

sign of general appreciation, because it means that all the others who score above 50% and enter the ‘winning area’ are still willing to play the game again.

3. *Un inizio difficile*: a Serious Game for teachers

Un inizio difficile (A Difficult Start) was designed as a role-playing simulation game to be used in the formal learning environment of the initial and continuous training of teachers, especially high school teachers. The game is a digital tool for experiential learning through *problem solving* activities.

The game presents its players/teachers with a typical school situation. The teacher/avatar is required to face and overcome several difficulties. A young teacher of Italian who is teaching high school students for the first time in her life has to deal with her students’ complaints against a new and strict code of school rules, her senior colleagues who put her to the test, disgruntled parents and an uncompromising principal, whose main concern is completing an outstanding first school year in his new position. The newly-appointed teacher will have to gain her principal’s and her colleagues’ respect and appreciation whilst also passing her test year with honours.

The game’s timeline is 15 days and the story has 5 ‘sub-situations’: *the relationship between the teacher and the principal, the relationship between the teacher and her students, the relationship between the teacher and her tutor teacher, the relationship between the teacher and her colleagues and the relationship between the teacher and the parents*. By the end of the first two weeks of school, the newly-appointed teacher will have to present her strategies and explain her behavioural choices to her principal.

The situations are plausible. They constitute *good training* and they significantly elicit some essential *soft skills* teachers should possess, such as *relational-communicative abilities, cooperative abilities and the ability to work in a team, conflict mediation, listening and data inference abilities in a specific context, pro-activeness in difficult situations as well as the awareness of one’s role*. The general situation and the problems the story presents the players with are particularly critical and they have been exasperated on purpose in order to make the possibility of getting it wrong more tolerated and acceptable on the part of the player (Dell’Aquila et al., 2017: 39-61).

As for the Editor E-CORE’s reduced performance in the first part of the ELSE project, and as already specified in this article’s previous paragraphs, the storyboard of *Un inizio difficile* develops through 13 multiple answer phases with

three choices each, the only exception being that of the two most important phases, where consequential deviations were added so that players could make up for any previous error. The point system is as follows: zero points are awarded for the least appropriate option, whilst multiple points are awarded for the ‘acceptable’ and ‘excellent’ options. The phases involving situations alternate with intermediate phases which are awarded points, too, because the questions have a feedback/reinforcement role within the story *continuum*, given that the multiple-choice mode sometimes makes the game fragmented and discontinuous. Below are a situation phase and an intermediate phase. The information about the point system is included.

Table 10 – Examples of situation phase and intermediate phase

Step 05

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| SETTING | The students go back to their classroom after being told they might fail their school year, but... | | |
| AVATAR/ SENTENCE | A student: What do you think you'll do, teacher? We won't do anything, and we won't study much until our principal changes these unacceptable school rules. Live with it! | | |
| | 5.1 | 5.2 | 5.3 |
| PLAYER | You have your national school text at the end of this year, and the syllabus is very demanding. I will start going through the syllabus straight away, and I will schedule tests soon. You can do whatever you want, and it is your problem. I can't really waste any more time. | I know why you are unhappy. We could talk about freedom and the relationship between freedom and rules and regulations. I have put together some passages for you, and this subject matter could be part of the final test! | I have an idea. What about getting to know other life experiences that are closely related to the concepts of rights and freedom? I would like to take you to visit a small company whose boss has recently hired some refugees. |
| SCORE | 0 | 3 | 6 |
| GO TO | | | |

Step 06 (an intermediate step of the first crossroad linked to answer 5.3)

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|----------------|--|---------------------|-------------------------|
| SETTING | The students do not fancy having just an ordinary class and they accept their teacher's proposal of visiting a small company that produces artisan goods. They talk to the refugees and listen to their stories... | | |
| | 6.1 | 6.2 | 6.3 |
| PLAYER | ...about emigration. | ...about suffering. | ...of rights violation. |
| SCORE | 1 | 0 | 2 |

At the end of the game, players have a ranking on a 100/100 scale that is associated to a performance profile based on abilities-objectives and split into eight levels, four for the ‘loser’ result and four for the ‘winner’ result. The two performance ranges are preceded by the *principal's comments*. The principal shares his thoughts on the teacher/avatar performance.

