



Keeping it Real

An exploratory study of how 13-14-year-olds
critically engage with online content

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1. Executive Summary

To support the critical media and information literacy skills of young people, it is vital that we understand what currently influences their tendency to be critical – or not – online. With this exploratory study, which was made possible with the support of the Swedish Postcode Foundation, Free Press Unlimited aims to provide insights into young people’s critical engagement with online content in different country contexts.

We set out to identify factors that influence whether youth engage critically with the information they encounter online – that is, whether they try to determine if what they see is reliable. We further wanted to know if these factors – characteristics of the young person themselves and/or of the content they see – differ depending on their background. For example, what makes a 13-year-old in Mexico take a critical look at a social media post? And is that the same as what makes a South African or Dutch 13-year-old more critical?

Research

We recruited participants aged 13-14 in three countries: Mexico, South Africa and the Netherlands. Through a questionnaire, an observation exercise and interviews, we gathered information in order to identify trends.

Together, these different types of information have been used to construct:

- **Profiles** for each group focused on their critical engagement with the information they encounter on social media. These profiles are based on the commonalities between the participants from the respective groups, not by averaging their results.
- **Personas** of different types of individual ‘engagement styles’ with regards to the information they encounter on social media.

Both can be used as input for developing tools or methods that aim to increase the ability of children of different backgrounds to engage critically with information online. On the next page you will find a short version of the personas. A more extended version of the profiles and personas can be found later on in this report.

With this approach, and with a sample size limited to 93 children, the data itself should not be considered conclusive, statistically significant or fully representative, but rather exploratory. We wanted to get an impression of the bigger picture and find clues for future work on media literacy for educators, practitioners, media and media development organisations. The findings of this study can also be used by research institutes as hypotheses or input for further research. You can find the full details on page 36.

Personas

We constructed a number of global personas that cut across the groups. These are described in full on page 18–21.



Safety Seeker

Aims to avoid potential harm online; they do not interact with content they believe is not genuine and they are discerning about friend requests.



Awareness Raiser

Is concerned about global issues and considers the positive impact of online content more important than its veracity.



Entertainment Junkie

Cares about having fun, being entertained and making friends smile; truth isn't as important.



Dedicated Fan

Believes content posted by the people they admire and will call out fake news about the things they care about.



Socialiser

Is all about friends, connecting across several social media platforms. They are discerning about friends but still have hundreds – and they believe the things they share.



Scroller

Doesn't engage with misinformation or content they don't care about; they just scroll on past. They can be challenging to engage.

Findings

The results of this study help to provide a better understanding of the way different groups of young people relate to online information with regards to its reliability. This is displayed mainly through the personas and profiles we constructed, but also through a country-by-country description of the main factors affecting critical engagement (see the South Africa and Mexico chapters). Within each country, we established patterns in four areas: demographics and home life; experience and knowledge; use of social media; and behaviour and attitude.

The findings of this research can help shape new approaches to media literacy training in Mexico, South Africa and beyond. Based on the findings, we have formulated a number of recommendations: for educators, for media and media development organisations and for further research. The full list is in Section 3, on page 33–36.

Some highlights are:

- Involve young people actively in the content production of news and information that is geared toward their age group. Involve (independent) journalists to encourage critical thinking, to share their experiences and help them understand the choices journalists and other content producers make.
- Peer-to-peer support should be facilitated.
- Provide children with a lower socioeconomic background with the facilities wealthier children have at home.
- Close monitoring of children's online behaviour (including by their parents) does not have beneficial effects. Instead, facilitating children to ask questions when they arise increases the likelihood that they will develop a critical attitude.
- Many children know how to check when they don't trust something, but they apply this knowledge inconsistently. Those who can describe their approach step-by-step are more likely to apply it. Encourage children to make explicit their view of whether something is reliable and apply this deliberately.

2. Introduction

Media literacy has reached a critical moment for teenagers: now, more than ever before, they need to be equipped with skills and tools to navigate an increasingly polarised and potentially misleading daily onslaught of content online.

At the time of writing, the world is in the midst of the COVID-19 pandemic – a novel Coronavirus is circulating globally, taking a wave of misinformation with it.

It is certainly a sign of the times, but not just of our times – ‘fake news’ has been an issue for a century. Back in 1925, *Harper’s Magazine* published an article about the ways in which new technology – the wires – was enabling the spread of fake news. The article, “Fake news and the public,” (McKernon, 1925) highlighted the difficulty editors had in telling real news from fake news: “An editor receiving a news item over the wire has no opportunity to test its authenticity as he would in the case of a local report.”

“the discourse around ‘fake news’ has become weaponised to cast doubt on genuine journalism and dismiss real information”

The misinformation phenomenon has been exacerbated by an exponential development in technology, which has enabled people to create believable but untrue content with little or no need for expertise. Today, through social media, we curate our own news feeds – our behaviours and preferences online interact with algorithms to give us individual selections of headlines and content, which we as the consumers of information must critically evaluate. At the same time, the discourse around ‘fake news’ has become weaponised to cast doubt on genuine journalism and dismiss real information.

The term ‘fake news’, used in this manner, has been popularised by US President Donald Trump; by one count, reported in *the Washington Post*

(2019), he had used the term more than 400 times by the start of 2019. In his wake, leaders of other countries – from Nicolas Maduro in Venezuela to the Chinese government and state media – have started to use the term to dismiss any story that would cast them in a negative light (*the Guardian*, 2018). Casting doubt on legitimate journalism in this manner makes it even more difficult, but all the more important, to critically assess whether the information we come across is credible.

Despite our exposure to and awareness of misinformation, we are generally not confident in our own abilities to identify trustworthy content, and the extent of this lack of confidence differs depending on location. For example, 70% of people in South Africa and 68% of people in Mexico are “concerned about their ability to separate what is real and fake on the internet,” according to the Reuters Institute Digital News Report (Newman et al., 2019, p. 21); this falls to just 31% in the Netherlands. This concern seems to align to political polarisation: the more polarised the politics, the more concerned the people.

“In contemporary societies the media are self-evidently important creators and mediators of social knowledge. An understanding of the ways in which the media represent reality, the techniques they employ, and the ideologies embedded within their representations ought to be an entitlement of all citizens and future citizens in a democratic society.”

– Masterman, 2013

“Most users do not understand how the content they read has got there [social media], but accept it without question. A significant part of digital literacy is understanding how social media works, and how the content that each user reads has appeared, as a result of specific algorithms.”

– House of Commons, 2018

What’s notable is that these statistics relate to adults – those presumably with experience, both offline and online, that informs their ability to engage critically with content they see. If it’s that challenging for adults to navigate the fake news landscape, how are teenagers faring? In a study carried out in another context – the United States – less than half (44%) of participating children agreed that they know how to differentiate between fake and real news stories. (Robb, 2017, p. 15)

Young people and the right to media literacy

Media literacy is defined in many ways, but it commonly encompasses the ability to interact with media in a number of ways, including to access, analyse, assess, comprehend, critique, evaluate, produce and review it. (Mihailidis, 2009, p.7)

It stands to reason that media literacy education could go at least some way to supporting young people in this context of challenge and exposure.

However, caution should be exercised. Mihailidis (2008) found that media literacy education needs to be combined with lessons on citizen rights and on the importance of reliable and quality media for accountability if it is expected to make young people ‘better’ citizens. Teaching critical skills alone, without teaching how to appreciate credible information, can make students more cynical about social institutions such as the government and media. Being able to critically distinguish between more and less credible information requires children (and adults) to realise not only that there

is a lot of misleading information, but also that there is reliable information to be found and that this has value.

Understanding current needs

The problem of misinformation isn’t just its existence, but also the growing potential for its creation. In Mexico, for example, if you google ‘fake news’, the second prefilled suggestion you get is ‘fake news generator’ (observation from November 2019). Given how easy it is to create and distribute misinformation today (in all forms, including unintentional, politically motivated or clickbait), it is vital that all people – young people especially – question the reliability of the content they encounter.

To support the critical media and information literacy skills of young people, it is vital that we understand what currently influences their tendency to be critical – or not – online. Not necessarily to evaluate whether they are ‘good’ or ‘bad’ at it, but to understand in which situations they do so to a greater or lesser extent. It is important not to make too many assumptions, but to take the current experiences and behaviours of children as the starting point for any attempt to strengthen their critical media and information literacy skills.



This fake news, created using thefakenewsgenerator.com, looks professional.

A study by Steeves (2012) with 66 young people and 21 parents in Canada found that children and teenagers were aware of the potential dangers of the internet and behaved accordingly, being careful not to expose personal information and to click away from undesirable content. Their parents monitored their activity closely, and those with a looser grip had more open discussions with their children about what they were doing online.

Several reasons have been identified for the susceptibility of young people to misinformation: confirmation bias, giving meaning to experiences, a lack of perspective and the inability to judge the reliability of information and their purpose. (UNESCO, 2017, p.45)

“it is important not to make too many assumptions, but to take the current experiences and behaviours of children as the starting point for any attempt to strengthen their critical media and information literacy skills”

These seem like good starting points for this study – Keeping it Real – with two major exceptions: they are about a decade old (a lifetime in the fast-moving online world) and they both focus on developed North American countries. In fact, almost all of the existing research is primarily or exclusively focused on children living in Western countries. (UNESCO, 2017, p.36)

Existing studies illustrate why it is important that young social media users learn to judge the reliability of various sources of information. However, the problems facing these young people might be different in other parts of the world, depending on the cultural, economic or political context. Furthermore, it is very well possible that there are differences between groups and national contexts in how youth relate to digital media. These differences, if they are not properly understood, are an obstacle to the effectiveness of media and information literacy development.

What factors affect critical behaviour today?

With this study, Free Press Unlimited intends to provide insights into teenagers’ critical engagement with online content in different country contexts. What factors affect if and when they show signs of critical engagement – do demographic factors make a difference? The types of content they are engaging with? Their skill, experience or confidence in their own abilities? In doing so, our aim is to determine what, if any, factors affecting critical engagement are global or country-specific, and to identify areas where tools could be developed to support media literacy.

