



MANUAL

For teachers and guidance career practitioners



Guidance and Entrepreneurship Mind-Sets through Games



Co-funded by the
Erasmus+ Programme
of the European Union

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Publication information
Erasmus+ KA2
Strategic Partnerships - 2014-2017
Project Number 2014-1-ES01-KA201-004926

Contents

— Project partners	_____	1
— The GEM project and entrepreneurship education	_____	2 - 3 - 4
— Introducing GEM	_____	5
— Overview, aims and key features	_____	6
— Using GEM	_____	7 - 8 - 9 - 10 - 11
— Explanation of the game to students	_____	12
— Explanation of entrepreneurship skills to students	_____	13 - 14
— Using GEM in the classroom	_____	15 - 16
— What to do next	_____	17
— Contact details	_____	18
— Bibliography	_____	19

Project partners

CASCAiD

www.cascaid.co.uk



Centro Studi Pluriversum

www.pluriversum.eu



Educaweb

www.educaweb.com

educaweb (*)

UPCNet

www.upcnet.es/es

UPCnet

The GEM project seeks to foster entrepreneurial mind-sets and entrepreneurship skills of students through an innovative, ICT based guidance game. The project has designed, created and tested a multilingual game that helps guide students through transition periods and fosters entrepreneurship mind-sets and skills.

In order to enhance Europe's economic prosperity and boost growth, the Entrepreneurship 2020 Action Plan of the European Commission was established, which is a blueprint for action and to create an environment for entrepreneurs and businesses to thrive.

The Entrepreneurship 2020 Action Plan of the European Commission (2013) identified three key actions to focus on,

1. Entrepreneurial education and training to support growth and business creation;
2. Removing existing administrative barriers and supporting entrepreneurs in crucial phases of the business lifecycle;
3. Reigniting the culture of entrepreneurship in Europe and nurturing the new generation of entrepreneurs.

The GEM project focuses on area 1, Entrepreneurial Education. Entrepreneurship is a skill that can be learnt, and the main objective of the European Commission is to promote entrepreneurship education and stress its importance at all levels from primary school to university and beyond. (EC, 2017)

Educational learning, both in quantity and quality should be increased (EC, 2013). Young people benefit from entrepreneurial learning, whether or not they become entrepreneurs themselves, because it develops important transferable skills. The European Entrepreneurship Competence Framework (EntreComp) identifies 3 competence areas and 15 competences such as creativity, teamwork and responsibility (EC, 2013).

These entrepreneurial skills improve employability. Fostering and developing these skills from primary school promotes an entrepreneurial mindset and creates a solid foundation of skills that supports both entrepreneurship and employability.

Digital games are a beneficial and engaging format for younger children and therefore a good platform for learning and promoting entrepreneurship mindsets. According to Salen (2008):

“Gaming constitutes the sum total of activities, literacies, knowledge, and practices activated in and around any instance of a game. Gaming is play across media, time, social spaces, and networks of meaning; it includes engagement with digital FAQs, paper game guides, parents and siblings, the history of games, other players, as well as the games themselves. It requires players to be fluent in a series of connected literacies that are multimodal, performative, productive, and participatory in nature. It requires an attitude oriented toward risk taking, meaning creation, nonlinear navigation, problem solving, an understanding of rule structures, and an acknowledgment of agency within that structure, to name but a few” (p.9).

Through the game developed in the GEM project students will have an increased sense of initiative and entrepreneurship and better understanding of their own skills and competences in relation to entrepreneurship education.

Entrepreneurship education is one of the strategic areas for promoting entrepreneurship within Europe. The partnership for the project identified other projects related to entrepreneurship games, which established the methodology in the field, but these previous projects targeted upper secondary or university students.

The partnership felt that entrepreneurship mindsets can be promoted earlier in education. In primary education entrepreneurship skills are seen as important and are to be developed across all subjects and reference is seen to entrepreneurship education in 2/3 of European countries.

