HackforInclusion: An Online Civic Hackathon to Foster Students Protagonism and Improve Media and Information Literacy Competences.

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Abstract

With the objective of reinforcing media literacy and critical thinking among students, Hackforlnclusion - the first Italian online Civic Hackathon promoted as part of the IN-EDU project - has been an opportunity for 98 students and 27 teachers from 4 Italian regions to explore 4 topics of Media and Information Literacy (MIL). Teams have competed at the design and development of awareness-raising and communication campaigns in response to the following challenges: 1) How do we use words online? Being online as capable and creative protagonists to counter hate attacks, 2) Who said that? how to increase awareness of the source of information and recognize fake news & misinformation, 3) What do we say about us online? how to defend our digital identity and the right to privacy, and 4) How do they see us online? How to overturn the use made of bodies and images and stem the offensive and sexist language.

The practice – which overall in Italy, Croatia, Bulgaria and Slovenia has involved over 250 students and 70 teachers – has been innovative under many perspectives. As innovative non-formal learning methodology, it has allowed to engage students online promoting their autonomous learning process under guidance of experienced mentors, as well as called them to reflect on their behaviours online and the sense of being active and responsible citizens within their communities. All the participants, including teachers, tutors and mentors, have strengthened their transversal competences such as critical thinking, team work, public speaking, communication skills and time management.

Keywords: Hackathon, Media Literacy, Information Literacy, Online education, Civic engagement, Critical thinking

1. Introduction

As stated by UNESCO (2016), Socialization is embedded in information and communication and increasingly taking place through technological platforms, media and all forms of learning environments. When taken together and coupled with the incidents of the use of social media by extremist and violent organizations to radicalize and recruit especially young minds, the relevance of MIL to enable citizens to challenge their own beliefs effectively and critically engage in these topics, and thus the integration of MIL in formal, non-formal and informal settings becomes more urgent. In the present times, in which access to online information permeates people's lives, often influencing their choices, opinions, consumption patterns and lifestyles in an often unconscious way, it becomes essential that public institutions and educational ones in particular, offer learning opportunities that enable people to master digital tools and to use critical thinking.

The IN-EDU project - Inclusive communities through media literacy and critical thinking education - funded by the Erasmus+ Programme and implemented by 7 European partners from Italy, Bulgaria, France, Croatia and Slovenia, was developed with the purpose to enhance good practices of media literacy and critical thinking education to prevent social exclusion and fight inequality, through the implementation of an inclusive learning program that combines non-formal training with participatory and community approaches: the IN-EDU Engagement Programme. This paper focuses on the second step of the Programme, being the Civic Hackathon, and specifically reports about the experience of teachers and students participating to the Italian edition "HackforInclusion".

1.1 Media and Information Literacy

Media and information Literacy (MIL) refers to a complex set of competences that are considered nowadays crucial in allowing a full participation of youngsters and adults into democratic life, in a lifelong learning perspective. Different definitions are given at international levels, which however too often only focus on one dimension of the many at stake such as media literacy, digital competences or



information literacy. However, there is general agreement on the importance of growing media and information literate citizens as a way to effectively enhance critical thinking, intercultural dialogue, mutual understanding, active citizenship, as well as to promote human rights, freedom of expression, and counter hate speech, radicalization and extremism. All the activities planned within the IN-EDU framework and the methodological approach adopted have contributed to reinforce MIL in students and teachers.

2. Focus on HackforInclusion

2.1 The Civic Hackathon format

HackforInclusion was the first Italian online civic hackathon and took place on 8-9 January 2021 and was participated by 20 teams from 4 Italian regions - Umbria, Tuscany, Puglia, Sicily. The teams consisted of a maximum of 5 members, and have been accompanied by teachers as tutor in the preparation weeks before the event and also supported on the development of their campaigns by expert mentors with competences on digital tools, storytelling and communication.

Specifically, it was an opportunity for 98 students and 27 teachers from 4 Italian regions to explore 4 topics of Media and Information Literacy (MIL). The teams were asked to design and develop awareness and communication campaigns in response to the following challenges: 1) How do we use words online? Being online as capable and creative protagonists to counter hate attacks, 2) Who said that? how to raise awareness of the source of information and recognize false news and disinformation, 3) What do we say about us online? how to defend our digital identity and the right to privacy, and 4) how do they see us online? How to overturn the use made of bodies and images and stem offensive and sexist language?

Each team had to imagine a specific campaign within the theme chosen by identifying the target group(s), the channels and media to be used, the core messages and the activities required to make the beneficiaries more aware. The majority of the campaigns have been targeted to girls and boys from 13 to 25 years and had foreseen a comprehensive online presence.