3. Research Design

Through this study, Free Press Unlimited aims to contribute to a better understanding of the digital media literacy skills of young people in different contexts – to investigate the factors that affect their critical engagement with social media content online. We want to provide insights that inform the development of tools that could support critical digital media literacy skills.

3.1 Scope

Objectives

Specifically, the objectives were to:

- Gain insight into the engagement of 13-14-year-olds with digital information in Mexico, South Africa and the Netherlands and any possible differences between them
- Use this insight to improve the digital media and information literacy of young people in different contexts around the world

The target group of 13- and 14-year-olds was chosen because 13 is the official minimum age for registering for a social media account; it is the average age that young people start high school in Europe, Mexico and South Africa; it is an age between childhood and adolescence; and it is an age at which kids are (becoming) very vulnerable to what is entering their world through the internet, social media and via their peers (often more than via their parents).

As mentioned in the introduction, most of the research done so far has focused on Western countries. We therefore wanted to include one Western country in order to make a comparison – any similarities that are found will enable us to draw in a much wider body of literature and apply it to Mexico and South Africa.

The study takes an exploratory approach, and through observation, interviews and questionnaires, we gathered information in order to identify trends. With this approach, we did not aim to get statistically significant or fully representative data, but rather to get an

impression of the bigger picture and open the door to further research.

We designed this research in order to yield results that would be of interest primarily to practitioners – educators, media and media development organisations and policy makers – but they can be used by other researchers in the field of young people and media.

Research questions

The research focuses on two research questions:

- Which factors determine whether young people engage critically with information they encounter on social media?
- Which, if any, differences exist between socioeconomic and national contexts in how and when young people relate critically to digital information?

The key term in these questions is 'critical engagement'. By this we mean whether the participant engages with the information they encounter online, and if they do, whether they evaluate the credibility of the information.

In the process of answering these questions, we set out to construct:

- **Personas** of different types of 'engagement styles' with regards to the information they encounter on social media, which have been observed across groups.
- **Profiles** for each distinct group included in the study (participants with the same socioeconomic and national background – see the participants section), focused on their critical engagement with the

information they encounter on social media. These profiles are based on commonalities between the participants from the respective groups, not on averages of their results.

The aim is for the personas and profiles to be suitable as input for developing tools or methods to increase the ability of children of different backgrounds to engage critically with information online. They describe the factors that influence critical engagement with information – such as cues about the person who shared the information or characteristics of the content – and highlight any differences across contexts, thereby answering the two research questions.

The comparison between Mexico and South Africa on one hand and the Netherlands on the other will be particularly useful in determining the extent to which knowledge and good practices generated in developed countries can be applied in other contexts.

3.2 Data collection

Data gathering was done in three ways: a questionnaire, an observation exercise and interviews and focus groups. The research design was elaborated together with researchers in South Africa and Mexico, who provided valuable input both for localisation and for the overall design of the research instruments.

This resulted in five types of information about the participants

1. Group (from selection process)
2. Personal characteristics (from questionnaire)
3. Experiences and attitudes (from questionnaire, interviews and focus groups)
4. Influence of content-specific factors (from observation exercise)
5. Degree to which their feed warrants a credibility evaluation (from observation exercise)

Questionnaire

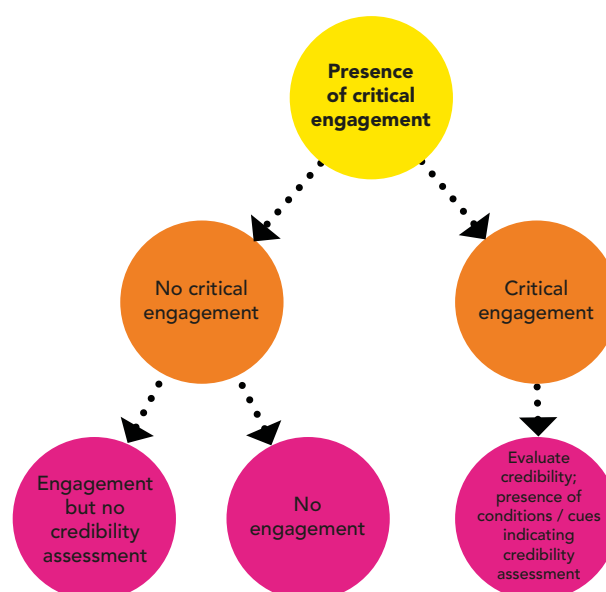
The participants and their parents were asked to complete a questionnaire. The questionnaires covered the participants' demographics and personal characteristics, as well as their experiences with the internet, social media and media literacy education. Most of the data is complete for the questionnaires.

Observation exercise

Every participant took part in an observation exercise, in which they scrolled through their Facebook feed while commenting – thinking out loud – in the presence of a researcher. The researcher observed their behaviour and thinking process and recorded their reactions to the content the participant encountered.

The researcher asked probing questions about the information in the feed and the participant's behaviour and recorded the details of each observation 'moment' – an engagement of some kind with the content. The details they recorded included the type of engagement, characteristics of the content, whether the information could be true or false (i.e. potential for critical engagement) and whether the participant engaged critically with the content – see Figure 1.

Figure 1: Observation exercise



The observation exercise was designed as follows:

With a 'moment' being defined as the participant doing one or more of:

- Making a relevant statement
- Liking or reacting
- Clicking 'see more comments'
- Commenting
- Sharing a post
- Clicking a link
- Playing a video, or watching a video that automatically plays

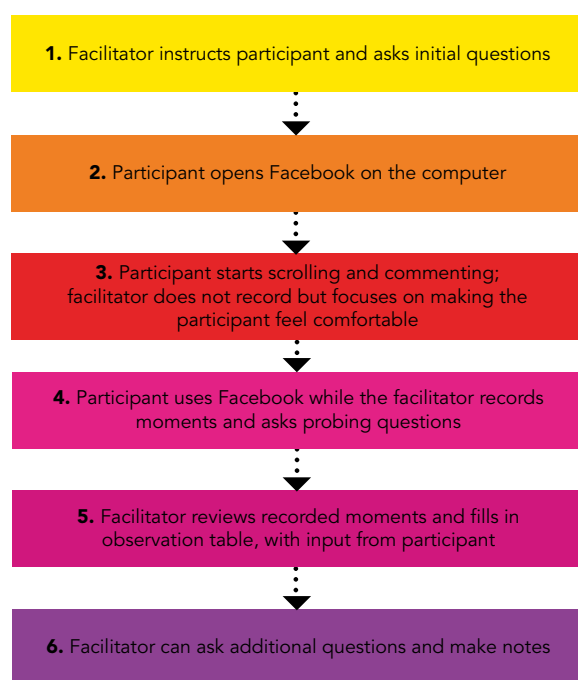


Figure 2: Observation exercise flowchart

Interviews and focus groups

With the support of local researchers, we carried out interviews and focus group discussions to gain deeper insights into the factors that might influence critical engagement with digital information. The intention was for the interviews to provide more detailed qualitative information supporting what we found in the observation exercise and the questionnaire, and potentially to highlight other trends.

About half of the participants were interviewed individually and the other half took part in focus group discussions. With the focus groups, the aim was to ensure a balance of participation

Cat pictures vs. climate change

Of course, not everyone's Facebook feed is the same – some children might encounter more content that could be true or false (like claims about climate change) while others might see posts where this isn't the case (like cat pictures). To capture this distinction, we added a scale called the 'cat-picture versus climate change' scale.

The facilitators were asked to rate each participant's feed on a 0-10 scale, with 10 representing a feed containing only 'climate change' and 0 only 'cat pictures'.

styles (more and less active participants) and an equal gender split. Those who were very shy were interviewed individually. Individual interviews were also conducted with several parents and teachers for each group.

Participants

We recruited seven groups of participants, each from a different national and socioeconomic background. There were three groups from Mexico, three from South Africa and one from the Netherlands.

All the participants were 13 or 14 years old and in their first year of secondary school. There was an equal gender split within each group, with 50% girls and 50% boys.

The participants from Mexico all attended schools in different parts of Guadalajara:

- **Group 1** consisted of children from a public school on the periphery of the city, with a lower socioeconomic background.
- **Group 2** consisted of children from a private school with a lower-middle socioeconomic background;
- **Group 3** consisted of children from an urban public school with an upper-middle socioeconomic background.

In South Africa, there was a similar pattern of recruitment, all from different parts of Cape Town:

- **Group 1** consisted of children from a school in a township with a low socioeconomic background.
- **Group 2** came from a school in a low-income suburb with a lower middle socioeconomic background.
- **Group 3** consisted of children from a school in a high-income suburb, with an upper middle socioeconomic background.

While the focus was on Mexico and South Africa, we also recruited one group of participants in the Netherlands to compare across contexts. These participants came from the wider Amsterdam area and were selected to ensure a mix of educational and socioeconomic backgrounds – see Table 1.

3.3 Analysis

The analysis involved collating and cross-checking the three different types of data collected – questionnaire results, the observation tables, and interview and focus group recordings – to answer the research questions and construct the personas and profiles mentioned above.

The analysis consisted of several steps:

1. Preparing the raw data for each source.
2. Analysing the data for each source separately.
3. Combining data from different sources to identify additional correlations: e.g. see

if there is a relationship between a factor measured through the questionnaire and the behaviour observed during the exercise.

4. Cross-checking correlations found within one source or between two sources with the data of the other source. This was mainly between the two quantitative sources on the one side and the interview and focus group output on the other, for example, to see if a correlation between factors A and B found in the observation exercise matched with how these factors were talked about in the interviews.

The 'presence of critical engagement' was measured through the observation exercise, which means that the relationship between critical engagement and the other factors measured during the observation exercise (content factors – see above) could be measured directly. The questionnaire data was first used to produce some descriptive statistics about each group, and then related to 'critical engagement' when combined with the data from the observation exercise.

