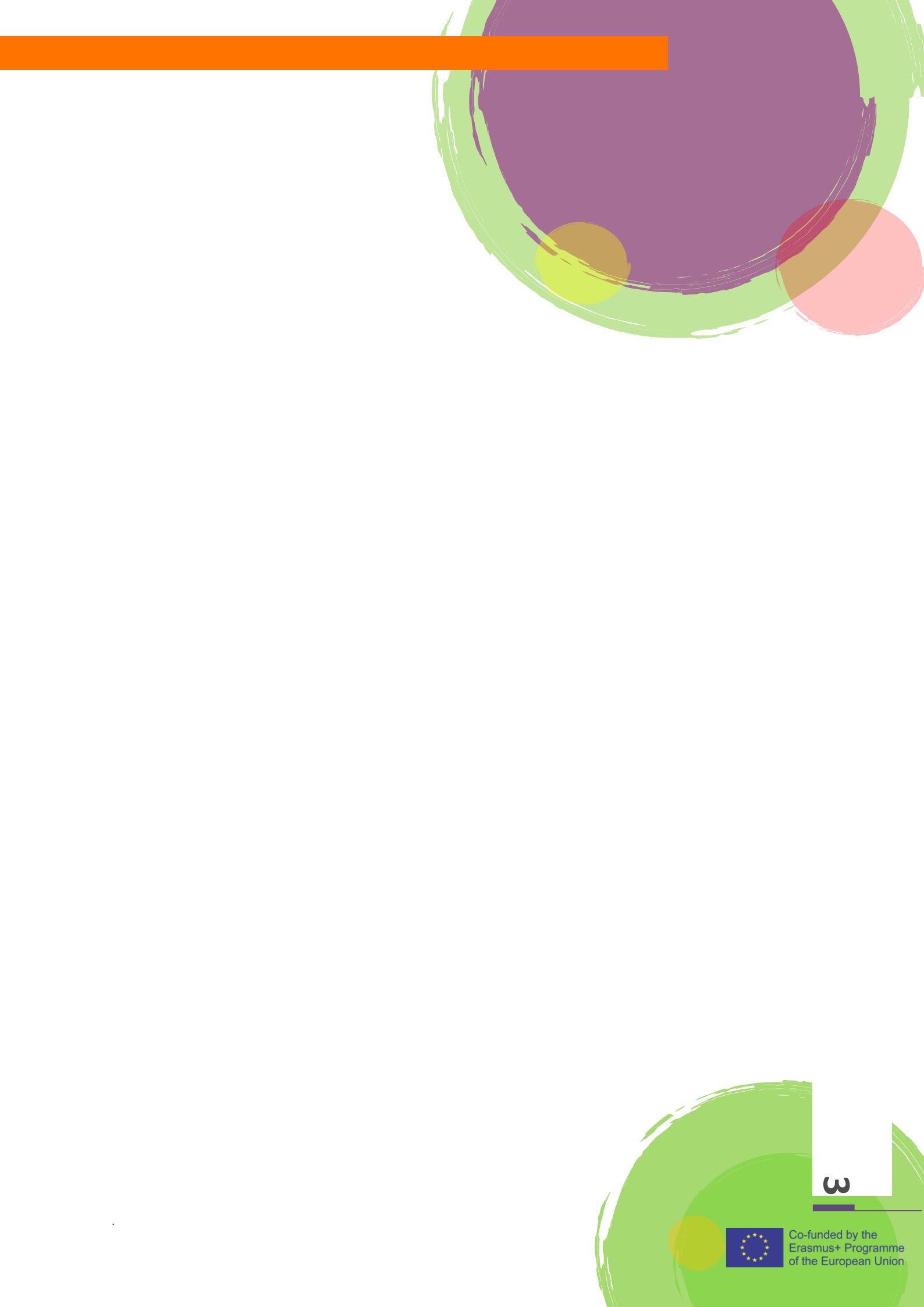
The document presents a collection of case studies, ready to be used by adult educators in their courses or trainings. They will provide adult educators with innovative tools that can creatively more modernize, interesting, effective learning process.

There are nine main reasons why games with adult learners are a must:

- ❖ They warm up the adult learners
- ❖ They create better class dynamics
- ❖ They aid with memorization
- ❖ They provide satisfaction and motivation
- ❖ They add variety
- ❖ They allow a freer and more uncontrolled practice
- ❖ They work the brain
- ❖ They energize
- ❖ They encourage interaction

We tried to present numerous examples and practices that support serious games, formal and informal education, lifelong learning or adult education, element of innovation and open-source materials.

<https://busyteacher.org/18133-games-with-adult-learners-a-must-9-reasons.html>



2.1 GAMIFICATION CHALLENGES AND A CASE STUDY IN ONLINE LEARNING

Web link(s)

<https://jolrap.scholasticahq.com/article/26910.pdf>

Issuing body/Authors:

Darren Wilson, Cynthia Calongne, and Brook Henderson

Internet Learning Volume 4 Number 2- Fall 2015

Colorado Technical University



SHORT SUMMARY

In this case study two design models are introduced to feature the **game-design elements and relationships that are critical for successful gamification**. In online education, gamification employs game mechanics and incentives to encourage positive outcomes. Making good design decisions and offering a strong implementation are critical elements in the success of gamification. The study concludes by reviewing the results from a gamification case study and offers recommendations for future research.

Keywords: Social, analytics, knowledge, networks, visualization

The authors of this study introduce the challenges associated with defining gamification and propose a model to support gamification design. The method and analysis sections review two case studies from earlier work in this field and conclude with recommendations for future research. Examples of target systems include popular reward programs and academic course management tools.

The authors analysed a case study conducted by Calongne that featured the design, implementation, and assessment of a **Treasure Hunter Game** to strengthen online learning.

GOALS OF THE STUDY:

1. to reduce the fear that students experience when working in online teams and
2. to strengthen the final project, which was developed by small groups of 3-4 members during two 5.5-week class.

The software project management class met fully online while the software requirements engineering class used a hybrid or blended learning model and met one night a week on campus and the rest of the weekly activities were held online. In the hybrid model, students attended a face-to-face class once a week for three hours, and completed their assignments and class discussions online using Blackboard, a learning management tool.

The problem noted with these classes stemmed from student reluctance to begin work on the team project. Both classes developed team projects: 1) the hybrid class developed a software project management plan with a detailed schedule, an organization breakdown structure, a work breakdown structure, a strategy for defining cost accounts and related elements to support a complex software development project; and 2) the online class developed a software requirements specification with a lifecycle requirements traceability matrix.


Working together in groups was a vital part of the career-oriented curriculum as it provided life skills suitable for future work in software engineering. Mapping the course assignments to the game mechanics required preserving the curriculum goals while measuring that the students were developing the desired skills and competencies.

The evaluation of the collected data focused on studying whether the course and learning objectives were met and if they satisfied the program outcomes. The goal was to strengthen two fast track graduate classes and foster better team experiences. As the game centered on the use of normal class activities using game-base metaphors, the course assessment method was a natural choice for evaluating whether the game constructs met the desired course outcomes. The **Treasure Hunter's Game** had five goals in addition to the course objectives:

1. participation early and often in the course
2. encouraging contributions with substantive content
3. promoting collaboration and team communication skills
4. providing traceability for individual activity on the team project
5. encouraging successful team outcomes with measurable competencies

CONCLUSION

Linking the process (the game with a team of players) with the product (online learning and the development of the team project) was a great success. In spite of the fanciful metaphors, it was popular, and the students demanded faster progress reports and were eager to see the results of their efforts. Tabulating on the Treasure Hunter Report was a manual process that featured a few strategies to maintain privacy and to motivate the players. As previously mentioned, at each level at least two NPCs ranked with the top, bottom and mid-range players, reinforcing



“running with the pack.” To reduce the likelihood of NPC detection, their growth could only advance in a reasonable fashion given the possible measurements and incentives for that week. In some cases, the list was scrambled with the rank order switched from low-to-high or high-to-low while at other times, it featured other elements. Only aliases were displayed and only if they remained anonymous. The team members were “sworn to secrecy” and encouraged to keep their reputation titles to themselves. No one mentioned them in class, except to say that they enjoyed advancing through the ranks and having their accomplishments reinforced. From an instructor’s perspective, implementing the game required planning and steady work. During the last three weeks, the students as players insisted on daily if not hourly reports, and future games of this nature will benefit from an automated gamification process and report generation. Grades are insufficient catalysts for ensuring great online team experiences. Without recognizing the beliefs and values that learners bring to class as they work on the online team projects, it would be hard to help them remap these perceptions with new perspectives. The game-design elements were simple in the case study and the overhead was mostly in keeping track of the measurements on a spreadsheet and the metaphors for creating energy and excitement in the game.

As Wilson (2015) observed, how the game is designed is only one piece of the puzzle. Motivating the learners, getting everyone energized and hosting a great game requires a great implementation and hard work, at least initially. Once the learners assume ownership of the game, the burden on the instructor shifts and the game feels like an organic part of the class and quite natural.

The case study offered individual measurements in the game for team activities, but several opportunities emerged during the assessment phase. For the educational use of gamification, future work could explore the opportunities presented by collaborative gamification to strengthen the team experience through shared goals, measurements, collaboration tasks, group communication mechanisms and in fostering team cohesion for online learning.

- Through gamification, it may be possible to blend how adults learn (andragogy) with self-determined learning (heutagogy) to offer insights on how to enhance knowledge and skill development through online learning.
- Gamification offers the promise of better online learning experiences

2.2 "FOOD CHOICES FOR A HEALTHY PLANET "

Web link(s)

<https://greenbrownblue.com/food-choices/>

Issuing body/Authors:

This website was built by The Lexicon™, tax-exempt nonprofit organization headquartered in Petaluma, CA.




SHORT SUMMARY

Authors created this game to raise awareness about the impacts our food choices have on our own health, but also the environment, climate change and the cultures in which we live. The players can choose one of the four global regions and pick a character that they want to play. Each region has distinct cultural, economic, historical, and agricultural capacities to feed itself, and each character faces different challenges, such as varied access to food, higher or lower family income, and food literacy. The player can select the choices they might make given the situation and at the end of the day they will get the report on the impact of their food choices on five areas: health, healthcare, climate, environment and culture.

The game is created to help the player to better understand how all these regions and characters' particularities can influence our food choices, and how our food choices can impact our personal health, national healthcare, environments, climate and culture. FOOD CHOICES FOR A HEALTHY PLANET was produced by a food system solutions activator featuring nutrition and climate change experts from across the globe. They looked at diets in four regions, each with a distinct lens: Nordic Countries (sustainability), Brazil (local and whole foods instead of ultra-processed foods); Canada (plant-forward), and Indonesia (developing countries, children). Instead of using a prescriptive approach, and offering a single perspective for global diets that could be translated to fit the needs of individual countries, the group developed a country-first perspective, recognizing that each country has distinct cultural, economic, historical, and agricultural capacities to feed itself.



Co-funded by the
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Personalizing the game: players begin by choosing a country and then a character who they help in making food choices over the course of one day. Later versions may allow for creating custom avatars.

GAME OBJECTIVES:

- ❖ Better understanding on how all these regions and characters' particularities can influence our food choices, and how our food choices can impact our personal health, national healthcare, environment, climate, and culture.

CONCLUSION

“Food choices for a Healthy planet” game offers a playful interactive learning experience about how to take action through food, expert answers on some of the complex questions of food system sustainability, an opportunity to test different ways to tweak your diet to lower impact, new ways to understand external factors affecting our food choices and much more...



