



European Commission

Horizon 2020 European Union funding for Research & Innovation



H2020 Grant Agreement No 732332

D3.1 – Data collection workshops

Authors: D. Persico, CNR-ITD, F. Dagnino, CNR-ITD, J. Earp, CNR-ITD,

F. Manganello, CNR-ITD, M. Passarelli, CNR-ITD, C. Perrotta, Leeds Univ, C. Bailey,

Leeds Univ., F. Pozzi, CNR-ITD

Deliverable nature:	Websites, patent filings, etc.
Dissemination level:	Public
Contractual delivery date:	31/10/2017
Actual delivery date:	27/11/2017
Version:	1
Total number of pages:	32
Keywords:	Gaming Horizons; Cultural expansion; Digital games,
	videogames, workshops, scenarios, areas of tension



Executive Summary

This document presents the fifteen face-to-face data collection workshops that Gaming Horizons partners held in the period from September to November 2017 (Project Months 10-12). Organisation, implementation and reporting of the workshops was undertaken within Task 3.2, thus forming an integral part of the project's second phase, namely Cultural Expansion.

As well as providing data on the organisation and attendance of the individual events, this document describes the general format adopted for the workshops, as well as a high-level (i.e. focusing on broad themes and highlights) analysis of the resulting data. The format was adapted and implemented to suit the nature of each event and the different stakeholder groups attending. As specified in the project DoA, reporting and analysis of workshop outputs will form part of D3.2 Scenarios for the 'Cultural Expansion' of Games.

Contents

1.	Intr	roduction	5
2.	Wo	orkshop format	6
3.	Wo	orkshop organisation and analysis of the resulting data	7
3	8.1.	ITD workshops	8
3	3.2.	Leeds Workshops1	1
3	3.3.	Analysis of the 'areas of tensions'1	4
	3.3	3.1. The surmised motivating power of games	5
732	2332	- GAMING HORIZONS	2



3.3.2.	What are games good for?	16
3.3.3.	Can gaming be a compulsory activity? (the learner's paradox)	17
3.3.4.	To what extent are games compatible with formal education constraints	?
And wi	th MOOCS?	18
3.3.5.	Are games the eighth art?	18
3.3.6.	What is the future of gaming?	19
3.3.7.	Competition: good or bad?	19
3.3.8.	Inclusion: are games an asset?	20
3.3.9.	The gap between gaming research and development	20
3.3.10.	Gender differences: can games counter social influence, or are they	
enhanci	ing it?	22
3.3.11.	Game literacy: who is it for?	22
3.3.12.	Regulating games	22
3.3.13.	From games to the real world	23
3.3.14.	Gaming and formal education: a difficult marriage?	23
3.3.15.	Gamification in education: panacea or fad?	25
3.3.16.	Games: socialization or escapism?	25
3.3.17.	Video Games as Narrative Opportunities	25
3.3.18.	The assumptions and ethics of play	26
3.3.19.	Video games as multiple and complex	26
3.3.20.	Ethical and meaningful research approaches	27



	3.3.21. Just a game? What ethical responsibilities are entailed in game	
	development?	. 28
	3.3.22. Are serious games the poor relation of entertainment games?	. 29
4.	Concluding remarks	. 30
4	.1. List of participants	. 31
5.	References	. 33

List of figures

Figure 1. the flower metaphor	7
Figure 2. A collection of photographs from the ITD workshops	9
Figure 3. The Gaming Horizons official workshop invite	12
Figure 4. A collection of photographs from the Leeds workshops	13

List of tables

Table 1 – format adopted for the GH WP3 face-to-face workshops	. 6
Table 3 - Overview of the 15 face-to-face workshops	. 8



1. Introduction

Deliverable D3.1 of the Gaming Horizons project is the output of *Task 3.2: Face-to-Face Workshops*, which was undertaken in the second phase of the project, *Cultural Expansion*. The task comprises a cycle of 15 workshops held by project partners in the UK and Italy, which are presented in this accompanying document. The purpose of these activities was to extend engagement with stakeholders initiated in the first phase - *Landscape Analysis* - so as to inform the *Scenarios for the Cultural Expansion of Games* (D3.2) and the *Online Manifesto* (Task 3.4). Accordingly, an effort was made in workshop organisation to pursue meaningful engagement with a wide range of stakeholder groups and to establish multidisciplinary dialogues with and between different games-related fields, including learning and psychological research, educational practice, game design studies, mainstream and independent game development, game criticism, critical theory, and the arts.