In lower secondary, many more European countries make explicit reference to entrepreneurship education in their steering documents than they do at primary level. The transversal approach to entrepreneurship education, in addition to the integration within other subjects is still widespread (Eurydice network, 2012).

The GEM game will offers a tool for teachers looking for an entrepreneurship education activity for their students and the GEM game offers an innovative, ICT solution.

Guidance and Entrepreneurship Mind-Sets through Games (GEM)) is an engaging ICT resource that introduces students to the world around them beyond the classroom, through the exploration of some professions and the transferable entrepreneurship skills which all of these professionals need to carry out their work.

Through the use of avatars, children can begin to explore the world of careers by putting themselves in the shoes of different situations and answering what they would do in certain scenarios.

Aimed at primary and lower secondary students, a combination of graphics and text makes it easy for children to follow the on-screen action while developing their reading and digital literacy skills. With the aid of an interactive quiz, which helps develop problem-solving and ICT skills, children are encouraged to reflect on their learning.

The game is available to play in English, Italian and Spanish; children can choose the language they play the game in, which also supports developing language skills.

The outcome of the tool is that pupils collect GEMS matching to the entrepreneurship skills they indicate they would use in response to some professional challenges. The tool will also explain the importance of these skills and how they can develop the skills further.

Exploring the world of work

GEM guides pupils on a journey around different work situations related to different jobs where they will answer which situation best describes what they would do, helping to develop self-awareness. The tool can help to support the citizenship curriculum.

Reading skills

Pupils get the opportunity to read a variety of challenging situations which introduces new language and concepts that pupils are encouraged to reflect on in a fun, interactive way.

Supporting the primary curriculum

We know that it can be difficult to find space within the curriculum; therefore we have developed GEM to be used in a short lesson, as homework or in playtime. It is accessible as a web based application, therefore can be completed for any device connected to the Internet.

Expanding horizons

Ideas and aspirations about future options can become fixed early. With GEM children get the chance to find out about a range of skills and jobs as early as possible to help set their sights high for their future.

Language curriculum

GEM allows children to explore entrepreneurship education in either Spanish, Italian and English. Which allows schools to link the learning to the development and understanding of reading and writing in a foreign language.

Careers guidance

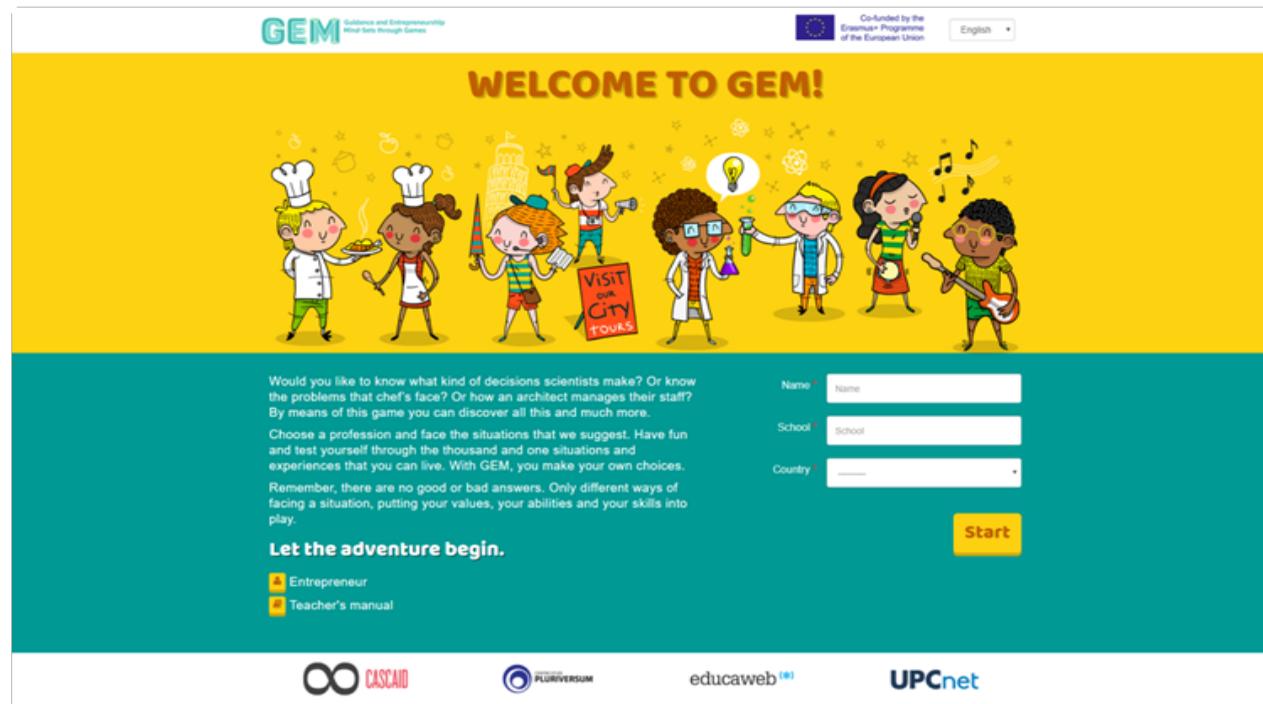
GEM links entrepreneurship skills with an understanding of different professions and skills, which closely link to careers education. Guidance counsellors and educators can bring the two together through the use of GEM.