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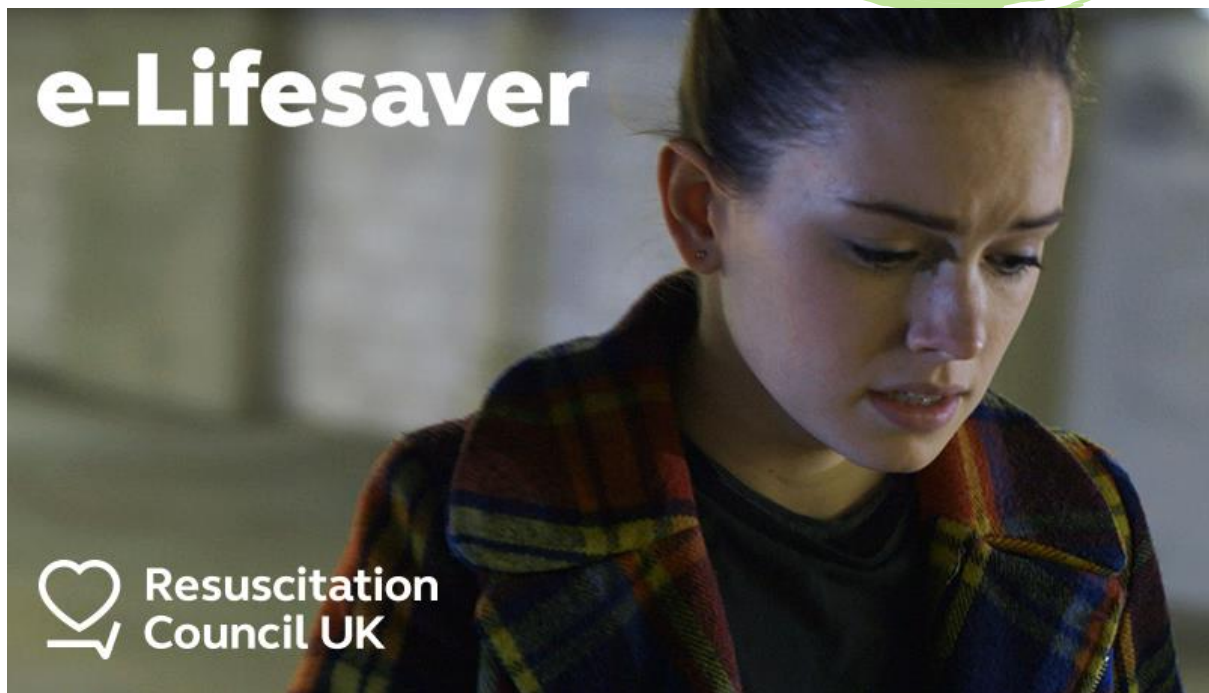
2.3 LIFESAVER

Web link(s)

<https://lifesaver.org.uk/>

Issuing body/Authors:

Resuscitation Council UK



SHORT SUMMARY

Lifesaver is an app, that more than 2 million people have used to learn CPR skills and how to use an AED to help someone in cardiac arrest and to learn what to do when someone is choking. Resuscitation Council UK's Lifesaver Learning products were developed in collaboration with award winning production company UNIT9. Through their four interactive films scenarios, evidence-based guidance on CPR and first aid education are brought to life by BAFTA winner Martin Percy. Lifesaver is a cutting-edge way for people to learn lifesaving skills anytime, anywhere. Through action packed scenarios, one is thrown into the heart of the action as they make the crucial decisions and learn the essential skills needed to save a life.

Target group:

- individuals who want to learn CPR
- teachers who want to provide students with the skills to save a life

You can play in on a web, on your tablet or smartphone or as part of their workplace e-learning solution called e-Lifesaver. You can play Lifesaver also in Virtual Reality on their mobile app.

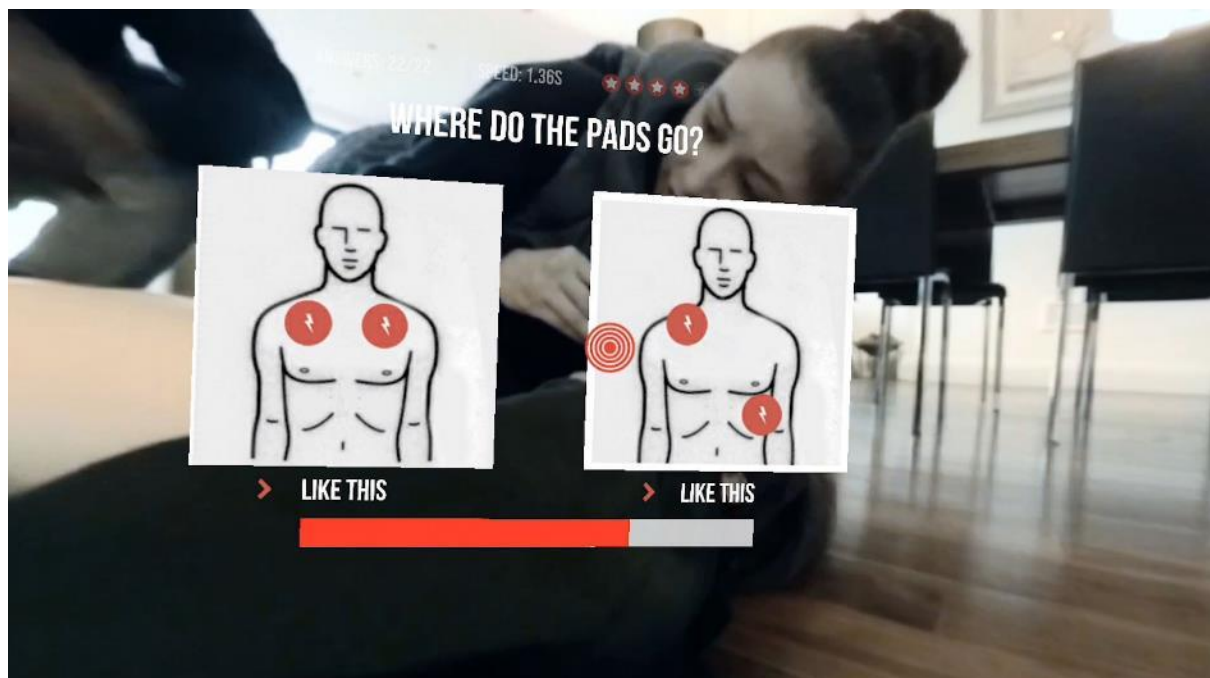
With e-Lifesaver, CPR skills are learnt through interactive films, which put users at the heart of the action in an emergency and teach the right choices to save a life.

- ❖ Real stories of CPR in practice
- ❖ FAQS, Emergency INFO

CONCLUSION

In LifeSaver web page you can find interactive films of individuals that experience cardiac arrest, collapse, are choking and one can learn CPR and how to use the defibrillator, how to use an AED, how to help individual who is choking, how to put someone into the recovery position.

The e-LifeSaver was developed by clinical experts at Resuscitation Council UK and is ideal workplace first aid training solution. It was launched in spring 2020 and has already been used by numerous organizations. These are the skills that could make all the difference if one witnessed someone have a cardiac arrest or start choking in the workplace, at home, or in public.



2.4 BAD NEWS - FROM FAKE NEWS TO CHAOS! HOW BAD ARE YOU? GET AS MANY FOLLOWERS AS YOU CAN.

Web link(s)

<https://www.getbadnews.com/en>

Issuing body/Authors:


This game was developed by researchers at Cambridge University and DROG, a Netherlands-based platform against disinformation



SHORT SUMMARY

The Bad News game "builds resilience" against bad online information by placing players in the position of the people who create them. They touch on the concept of disinformation in a broader sense and explain how the game covers different aspects disinformation. They are intended for teachers who want to use the game Bad News to **acquaint students with the phenomenon of fake news and other forms of disinformation**. They explain how fake news or disinformation influences society and why this influence is harmful. They offer various tools to identify them and explained why this should be done. They also contain links to additional information that may be useful.

The first version of this game was published in Dutch in November 2017. It is available on portal www.slechtnieuw.nl. The content of both versions of the game was prepared by DROG (www.aboutbadnews.com), a Dutch organization that works to prevent the spread of disinformation. The game was prepared in collaboration with researchers from the University of Cambridge in Great Britain. Gusmanson took care of the visual and graphic design (www.gusmanson.nl).



The game is simple. Players see a short text or image on the screen (for example, a meme or an article title). They respond can be done in different ways. This is how they gain followers and strengthen their credibility. If they choose an option that a "real" disinformation creator would also choose, they get more followers and become more credible. But if they lie too blatantly to their followers, if they choose an option that is clearly meaningless, or if they act in accordance with journalistic one's rules, they lose followers and credibility. The goal of the game is to collect as many followers as possible, no to lose credibility.

Since it is impossible to present all aspects of disinformation in detail, they have decided to use the most common. The game is divided into 6 parts, which at the end brings different things to the player badges. These are impersonation, affecting emotions, separation or polarization of society, the spread of conspiracy theories, discrediting and trolling.

GAME OBJECTIVES:

- ❖ to expose the tactics and manipulation techniques that are used to mislead people and build up a following
- ❖ to build cognitive resistance against common forms of manipulation that you may encounter online

Bad News improves people's ability to spot manipulation techniques in social media posts, increases their confidence in spotting such techniques, and reduces their willingness to share manipulative content with people in their network.

CONCLUSION

You can use this game in a class or a group. The game last about 20 minutes. This game can be used for example during a workshop media literacy by acting it out first and then discuss it with students – what have they learned along the way. The authors of the game recommend that you divide them into pairs. During the game they should actively think about what they are doing. The game offers players a god insight into the various principles of spreading disinformation and reveals how easy it is to manipulate information.

Bad news was written with an audience in mind of ages 14 and up. The game contains minor references to mild forms of violence (including rude language on a fictional social media network, although no swear words are used), but doesn't feature content that is likely to be perceived as graphically shocking. While the game does contain some references to real-world events, its scenarios are entirely fictional. Effort has been made to make the game as inclusive as possible, and it can be enjoyed by players from all backgrounds.

2.5 CORONAQUEST THE GAME TO FOSTER HYGIENE AND PROTECTIVE MEASURES IN CLASSROOMS

Web link(s)

https://coronaquest.game/ecole/fiche_EN.pdf

Issuing body/Authors:

Project created together with DNA-Studios, David Hofer, Martin Charrière, Antoine Desbois, Nicolas Gachoud, Nathanaël Monney. DFJC Project Leader: Julien Schekter

info@coronaquest.game



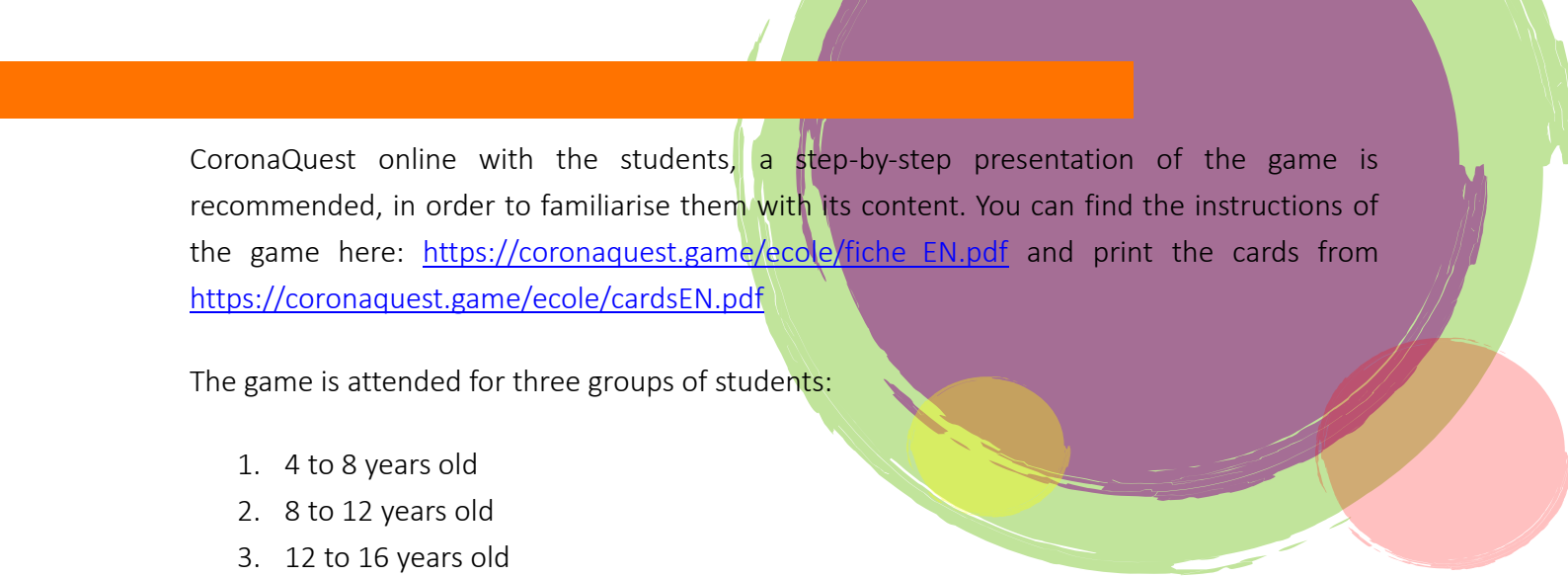
SHORT SUMMARY

CoronaQuest is a project created between 29 April and 9 May 2020 by the DFJC [Department of Education and Training, Youth and Culture] of the Canton of Vaud (Switzerland), directed by the Councillor of State Cesla Amarelle. Freely inspired by the famous game Hearthstone, CoronaQuest is an online card game featuring courage points. It was designed so that its rules can be learned playing the game. But a quick start guide is also provided.

