HORIZON 2020 FRAMEWORK PROGRAMME
ICT – 21 -2014
Advanced digital gaming/gamification technologies

ProsocialLearn
Gamification of Prosocial Learning
for Increased Youth Inclusion and Academic Achievement

D7.4
3rd Experimental Planning and Community Management
In the present deliverable we report the work completed and progress made up to M35 of the project, as well as plans towards the project completion with respect to: (a) developing and sustaining an engaged school-based community of ProsocialLearn users, with a primary focus on building a core community of teachers and ambassadors; and (b) planning and facilitating school-based evaluation studies.

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- **Reviewer(s):** Pilar Pérez (ATOS)

### Dissemination level
- ☑ internal
- ☑ public
- ❌ confidential

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<td>15/07/2017</td>
<td>Evangelia Dimaraki (EA)</td>
<td>Table of Contents with bulleted explanations and summaries. Experimental planning section, incorporating input from partners. Abstract. Executive Summary draft</td>
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<td>0.2</td>
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<td>Evangelia Dimaraki (EA)</td>
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<td>Experimental Studies Plan finalized. Teacher community section, updated to incorporate input from partners and include Fall 2017 activities. Final draft available for internal review</td>
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<td>Pilar Pérez (ATOS)</td>
<td>Review of the final version</td>
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## List of Abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>DOW</td>
<td>Description of Work</td>
</tr>
<tr>
<td>PO</td>
<td>Project Officer</td>
</tr>
<tr>
<td>PoT</td>
<td>Path of Trust (game)</td>
</tr>
<tr>
<td>EwF</td>
<td>Emotions with Friends (game)</td>
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**Executive summary**

ProsocialLearn is a project that aims to create a ground-breaking digital gaming genre that will help children to acquire prosocial skills necessary for positive relationships, team working, trustworthiness and emotional intelligence; to catalyze an increase in the number of prosocial digital games that are available for use in European Schools and tailored to their needs; and to develop a European market for prosocial digital games.

By building on a game development and distribution platform for the production of prosocial games that engages children and stimulates technology transfer from traditional game industry to the education sector, ProsocialLearn offers games developers scientifically validated prosocial game elements for development digital games, including functions such as visual sensing, identification of prosocial signals from in-game actions, personalised adaptation of game elements, player profiles, game mechanics and expressive virtual characters.

Through a multi-disciplinary collaboration between industry, researchers, psychologists, pedagogists and teaching professionals, ProsocialLearn addresses complex factors associated with child development and advanced ICT in school curricula. Both short term and longitudinal studies (pilots) conducted at schools across Europe build empirical evidence for the conceptual premise, technological components and game elements to be integrated into the ProsocialLearn platform.

This document is the third of a series of three deliverables that report on the work of T7.2: Experimental Planning and Community Management. The task includes all work necessary to develop and sustain an engaged school-based community of ProsocialLearn users, as well as to plan and facilitate all school-based experiments using the ProsocialLearn platform, technologies and games (including logistics for attaining the necessary human resources, space and other equipment needed), including formative technical, usability and pedagogical experiments, as well as summative longitudinal validation studies of ProsocialLearn in operational conditions.

The present deliverable, reports on work completed and progress made up to M 35 and details the activities planned for the remainder of the project, with an emphasis on the final summative phase of the evaluation and the sustainability of the teacher community. As the relevant planning was revised several times, to be in alignment with the development of the ProsocialLearn Platform and Games, the submission of this deliverable has been delayed to ensure that all parameters assumed in the final plan for the third phase of evaluation studies are in place and that these studies are successfully underway.
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1 Introduction

1.1 Purpose of the document

This document is the third of a series of three deliverables that report on the work of T7.2: Experimental Planning and Community Management. The task includes all work necessary to develop and sustain an engaged school-based community of ProsocialLearn users, as well as to plan and facilitate all school-based experiments using the ProsocialLearn platform, technologies and games (including logistics for attaining the necessary human resources, space and other equipment needed), including formative technical, usability and pedagogical experiments, as well as summative longitudinal validation studies of ProsocialLearn in operational conditions.

The present deliverable, reports on work completed and progress made up to M 35 and details the activities planned for the remainder of the project, with an emphasis on the final summative phase of the evaluation and the sustainability of the teacher community.

1.2 Scope and Audience of the document

The dissemination level of this document is public. The audience for this document includes the consortium partners who will directly or indirectly partake in the school-based experiments of ProsocialLearn technologies and in fostering the ProsocialLearn teacher community. It is also of interest to other researchers who are involved in projects that require deploying and testing innovative technologies in school settings.

Naturally, the ProsocialLearn PO and reviewers will use this deliverable and the ones that preceded it in assessing the progress and completion of the task.

1.3 Structure of the document

The document contains the following sections:

Section 1: Introduction – an introductory section, i.e. this present section, which describes the main purpose of the document

Section 2: Presents the work completed in relation to developing a ProsocialLearn teacher community and outlines the priorities and activities planned from the upcoming period.

Section 3: Presents work and planning related to school-based experiments, specifically, the completion of the 2nd phase of evaluation (small scale studies) and the commencement of the 3rd phase (validation in operating school conditions).

Section 4: This section contains the conclusions of the present report.
2 ProsocialLearn Community Development

The ProsocialLearn Teacher Community aims to engage and support innovative teachers, schools and school administrators across Europe, in order to adopt prosociality as their daily school practice, integrate ProsocialLearn games into the learning process and share best practices, questions, thoughts, ideas and inspiration with colleagues from all around Europe.

In the course of the project, the strategy for building a ProsocialLearn Teacher community, as outlined in D 7.2, was solidified in three main courses of action:

- Engaging directly with teachers and teacher trainees by organizing dedicated ProsocialLearn workshops and exploiting opportunities for training sessions in other events
- Developing and formalizing a network of ProsocialLearn Ambassadors
- Building the Online ProsocialLearn Community Teachers Space

The cultivation of the ProsocialLearn Teacher Community was paced to be in alignment with ProsocialLearn platform and game development progress, making use of the games and material available at each phase. The activities reported in the previous deliverable (D 7.3) focused on teacher training geared towards creating awareness of prosociality concepts and skills, on enlisting community participants and on laying the groundwork for the ProsocialLearn Ambassadors network and Online Teacher Space.

In the activities reported here, while we continued pursuing opportunities to expand the circle of interested teachers and stakeholders, and to recruit new members to ProsocialLearn community, our emphasis shifted to deepening the participants’ engagement, inviting them to elaborate prosociality concepts through design activities, discuss the game-based learning approach of the project and its potential for pedagogical integration and provide their feedback on piloting and schools’ involvement. We also formalized and activated the Ambassadors network and unveiled the ProsocialLearn Community Teachers Space.

Finally, as the project reaches its completion, the activities underway and planned for the final months focus on the sustainability of ProsocialLearn community.

2.1 ProsocialLearn Workshops and Training Events

The following is a summative table of the workshops and other training activities conducted by pedagogical partners from November 2016 through December 2017.

<table>
<thead>
<tr>
<th>#</th>
<th>Workshop</th>
<th>Partner(s)</th>
<th>When and Where</th>
<th>Participants</th>
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<tr>
<td>1</td>
<td>PSL Game Design Workshop</td>
<td>EA</td>
<td>5th November 2016, Workshop in the context of the EDEN Open Classroom Conference</td>
<td>4 teachers, 1 game designer</td>
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<tr>
<td>2</td>
<td>Planning and Pedagogical Integration Workshop</td>
<td>EA</td>
<td>2nd December 2016 Ellinogermaniki Agogi, Pallini, Greece</td>
<td>7 teachers</td>
</tr>
<tr>
<td>3</td>
<td>In-service Training</td>
<td>EUR</td>
<td>27th January-5th December 2017 (15 Workshops)</td>
<td>1185 participants</td>
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</table>
Table 1 – Teacher Workshops and Training Events

As it can be seen in the table above a range of workshops and training events were conducted for engaging directly teachers and teacher trainees with the concepts, tools, games and materials of the ProsocialLearn project, as they became available. Brief descriptions of these workshops are provided below.

