

Cyber Safe Generation: Digital education by design

# Scientific papers and articles in academic and professional journals

A RESOURCE FOR YOUNG PEOPLE, TEACHERS AND PARENTS







# **Project Overview**

CyGen is a co-funded Erasmus+ Key Action 2 strategic Partnership. The project engaged directly with children (aged 8-13), teachers and parents in four European countries (United Kingdom, Belgium, Denmark and Greece) to:

- 1. Explore the digital opportunities and challenges as these are experienced by these groups;
- 2. Develop a novel participatory design methodology and methods in order to work collaboratively with children and young people;
- 3. Co-design a culturally, linguistically and age appropriate open-access multimedia education programme, a 'web app' with children in the four member states. Designed by children, for children, the web app recognises and builds on children and young people's knowledge and experience to support their safe, informed use of the Internet;
- 4. Produce online open-access guidance encompassing lesson plans and pedagogical resources to support teachers and educators in primary and secondary schools in diverse European education settings to support children's online safety;

The CyGen project was created to understand the opportunities and challenges faced by children when they go online. The project worked with children, young people, teachers, parents and academics to map these opportunities and challenges and, with children, to design educational resources to support children's safety online. The project was unique in that children helped the project team to develop and evaluate an evidence-based digital educational programme to promote young peoples' online citizenship and safety across the four participating European countries (UK, Denmark, Belgium and Greece).

The outputs created for this project are:

- IO1: Scoping and needs analysis
- IO2: Participatory Design Model
- IO3: Design workshops
- IO4: Co-designed digital education programme
- IO5: Evaluation

Further information regarding the evidence-based digital educational programme can be viewed via our website <a href="http://cygen.eu/resources/">http://cygen.eu/resources/</a>





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# **Overview**

This intellectual output are papers and digital articles that were published and/or in preparation in academic and professional journals to maximize dissemination within partner countries, the European community and internationally. Publications enabled the project team to share key findings from each of the project phases with the academic and education community to maximize impact and sustainability.

Five identified writing themes for the project	
1.	Children's perspectives on healthy online behaviours, the challenges and how they navigate and manage these in their everyday and digital lives (O1 Co-produced needs analysis and O3 Design workshops)
2.	Designing with children and young people: Lessons for researchers and teachers (O2 Participatory Design Model and O3 Design workshops)
3.	Co-designed digital education packages: What works? (O5: Evaluation)
4.	Methodological insights from working with children in school settings (05: Evaluation)
5.	Accessible 'think' pieces' will be produced and translated into all partner languages were appropriate. These will address policy makers, NGOs, politicians and the wider public.





### **Published articles**

An article about the CyGen project participatory design model and how the project has develop a digital educational package, which can be used with children in schools. *Børn er meddesignere af digitalt undervisningsmateriale om online adfærd (Children as codesigners of an digital teaching resource on children's online behavior*). Pilgaard, Michal & Frydendahl, Jette Aabo, June 2019, In :Pædagogisk extrakt.

https://www.forskningsdatabasen.dk/en/catalog/2453486629

This paper presents the participatory design model developed in the research and development Erasmus Plus project CYGEN. The aim of CyGen is to develop a digital educational package, which can be used by teachers and academics in schools and other settings to support children's online involvement and the presence of their voice and perspectives in design processes for educational and community-based digital projects. *Co-creating Educational Package together with Children on the topic of Safe Internet Behavior and good Practice Online*. Heidi Stensman Pugh, Michal Pilgaard & Jette Aabo Frydendahl 2018. <a href="https://www.ucviden.dk/portal/da/publications/cocreating-educational-package-together-with-children-on-the-topic-of-safe-internet-behavior-and-good-practice-online(479f8262-0a29-4930-8a9a-c1d4fae350a8).html</a>

An article is about children's ability to navigate the web and judge whether chatrooms and image sharing are dangerous which should be developed in interaction with adults. It is not sufficient to set up few simple advices or rules for online behaviour. It requires a trusting room for continuously dialogue between children and adults. "Ja, ja.. vi følger da mormor-reglen" (Yeah, yeah.. of course, we obey the grandmother rule") Pugh, Heidi Stensman and Hansen, Majken Svane. IN: Pædagogisk Extrakt. nr. June 2019. https://www.ucviden.dk/portal/en/publications/ja-ja-vi-foelger-damormorreglen(4d2309c8-04bf-490f-83f7-5e6e6574ae1e).html

