

# Guidelines for WP2

Guidelines for the game design and definition of the guideline for the characters, the plot, the narrative, the games rules and the in-game term concepts

University Paderborn – UPB,DE  
Marc Beutner / Niclas Grüttner



# **Promoting the Transition to Active Life through Gamification and Game-Based Learning**



*Skills 4 life*

*Ref. No. 2022-1-AT01-KA220-ADU-000086937*

## **Work Package 2**

*Skills4Life Serious Game Design –  
Development and Validation*

**Guidelines**



# Content

1. The core idea of WP2 .....	4
2. Elements of the game design .....	4
3. A guideline for the characters .....	6
4. A guideline for the plot and the narrative.....	7
5. A guideline for the games rules and the in-game term concepts.....	7
6. Responsibilities of the partners.....	8

# 1. The core idea of WP2

The main objective of WP 2 ‘Skills4Life Serious Game Design, Development and Validation’ is to co-create with institutionalized young adults, adult educators and social workers the Serious Game (SG) SKILLS4LIFE SG. The Serious Game has the aim to provide a safe and positive learning environment for the acquisition of

- cognitive skills
- conceptual skills and
- practical skills

that can allow a better and smoother transition to adulthood of institutionalized young adults.

Research results show SG can positively contribute to improving practical skills (i.e. daily living, work-related skills), cognitive skills (i.e. attention and understanding, working memory, comprehension), and conceptual skills (i.e. numbers, time, money, language, and literacy).

WP2 will contain three core results:

- A transnational project meeting from the 16th to the 18th of January 2023 at the University Paderborn, DE
- The Skills4life Serious Game
- The Skills4life Oonline Platform Game

# 2. Elements of the Serious Game Design

The Serious Game of Skills4life will include 4 topic areas, for categories with regard to difficulty and eight difficulty levels.

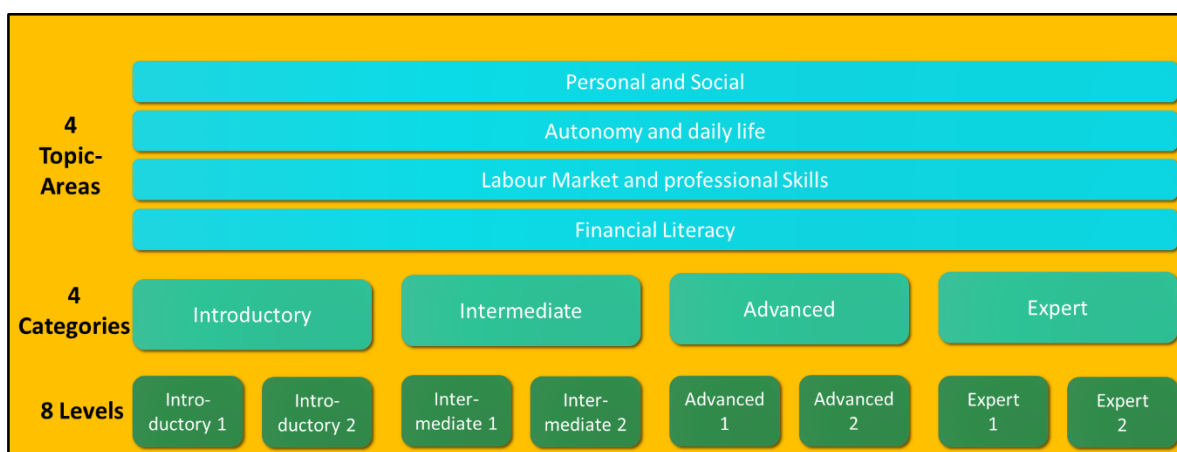
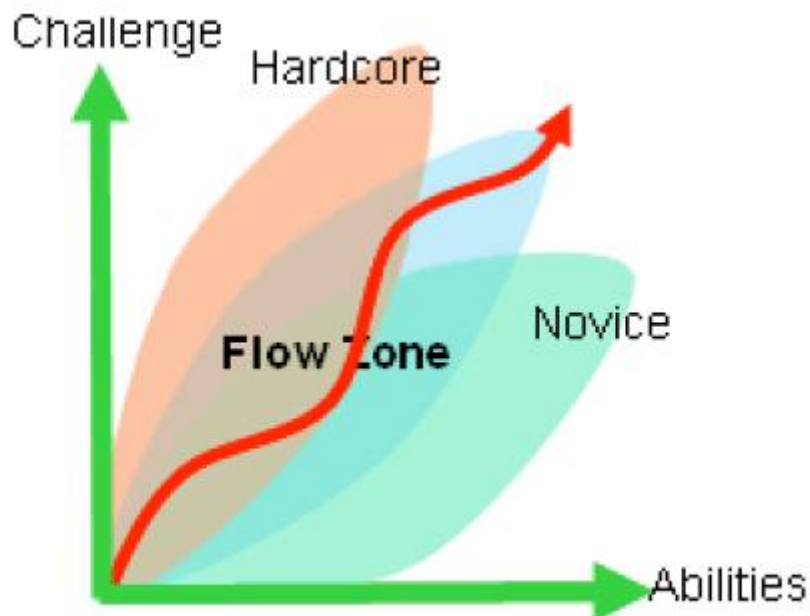