**PsL Game Design Workshops:** This workshop combines conceptual learning with hands-on activity. It employs the devise of Game design to engage students in an in-depth exploration of two key questions that encapsulate the ProsocialLearn project: “What is prosociality?” and “What is game-based learning”. The workshop uses design tools that have been produced at various stages of the project namely: the reference table of Prosociality domains, the Game Design Canvas and the Prosocial Game Mechanics Cards (See Appendix 1). After a brief theoretical introduction to prosociality, to set the stage, the three design tools are introduced in succession, leading participants to refine iteratively their game ideas. So far we have conducted four game design workshops involving 67 teachers and trainee teachers. The workshop format with the iterative cycles of creativity and reflection is very appealing to participants and leads to in-depth discussions of the two key questions.
Planning and Pedagogical Integration Workshop: This workshop was conducted with teachers from five schools in the broader metropolitan area of Attica, Greece, which have participated in our previous workshops (see D 7.2 and 7.3) and which have shown a commitment to participate in the evaluation of the games and host PsL pilots in their schools. “The Chase” game was used as a concrete game example around which the pedagogical integration and planning discussion was constructed. Teachers provided feedback on the opportunities and problems that they see with classroom implementation of the game, and discussed its alignment with their curriculum. The workshop was conducted in late autumn 2016 in anticipation of pedagogical pilots in actual classroom conditions during the winter and spring of 2017. Therefore part of it was dedicated in discussing the piloting procedures. (see Appendix 2 for more details ). However, the level of technology readiness led us to the decision to postpone these tests and focus on maintaining the goodwill and commitment of the teachers. We are currently in the process of working with these teachers for the upcoming pilots (see below).

In-service training: In the course of 2017 Europole has organized a series of 15 workshops/ seminars for teachers in-service training on innovative topics related to the real needs of teachers and led by experts, including ProsocialLearn, with an emphasis on the creation of the community of teachers.

Pedagogical Integration Workshop: This workshop introduced the trainees to the idea of prosocial ‘serious games’, invited them to contribute their ideas of lesson plans around a ProsocialLearn (PsL) game, and elicited their feedback about including a prosocial game in lesson planning. "The Chase" game was used as an example game with prosocial focus. Seven trainee teachers from the University of Southampton Primary PGCE programme, took part in the workshop. In the course of the workshop participants contributed ideas about how “The Chase” game could be embedded in different lessons mapped to different parts of the curriculum, including PSHE, ICT, Maths, Science, Music, Arts, Drama English, MFL (Modern Foreign Languages). The trainees also discussed assessment strategies for
prosocial learning (see Appendix 2 for more details). An analysis of these contributions, as evidence of the potential of “The Chase” and other prosocial games to be embedded in classroom practice is reported in D 7.9 2nd Results of small experimental studies.

**Professional Development Workshop, ICT for Inclusion:** A short training on the use of ICT to improve inclusion in the classroom, which references the case of ProsocialLearn, conducted by Europole in Badia Calavena, Italy.

**PSL Hands-On Demonstration Workshop:** This workshop was developed based on the release of the integrated ProsocialLearn service, including the platform and 6 games, in October 2017. It includes a short introduction on prosociality and the ProsocialLearn project. Short descriptions of all the games were provided. A hands-on experience of one or more games (depending on the time available) by logging into the platform through the student interface was performed and a reflective discussion on the experience as an instance of game-based learning using a short form took place. Finally, an explanation of the piloting activities and an invitation to participate was provided. The presentation from this workshop has been elaborated and included in the information package for the Outer Tier pilot studies (see section 2.2 ProsocialLearn Ambassadors, below).

Overall, the concepts, games and tools of the ProsocialLearn project have been engaging to teachers and teacher trainees, who find prosociality a timely concern for school practice.

### 2.2 ProsocialLearn Ambassadors

The diversity of national languages, educational systems and curricula across Europe has led us very early in the project (see D 7.2) to adopt a strategy of organizing the ProsocialLearn community regionally by instituting the role of the ProsocialLearn Ambassador.

In the course of the project, the definition of the ProsocialLearn Ambassador evolved, as it became increasingly clear that prosociality values need to be adopted and supported in a broader sense by national school systems and practitioner organizations, in order to engage teachers with the project and foster sustain interest or learning activities that make use of the ProsocialLearn platform and games during and after the funding period of the project.

Thus we have instituted a two level ambassador structure, comprising **Institutional Ambassadors** at the national or regional level and **Teacher Ambassadors** at the local level, ensuring that ProsocialLearn ambassadors will be teachers, administrators and other stakeholders that are well-positioned and well-respected in their national and local educational communities.

- **Institutional Ambassadors**, can be private or public body institutions. An educational organisation (institution or network) can apply for becoming ambassador through a dedicated form provided by the ProsocialLearn community. Each candidate has to prove related experience in the field, such as previous involvement in educational settings, and the capacity to involve actively an adequate number of schools through an established administrative structure or network. Depending on the case, the institutional ambassadors can be regional ambassadors or national ambassadors. The ProsocialLearn committee which includes designated members from core partners (Atos, EA, Europole) is responsible for the selection.

- **Teacher Ambassadors**, apply through an online form and are selected by their national or regional institutional ambassadors, to achieve good distribution in local areas. Each applicant has to prove experience in the field, history of learning activities and creation of educational
material and participation in relevant events. Ambassadors are selected on a school year basis.

At the end of each school year, both institutional and teacher ambassadors provide an online report. Institutional ambassadors report the number of schools that they have involved in the community, events they have organized, their “ProsocialLearn Week” activities and educational material they have produced. Teacher ambassadors report the number of students they have involved in prosocial learning, events they have participated in and educational material created.

Given that a significant part of the Teachers’ Community strategy is based on Ambassadors’ role, it is important to offer a tangible set of benefits. Benefits that are currently being offered through the ProsocialLearn project include: privileges regarding their access to ProsocialLearn games and materials; networking and mobility opportunities; professional development opportunities; and official certification for the ambassador status.

Currently there are six Institutional ambassadors in the ProsocialLearn project:

- Uşak İl Milli Eğitim Müdürlüğü, Turkey
- Panevezys District Education Centre, Lithuania
- The directorate General of Innovation and Equity in Education of the Consejería de Educación of the Autonomous Government of Castilla y León, Spain
- Friend of Education, Former Yugoslavian Republic of Macedonia
- The Department for Information and In-service Teacher Training of Trakia University, Bulgaria.
- finally, Polo Europeo della Conoscenza acts as an Institutional Ambassador in Italy.

