# GLOBAL KIDS ONLINE RESEARCH TOOLKIT

# Procedure for coding and analysis

# Qualitative research toolkit



## Contents

Things to consider	.3
Coding and analysis process	.4
Using the Global Kids Online coding framework	.5

Welcome to the Global Kids Online research toolkit. This coding and analysis guidance outlines the key steps for coding and analysing your data.

Before using this you should consult Getting started with the Global Kids Online research toolkit (www.globalkidsonline.net/tools), which introduces you to the purpose and approach of Global Kids Online, and the Qualitative research guide (www.globalkidsonline.net/qualitative), which explains the range of qualitative resources.

These tools have been developed to enable academics, government, civil society and other actors to carry out reliable and standardised national research with children and their parents on the opportunities, risks and protective factors of children's internet use.

### Things to consider

- Coding is the process of grouping interviewees' responses into categories in a reliable manner to reveal the underlying ideas or themes in the transcribed interviews (the data).
- Coding can be research-led, looking for ideas and themes in the data that can address or answer questions arising from prior research, theory or policy. Alternatively, the researchers can analyse the transcripts without any prior assumptions or previously prepared codes, developing the codes inductively from the data. Often, researchers will mix these approaches, basing some codes on prior knowledge, but remaining open to new insights from the data.
- Whichever approach is adopted, a test coding framework should be tried out on a small

number of transcripts, with the researchers discussing how it works and what it can reveal, to be sure it is clear, easy to use and generates valuable results free from researcher bias as far as possible.

- The coding framework below, developed for Global Kids Online, is recommended, based on pilot research in several countries. However, since the aim of qualitative research is to reflect particularities of the situation, the children's views or the country, researchers should consider how well this fits the data, and whether and how much it should be adapted.
- Before coding, all interviews and focus groups should be carefully transcribed, checked and anonymised (by replacing all names with pseudonyms and removing or changing any details that can be used to identify a particular child). Each transcript should be labelled with the age, gender and other relevant information (e.g., urban/rural) of the children participating. A clear numbering system for transcripts is helpful, and also for lines or segments (conversational turns) within each transcript.
- Ideally, each transcript should be analysed by two trained researchers, thus ensuring reliability of the coding process and findings (another researcher coding the same data would achieve similar results). Each researcher should code independently a minimum of two transcripts from the focus groups and from the individual interviews.
- This reliability of the coding can be achieved by comparing and discussing any differences in the test coding of the two researchers, carefully revising the coding framework in relation to any problems arising. If major revisions are made, both coders should repeat the coding on a new transcript to ensure that the framework is clear and can be applied reliably.
- Once the coding framework is clear to both coders, and all decisions are recorded as instructions in the coding document (so that a third coder can follow the process), the rest of the focus group and interview transcripts can be coded by only one researcher without further

discussion. However, it is important to continue to monitor the reliability of the coding frame throughout the coding and analysis process and to make adjustments when needed.

 Coding can be done with the help of coding software (e.g., NVivo). When this is not available, Microsoft Word can be used for the coding, inserting comments in comment boxes. If none of the above is feasible, the traditional pen-and-paper method for coding can be used.

## Coding and analysis process

 The following coding procedure has been developed, drawing on and developing the work of EU Kids Online, to ensure the reliability of the analysis process and the comparability of the data, as well as to allow the bottom-up interpretation of the data and follow-up crosscountry comparisons.

For further details on the EU Kids Online analysis process, see Livingstone, S. (2014) *Developing social media literacy*, at <u>http://eprints.lse.ac.uk/62129/</u> and Smahel, D. and Wright, M. (2014) *The meaning of online problematic situations for children*, at <u>http://eprints.lse.ac.uk/56972/</u> We suggest a two-step process:

#### (1) Transcript synthesis in English

This process involves creating condensed descriptions of the material in English by summing up relevant chunks of the transcript in short and clear form and labelling them (giving them a heading). The aim is to create a summary of the content (like a detailed contents page) that is accessible to researchers unfamiliar with the original language.