The qualitative data required a bit more preparation. We first collated quotes and information from the interviews and focus groups and tagged it thematically, taking an inductive approach and letting trends and themes emerge from the material. Themes included safety, privacy, approach to determining truth, distrust and blocking. Within each theme, we could then identify and compare the opinions and attitudes expressed by the participants.

Country	Group	Background	# participants
Mexico	1	Lower income	12
	2	Lower-middle income	12
	3	Upper-middle income	12
South Africa	1	Township	15
	2	Low income suburb	14
	3	High income suburb	15
The Netherlands	1	Mixed	13

Table 1: Participant recruitment patterns

Factors included

The table on the next page shows which factors were included in the study – either to investigate the link with critical engagement directly, or to take into account their influence on the participant's circumstances. These can be classified into four groups: demographic factors; experience with internet/social media; attitude to internet/social media; and content factors. The last column lists how we observed or recorded these factors.

Content factors were related to the comments and behaviour of the participant towards that specific piece of content, in order to assess whether these content factors influence whether the participants make a credibility judgment or not – see Table 2.

Limitations

The sample size was limited to 93 children, in groups of 12-15 individuals. For each participant, an average of 15 observation moments were recorded. When drilling down into this data, there were instances of one or two posts of a certain type, making any kind of meaningful analysis for these factors impossible. While trends could be spotted and supported by qualitative data from interviews and focus groups, the data itself should not be considered conclusive but rather exploratory.

The interviews and focus groups were conducted in the participants' main languages – for Mexico that was Spanish, for South Africa it was English and isiXhosa, and for the Netherlands it was Dutch. The interviews and focus group discussions were recorded and transcribed. All non-English transcripts were translated into English for the purposes of this research. It is therefore important to note that some nuance or detail may have been 'lost in translation'.

As mentioned in the section detailing the observation exercise, we asked the facilitators to indicate the proportion of content with a truth value relative to that without a truth value. While this made it possible to make a rough comparison, these indications were far from exact. That makes this factor difficult to take into account across participants who were assessed by different facilitators.

We had originally planned to recruit participants in three countries: Mexico, South Africa and Sweden. However, there was a late change to this aspect of the research. After several attempts to recruit participants in Sweden, it was clear that we would be unable to find enough young people there who regularly use Facebook – an interesting finding in itself. In order to have a group of participants from a European country (where much of the existing research has been conducted), we recruited a group in the Netherlands, replacing Sweden.

	Factor	Observation method
Demographic / personal factors	Socioeconomic background	From recruitment strategy (groups)
	Type of school	
	Education level of parents	
	Dyslexia	Short list of questions to parents together with consent form
	Gender	
	Home language	Questionnaire
	Household structure	
	Comfort with English language	
	Other responsibilities (e.g. work outside the home)	
	Media literacy education	
Experience with internet / social media	Ease and frequency of access to internet / social media	Questionnaire
	Device used to access internet/ social media (incl. differentiation private / shared)	
	Age of first access to internet	
	Frequency of using social media	
	Perception of whether their parent monitors their activity online	
	Amount of contacts on Facebook	
	Experience with creating and disseminating own content	Short list of questions to parents together with consent form
	Connected to parent on Facebook y / n	
	Talks with parent about online content	Ask both parent and child: short list of questions to parents together with consent form
	Context where they usually use social media / internet	Questionnaire + follow-up questions in interview / focus group
	Peer support in using internet / social media	Questionnaire and focus group
	Use of different social media platforms	
	Having had negative online experiences	Questionnaire; follow-up questions in interview
Attitude to internet / social media	General perception of reliability of information online	Questionnaire and follow-up questions in interview and focus group
	Trust in others (offline / online)	
	Sense of security / comfort or danger / threatened online	
	Confidence with internet skills and behaviour	
	Experiences internet as separate domain for socialisation or knowledge gathering	
	Confidence in 'critical skills' (feeling able to determine what is true or not)	
	Uses internet/ social media to read or news stories	
Content factors	Many likes	Observe from (recording of) screen. Recorded for each piece of content, in relation to the observed behaviour/ thought.
	Shared by someone familiar	
	Spelling / grammar mistakes	
	Presence of images	
	Advertisement	
	Mentions public figure	
	Type of content	
	Type of source	
	Comments posted by other users (negative or positive)	
	Mentions expert	

Table 2: Factors included and observation methods

4. Findings

When working with groups of young people to develop and support their media literacy, it helps to be armed with information about patterns in their (critical) engagement with digital content and have a head-start.

With this study, we collected different types of information of the participants, observed their behaviour with social media and interviewed them on their attitude to the (importance of) reliability of information online. This has allowed us to explore the differences between young people: which factors, in their background or attitude, lead to different behaviour? And how can we describe these different groups? This can be used as a starting point for educators, practitioners, media and media development organisations and policymakers that work on media literacy, to identify who you're talking to and what their development points might be, and to start improving their media literacy with some simple actions.

The findings have been elaborated to make them accessible and actionable for anyone who would like to engage with young people to improve their digital media literacy skills. In this chapter, we describe key factors that affect critical engagement; formulate 'personas' which describe

the different type of engagement styles with online information across groups; and develop 'profiles' that describe the relevant characteristics of each group (i.e. participants with the same national and socioeconomic background).

The first section – Global – includes factors common to all groups regardless of their location. These are factors shared by young people in Mexico and South Africa and supported by data from the Netherlands (the 'personas'). We then look in-depth at the 'profiles' in Mexico and South Africa – first the findings that are applicable to that national context generally, and then a profile for each of the three groups included in the study. These profiles are presented as a 'typical' participant in each group.

When working with or developing tools for one or more of the groups included in this study, a good look at the profiles helps to gain an impression of the life and characteristics of the young people in your target group.

Higher critical engagement

- Higher socioeconomic level
- Comfortable using English online
- Use social media daily (middle group in frequency of use)
- Private access to internet
- Started using the internet early (aged 8)
- Have basic computer skills, such as being able to save photos
- Can get support from friends about using social media
- Know how many friends they have on social media, and have up to 300
- Have little or no connection with parents on social media

Lower critical engagement

- Lower socioeconomic level
- Less comfortable using English online
- Use social media very infrequently (once a week or less) or very frequently (several times a day)
- No personal internet access (for example, prepaid internet or Wi-Fi at home)
- Started using the internet later (aged 12)
- Lack basic computer skills
- Have very few or many hundreds of friends on social media
- Online behaviour monitored closely by parents
- Get no support from friends about using social media

4.1 Global

FACTORS AFFECTING CRITICAL ENGAGEMENT

Before we describe personas and profiles, there are a number of factors that stood out as important trends in the observation data and the interviews and focus groups. These show some patterns that will be described here generally, while the next chapter will discuss the findings for Mexico and South Africa specifically.

Some of these factors are demographic and therefore difficult to influence, such as socioeconomic level. However, these could still be relevant to take into account when designing media literacy interventions. Other factors could provide opportunities for influencing and improving young people's ability to reflect critically on social media content.

A few factors were associated with higher or lower rates of critical engagement across contexts. Some of these can perhaps be improved through education or media literacy interventions; others might be beyond the influence of media literacy interventions but should still be taken into account. It is possible that some of these factors are associated with one another rather than having a direct relationship with critical engagement. Furthermore, this list does not claim a causal link between these factors and higher or lower critical engagement, but rather a simple correlation.

Socioeconomic level

Participants with higher socioeconomic backgrounds displayed more critical engagement than those with middle and lower socioeconomic backgrounds in both Mexico and South Africa. Furthermore, participants with higher socioeconomic backgrounds were more likely than those from middle or lower groups to have explicit strategies for deciding on whether to accept friend requests. This is likely due to a number of confounding factors, including access to the internet, education, length of time online and parental support – all of which correlated with

both critical engagement and with socioeconomic background – but it is not possible to disentangle the specific effects of each of these factors.

Groups from schools in high income areas tended to score away from the extremes on measures where these extremes had a negative relationship with critical engagement, such as frequency of use and number of contacts on social media. For example, these participants reported accessing Facebook and other social media sites daily but not several times a day (the 'most frequent' end of that scale).

At the other end of the scale, those from lower income areas, with less constant access, tended to be more often very low- or very high-frequency users of internet and social media. Some accessed the internet and Facebook weekly and had fewer than 50 friends, while others were online several times a day and had hundreds of friends.

Confidence

'Confidence' (both in a participant's own digital skills as well as in their ability to detect falsehoods) has a strong correlation with a participant's level of critical engagement, but not always in the same way. Generally, we can conclude that both a lack of confidence as well as over-confidence can inhibit young people's critical engagement with content. However, the salience of these differs by context.

In Mexico we detected both of these effects clearly in the observation data. The participants' confidence was positively correlated with critical engagement: the higher the confidence, the more critically engaged they were. But at the high end, participants with very high self-confidence displayed lower critical engagement.

Based on the interviews, it seems that the participants with a very high level of confidence tended to believe they would immediately spot if something they saw was false – and as a result they were less likely to question or doubt information that did not jump out at them as false or misleading.