The institutional ambassadors have been active in community building and training for ProsocialLearn, exploiting opportunities such as training sessions and conferences, with the view to diffusing prosociality, informing on the project activities and continuously expanding the circle of people interested in ProsocialLearn activities:

- Panevezys District Education Centre (Lithuania) organized a workshop to introduce the ProsocialLearn project and games to teachers and researchers from the region (15/07/2016, 50 participants)
- Uşak İl Milli Eğitim Müdürlüğü (Turkey) organized a workshop to introduce the ProsocialLearn project and games to teachers and researchers from the Uşak schools and university (29-31/03/2017 15 participants)
- Uşak İl Milli Eğitim Müdürlüğü (Turkey) has introduced ProsocialLearn in a conference about the inclusion of refugee students (15-16/11/2017, ~800 participants)
- A joint training program was undertaken by three Institutional Ambassadors for teachers coming from their school networks in Spain, Turkey and Italy on prosocial tools to improve the inclusion of the refugee students (25-29/09/2017, Spain 50 participants and 15-21/10/2017, Italy 20 participants)

As with all community building activities, scaling up the ambassador network has been contingent upon the maturation of the ProsocialLearn platform and games. Fortunately, through the initiative of Europole, the future scaling up of the ProsocialLearn ambassador network has received funding through an Erasmus+ Cooperation for Innovation and the Exchange of Good Practices project for an additional three years. Several institutional ambassadors of the ProsocialLearn project are partners in
this initiative. We discuss this synergy in more detail in section 2.4 Planning for ProsocialLearn Community Growth and Sustainability, below.

### 2.3 ProsocialLearn Community Teachers Space

The Online ProsocialLearn Community Teachers Space holds an important role in our community strategy and constitutes the central meeting point of ProsocialLearn Teachers and Ambassadors at national and EU level to communicate with each other, exchange experiences related to ProsocialLearn games, share good practices and access educational resources and learning materials about prosocial learning and game-based learning.

The design of the online ProsocialLearn Community Teachers Space went in through several iterations of specifications definition to ensure that the functionalities provided correspond to the evolving strategy of community development. The most notable revision in that respect is related to the functionalities that support the two level ambassador structure (see section 2.2 above). In its final version the Online Teachers Space provides distinct functionalities for the following roles:

- **Teacher** (basic role): can subscribe groups to participate in the discussions; can preview available games.

- **Teacher Ambassador**: has Teacher functionalities; can create groups and threads to facilitate the discussion, moderate the groups and stimulate the participation; has the responsibility of completing the Teacher Ambassador Yearly Report with his/her own activity.

- **Institutional Ambassador**: can create groups and threads to facilitate the discussion, moderate the groups and stimulate the participation; can promote Teachers to Teachers Ambassadors and monitor their activity through the Teachers Ambassadors Yearly Report Summary; has the responsibility of completing the Institutional Ambassador Yearly Report with his/her own activity.

- **Community Manager**: manages users, approves user requests, assigns roles, creates the structure of groups and threads to facilitate the discussion, moderate the groups and stimulate the participation; manages the candidacies of Institutional Ambassadors; has access to Institutional Ambassador Yearly Report Summary and Teachers Ambassador Yearly Report Summary; can add Teachers Ambassadors (if needed) but this is a specific function of Institutional Ambassadors.

Equally important was the interface refinement, which resulted in a very lean design that is easy to understand and inviting to navigate creating a welcoming, attractive, simple and action-driven user experience for teachers and ambassadors.
In the final phase of the project our focus is on the more rapid growth of the ProsocialLearn community, more active engagement of the participants and, more importantly on the sustainability of the ProsocialLearn community after the funding period of the project.
As discussed in D 7.3, the technological maturity of the project has been the critical factor for both scaling up and for deepening of the community through more substantial work. During the Fall of 2017, we have reached the requisite level of technological maturity in the project, that will allow us to accelerate community building, namely:

- the delivery and translation of six games, together with sample learning materials
- the integration of the game in the ProsocialLearn platform
- the refinement of the functionalities and interface provided by the platform for the teachers
- the delivery of the final version of the online ProsocialLearn Community Teachers Space

Therefore, several of the activities can be realized within the final months of the project, including activities envisioned in D 7.3, for broadening and deepening the ProsocialLearn community of teachers:

- **Participatory learning design workshops**: with the full range of the games now available, the project pedagogical partners and the ProsocialLearn ambassadors can now run value added workshops for the teachers involving them in testing all available games and designing learning units for the games of their choice to fit them in their and support the teaching of prosocial skills at the most creative manner. These will also be opportunities for teachers to share ideals and develop joint projects and more sustained collaborations around prosocial values. The experience and material from pedagogical integration workshops in the previous phase will be elaborated to develop a polished workshop format that can be easily replicated in various locations.

- **“Prosociality Week”**: a celebratory intensive event to welcome schools into the ProsocialLearn Community, that will involve workshops, hands on activities and teacher training on prosocial framework and design of prosocial learning scenarios. Along with their students they would organize various activities (e.g. theater performances, painting exhibitions, concerts, etc.) based on the scheme of prosocial skills with the view to expanding and strengthening prosocial community of interest. A “Prosociality Week” is planned by Europole in January and will be possible to replicate by ProsocialLearn Institutional Ambassadors in other countries.

- **eTwinning**: eTwinning is an established platform for staff (teachers, head teachers, librarians, etc.), working in a EU school, to communicate, collaborate, develop projects, share and, in short, feel and be part of the learning community in Europe. Dovetailing with eTwinning is a sensible route for the ProsocialLearn community to grow. Ellinogermaniki Agogi (EA) has already registered ProsocialLearn project to the national eTwinning project and will set up collaboration proposals based on the ProsocialLearn platform and games for the upcoming year. Other partners and ProsocialLearn institutional and teacher ambassadors will be involved in encouraging their teachers, to register ProsocialLearn project in eTwinning platform, link up with other teachers and participate in ProsocialLearn collaborations.

- **Online Content in the ProsocialLearn Community Teachers Space**: teachers’ commitment to the online ProsocialLearn Community Teachers space on a long term basis, depends on the assets they are going to enjoy. A concentrated effort is being made by the pedagogical partners in the project to seed the community space with content of value to the teachers. Materials from workshops, piloting activities and other events will be refined and repurposed for uploading, game designers will upload learning materials associated with the games and the group structure

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1 For more info you may visit eTwinning web site available at [https://www.etwinning.net](https://www.etwinning.net)
of the community space will be enriched with game-specific groups. Of particular importance are highlights and stories of community successes (e.g., the implementation of prosocial digital games for the mitigation of social exclusion phenomena). Ultimately, the online content should grow through the contributions of the community participants themselves. The online space should function as a virtual meeting point of teachers, where they can share relevant educational resources, topics of discussion and relate their experience from ProsocialLearn game-based learning. Our effort in the final months of the project will be to seed the online community space with enough content to make it worthwhile to teachers to engage and contribute in the ProsocialLearn Community Teachers Space.

- **Test school as a sandbox in the platform:** we are currently exploring the possibility of setting up a test school as a “sandbox” space through the ProsocialLearn Platform for participants of the ProsocialLearn community to experiment with the available games and functionalities, in preparation to using ProsocialLearn in their classroom, or as part of professional development activities and events. This will build on the practice of having a test school for testing and training purposes during the current piloting phase (see below). There are however more complex logistics to consider for scaling up the setup at the community level in a way that would allow participants to experiment both with the role of the teacher and with the role of students. A viable solution might to setup up each Institutional Ambassador as a test school, and allow them to provide teacher accounts to their Teacher Ambassadors. Such a scheme would provide Ambassadors with privileged access to ProsocialLearn games during and after the funding period of the project and enable them to deploy them flexibly for community building and training purposes.

The community development efforts will be greatly facilitated by providing a more long term perspective to institutional ambassadors, teacher ambassadors and teachers who are early adopters. Ensuring access to the ProsocialLearn Platform, Games and ProsocialLearn Community Teachers Space after the funding period of the project, as well as the access rights of community members are issues currently under consideration in the ProsocialLearn Exploitation plan.