This step is crucial for creating a joint database for cross-country comparisons, but it is not mandatory. However, it is recommended that country partners create transcript syntheses in English, should time and resources allow this.

Both the summary and the label (title of summary) should be as explicit as possible – to be understandable as 'stand alone' extractions (for readers who do not know the language of the original transcript). The summaries can sometimes also cover the question asked by the researcher, when useful.

Below is an illustrative example of Step 1. For clarity, both the transcript and the synthesis are in English.

#### Illustration of Step 1: Transcript synthesis in English

Source: Livingstone, S. (2014) Developing social media literacy, at http://eprints.lse.ac.uk/62129/

Interviewer: Do you think people say more things that are bad about each other because it's easier to do on Facebook?

#### All: Yeah

Girl 1: Because you don't see the person's face, you don't see the person's reaction, so you just... and you're only typing, so....

Girl 2: When you would see them in school anywhere....when it comes face to face, you would feel scared and you would try to avoid the person the whole day, and you would be like... you would be hanging round your friends, acting like it's cas [sic], but inside you're looking at... see the person's there, because you never know that the person can come after you and be like, you did this, so now watch what I'm going to do. Because it's easy... it's not face-to-face, it's like me and R-- again. We're rude to each other so much on Facebook, but then when it comes to face-to-face we have nothing to say. Maybe R-- will have nothing to say to me or I'll have nothing to say to R--, because it's a bit scary to see what will happen and the reaction.

Interviewer: So would you say there's quite a lot of people you know in your age – in your year – making bad comments about each other online?

#### Girl 2: Not that much.

Interviewer: Or is it just a minority thing?

#### Girl 1: Yes.

Girl 3: Sometimes people....in lessons....it's just... they say they're jokes, but some people might take it seriously but they meant it as jokes. But then after, there is some stuff that people might say over something that happened a long time ago. But if it always gets dealt with, it's not like where it comes to the point where it counts as bullying or someone gets hurt. It's just... they're just words. They're just saying it to each other.

**Comment [H1]:** Faceboo k: People are more likely to say bad things about each other online because they do not see the other person's physical reaction

**Comment [H2]:** Faceboo k: Girl 2 and R-- are rude to each other on Facebook, but not face-to-face

**Comment [H3]:** Faceboo k: Only a minority of children say bad things about each other

**Comment [H4]:** School: In lessons children often say things as jokes – even though some might take these serious, it's not really cyberbullying

#### (2) Thematic coding

The second step involves applying the coding framework to the remaining transcripts. Then, perhaps in a spreadsheet or Word document, all the parts of all transcripts can be grouped together that relate to each particular code, ready for interpretation.

The analysis of the qualitative data then involves interpreting the material for each code, noting any patterns, differences and key findings. Sometimes codes can be re-organised (broken down or grouped together) to represent new concepts or broader themes that have been discovered. selection of quotes to support the presentation of the findings.

## Using the Global Kids Online coding framework

This framework has been developed to cover the topic guides for focus groups and individual interviews. It can be used to start the coding and analysis process. Note that it matches the topic guides included in the Global Kids Online research toolkit and has been developed to cover key elements of the Global Kids Online model.

The analysis of qualitative data usually involves the

For the Global Kids Online model and framework see *Method guide 1: Research framework* at www.globalkidsonline.net/framework Keeping a record of the adaptations and why they were necessary can provide useful feedback to the Global Kids Online Steering Group on how the research toolkit needs to be improved in the future.

However, further country-specific or situation codes are likely to emerge, and these should be added to the framework.