Figure 1: The core structure of the Serious Game elements

The level of difficulty is directly connected to that what is discussed as the flow zone (Chen 2006) in Serious Gaming. Here it is important to make sure that the user won't feel that it is too hard or impossible to solve the problems but also the user should also not feel that it will be too easy to deal with the tasks and problems.



**Abb. 4: Flow-Zonen (CHEN, 2006, S. 10)**

Figure 2: The flow zones according to Chen, 2006, p. 10

Moreover, the Serious Game will contain interactive tasks like in the Serious Game Money Fit (<https://moneyfit.ch>), which we will create with H5P tasks (<https://h5p.org/> and <https://h5p.com/>). The Serious Game will be integrated in a website, which can e.g. be run by a Word-Press setting. Here H5P tasks can directly be embedded in the website / learning portal.

H5P offers several opportunities to create interactive tasks from interactive videos, fill in the blanks tasks, multiple and single choice options, hot-spot-pictures, quizzes, etc.

This will also include Videosequences like in the interactive experiment „The Man with the Harpoon“ (<https://www.rtbf.be/harpon/>).

The H5P tasks and video sequences will activate the learners and will provide a realistic and authentic setting. Here, the partners from the adult education sector will create short videos on situations with care leavers which will be integrated in the Serious Game.

In addition to that we will use elements of gamification and rewards to enhance the game. We will look, if it is possible to integrate scores, achievements, leaderboard, etc.