To improve the prospects of the teachers’ community, Europole submitted successfully an Erasmus+ Cooperation for Innovation and the Exchange of Good Practices project under the Strategic Partnership for the Development of Innovation action. The project, titled “ProSocial Values”, involves the first Prosocial Learn Ambassadors as partners and lasts 3 years. It aims at engaging schools, teachers, administrators and pupils in the creation of a community for the spreading of prosociality values in the local society. The teachers will be trained to use the prosocial games in their lessons and the training material will be available online so that the project partners will organise seminars and workshop to involve other schools or associations among their networks, reaching an European-wide level. “ProSocial Values”, which runs through August 2020 will foster the adoption of prosocial games in the teaching activities, keep the online ProsocialLearn Community Teachers Space alive with discussions and extend it with new teacher-generated educational content. It will also maintain the ProsocialLearn ambassador structure. The “ProSocial Values” project is an important achievement for the sustainability of the ProsocialLearn Teacher Community and represents the culmination of the strong community building efforts throughout the ProsocialLearn project.
3 School-based Experimental Studies

3.1 Small-Scale Experimental Studies

The Small Scale experimental studies (phase 1 and 2 of the evaluation, see D 7.2) have been completed. The following is a summative table of all the small-studies that have been conducted during the ProsocialLearn project. As it can be seen in this table, we have conducted 14 small scale studies involving 453 students and 36 teachers in four project countries (Greece, Italy, Spain, UK).

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<th>Technical Partner(s)</th>
<th>Evaluation Phase</th>
<th>When/Where</th>
<th>~# of Players</th>
<th>Testing ‘Kit’/Game</th>
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<td>CERTH, EA</td>
<td>prelim</td>
<td>9th June 2015, Greece</td>
<td>18 pupils</td>
<td>Path of Trust (two-player)</td>
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<td></td>
<td>Concept validation, Game usability and experience</td>
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<td>CERTH</td>
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<td>17th &amp; 21st June 2015, Greece</td>
<td>8 pupils</td>
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<td>3</td>
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<td>5</td>
<td>Gameplay experience with respect to the engagement factor</td>
<td>CERTH</td>
<td>first</td>
<td>21st December 2015, Greece</td>
<td>18 pupils</td>
<td>Path of Trust (Single Player Xmas Edition)</td>
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<tr>
<td>6</td>
<td>Expressive Virtual Characters</td>
<td>KTH EUR</td>
<td>first</td>
<td>1st April 2016, FYROM</td>
<td>31 teachers</td>
<td>Emotions with Friends</td>
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<tr>
<td>7</td>
<td>Voice interaction and collaborative</td>
<td>ITINNOV</td>
<td>first</td>
<td>5th-6th April 2016, Italy</td>
<td>49 pupils</td>
<td>The Chase</td>
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<td>No.</td>
<td>Task Description</td>
<td>Collaborators</td>
<td>Operator</td>
<td>Date/Location</td>
<td>Participants</td>
<td>Game Name and Version</td>
</tr>
<tr>
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<tr>
<td>8</td>
<td>Voice analysis module</td>
<td>ATOS, ITINNOV, PG</td>
<td>first</td>
<td>1st May 2016, Spain</td>
<td>24 pupils</td>
<td>Kitty King’s Candy Quest</td>
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<tr>
<td></td>
<td>Video feature acquisition module</td>
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<td>Secure game-platform Communication</td>
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<td></td>
<td>Concept validation, Game usability and experience</td>
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<tr>
<td>9</td>
<td>Engagement algorithm</td>
<td>CERTH</td>
<td>first</td>
<td>18th May 2016, Greece</td>
<td>20 pupils</td>
<td>Path of Trust (Single Player and Light version)</td>
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<td>10</td>
<td>Engagement algorithm</td>
<td>CERTH</td>
<td>first</td>
<td>14th-15th June 2016, Greece</td>
<td>72 pupils</td>
<td>Path of Trust (Single Player and Light version)</td>
</tr>
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<td>11</td>
<td>Off-line and On-line adaptation algorithms, engagement algorithm</td>
<td>CERTH-EA</td>
<td>second</td>
<td>19th-22nd December 2016, Greece</td>
<td>20 pupils</td>
<td>Path of Trust (two-player with adaptation)</td>
</tr>
<tr>
<td>12</td>
<td>Usability, Acceptability, Pedagogical Integration</td>
<td>Soton, ITINNOV</td>
<td>second</td>
<td>13th December 2016 – 25th January 2017 – 1st February 2017, UK</td>
<td>22 pupils</td>
<td>The Chase</td>
</tr>
<tr>
<td>13</td>
<td>Usability, Acceptability, Pedagogical Integration</td>
<td>Soton-KTH</td>
<td>second</td>
<td>18th–24th January 2017, UK</td>
<td>20 pupils</td>
<td>Emotions with Friends (EwF)</td>
</tr>
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<td>14</td>
<td>Off-line and On-line</td>
<td>CERTH-EA</td>
<td>second</td>
<td>4th–7th April</td>
<td>148</td>
<td>Path of Trust</td>
</tr>
</tbody>
</table>
adaptation, engagement algorithm, corrective feedback 2017, Greece pupils (two-player with adaptation)

Table 2 – Full List of Small Scale Experiments

The preliminary and first phase of small-scale studies (studies 1-10 in the above table) were reported in D7.2 and 7.3. In the next section we give a brief description of the second phase.

3.1.1 Phase 2 Small-Scale Experimental Studies

As described in D 7.3, for the second evaluation phase we planned a number of formative studies with end-users in three areas of interest:

- Technical tests for the refinement of ProsocialLearn modules
- Usability and acceptability
- Pedagogical integration of ProsocialLearn prototype games

Specifically, the following small-scale experiments carried out within the framework of the second evaluation phase:

- Two technical experiments, with an updated version of the “Path of Trust” (PoT) game that supports offline and online adaptation. The first was conducted in a Greek private primary school on 19-22 December 2016, involving 20 pupils. The second was conducted in a public primary school in Thessaloniki, Greece during 4-7 April 2017, involving 148 students. Game session recordings provided data for the evaluation of offline and online adaptation algorithms, engagement and variations of corrective feedback. End-user feedback on the game premise and various game elements was also collected.

- Two pedagogical pilots involving students in one mainstream primary school and one specialist school in the area of Southampton UK. The first was conducted using “Emotions with Friends” (EwF) game and involved a total of 20 pupils and 3 teachers. The second used “The Chase” game, and involved a total of 22 pupils and 2 teachers. The objective of these studies was to evaluate the usability and acceptability of the game for children and for teachers, and to gain examples from teachers about how prosocial games can be incorporated into their lessons. A third pedagogical pilot using “The Chase” game, had been planned in Greece, but was cancelled for technical reasons, because the scheduling coincided with the migration of “The Chase” game to the ProsocialLearn platform.

Overall, 2\textsuperscript{nd} phase pilots in Greece and the UK involved 210 pupils. The studies were conducted in the classroom, in controlled conditions by the researchers, with teachers in supporting and observing roles. A more detailed description of the studies and their outcomes can be found in D 7.9. The studies were conducted using as vehicles three of the initial experimental games: “Path of Trust”, a game about trust and cooperation; “The Chase”, a game about cooperative strategy; and, “Emotions with Friends”, a game about the expression and interpretation of emotions and social behaviours. (All three games are described in more detail in D 7.3). The end-user input has confirmed that the teachers see pedagogical potential in all three games, and the students both enjoyed the games and understood the prosociality concepts underlying each game’s premise.
As we foresaw in D 7.3, challenges did arise in the alignment between the technical progress in the project and cycle of school activity. Thus, delays in technological readiness, which were associated with legitimate difficulties in coordinating the outcomes of several technical tasks, brought us beyond the available window for phase 2 pedagogical pilots of the new demonstrator games as well as for QoS and QoE evaluation of the ProsocialLearn platform prior to the final evaluation phase.