GAME OBJECTIVES:

- ❖ to inform the players about the protective measures and actions that will make their return to school less stressful and safer and
- ❖ encourage a more caring attitude of people towards each other.

The cards can also be printed from coronaquest.game/ecole/cardsEN.pdf to play, to facilitate the learning of the rules, or to address some particular aspects of the game. Before playing



CoronaQuest online with the students, a step-by-step presentation of the game is recommended, in order to familiarise them with its content. You can find the instructions of the game here: https://coronaquest.game/ecole/fiche_EN.pdf and print the cards from <https://coronaquest.game/ecole/cardsEN.pdf>

The game is attended for three groups of students:

1. 4 to 8 years old
2. 8 to 12 years old
3. 12 to 16 years old

Step 1: Discovery of offensive and defensive cards

Step 2: Presentation of the cards with characters and bonuses

Step 3: Online game presentation

CONCLUSION

When using the CoronaQuest game with your students, you can address themes related to Media, Information Technology, Images and Communication (MITIC) and Health and Well-being, through their emotional and health security aspects, as well as concepts related to Citizenship. Depending on how CoronaQuest is used in the classroom, objectives related to specific disciplines can be worked on through specific activities. Before playing CoronaQuest online with the students, a step-by-step presentation of the game is recommended, in order to familiarise them with its content.

2.6 RIBBON HERO: EPIC GAME THAT TEACHES YOU HOW TO USE MICROSOFT OFFICE

Web link(s)

<https://ribbon-hero.en.softonic.com/>

(free Download)

Issuing body/Authors:

Ribbon Hero is a video game developed by Microsoft Office Labs.



SHORT SUMMARY

The game is available as a free download and serves to educate users of Microsoft Office 2007 and 2010 how to use the ribbon interface. It is followed by the sequel Ribbon Hero 2.

Ribbon Hero appears on the Ribbon in the supported Microsoft Office programs. Once opened, it lists challenges in four sections:

1. working with text,
2. page design and layout,
3. getting artistic, and
4. quick points.

With the first three sections, each challenge is designed to introduce users to a key feature and have them edit a sample document using that feature. The quick points section doesn't offer specific challenges, but lists features instead, which can be used outside the game to accumulate points. Half of all available points can be earned through the game challenges offered in the first three sections, while the remaining points must be earned from implementing the same features outside of the game. Microsoft has taken great care in designing the challenges by creating short, relevant tasks and providing immediate feedback

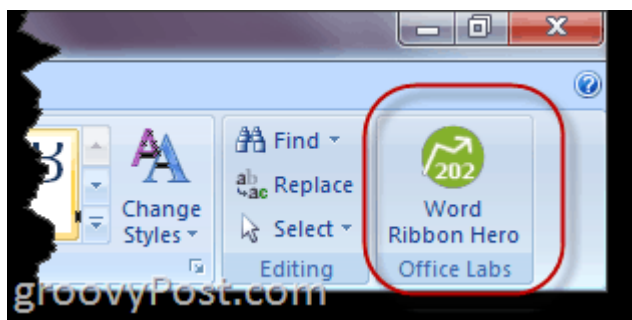
and reinforcement to help keep the user engaged and interested. Also, by keeping the difficulty level manageable, yet challenging, and providing enough support to insure reasonable success, the game encourages further play and development of Office skills.

Another feature of Ribbon Hero is its ability to track the progress of the user in learning to use the Office features and tools and adjust the challenges accordingly. Not only by following the game progress, but by monitoring the features used outside of the game. The game can then adjust the order of training content to ensure that users see only features and tools that they haven't seen before.

Because Ribbon Hero can link to Facebook, each player can share their scores and compare their progress with friends on Facebook who also play the game. In essence, Ribbon Hero is a software tutorial within a game that can be socially connected. This is one of the best corporate education gamification examples out there.

Source: https://ec.europa.eu/programmes/erasmus-plus/project-result-content/e22ddbda-dd23-42cc-89a2-786e921b2d80/Gamification%20in%20Education_20170418_020301.pdf

After installing Ribbon Hero, the Ribbon Hero button will appear in the ribbon of Word, Excel, PowerPoint or OneNote and keep track of your score.



You get “Quick Points” for doing basic stuff, like copying and pasting, using the format painter or spell checking. But you can really rack up the points by completing challenges. If you click the **Ribbon Hero** button to see your score and achievements and to take on challenges.



In terms of difficulty, challenges range from the pedestrian (like increasing the font size) to hardcore (adding a linear trend line to a bar graph). In order to keep you from getting rusty, Ribbon Hero rewards you additional points for coming back and completing challenges on a later date.

The “gameplay” is simple and gratifying. When you select a challenge, it lays it out for you in a template with a few simple instructions. As you complete the tasks successfully, Ribbon Hero releases balloons and rings a bell in a celebration of your well-earned points that rivals my last three consecutive New Year’s Eves in terms of jubilation and fulfillment. If you get stumped, you can ask for a hint or read the relevant help article.

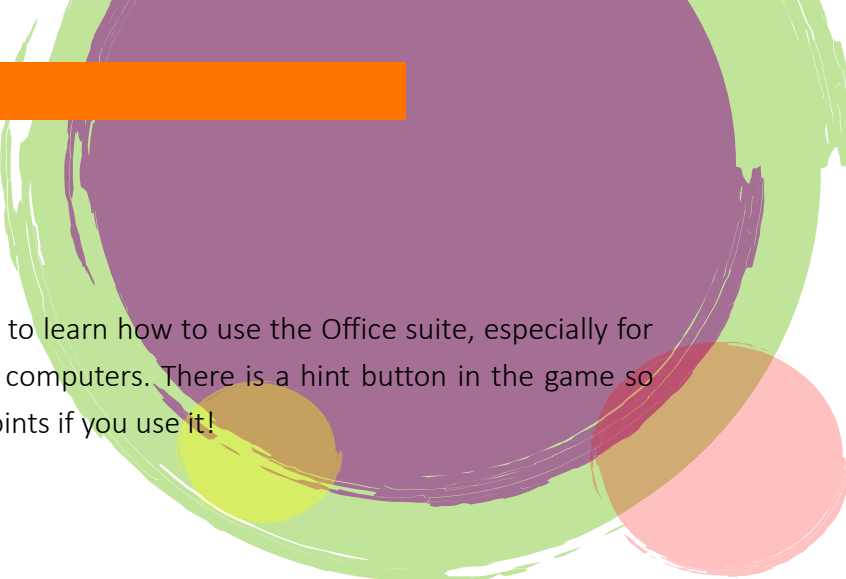

<https://www.groovypost.com/howto/microsoft/windows-7-how-to-add-program-associations-to-file-types/>

Ribbon Hero 2: Clippy's Second Chance

Clippy, one of the Office Assistants which were included in Microsoft Office 97 through 2003, is looking for a part-time job and requires help with his resume. However, he enters a time machine and is taken to several different time periods. He travels to the Middle Ages, Ancient Egypt, the 1960s, Ancient Greece, the Renaissance period and the future. In each time period, there are several tasks which must be completed before moving to the next period. These tasks include formatting documents, inserting graphs and pictures, and other common uses for Microsoft Office products.

GAME OBJECTIVES:

- ❖ to know how to work with different programs in Microsoft Office (Excel, Word, PowerPoint, ...)
- ❖ holistic feel and understanding of Microsoft Office



Ribbon Hero 2 is actually a really neat way to learn how to use the Office suite, especially for anyone who's not really comfortable with computers. There is a hint button in the game so you'll never get stuck, although you lose points if you use it!

CONCLUSION

If you want to experience game-based learning Ribbon Hero is a great way to do it! For a quick overview of the game watch YouTube tutorial

<https://www.youtube.com/watch?v=eEuC6IGZMtY>

2.7 WORKING WITH WATER - A DELIGHTFUL WEB GAME TEACHING WATER MANAGEMENT

Web link(s)

<https://www.chaostheorygames.com/work/working-with-water>

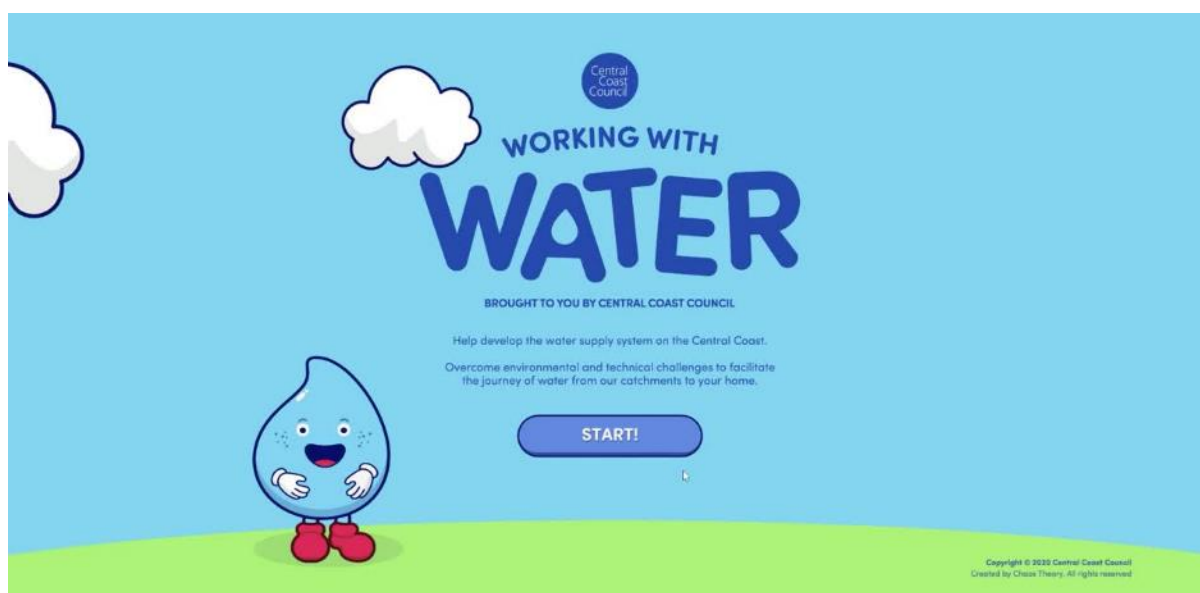
Issuing body/Authors:

Chaos Theory Games

Level 4 / 67-69 Regent Street

Chippendale, NSW, 2008

Australia



SHORT SUMMARY

Working with Water is a turn-based strategy web game helping teach students about developing and maintaining a sustainable water supply system.

