The value of establishing a community of teachers for the gamification of prosocial learning

Pegadogical, social and developmental aspects of a Teachers' Community Space experience

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Abstract— **In today's multicultural world, where the meeting of different cultures breeds suspicion and division, the school has the responsibility to provide adequate support so that every person develop an open and aware identity. The community is a space of identity developed through the idea and the perception of being part of a group of persons that believe in the same objectives and ideals. The development of a community of teachers within a project focused on the gamification of prosocial learning for increased youth inclusion and academic achievement, allows us to analyse in depth the social and the pedagogical aspects that lies underneath the structure of a community. The teachers are the core elements and they will be guided by the project partners through the different steps of the community building: the sharing of the values, then the practices and finally the actions, in a path that will grant the fruitful growth of such community.**

Keywords— *community of teachers, community of practice, prosociality, gaming, social skills, prosocial values*

I. THE PROSOCIAL VALUE OF AN EDUCATIONAL COMMUNITY

As an educational community [1], the school generates widespread relations of conviviality interwoven with affective and emotional languages promoting the sharing of those values that make feel the members of society as part of a real and alive community. The school should be considered an opportunity for everyone to preserve his own identity and to know each other in an open confrontation.

This responsibility cannot be left solely to teachers, but work together with the whole school and with its social environment [2]. Building a teachers' community in the framework of a project about prosociality will allow us to use and foster these social and pedagogical aspects. The scope of this community is to help schools to learn and develop prosocial values, trustworthiness, emotional intelligence and to recognize the value of understanding other people's needs, so that excluded children, those with low empathy or lack of social skills, appreciate the sense of prosociality and reach higher achievements in their academic field.

A. Organisational Values

A teachers' community also promote a new organizational valueeradicating linguistic, cultural and psychological barriers, opening the educational attitudes and good practices, but furthermore, creating a glue of responsibility and cohesion among the partners of different countries. This communitarian environment has the possibility to enlarge the educational sedimentation from a schooling cooperation to a pedagogical awareness crossing trough countries, local dimensions and at the same time, creating a solid structure of strict cooperation into a global structure.

B. Cooperative Learning

Learning is not only an individual process; the learning dimension of the community plays a significant role as well. In the daily practice the teacher involved in the community, aware of the advantages acquired as member is able to reproduce the same structure and to use collaborative learning within its own class: s/he stimulates the process of creating new knowledge by inviting the students to interact, to solve problems and to produce artefacts (learning by doing).

Moreover the transfer of prosocial values can only take place within the cooperative learning modality since the collaboration and co-construction of knowledge already provide by themselves the capacity for dialogue, respect of other people's thoughts and the capacity of taking responsibility. The group and the ability to interact positively into it with this learning modality plays a key value, but at the same time the individual does not disappear or melt into the group but enriches it with unique contribution.

The ProsocialLearn project funded by the European Union, is creating fun educational games for children to learn social and emotional well-being skills. The project will create a prosocial game development and distribution platform to distribute prosocial digital games from game companies to the educational sector and work with communities of teachers in Europe to evaluate our approach. The adoption by the project of the educational community vision adds as innovative element the playful component in the process. The dynamic

interaction with the game and with the peers increases exponentially the emotional, cognitive and behavioural involvement allowing the information received to settle effectively and positively.

II. PHASES OF THE BUILDING OF A COMMUNITY OF TEACHERS

Communities of teachers are dynamic social structures that require "cultivation" so that they can emerge and grow [3]. Communities have lifecycles and for each phase specific design, facilitation, and support strategies must be conducted to achieve the goals and lead the community into its next stage of development. If the community is successful, over time the energy, commitment to, and visibility of the community will grow until the community becomes institutionalized as a core value-added capability of the sponsoring organization [4].

There are two major challenges associated with building the community of teachers: the diversity of national languages, educational systems and curricula across Europe and the need to engage teachers and ensure the participation of schools before the outcomes of the project are available. To address these challenges, the strategy of the project is to strength the community of values. National communities have been created in several European countries, centred around innovative teachers recruited early in the ProsocialLearn project to serve as prosociality ambassadors and to scale them gradually in successive phases, taking into account the maturation of the technical solution of the project and the corresponding needs for school-based evaluation.

In order to set up a sustainable community to encourage teachers and pupils to learn from others' experiences, share resources, adopt a prosocial learning style, exploit networking and mobility opportunities and involve policy makers and stakeholders, the following phases have been adopted:

- Inquire: Identify the audience, purpose, goals, and vision for the community through a process of exploration and inquiry,

- Design: Define the activities, technologies, group processes, and roles that will support the community's goals.

- Prototype: Pilot the communities with a select group of key stakeholders to gain commitment, test assumptions, refine the strategy, and establish a success story.

- Launch: Roll out the community to a broader audience over a period of time in ways that engage newcomers and deliver immediate benefits.

- Grow: Engage members in collaborative learning and knowledge sharing activities, group projects, and networking events that meet individual, group, and organizational goals while creating an increasing cycle of participation and contribution.