Compensating for these challenges, the pedagogical integration workshops described above were complementary to pilots with respect to addressing questions of pedagogical potential and curriculum fit from the point of view of the teachers. As we will see below, the plan for the 3rd phase of the experimental studies has been revised to incorporate pedagogical integration questions for the new games.

3.2 Validation in operating school conditions (Phase 3 Studies)

The 3rd phase of studies involves the comprehensive empirical validation of the complete ProsocialLearn approach, including the platform, the games and the services provided, through longitudinal studies, implementation in a larger distribution of schools and use in real operational conditions.

The evaluation methodology for the 3rd phase of studies, which was originally outlined in D2.5 has been updated and elaborated in order to reflect conceptual and design changes in the project approach as well as the revised schedule for delivering the ProsocialLearn platform and games. The evaluation methodology, reported in D7.10, was based on the estimates of the General Assembly meeting in Athens (June 2017), which placed the integrated delivery of the ProsocialLearn Platform with 6 games at the end of September 2017. This estimate together with the extension of the project provided a tight but meaningful window (October 2017-January 2018) for the summative empirical validation of the complete ProsocialLearn solution. Ethics clearance and necessary permissions have been acquired in accordance to institutional an local regulations in each country.

The approach adopted in D 7.10 emphasized:

- built-in flexibility to mitigate the risk associated with unforeseen delays in technology delivery and to accommodate the different pragmatic constraints of schools, by proposing three alternative research designs with their respective trade-offs
- the inclusion of pedagogical questions about the newly available ProsocialLearn games, together with the original summative questions about the benefits of the ProsocialLearn integrated solution on children’s prosocial skills: specifically the data collection during these pilots includes questions of game appeal and prosocial awareness from the point of view of the pupils, as well as questions of pedagogical potential and curriculum fit from the point of view of the teachers.

The planning of the studies follows a two tier model in order to balance breath with depth in the data that can be collected and analyzed within the project timeframe and resources:

- The inner tier provides the depth, comprising implementation in small number of classrooms, in the UK, Greece and Italy, over a prolonged period, allowing for intensive data collection that includes: experimental data re improvement of prosocial skills, researcher observations of classroom use, children and teachers responses about their experience of prosocial games, as well as feedback from the teachers about pedagogic value and curriculum integration
The outer tier provides the breadth, comprising implementation in larger distribution of schools, in several countries, in real operational conditions under the sole responsibility of the classroom teacher and with less intensive data collection: the teacher will choose one or more games to use within learning activities and record their own and their pupils experience in a concise feedback forms, to be used as data in conjunction with data gathered directly through the ProsocialLearn platform.

The present deliverable has been delayed to ensure that all parameters assumed in the final plan for the third phase of evaluation studies are in place. Indeed, at the time of writing there are inner tier longitudinal studies in process in three project countries, as reported next.

### 3.2.1 Intensive Longitudinal Evaluation (Inner Tier Validation)

The first tier of the summative comprehensive validation comprises sustained involvement with schools over an extensive period for in-depth studies of ProsocialLearn activities in classroom conditions. In these studies, ProsocialLearn games are used in the classroom, integrated in regular classroom practice over several weeks with the teacher in charge but with the researchers present.

The research methodology for inner tier studies was elaborated in D7.10, where three methodological options were developed to provide the educational partners with the flexibility to accommodate the timeline of technical delivery and their local conditions.

Indeed, we have been able to commence these in-depth studies in three project countries (Greece, Italy and UK) in mid-November 2017. We anticipate the classroom implementation to be completed in the first week of February 2018 at the latest, involving approx. 300 pupils and 12 teachers.

This timeframe allows us to implement a 8 week minimum longitudinal research design option (see D7.10, Design 2), which is summarized in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Assess 1 (week 1)</th>
<th>2-3 Weeks</th>
<th>Assess 2 (week 4)</th>
<th>2-3 Weeks</th>
<th>Assess 3 (Week 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group or Class 1</strong></td>
<td>Strengths and Difficulties Questionnaire (SDQ)</td>
<td>Digital games</td>
<td>SDQ</td>
<td>Sociometrics</td>
<td>Self-perception</td>
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<tr>
<td></td>
<td>Sociometrics</td>
<td>Self-perception</td>
<td>Business as usual</td>
<td>SDQ</td>
<td>Sociometrics</td>
</tr>
<tr>
<td><strong>Group or Class 2</strong></td>
<td>SDQ</td>
<td>Business as usual</td>
<td>SDQ</td>
<td>Sociometrics</td>
<td>Self-perception</td>
</tr>
<tr>
<td></td>
<td>Sociometrics</td>
<td>Self-perception</td>
<td>Digital games</td>
<td>SDQ</td>
<td>Sociometrics</td>
</tr>
<tr>
<td></td>
<td>Self-perception</td>
<td>Usability qu’aire</td>
<td>Usability qu’aire</td>
<td>Self-perception</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 – Outline of the 8 weeks minimum longitudinal design
As it can be seen in the table, the pupils in each participating classroom engage in ProsocialLearn game-based activities for one or two periods a week over several weeks. Concurrently, teachers and students complete at specific intervals a set of repeated assessments measures related to prosociality. During the study, researchers observe the classroom activity to record student responses to their game-based experience. At the end of their game-based activity, both teachers and students will complete a user experience scale and questionnaire. Teachers will also be interviewed to elicit pedagogical feedback. The research instruments to be used can be found in the Appendix of D 7.10.

It is anticipated that different schools in different countries will use this design with some variation in the deployment of the full set of assessment measures, depending on the real-time available and other local restrictions and constraints.

The planning and preparation for the inner tier pilot was critical to its success, because the shortening of the evaluation period created a very tight timeline for inducting the participating teachers and conducting the studies. In addition, we hadn’t had the chance to pilot the same version of the platform and the games during the 2nd phase, before scaling up. The technical and pedagogical teams of the project worked together to mitigate the risks involved, through planning and preparation activities from June 2017 through the beginning of the pilots in November 2017, that occurred simultaneously with the technical work of finalizing the game production and platform integration. Specifically:

- both the technical and the pedagogical teams enacted an agreed upon procedure with specific benchmarks for monitoring technology readiness: at each benchmark point we revised the pilot plan taking into account research requirements, technology readiness and school constraints and we triggered accordingly the further preparation activities below
- the pedagogical teams renewed contacts with schools and secured commitment of participating in the intensive longitudinal pilot
- the pedagogical teams worked with the administrators, teachers and technical staff of the schools to create the conditions for the efficient conduct of the trials: to find appropriate curriculum match for the ProsocialLearn games, to curve time in the school schedule and to commit the necessary school resources
- the platform provider (ATOS), set up accounts for participating schools as well as additional ‘sandbox’ accounts for testing and training prior to implementation
- the pedagogical teams in collaboration with participating schools conducted two rounds of acceptability testing for the platform and the games using the school infrastructure: these tests provided the technical teams with actionable feedback and were also used to decide how the ProsocialLearn platform and games would be deployed in the respective schools during the pilots to ensure that the ProsocialLearn games and platform can be evaluated in real school conditions, with respect to technical infrastructure and network policies
- based on the decisions made in the above steps, with respect to classroom setup, game choice and curriculum integration the pedagogical teams prepared supporting materials including a summary and schedule for classroom activities and data collection for the teaches, lesson plans and student workbooks (adapting the material provided by game designers), consent forms and an information summary for the parents
- finally, the pedagogical teams held induction and planning meetings with the participating teachers, where they had a chance to become conversant with the game of choice and the platform, develop an understanding of underlying prosociality concepts, review and finalize the lesson plans and student booklets, agree on the schedule and discuss any questions or concerns about the learning activity or the research procedure.
There are currently six games that are being integrated into the platform (see Appendix 4). In the course of the above preparatory process, we have agreed on an approach of selecting a common game for implementing an intensive study of 8-week trials that can be comparable across the three countries. Taking into account research requirements, technology readiness and school constraints (e.g. network and computer capacity) we opted for the game “Laika, on the trail of the Golden Bone”. The game has been integrated seamlessly with the platform, has lower requirements in terms of network capacity compared to the other games, and therefore is usable in schools with varied technical infrastructure. The other five games will be included in the extensive outer tier trial, which will begin in January 2018, as described below.

Finally, given the level of commitment required by the schools for an 8 week study and the tight timeframe for planning and execution, we have engaged schools with which the pedagogical teams in Greece, Italy and the UK already have strong collaborative ties and can work in close proximity. The more expansive outer tier set of studies with provide a breadth of perspective to complement and validate the conclusions of these in-depth studies, as discussed below.

### 3.2.2 Extensive Implementation (OuterTier Validation)

The outer tier validation complements the in-depth longitudinal studies, by implementation in a larger distribution of schools and use in real operational conditions with minimal support from the ProsocialLearn partners, albeit with less intensive data collection.

Teachers will select from the available games on the ProsocialLearn platform one or more that they want to use within learning activities. The will use the game or games of their choice at least once
and return feedback forms with their own and their students experience and feedback in simple forms. Of course they will be free to use the games for more sessions if they want, beyond the needs of the pilot.

To support the local contact persons and the ProsocialLearn ambassadors in organizing the OuterTier Pilots, we have prepared a folder that contains the following documents:

- **Power Point presentation:** This presentation is addressed to teachers, explaining the ProsocialLearn Project, providing descriptions of the games and informing them on what to expect from participation in the pilots.
- **List of available games:** for each game there is a short description of the gameplay, and an explanation of the prosocial skills that it fosters (see appendix 4)
- **Children’s Feedback Form:** This is a simple visual one page form for the students to record their impressions of the game. Each student will fill out an individual form after playing the game. If more than one games are played, one form will be filled for each game. (see appendix 5)
- **Teachers’ Feedback Form:** This is a two page form for the teachers. The first page asks them to fill in some brief information and answer two open-ended questions about their context of use and their impressions of the game. The second page is a short usability survey, asking them how much they agree with some statements about the game. If the game is played many times the form will be filled at the end of the overall activity. If more than one games are played, one form will be filled for each game. (see appendix 5)
- **Information Sheet for Teachers:** This document explains to teachers what the ProsocialLearn games are about and what they can expect of their own and their students participation to the study. This document can be used as a reference when talking with teachers about the project.
- **Information Sheet for Parents:** This document explains to parents what the ProsocialLearn games are about and what they can expect of their child’s participation to the study. This document will be used in conjunction with the Consent Form for Parents, to ensure informed consent.
- **Information Sheet for Children:** This document explains in very simple language to the students what the ProsocialLearn games are about and what they can expect of their participation to the study.
- **Consent Form for Parents:** This is a sample of a simple form that can be used for obtaining informed consent from parents or guardians for the participation of their children in the study. This form can be revised in accordance to the established national or institutional ethical rules and guidelines.
- **Assent Form for Children** This is a sample of a simple form that can be used for obtaining the assent of children for their participation in the study, if this is an established practice in the host institution.
- **Consent Form for Teachers:** This is a sample of a simple form that can be used for obtaining informed consent from teachers participating in the study, if this is an established practice in the host institution.
- **READ ME FIRST:** This is a document that provides instructions for using the other documents in the folder

The most important outstanding challenges of the Outer Tier studies is in the logistics of coordinating and supporting remotely trials in schools distributed among several countries. The most critical tasks are:
setting up the school accounts through the ProsocialLearn Platform: local contact persons (ProsocialLearn ambassadors and Project Partners) will contact ATOS as the platform provider with a list of schools that need to be setup. An additional school will be set up as a ‘sandbox’ where interested teachers can try out the games and the platform functionalities before using them in the classroom.

setting up a mechanism for collecting and processing the feedback forms from each trial site: the additional complication of multiple local languages makes it necessary for the process to be coordinated through a local contact person, whether a project partner or an ambassador

We expect the outer tier pilots to take place during January 2018. We are currently in the process of recruiting interested teachers through participants in our community building activities. Currently ATOS in Spain, Ellinogermaniki Agogi in Greece and Europole in Italy have mobilized in this direction. Europole is also managing the network of ProsocialLearn ambassadors and is developing an initiative entitled “Prosociality Week” within which ambassadors in different countries will host prosociality events and piloting activities.

In conjunction with the Outer Tier school-based studies, we will conduct teacher focus groups, as a vehicle for casting an even wider net for data collection. Participants will be engaged in testing the full set of ProsocialLearn games and provide feedback about their appeal, learning value and suitability for classroom use. These focus groups will be combined with teacher workshops, ProsocialLearn ambassador meetings and community building events. For that purpose we have prepared a Games Rating Form (appendix 5) that can be used by participants to capture meaningful feedback.

Within the model of the outer tier studies, we can also accommodate some requests we have been receiving from other researchers, or from independent users (such as families) to try out the ProsocialLearn games.

Outer tier studies will simulate more closely real life conditions of use, with the wider distribution of schools, more varied users and minimal support. Combined with the intensive longitudinal trials of the inner tier, they will serve the overall goal of the third phase of the evaluation, which is to establish the pedagogical soundness and the learning effectiveness of the ProsocialLearn solution.
4 Conclusions

As community development and piloting activities were contingent upon the maturation of the ProsocialLearn integrated solution, the plans and activities described in this deliverable were revised several times. Community development and experimental planning has been evolving with the overall progress of the project and adjusting accordingly. This evolution can be traced through the three iterations of this deliverable (D7.2-7.4).

This was expected from the beginning, because community development and experimental planning tasks build upon the outcomes of all other WPs of the project. The conceptual formulation of the prosociality domain and game elements (WP2), the development of games and back-end modules and finally their integration in the ProsocialLearn platform (WP3-6), all have provided the inputs for community building activities and experimental studies, which in turn informed that work with essential end-user feedback.