At the beginning of the Cultural Expansion phase, the Gaming Horizons partners agreed to adjust the organisation of activities in *Task 3.1 Webinars* and *Task 3.2 Face-to-face Workshops* that was originally foreseen in the project work plan. The objective of this reorganisation was to maximise leverage of partners' respective competencies, experience and networks, i.e. Leeds University and CNR-ITD in professional training, and NHTV in the gaming community and game industry. Accordingly, the 15 workshops were run exclusively in the UK and Italy, respectively by Leeds University (eight workshops) and CNR-ITD (seven workshops), while NHTV ran the ten webinars foreseen in Task 3.1. This activity redistribution also optimised time-to-completion in Tasks 3.1 and 3.2 at a critical phase in the project lifecycle.



2. Workshop format

At the outset of Task 3.2, CNR-ITD designed a core workshop format that could be drawn upon for the various workshops to be held in both Italy and the UK (see Table 1). It was agreed that, for each workshop, the organising partner would seek to adopt this format where appropriate, adapting it to suit the number and type of participants involved, as well as the specific workshop context and duration.

As mentioned in the introduction, a key aim of the workshops was that they should inform the WP3 scenarios. To facilitate and scaffold this process, the workshop format incorporated a metaphor for the GH scenario, namely the flower (figure 1): the centre represents an Area of Tension (AoT); the petals correspond to related positions and experiences that emerged either in the Landscape Analysis or during the workshops themselves; while the stem represents possible recommendations for different stakeholder groups concerning the AoT. Construction of the AoT flower was the goal of the group activity phase of the workshops. Each group adopted an AoT (flower centre), fleshed this out with positions/experiences (petals), and finally added a slogan/recommendation (stem) - see the workshop photos in Section 3. The resulting flowers offer foundations for the scenarios that project partners are to produce in Task 3.4 and then publish in D3.2.

TIME	TITLE	ACTIVITY AIM	ACTIVITY DESCRIPTION
30'	Introduction	Provide participants with contextual information about the project and the workshop, clarify the concept of scenario through a range of examples. Propose the areas of tension (AoT) chosen for the workshop (at least one for each group).	The introduction is a brief presentation of the GH project, its aims and its achievements so far, followed by a presentation of the workshop aims (see above). The presentation ends with an informal definition of what a scenario is, based on the flower metaphor, whereby the 'area of tension (AoT)' is the flower centre, the petals are opinions, experiences, contributed by participants or also links to other resources relevant to the AoT. The stem and its leaves represent the recommendations. The AoT chosen for the workshop are also presented.
30'	Ice breaker activity	Get participants and workshop moderators to know each other, gathering some basic info about	Each participant is provided with an empty persona card (<u>https://drive.google.com/drive/folders/0B0bKMk6dkPQeSTFfX3pWWT</u> <u>h0WFk</u>), containing fields to fill in. Instead of the picture, there is a space where participants are invited to draw a sketch of their relationship



		participants, warm up the atmosphere and form groups	with games. Once they have filled in the card, they are invited to stick it on the flipchart foil representing the flower (the AoT) they want to contribute to and introduce themselves to the other participants, including a brief explanation of their drawing.	
15'	Group work activity set up	Present the group activity to participants	One of the moderators explain the task groups should carry out. At the end, participants move about the room to join the group corresponding to the scenario they have chosen. More than one group on the same scenario is possible.	
60'	Group work	Discuss the chosen AoT and identify possible petals to be added to the flower, representing interesting positions about it. Identify a slogan or a catch-phrase that summarizes their main recommendation about the AoT.	Phase 1 ANALYSIS Group members should express their positions about the chosen area of tension or narrate an experience they have had concerning it (in this phase agreement is not needed, i.e. positions can even be very distant). They can also refer to academic papers, blogposts, videos or other resources they believe relevant to the AoT. During the discussion, the group should choose a few relevant contributions they would like to add to the flower and write them down on post-its of specific colours (yellow for positions, red for experiences, blue for other resources). Post-its should be grouped according to closeness of content, making up petals. Phase 2 SYNTHESIS Group members should agree upon a catch-phrase as a legacy of their group work and choose one or more rapporteurs who will present their work in the next phase.	
45'	Group work reporting & discussion	Share with other participants group work results.	One rapporteur per group should briefly report the chosen positions and the experiences, as well as the catch phrase. Optionally, prizes for the best petals and catch phrases can be attributed. General discussion should follow.	

Figure 1. the flower metaphor



3. Workshop organisation and analysis of the resulting data

This section provides an overview of the 15 face-to-face workshops run in Task 3.2, as illustrated below in Table 3, followed short summaries of the workshop and then a detailed description of the 'areas of tension' analysed during the course of this task.