The game takes place in the Central Coast of New South Wales, Australia, where the need for clean drinking water increases as the community grows, and the player is responsible for building new infrastructures to meet the increased demand.

The Central Coast Council wanted an informative yet engaging platform to educate their community about water management, replacing an in-person training program in the wake of COVID-19 restrictions. As part of their Love Water campaign, they were tasked with developing a game to simulate the challenges of water management for the growing population of the Central Coast.

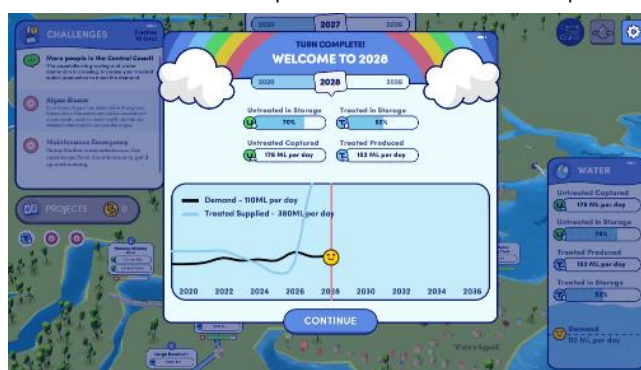
GAME OBJECTIVES:

- ❖ it aims to help students develop their problem solving skills and exercise high-order thinking.

Players are presented with *Challenges* such as drought, or algae blooms that threaten the Central Coast water management system. Players must complete *Projects* like maintenance, or building infrastructure to overcome the challenges and maintain a sustainable flow of clean drinking water. Each *Challenge* and *Project* was targeted at a specific learning outcome.

Instant Feedback on Performance

Working with Water gameplay spans from the year 2020 through to 2036. At the end of every year, players are presented with a water report that reflects their performance.



Players can assess their ability to overcome the challenges, and have the opportunity to access Central Coast Council resources and compare their in-game water system to the work that the Central Coast Council has done in the real-world.

Realistic Map of Central Coast

In Working with Water, water management infrastructure like dams and weirs, and population centres such as towns are visible and larger than life entities.



This helps the player relate to the local areas that they are familiar with, while still providing clear visibility of key elements.

CONCLUSION

Working with water is an exciting educational game and can be the additional teaching resource for science and geography teachers. It increases the awareness about water management, infrastructure and restrictions. The vision of the creators of the game is to improve quality of life and inspire a more sustainable future through the magic of play.



2.8 SOKRATIVE 101 : IN-CLASS MOBILE INTERACTION BETWEEN TEACHER AND STUDENT

Web link(s)

<https://www.socrative.com>

Issuing body/Authors:

Socrative is a product of Showbie Inc.

Since 2010, Socrative has delivered formative assessment tools to teachers around the world.



SOCRATIVE 101

- This education gamification company makes it easier to engage students through a response system that offers educational exercises and games over a laptop or mobile device.



SHORT SUMMARY

Socrative logoSocrative is a quiz-based, formative assessment tool with multiple features that can enrich teaching and learning. Teachers can design quizzes, space races (picture being at the county fair and squirting water at a target to move a horse across the field...just like that but for quizzes!), exit tickets, and more to collect and analyze student data in real-time to make on-the-spot teaching changes and improve student learning.

This education gamification company makes it easier to engage students through a response system that offers educational exercises and games over a laptop or mobile device. Initially the instructor will have a “room number” which they can give out to the students. The students will join the session by going to m.socrative.com and entering the room number.

The instructor can then engage the students, interacting with them and then initiate a quiz. Once the quiz is complete, the results are instantly available to the instructor. Aimed at the digitally native generation, this education gamification program helps teachers adapt lessons to these modern learning styles and better track the results. By using mobile devices, any class can become more interactive and fun. As student expectations change, education has to follow suit, and this start-up could be one of the first steps in making that happen.

Source: https://ec.europa.eu/programmes/erasmus-plus/project-result-content/e22ddbda-dd23-42cc-89a2-786e921b2d80/Gamification%20in%20Education_20170418_020301.pdf

Access: Socrative can be accessed on the top three operating systems: Windows, Apple, and Chrome. No downloads are required. A web browser that utilizes HTML-5 is needed to access all functions. Socrative is also usable on various hardware: desktops, smartphones, tablets, and mobile phones.

Workflow: There is a moderate time investment needed to become proficient with Socrative. After creating a free account, teachers are automatically given one public room. The public room is, essentially, a virtual meeting place for teachers and students. Unfortunately, a public room cannot accommodate a class roster. In order to track student activity within a public room, students must first enter the name of the public room, followed by their personal name. Students do not need to create accounts. Teachers invite students via a URL into a room to access a quiz, quick question, space race, or exit ticket.

Within a public room, teachers can create a quiz, search for a quiz, copy a previous quiz, edit quizzes, and more. Question types can be multiple choice, true/false, or short answer, and question order can be shuffled for each student. While images can be uploaded to a quiz, there is no support for audio or video files.

Socrative maintains a reports section, where teachers can download an Excel spreadsheet with data on overall class performance. Individual student reports are also available to download in PDF format. Aggregate and individual results can also be e-mailed to teachers.

One noteworthy feature is the Quick Question. Quick Question allows students to answer a multiple choice, true/false, or open-ended question in real-time. It was designed to provide teachers with an easy method to capture aggregate classroom performance periodically throughout a lesson. Such student-checking with Quick Question permits teachers to calibrate their lessons, to better ensure that the learning needs of all students are being met. Class results can be shared with students instantaneously.

Exit ticket is a quiz that is launched at the end of a lesson. It provides students an opportunity to demonstrate their mastery of content for the day, while ensuring teachers that objectives were met. Socrative recommends the use of Exit Ticket to adjust homework assignments or address mistakes.

Finally, Space Race allows teachers to design a quiz so that either individual students or student teams can compete with another. As each student or team answers each quiz question, their chosen avatar moves ahead in the race. The student or team who answers the most number of questions correctly, during the specified time frame, wins the race.

Accessibility: While Socrative does not directly accommodate learners with special needs, the website and app can work in concert with screen-magnifying and screen-reading software programs.

Source: <https://blogs.umass.edu/onlinetools/assessment-centered-tools/socrative/>

How to Use Socrative

1. Type www.socrative.com in your web browser
2. The site requires all teachers to create a free account.
3. Complete the “get account” web page.
4. Socrative will send new users an e-mail establishing the account.
5. After signing in with account credentials, the user home page provides several clickable options:
6. To access a tutorial, click on the Getting Started icon
7. To design a quiz, quick question, space race, or exit ticket, click on the icon labeled Quizzes
8. To activate a quiz, quick question, space race, or exit ticket for student access, click on the icon labeled Launch
9. To design a room, click on the icon labeled Rooms
10. To review student and classroom performance, click on the icon labeled Reports
11. To apply solutions for common problems encountered by users, click on the icon labeled Troubleshooting

From mobile phones to iPads to Chromebooks, Socrative works on nearly every device.

GAME OBJECTIVES:

- Stimulate higher learning by tracking the real-time understanding of your students
- app for fun and effective classroom engagement

CONCLUSION

If you are a teacher and want to track the understanding of your students Socrative is the tool you can use. Design your own quizzes and check students understanding with prepared activities or on-the-fly questions and get real-time reports to visualize learning.

2.9 GAMIFICATION AND SERIOUS GAME APPROACHES FOR ADULT LITERACY TABLET SOFTWARE

Web link(s)

<https://www.sciencedirect.com/science/article/abs/pii/S1875952114000147>

Issuing body/Authors:

Author: Kevin Browne, Christopher Anand, Elizabeth Gosse

Publication: Entertainment Computing

Publisher: Elsevier

Date: August 2014

SHORT SUMMARY

In this paper, the authors overview the design of tablet apps they designed and built to teach literacy to adults, and present the results and conclusions derived from experiments performed with target users. Low adult literacy is a significant problem with a high economic cost both for the individuals and for society. Programs created to address low adult literacy face access and engagement barriers that tablet software may be able to help overcome. They designed three tablet apps, using two contrasting approaches of incorporating game-design elements to engage the users. They tested the apps with participants from the Brant Skills Centre, a non-profit organization that offers adult literacy programs in Brantford, Ontario. Though participants were divided on whether they preferred the apps to more traditional instruction, most participants preferred using the apps in addition to more traditional instruction. Based on this they conclude that [gamification](#) and serious game design approaches were effective at increasing learner engagement, and they propose a direction for future research.

OBJECTIVES:

- ❖ to design three iPad apps to teach literacy concepts to adults with low literacy skills
- ❖ testing the iPad apps with participating clients at an adult skills centre

CONCLUSION

Participants recommended teaching concepts using both traditional lessons and iPad apps in the future. Short-, medium- and long-term rewards were effective at motivating participant behaviour. Time limits and gradually increasing challenge difficulty appeared to induce a state of flow in participants.

Here is some app that you can use for teaching literacy to adult in education.



**LEARNING
UPGRADE®**

Learning Upgrade

Learning Upgrade® is a fun and engaging digital solution to help adult learners accelerate growth in literacy and math skills to succeed in classes, earn a diploma, get a better job, or enter college. Learners can access over 900 English and math CCRS-aligned lessons on their smartphones or tablets, anytime and anywhere. Engaging lessons feature songs, videos, games, and reward certificates. Additionally, instructors can track student progress in real time with detailed web-based reports.

Features include:

- Engaging lessons filled with songs, videos, and games that move adults step-by-step from the fundamentals to advanced comprehension
- Ability for adults to earn certificates as they progress through 300 sequenced lessons
- English, reading, math, and HSE test prep

Learners will be able to:

- Engage in lessons on phonics, decoding, vocabulary, grammar, writing, listening, math, and more.
- Build literacy skills through engaging songs, videos, games, and rewards.
- Practice problems accompanied by immediate intervention and remediation with multimedia supports.
- Repeat lessons until they master them, earning a gold certificate when they become proficient in each standard's benchmarks.
- Rapidly advance to NRS, CASAS, TABE levels.
- Qualify for HSE and CTE programs.
- Prepare to pass the GED® and HiSET® tests

Access the app:

- Available from Google Play and Apple App Store.
- <https://abc.xprize.org/lu1155>
- <https://web.learningupgrade.com/>

Amrita Learning - Reading app



Amrita Learning, created by AmritaCREATE, is a personalized learning app with engaging, culturally appropriate e-content linked to life skills. The content is structured into two locales: ESL (English as a Second Language) and NS (Native Speaker).

Upon entering the app, the learner is assigned to one of the locales depending on their native language. Within each locale, small learning units are sequenced to build on previously learned skills. Specific skills used for decoding words, vocabulary, fluency, and comprehension are emphasized. The materials in the two locales are designed very differently, but both stress the use of engaging material to reduce the high dropout rate that has plagued adult learning programs.

Features include:

- Personalized learning app with engaging, culturally appropriate e-content linked to life skills
- Lessons that start with learning letter sounds and advance to multi-page stories and articles, with vocabulary support in English and Spanish

Learners will be able to:

- Establish alphabet sounds and word-building skills through short, engaging videos.
- Use a reading curriculum that features a series of stories interwoven with factual life skills passages.
- Build skills with games, activities, and music within reading passages.
- Practice using the Reading Library that includes fun and interesting stories and articles. The library has two special sections that include self-empowerment articles and read-with-your-child stories.

Access the app:

- <https://www.amrita.edu/research/project/amrita-learning-app>
- <https://abc.xprize.org/ac1155>

Codex: Lost Words of Atlantis



Codex: Lost Words of Atlantis, developed by People ForWords, provides a new approach to learning, combining university developed and tested teaching methods with game development expertise. The app focuses on how adults learn to read and respects their sensibilities and character, while still making a game suitable for all ages.