- Sustain: Cultivate and assess the knowledge and "products" created by the community to inform new strategies, goals, activities, roles, technologies, and business models for the future.

A. Development of a Community of Values

The community can rely on the personal attitude of teachers and decision makers, considering the prosocial values as a milestone of a society and a perfect educational strategy to eliminate barriers among students, promote their cooperation, improve the role of the teachers in the society and the real contexts of social harmonization, point the focus on the school as the inclusive environment. The ProsocialLearn project organises open events to raise awareness of the project and enlist interested teachers and schools with more focused events that aim to **train** the teachers as prosociality ambassadors in school communities, **invite** them to share input in the game-based learning approach of the project and, **engage** them in the formative field testing of technical functionalities embedded in the initial prosocial games developed within the project.

B. Development of a Community of Practices

Once founded on certain values, the community can involve more persons in the sharing of practices. Good practices are skills that people have already acquired throughout their experience. The result of this interaction is the creation, sharing and dissemination of knowledge that become more than the sum of the parts of the knowledge possessed by each individual member.

Thanks to the community of practice, the teachers begin to reflect on their activities in a professional context and this enables them to increase their professional competences. Educational strategies related to the ideals are collected and made available through the community. This develops a participatory design that does not delegate to the 'experts': each actor of the community is an expert of his own experience in a constructive and communicative space where can contribute to the growth and development of all.

In this phase the ProsocialLearn project selected the most appropriate community-oriented tools to support the goals of the ProsocialLearn Teachers' Community, so that the members were given the opportunity to discuss, share their opinions on prosocial games and provide their feedback on piloting and schools' involvement. To this end the project facilitated events and activities to exercise the prototype, focusing on achieving short term value added events.

C. Development of a Community of Actions

Another step of a community is when the members start to actively use the practices proposed, adapting them to their reality. Support the creation of a teachers' community of action is one way to make them aware of their role within the school system. The involvement of schools and teachers become even more direct and aims to develop joint activities, parallel and interrelated which will lead to the creation of additional practices. The exchange and the open discussion will strength the community, thanks to the enhancement of the feeling of belonging that the member will have.

In this phase the main concern is the sustainability of the ProsocialLearn Teachers' Community and the finalization of all procedures for its stand-alone presence after the end of the funding period of the project. To this end the project delivers a support infrastructure including documentation and mentoring

of the existing members and the new ones that will be recruited.

D. Further Activities

Additionally the project highly prioritizes: the identification of opportunities for capturing new knowledge related to prosociality, the development of policies for sharing knowledge outside the community (public bodies and decision makers are part of the core of the community of values) and the publication of articles about the community and its projects.

Considering the experimental aspect of the project, building a sustainable prosocial community, provides a pool of schools for conducting both the small-scale experiments and the large scale validation. Therefore, the community building work includes a complete list of the school involved, a survey about their demographics, an ethical clearance and DPA registration.

III. THE STRUCTURE OF A PROSOCIALLEARN TEACHERS' COMMUNITY

In each community there are different types of members depending on the level of involvement with the community. The maximum level of involvement is up to what is called the "core" and we identify it with the members of the community of values. The optimal functioning of a community depends on the presence of key figures that are able to handle the organization of the community, promote the interaction between members and facilitate the circulation of knowledge. Therefore the success or failure of a community is based mainly on this group.

In this case the core of the community is represented by National networks and public bodies able to aggregate teachers and schools. Being able to count on a very large pool of end-members is one of the fundamental requirements to create an effective and durable network: if core members are able to "compensate" to inevitable changes or lacks of the peripheral participants, the community does not suffer variations that could undermine its structure or durability.

It is important to identify what motivates core members to join the community. In this case the public bodies share the will to improve the competences of the teachers, to create a positive exchange of practices to foster the social inclusion and to prevent violent or bullying situations.

A. The Role of the Ambassadors

Besides the national networks and the public bodies, the most active members of the community are recognized as ambassadors. Each person must provide experience on the field, history of learning activities, creation of educational material and participation in relevant events.

Considering that the Community is transnational, the ambassadors are the only viable approach when dealing with such variety of languages, cultures and school systems.

B. Engaging Schools and Teachers

The identity of the community is built by providing schools with tangible tokens of participation in the project such as online badges for their websites or physical banners to display in the schools. The school itself will be established, therefore,

as a living community not because of bureaucratic and formal relations but through personal relationships and lives of all actors who are not only those with the task of educating but also all members of the social body.

We determine different levels of involvement and rewards for different schools and teachers depending on the project capacities and their commitment: from casual community members, to active participants in design and piloting activities, to the ambassadors who support other teachers in their area.

C. Teachers' Space Online

An on-line common space is essential to support the activities and building-up the community strategy. The community space as well as the promoters of such community space should provide clear information about:

- Expectations: Precisedefinition about what is delivered, how the teachers and schools are involved and what is the workload and responsibilities of the roles assumed.