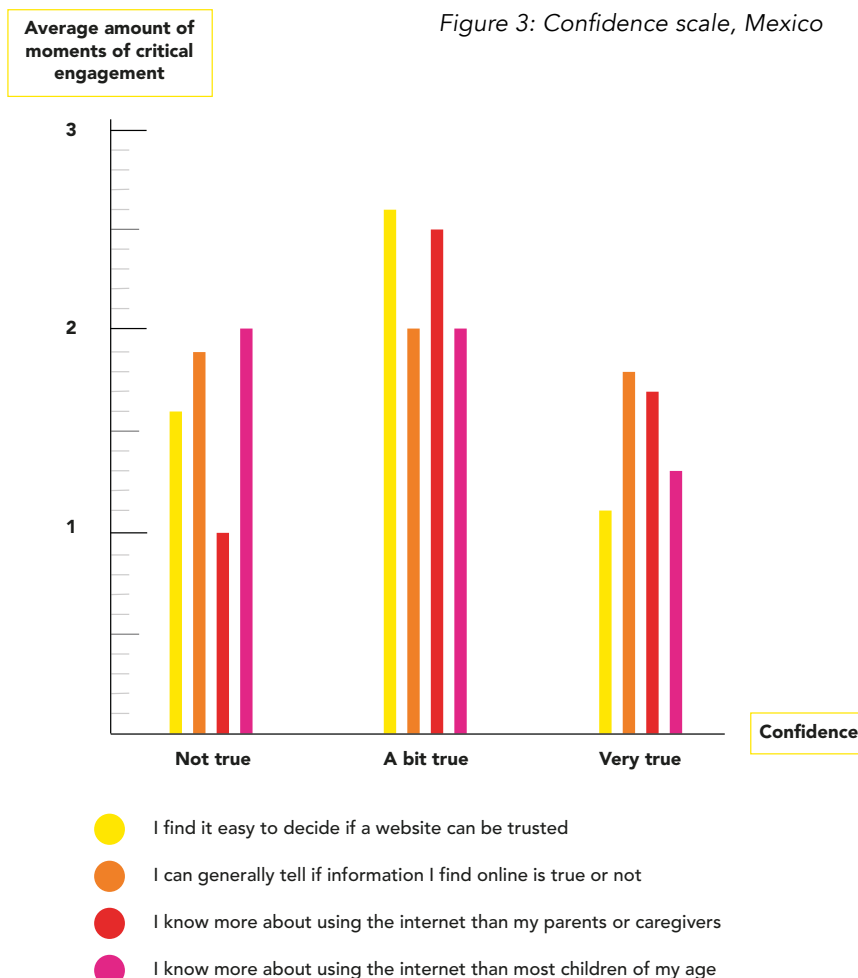
This was something we also found in South Africa. The South African participants' 'lack of confidence' did not seem to pose an issue, however, as it was generally the group with the lowest confidence in their own abilities who turned out to be most critically engaged with the content they encountered during the observation exercise.

Parental monitoring

Many parents, concerned about the well-being of their children, monitor their children's online behaviour in various ways. With regards to the critical engagement of young people, this approach does not seem to have positive effects. Participants with parents who know what their child does online were not more critically engaged. In the case of Mexico, they were even less likely to be critical of what they saw online if they are connected to their parents or caregivers on Facebook or if their parents monitor what they do on Facebook.

While close monitoring seems to be negatively correlated with critical engagement, one different factor has a more positive impact: the interviews revealed that young people who feel they can approach their parents are better able to be critical of content. When we combine this with the observation data, it seems that a distinction should be made, though, between children discussing what they see online versus asking for help.

South African participants in particular who reported discussing content on social media with their parents or caregivers were most often much more critical during the observation exercise. At the same time, those who reported asking their parents questions about online content frequently tended to be less critical during the observation exercise. This latter pattern was also observed with the Mexican participants.



Approaches to determining truth

There were some common approaches to determining reliability of information, and in each group, there were some participants who could describe explicitly the elements they looked at or actions they took to verify the veracity of content online.

These included actions to check the content as well as factors about the appearance of the content. Actions included searching for the information online using Google or comparing it to news from reputable sources they followed on social media, while content factors included spelling, the presence of images or video (increasing perceived reliability), emojis (decreasing it) and the presence and tone of comments on a post. These overlap to some extent: some participants reported visual cues that made the source seem more official or credible, such as official logos or even seeing an outline

that indicates that the content originated from a television screen.

While participants from the higher socioeconomic groups in each country were generally better at verbalising their attitude and approach to (information on) social media, each group still contained both participants who could and those who could not describe an explicit approach to determining truth.

Stories involving violence or danger

Exposure to violent stories, either through personal experience or experience of a friend or relative, has an impact on critical engagement. When it comes to fear, there is a bell curve relationship in Mexico: those who were very scared or not at all scared tended to be less critically engaged.

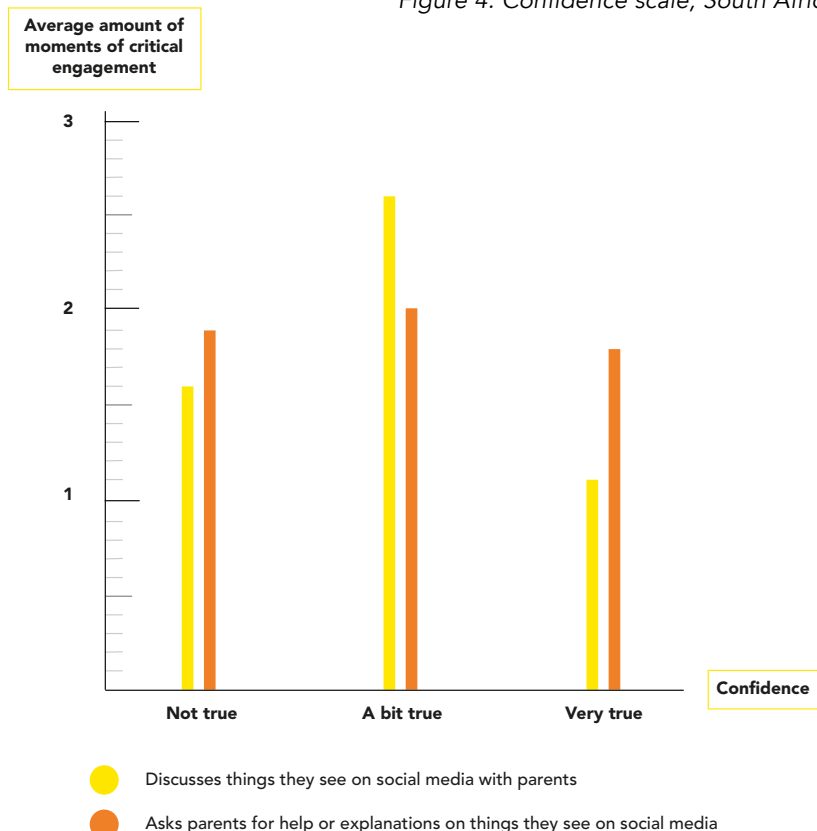
Fear is a factor that could be explored more deeply. The results of the questionnaires were sometimes not aligned with the interviews – some children talked about frightening events or stories heard from others but didn't report this in their answers in the questionnaire.

The type of violence or danger that is encountered on social media differs by context. In Mexico, kidnapping and (for girls) pressure to share nude images are talked about frequently by participants regardless of socioeconomic background, while in South Africa the mentions of various forms of violence and hateful content were more common among the groups with lower socioeconomic backgrounds. There was also a disconnect between fear of danger online and offline: although there is recognition that there are real people behind posts, participants in South Africa were more likely to trust people online than those they encounter in real life.

Friend requests

Behaviour around friend requests can be seen as a proxy for critical engagement, with those

Figure 4: Confidence scale, South Africa



children who are more deliberate about accepting friend requests also more critical of content. These participants reported a number of checks, including looking at the name, profile photo and timeline, and then checking in real life before accepting.

The quantitative results suggest that the number of social media contacts a participant has is related to their critical engagement: the participants with 51-300 Facebook friends tended to be more critical than those with fewer or more Facebook friends.

Peer support

Children who reported receiving support from their friends were more likely to be more critically engaged. In the interviews, participants also indicated that they were more open to learning about social media and the reliability of online content from people closer to their age than older authority figures. Since critical engagement varies strongly within groups, this creates opportunities for peer-to-peer learning.

PERSONAS

These 'personas' describe different attitudes or styles towards content on social media and its reliability. They were observed among participants across groups, rather than among a single group with a similar background.

Regardless of your target group, if you are planning to set up a media literacy programme, you should take into account that the participants will likely include children with a mix of the following attitudes. Each persona is illustrated by a selection of quotes that exemplify the attitude described.

"I think the kids nowadays are quite skeptical of information... I think they're better at discerning false information than, maybe, my generation. My generation are far more gullible, I think, to news because we grew up going 'If the newspaper says it, we must believe it.' This generation have newspapers, but, they never read them."

– Teacher, South Africa



Safety Seeker



There's a lot of potential harm online, and the Safety Seeker aims to avoid it. They are aware

of locally relevant safety issues and concerned about being tricked by people or websites pretending to be someone or something other than who or what they claim. They adjust their behaviour to avoid these risks and don't interact (liking, sharing) with content that they believe is not genuine. Generally, they post less frequently, assess friend requests before accepting them and are willing to ask for advice.

"Being approached by fake persons happened to me a lot, I have to know that a person is real if I'm going to talk to him or her."

– Participant #46 Mexico

"For me I have noticed the more info you put on Facebook the closer some people can come to doing bad things with your account."

– Participant #5 SA

"There can be pedophiles. I don't really trust social media. Like, if I get anonymous messages, I go into the profile and google to see if it's legit."

– Participant #24 SA

"With people who try to follow me I first go to that account, then I look briefly at who that person follows, because I don't want people to follow me that I don't know at all and who do not know people I know either."

– Participant #8 NL



Awareness Raiser



The Awareness Raiser is concerned about issues like the environment, human rights and racism and

tends to be swayed by content of that type. If information is deemed to be 'good' then its truth is less important than its impact. While they acknowledge the content may not be accurate, they believe that it is more important that the underlying message is correct, and that people take action.

"With climate change, I shared it because I wanted that also my relatives were going to become aware, and we could take action."

– Participant #37 Mexico

"Well, there is this thing now about plastic, it is going all around. I don't know what it is, but sometimes I will just post that, so that other people can be aware of it."

– Participant #7 SA

"About the environment, a message is going around that we only have 12 months to save the earth. I do not know if that is true because I have never seen such an investigation. But it would be OK to share, to understand that we indeed don't have a lot of time and that is more what it is about. The numbers do not have to be entirely correct, but the idea behind it remains the same."