Code	Example content: Any portion of the interview transcript that discusses
Access	
Age of first use	First use of the internet (including own use or peers, siblings, etc.)
Frequency of use	How often they use the internet (note any variations based on week days or holidays)
Time of use	When they use the internet (time of day)
Time spent online	Discussion of how long children spend online
Barriers to access	Any discussion of what might be limiting children's ability to access the internet (including lack of devices, cost, connectivity, skills, lack of time, adult mediation, etc.)
Places of use	Code all locations that children discuss (these may include school/college, home, homes of friends or relatives, public places, on their way somewhere)
Devices	Code all devices that children mention using (mobile phone, smartphone, PC, laptop, tablet, games console)
Device	Discussion of whether the child shares devices or has his or her own
Connectivity	Type of connection that children use (pre-paid internet on a contract or at home; free internet outside the home or via other people's devices; paid internet at cyber cafes, pay-to-use computers; pay-as-you-go internet)
Connectivity independence	Discussion of whether the child is able to connect to the internet on his or her own or needs assistance from others (relatives, peers, educators, etc.)
Opportunities	
Positive online experiences	Discussion of children having fun when they are online or thinking that the internet has a lot of positive things to offer them
Online learning	Learning something new, looking for information, used the internet for school work
In-school learning	Note the range of learning activities that children do online when they are at school (e.g., looking for information about assignments, writing things, creating drawings, making presentations, communication with teachers, etc.)
Online	This can include a range of community participation activities, such as looking for

resources or events about the local neighbourhood, using the internet to talk to people from places or backgrounds different from theirs, getting involved online in a local organisation or charity, using the internet to help somebody else
Note civic participation activities, such as looking for news online, discussing political or social problems with other people online, getting involved online in a campaign or protest, signing an online petition, using the internet to join a civic, religious or political group
Code the creative activates that children do when they are online. These can include creating and uploading videos or music that they or others have created, creating a blog or story or website online
<ul> <li>Code carefully the full range of socialising activities that children do when they are online or when using digital devices. These could include:</li> <li>Visiting a social networking site (e.g., Facebook)</li> <li>Talking to family or friends who live nearby or further away (e.g., by Skype)</li> <li>Helping someone else who wants to go online</li> <li>Using instant messaging (IM) (e.g., Viber, WhatsApp)</li> <li>Commenting on the updates that friends or family have put online</li> <li>Showing friends or family something that the child has seen online</li> <li>Visiting a chatroom to meet new people</li> </ul>
Code any discussion of internet entertainment activities, such as watching video clips (e.g., on YouTube), playing online games (alone or with others), listening to music online (by downloading or streaming), watching TV shows or movies, using apps
Looking for health information for themselves or someone they know, participating in a site where people share the child's interests or hobbies, posting photos or comments online (e.g., on Facebook or a blog)
Using the internet for commercial purposes, such as browsing for things to buy or to see what things cost, trying to sell things online
Using a mobile phone to contact people (such as family, friends, educators, other trusted adults, child services)
These can include search engines (e.g., Google), social networking sites (e.g., Facebook), IM (e.g., WhatsApp), children's broadcasting sites (e.g., CBBC), online encyclopaedia (e.g., Wikipedia), or gaming sites (e.g., Minecraft)
<ul> <li>This can include a range of issues discussed in relation to how the child feels about the online environment in terms of safety and security and in comparison to face-to-face communication, for example:</li> <li>Feeling safe on the internet</li> <li>Finding other people are kind and helpful on the internet</li> <li>Knowing what to do if someone acts online in a way they don't like</li> <li>Finding it easier to be oneself online than when with people face-to-face</li> <li>Talking about different things online than when speaking to people face-to-face, including private things</li> </ul>
Under this code a number of issues fall that the children might discuss, including having their own profile on a social networking or social media or gaming site, the number of profiles they have, the information available about the child on these profiles, which social networking or gaming sites they use, and responding to requests from people to become online 'friends'

Social Awareness of safety features on social networking sites, such as blocking button (to block contacts), report button (if being treated badly online), help centre or link to a helpline (to contact someone who can help), and safety centre (to get information or advice)