Features include:

- A mobile adventure game that helps low-literate adults improve their English reading skills
- An archeological adventure storyline—the initial gameplay revolves around crafting phonemes, onset-rime patterns, and sight words to “decode” a mysterious language from a lost civilization
- Ability to play in English or Spanish

Learners will be able to:

- Transform their literacy skills with engaging, puzzle-solving gameplay. Learn to recognize letters, build words, and read and write sentences by deciphering the ancient language of Atlantis.
- Play fun, timed mini-games that test learners’ reading skills in everyday situations, from figuring out a bus schedule to paying the correct amount of cash when you go shopping.
- Play in English or Spanish with instructions delivered accordingly.
- Visit real locations in Egypt and Australia, the first two regions in a planned five-region journey around the world.
- Seek out hidden ancient relics and energize the mysterious crystals that power Atlantis. As they learn more, learners can dig deeper into the history of the once great civilization.

Access the app:

- <http://www.peopleforwords.org/>
- <https://abc.xprize.org/pw1155>



CELL-ED

Cell-Ed provides the opportunity for users to learn the skills they want anywhere, anytime. With just the touch of a button, they can listen to the voices of Cell-Ed instructors. By sending a text message, they can learn and communicate with a personal instructor who can help them when they need that extra support. Complete the course and earn a certificate.

Features include:

- A text messaging app that runs on feature phones and smartphones (smartphone app only for this competition).
- Designed for adult English language learners and basic literacy learners.

Learners will be able to:

- Learn through stand-alone and blended learning options.
- Build skills through a personalized approach based on his or her abilities and goals with coaches available to help.

Access the app:

- <https://www.cell-ed.com/>
- <https://abc.xprize.org/ce1155>

<https://www.proliteracy.org/Blogs/Article/445/4-Apps-That-Empower-Adult-Learners>

2.10 DUOLINGO

Web link(s)

Duolingo is available for download on

Google Play Store:-

(https://play.google.com/store/apps/details?id=com.duolingo&hl=en_IN&gl=US)

App Store:- (<https://apps.apple.com/us/app/duolingo-language-lessons/id570060128>).

Issuing body/Authors:

Duolingo, Inc., an American educational technology company



SHORT SUMMARY

Duolingo is an American educational technology company which produces apps for language-learning and provides language certification. On its main app, users can practice vocabulary, grammar, pronunciation and listening skills using spaced repetition. Duolingo offers over 100 total courses across over 40 distinct languages; including a small variety of constructed languages. The company uses a freemium model with over 500 million registered users. Duolingo offers a premium service which eliminates advertising and offers more features.

Duolingo also offers the Duolingo English Test certification program and a literacy app for children called Duolingo ABC, and the company released an elementary level math app called Duolingo Math currently exclusive to iOS.

Duolingo language courses are built upon the concept of a "tree". Trees are composed of skills, which focus on a specific aspect of the target language. Trees are usually split into sections, or units, containing a chunk of related skills. Skills can be vocabulary and grammatically based, but other skills relating to colour, idioms, relationships, and countries are also featured in courses. Skills are composed of six levels: levels 1, 2, 3, 4, 5, and Legendary. Users progress through levels on skills by practicing the lessons a certain number of times, usually 2 to 6, depending on the skill. Users also have the option to "test out" into the next level on a skill. Users also have the option to test out of entire units within a course. When users complete a lesson or test out, they are rewarded experience points. Users are also tested on prior knowledge in future lessons

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Co-funded by the
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as lessons will call back to previously learned words and expect the user to be able to apply them in new sentences.

Lessons can include matching, translating, speaking, multiple choice. In 2019, the company launched Duolingo Stories. This feature consists of a small story for a particular situation to help improve learners reading and listening skills. Stories are available on selected, most popular courses. For some languages Duolingo offers podcasts for people in intermediate level consisting of stories told usually by native speakers from different parts of the world where the target language is spoken, but with simplified grammar, vocabulary, and with a slower intonation, as well with occasional assistance with providing context or explanations of unusual words in the source language by a narrator.

Duolingo also provides a competitive space. In Leagues, people can compete against their friends or see how they stack up against the rest of the world in randomly selected groupings of up to 30 users. Rankings in leagues are determined by the amount of XP earned in a week. Badges in Duolingo represent achievements that are earned from completing specific objectives or challenges.

<https://en.wikipedia.org/wiki/Duolingo>

Duolingo provides features designed to allow teachers to track students' progress in language acquisition.

In 2022, Duolingo began rolling out a redesigned user interface, featuring a single learning path. The app comes in a gamified format with tons of exercises and lessons that help you develop your reading, writing, speaking and listening skills in the language of your choice. At present, Duolingo teaches 41 different languages, out of which 38 are for English speakers.

APP OBJECTIVES:

- Game-based learning of languages
- Improvement of students reading and listening skills

CONCLUSION

A 2017 study found no significant difference between elementary students learning Spanish through the "gamification" of Duolingo and those learning in classroom environments, with both groups demonstrating a similar increase in achievements and self-efficacy. A 2022 study on adults using Duolingo as their only language learning tool, published in the journal Foreign Language Annals, found that the participants that completed a course had similar proficiency to university students after four semesters of study. The authors therefore suggested that Duolingo could be an effective tool for foreign language learning. Another 2022 study of Malaysian students learning French published by the National University of Malaysia Press found that it facilitated acquisition of vocabulary, with the authors suggesting that it was well suited for beginners in this regard.

2.11 2048

Web link(s)

APP STORE <https://apps.apple.com/us/app/2048/id840919914>

Sistem: Android

Issuing body/Authors:

ELASOFT



2048

SHORT SUMMARY

2048 is the app for brushing up your math skills and having fun at the same time. It is a math-based puzzle game app for adults that makes you put your math as well as logical skills to use. Your goal in the game is to join the given numbers to get the 2048 tile. You can move the tiles using the arrow keys and when two tiles of the same number touch, they combine into one.

<https://www.edsys.in/best-learning-apps-for-adults/>

You need to continue until you get two tiles with 1024 next to each other and they merge to form the 2048 tile.

2048 app is available for download on

Google Play Store:-

(https://play.google.com/store/apps/details?id=com.androbaby.game2048&hl=en_IN&gl=US)

App Store:- (<https://apps.apple.com/us/app/2048/id840919914>).

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Co-funded by the
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of the European Union

2048 is a single-player sliding tile puzzle video game written by Italian web developer Gabriele Cirulli and published on GitHub. The objective of the game is to slide numbered tiles on a grid to combine them to create a tile with the number 2048; however, one can continue to play the game after reaching the goal, creating tiles with larger numbers. It was originally written in JavaScript and CSS over a weekend, and released on 9 March 2014 as free and open-source software subject to the MIT License. Versions for iOS and Android followed in May 2014.

2048 was intended to be an improved version of two other games, both of which were clones of the iOS game Threes released a month earlier. Cirulli himself described 2048 as being "conceptually similar" to Threes. The release of 2048 resulted in the rapid appearance of many similar games, akin to the flood of Flappy Bird variations from 2013. The game received generally positive reviews from critics, with it being described as "viral" and "addictive".

2048 is played on a plain 4×4 grid, with numbered tiles that slide when a player moves them using the four arrow keys. Every turn, a new tile randomly appears in an empty spot on the board with a value of either 2 or 4. Tiles slide as far as possible in the chosen direction until they are stopped by either another tile or the edge of the grid. If two tiles of the same number collide while moving, they will merge into a tile with the total value of the two tiles that collided. The resulting tile cannot merge with another tile again in the same move. Higher-scoring tiles emit a soft glow; the highest possible tile is 131,072.

If a move causes three consecutive tiles of the same value to slide together, only the two tiles farthest along the direction of motion will combine. If all four spaces in a row or column are filled with tiles of the same value, a move parallel to that row/column will combine the first two and last two. A scoreboard on the upper-right keeps track of the user's score. The user's score starts at zero, and is increased whenever two tiles combine, by the value of the new tile.

The game is won when a tile with a value of 2048 appears on the board. Players can continue beyond that to reach higher scores. When the player has no legal moves (there are no empty spaces and no adjacent tiles with the same value), the game ends.

[https://en.wikipedia.org/wiki/2048_\(video_game\)](https://en.wikipedia.org/wiki/2048_(video_game))

CONCLUSION

2048 app is a really clever puzzler that uses math and gravity to test your planning skills to the maximum of their capabilities. This game has many learning benefits such as, developing problem solving and planning skills and developing maths skills, such as, addition and multiplication.

2.12 The Use of Gamification in Distance Education: A Web-Based Gamified Quiz Application

Web link(s)

<https://dergipark.org.tr/en/pub/tojqi/issue/31755/329742>

Issuing body/Authors:

Yusuf Levent Şahin, Nejdett Karadağ, Aras Bozkurt, Ezgi Doğan, Hakan Kılınç, Serap Uğur, Salih Gümüş, Aylin Öztürk, Can Güler

The Use of Gamification in Distance Education: A Web-Based Gamified Quiz Application

Turkish Online Journal of Qualitative Inquiry (TOJQI)

Volume 8, Issue 4, October 2017: 372-395

DOI: 10.17569/tojqi.329742

Research Article



SHORT SUMMARY

One of the basic challenges in distance education is motivational issues that distance learners encounter because of the factors such as separation in time and space from teachers, other learners, and learning sources. In an effort to minimize this drawback and increase learners' participation into learning processes by motivating distant learners, new approaches such as gamification have been integrated in distance education. Gamification is one of the motivational approaches to meet this need. Gamification is defined as the application of game elements and digital game design techniques to non-game situations to engage and motivate people to achieve their goals. Within this perspective, this study intended to explain the use of gamification by examining, **SoruKüp**, a gamified web-based quiz application designed for the use of distant learners. Within this context, the research used holistic multiple-case design which is one of the qualitative research model. The research data was collected through

interviews with participants who used SoruKüp application and the data was analyzed using content analysis technique. Within the perspectives of the research, it has been argued that gamification in distance education enhances the learners' motivation, contributes to the sustainability of the learning process, and makes the learning process more fun.

The main aim of this study was to determine the usability of gamification practices. It sought answers to these questions:

- ❖ What are the distance learners' opinions about the gamified test application?
- ❖ How does the gamified quiz application influence the participants' motivation?

The sample included students who used the SoruKüp, a web-based quiz application, in Anadolu University's Open Education Faculty in the 2015 fall semester. The data collection instruments included semi-structured interviews carried out face to face or through tele-conferencing, system records tracking user logs in the SoruKüp application and researcher diaries.

SoruKüp, which was developed for the use of Open University students, is a web-based quiz application enriched with gamification. The application can be accessed via Facebook. It uses Node.js, PHP and MySQL technologies in the background and HTML5 as its interface. The application is supported by contemporary operating systems and works on smart phones, tablets and computers.

SoruKüp was designed as a multi-player information contest and has the following elements:

- Real-time multi-player competition system
- Post-competition ranking system
- Motivational feedback system based on competition results
- Scoring system
- Level system based on performance
- General ranking system
- Social interaction opportunities
- Making the content concrete with cards
- Chance factor

CONCLUSION

According to research findings, students in a distance education system stated that the gamified application influenced their motivation positively in the learning process. The leader board, a gamification component, enabled them to evaluate their level and see other participants on the board, which increased their perception of social presence. Qualities such as points, achievement and progress supported their learning experiences and made the learning experience a sustainable process. The participants found the social graph component that enabled communication with other participants unnecessary, and some of them stated that they were not even aware of this feature. Some of the participants mentioned that they were disturbed by the potential contact with participants they did not know in person. The negative

opinions related to the social graph component could be related to the cultural context, which implies that presenting this gamification element as an option would result in a more effective gamification design.

The participants thought that it was necessary to give the user the option to choose in chance factor design. There were positive feedbacks on the feedback mechanism, and the participants stated that they had the opportunity to evaluate themselves through the feedback mechanism, which influenced their motivation in a positive way. Another theme was that the first person discourse used in the feedback maintained warm communication. The participants also mentioned that the features presented in the context of constraints should be more flexible, and if possible, individualized. With regard to relationships, the multi-player structure was found to be positive. This dynamic reinforced competition and increased the learners' participation. One interesting idea that was discovered concerned the use of bot users in distance learning processes. Although some participants preferred real users to bot users, there was positive feedback on the use of bots, and the need for more realistic bot designs was expressed.