The challenges introduced by the complexity of putting together multiple pedagogical, technological and administrative pieces while coordinating with the education systems of different countries have been managed successfully throughout the project, because planning has rested on three pillars:

- a clear overall strategy both for community development and for evaluation that allowed to manage every contingency from a high-level perspective of priorities
- a good flow of information and constructive communication among the technical and pedagogical partners
- a combination of rigor and flexibility in planning, that enabled us to both contain and accommodate delays

At the time of writing, all the pieces of this complex and ambitious project are locking into place. Since October 2017, when the difficult technical task of games and platform integration has reached a level of maturity that enables us to deploy them in operational school conditions all community development and piloting activities have been accelerated. We expect that this progress will gather more speed during the final months of the project as we continue to expand our network of schools, teachers and students and that we will also be able to deepen their engagement in designing and carrying out ProsocialLearn learning activities in operational school conditions.
Appendix 1 - PSL Game Design Slides

Promoting prosocial skills through games
A game design workshop

What is prosociality

- Prosocial practices focus on the common good and the well-being of the community, rather than narrow self-interest
- Prosocial practices include: altruism, cooperation, care for others, expression of sympathy, alleviating suffering, gratitude
- A prosocial response is a choice that does not depend on expected outcomes for the individual (positive, neutral or negative)
- Helping, sharing, consoling and cooperating, are values in themselves, independent of rewards or reciprocation

Prosocial ≠ Antisocial
Core Domains of Prosociality: Empathy and Compassion

**Empathy**
How can I learn to identify, relate, and respond appropriately to the emotions and circumstances of others?

**Compassion**
How can I avoid being too judgmental and recognize mistakes and failures as a common human experience shared by all?
How can I express my compassion to others and to act in a way that will alleviate their difficulties?
How can I learn to receive the compassion that others express towards me when I face difficulties?
How can I learn to be compassionate to myself when I fail or make mistakes? (self-compassion)

Core Domains of Prosociality: Trust and Cooperation

**Trust**
How do I know whom to trust and when to trust?
How do I become worthy of trust?

**Cooperation**
How do I develop shared goals and plans with others?
How do I coordinate to pursue difficult tasks that are personally and communally beneficial?
Core Domains of Prosociality: Fairness and Generosity

**Fairness**
- How do I share fairly in assigning effort and distributing goods?
- How do I react fairly in situations of inequality, whether I am in a favorable or unfavorable position?
- How do I advocate for a fair solution?

**Generosity**
- Can I learn to share my valuable possessions with others?
- Can I offer gifts or help, without expecting something in return?
- Can I support the success of others without any selfish reason?
- How can I learn to receive the generosity of others?

Let’s design a Prosocial Learning Game

the game will be about a pair of core domains

design tools:
- reference table of the core domains
- game design canvas
- game mechanics cards
some game fundamentals to consider

- what kind of game (board game, physical game, digital game etc.)
- number and roles of players
- duration and repetition

- start condition - context of action
- assignment - mission
- end condition
- rules
Experimental Planning and Community Management

INSPIRATION
What games and mechanics can inspire your design?

AUDIENCE
Who is the audience?

Assessment
How will you assess whether the game reached its learning goals?

Games
What do players do?

Goals
How do players win?

Skill challenge
How challenging are the goals?

Feedback
How does the game provide feedback?

Enjoyment
What is enjoyable about the game?

Generalising
How do players transfer game learning into real-life contexts?

RESOURCES
At what time and pace can the game be played with what resources and materials?
Appendix 2 - Planning and Integration Workshop Details (EA)

Workshop Structure

(i) Brief review of the PSL conceptual framework of prosocial domains and skills (participants were already familiar with it from previous workshops)

(ii) Presentation of a mapping between prosocial skills and the objectives of the primary school curriculum, by subject, based on an analysis conducted by the project team.

(iii) Planning discussion about the prospective pilot sessions: overview of goals and procedures (time commitments, learning activity, data collection, ); ethics; technical issues and practical details.

(iv) Pedagogical Integration exercise, based on “The Chase”: curriculum integration, lesson planning, classroom management & pedagogical considerations.

(v) Feedback and discussion.

Input on pedagogical integration for “The Chase” Game

- **The duration of the game play:** it will take more than 15’ to play a round. How long it takes will depend on the conditions (see below)

- **Possible Conditions for playing:**
  - **silent game followed by discussion.** The game will take less time if the students are told that they cannot talk during the game but only discuss it afterwards, or if they are seated in a way that does not encourage talk, as in a computer lab where they are not close to their partners .
  - **talking while playing** will take longer, but it is arguably more interesting , though it does present the danger of students getting into a fight
  - **deliberating before every move and make a collective decision:** this will take the longest, but it is a way to foster listening and also to engage in critical and strategic thinking in the context of collaboration. It can also be done with few computers and a projector in a classroom setting.

- **Possible Group Set-Ups:**
  - **dyads instead of individuals,** will enable games of 8 instead of 4. This will mean that running 3-4 games simultaneously is enough to accommodate any regular sized class.
  - **a setup where the whole class is divided in 4 teams** is also possible, playing with 4 computers and a projector.
Appendix 3 - Pedagogical Integration Workshop Details  (Soton)

Workshop Structure

(i) Brief introduction of the colleagues consisting the PSL project team from Southampton Education School and IT-Innovation Centre,

(ii) Brief overview of the PSL project - highlighting the importance of emotional well-being, prosociality and how it can be supported through digital games (PSL skills’ links with Personal, Social, and Health Education (PSHE)),

(iii) Short description of the aims and objectives of the session - brief overview of The Chase, which was used as an example game with prosocial focus,

(iv) The Chase was played by two members of the PSL team and one of the trainees, while all the attendees were able to view the game’s progress via the projector,

(v) The trainees were split into two groups (a group of four and a group of three) and were asked to think about how they could embed a prosocial game in a lesson, using The Chase as an example, and share these ideas with their peers

(vi) Participants’ feedback was provided and a brief discussion followed based on their shared ideas,

(vii) End of session (consent forms signed and returned).

Following the session, the trainees were emailed to ask whether they’d be willing to flesh out any of their ideas a bit further using their familiar lesson plan template.
Appendix 4 - List of Final ProsocialLearn Games

(This list is taken from the material designed for the Outer Tier Phase 3 Studies)

1. ‘Lost In Space’

‘Lost In Space’ game was developed to support children’s skills for cooperation (e.g. asking for help, helping others, setting goals and obtaining them or solving a problem as a group), friendship (e.g. joining a playgroup or sharing your things with others) and feelings (i.e. dealing with stress and anxiety).

![Figure 4 – ‘Lost In Space’: welcome screen with logo and an instance of a puzzle](image)

In the game three players can participate, where each of them undertakes the role of a robot. Specifically, three robots – an engineer, a researcher and a navigator – must find their way back home, through the vastness of space. The puzzle tactics game play requires focus, memory and attention skills, as well as planning and strategic thinking as a team. Each player has his unique puzzle to solve. Each player gets a set of tokens (helper hints). They can use it to help themselves solve the puzzle, help a teammate solve a puzzle or save them for the final mission to help the team complete the achievement. The token economy defines the strategy and cooperation of the team.

The duration of the game is approximately 20-25 minutes and has replay value as each of the team mates can cycle through the 3 class types, experience higher difficulty puzzles or collectively attempt to solve a new achievement each time.

2. ‘Dog Park Laika’

‘Dog Park Laika’ is a game developed to support children’s skills for cooperation (e.g. helping others and learning about others), friendship (e.g. learning about others, sharing about oneself and joining in a conversation) and feelings (understanding social cues).
Figure 5 – “Dog Park Laika”: Snapshots of the park environment, characters and dialog

The game consists of 4 four episodes and although is single-player, teachers can generate discussion in the classroom after the completion of each episode. According to the game’s story, a dog detective tries to find out what happened to the Golden Bone, the traveling trophy awarded to the dog park “Laika” by the “Jolly Dog Association”, which has gone missing. The dog detective visits the residents of the park – dogs with different personalities, behaviours, and relationships – interviews them, gets to know them, understands their feelings, relations, and motives, and approaches them accordingly to gain their trust and receive valuable and trustworthy clues for solving the case. The gameplay helps children to understand the value of empathizing with others, cultivating friendships through sympathy, understanding and support, and become aware of people differing in character, personal needs and desires and expressing them in different ways.