Skills and	I practices
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Operational skills	<ul> <li>Skills are characterised by different dimensions, and it is important to assess all of them to get an in-depth understanding of children's abilities. Operational skills relate to the ability to use computer technology and the internet, e.g., being able to install programs and click the right buttons. The issues that children might bring up that fall under operational skills relate to knowing or not knowing how to:</li> <li>Save a photo that they find online</li> <li>Change privacy settings (e.g., on a social networking site)</li> <li>Use a programming language (e.g., Python, C+ etc. [add local examples]</li> <li>Open downloaded files</li> <li>Use shortcut keys (e.g., CTRL-C for copy, CTRL-S for save)</li> <li>Open a new tab in a browser</li> </ul>
Information/ browsing skills	<ul> <li>These contain, on the one hand, formal internet skills or the competency to navigate on the web and, on the other hand, informational or evaluation skills, the ability to evaluate the reliability of information found on websites and to cross-reference to information correctly. The issues that children might bring up that fall under operational skills relate to knowing or not knowing how to: <ul> <li>Check if the information they find online is true</li> <li>Choose the best keywords for online searches</li> <li>Find a website they have visited before</li> <li>Feel confident in their evaluation if a website can be trusted</li> <li>Find themselves on websites without knowing how they got there</li> </ul> </li> </ul>
Social skills	<ul> <li>These are the skills needed for successful and safe online communication, and can include children talking about knowing or not knowing the following:</li> <li>Which information should and shouldn't be shared online</li> <li>Removing people from contact lists</li> <li>When information should and shouldn't be shared online</li> <li>How to behave according to the situation online</li> <li>How to change who they share content with (e.g., friends, friends of friends or everyone)</li> </ul>
Creative skills	<ul> <li>These relate to the ability of children to create online content and might incorporate competency on:</li> <li>Posting online video or music that they or others have created</li> <li>Which different types of licences apply to online content</li> <li>Creating something new from video or music that they found online</li> <li>Editing or make basic changes to online content that others have created</li> <li>Designing a website</li> </ul>

Mobile skills	<ul> <li>There are a range of activities that children do on their mobile phones, and the skills needed for these can be coded under this, including discussion of:</li> <li>Installing apps on a mobile device (e.g., phone or tablet)</li> <li>Keeping track of the costs of mobile app use</li> <li>Making an in-app purchase</li> <li>Deactivating the function showing their geographical position (on Facebook, Google Maps, etc.)</li> <li>Connecting to a Wi-Fi network</li> <li>Blocking push notifications from different apps</li> <li>Having the same documents, contacts or apps on all devices that they use (e.g., smartphone, tablet, PC)</li> <li>Blocking pop-ups that promote apps, games or services they have to pay for (unrequested windows that appear during web surfing)</li> <li>Protecting a smartphone with a PIN or with a screen pattern</li> <li>Updating their status on social networking sites</li> </ul>
Overall skills confidence	<ul> <li>Finding information on how to use smartphones safely</li> <li>Children may also express overall confidence in their digital skills, including when comparing themselves with others (peers, parents, teachers). This relates to feeling that they know lots of things about using the internet or that they know more about the internet than parent(s)/carer(s) or other educators. As this might influence children's decisions about seeking help, it is important to have a separate code for their overall</li> </ul>
Risk	confidence in their digital skills
Risk experience	<ul> <li>Direct and indirect experiences with online risks:</li> <li>Own/personal risk experiences</li> <li>Risks and experiences that children hear about from friends, peers, siblings, parents, teachers, media and other people</li> <li>Absence of experience: explicit statement that no experience/exposure to online risks took place</li> </ul>
Risk impact	Emotional impact: negative consequences or signs of harm after risk experience, indicated by (negative) feelings, emotional reactions, changes in opinion Behavioural impact: what children do after risk experiences, indicated by coping strategies, behavioural responses and changes in behaviour
Risk awareness	<ul> <li>Children's knowledge, subjective opinions, thoughts and judgements about online risks:</li> <li>Why something is (not) problematic, risky, dangerous or unpleasant, dangerous or unpleasant</li> <li>Under which circumstances something is (not) problematic, risky, dangerous or unpleasant</li> <li>Opinions, thoughts and judgements related to the nature of the problematic situation itself</li> <li>Evaluations or comparisons with other risky or problematic situations</li> </ul>
Strangers	Any kind of online or offline contact with strangers, i.e., people they have never personally seen before, including potential pedophiles
Online hurtful behaviour	Any bothering, rude, nasty, violent communication online. Communication can be in the form of text, pictures or videos Attention! This is about active communication, personally directed at the victim. It is not about harmful mass-communicated messages