no.	date	venue	organising partner	stakeholders targeted
1	20/09/17	ICEM Conference, Naples	CNR-ITD	Researchers
2	10/10/17	Vimercate, IT	CNR-ITD	Educators
3	10/10/17	Leeds Uni	Leeds Uni	Players, researchers
4	18/10/17	Leeds Uni	Leeds Uni	Players, VR designer, researchers
5	19/10/17	Leeds Uni	Leeds Uni	Players, students
6	24/10/17	Leeds Uni	Leeds Uni	Players, students
7	25/10/17	Leeds Uni	Leeds Uni	Players. students
8	27/10/17	Genoa Science Festival	CNR-ITD	Educators, SEN teachers & professionals
9	06/11/17	Sheffield Hallam Uni	Leeds Uni	Players, researchers
10	08/11/17	Genoa Uni	CNR-ITD	Trainee Educators
11	08/11/17	Leeds Uni	Leeds	Educators / Researchers
12	08/11/17	Sheffield Hallam Uni	Leeds	Educators - digital literacies
13	09/11/17	Genoa Uni	CNR-ITD	Trainee game developers / players
14	14/11/17	ITD-CNR	CNR-ITD	Researchers & developers
15	16/11/17	ITD-CNR	CNR-ITD	Players & parents

Table 2 - Overview of the 15 face-to-face workshops

At each workshop, audio-recordings of the group activities and video recordings of the conclusive plenary session were made.

3.1.ITD workshops

Workshops were held in various locations in Italy, including international conferences (i.e. the ICEM2017 - International Conference for Educational Media in Naples). In each workshop, areas of tensions were explored trying to strike a balance between the project priorities and the interests and skills of participants. For instance, in one case the discussion developed around the use of games and gamification in the context of MOOCs.



In another case, a workshop was held in a vocational school for bakers and graphic designers in Vimercate, Italy, where teachers have different educational and professional backgrounds and are involved in a pioneering project about technology-enhanced educational paths. Another workshop was unique in that it involved 70 trainee teachers from Genoa University's School of Education (thanks in this case are due to their lecturer, Prof. Davide Parmigiani, and the University of Genoa, for hosting the Gaming Horizons event). Given the audience size, the workshop format was amended to facilitate participation and speed up decision making. A real-time 'Delphi study'¹ was carried out using Kahoot! (https://kahoot.it/) participants voted on a number of positions they had previously expressed online and also identified further areas of tension and recommendations.

The list of workshops organised by ITD can also be found here:

http://www.itd.cnr.it/news.php?CAT=1

A collection of photographs from the ITD workshops is reported in figure 2.

Figure 2. A collection of photographs from the ITD workshops



¹ <u>https://en.wikipedia.org/wiki/Delphi_method</u>











3.2.Leeds Workshops

In total, eight workshops were organised by the University of Leeds. These took place during October and November. Six workshops were held in Leeds, while two took place in Sheffield. Using two different sites helped us to draw on a wider network of expertise and experience. Participants were recruited in a number of ways. Firstly, we targeted specific individuals from our own professional networks, requesting attendance from educators, researchers and other academics with an interest in the focus of the Gaming



Horizons project. In addition to this, we put out a wider call for workshop attendees, contacting local gaming societies and attending local gaming events to give out invites. A comic poster was produced to advertise the events, and this was distributed physically as well as being sent out via social media (figure 3).





Across the eight workshops we talked with 24 participants. This included academics, game designers, players, students, teachers and researchers. Each workshop was intentionally small in order to encourage discussion, giving each participant plenty of chance to have their say in a non-threatening, intimate environment. Discussion was



lively, friendly and very informative. Initially we asked participants to introduce themselves to each other, considering their relationship to the area of video games, with an option to explore this through the use of drawing. Participants were then tasked with elaborating on the areas of tension that had arisen from the earlier interviews deliverable. Different participants brought with them different types of knowledge, information, expertise and various examples of practice that they shared generously. Unless participants requested otherwise, workshops were recorded using audio. Recording was also completed using paper based methods, with participants creating their own 'flowers' using post-it notes that elaborated on the tensions under discussion. The information from these workshops has been useful in enabling us to develop scenarios that include detail and insights that would otherwise not have been available to us.



Figure 4. A collection of photographs from the Leeds workshops





3.3. Analysis of the 'areas of tensions'

The GH landscape analysis led to the identification of a number of 'areas of tension'. The areas were explored and debated during the workshops, involving participants in a process that could be described as 'laying the groundwork' for a number of scenarios. In fact, while the Landscape Analysis served the purpose, among others, of identifying these areas of tension, the aim of the Cultural Expansion is to build upon the results of the previous phase to create scenarios which propose, or illustrate visually,



recommendations on how to take informed decisions that can be adopted in those contexts where the problem arises.

Hence, the discussions that took place during the workshops were analysed using a twofold approach: on the one hand, from the point of view of the GH partners, the workshops were an opportunity for involving GH stakeholders (researchers, policy makers, developers, educators, parents and players) in collaborative work leading to the development of the GH scenarios; on the other, from the point of view of the workshop participants, the workshops allowed for an increased awareness about some of the unsolved problems concerning the use of games and gamification and in education, as well as, more generally, the role of games in society. This was achieved through collaborative activities where participants creatively engaged in the definition of the online scenarios. The outcomes of the workshops and of the other initiatives of the Cultural Expansion will be, of course, further elaborated by the project partners to produce final versions of the scenarios to be included in Project Deliverable 3.2. The following is a list of examples of the areas of tensions which were discussed during the workshops. Each tension was summarised in a 'tag card' showing only the main points. They are reported here in extended format, i.e. as they emerged from the 'landscape analysis' phase of the project, and as they were further defined (and refined) in the process leading up to the workshops.