Table 11 – *Un inizio difficile* performance profiles

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| Performance profiles of the losing range, in ascending order in terms of points: |
| 1. Being cautious is definitely a quality, but teachers need many other competences and abilities. |
| 2. Do not wait until you are told what to do. Instead, put yourself to the test and consider your professional identity. |

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| <p>3. Work more on communication and listening within the school community. You can improve dramatically.</p> <p>4. You are still somewhat uncertain about your role as a teacher. You are mainly focussed on your duties.</p> <p>Performance profiles of the winning range, in ascending order in terms of points:</p> <p>1. You have good potential, but you still have not focussed on your role and you are very cautious.</p> <p>2. Get involved and take the initiative. You can become a fantastic teacher.</p> <p>3. You have good communicative skills and you don't give up when faced with the unexpected. You have the qualities a good teacher should possess.</p> <p>4. You have fantastic listening and mediation skills. You get involved and you take the initiative even in the most difficult situations. Your students are lucky!</p> |
|---|

The *Un inizio difficile* SG is structured on a win/lose model, in accordance with the player's motivational and engagement factors (Kasbi, 2012). However, it has been created with a view to providing a role-playing experience where the player's behavioural profile comes out, fostering behaviour analysis at a debriefing stage and promoting an exchange of views within the learning community about the competences related to significant contexts. The game can be played individually, and it will provide a personal performance evaluation. However, it is also a situated learning tool and a tool to think about one's own didactic practice, albeit a rudimentary and simplified one.

The choices for each phase have been designed by profiling and stigmatising three different behaviours. The *regulatory teacher* is focussed on organisation and procedures, has a rigorous approach towards the syllabus, she is reliable as she executes the principal and the school bodies' decisions. She is able to have a good relationship with her students, provided that rules, timings, deliveries and commitments are followed and met. The *empathetic teacher* is always attentive towards the students' needs, difficulties, and issues. She tries to form alliances and establish agreements with her students in order to reach her teaching objectives, follow the syllabus schedule and meet the organisation's expectations. The *divergent teacher* is skilled at effective communication, uses contextual data and contingent situation data to adopt strategies and behavioural postures to reach objectives. She is purposeful and proactive towards the organisation and the school community.

The three profiles have been identified on the basis of several observations carried out throughout the course of several years in the context of active training of pre- and in-service schoolteachers of any level. The profiles reflect realistic behavioural modes that are 'accepted' within the current school environment, although they show very different soft skills levels. Nowadays, soft skills are particularly valued amongst a teacher/educator's training needs. The game options providing more points match the divergent teacher profile. However,

many other answer combinations produce a positive outcome with points awarded which fall in the ‘winner’ range.

Partly because of the stop to the didactic activities caused by the CoViD-19 crisis, the first phase of the ELSE project saw a first exploratory survey on the SG use where *Un inizio difficile* was sent to a mixed target group of 100 pre-school, primary and secondary school teachers. The teachers were asked to fill in the feedback questionnaire on the MoodleUniTus platform after playing the SG, the link of which was available on the same platform. Teachers were not explained the SG’s aims and features so as to collect the respondents’ spontaneous feelings and evaluations, as well as some ideas on potential script revisions. Because of the questionnaire’s final objective, it was possible to send it to teachers working in all types of schools, even though the simulation of *Un inizio difficile* takes place in a high school.

3.1. Exploratory survey results

Below are the exploratory survey items, a summary of the collected data and the main evidence shown by data processing.

Table 12 – Participants

| | | |
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| Participants: | 100 teachers who are attending the support teacher training programme to specialise as support teachers, at the University of Tuscia. | |
| Type of school: | Pre-school (3-6 years old) | 25% |
| | Primary school (6-11 years old) | 32% |
| | First-cycle secondary school (11-14 years old) | 21% |
| | Second-cycle secondary school (14-19 years old) | 22% |

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| 1) Have you played any other digital training game (<i>serious game</i> , role-playing games, simulation games and so on)? | |
| 10=yes | 90=no |

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| 2) Do you think that training in a simulation environment is useful in order to develop competences and abilities to apply in the real world? | |
| 88=yes | 12=no |
| Main common answers: | Main common answers: |
| Because such activities put you in a real situation, where being prompt and decisive are key factors. Teachers often find they have to take decisions in difficult situations, without a reasonable amount of time. | Because in a simulated environment you do not pay the price of having ‘bold’ opinions. In the real world, a ‘transversal teacher’ is pointed at by his or her colleagues and seniors, as very few people truly understand the added value of talking to one another. |
| In reality we are often influenced by our mood and our feelings. This activity allows us to use metacognition on the correct behaviour we should choose. | It is not possible to simulate anything relating to non-verbal communication and to the relational context. These are crucial to understand the situation and choose one’s answer. |
| By reproducing real situations, participants have to reach an objective, use specific knowledge and adopt strategies. The information and experienced feelings stay in one’s mind and they allow us to improve our | Because the real world is completely different from the virtual world. There are variables which are not taken into consideration by a game. Whilst playing the game, I realised that the option I would have liked to |