The duration of each episode is approximately 10-15 minutes.

3. ‘Seasons Soup’

‘Seasons Soup’ is a game developed to support children’s skills for cooperation (e.g. setting and achieving goals, following directions, paying attention, taking turns or trusting others), friendship (e.g. using nice talk, being an active listener or not interrupting others) and feelings (i.e. dealing with stress and anxiety).

Figure 6 – ‘Seasons Soup’: Overview of the maze
It is a two player game in which the 1st player gives instructions to the 2nd player who in turn asks further questions and instructions, and vice versa. The objective of the game is to move the Bunny character (Player 1) through the maze to the other side and escape together with the Bird character (Player 2). The Bird sees the maze from the air and will be able to guide the Bunny that moves on the ground. Both need to avoid dangers, and need to communicate with each other during the game in order to win together. In the middle of the game the roles are reversed: the Bunny player takes the role of the Bird and vice versa.

The game’s duration is approximately 10 minutes, where each child has the opportunity to play the game as the Bunny for 5 minutes and as the Bird for another five minutes.

4. ‘Tower Together’

‘Tower Together’ is a game that incorporates skills for cooperation (e.g. solving a problem as a group, paying attention to others, following directions, working as a team or staying on task), friendship (e.g. sharing with others, being an active listener or respecting others) and feelings (e.g. dealing with stress, self-control or identifying feelings and emotions).

The game tasks players with building towers out of tetromino blocks that are subject to physics. It requires at least two players and can currently have up to eight players. Players take control of blocks from a shared supply and are able to move and rotate them in 90 degree increments. The blocks may then be locked into place when happy with their positioning, at which point physics takes over, with these blocks now able to rotate freely and fall if not properly supported. If players manage to reach a checkpoint, they are provided with an additional supply of blocks and a new, higher checkpoint to reach. In order to achieve their goal of reaching this line, players need to communicate on which blocks to use and where they should be locked into place. The game ends once players fail to reach a checkpoint before running out of blocks, at which point the players are told the final height of the tower they have created.

The duration of the game is approximately 15 minutes.

5. ‘Pushy Paddles’

The ‘Pushy Paddles’ game incorporates skills for cooperation (e.g. solving a problem as a group, paying attention to others, asking for help, helping others, taking turns or being a good sport), friendship (not interrupting others or being an active listener) and feelings (dealing with boredom, dealing with stress or self-control).
Figure 8 – ‘Pushy Paddles’: welcome screen with logo and an overview of game environment

The game requires 3 players, each with their own role, while they can select which avatar they play as from a number of different avatars.

One player, the “Floater” must ride the platform from the bridge to the chest at the end of the water without hitting any obstacles in their path. This is achieved with the help of the other 2 players, the “Paddlers”, who must use their paddles to steer the floater around the obstacles and to the chest. Players will need to communicate in order to get to the goal at the end of the level, the 2 paddlers should be standing on opposite banks in order to steer the floater efficiently past the obstacles and onto the island with the chest. Once a player reaches the chest, that player will be given a series of rewards that he must distribute amongst all players. The game will then reset, increase in difficulty and change the roles of the players in a round robin style. Players will work together to try to complete as many levels as possible, each round will have a time limit in which players must try to reach the goal. If the goal is not reached in that time, the game is lost and players must start from the first round again.

The duration of the game varies from 15 to 45 minutes, depending on the levels the players manage to complete.

6. The Chase

The Chase game fosters skills for cooperation (e.g. solving a problem as a group, asking for help, helping others, taking turns, trusting others). The premise of the game reinforces the value of cooperating to fulfill a common goal and helping others for everyone’s benefit.

Figure 9 – “The Chase”: Snapshots of the game environment
The Chase is a turn-based, dice-based, board-like game, for 2 to four players. Players start with 25 small balloons each and try both to save as many balloons as they can and to reach together the end of the course, where they can board a big air balloon and fly away. To succeed they need to avoid the Giggle Monster, who takes five balloons every time he catches someone. The players take turns rolling two wheels that dictate how many moves they have and how many the Giggle Monster has. The dice gives moves either to the players, the monster or both. Players can help each other from being caught, by offering their turn to another player at a cost of 1 balloon. Players must think of the others as well as themselves and strategize their moves together as a team in order to win.

The duration of the game is approximately 15-20 minutes.
Appendix 5 - Feedback forms for the Outer Tier Studies

Teacher’s Form

PLEASE FILL IN A DIFFERENT FORM FOR EACH PROSOCIAL DIGITAL GAME THE CHILDREN PLAYED

Please fill in the following information.

Your Role: ______________________________________________________

Year Group you teach: ____________________________________________

Name of prosocial digital game played: ______________________________

Date of game play: ________________________________________________

Duration of game play: ____________________________________________

Number of children involved in the game: _____________________________

Please provide some comments for the following questions:

1. What do you think about the game, in terms of the purpose it wants to fulfil (e.g. taking turns, asking for help and helping others, trusting others, solving a problem as a group or dealing with stress and anxiety)?

   Please circle the number that best reflects your response:

2. Was the game embedded in your lesson (e.g. as part of a larger classroom scenario or as the basis for further group activities surrounding e.g. cooperation taking turns, asking for help and helping others or solving a problem as a group)? If so, please describe the process you followed.

Here are some statements. Please tell us how much you agree with them based on your experience with the game.

Please circle the number that best reflects your response:
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Not at all</th>
<th></th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I think that I would like to use this game frequently.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>I think the game was simple</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I think the game was easy to use</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>I think that I am able to use this game without the support of a technical person</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>I found the various functions in the game were well integrated</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>I think there was coherence in this game</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>I imagine that most people would learn to use this game very quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>I found the game very friendly to use</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>I felt very confident using the game</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>I could get going with this game without being necessary to learn a lot of things in advance</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Children in my class would find the game interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>The concept of the game is important for children</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>The general idea behind the game and its purpose makes sense to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>Such a game would be useful as a basis for discussions in my classroom</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>Such a game would be useful for developing skills for collaboration between children</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>The game would integrate nicely into our other classroom activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*Thank you for your feedback!*
Children’s Feedback Form

GAME TITLE:

What do you think?

1. How much fun is the game?
   Draw a line on the fun thermometer.

2. Would you want to play the game again?
   Tick off a circle.
   - Yes
   - Maybe
   - No

3. What do you think of the game?
   Tick off what is true.
   - beautiful
   - simple
   - surprising
   - bad
   - childish
   - great
   - fun
   - confusing
   - ugly
   - difficult
   - boring
   - exciting

4. I'm a
   - girl
   - boy
   and ___ years old.

Thank you!
### Games Rating Form

Please give us your opinion on the games you have seen today:

#### Dog Park Laika

<table>
<thead>
<tr>
<th></th>
<th>Absolutely</th>
<th>Not At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoyed this game</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My students would enjoy this game</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This game has learning value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would use this game in my classroom</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Potential (+):**

---

**Challenges (-):**

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**Curriculum Connections:**

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#### Tower Together

<table>
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**Potential (+):**

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**Challenges (-):**

---
Curriculum Connections:

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### Pushy Paddles

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**Potential (+):**

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**Challenges (-):**

---

Curriculum Connections:
Lost in Space

<table>
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<tr>
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</table>

Potential (+):

Challenges (-):

Curriculum Connections:

The Chase

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</table>

Potential (+):

Challenges (-):

Curriculum Connections:
# Season’s Soup

<table>
<thead>
<tr>
<th></th>
<th>absolutely</th>
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**Potential (+):**

**Challenges (-):**

**Curriculum Connections:**