3.3.1. The surmised motivating power of games

Gaming is a very enjoyable activity, and for this reason its power to engage has recently been harnessed for serious purposes. However, it is debatable whether this attempt has been successful on all fronts: while there is evidence that serious games are effective for learning (Clark et al, 2016), our interviews reveal that acceptance of game based



learning and specifically the use of serious games at school is not particularly welcomed on the side of players, at least in secondary school, possibly because serious games often turn out to be less engaging than the videogames they play at home, but perhaps also because playing is seen as a free activity and it cannot be done 'under teacher supervision', that is, with a teacher who chooses where, when and what to play. There are possible alternative solutions to this problem, solutions that range from promoting different forms of developer/content expert/educator collaboration involving indie developers in the design of serious games, to giving up altogether the use of serious games in formal education in favour of the use of other types of games, e.g. art games.

One further aspect of this tension has to do with the type of motivation that games can engender: is it intrinsic motivation to learn, or rather extrinsic motivation to 'succeed in the game'? When the two motivations are not fully merged and aligned, the effect can be very far from what the teacher desires.

3.3.2. What are games good for?

Games and gamification are widely used for teaching and training. Some educational games focus on teaching specific contents or disciplines.

However, there are potential benefits of using games that go beyond knowledge acquisition. Specifically, there is strong evidence that gaming improves motor skills and reaction times. There is also evidence that regularly playing entertainment games can improve higher-level cognitive skills, such as problem solving or even learning capacity ('learning to learn') -- however, this evidence is more disputed and it's yet unclear whether or not these improvements transfer to a non-gaming context.



Games may also be used to teach collaboration, especially when they require team planning and coordination.

Lastly, game narratives can be used to explore different themes and stimulate reflection on real-world topics and problems.

At the moment, it's unclear how many of these applications represent untapped potential, and how many are based on unsubstantiated hype. Some applications still need to be fully explored by scientific literature (e.g. the power of game narratives), and the topic of which games can be better used for what purposes needs to be further explored.

3.3.3. Can gaming be a compulsory activity? (the learner's paradox)

When considering games for learning, educators-interviewees generally preferred the use of off-the-shelf commercial games, rather than games built specifically for learning. However, they also expressed doubts about making games a compulsory, essential component of a learning program. Part of the enjoyment of gaming stems from its status as a voluntary activity. Some gamers are even critical of the very idea of finding a practical application of gaming, because they claim that, as a culture, we should embrace the dignity of purposeless, unproductive leisure time. Additionally, gamers have strong personal preferences for specific genres and games, as well as a wide range of skill levels and different learning styles. It is very well possible that the most polished, entertaining commercial game would still be a frustrating activity when imposed to student as a homework and with a one-size-fits-all approach.

3.3.4. To what extent are games compatible with formal education constraints? And with MOOCS?

Introducing gaming in some (formal, or even non-formal) education context sometimes clashes with contextual constraints. For example, teaching time is an especially critical aspect at school, where face-to-face lessons must fit a rigid time-table, with rather short slots of time. Are there similar constraints in MOOCs? Some games require long playing sessions, and overall a significant time investment. Other games are very short and can be more easily be accommodated in shorter slots of time, but the experience they offer may shallower or less engaging.

Another critical aspect is personalization of the content: learners may have strong personal preferences for specific genres and games, as well as a wide range of skill levels and different learning styles. Implementing games in a learning setting effectively requires flexibility and an individual focus. This may require additional resources, both financially and in terms of teaching staff.

Finally, while school teachers, principals and parents tend to see gaming as a frivolous and not time-efficient activity, the situation may be different in MOOCs.

Can this conflict be solved? Should games be adapted to existing course design, or should courses change to better embrace the flexibility required by gaming? What opportunities and challenges are offered by teaching environments alternative to traditional schools?

3.3.5. Are games the eighth art?

Although some interviewees recognise the artistic potential of games, to the point that some talk of games as a hyper-art, most of them had no reflections about it. Does this

GAMING HORIZONS

mean that we are only at the beginning of the development this potential? Can (and should) we do something to favour it? Alternative approaches range from sensitising policy makers to favour investments, to raise awareness among players and teachers about it.

Additionally, it is still unclear what the direction for art games should be: while some games are typically considered 'artful' (e.g. Flow, Journey; The last day of June, Fragments of him), they are sometimes criticised for lack of interactivity or unengaging gameplay.