GEM can be used in the classroom or at home by students as it is accessible on the public internet.

To run GEM in a classroom, students will need access to a laptop, computer or tablet to complete the GEM game. Each student will also need access to the internet, as GEM is a web based application.

The students will need to open up an internet browser and head to <http://www.gemgame.eu> to access the GEM game.

They will then be taken to the GEM home page, which looks like this:



They will need to fill in their name, school and country and then click start.

Students will then be taken to the next screen where they can choose one of 10 games to complete, each game focuses on a different professions:



Children should then choose which job they wish to explore by clicking on one of the icons.

Once they have clicked on an icon they will be taken through 10 different scenarios that someone in that job may face, and they will be given 3 possible answers. Children will need to think about how they react to the scenario, choose the appropriate option, and then click next. It is good to explain to students that there is no right or wrong answer, GEM is designed to let students explore:

GEM Guidance and Engagement Module
Hello, Sarah - English

Scientist 1/10

You are responsible for a research company in which four people work.

You have received three invitations to take part in a course. You know that the training is very important, but only three people from your team can attend, although the four people want to go.

What do you do?

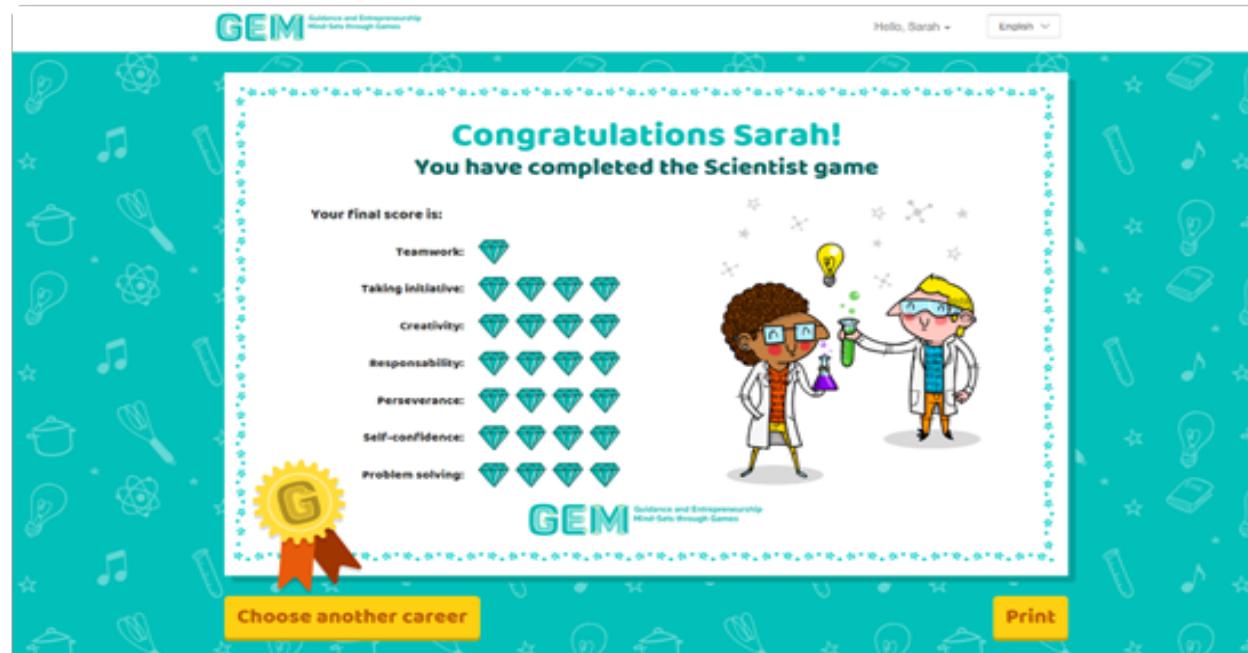
- A** You decide to talk to your team. Together you will find a solution.
- B** By your own you decide who will go on the course, taking into account their profile and the course content.
- C** It is not right to attend at the moment as you are busy, you decline the invitation and you do not offer it to your team.