2.13 RuffProto UX Innovation game

Web link(s)

<https://www.ruffproto.com/product/ux-innovation-game/>

Issuing body/Authors:

RuffProto was developed by a Finnish company Preeriapingviini Oy

RuffProto® trademark is owned by:

Company: Preeriapingviini Oy

Address: Virolahdenkuja 17

City: Järvenpää

Postal code: 04430

Country: Finland

Web: www.preeriapingviini.com

Contact: info@preeriapingviini.com

Lahti, J. (2022) Using Universal Design Game as an Education

Tool- Case Ruffproto. ICERI2022 Proceedings, pp. 468-475.

Keywords: design games, collaborative design, digital service, higher education



SHORT SUMMARY

The RuffProto design game was created as a universal innovation tool for developing new digital products and services for creative teams. Universality in this context means that the design game in question can be applied to the design process of almost any type of digital service. Its potential in pedagogical use was studied in several Service Design, User-centered Design and Digital Prototyping courses in Laurea University of Applied Sciences and Haaga-Helia University of Applied Sciences. Workshops were organized as part of courses for both bachelor and master-level students. The RuffProto design game was used and evaluated in 10 workshops involving more than 200 students. In addition to course observations and student interviews, a total of 60 students took part in an evaluation survey.

RuffProto UX Innovation game is innovation tool for co-creation and business model development. It can be played in a small group and stimulates new perspectives and ideas for products and service development. The game can also be played in a larger group with teams of 2-6 people developing their own solution to your design challenges on their own game boards. Boards can be played in either order depending on the needs of the participants. Typical order though is to first design the product or service on the Innovation Board and then build a business model on the Business Board.

Game includes:

Innovation Board

60 x User cards (green)

60 x Gadget cards (red)

60 x Context of use cards (black)

The Ruffproto game has two different playing boards: Innovation board and Business board



CONCLUSION

The results of the study gave evidence to the RuffProto design game serving as a practical introduction to all course projects and offering a new type of learning experience via gamification, strengthening also group formation. The results highlight also that a universal design game can help student groups form coherent digital service concepts in a relatively short time in various types of digital projects. As a Universal Design Game, the RuffProto innovation game is also transferable to targets, such as digital service innovation, outside the classroom and school projects. Implementing the design game as part of a course provided students with



an understanding of a fast and collaborative innovation process and skills to use design games in future real-life projects.

The RuffProto design game worked as an effective aid in various digitalization related student projects, especially at the fuzzy beginning of a new project. Referring to the survey results, the RuffProto design game is clearly suitable as a learning tool for project ideation and innovation in different kinds of digital projects.

<https://www.theseus.fi/bitstream/handle/10024/783343/Lahti.pdf?sequence=1&isAllowed=y>

2.14 Quizziz

Web link(s)

Platforms: Web, Android, iPad, iPhone, iPod Touch, Mac

Google Play app

App store Apple

Issuing body/Authors:

Quizziz Inc.

Quizziz is an Indian educational software company headquartered in Bengaluru, India, that creates and sells a gamified student engagement platform. The software is used in class, group assignments, pre-test review, formative assessments and pop quizzes.



SHORT SUMMARY

Quizziz is a learning platform that uses gamification to make content immersive and engaging. Participants can engage in live and asynchronous learning using any device in person or remotely. Teachers and trainers get instant data and feedback while learners engage with gamification features in fun, competitive quizzes and interactive presentations.

Quizziz is a student and employee engagement platform designed to assist with training exercises and classroom curriculums. The system comes with gamification functionality along with interactive learning materials such as leaderboards, live videos, live chat, and more.

Quizziz also allows administrators to control activities and assign specific tasks and assignments individually. The dashboard provides a centralized view of which tasks have been completed as well as the necessary requirements to complete additional assignments. ...

Quizziz is a quiz and interactive lesson tool similar to Kahoot!, Pear Deck, and Nearpod. Teachers must create an account, but for students it's optional. Students access teacher-shared content using a link or access code through the website or app, and they can see both questions and answers on their screens. There's also notable integration with various learning management systems, but some require a paid district plan. Students answer questions at their

own pace within parameters set by their teachers. If teachers allow it, students can see their place on the leaderboard for more exciting game play.

Teachers can select from a database of lessons and quizzes and edit them to meet their needs, including just picking and choosing select questions or slides. When creating from scratch, teachers can add images, audio, video, and different types of questions (including multiple choice, fill in the blank, poll, open-ended, and audio/video response). Teachers can also add custom feedback students see after each question. Content can be organized into collections to make it easier to find and assign. Students can complete quizzes all together competitively as a class while seeing classmates' progress, or teachers can assign content for students to complete on their own time. Afterward, teachers can view feedback by student or by question, making it easy to see where individuals or groups need reteaching or reinforcement.

There's a free version as well as a paid version called Quizizz Super. This paid version removes ads, adds the audio/ video response and custom feedback features, and more.

Quizizz has evolved from a simple quiz game into a teacher and student-friendly learning platform that integrates sophisticated quizzes into a slide-based learning experience. Teachers can opt to run quick quiz reviews or integrate quizzes into interactive lessons with instructional supports. They can also run these lessons live or assign out self-paced options. All of these features, plus the custom question-by-question feedback, give Quizizz a unique niche in the crowded world of quiz and game show tools. It's a tool that can do it all and well, thanks to how customizable everything is. Teachers can add audio directions, embed videos, add polls, or asking students to draw on or label slides. Lighthearted themes, images, leaderboards, question timers, and music can boost the experience for students.

Importantly, while Quizizz used to be free and ad supported, there are now separate free and paid versions. Some of the best features, including video and audio responses, are now locked behind the paid version.

CONCLUSION

Quizizz is a learning platform that allows participants – students to see their progress through class leaderboards. Varied questions types keep things interesting, but also videos and audio responses add additional flavor. From the pedagogical aspect students' interactions can go beyond quizzing to concept mastery thanks to the question variety. Teachers can add custom answer explanations. Teachers can view reports by student to see which questions they answered incorrectly or can view students' responses by question. Students can have questions read aloud if they choose.

<https://www.common sense.org/education/reviews/quizizz>

2.15 Kahoot!

Web link(s)

Platforms: Web, Android, iPad, iPhone, iPod Touch, Mac

Google Play app

https://play.google.com/store/apps/dev?id=5643238107618943124&hl=en_US&gl=US

App store Apple

<https://apps.apple.com/us/app/kahoot-play-create-quizzes/id1131203560>

Issuing body/Authors:

Kahoot! ASA engages in the development of learning application. It offers a game-based learning and trivia platform for classrooms, offices, and social settings. The company was founded by Johan Brand, Jamie Brooker, Åsmund Grytting Furuseth, and Morten Versvik in 2012 and is headquartered in Oslo, Norway.



SHORT SUMMARY

Kahoot! is a Norwegian game-based learning platform, used as educational technology. Its learning games, also known as "kahoots", are user-generated multiple-choice quizzes that can be accessed via a web browser or the Kahoot! app. Kahoot! also includes trivia quizzes. This educational platform is similar to other technological learning tools such as Wooflash, Blooket, or Quizlet.

Kahoot! was founded in 2012 by Johan Brand, Jamie Brooker, and Morten Versvik in a joint project with the Norwegian University of Science and Technology. They collaborated with Professor Alf Inge Wang and were later joined by Norwegian entrepreneur Åsmund Furuseth. Kahoot! was launched in a private beta at SXSWedu in March 2013, and the beta was released to the public in September 2013.

Kahoot! is a social learning platforms, with users of the game gathered around a common screen such as an interactive whiteboard, projector, or a computer monitor. The site can also be used through screen-sharing tools, like Zoom or Google Hangouts. The game design is such that the players are required to frequently look up from their devices. All players connect using a generated game PIN shown on the common screen, and use a device to answer questions.

These questions can be changed to award more or less points. The points the player is awarded is based on the speed of the answer and the possible point value of the question. Points then show up on the leaderboard after each question. The player can also get a streak, meaning they correctly answered more questions in sequence. The better their streak is, the more points a player gets when answering the next question correctly.

Kahoot! can be played through a web browser, or on an application on mobile devices.

<https://en.wikipedia.org/wiki/Kahoot!>

Kahoot!, a student-response tool for all platforms, allows teachers to run game-like quizzes and build presentations with embedded quizzes. Teachers can either create their own quizzes or find, use, and/or remix public quizzes. Kahoots can be presented live or assigned for self-paced learning. During live Kahoots, questions with answer choices get projected onto a classroom screen while students submit responses using an internet-connected device (computer, tablet, or phone). Questions and polls can contain images and video to help further appeal to all learners. For live Kahoots, teachers can choose between Classic mode and Team mode. The Team mode allows groups of students to cooperate with each other and compete against other teams. Assigned Challenges can be completed asynchronously, but students still earn points for their quick responses and compete against their classmates; the leaderboard appears after all participants have responded. Playing a game of Kahoot! doesn't involve student accounts, only a game PIN from the main screen and a gameplay name for each participant.

With a free account, created quizzes can be multiple choice or true and false, and creators can adjust the time limit and point value for each question. Premium accounts add more options, including multi-select options for quizzes.

With Kahoot!, teachers can integrate slides, videos, polls, and surveys to go beyond the typical multiple-choice quiz experience and move toward a true learning experience. Teachers can also incorporate questions that don't award points to gather opinion data, or include a question with multiple correct answers to challenge students' thinking (and without skewing point totals). Premium features like open-ended responses, puzzles, and brainstorming questions are great for assessing student understanding and prompting discussion. All of this means Kahoot! is now a much more flexible tool than in the past, and is an easy-to-recommend option for quizzing. Data is saved from each round of play and can be viewed online, exported to Google Drive, or downloaded. The reports are well designed for providing immediate feedback, but they're limited because of the way students connect to the platform. For teachers, it would be time-intensive to analyze students' growth patterns or individual problem areas using Kahoot! quizzes.

<https://www.common sense.org/education/reviews/kahoot>

CONCLUSION

This is very useful tool for a teacher who is trying to engage the students more because it has a lot of visuals and sounds that help with that. Kahoot is easy to use and has a great system for both the students and the teachers. Creating quizzes is very intuitive and there are many options for the types of answers that can be submitted to Kahoot.

2.16 Demonstrating Respect Game

Web link(s)

<https://www.filamentgames.com/project/engage-with-older-adults/>

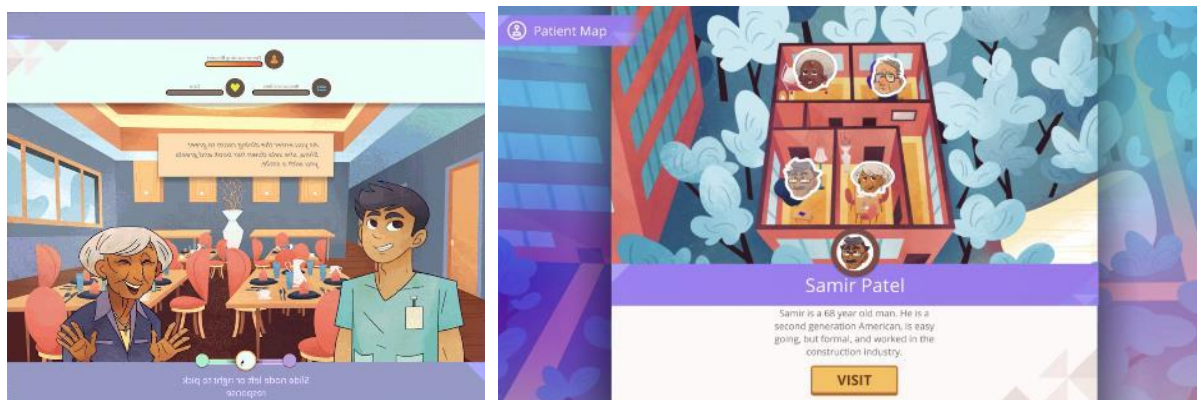
Issuing body/Authors:

Filament games

821 E WASHINGTON AVE SUITE 405

MADISON, WI 53703

Founded in 2005, Filament Games is a full-service digital studio that specializes in learning game development on a for-hire basis. They've completed over 200 projects since their founding and have worked with some of the biggest names in education – folks like Amazon, Scholastic, Smithsonian, Oculus, National Geographic, PBS, Television Ontario (TVO), McGraw-Hill, and even the US Department of Education.