3.3.6. What is the future of gaming?

Some players seem to believe that the games culture is expanding thanks to e-sports and streaming sites, and refer to this phenomenon as the 'new frontier' of gaming. Other gamers indicate virtual and augmented reality as the technological advances that will revolutionize the world of gaming. These two possible directions are the two extremes of a continuum in terms of user agency and immersion. And yet, when it comes to recommendations to developers for the future of gaming, many players do not mention technological advancements, but rather express a desire for more engaging and innovative game narratives.

3.3.7. Competition: good or bad?

While the positive value of collaboration skills is undisputed, the same cannot be said of competition. Some educators try to avoid the use of highly competitive games, because they can cause distress to individual students, make the class more difficult to handle and do not favour inclusion. Even when they do appreciate the positive effects of competition in terms of increased commitment and of learning to live in a competitive world, they try to mitigate its negative effects with a blend of competition and



collaboration. However, competition in games can take very different forms from human-to-human competition: it can be competition against a computerized agent (Player vs Environment), against the previous performance of the same player, etc, so there are ways to harvest its advantages while moderating its downsides.

3.3.8. Inclusion: are games an asset?

While some of our players have mentioned how games have facilitated the inclusion of Special Education Needs students, others highlight the risk that games, as other technologies, can increase the digital divide among youngsters. Moreover, in the recent past games have been under accusation of nurturing intolerant attitudes towards minorities and of suffering from gender bias. However, our interviewees also mentioned a range of scenarios where the inclusive power of games was taken advantage of.

3.3.9. The gap between gaming research and development

One of the areas of tension emerged from the Gaming Horizons literature review and interviews has to do with the gap existing between the research and development worlds. From our analysis of the psychological literature it seems that very little of the results obtained can be straightforwardly translated into 'recommendations' for stakeholders, other than researchers themselves. Most recommendations in the contributions we considered were directed to other researchers and, more rarely, to healthcare professional and policy makers. Recommendations to, and even consideration of, developers and users were strikingly rare. The point of view of gamers themselves was virtually absent from most contributions, even for those topics (e.g. engagement or addiction) for which it could have offered precious insights. One important point emerging from much of the educational literature, instead, is the need for e among the different stakeholder groups with an interest in game based learning: commercial game companies, game developers,



educational researchers, teachers, administrators, policy makers and parents (Persico et al., 2017).

On the other hand, many developers stated a desire to learn more about their field, and currently use industry websites like Gamasutra² and conferences like GDC³ as methods of learning and sharing their knowledge, presenting the possibility that academic research should aim for inclusion on/with these platforms, not competition with them. In other words, there seem to be a mismatch between the language used in the academy and in the development world, but also a difference between the main sources of academic literature produced by researchers and the information channels used by industry, both AAA and 'indie'. Such mismatch clearly hinders communication between the two worlds. The effects are visible both in the discourse about game based learning and in that about ethics. As far as the former is concerned, the vision of serious games as an impoverished version of entertainment games tackled in the previous workshop may be seen as a consequence of the gap between research and development. Serious games, in fact, often lack appeal due to poor graphics, user interface and play mechanics, even if their educational quality is very high. As to the latter, the increasing cultural relevance of games in our society makes ethical concerns in development a priority. Much research has been devoted to ethical and cultural themes that have been the object of discussion in the media about gaming. However, from our interviews, it emerges that both developers and gamers seem sometimes to underestimate the importance of these themes, because we 'just' talking about a game. There are, however, ethical themes that should concern game developers as well as researchers, and the dialogue between the two should be reinforced.

² <u>www.gamasutra.com</u>

³ The Game Developers Conference: <u>http://www.gdconf.com/</u>



3.3.10. Gender differences: can games counter social influence, or are they enhancing it?

Several interviewees reported differences in game preferences between girls and boys, as if the gaming world tended to propagate gender-based divisions. Often these differences reflect social stereotypes, e.g. girls tend to prefer wearable computing to Arduino programming and boys the other way around. What should teachers do in these cases? Should they respect these preferences or try to encourage girls to overcome the invisible barrier that separates them from 'boy's games'? The same question can (should) be levelled at developers. Some developers-interviewees mentioned the tension between their having to cater to market demands (for gendered games) and having an ethical responsibility to break down such divisions.

3.3.11. Game literacy: who is it for?

The generational gap is particularly wide when games and gaming are considered. Many gamers maintain that if parents want to know their children and if teachers want to harvest the potential of games they need to enter the world of games and engage with games themselves. In a similar vein, educators believe that game literacy should be one of the themes of media literacy curricula in schools. However, many parents, teachers, researchers, policy makers simply don't have the time - or usually the inclination - for this step.