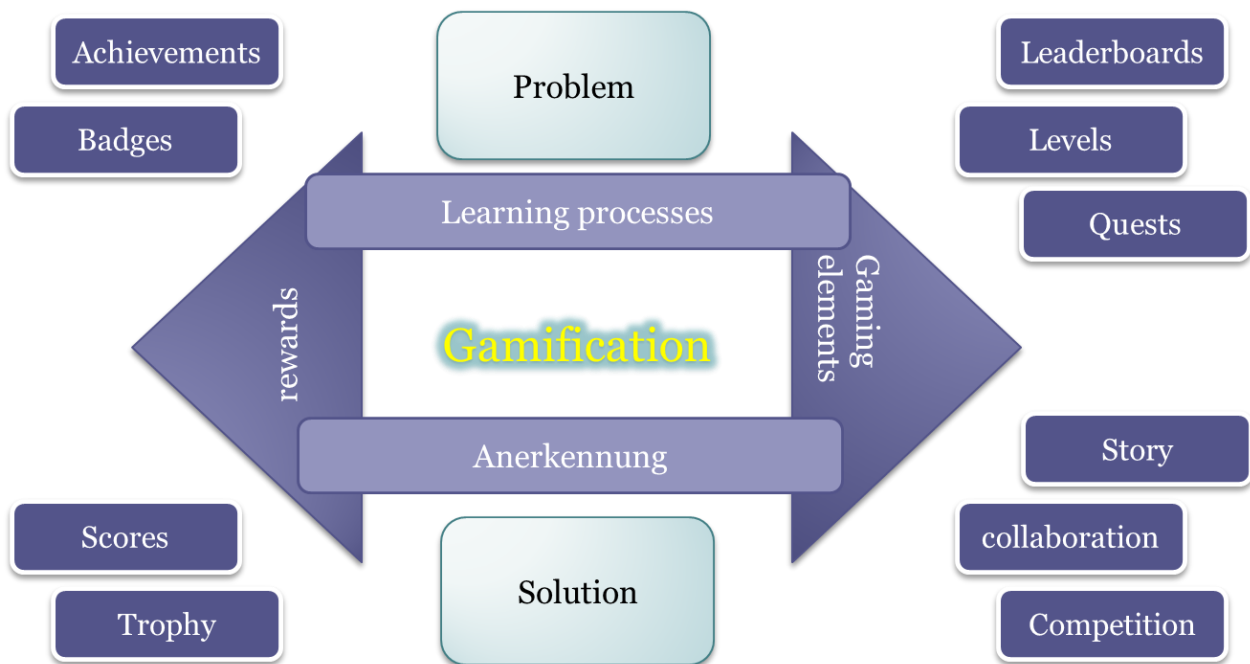


Figure 3: Gamification aspects

### 3. A guideline for the characters

The serious game can be played either using a male or a female character. Both characters have a similar background story, but different approaches to how they start out in life on their own. The characters can be displayed as follows:

- Jerry, an 18 year old boy from Belfast, wants to leave his foster parents and stand on his own two feet now that he is of age. He is in contact with the *Care Leavers' Association*, which supports young adults who have spent part of their lives in residential child and youth care - e.g. in sheltered housing/children's homes or foster families - and who are in transition to independent living. But, Jerry wants to do this transition from foster care into a normal and independent life without the help of others. So, Jerry is to be confronted with various problems for which he needs a solution. It is about finding the first flat of his own that is also affordable. He has to realise his strengths and weaknesses and goes through a process of self-reflection. He also has to find a job that is suitable for him and he needs to find out how he can manage the money he earns. To put it in a nutshell, Jerry is the type of character who does not accept help from other people, but wants to show that he can do everything himself.
- Janet is an 18 year old girl from Bristol who has recently decided to leave residential child and youth care. Nevertheless, she would be allowed to stay two more years. But, Janet decided that it is time to get out of her comfortzone and move to another place as to start from the very beginning. Her idea is to move to Sheffield as it is a big student city where she could get in touch with a few more people. She also has the struggle to find a job, an appropriate flat

which is affordable and a good job. But, other than Jerry, she gets help from the *Care Leavers' Association* that helps her in finding the right path.

## 4. A guideline for the plot and the narrative

The story, or rather the game, is built up in a kind of waterfall structure. Different sections are dealt with and worked on, one after the other, building up on each other, which ultimately lead to an overall result as can be seen in the following figure:

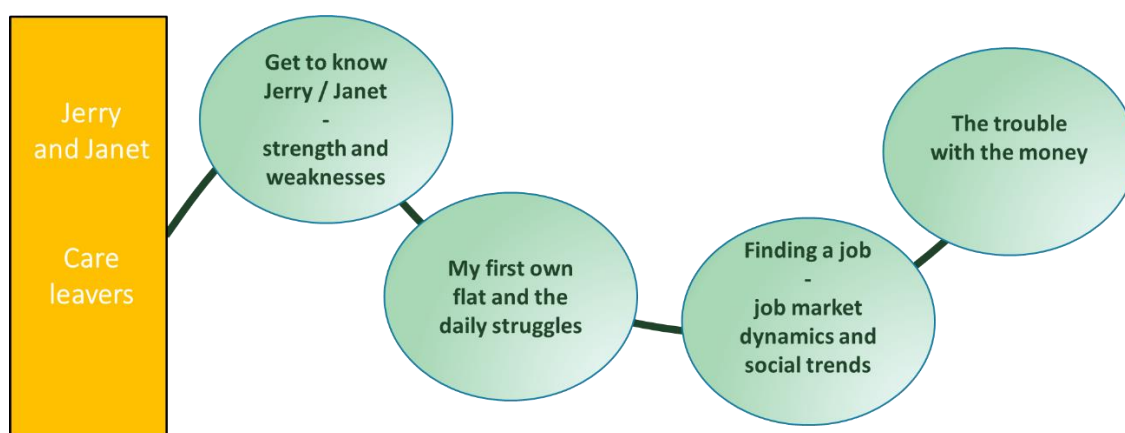


Figure 4: The structure of the plot and the narrative

Therefore, the player gets an introduction of who Jerry and Janet are and how their strengths and weaknesses look like. After that first part, the problems and struggles with the first own flat are described. It is all about finding a flat and keep it clean and maintained. After finding a flat, both need to find a job, which is difficult due to the job market dynamics and social trends which affect the selection of the right job. The next and also last chapter deals with the trouble of money and how they can manage the money they earn. Summarised, it could be said that the player is guiding Janet and Jerry through the whole process of getting independent and responsible for their own life. The single steps are being played after another and can not be played backwards or jumbled.

## 5. A guideline for the game rules and the in-game term concepts

- The game rules have to be easy and not too complicated.
- The Serious Game provides you with an experience like the ones of Jerry or Janet, who are both care leavers and have to cope with the challenges of becoming an adult and being responsible for their lives.

- The aim of the game is (a) to get an idea of your strengths and weaknesses with regard to your competences and skills, (b) to create a structures daily life in your own home, (c) to find an adequate job which is fitting to your skill-set and to deal with the requirements of the job market and the job itself and to (d) get control about your finances.
- The decisions and answers you make will be recorded in your case and weigh on your score.
- With regard to the leaderboards on each level, your are in a competition with other players of the serious game.
- On the learning platform, you can train for the answers in the game and thus improve your result.
- The learning platform includes a glossary of terms.

## 6. Responsibilities of the Skills4life partners

According to the application, we suggest the following responsibilities. c

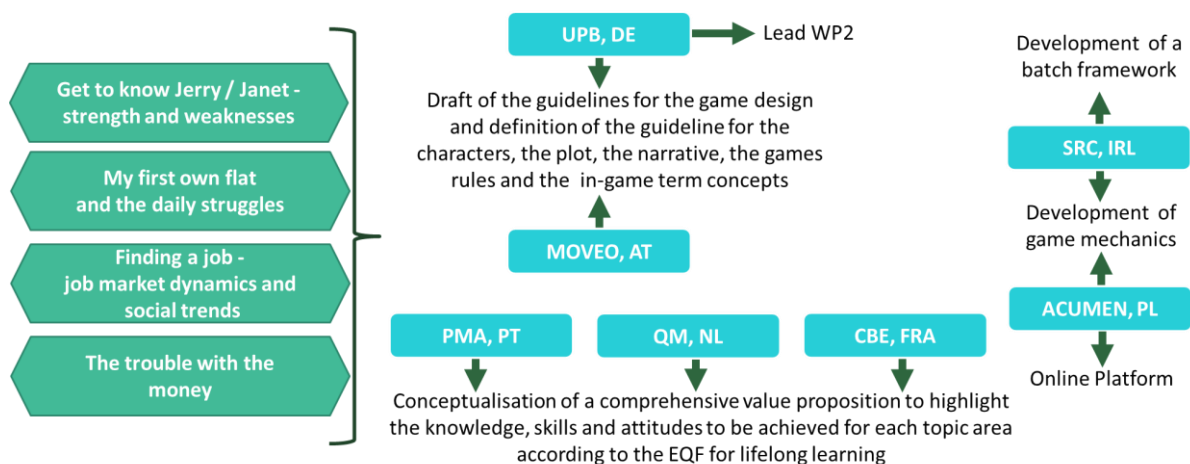


Figure 5: General Responsibilities



With regard to the content development, we suggest the following working teams. This will be discussed at the Paderborn meeting, too.