SHORT SUMMARY

Developed in partnership with the Mental Health Association of Maryland, Demonstrating Respect Game teaches players how to better understand and successfully interact with older adults. In the game, players interact with a sequence of clients, listening to their problems and attempting to understand and meet their needs. While making interpersonal decisions, players are tasked with maintaining balance for each client, remaining sensitive to the disposition, needs, and preferences of each individual. Success in the game is dependent on the player's ability to build trust with each client and correspondingly develop a reputation in the facility for proper caregiving.

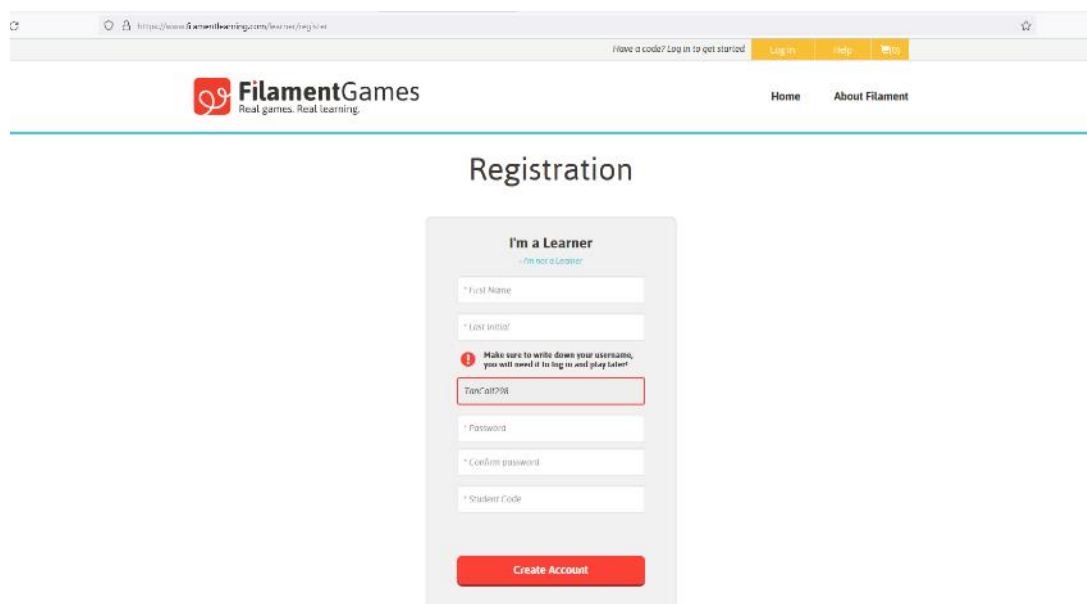
GAME OBJECTIVES:

- Social-emotional learning

CONCLUSION

Demonstrating Respect game is a training game for adult learners in healthcare professions. Filament believes in the power of play and its capacity to improve the world. Play builds relationships, broadens horizons, sharpens skills, and spreads joy. Like play and learning, they believe that work and life are complementary forces. They also value flexibility, understanding that life structures vary from person to person and day to day.

<https://www.filamentlearning.com/learner/register>



The screenshot shows a web browser window with the URL <https://www.filamentlearning.com/learner/register>. The page header includes the FilamentGames logo with the tagline "Real games. Real learning." and navigation links for "Home" and "About Filament". Below the header, the main heading is "Registration". The registration form is titled "I'm a Learner" and includes a link for "I'm not a Learner". The form contains the following fields: "First Name", "Last Initial", "Username" (with a red border and a warning icon stating "Make sure to write down your username, you will need it to log in and play later!"), "Password", "Confirm password", and "Student Code". A red "Create Account" button is at the bottom of the form.

2.17 That Quiz

Web link(s)

<https://www.thatquiz.org/>

Issuing body/Authors:

Issuer Organization: COMODO CA Limited



That Quiz can be a useful tool for learning because it immediately lets kids see their score, what they got wrong, and the correct answer. It also makes it easy for teachers to give kids another chance and provide a new version of an assessment. All they have to do is press Regenerate, and an entirely new test appears that addresses the exact same concepts. Features like that have the potential to save a ton of time! And if you're using standards-based grading or working in competency-based classrooms, you'll be extra grateful for this automated test generation.

That Quiz can be very helpful for differentiation, remediation, and providing alternative forms of an assessment. Its many options make it a versatile tool; you can import tests created by other teachers or make your own. Shorter quizzes could be merged later to produce a larger final exam.

That Quiz is a website featuring multiple-choice, matching, and short-answer tests on a variety of core subjects. Most of its content is math-oriented, with quizzes on arithmetic to calculus, but it also includes tests on science, geography, and four languages. Click on a quiz like "Shapes," and you're presented with the image of a rectangle and four multiple-choice options. Guess correctly, and your right answer will be recorded in the upper right corner. You can also choose which shapes you'd like to be quizzed on, whether you want the quiz to be timed, and a handful of other options. Each assessment is graded by the site, and kids get immediate feedback. Kids can access their tests by having a test code, a link to their class home page, or

an email notification. A teacher account gives teachers the ability to design and assign tests. It also lets teachers view grade reports for each student on each quiz.

Creating tests is easy and quick with That Quiz. It's not super slick, but the levels of customization make up for the slightly boring interface. Kids can learn about almost anything; there are tons of math quizzes and a reasonable amount of content in other areas. Math questions range from basic arithmetic to calculus, and vocabulary quizzes are available for people learning English, French, Spanish, or German. Kids will also find science practice on cells, anatomy, elements, and conversions.

Note: Testing security is always a concern with online tests, and certain precautions should be taken to preserve the integrity of the quizzes you create. Unless it's a practice test, don't assign it until your actual class period. Students should also protect their passwords to prevent others from taking tests using their name.

What is ThatQuiz?

- A **free** service for **teachers** who want to **replace paper tests** with **online testing**.
- An online grade book providing fast analysis of class and individual student progress.
- An exchange for teachers to share the resources they create.
- A skills site for students, especially useful for [math practice and testing](#).

Registration is free and teachers who [register](#) receive complete record-keeping of student grades. They have access to more precise test-generation tools, can create single tests with questions from different categories, can create matching and multiple choice questions, and can access a public test [library](#). There is no reason for students to register, since the additional features are only useful for teachers.

<https://www.commonsense.org/education/reviews/that-quiz>

CONCLUSION

2.18 Gammopoly

Web link(s)

<https://gammopoly.infoproject.eu/>

Issuing body/Authors:

The project (project code 2019-1-RO01-KA204-063821) is funded by the European Commission under the Erasmus+ programme KA2



<https://www.youtube.com/watch?v=K7rAL24m6Z8>

video tutorial

SHORT SUMMARY

The project “Gammopoly – The game of life for adult education” is a project of strategic partnership in adult education field, developed by a consortium of 5 European organisations from Romania, Italy, Portugal, Spain and Poland on a period of 20 month. The main aim was to facilitate the access of adults to innovative methods of non-formal education, through which they can develop key competencies and life abilities for a better insertion on the labour market, that is more and more focused on technology and continuous training.

The project face from the need of adults to be continuously focused on their personal, professional and familial development, so they can have healthy decisions for their lives. Another important need is the one of the specialists in adult education, which don't have very extended tools for personal development of adults, including the development of social skills, key competencies and abilities for a healthy lifestyle. For answering these needs and problems, the 5 organisations proposed a new intellectual output – a board-game named Gammopoly, including a work methodology in the field of adult education and a website through which promote this kind of non-formal education instruments. Also, the toolkit with the recommendations for the professionals which are working with people facing difficulties (as disabilities, refugees, migrants, persons with lower socio-economic background).

The main objectives of the project are:

O1. Facilitating the development of key competences that are asked on the labor market from Europe, for adults, through developing some innovative non-formal learning tools in the educational field – the project proposes the development of a board-game that can be played with the family, with the group of friends, but also as an activity in team-building sessions or during personal development workshops for adults.

O2. Increasing the working skills of specialists in the field of adult education (trainers, psychologists and psychotherapists, psychological counselors, coaches, human resources specialists etc) for developing some innovative activities with the purpose of integrating in an easier way the adult on the work market, but also integrating them in more diverse-groups, as professions or educational and socio-economic background.

O3. Developing the organisational ability for 5 organisations from the adult's education field, for developing innovative work tools in this field, within the activities with adults and the extension of the education services offered to them, so as to reduce the discrepancy and competitiveness in the labor market between young people and adults, integrating the specificity and experience of each target group in a unitary way.

The main purpose of the game:

- ❖ is to develop skills during several life cycle stages. You will need to cooperate with your partner in order to face the challenges that you may encounter during the game. Make the best decisions together to grow as a family!

CONCLUSION

“GAMMOPOLY: The Game of Life” is a board game based on the systemic theory of the phases of the family life cycle, which considers that each person / family goes through successive stages of development throughout life and in transitions from one phase to another. Each person / family is challenged to acquire certain skills, life skills, etc. in order to face difficult situations and adapt to the new stage of development.

For game instructions visit: [RULEBOOK \(1\).pdf - Google Drive](#)

2.19 GeoGuessr

Web link(s)

<https://www.geoguessr.com/>

Issuing body/Authors:

GeoGuessr is available as apps on both iOS and Android, and your account gives you access to play in our apps as well.



SHORT SUMMARY

Teachers can use Geoguessr as an extension activity in geography or world cultures classrooms or as a media literacy and critical thinking exercise in any content area. It can serve as a prompt for teaching and learning research skills, as a discussion starter about differences in geographical and building features in different places, or as inspiration for student-designed games using free online resources like photo collections. With dedicated play and more in-depth small-group or whole-class discussion, teachers can use Geoguessr to build students' background knowledge about geography and explore places that are new to students and even to teachers.

Put students in groups and give them roles such as researcher, recorder, or fun-fact finder to add more flavour to the locations they identify and encourage them to present their findings to their peers. Students can also connect with students in their schools or around the world to share challenges and build relationships.

Free accounts allow users to play for five minutes every 15 minutes, which could work as a warm-up or an end-of-class activity. If your school has a Pro account, encourage students to make their own map challenges. Have them create maps that have personal meaning or are based around a theme that you're studying in class. If there's no room in the budget for a subscription, your classroom can still play a different map daily, along with the Daily Challenge,

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and play the free world option. Teachers and students can also create their own quizzes and join the quiz with a QR code.

Geoguessr is an addictive puzzler on the web or as an Android or iOS app that tasks students with guessing the location of Google Street View and Mapillary images from around the world. By investigating the image area, scouring it for clues, and thinking critically about what they see, students work to narrow down where in the world it might be. Using clues such as road signs, languages, environment, topography, and personal experience, students also employ their research skills to identify the precise location.

To guess, students drop a pin on the map next to the picture and zoom in to place it more precisely if necessary. At the end of each round, the game shows players how close their guesses are to the actual location and awards points based on proximity. After five rounds, a summary is shown with the total number of points. Players can share games with their friends, challenging them to match their high scores.

The site includes maps created by Geoguessr users, and a Daily Challenge. Students with free accounts can do the Daily Challenge and one map per day, along with the original free world map as often as they'd like. Students with Pro accounts can also make and save their own maps, play as many maps as they like, compete with friends, create leagues, and have no ads between rounds. For all accounts, player profiles keep track of stats like best round, average score, number of games played, and recent activity. Students also earn badges for achieving various milestones. One note of caution: Users can livestream their games, some of which contain mature content warnings, via Twitch, so teachers will want to ensure that their school's content filters are in effect.