3.3.12. Regulating games

A difficult topic regarding video games is the regulation of their access on the part of children and young adolescents. Games with violent or sexual content are labelled as such, but this labelling is often ignored by parents that purchase games for their



children. So, while selling restricted games to children is illegal, parents (sometimes unwittingly) circumvent this regulation.

Several player interviewees expressed the desire for tighter regulation, but this would require restrictions on *parents'* behaviour and decisions. This kind of regulation could be more effective in protecting children from inappropriate content, but would likely be poorly received by parents, especially in cultural contexts that try to preserve parents' agency as much as possible (e.g. the US).

3.3.13. From games to the real world

Games seem to help in training several skills, especially relating to perception and reaction times. However, two questions remain open:

- (1) are these abilities transferred to non-gaming contexts?
- (2) can games be effectively used to train more higher-level skills? (e.g. problem solving).

While interviewees generally reported increased reflexes, and said that they did notice an improvement in real life, they rarely reported higher-level cognitive benefits, such as strategical thinking.

3.3.14. Gaming and formal education: a difficult marriage?

Integrating games in formal education is not very easy. Firstly, not all teachers are familiar with games or game-based learning and not all students are in favour of this 'marriage', especially when the choice of games falls in the category of serious games, whose engaging power is often not as strong as that of entertainment games. Secondly, gaming is, by definition, a free activity; while formal education has its rules, its constraints, and sometimes the use of games isn't compatible with these restrictions. For



example, implementing gaming (especially with off-the-shelf games) in the classroom clashes with the rigid timing of school lessons. Some games require long playing sessions, and overall a significant time investment. Other games are very short and can be more easily accommodated in the school system, but the experience they offer is sometimes shallower or less engaging: they can serve as a stimulus for a discussion, rather than support learning for a meaningful amount of time. How should this conflict be solved? Should games be adapted to the existing school system, or should school change to better embrace the flexibility of gaming time?

Another aspect of this tension is clearly described in <u>this blogpost</u>: striking the right balance between engagement and learning is something that not all serious games succeed in doing. In addition, some of our interviewees pointed out that playing at school is almost an oxymoron: the nature of play is such that it cannot be done 'under teacher supervision', that is, with a teacher who chooses where, when and what to play. Even the motivating power of games has been questioned to some extent: while successful games can engender motivation, sometimes this is not the kind of intrinsic motivation that is needed to foster and sustain the learning effort, but rather, a more extrinsic type of motivation pushes the player to succeed in the game. When extrinsic and intrinsic motivation are not aligned, the routes followed to succeed may be very far from the desired ones: even cheating may be contemplated.

However, it is important to note that the world of games is very varied and complex. It includes many different genres, from first person shooters to online Role Play Games, from Coding games to simulation games, and also narrative based games, some of which have artistic features and aim to generate emotions rather than merely entertain. So, the choice to use games to foster learning entails a non-trivial degree of game literacy on the side of the teacher.



3.3.15. Gamification in education: panacea or fad?

The introduction of game mechanics in educational contexts (gamification of education) is often positively considered, nevertheless a concern exists about the risk of students' behaviour manipulation. This deal viation is not acceptable in an educational relationship and this risk should be taken in due account. How can this risk be avoided? Is there a difference among the mechanics implemented?

3.3.16. Games: socialization or escapism?

Games are both seen as media supporting socialization and, at the same time, as providing the player the opportunity to run far from her reality. While sharing experiences and achievements in games can foster peer relations, some individuals tend to isolate themselves with possible negative consequences.

Educators and players interviewed, generally, expressed convergent opinions about this tension, recognizing the double soul of games and identifying isolation as an extreme possible consequence of an excessive use videogames.

While some players declared that games serve specifically the purpose to escape from the everyday life, some others highlighted their social function: games not only give the opportunity to know new people, joining players community, but also to keep in touch and enjoy playing with friends living close by or abroad. Most of educators mentioned to push the social power of videogames, designing game-based collaborative activities to be held in the classroom adapting single player games to their objectives.

3.3.17. Video Games as Narrative Opportunities

A number of participants discussed the use of video-games as texts, drawing on the work of New Literacy Studies (Gee, 1991; Street, 1997) and Multiliteracies (New London Group, 1996). Here, games were positioned as rich, multimodal texts that can



be actively read, but also 'lived' and even shaped by players, as a kind of cultural experience. But how do such understandings of video games reconcile with the ways in which literacy education is often conceptualised in and around schools, through directive curriculum documentation, as a set of skills to be learnt rather than as a lived, situated social practice? In this context, where does the use of video games as narrative artefacts fit in? Is it necessary to adopt an alternative understanding of literacy before we can understand the value of video games as narratives?