Sex	Any message, picture or video with sexual content:
	<ul> <li>Mass-distributed pornographic content</li> <li>Adverts or pop-ups with sexy images</li> </ul>
	<ul> <li>Sexy pictures or videos from peers</li> </ul>
	<ul> <li>Conversations on webcam or chatroom about sex</li> </ul>
Unwanted content	Content that is perceived as bothering or disturbing in any way. Often this is encountered on mass public platforms such as websites, blogs, boards or forums, video-sharing platforms, etc.:
	Content perceived as 'unpleasant'
	<ul> <li>Violent, rude, nasty, shocking, disgusting content</li> <li>Information that is wrong, untrue, misleading or fake</li> </ul>
	Attention: This is about mass-distributed content, not directed at a specific person
Commercial	Any commercial content or communication perceived as bothering or unpleasant:
risks	Spam, adverts, pop-ups
	<ul> <li>Commercial websites promising a gift</li> <li>Misleading commercial websites</li> </ul>
	<ul> <li>Problems with e-shopping or online purchases</li> </ul>
	<ul> <li>Not receiving the order, or receiving the wrong order</li> </ul>
	Credit card abuse
Technical	Anything related to malfunctioning devices or internet connections:
problems	• Viruses
	Slow computers
	Problems with downloading
	<ul> <li>Battery problems</li> <li>Illegal downloads causing troubles</li> </ul>
	<ul> <li>Illegal downloads causing troubles</li> <li>Not being able to find/access a website or platform</li> </ul>
Health and	Any health problem or issues related to excessive internet use:
overuse	Sleeping problems, nightmares
	<ul><li>Overuse problems, feeling of being addicted</li><li>Physical problems with eyes, back</li></ul>
Help-seeking an	d support
Talking to others when upset	This can include a range of people children might talk to when they are bothered or upset about something, as well as not having anyone to talk to
Feeling supported by family	This can involve discussion of finding it easy to talk to family members in general, feeling listened to, feeling that their family tries to help, or even feeling safe at home
-	This reflects the relationship between the shild and the nevert/seven and the neverties
Parental supervision	This reflects the relationship between the child and the parent/carer and the parenting style that is used, including the parent/carer praising the child for behaving well, or telling the child when s/he is doing something well, or setting rules about what can be done at home and outside the home

Seeking parental help	<ul> <li>This includes occasions when the child has initiated conversations with their parents about things online, asked for their help or indeed helped their parents. For example:</li> <li>Helping the parent/carer to do something they found difficult on the internet</li> <li>Starting a discussion with the parent/carer about what the child does on the internet</li> <li>Asking for the parent/carer's advice on how the child should act online</li> <li>Asking the parent/carer for something that the child has seen advertised online</li> <li>Asking for the parent/carer's help with a situation on the internet that the child could not handle</li> </ul>
Mediation	
Parental enabling mediation	<ul> <li>There are different ways in which parents and carers can supervise, support or restrict children's online experiences. Enabling mediation relates to the activities that are aimed at encouraging the child to use the full range of online opportunities. These might be related to:</li> <li>Encouraging children to explore and learn things on the internet</li> <li>Suggesting ways to use the internet safely</li> <li>Talking to children about what they do on the internet</li> <li>Staying nearby when children use the internet</li> <li>Doing shared activities together with children on the internet</li> <li>Talking to children about what to do if something online bothers or upsets them</li> <li>Helping children when something is difficult to do or find on the internet</li> <li>Explaining why some websites are appropriate or inappropriate</li> <li>Helping children about the commercial activities they are exposed to online</li> </ul>
Parental restrictive mediation	<ul> <li>This relates to situations when the child is allowed to do online activities only with parental supervision or is never allowed to do them. Such restricted activities might relate to not being allowed to/having to be supervised when:</li> <li>Using a web or phone camera (e.g., Skype or video chat)</li> <li>Downloading music or films</li> <li>Visiting a social networking site (e.g., Facebook,)</li> <li>Spending time in a virtual world (e.g., Habbo, Club Penguin, Minecraft)</li> <li>Putting (or posting) photos, videos or music online to share with others (including social networking sites or IM), etc.</li> </ul>
Parental technical mediation	<ul> <li>When the parent uses technical features to mediate children's online use, including:</li> <li>Parental controls or other means of blocking or filtering some types of website</li> <li>Parental controls or other means of keeping track of the websites or apps</li> <li>Rules about how long or when the child is allowed to go online</li> <li>A service or contract that limits the time children spend on the internet</li> <li>Software to prevent spam or junk mail/viruses</li> <li>Parental controls that filter the apps that can be downloaded</li> <li>Parental controls that alert the parent/carer when the child wants to buy content (in-app purchases)</li> <li>Software that limits the people the child can be in touch with through voice calls and messages (SMS, MMS or IM)</li> <li>Ad blocking software</li> </ul>