– Participant #8 NL

"No, I barely care about truth, what I look the most for is something to have fun on Facebook"

– Participant #30 Mexico



Entertainment Junkie



It's all about memes for this persona. The Entertainment Junkie sees the online world as

light-hearted, not for serious content. They don't care much about whether something is true; if it's funny, it's worth engaging with and sharing. They like to laugh, and they like to entertain their friends – as long as no one gets hurt.

"Memes... Online is more to have fun and face to face is more serious. I barely care if something is true, what I look the most for is something to have fun on Facebook"

– Participant #30 Mexico

"Well, I find posts funny. Of course, I take precautions that I will not hurt someone, but I find them funny and I almost always share them."

– Participant #8 Mexico

"I am just looking to entertain myself with certain funny posts. Like that one or just gaming videos."

– Participant #5 SA

"Friends send me pages that I have to see, because it's funny. Then I follow them."

– Participant #5, NL



Dedicated Fan



In a world of influencers, the Dedicated Fan is more likely to believe content posted directly by

those they admire. They judge gossip harshly when it's not true. If they see news about a celebrity, they will check other sources and if they discover it's not true, they will comment and say something about it. They are loyal to the those they look up to, and they defend them online.

"[As an example of 'bad' content] I've seen online that Prince Harry and Meghan are getting divorced, only to hear later that it is false news."

– Participant #8 SA

"There is a band that I like, but there are also people that will hate them. They will say mean things about it. And I might look at a post and someone will say something, and I know it is not true."

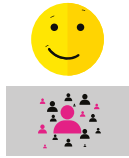
– Participant #12 SA

"I've seen naked pictures of Stana, Christiano Ronaldo and Messi and people were comparing them, and I didn't like that... I don't believe these are real and it's not right for people to do that because it can ruin their reputations."

– Participant #50 SA

"For example in 'La Gambeta' [A website about football] they write about a signing [of a football player] and I go to Google, 'ah, yes, that's it, they signed him' and so I see it is true."

– Participant #11, Mexico



Socialiser

The Socialiser is all about friends. They use multiple social media accounts to stay

connected. They probably have hundreds of friends on Facebook, but they are careful about who they accept, and they have a structured way of checking friend requests. They trust their friends and tend to think all of the content their contacts share is truthful. They are very open to advice and support from their friends to decide what is correct and what is not.

"Of my classmates, everything they share, well, I say it's true."

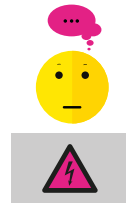
– Participant #8 Mexico

"I need to talk with my friends via Facebook, then I feel more confident because I can know more about others."

– Participant #9 Mexico

"What I do is, all the people I know they can follow me. People I don't know aren't allowed to follow me."

– Participant #7 NL



Scroller

Sure, lots of content online can't be trusted, but who cares? Just scroll on. The Scroller is aware of the existence, but unconcerned

about misleading or false information. They might know how to spot content that's not true, but it's usually not important enough for them to affect their behaviour. They ignore, share, scroll on. This makes it challenging to engage them.

"When seeing something false I would just ignore the post and carry on looking at their other posts, like just not pay too much attention to it..."

– Participant #9 SA

"Well would this be true or not? Especially if it doesn't get my attention or if it does not matter to me, I will just pass it."

– Participant #24 Mexico

"I am not going to try hard to check whether it is real or not. Yeah, if it's important I might just see that the next day anyway."

– Participant #2 NL

"I actually don't care that if it is real. Maybe if there is a terrorist attack."

– Participant #1 NL



4.2 Mexico

The findings from the Mexico sample revealed a lot of room for improvement in the participants' inclination to engage critically with the content on their social media feeds.

On the plus side, the participants in the Mexico groups were generally highly aware of the existence of dangers online. Many of them indicated that their views and behaviour had been affected by personal experience or stories they had heard from people they know – in particular concerning kidnapping. They were discerning about who they connect with online, supportive of one another, but not always knowledgeable. A strong point is that many of the participants had a deliberate and structured approach to dealing with people they think are not real. On the other hand, many of them did not feel that the truthfulness of specific posts or information was very important to them – their notion of reliability was more tied to their relationship with the person who shared the content. This can stand in the way of developing a technique or aptitude for assessing whether a post is reliable.

If we compare the groups, what stands out is that the biggest difference is between group 3, the upper-middle socioeconomic participants, and the other two groups (lower and lower-middle socioeconomic participants), which were more similar. In particular, they tended to be much less critical of 'popular' posts, which was not the case for group 3. Parents of the participants in group 3 were less likely to strictly monitor their children than were the parents of participants in the other two groups. One common factor among all three groups was that the participants reported often feeling unsafe online, and most children in each group believed that they knew more about social media than their parents.

Youngsters with a lower socioeconomic background were likely to log into Facebook less frequently than those in the other groups, but they did tend to have many Facebook friends. The ones in the middle social-economic group were most active: they logged in frequently, had the highest level of interaction and tended to have many (300+) friends. The children with the highest social-economic status logged in frequently, but they didn't interact as much on the platform and had fewer Facebook friends. The higher the socioeconomic background of the children, the more common it was for them to use other social media platforms such as Instagram (but not messaging apps, which were ubiquitous).

One notable finding was the presence of a lot of environment-related content on the feeds of children of all backgrounds. They regularly engaged with and talked about this content. Participants were also affected by the experiences of those around them – particularly recounting stories of kidnapping, and of choosing their online contacts carefully to avoid the same fate. Mexican participants of all backgrounds tended to fear being kidnapped.

FACTORS AFFECTING CRITICAL ENGAGEMENT

Looking at data across all groups in Mexico, a number of common factors come to light.

Demographics and home life

- Socioeconomic group: The main dividing line seems to be between the highest socioeconomic group and the other two –

with participants in the group with highest socioeconomic background more likely to be critically engaged.

- Parental monitoring: Close monitoring is connected to lower critical engagement. Children who were not connected to their parents online were more critical, while children who were closely monitored by their parents (report that their parent see what they do on social media) tended to have lower rates of critical engagement.

Experience and knowledge

- Education: Media literacy education at school makes a difference: those who were trained at school were more critically engaged.
- Negative experiences: Children who had been exposed to bullying or negative content were more likely to critically evaluate the content they saw.

Use of social media

- Frequency of use: Daily social media use correlated to higher critical engagement, with less or more frequent use linked to a decline in critical engagement. Moderation seems to be key.
- Access: Children with easy personal access to the internet and those who had been online for the longest tended to be more critically engaged. This was not (only) a proxy of the socioeconomic group factor, as it also held when comparing participants within the same group.

Behaviour and attitude

- Confidence: Children who were moderately confident in their digital and media literacy skills tended to be most critically engaged, compared with children who had either a very low or very high level of confidence.
- Trust: Critical engagement was linked to a moderate distrust of people in real life and online. Participants who disagreed with the

two statements that most people can be trusted ('online' and 'in my hometown'), as well as with the statement that they 'feel safe on the internet', evaluated the posts they saw during the observation exercise more critically than those who agreed with either of these statements. At a certain point, this distrust becomes too much though: the participants who strongly disagreed with the statements (i.e. were the most distrustful of other people) were least likely to engage critically with the posts they saw.

- Support from peers: Participants who reported receiving support from friends or peers in using the internet safely were more critically engaged than those who did not. Peer support was relatively common and desirable.

"Well, you can easily see what information is false and what is true, for example publications that say that 'a singer died' always appear at the beginning of my Facebook timeline. What I do is look for it in other places. Sometimes they report deaths on the news, and I prefer to see the news rather than doubt if it is true or not."

– Participant #8 Mexico

PROFILES

These profiles are based on commonalities between the participants in the respective groups, not on their average results. This means that each profile does not describe all participants with the group's shared background, but most children in the group will share most of the characteristics. The names of the profiles are made up and do not refer to any participant.

Profile of Group 1, lower socioeconomic background: "Andrea"

Andrea is a student at a public school on the outskirts of the city and lives just outside the city. They talk to their parents about social media and are closely monitored online. They use Facebook daily and have more than 300 contacts. They are aware that there are real people behind the posts they see, and distrust posts by people they don't know much more than those of people they do know. But while they are more likely to be critical of information from people more distant from them, they are still uncritical towards most of the information they encounter, regardless of the source. This is especially true if a post has many likes.

Group 1: public school at the periphery of the city; lower socioeconomic background

 Home and school • Likely to be closely monitored online by their parents • Wi-Fi at home, but do not own their own smartphone	 Behaviour and attitudes • Often feel unsafe online • Use Facebook daily or weekly • Many friends on Facebook (300+)
 Knowledge and experience • Likely to have seen something that made them uncomfortable in the past year • Don't find it very easy to tell if a website can be trusted	 Critical engagement with social media content • Treat posts with many likes less critically • More critical towards posts by friends or peers than by family members, and most critical towards posts from unknown sources • When they do assess the credibility of a post, they are most likely to remain unsure of whether it is true

Profile of group 2, lower-middle socioeconomic background: "Pau"

Pau is a student at a public school outside of a central district of the city. Their parents tend to be strict about their behaviour online, but they don't talk to their parents much about social media. They feel unsafe online, but they use Facebook daily and have more than 300 friends. They tend to be led by others' reactions online – posts with lots of likes are usually not questioned. They also use Instagram and other social media platforms.

Group 2: public school in low-income suburb; lower-middle socioeconomic background

 Home and school • Do not approach their parents if they have questions about social media • Own a smartphone and have Wi-Fi at home • Give and receive support on online matters to friends and classmates	 Behaviour and attitudes • Often feel unsafe online • Use Facebook daily or several times a day, and post and comment daily • Use Instagram • Have 300+ friends on Facebook
 Knowledge and experience • Have seen information they knew was false	 Critical engagement with social media content • Are much less likely to critically evaluate posts with lots of likes • Are much more likely to critically engage with posts from classmates than from family members or friends • When they assess the credibility of a post, they are most likely to think that it is not true

Profile of group 3, upper-middle socioeconomic background: “Cruz”

Cruz is a student at a public school downtown. They don’t talk much to their parents about social media and they are largely left to their own devices online. They are savvy users though, who use their privacy settings and block other users to regulate who has access to their profile information. They talk about their online experiences with their peers and share advice on how things work on social media. They are also discerning about who they befriend. They are likely to think that a lot of what they encounter online is not true. Disengagement is a common reaction to false or negative content.