An article is about the importance on how the professionals in school communicate on the new digital platforms in relation to digital parenting and co-operation with parents in general. To support children's digital safety and literacy the article also point out that it is necessary that the relationship between home and school is built on dialogue and information sharing in an open but trustful environment. "You've got mail" når forældresamarbejdet er kropsløst og digital. Pugh, Heidi Stensman og Hansen, Majken Svane. IN: Pædagogisk Extrakt. nr. June 2019.

https://www.ucviden.dk/portal/en/publications/youve-got-mail--naar-





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A Blog by Early Career Researcher in the beginning stages of a PhD examining younger children's understandings of online safety, the networking opportunities this visit offered were exciting. Networking as an Early Career Researcher – CyGen. <a href="http://blogs.hud.ac.uk/subject-areas/hudcres/2017/10/04/networking-ecr/">http://blogs.hud.ac.uk/subject-areas/hudcres/2017/10/04/networking-ecr/</a>





# **Book chapter**

Lomax, H. (2020) 'Consuming images: Ethics and integrity in visual social research', in Iphofen, R. (ed.) <u>Handbook of Research Ethics and Scientific Integrity</u>, Springer Nature (accepted in press).

The use of images in social research can be traced to the mid-twentieth century sociological inquiry of Howard Becker, John Collier and Pierre Bourdieu and the anthropological film and photography of Margaret Mead and Gregory Bateson who sought to 'understand culture by making it visible' (Harper: 2012:11). More recently, rapid developments in digital technology have extended the range of visual methodologies and the diversity of visual material available for research. Contemporary visual methods encompass digital storytelling, participatory video and collaborative cellphilms, reflecting an increasingly dynamic visual culture and offering new possibilities for researchers to work collaboratively with research participants to illuminate social issues. However, alongside the potential of these new visual technologies have arisen a number of ethical challenges, not least concerning the ownership of research (Gilchrest et. al., 2015); the privacy of research participants (lphofen, 2011) and 'worries' about how subjects may be visually represented in images which may have an enduring digital afterlife (Fink and Lomax, 2016; Nutbrown, 2010).

It is the ethical consequences emerging from this shifting digital landscape that are the focus of this chapter. Rapid transformations in the production and consumption of images are challenging conventional ethical principles of anonymity and confidentiality as unachievable, inappropriate and, in some cases undesirable (Sweetman, 2009; Wood, 2015). This is not least because of the visual's inherent capacity to render subjects visible and indeed, research participants' own wishes to be acknowledged in research (Wiles et. al. 2008; Lomax, 2015). The democratisation of research and commitment of a growing body of social researchers to collaborative research practice is troubling issues of ownership and decision-making about what gets seen and shared in imagebased research (Mitchell, 2017); while the potential of the digitized image to circulate beyond the immediate temporal and spatial confines of research (Van Dijck, 2008) calls in to question the appropriateness of fixed and formalised frameworks which assume that ethical dilemmas can be resolved purely by the application of abstract rules (Miller et. al., 2012). Instead, this chapter elaborates a situational care-based ethics based on principles of respect, attentiveness and responsibility (Clark, 2013; Miller et. al, 2012; Wiles et al., 2008). In considering ethical decision-making as a form of 'responsible





knowing' (Tronto, 1993), care-based ethics shift the focus from ethics as a set of predetermined principles to one in which the potential harms and benefits must be considered within the context of each unique research relationship foregrounded by an understanding of the wider social and political environment in which the research is located (Lomax, 2015; Miller et. al, 2012). In elaborating this approach, the chapter considers how the visual researcher might engage with ethical concerns which emerge in practice, frequently beyond the scope of research ethics boards (Stirling and Yamada-Rice, 2015). Examples from contemporary research are drawn upon to illustrate how researchers might navigate the specific challenges engendered by visual research in which the boundaries, for example about what could and should be revealed in the production and dissemination of research, are being rapidly redrawn.





# **Professional papers delivered**

Lomax, H, (2019 **Invited speaker**) 'Letting go: Ethics and analytics in visual research', Making the Visual: Creating, Thinking, Distributing, British Sociological Association Visual Sociology Study Group, Bluecoat Museum & University of Liverpool, 23rd October. The aim of this workshop is to explore different ways of analysing visual material and the ethical challenges that are engendered in its dissemination. Participants are requested to bring a personal, research or published image of interest. Using these and other images, the workshop will apply different interpretative strategies in order to consider what these may offer sociological understandings. The workshop will also consider the ethical challenges inherent in the dissemination of visual material in the context of a digital landscape in which researchers can quickly loose control of images and their interpretation. Using participants' images and those from the presenter's research, the workshop will consider the role of fixed and formalised ethical frameworks alongside situational care-based ethics as a means of disseminating ethically.