Geoguessr helps to solve what might be a challenge for social studies teachers: lack of interest in an understanding of world geography. By bringing places around the world into your classroom, students may be naturally curious and motivated to find out more. Kids can even use map reading skills and the process of elimination to narrow down their choices. While solving a puzzle or trying to beat a friend's high score, students have opportunities to learn a bit about the world, its regional differences, ecosystems, and inhabitants, in both urban and rural settings.

Once students have guessed the location, there's minimal information about each place, creating somewhat of a surface-level experience. While students can use their critical thinking skills to make observations about landmarks, languages, architecture, and geographical features to figure out the location, there are few opportunities to learn more about a place aside from its location on a map.

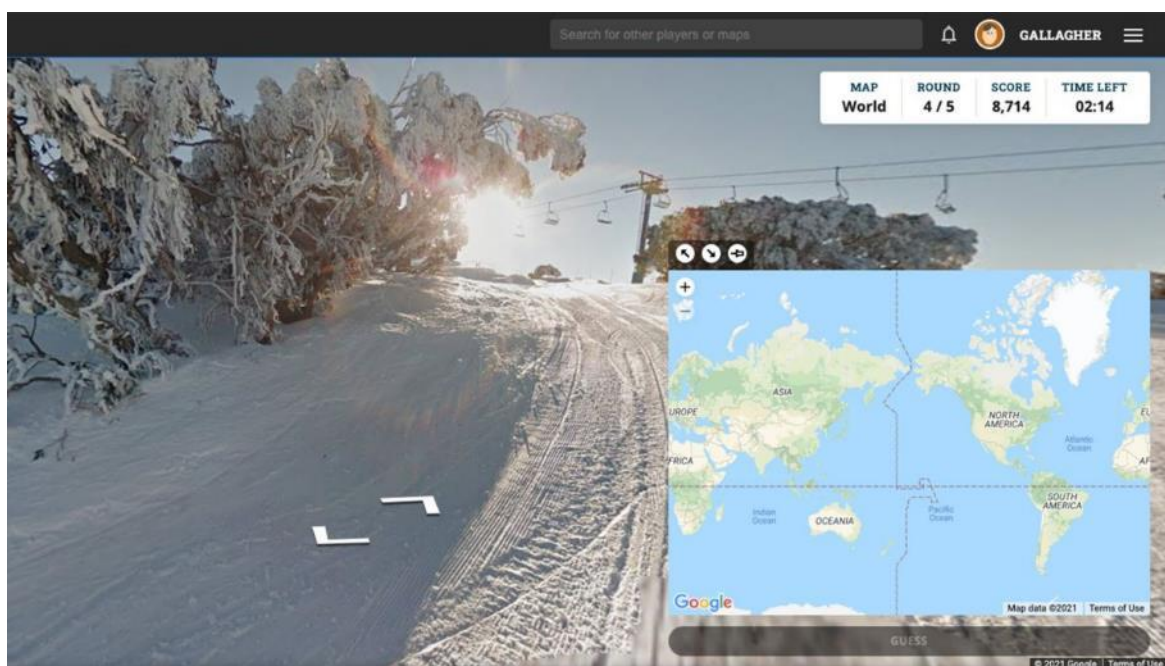
Geoguessr is less straight instruction and more a platform for cultivating 21st century skills. It can be a good motivator for thinking about geography and culture, and for building reasoning and critical thinking skills in self-directed, small-group, or whole-class settings. While they'll certainly develop some strategies of their own, students will benefit from some guidance and help to encourage thoughtful play and collaboration. By creating their own maps, students can bring their geographic study down to the local level, anywhere in the world.

<https://www.commonsense.org/education/reviews/geoguessr>

GeoGuessr is available in 10 different languages. You can select language in the website footer under "Change language".

CONCLUSION

GeoGuessr is the most fun game out there! Easy to learn but really hard to master, so is really addictive! And you learn lots about the world at the same time! Love the new play with friends game mode where you can create parties and play vs friends and family!



2.20 LEADER

Web link(s)

<https://leadertheproject.com/project/>

Issuing body/Authors:



LEADER is an Erasmus+ project which aims to support students in Vocational Education and Training (VET) to develop appropriate soft skills, allowing them to take control of their careers.


Soft skills refer to the competencies needed to communicate, cooperate, and work productively. In most competitive job markets, employers do not only look for technical ability and specialist knowledge. Instead, they seek candidates who can become leaders, and leadership itself depends on both technical and 'people skills'.

The game is prepared to teach soft skills:

1. COMMUNICATION
2. LISTENING
3. LEADERSHIP
4. ADAPTABILITY
5. EMPATHY
6. DECISION-MAKING
7. TIME MANAGEMENT
8. COLLABORATION
9. CREATIVITY
10. PROBLEM-SOLVING

SHORT SUMMARY

The LEADER game was developed as a practical and guiding instrument for lessons or training. This is an application-based tool you can download from Google Play Store or Apple App Store, and you can play the activities presented on the platform but also you can integrate your own



activities. It has a multilingual functionality, and you can choose to have interface in multiple languages. You can enter the game either as facilitator or the player.

For playing the LEADER game, you need a smartphone or tablet. To have a larger overview, it is recommended to use a tablet, as the screen is bigger and easier for you to keep track of all students' activities. Students need their smartphone, so they can log in with the room code and enter the game. It is important to make clear to the students that they cannot use their smartphone for other purposes, so they won't be distracted while playing the game. The process for downloading the LEADER serious game differs between Android and iOS, however, it is the same for teacher and students. Please follow the steps below:

The app will start giving you two choices; "I am a facilitator" and "I am a player". For both options the instructions are available in the Leader game User Guide

<https://drive.google.com/file/d/14nAA2IaC213Val0GVOq0k9GY4hCwJg-q/view>

Also, you can find a complete and comprehensive description of all the activities online, at their LEADER platform <https://leadertheproject.com>

CONCLUSION

A serious game called the 'LEADER Game' is available as a downloadable mobile application on both Google Play and App Store and have been developed to facilitate the implementation of training activities. Interested trainers and trainees operating in the vocational educational and/or entrepreneurial spheres are encouraged to make use of these tools in order to acquire new personal and professional strengths. Skills you gain with this serious game refer to abilities that relate to how one works and interacts with other people and include: communication, empathy, teamwork, creativity and many more.

2.21 Engage with® Older Adults

Web link(s)

<https://engagewith.org>

Issuing body/Authors:

Engage with® Skills Training Program

A nonprofit initiative of the Mental Health Association of Maryland

Heaver Plaza

1301 York Road, Suite 505

Lutherville, MD 21093



SHORT SUMMARY

The Engage with® Older Adults skills training module focuses on developing the skills necessary to work with, care for and/or support older adults during all phases of the aging process. The Older Adult module begins with the “Core Skills,” “What everyone needs to know.” It is a four-hour, stand-alone, skills-based training that provides a comprehensive foundation of skills that has immediate practical applications for its attendees. The Core Skills training provides an introduction to the Engage with® Older Adults approach and is required prior to attending any of the available supplements.

The Engage with® older adult at home skills training program uses an innovative, simple to use interactive gamification approach. Participants register via the Engage with® online training portal, and receive a link to enter the training environment. Once the participants are signed into the live training world, they are invited to personalize their student avatar to match how they most closely identify with. This is recommended, but not required to fully participate in the training program. The Engage with® Skills Training world is an immersive, virtual world designed to connect you with other live participants from all over the world. Although not required to fully participate in the skills training program, participants are encouraged to explore their environment and to take advantage of designated areas to meet other live student avatars, like the visiting area and main lobby. When the virtual training starts, student avatars

make their way to our auditorium where they can choose their own seat. In the auditorium, participants will interact with a live, certified instructor.

Core Skills: What Everyone Needs to Know

- Demonstrate respect
- Reduce the impact of stigma
- Active listening
- Non-verbal communication
- Verbal expression
- Engage in meaningful ways
- Identify risk factors for suicide
- De-escalate

Learning Objectives

- Apply skills that enhance their ability to effectively engage with older adults.
- Explain the behavioral health issues that affect some older adults.
- Examine how age-related changes in our body impacts our ability to process and recover from the effects of medications, illicit drugs and alcohol.
- Describe the normal aging process.
- Summarize the “new” culture of aging.
- Identify how the older adult views themselves, including their experiences and perspective, expectations, and needs.
- Classify stigma as it relates to aging.
- Use purposeful communication, including active listening, non-verbal and verbal communication.
- Distinguish the risk factors that increase an older adult’s risk of suicide.
- Give examples of how to de-escalate an irritated or aggressive older adult.





For this virtual skill training there's no special equipment needed or some software to download, you just need a internet connection and a device with keyboard.

CONCLUSION

This program offers fully immersive environment using an innovative, multi-user gamification approach to live virtual training. This includes videos, quizzes, games and small group interactions, all designed to inform and engage using real-time interaction.

Engage with® Skills Trainings have a proven, evidence-base and verified efficacy. A two-year evaluation from the University of Maryland revealed lowered staff turnover, improved staff satisfaction, and created positive changes in behaviour related to staff interactions with older adults. Engage with® Skills Trainings are led by licensed professionals who are experienced and talented teachers with strong clinical backgrounds. There is no self-directed pre-work or homework to worry about or track—just a self-contained, immersive online experience.

Many instructor-led training programs require an organization to train their own people as instructors first, who in turn then train staff in various curricula. This process can take months, requires a dedicated staff person to teach a specific curriculum and needs to be replicated if that staff person leaves. Engage with® Skills Trainings are available immediately, are conducted by Engage with® staff and there is no subscription required—you can train as few or as many staff as you wish, when you wish.

Engage with® Skills Trainings consists of a 4-hour Core Skills Training that covers “what everyone needs to know,” plus five additional 2-hour supplements that go deeper into key areas, for a total of 14 hours of training available. Included in their most popular training packages is a pre-training consultation that identifies areas of importance and sensitivity in your workforce, and adjusts your training experience accordingly. For our most robust training packages, post-training consultation is also available. As your skills training proceeds, these case conference style post-training consultations, led by a board certified psychiatrist, allow your team to explore challenging issues and gain guidance on how to apply the Engage with® principles in real time.

2.22 VIRTUS project

Web link(s): <https://www.project-virtus.eu/>

Issuing body/Authors:

SHORT SUMMARY

VIRTUS project is addressing the preparation and readiness of ASD individuals on occupational ability, adaptation to professional environments and professional training with Virtual Reality (VR) technology. Project Activities include assessment of methodologies, development of VR scenarios for 3 different occupations (Barista, Kitchen Assistant, Office Clerk), training of trainers, training of people with ASD and evaluation and certification according to EU standard.

2.23 DigiREACT Personalized Gamificator

Web link(s): <https://www.digireact-project.eu/digireact-personalized-gamificator>

Issuing body/Authors:

SHORT SUMMARY

DigiREACT is the first EXP designed to unify the complex corporate training ecosystem combining gamification elements with personalized mechanics (AI technologies) to provide a sustainable skills retention service. It aims to address the needs of both the trainers to discover and control their organizational abilities of the employees to improve and maintain their skills within hybrid teams.

The impact is expected to be significant for corporate trainers, providing sustainable workforce management capabilities and providing them with the opportunity to create their own content, based on the needs and learning styles of their employees. With the training materials being constantly updated, employees will remain engaged, while the gamificator will continue to provide learning opportunities and skills retention services in the long-term, offering a viable solution for digital transformation.

The instructional and architectural design strategies as well as the back-end technology will establish an environment that is content agnostic. With minor modifications, it can be thus transferred in any micro-e-learning programme.



CONCLUSION

Conclusion: Education Gamification is here to change our future
Even with all the great examples above, this is just the tip of the iceberg of all the great education gamification examples. Education gamification is here to stay and here to change the world.

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Project title: S4EG – Skills for Employment through gamification

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