Group 3: public school in a central area of the city; upper-middle socioeconomic background

 Home and school • Monitored a little online by their parents • Own a smartphone and have Wi-Fi at home • Often give and receive support on online matters to friends and classmates • Have received media literacy training at school or a club	 Behaviour and attitudes • Feel unsafe online • Use Facebook daily or several times a day • Use Instagram daily
 Knowledge and experience • Believe people online are rude or nasty, but haven’t experienced this much directly • Very confident in their ability to save a photo and other basic computer skills, but not in more advanced skills such as using a programming language	 Critical engagement with social media content • Are more likely to post a comment on a post that they engage with critically • Engagement with video content twice as likely to be critical; much higher rate than other profiles • When they assess the credibility of a post, they are most likely to think that it is not true



4.3 South Africa

The South Africa research revealed a significant difference in moments of critical engagement between participants from group 3 (high socioeconomic level) and from groups 1 and 2 (middle-low and low). This is similar to the divide between the groups in Mexico.

While for the lower and middle participants Facebook (Lite) is the main or only social media platform they use, the group with the higher socioeconomic background tended to use a large set of platforms. Of these, Instagram was (in 2019) the one they mainly used for contact with their peers, while Facebook was considered 'for older people' and a platform on which they were more connected to older family members. This perception that Facebook is for older people does mean that they saw it as more trustworthy.

Data costs are a major issue and barrier to entry to platforms such as Instagram and Snapchat. Children with lower socioeconomic backgrounds rely on small pockets of data and mainly use Facebook, and particularly Facebook Lite. These children are much more deeply immersed in Facebook as their social media tool for posting about themselves, their friends, their family, their sports, their social activities etc.

In the interviews, the participants tended to blend fiction, falsehoods and harmful content – all were seen in a similar light and considered negative, and they were often not distinguished from each other.

The interviews further indicated that the participants in these groups cared about information being reliable in general. Furthermore, participants were rather confident of their ability to evaluate content; some stated that Photoshopped images in particular were easy to spot. In practice, however, they showed relatively little consideration

as to whether or not the content they saw was reliable, particularly with regard to posts that were entertaining.

For each group, different factors influenced if and when they engaged critically with content they saw – see the profiles for more information on these. But there were also common factors, such as exposure to unpleasant, mostly violent content and a general distrust in people and information. Compared to the participants in Mexico, the children in South Africa were generally less deliberate about assessing friend requests.

FACTORS AFFECTING CRITICAL ENGAGEMENT

For the South African groups, there were many common factors.

Demographics and home life

- Socioeconomic background: The participants from the high-income suburb engaged critically with posts on their Facebook feed much more often than the participants from the other two groups.
- Parental monitoring: The most critically engaged participants often discussed what they saw online with their parents or caregivers, but rarely asked for help. Being monitored online or connected to their parents on social media did not make them any more or less likely to be critical of what they saw. Critical engagement was much lower for children with parents whose highest level of education was primary.

Use of social media

- Frequency of use: 'Moderate' users were most critically engaged: those who reported using social media daily or almost daily were more critically engaged, while those who went online several times a day or less than daily were less critically engaged.
- Access: Children with easy personal access to the internet and those who had been online for the longest were more critically engaged.

Behaviour and attitude

- Confidence: Confidence in their ability to spot false information seems to be inversely proportional to critical engagement – the more confident they were, the less likely they were to engage critically and assess the reliability of information they encountered. Overconfidence in their ability to detect misleading information intuitively seemed to be an important inhibitor of critically assessing the content they encountered.
- Online and offline congruence: Children who indicated that they talked about the same things online and offline tended to be much more inclined to assess the reliability of content online than those who indicated that they talked about different things in the two spheres. At the same time, the children who engaged most critically with content indicated that they were less trusting of people online than offline.
- Familiarity: Participants were less likely to engage critically with a post from a family member. Overall, participants were more likely to engage critically with a post from an unknown person.
- Support: Participants who reported that their friends had explained why some websites are 'good or bad' or had suggested ways to use the internet safely were more likely to engage critically with the content they encountered.

PROFILES

These profiles are based on commonalities between the participants in the respective groups, not on their average results. This means that each profile does not describe all participants with the group's shared background, but most children in the group will share most of the characteristics. The names of the profiles are made up and do not refer to any participant.

Profile of group 1, lower socioeconomic background: "Siya"

Siya is a student at a township school. They speak isiXhosa at home but are comfortable using English online. They feel quite unsafe online and do not trust people or the information they encounter online. If they see something online that they have not seen before, they will assume it is false rather than true. They use Facebook Lite daily and have more than 300 friends. They are not overly confident in their own abilities. For them, there is a link between their online and offline lives, and they are concerned that what they do or say online could have real-life repercussions. They first went online at an older age (12-13) than children in the other groups.

Group 1: township; isiXhosa speaking

 Home and school • Don't ask their parents if they have questions • Not monitored online by parents • Probably have own smartphone but may share one with someone else; use prepaid internet • Receive support from friends or classmates	 Behaviour • Online every day; use Facebook Lite daily, but post less than once a week • Do not use other social media platforms, except sometimes WhatsApp • Feel quite unsafe online • Distrust people they encounter both offline and online, and information online • Have 300+ friends on Facebook • Talk about different things online and offline; aware that things they post online can be seen by different people
 Knowledge and experience • First went online at age 12-13 • Believe people online are rude or nasty and encounter content online that make them uncomfortable • Encounter content online that they think is false • Lack confidence in ability to determine truth online	 Critical engagement with social media content • Facebook feed contains little 'news' content • Less likely to question reliability of posts with videos • Low level of critical engagement for posts by family members, and high for unknown sources • When they assess the reliability of a post, they are most likely to think it is not true

Profile of group 2, lower-middle class background: "René"

René is a student at a school in a low-income suburb school. They don't easily trust people or information, but they have a lot of contacts on Facebook. They have good digital skills. They have seen images of self-harm that circulate on social media and are concerned but not surprised about this. They don't consider discussions on social media about gang violence abnormal.

Group 2: school in low-middle-income suburb; speaks English

 Home and school - Occasionally ask their caregivers for help if they have questions about social media - Closely monitored online by caregivers - Have own smartphone with prepaid internet	 Behaviour - Are more trusting of people in their hometown (offline) than people online - Aware that not all information online can be trusted - Use Facebook (often Lite) and WhatsApp daily, don't use Instagram - Have 300+ friends on Facebook - Talk about different things online and offline
 Knowledge and experience - First went online at age 9-13 - Believe people online are rude or nasty - Have seen information they recognised as false - Have strong basic computer skills and some advanced computer skills	 Critical engagement with social media content - Have a low level of critical engagement with personal and entertainment posts - Are less likely to be critical of posts with pictures - Have a low level of critical engagement for posts by public figures - Are likely to be critical of posts that come across as 'unclear'

"Normally when it is something that is really hard to believe – than I think those posts are fake."

Participant #5 SA

Profile of group 3, higher socioeconomic background: "Neo"

Neo is a student at a school in a high-income suburb. They talk with their caregivers about what they see online and with whom they are connected on social media. They use Instagram and WhatsApp every day and have a relatively small circle of friends online. Social media is a fun part of their lives; they don't take it too seriously. When they see something they consider 'nasty', they disengage – scroll on or log off.

Group 3: school in high income suburb; home language is Afrikaans or English

 Home and school • Ask their parents if they have questions about something they see online • Are connected to their parents on Facebook • Own a smartphone and have Wi-Fi at home • Give and receive support from friends or classmates • Have had some media literacy training at school or a club, but didn't think they learned anything new	 Behaviour • Feel relatively safe online • Trust people in their own community (offline) but don't think people online can be trusted • Use Facebook daily but post less than once a week – primarily use other social media when communicating with peers • Use Instagram daily, sometimes Snapchat • Have 0-300 friends on Facebook • Talk about different things online and offline
 Knowledge and experience • First online before age 10 • Have seen information online that they thought was false • Are unlikely to have bad experiences themselves online, but have been exposed to a lot of content that made them uncomfortable – particularly racism and violence • Have strong basic computer skills	 Critical engagement with social media content • Are more critical of posts that have fewer likes • When they assess the reliability of a post, they are most likely to conclude that it is true • Critical engagement influences subsequent behaviour towards the post • Level of confidence in ability to detect reliability varies highly

"First I read through the info. Then I check if there are images. If there are only images, then I think it is maybe false. But if there is info and images then I know it is true."

Participant #22 SA

5. Conclusions and Recommendations

5.1 Conclusions

This study has provided interesting insights into the way young people in Mexico, South Africa and the Netherlands approach information they encounter on social media. While they leave a lot of content unexamined – including content that could very well be false – we identified some factors that influence their consideration of whether what they see is reliable. After all, the goal is that they realise that the reliability of information is something they need to consider.

1. General Attitude

Young people don't trust all the content and information they read and see online. They often know what to do if they are unsure whether something is true – sometimes that means verifying the information, sometimes scrolling past it. The most critically engaged young people look to others, particularly their peers and their parents, for advice and confirmation.

Many young people see information that looks authoritative – no spelling mistakes, professional layout, visibly taken from more traditional media such as TV – as more credible. Furthermore, most young people trust official news channels, when available, more than information on social media. One interesting finding is that, especially in contexts like the Netherlands, where there is a strong and established public service media (or private media with the same function and reliability), young people often use official channels as a frame of reference to determine if something they saw elsewhere is correct. Even when they don't follow these media outlets directly, having a reference point is beneficial for their ability to keep a level head and put the information they encounter online into perspective.