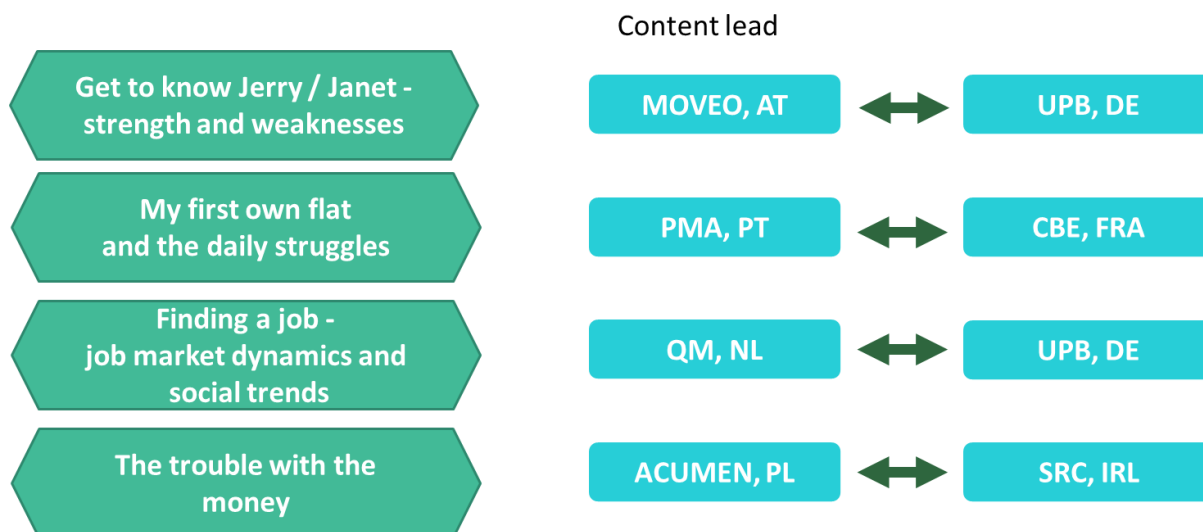


Figure 6: Content Development Responsibilities

## 7. Timeline for WP 2

No. of activity	Related Project Activity	Date of Start	Date of End	Responsible	Language
1.	Design of the first draft of WP2 Guidelines	01.11.2022	15.01.2023	UPB	EN
2.	Transnational Meeting in Paderborn, DE and discussion on value proposition	16.01.2023	18.01.2023	UPB and all partners	EN
3.	Work on value proposition	18.01.2023	17.02.2023	PMA, QM, CBE	EN
4.	Finalisation of the Design of the of WP2 Guidelines	18.01.2023	15.02.2023	MOVEO, UPB	EN
5.	Translation of the value proposition	10.02.2023	28 .02.2023	All partners	All languages
6.	First conception of a batch framework	10.02.2023	30.03.2023	SRC	EN
7.	First conception of the online platform	10.02.2023	30.03.2023	ACUMEN	EN
8.	Development of the Game mechanics	10.02.2023	30.06.2023	SRC, ACUMEN	EN

9.	Content development – Get to know Jerry/Janet H5P / Text / Graphic / Video	30.03.2023	30.10.2023	MOVEO, UPB	EN
10.	Content development – My first own flat and the daily struggles H5P / Text / Graphic / Video	30.03.2023	30.10.2023	PMA, CBE	EN
11	Content development – Finding a job H5P / Text / Graphic / Video	30.03.2023	30.10.2023	QM, UPB	EN
12	Content development – The trouble with the money H5P / Text / Graphic / Video	30.03.2023	30.10.2023	ACUMEN, SRC	EN
13	Translation of the developed four aspects	30.06.2023	30.11.2023	All parntners	All languages
14	Development of the Serious Game	30.06.2023	31.01.2024	SRC	EN
15	Testing of the Serious Game	30.11.2023	30.04.2024	All parntners	All languages
16.	Implementation of the final batch framework	01.06.2023	30.04.2024	SRC ACUMEN	EN
17.	Implementation of the online platform	01.06.2023	30.04.2024	ACUMEN	EN
18.	Translations	01.06.2023	30.04.2024	All parntners	All languages

## Literature:

BEUTNER, M., PECHUEL, R. (2011). Paderborner Berufspädagogisches Konzept (PVEC) für Serious Games und "The Fair Project" - Erkundung des Potenzials von Serious Games zur Schaffung authentischer Arbeitssituationen in der beruflichen Bildung, in: HO, C., LIN, M.-F.G. (Eds.), Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2011. Association for the Advancement of Computing in Education (AACE), Honolulu, Hawaii, USA, S. 575-580.

The logo consists of a stylized 'L' shape with a gradient from yellow to red. To its right, the text 'SKILLS 4 life' is written in a bold, black, sans-serif font. The 'i' in 'life' is lowercase and has a yellow-to-red gradient dot above it.

# SKILLS 4 life