Next

CASCAID FLUKIVERTUM educaweb UPCnet

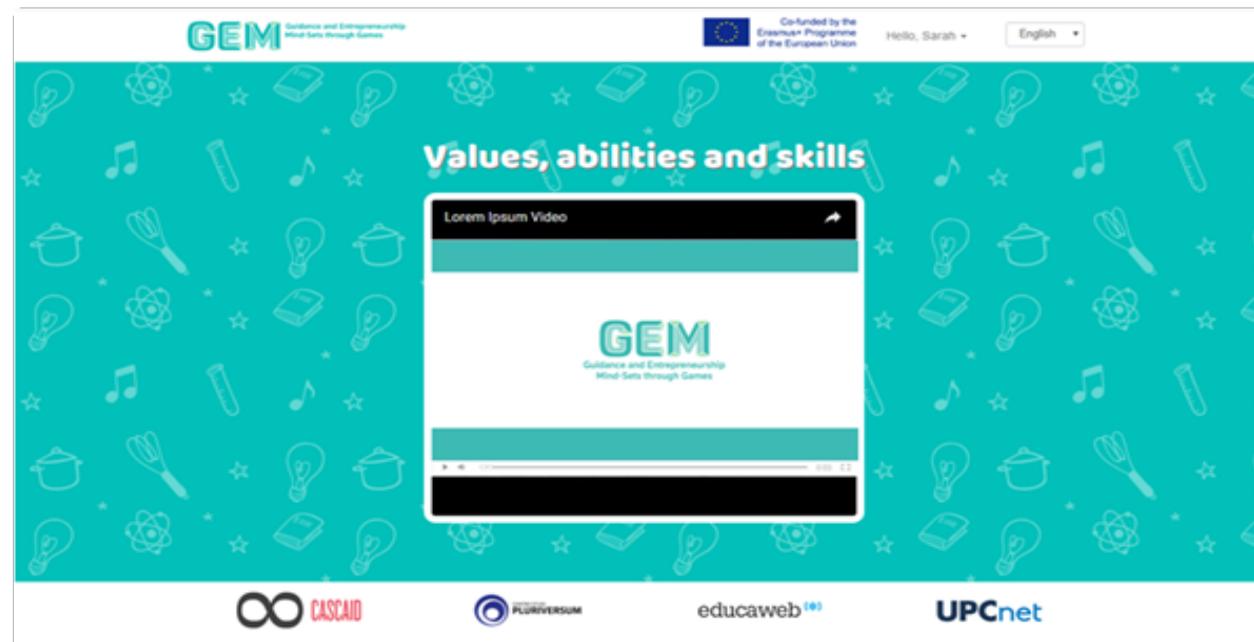
Once they have completed all 10 scenarios, children will receive a certificate. The certificate outlines a GEM score against seven different entrepreneurship skills; Teamwork, Taking Initiative, Creativity, Responsibility, Perseverance, Self-confidence and Problem Solving.