3.3.18. The assumptions and ethics of play

We heard from a number of stakeholders, in a range of contexts, who believe that there are benefits to be gained from playing video games. However, participants also indicated that play is ethically complex in that it brings with it certain assumptions about the player, with the idea of *'play as privilege'* highlighting an understanding that games and game mechanics are not necessarily neutral or free from prior-association. If this is the case, what does the use of play in educational contexts assume about participants? How can we be mindful of this, or work to challenge assumptions about players and the nature of play itself? Is it right to work from the assumption that everybody is playful? Is it wrong to assume that people have the time, space or inclination for play? Are there benefits in promoting playful pedagogy for all, or would a more nuanced understandings of the assumptions and ethics of play help us to pursue more nuanced and appropriate directions?

3.3.19. Video games as multiple and complex

Some participants suggested that, even though there are many different genres of video game that offer multiple and distinct opportunities and experiences to players, in terms of research we often talk as if video games are a singular entity. In seeking answers



about video games, is this diversity sometimes forgotten in the rush for conclusive or decisive responses? Would perhaps foregrounding the complexity of video games help us to begin to make different meanings around them, expanding the possibilities for what we are looking for and, indeed, how we seek to research them?

3.3.20. Ethical and meaningful research approaches

Ethically grounded empirical research around the use of games was thought by some participants to be the key to persuading unconvinced stakeholders (be it policy makers, parents or teachers) about the positive aspects of using videogames in educational contexts. However, there was also a concern that it was not possible to isolate the complex benefits of videogames using established research approaches that often pursue instrumental, outcome oriented outcomes. In spite of the clear commitment from many interviewees to pursue an ethically driven, inclusive and socially considerate research approach, some of the responses highlighted that there remain persistent barriers to doing so. Constrained by funding, lack of opportunities for cross- disciplinary collaboration and a continuing institutional and industry driven emphasis on ethics as procedural compliance, there was an implication that policy and research decisions that foreground ethics as a driver do so in spite of, and not because of, wider frameworks. If such ethically grounded, socially responsible and responsive approaches are to be valued more widely in relation to policy then what needs to be done in order to support and *encourage* perspectives that move beyond instrumental, purely outcome oriented concerns?



3.3.21. Just a game? What ethical responsibilities are entailed in game development?

Games are seen by many interviewees as 'culturally relevant', i.e. having a position and cultural significance comparable with cinema, television, literature and the like - perhaps even beyond these ('*with games, you're shaping the story, you're right there in the middle of the story, you are the story, and that's very powerful*'). However, when considering this 'power' and the potential (personal and social) impacts of gaming, many expressed the somewhat dismissive view that 'it's just a game', however compelling the gaming experience. This was especially evident regarding supposed negative impacts like the alleged generation of individual aggressiveness and the perpetuation of social stereotyping.

So the question arises as to what ethical responsibility game developers (and game producers) have toward players and society more generally, and to what degree this might impact on the game development process, whether by informing and enriching it or by impinging upon it and by extension on the developer's freedom of expression. Interestingly, some held that, by definition, serious and applied games (not-just-games, as it were) should be subject to more critical ethical scrutiny; the association of instrumental 'seriousness' and ethical standards is problematic, especially if games generally are held to be 'culturally relevant'. This serious-ethics association also surfaces on the positive side of the equation, however, in that educators consider games involving ethics-grounded decision making as offering considerable affordances for the study of ethics in formal education. A further source of tension is that the interviewed games researchers tended to frame ethics and social responsibility issues very narrowly, mainly considering compliance with Research and Development procedures set out by their institutions. This contrasts sharply with the ethics-related academic research on



games reported in the Gaming Horizons literature review and the EC definition of Responsible Research and Development.

3.3.22. Are serious games the poor relation of entertainment games?

Serious Games (SGs) are digital games developed for purposes additional to entertainment, such as learning and training in different contexts like school education, medical training, and the military. In recent times there has been a steady increase in SG research and development, largely as a result of funding support from the European Commission. The results, however, have not always been encouraging. Strong focus on the 'serious' dimension, coupled with other factors like budget limitations, has often resulted in games with low appeal in terms of graphics and play experience, even though the games themselves may be sound from the educational viewpoint. One of the strategies suggested for overcoming these shortcomings is greater involvement of indie game developers in SG design and development.

This critical view of SGs was expressed by many - although not all - of the stakeholders interviewed by Gaming Horizons, especially educators, developers and players. A number of educators stressed that students don't always see the employment of digital games at school in a positive light, largely because SGs usually fail to meet their very high expectations in terms of immersion and engagement in the game experience when compared with entertainment titles. The educators also pointed out that students can often feel 'cheated' when they realise that the game actually clothes what are essentially learning activities. Some players also voiced similar positions. For their part, the interviewed developers stressed the relatively poor aesthetic and gameplay qualities of SGs. They also cast doubt on their effectiveness and value, given that SGs are mostly designed with specific contexts and age groups in mind. Another concern expressed is



that the conditions imposed by public funding bodies can limit the creative scope afforded to developers.