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| perception, attention and memory by fostering changes in behaviour through learning by doing. | choose was not available. Therefore, I had to choose amongst the given ones even though I did not fully agree with them. |
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Ninety percent of the participants has never played serious/learning games. However, 88% of the respondents recognises an educational value to exercising one's abilities in a simulated environment. This underlines the importance of training in a protected environment, which is not connected to any emotional dynamics. The motivations of those who do not give this type of tool any educational value (12%) all have to do with the impossibility of simulating real situations and contexts and, therefore, with the player's difficulty in answering in a plausible way. One interesting aspect is the frequency with which similar reasons were given to support contrasting opinions. The same reasons, with the opposite value, are used to support two ideas: *advantage of a protected environment vs. lack of reality of the protected environment*; *advantage of the reduced emotional burden vs. lack of the emotional-relational context*; *possibility of experimenting 'new' behaviours vs. difficulty in adopting the desired behaviour*.

3) Which abilities/competences can be developed by playing *Un inizio difficile*?

The competences at play were partially or completely identified by 97 players. Only three players provided a totally negative answer. One of these respondents provided the following explanation: "in my opinion, none; this is a game and you can learn to play it by being a bit cunning and choosing sentences and behaviours that are more 'desirable' without developing any competence and without this meaning that one could be as good in a real situation". This explicit answer shows distrust towards the training use of games which is also found in higher percentages in the replies to the other items, as already highlighted in item 1.

| | |
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| 4) Which situations seemed unreal or not very useful to you? | |
| 81=none | 6=all |
| | 33=some |
| Main common answers: | Main common answers: |
| The alternatives offered do not cover all the possible answers. | The principal's intransigence does not seem realistic. |
| It seemed unreal to me that no other teacher, not even the principal, would try to listen to the students. | Because suggesting didactic activities starting with or built upon the students' real needs cause more doubts on the part of principals or colleagues who are not very flexible. |
| I believe that a principal who has just arrived to a school is unlikely to set rules which are difficult to manage in an unfamiliar context. I also think that such a principal | |

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| would not rely on the teacher who possesses the lowest amount of experience. | |
| It is unlikely that a whole class refuses to attend a class as a prolonged activity and right at the start of the school year, with new teachers. | Cooperation with parents and with the class council is not always such a given. |

Similarly to the previous instances, the reasons for negative and partially-negative answers are all linked to how realistic some specific situations were. No reference was ever made to the internal consistency within the game, nor to how functional some situations were compared to the training objectives. However, as far as this item was concerned, one has to take into account that nearly all negative/partially-negative answers were given by pre-school and primary school teachers, which might point to a lower level of experience of such teachers of a secondary school context.

| 5) Do you agree with the feedback you received? | |
|--|-------|
| 80=yes | 20=no |
| Main common answers: | |
| Final score: 56,6% Because I think I have adopted some useful and effective class-management strategies. | |
| Score: 56,6% Because I believe I have adopted useful strategies in order to catch the students' attention and that I have acted as a mediator with their needs by listening to them whilst also showing respect for our positions. | |
| Score: 38,46% Because I know perfectly well what my role at school is. | |
| Score: 80% Because I do not believe I am so courageous and resourceful. | |

The information related to item 5 shows a significant *lack of agreement* with the scores and the suggestions provided by the SG. This was nearly always motivated by the lack of correspondence between the perception that each respondent had of his or her own performance and the outcome of the simulation, even in those cases where the results obtained were higher than anticipated.

| 6) Do you think you could improve your score by playing once again or more? | |
|--|---|
| 65=yes | 35=no |
| Main common answers: | Main common answers: |
| I would have the opportunity of thinking on my previous choices and rethink my position in order to constructively improve. | Because I would answer all questions consistently, in the same way. |
| Because the score and the result obtained made me think about the aspects I could change in order to improve my simulated actions. | I tried to do it several times whilst also being coherent with myself. Not much changed, but I never felt I wanted to give answers I do not believe in. |
| Because I would have the opportunity to think about my previous answers and think hard about my decisions in order to improve and to make my approach more global. | I am sure of the answers I provided and I would not change them. |