Students can print the certificate, or chose another career to explore. They can complete as many career games as they would like.



It is important to explain to students that there are many different results in GEM and that their score can change if they choose different options for each situation. They can play GEM again if they wish, to see how their score changes.

There is a video available www.gemgame.eu/skills with an example of each skill in real life that students can view before or after playing with GEM.



To introduce the GEM game to children, there is a fun and informative video that students can view. The video explains the different skills that feature in GEM and gives examples of those skills in real life. You can access the video on this link: www.gemgame.eu/skills

Teachers can also introduce the GEM game to students in the classroom, and here is a suggested explanation:

“Choosing different ways to face the situations, you will be matched to a variety of entrepreneurial skills: team work, taking initiative, creativity, responsibility, perseverance, self-confidence and problem solving. Each situation is associated with some of these skills according to your response, and through gemstones as a result, you will know what kind of skills you would put into play”.

There are 10 professions to choose from scientist, chef, singer, tour guide, building architect, software developer, physiotherapist, engineer, air traffic controller and fashion designer.

There are 100 situations in total, 10 for each profession and in each situation, you will find three possible answers and you must choose one. There are no good or bad answers, only different ways of facing a situation. It is important to stress here to the students that GEM is not a test, it is a game that students play to explore skills and professions in a fun and engaging way. It will enable students to develop awareness of skills that will help them prepare for their future as well as supporting their time in school.

The students should choose which profession they wish to start with and above all, have fun!

In our lives and as we grow up, we develop different skills. Some of these skills we develop in school (basic skills), and other skills are related to specialised knowledge in a working context (technical skills), and finally, there are another skills that are transferable to any professional or personal context, such as teamwork or problem-solving (soft skills) (Bacigalupo, 2016).

GEM is focused on the last type of skills; skills that will be useful for any kind of job and will ensure we can do our job properly and be happy and successful. We sometimes refer to these skills as 'transferable skills'. The following are the seven skills of GEM:

Teamwork

I work cooperatively with all the people involved in the same project as me. I am able to find solutions with other people motivate people and know how to ask for and accept help.

An example of teamwork is: when you play a team sport, such as football, you all work together to pass the ball and score a goal.

Taking initiative

I am able to think and act freely to make decisions, knowing how to adjust to any unexpected situation. I can work without constant supervision, be proactive and plan my work.

An example of taking initiative is: when you help tidy the classroom, because you know that it is something that needs to be done, without your teacher asking you to do so.

Creativity

I am able to introduce new ideas and innovative ways of doing things. I can find different solutions to problems and take inspiration from things around me.

An example of creativity is: when one of your toys is broken, for example the sail on a model boat and you decide to fix it by cutting out newspaper to create a new sail.

Responsibility

I commit to my tasks and I respect the commitments I have to tasks, I reflect about the decisions that I take and I act on my own values.

An example of responsibility is: when you look after your younger brother or sister in the playground when there is no adult looking.

Perseverance

I maintain a positive attitude to achieve my goals despite difficulties that I may face. I won't let problems stop me and if it is necessary I will ask for help.

An example of perseverance is: when you get your school work wrong a number of times but you keep trying even though you feel it is hard.

Self-confidence

I know that I am able to perform work successfully and solve problems myself. I show confidence in my own abilities, decisions and opinions.

An example of self-confidence is: when you are to play a leading role in the school play and you are worried on the night of the play that you will forget your lines, however you tell yourself that you can do it and everything is fine in the end.

Problem solving

I am able to look for a solution for a problem or I know how to ask for help to solve it.

An example of problem solving is: when you are working on a group task at school and you are about to present your work, however the person who was going to do the talking goes home sick, so you decide to split the responsibility to each person in the group.

The following is an example of a workshop that can be used in the classroom to support the use of GEM in the classroom.