- Added value: the advantages for the participant teachers and schools should be clearly specified including concrete rewards as: access to resources, invitation to events, equipment etc. These forms of rewarding can include certification with recognition in the field of education.

- Involvement degrees: the strategy should include different levels of involvement from basic community members with low-medium level of participation to active participants willing to adopt a role of ambassador and to support and guide other members within the community.

- Foster the sense of belonging: the community provides tokens of participation, online badges and banners to express the community belonging..

From a technical point of view the on line ProsocialLearn Teachers' Space provides:

- Users' profile: including their category and features (teacher role, teachers' ambassador role, institutional ambassador, community manager role and administrator)

- Groups, Threads and Folders: The community manager has the availability to create Groups. The Group is the starting point of the structure. The Group covers a thematic and homogeneous topic. This topic can be sub-divided into Threads. Each Thread can have associated a Folder with related material. Teachers can share their own material, see the others' material and contribute and participate to topics proposed by Teachers ambassadors. Teachers ambassadors will motivate the participation trough the proposition of topics, activities and events. The material that can be uploaded covers not only text but also other formats as photographs, video, presentations etc.

- The community users can also access from the website to a set of prosocial games and related material (guidelines, short summary, skills covered etc.)
- Finally, the users can also apply for becoming teachers ambassador through the website

In short the teachers' space online support the community objectives, structure and scope.

IV. PROSOCIAL VALUES COMMUNITY

Currently the process of community building of the ProsocialLearn project is at the phase of the creation of a community of values. We received the commitment of six European stakeholders interested in the development of the prosocial values within their society. They will have the role of Institutional Ambassadors. These bodies are Regional or National Directorate of Education (Turkey, Spain), in-service teachers' training centres (Lithuania) and universities (Bulgaria), National network of schools (Italy) and National association of teachers (FYORM). All this stakeholders can involve a total of about 1900 schools and local organisations.

One of the main teachers' community in Europe is Scientix, born in 2009 as an initiative of the European Commission. It promotes and supports an Europe-wide collaboration among STEM (science, technology, engineering and maths) teachers, education researchers, policy-makers and professionals. Initially Scientix collected STEM education projects and their results, then it expanded the community thanks to the National Contact Points and the Scientix Ambassadors (teachers that promote and inform about it to their peers). Scientix is coordinated by European Schoolnet, the network of 31 European Ministries of Education, based in Brussels that use its links to help schools make effective use of educational technologies and implement projects.

The ProsocialLear Teachers Community takes inspiration form this two networks and at the same time aims at a wider involvement of the teachers in the decision-making process (horizontal structure), a deeper pedagogical background and a continuous dialogue among teachers and institutions.

V. THE IMPACT OF THE COMMUNITY IN THE LIFE OF ITS MEMBERS AND IN THE SOCIETY

The society is going through a period of transition and transformation: precariousness, insecurity, individualism, selfishness, culture of entertainment, consumerism result in the crisis of the traditional places of education and educational models: families and schools. The community is a space that goes beyond the political and social events that characterise our time, it is not just a space to share activities but a place of identity that has to be developed through the idea that the members are part of a group of people who believe in the same ideals and values and that they come from different countries, crossing the imposed limits (of cultures and geographical boundaries). The community is open to listen, know how to grow up respecting the dignity of every human being and his rights of citizenship, actively offering a real possibility for everyone to express themselves, to be themselves, to learn how to contact with others and to develop, according to their own needs and their own characteristics, their own potential [5].

The proposed concept of community relies on an open, dynamic and inclusive community based on conviviality, cooperation and the recognition of differences. It is not the communitarianism of a closed, static, intolerant and based on mutual distrust community. The person remains at the core of the educational process: everyone learns to feel responsible for each other while respecting differences. The participation and positive interaction becomes a real stage cultural literacy that allows participant to understand and become aware: it is a relational literacy.

A. Community of Learners and Future Citizens

Resuming the pedagogical discourse of Rousseau and J. Dewey, it is necessary to train future citizens to be open and able to think by themselves, since this represents a guarantee for democracy and the rights of citizenship. It is therefore necessary to educate future generations within a prosocial model of exchange where there is no longer the idea of better or worse but a joining model not homologating in which the differences enhance the members.

The teachers participating in the community are able to establish with their students a relationship based on openness to the other, the value of their ideas and the willingness to accept their views [6]. The teacher will play the important role of initiator of this process stimulating the pupils, then later (when they will be entered in view of the pro-sociality) s/he can take a step back and become a facilitator of relations between peers.

The creation within the schools of a community that promotes prosocial values will indiscriminately reach all pupils, bringing benefits especially to those who suffer from social exclusion or lack of socialization skills. The entire school environment will promote a change that will allow these children to experience new ways of relating to each other. The peer group of children will perform several functions: test case for strengthening new skills, promoting a different attitude, support in difficulty, engine for the testing of prosocial behaviour even outside the school.

The improvement of relationships within the group will be reflected accordingly to the outside of the group class reaching the society.

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