Lomax, H. (2019 **Keynote**) New ways of seeing: Analysing digital visual data, SRA Summer Event - New ways of seeing: Social research in a digital, visual age - London, 3<sup>rd</sup> July.

This presentation will consider the analytic challenges of working with digital visual data. It will draw on diverse sources including 'found' images (personal photographs on social media platforms and images in online news media) as well as examples of participant generated digital content made as part of collaborative arts based research. In considering both 'found' and 'made' images in this way, my aim is to shift analytic attention from a narrow focus on the image to include a consideration of the wider cultural contexts in which images are created, circulated and consumed. In so doing, my intention is to map out an analytic approach which considers the 'new' digital landscape and its affordances for how people, including research participants, communicate with images and how we, as social researchers, understand this.

Lomax, H. (2019 **Keynote**) 'Seeing childhood? Re-framing 'the child' in visual research', Association of Visual Pedagogies 4th international conference: *Ocular becoming in dangerous times: The politics of 'seeing'*, RMIT, Melbourne (video summary available <a href="here">here</a>)





In this keynote lecture I will focus on ways of seeing childhood, examining genres of visual culture in which children are routinely represented (Personal photography, institutional imagery, public broadcasting and images in online news media) in order to consider what social relations are produced and reproduced by the circulation of images in these digital spaces. I will consider the implications of these 'ways of seeing' for researchers seeking to research with children using visual methods such as digital photography and film, methods which are often predicated on giving children 'voice'. In bringing together these two research foci - visual culture and visual methods - my aim is to re-frame the child in visual research, paying analytic attention to the production of children's voice, including the ways in which children themselves attend to, reproduce and resist wider visual discourses. In so doing, I suggest a shift away from the concept of an authentic children's voice, considering instead how researchers might capture the complexity of children's meaning making practices, and how these are constituted through the sociality (and materiality) of the research encounter and what this means for children's agency and for understandings of children and childhood.

Lomax, H and Fink, J. (2019) 'Understanding Online Images: Content, Context and Circulation as Analytic Foci.' In: Pauwels, L. and Mannay, D (eds.) Sage Handbook of Visual Methods. London: Sage (2nd edition).





# **Future articles**

### UK

- 1. A national publication aimed at teachers and school leaders on how technologies can be used to support children's learning about internet safety.
- 2. A paper exploring how creative methods including digital technologies framed within a multi-modal participatory approach support research and pedagogy through creative child-led learning.

### **Belgium**

1. A European paper on digital design.

### **Denmark**

1. Plans for 2/3 national articles (in Danish) aimed at a professional audience (teachers / pedagogues) re themes 1 and 3 above.

### **Greece**

- 1. A short 'think piece' in an Education magazine regarding the impact of the project on school pedagogy and child-centred learning, including how the creative methodology has impacted on children's 'voice' in the project and in school. The impact of the CyGen Methodology on School Pedagogy. Ecomedia 2020 (October) Conference proceedings under the title of: "Creativity and Innovation by means of ICT & Media in Education"
- 2. A conference submission in progress: <a href="https://journal.eepek.gr">https://journal.eepek.gr</a> The CyGen codesigned methodology in child-centered learning

The Erasmus+ KA2 program titled "Cyber Safe Generation/CyGen" brought together young students, teachers, parents and academics who developed a data-driven digital education package to promote the safe participation of children online in various European countries. The project, led by experts in digital technologies in education, has partnered with educational institutions in order to develop, implement and evaluate a collective educational material aimed at enhancing children's 'digital well-being' in Europe. The project partners are: University of Northampton and University of Huddersfield (United Kingdom), Department of Computer Science of the University of Leuven, Limburg (Belgium), 2nd Primary School of Kalamata (Greece), University of VIA University College (Denmark). The project focused on a series of design cycles where children, in each partner country, collaborated with the respective research teams. The aim was to develop an online application in which students undertake to provide appropriate solutions to dilemmas





related to the proper use of the Internet. Core research conducted in each country focused on views and experiences of children and teachers by designing, controlling and improving the application. The development of the project model focused on 'design based research' and resulted from participatory design processes of its methodology. At the same time, a design training kit was created, containing lab guides in each partner language as well as tools to support children's interaction and response at all stages of the project. The design methodology tools had already been tested and evaluated by teachers, students and researchers at the Partner Universities.





# The Partnership