Many of the participants know that the people they encounter online may not be who they seem, especially in Mexico, where kidnapping is a serious threat. They deal with this most effectively when they have a deliberate approach to assessing friend requests. Many participants know of an approach like this, but don't follow it consistently. Compared to the participants in Mexico, the

13-14-year-olds in South Africa were generally less deliberate about assessing friend requests. Having young people explicate the steps they already follow in some situations could therefore be beneficial.

There is great variety in the extent to which young people indicate that they care about the reliability of information. Some recognise the importance of truth, but then conflate misleading, fictional and harmful content without differentiating between them. Others just don't care or don't find it relevant. And some mainly care about the entertainment value of what they encounter online, although these posts are less likely to be assessed critically, regardless of attitude or personal characteristics.

2. Gender

While we noticed some gender differences in critical engagement patterns related to content, there was no discernible difference that held across all contexts. A few examples of gender differences were:

- In South Africa, female participants were less likely to agree that information on the internet is reliable or that people in their hometown could be trusted
- In both South Africa and Mexico, male participants were more critically engaged with posts mentioning a public figure
- In South Africa, female participants were less likely to critically engage with personal posts and more likely with entertainment posts

3. Socioeconomic groups

Generally speaking, critical engagement is positively correlated with socioeconomic group – the higher the socioeconomic background of the young person's family, the higher their critical engagement. This can be seen in many factors that concur with socioeconomic background, such as parents' education level, whether the child has a job, their internet access and their family structure. The highest groups tended to be more critically engaged than the middle and lower groups, which were more similar to each other.

4. Large within-group differences

However, there was a big difference between individuals within each group – while the overall critical engagement might be a certain way, there were high and low engagers in almost every group. This suggests that peer-to-peer learning could be beneficial. That is also reflected in the data: those who get support from peers tend to be more critically engaged.

While the profiles we developed for each group in the study may be useful, this variance within groups means the 'personas' are also important. These personas are amalgamations of several students across groups; most of them hold true for all countries, and their engagement styles reflect the kind of content they prefer as well as personality and behavioural characteristics.

5. Moderation

Moderation is key in many areas. We noticed a 'bell curve' pattern in several places, notably:

- Parental involvement
- Fear of online dangers
- Frequency of use of social media
- Confidence in their own abilities

For each of these factors, too little and too much is related to reduced critical engagement; it is the young people who score in the middle range on these factors who are the most critical, while those at the extremes display fewer instances of critical engagement.

It is tempting to conclude that moderation leads to critical engagement, but it is important to remember that there is no causality shown here – the critical engagement could also be moderating the other factors in some way. A plausible explanation is that both a person's lack of belief in their own ability to determine the truthfulness of information, and a belief that they will recognise it easily will make them less likely to second-guess their first impression of the truthfulness of what they see. This could be investigated further through a study that looks directly into this particular correlation.

We had two research questions:

- Which factors determine whether young people engage critically with information they encounter on social media?
- Which, if any, differences exist between socioeconomic and national contexts in how and when young people relate critically to digital information?

Through this study, we have identified and explored some of the factors that influence whether young people critically engage with information they encounter on social media. These have formed the basis of the profiles and personas described in this report, that show the difference between different groups and contexts.

Originally, we had hoped to find out whether there were strong links between the correlations seen in South Africa and Mexico and a third Western country, the Netherlands. The idea behind this was to see whether the results of research conducted in Western countries could also inform media literacy efforts in other contexts. However, the data we collected in the Netherlands were not sufficient to draw these conclusions.

You can request the full collection of research instruments, data and analysis by emailing kir@freepressunlimited.org

5.2 Recommendations for improving...

...digital media literacy skills

The findings of this research can help shape new approaches to media literacy training in Mexico, South Africa and beyond. This is a selection of our takeaways; it is worth noting that such a large amount of rich data might help other experts to develop their own ideas for how to strengthen media literacy.

In many cases, the young people we interviewed offered their own good practices, advice for other children or for educators. Here is an overview:

- **Unknown people:** Many participants recommended not accepting friend requests from people you don't know: *"I would recommend that kids shouldn't add people they don't know... someone may agree to go out with someone they do not know and they may not come back"* (participant #7, Mexico); and to verify who you're talking to before responding: *"If I get anonymous messages, I go into the profile and google to see if it's legit"* (participant #24, SA). Generally, *"don't click on mysterious links and don't accept requests from strangers"* (participant #5, SA).
- **Privacy:** being aware of your privacy is also important *"definitely get a private account, pay attention to what you post and who you allow to follow you"* (participant #7, NL). Whatever you post is online forever, so don't post 'stupid videos' on YouTube or nude photos anywhere. *"I would not post nude photos with your head on it. The first tip is not to post nude photos. But if you do want to do that, I would do it unrecognisable"* (participant #1, NL).
- **Offline and online:** some children advised using the 'offline' world for safety – *"If I feel unsafe, I will log out of my account and close everything and stay away for a while"* (participant #10, SA) – and finding out

what to trust *"Online, you can't see their facial expressions which makes it like quite unstable to trust"* (participant #9, SA).

- **Media literacy should be taught by young educators:** across the board, the children agreed that they were much more open to learning about social media and digital media literacy from a younger adult, closer to their age group. Some define what is 'too old' very concretely: *"I don't listen to most teachers, but I also have a 25-year-old teacher and he's pretty chill. He understands us much better. (...) above 30, the barrier is larger"* (participant #1, NL).
- **Useful red flags:** participants mentioned many things they consider red flags, from spelling mistakes to the use of emojis. Furthermore, they advise other children to *"see the comments. If there are people doubting or disagreeing, then you should doubt it as well"* (participant #46, SA), as well as to double-check anything you think might be true: *"I look in Google and then I try books and that's it. Then I use an imaginary eraser in my mind for all the ideas I have and start to eliminate"* (participant #31, Mexico).

You could build on this by developing tools or methods to remind them of the elements many of them already find important. Highlight red flags, so that they are reminded; give them a structured method to deal with friend requests and help them remember to look for the source and the intention behind the posts they see.

...teaching and training

Skills and experience vary, familiarity with verification techniques varies, and scepticism of certain types of information varies. Designing a programme that engages kids of varying abilities and susceptibilities can be challenging. For teachers, trainers and others working with young people on media literacy, here are some recommendations inspired by our findings.

Get the kids involved

- Set them a task – how could they determine if something is true, step by step? Many children already fact-check some forms of information, but not all and not always consciously. Encourage them to make this explicit. They could look at examples of what others do and evaluate them and come up with their own ideas.
- Ask them what they do about content and people they don't trust. Start a conversation between them and facilitate peer-to-peer support. Ability and awareness vary a lot within the same group of children, so they are well positioned to learn from each other.

Speak their language

- Literally. Lack of familiarity with English could be a barrier to critical engagement, so talking about approaches to determining truth online in their native language might be more effective.
- Get young people to talk to them. The interviews showed that children are more likely to listen to people slightly older than them, who understand their perspective.
- Think about their age and tailor your approach.
- Most of the children do not expect close monitoring from their parents of their interactions in social networks. They benefit from comprehension and parents' disposition and willingness to help them when they ask their parents for help. Adults should be made aware of this and take this into account.

Highlight why reliable information matters

- Use relevant examples and stories – kidnapping in Mexico and violence in South Africa, for example.
- Why should they care? Talk to them openly about it and understand their responses, especially if they don't care about whether what they see is true. Expand on situations where the children or someone they know was directly affected by the (un)reliability

of what was posted online – this can be as small as gossip that was taken too seriously.

Teach them digital skills

- Close confidence gap: teach children who are confident in their skills ("I know if its fake when I see it") to doubt more and be explicit about how they can detect this; teach the kids who lack confidence to rely on a process, not their instinct. The challenge is to develop specific criteria with the student in both of these situations, so that they use open criteria and techniques instead of mainly their feelings.
- Teach them to evaluate friend requests before accepting them: is this person who they claim to be? This is beneficial in itself, but also sensitises them to the fact that all the posts they see on their timelines are put there by someone, who has their own motivations.
- Make sure they know what to do if they're in danger.

Support children with a lower socioeconomic background

- Socioeconomic background is a dividing line in both Mexico and South Africa. The challenge for educators is how to support children with lower socioeconomic backgrounds and bring them to the level that children with higher socioeconomic backgrounds are already on because of influences from their environment.
- Providing access to the internet in a supportive (for instance, school) environment at a younger age could help, as this is one of the large differences between the groups. This gives them more experience for dealing with social networks, both with information and making friends.
- All children should be taught to feel comfortable discussing their online experiences both with each other and with trusted adults. Especially (but not exclusively) younger educators seem fit for this role, which should be more that of a mentor than an authority figure.

Friend requests

1. Recognise – do you know the person by name or photo?
2. Explore – check their profile, do they have posts and photos and other activities? Do you have mutual friends?
3. Check – if you know them, ask them in real life if it's their profile.
4. Accept – does it all check out? Then you can hit accept!



Misinformation

1. Source – who posted it? Do you trust them?
2. Media – if it comes with a photo or video, does it look real or staged?
3. Publication – where is it published? Is it a reputable source?
4. Verification – google the news, can you find it on other reputable sites?



5.3 Recommendations for media and media development organisations

The recommendations for teaching and training outlined in the previous section can also be of use to media and media development organisations. In addition, there are conclusions and recommendations that can be drawn specifically to assist media and media development organisations to improve media literacy.

Two conclusions are particularly relevant for media outlets and media development organisations. First, it is beneficial for children to have a deliberate approach towards assessing the reliability of the information that they encounter. And second, they are more open to learning about digital matters through their own experience, or by having peers or younger adults share their

experiences and good practices, than they are though receiving instructions from an authority figure they do not expect to have shared their experiences.

As the findings of the study show, both a lack of confidence and overconfidence in their ability to recognise what information is true or false hinders taking a deliberate approach – both lead to quick judgement. Instead, it would be beneficial to foster a greater sense of agency in the children towards interpreting the content. What can help is an understanding that the posts they see are created by a real person, who has their own views or purpose and who made choices (deliberate or not) about what to post and from which angle.