Aims of the workshop:

- To start to explore their own ideas of the world of work and professions
- To promote reflection on their own values and capabilities
- Identify transferable skills useful for the development of an entrepreneurial mindset

Age group for the workshop:

Primary schools students, and adaptable for lower secondary students:

Activity 1

Introduction and
initial evaluation

Introduction of the activity and the main concepts.

Initial evaluation about student's perception of the concept of entrepreneur and entrepreneurial skills. Here, some questions to introduce the evaluation:

- What does it mean to be an entrepreneur?
- Is being an entrepreneur related to creating companies?
- What kind of skills should an entrepreneur have?
- Are these skills useful for any profession?

Activity 2

Entrepreneurial skills
presentation

Counsellor/teacher briefly presents the seven entrepreneurial skills considered in the GEM game using practical examples.

Group work with students: each group prepares a presentation of one entrepreneurial skill or a poster.

Activity 3
GEM game

Students connect to the game and choose one profession to play.
Counsellor/teacher supports the understanding of the situations.

Activity 4
Reflection of game results

Elaboration of the game results with the help of counsellor/teacher.
(Students receive gem-stickers for score obtained with the skill they previously elaborated in group to be attached to the poster).

Activity 5
Knowing the
professions

The counsellor / teacher invites students to reflect on the knowledge of professions presented in GEM game starting from playful activity: students have to match some characteristics to the right profession ordering them in 'fundamental' and 'important' and attach to a poster dedicated to professional figures taken into consideration.

Activity 6
Conclusion and
final evaluation

The counsellor / teacher conclude by recalling the objective of the workshop, the results obtained and the importance of entrepreneurial skills considered.
Compilation of the evaluation questionnaire by students.

After children have completed the GEM game, we recommend that they reflect and build on the certificates that they have obtained.

Here are a few suggestions for activities:

Interviews with real professionals

If the school is able to, children could have the chance to visit one of the professions (such as meet tour guides in a local museum) and interview them about how they developed the entrepreneurship skills in the game, and how they use these skills in their day to day job.

Record of skills

Children could be given a handout of all the 7 entrepreneurship skills and given a stamp by their teacher or new parent space when they demonstrate they are using/developing that skill in the classroom.

For further resources please see the Moodle platform: www.eguidance.eu/moodle - GEM UK - Resources for teachers and guidance practitioners.

Contact details

If you would like to know more about the ERASMUS+ project or contact any of the project partners, please visit www.gemproject.eu/partners and leave a reply in the comments box.

We welcome any feedback about how we can improve the game or any general comments.

Project Partners:

CASCAiD

www.cascaid.co.uk



Centro Studi Pluriversum

www.pluriversum.eu



Educaweb

www.educaweb.com

educaweb (*)

UPCNet

www.upcnet.es/es

UPCnet

Bacigalupo, M., Kampylis, P., Punie, Y., Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Luxembourg: Publication Office of the European Union; EUR 27939 EN; doi:10.2791/593884.

EACEA/Eurydice (2012), *Entrepreneurship Education at School in Europe: National Strategies, Curricula and Learning Outcomes*. Brussels.

European Commission, 2013. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Entrepreneurship 2020 Action Plan: Reigniting the Entrepreneurial Spirit in Europe*. Brussels, 9.1.2013 COM(2012) 795 final.

European Commission. (2017). *Entrepreneurship education - Growth - European Commission*. Available at: https://ec.europa.eu/growth/smes/promoting-entrepreneurship/support/education_en

Ito, Mizuko et al. "Foreword." *The Ecology of Games: Connecting Youth, Games, and Learning*. Edited by Katie Salen. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning. Cambridge, MA: The MIT Press, 2008. vii–ix. doi: 10.1162/dmal.9780262693646.vii

GEM

www.gemproject.eu



Co-funded by the
Erasmus+ Programme
of the European Union

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Publication information
Erasmus+ KA2
Strategic Partnerships - 2014-2017
Project Number 2014-1-ES01-KA201-004926