It represented an innovative learning practice from multiple points of view. First of all, in fact, for the first time in our country a hackathon - or a hacking marathon in which experts from different fields work together with the aim of developing an IT product - is organized for the purpose of social inclusion through media literacy and education to critical thinking. The activity has proposed the problem solving approach that has characterized the hackathons since the first experiences in the late 90s but radically transforming the problem to be faced for the participating teams. Furthermore, due to the covid-19 pandemic, the entire event has been redesigned to be carried out online without altering its main characteristics or the expected impact on the beneficiaries. The entire HackforInclusion was carried out using the Zoom platform, with plenary sessions and break-out rooms reserved exclusively for individual teams and managed by a technical director.

The inclusive approach has also been declined with reference to gender differences. A total of 40 boys and 58 girls have participated: this is a particularly important figure, considering that usually in the digital sphere, video games, and the presence on the Internet, girls are always fewer than boys.

The organisers of the Civic Hackathon have always worked to engage students throughout the whole process of planning and implementation, starting from the design of the communication strategy of the event. Indeed, groups of secondary-level students have worked with the organizers in defining the promotional activities in the social media targeting schools and peers, have participated in teams to the competition itself, have been invited to be a member of the Jury of the contest (5 students determining 1 vote) and have been consulted afterward to carry out a qualitative assessment of the learning experience.

2.2 Feedback from the participants

Collected both through questionnaires and through a follow-up focus group, the general feedback on the HackforInclusion practice coming from students, tutors and mentors was very positive.

More specifically, on the part of students and tutors the non-formal learning environment of the Hackathons was highly appreciated: it appeared clear to students that their participation was not only a fun activity, but an actual occasion to develop and strengthen competences that they are now able to use in the school context as well as in their daily life. Both students and tutors recognised the improvement in their media and information skills, where many admitted not to be fully aware of the issues confronted, prior to their involvement in the Hackathons. Transversal skills were also strengthened, and several students highlighted their new competences related to team work – and especially remote team work. Finally, students' and tutors' feedback highlighted that, despite the



International Conference

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Hackathons helped them to improve their digital skills, this field of competences was already quite developed.

Many students and a few tutors underlined that they found it challenging to understand how to design a campaign and how to pitch their project, but the overall experience was very positive. This element makes us understand that the HackforInclusion practice represents a great opportunity for developing fundamental skills and competences related to critical thinking, creativity, project design and public speaking. Indeed, despite such competences are key for navigating University and today labour market, it appears clear that nowadays learning contexts need to offer more opportunities for developing/ strengthening them.

Finally, concerning the feedback from mentors, they highlighted various elements of innovation, of which the most important concern: the approach of promoting learning through a healthy competition; communication through the digital dimension of what it is like to be a teenager nowadays; connection of the challenges with real community and societal problems.

The mentors also identified several strengths of the practice, among which: the fact that it represents a real opportunity for widening the learning opportunities offered by the Italian school system; the involvement of experts for supporting the students in their work; integrated and goal-oriented staff.

2.3 Lessons Learnt

The HackforInclusion practice was effective according to more perspectives. Firstly, it invited students to get involved in a different form of online school, by, on the one hand, adopting autonomously a variety of digital tools, and, on the other, by applying a project based pedagogy. Indeed, the students were asked to design a campaign, but no limits were set in terms of methodologies and working tools. Secondly, it raised the awareness among school students on their online behaviours and to actively hinder fake news, disinformation, hate speech, etc. Students also learnt to become responsible citizens at community and societal level, as they are now called to implement the winning campaigns as direct coordinators for the teams of each students.

Thirdly, the participation to the Hackathon was an effective opportunity for the students to develop/ strengthen transversal competences such as critical thinking, team work, public speaking, communication and time management.

Finally, HackforInclusion allowed students and teachers to experience their relationship in a different way, giving concrete space to mutual and intergenerational learning, especially concerning the digital tools, with which teachers feel less familiar.

3. Conclusions

In the introduction of the UNESCO MILID Yearbook 2016, it is emphasised that a rights-based approach to media and information literacy and to sustainable development — including countering hate, radicalization and violent extremism - can play a crucial role in perceptions of the "other" by encouraging reporting, research and analysis as well as the design and implementation of development interventions that are objective, evidence-based, inclusive, reliable, ethical and accurate, and by encouraging individuals to take sound actions based on their rights and the rights of others.

As called for, HackforInclusion has encouraged a variety of stakeholders and individuals to take action. Indeed, the non-formal learning approach combined with the competition (project-based methodology) has proven to be highly appreciated by both teachers and students and has initiated a virtuous process of competence improvement and citizenship in all the participants. Follow-up actions have been reported to the organisers not only by the winning teams but also from others, showing that the education experience of HackforInclusion has empowered students' protagonism and...hacktivism.

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