This is where media and media development organisations can add value to efforts to improve (digital) media literacy skills. Based on this study, we expect that involving young people actively in the production of content – including news – could be a valuable component in improving this understanding. Furthermore, independent journalists could be involved in encouraging the participants' critical thinking, by sharing their own experiences in verifying information and dealing with uncertainty about truthfulness. Sharing, showing, or having the children experience the choices journalists and other content producers make is likely to help them become more deliberate and nuanced. In other words, it is likely to increase their critical engagement towards the content they read and see online – help them 'think like a journalist'.

This study also revealed widely varying opinions among the young people involved as to the relevance of whether what they see online is true. Many participants indicated that they simply don't care; this could make them less receptive to media literacy training. It would therefore be advisable to highlight the value of reliable information for them. This could be done by having them experience producing their own content, for example, something that addresses an issue in their environment or that is beneficial to their peer

group. Media outlets and media development organisations can get involved in making this happen. Journalists could also emphasise how their content matters for their young target group or run follow-up shows that focus on how a previous story has affected their audience.

Regardless of the intervention a media or media development organisation is setting up, the profiles and personas described in this report will help them understand and take into account this target group. Educators, policy makers, media and media development professionals and others are warmly invited to explore the findings of this report to derive further lessons or draw inspiration for other types of interventions.

In a follow-up to this research, Free Press Unlimited will run a few pilot projects in different countries. Our aim is to boost critical thinking, the ability to distinguish misinformation from reliable, fact-based news and information, and to foster an understanding of the value of reliable information. The pilots will be based on the recommendations outlined here and will actively engage the target group in the production and/or distribution of content. We hope that other organisations and individuals who share the same goals will also be able to benefit from the findings of this study.

5.4 Recommendations for further research

A number of hypotheses emerge from this exploratory research, and these could be tested by:

Studying socioeconomic status as the main factor affecting critical engagement. This was clear in the South Africa and Mexico results and could be explored further. However, there is a tangle of factors playing a role in this association,

and it would be worth looking more closely at this. It would be worthwhile to study both the opportunities and constraints created by the young person's socioeconomic position as well as the influence of differences in norms prevalent in peer groups with different socioeconomic backgrounds.

Disentangling clusters for a better understanding of causality. The factors that work together, for example, to produce the socioeconomic effect, could be separated out with more research, to investigate which of them have an effect on critical engagement (separately or when they co-occur with another factor). This includes:

- Age first online
- Type and frequency of internet access
- English language proficiency
- Education level of parents

Looking at the influence of platform usage. Children with a higher socioeconomic background tend to use Facebook and Instagram, but the use of visual platforms like Instagram will likely extend gradually to children from lower socioeconomic backgrounds over the coming years. These platforms are ascribed different functions by the participants in the interviews. Further research should expand on this, to see if shifts in the function a child ascribes to a social media platform will also affect their tendency to perceive the information they encounter on it as credible. It would be important to investigate whether this is related to a change in the types of people they mainly interact with on a platform or whether it extends to anyone they interact with on that platform.

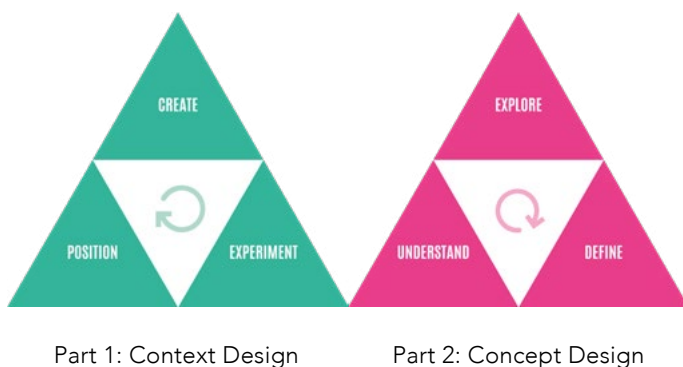
Annex

Case study: hackathons

Armed with the initial findings of the report, we at Free Press Unlimited wanted to see how they could be built on in context. Working in close collaboration with Studio.Why, we organised two three-day hackathon events with young people in Mexico and South Africa. These bootcamp-style innovation sessions were designed to bring young local people together to explore specific questions that arose in the research, with the aim of developing digital media literacy tools that can help young people engage more critically with online content. For each hackathon event, we selected a group of creative and open-minded young people to work together to find innovative solutions to a real-life, media-related challenge.

It is important to note that the participants were not part of the target group – the 13-14-year-olds. It was not feasible to get permission from their parents and their schools to attend a three-day event outside their close environment. The participants, roughly between 18 and 30 years old, focused on concepts that would work for 13-14-year-olds. For this they, among others, conducted interviews with the target group and – at a later stage – asked them to give feedback on the prototype of their concept.

The hackathons were based on the 'Dutch Design Deltas methodology' developed by Studio.Why.



"In order to develop a possible solution I learned to put aside my opinion and base my judgement on the user's experience."

– Hackathon participant

Challenges

In the two hackathons, participants worked on the following challenges:

1. How might we help 13-year-olds to be more deliberate about whether to accept a friend request?
2. How might we better equip influencers to help 13-year-olds engage with (social) media more critically?
3. How can we equip 13-year-olds to make source or fact-checking a habit?
4. How can 13-year-olds be encouraged to support each other – peer-to-peer support – to boost critical thinking?
5. How can we trigger young people to be more aware when consuming online content?

Insights

We gained some insights from the hackathons that complement the research findings and can be taken into consideration when exploring solutions for media literacy in young people.

- Kids need attention and belonging: they want friends (and likes!)
- Peers are important, as are celebrities, influencers, and certain things being said on TV and online
- Young people don't want their parents to get involved in their business, they don't want to be controlled. But an open conversation might help...
- Education in Mexico and South Africa is often based on repetition rather than curiosity and critical thinking
- Stay close to the world of kids: use music,

games, humour, memes, make-up, etc.

- Information should be fun, fast and easy. Kids are missing a tool to help them judge the trustworthiness of news and other information; there is no TomTom to navigate the news
- Young people believe certain information because they believe the brand behind the information; you have to build trust with your audience
- Social media is super important for young people, but Facebook is considered a tool for older people (although used in poorer communities due to lower data demands)
- Young people know about the dangers, they know about fake news, but they either don't seem to care or don't know how to handle it
- They have limited time to judge content and peer pressure can be high
- They have their own mechanisms for checking news: e.g. if a lot of people say it is true, it is true
- For really important news kids turn to well-known sources (and their parents)
- Traditional journalism doesn't interest young people, and therefore is not a solution to their problems

The good news is:

- Young people are asking for support, tools and clear criteria to understand, select, filter, judge and evaluate the news
- They also want tools against cyberbullying, catfishing and sexting, because it really affects them

Tools developed

The goal of each hackathon was to present concepts that could be used as starting point to further explore, test and build a new product or service. We were not aiming to fully develop a sound solution – that's impossible in a three-day event like these, and out of the scope of this project in terms of time and budget. A hackathon in itself doesn't produce final solutions, but is a focused process to initiate new ideas, thoughts and concepts. It is often the insights that are

distilled from these events that contains the added value, more than a presented idea that needs further development anyway. The insights mentioned above should therefore be used as a foundation when setting up a media literacy programme with young people.

Participants in each country came up with four solutions that we'll outline here.

South Africa

Young people accept friends too easily on social platforms. They want to belong to a group, it's the numbers that count and the aim is to show off to their peers (students laughed at a teacher who had 'only' 500 friends). But kids often don't know who is behind a friend request. To encourage young people to think for a second before accepting a new friend, one team suggested a questionnaire or funny video that pops up on social media (or is a plug-in on your browser) at the moment you accept a new friend. The questionnaire or video explains why they don't need to accept everyone and encourages them to think twice.

- Another approach to evaluating 'friends' was a playful app that periodically asks questions about a contact. After answering, the user will be asked if they want to stay friends with that person. The team suggested that local influencers should promote the app.

Danger is everywhere online, whether it comes in the form of bullying behaviour, harmful content or misinformation.

- To combat cyber bullying, one team suggested to organise a (sports) boot camp with the aim of bringing people together and to give space to talk about the dangers on social media. 'Just don't do it' would be the slogan for an anti-cyberbullying boot camp.
- Research shows the use of mild fear captures young people's attention. In low-income neighbourhoods in South Africa, kids go to public spaces like the library to use free Wi-Fi. One group suggested

activating an alarm would help get people's attention, to encourage awareness and start a discussion about fake news and disinformation. Before you go online a pop-up will appear on the computer screen in the library explaining the dangers.

Mexico

Kids love games and having fun, so this playful element could be used as a means to develop and strengthen critical thinking skills.

- One team presented a game of a magical world where puzzles containing news items need to be solved. Players get rewarded with points that have an actual value in the real world, like discounts in stores.
- Kids are more open for new things during after school activities. One team suggested to organise a stand-up comedy activity where you make fun of the stupid or dangerous things that can happen online. Laugh about it! Have a discussion! Become more aware!

Young people are looking for simple tools that can clearly point out potential dangers and help them critically engage and make good decisions.

- Are young people aware of what they browse and read online? A traffic light tells them quickly and easily if the content they see on social media is trustworthy: a red light shows a lot of fake news, orange is a warning, green is fine. The scores that trigger the traffic light are based on sources, the kids' online behaviour and the content they follow.
- One team suggested a new "fake news free" searching software that comes with applications that encourage a critical mindset.

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The full collection of data (anonymised) as well as the research instruments (questionnaires; observation exercise forms and instructions; interview and focus group guides) can be requested by emailing kir@freepressunlimited.org. These support the findings, conclusions and recommendations that are presented this report.

Keeping it Real:
An exploratory study of how 13-14-year-olds
critically engage with online content

Tim Schoot Uiterkamp

July 2020

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