A less negative view was expressed by those developers who were sceptical about making a direct comparison between entertainment games and SGs, given that they pursue very different objectives. Others believed that, in many cases, commercial off the shelf games (COTS) could effectively serve similar purposes as SGs without explicitly embedding predetermined learning objectives.

So should SGs be treated as the poor relations of commercial games or considered as something quite distinct? To help players achieve learning goals, do games need to be explicitly designed with those ends in mind? What strategies might be employed to improve play experience in SGs?

4. Concluding remarks

Overall, the activities in Task 3.2: Face-to-Face Workshops were completed successfully. Fifteen separate events were held in the UK and Italy, involving a total of 206 attendees representing a wide spectrum of stakeholder groups. The breakdown of attendees' self-declared profiles is as follows:

- Player: 31
- Parent: 19
- Educator / trainee educator: 94
- Researcher: 28
- policy maker: 3
- developer / trainee developer: 20
- other: 8
- profile not specified: 3



The workshop format designed specifically for these workshops proved to be serviceable for the stated task objectives and adaptable to the different contexts and conditions at hand. The workshops generated a sizeable body of data deemed useful for *D3.2 Scenarios for the 'Cultural Expansion' of Games.*

4.1.List of participants

Not all participants could be named, for instance the 70 participants who took part to the unique 'collective' workshop held in Genoa. We wish to thank them all for their time and valuable contribution to the project.

PARTICIPANTS				
Marzia di Francesco	Chiara Eva Catalano	Isabella Livia		
Pablo Achard	Andrea Repetto	Claudio Zuncheddu		
Hannah Gerber	Michela Mortara	Luca Carzaniga		
Mario Calabrese	Eduardo Cordiro	Rossella Biella		
Kertin Liesegany	Lucia Ferlino	Monica Griggi		
Terje Bergli	Flavio Traverso	Giovanni Paolo Improta		
Stefano Brenna	Andrea Ceregini	Giulia Rosso		
Matteo Cantù	Sonia Schenone	Francesca Tagliavacche		
Giulia Misani	Francesca Pozzi	Chiara Brambilla		



Matilde Brambilla	Alberto	Diana Aronni
Antonella Segalerba	Maria Cristina Zumino	Mario Palladino
Silvia Dini	Andrea Barbera	[name witheld]
Laura Freina	Francesca Craviotto	Christian Barducco
Cathy Burnett	Eduardo Burlando	Flavia Macchi
Robert Young	Jonni Clark	Giorgio Ramcilio
Charlie Russell	Kayleigh Smyth	Sabrina Vincenzi
Ynyi Luo	Tyler Denver	Alessia Frulli
Victor Esan	Victoria Cooper	Roberta Meschia
Tom Clement	Matt Hardy	Arcelloni Matteo
Eli Smith	Deri Matthews	Bosica Fabio
Nick Robinson	Mike O'Dea	Bruzzone Elia
Jemma Monkhouse	Claire Garside	Demicheli Benedetta
Dylan Yamada Rice	Anika Easy	Garrone Davide
Hugh Escott	Stephen Smith	Picasso Nicolò
Anna Ozimek	Iain Nicholls	Sobrero Filippo
Viola Nicolucci	Olaoluwa Oludipe	Travali Simone



Zunino Pietro	Laura Freina	Vittorio Midoro
Barbara Leporini	Luca Lusuardi	Pietro Polsinelli
Mauro Tavella	Stefano Cecere	

5. References

Clark, D. B., Tanner-Smith, E. E., & Killingsworth, S. S. (2016). Digital games, design, and learning: A systematic review and meta-analysis.

Gee, J. (1991). Socio-cultural approaches to literacy (literacies). Annual review of applied linguistics, 12, 31-48.

Persico, D., Bailey, C., Buijtenweg, T., Dagnino, F., Earp, J., Haggis, M., Manganello, F., Passarelli, M.; Perrotta, C., Pozzi, F. (2017). Systematic Review and Methodological Framework, *Gaming Horizons Deliverable D2.1*, Retrieved from <u>http://www.gaminghorizons.eu/wp-content/uploads/sites/18/2017/05/D2.1-State-of-the-Art-Literature-review.pdf</u>

Persico, D., Dagnino, F., Earp, J., Manganello, F., Passarelli, Pozzi, F., Haggis, M., Buijtenweg, T., Perrotta, C., Bailey, C. (2017). Report on interviews with experts and informants, *Gaming Horizons Deliverable D2.3*, Retrieved from http://www.gaminghorizons.eu/wp-content/uploads/sites/18/2017/09/D2.3_Interviews-report.pdf

The New London Group (1996) A Pedagogy of Multiliteracies: Designing Social Futures. Harvard Educational Review: April 1996, Vol. 66, No. 1, pp. 60-93.

Street, B. V. (1997). Social literacies. In Encyclopedia of language and education (pp. 133-141). Springer, Dordrecht.