Parental monitoring	<ul> <li>Parents can also check what the child has been doing online afterwards, including:</li> <li>Which friends or contacts the child adds to his or her social networking profile/IM service</li> <li>The messages in the child's email or other app for communicating with people</li> <li>The child's profile on a social networking site or online community</li> <li>Which websites the child has visited</li> <li>The apps the child has downloaded</li> <li>In-app purchases the child has made</li> </ul>
Outcomes of parental mediation	This might include the child discussing any positive or negative outcomes of parental mediation (such as feeling safer or feeling frustrated, lacking privacy)
Teacher mediation	<ul> <li>Discussion of any support or advice offered by teachers and educators or any restrictions placed on the children's internet use by school teachers. This might include teachers:</li> <li>Suggesting ways to use the internet safely</li> <li>Encouraging children to explore and learn things on the internet</li> <li>Making rules about what children can do on the internet at school</li> <li>Helping when children find something difficult to do or find on the internet</li> <li>Talking to children about what they do on the internet</li> <li>Explaining why some websites are good or bad</li> <li>Suggesting ways to behave towards other people online</li> <li>Helping when the children were bothered by something on the internet</li> <li>Checking if students have their mobile phones/smartphones on or off</li> <li>Looking at children's phones to see what they are doing or who they are in touch with</li> <li>Making rules about how mobile phones are used at school</li> <li>Taking students' phones away for a period (e.g., for a day or a week, etc.)</li> </ul>
Peer mediation	<ul> <li>Children also often seek help from their friends and peers who are an important source of support. Peer mediation can relate to friends offering any of the following support:</li> <li>Suggesting ways to use the internet safely</li> <li>Encouraging the child to explore and learn things on the internet</li> <li>Helping when the child found something difficult to do on the internet</li> <li>Explaining why some websites are good or bad</li> <li>Suggesting ways to behave towards other people on the internet</li> <li>Helping when something on the internet was bothersome</li> </ul>
Researcher comments	Any comments that the researcher has in addition to the data
Off-topic	When the interview segment does not belong to any of the previous areas, it is coded as 'off-topic'

#### Other materials from the research toolkit

- ✓ Additional Qualitative research toolkit resources include the focus group and individual interview topics guides, the procedure for coding and analysis, available at <u>www.globalkidsonline.net/gualitative</u>
- ✓ Quantitative research toolkit, available at <u>www.globalkidsonline.net/survey</u>
- ✓ Getting started with the Global Kids Online research toolkit, available at <u>www.globalkidsonline.net/tools</u>

- ✓ Method guides, available at <u>www.globalkidsonline.net/guides</u>
- ✓ Further information on adapting the toolkit is available at <u>www.globalkidsonline.net/adapting</u>