AN ASSESSMENT OF MEDIA LITERACY AND FACT-CHECKING TRAINING NEEDS IN SOUTH AFRICAN SCHOOLS AND UNIVERSITIES

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Executive summary

The goal of this report is to identify knowledge and skills gaps related to teaching about misinformation through a needs assessment of educators in South Africa. The aim is to assist the development of media and information literacy (hereon, media literacy) materials that can be used in South African schools on a secondary level, and to develop training-the-trainer programmes to increase the reach of media literacy and fact-checking skills.

Part of the project "Becoming a Responsible Consumer of Media", funded by the U.S. Embassy, Pretoria, this report presents the findings of a needs assessment of media literacy and fact-checking training needs of school educators and tertiary professors and lecturers conducted between September 2021 and February 2022.

The findings presented here are based on data obtained through quantitative and qualitative methods: two online surveys administered to school teachers and university lecturers and professors, a series of focus group discussions and interviews with basic education stakeholders (educators, lecturers, relevant policy makers and administrators), as well as discussions with media literacy experts and fact-checking practitioners.

The findings reflect the input from a diverse sample of respondents from five South African provinces: Western Cape, Eastern Cape, Free State, KwaZulu-Natal and Gauteng. This needs assessment will ensure that the media literacy materials to be developed in a later part of this project are grounded in research, speak to the real needs and experiences by the target audiences (that is, educators and learners), and address the real knowledge and skills gaps in the country, rather than apply formats and lessons-learned from other countries or world regions.

The findings of this needs assessment should also help determine which universities do not already offer fact-checking and media literacy training in their curricula and who will thus be invited to take part in the next phases of the project.

The main findings of our report can be summarized as follows:

- Media literacy can be understood as an **ecology of skills**, such as the ability to read media texts critically, to understand the relationship between media and audiences, and to know how the media production process works. Our research has made clear the importance of adding a new item to this ecology, namely **misinformation literacy**, which can be seen as a way of acquiring the critical and technical skills needed by media users to counter the spread of misinformation online.

- School educators have an **applied and pragmatic definition of concepts** such as misinformation, which is based on their own experience at work and their understanding of the experiences of their learners. This applied definition might not

always match the definitions found in the academic literature, but could be used to complement and contextualize academic concepts and theories.

- There exists **no nationwide, structured and uniform teaching of media literacy** in South African high schools, even though some competences are part of the curricula of different subjects, including life orientation, English, technology and history. Such inclusion, however, happens on an ad-hoc basis, depending on the capacities and interests of individual schools and teachers. Some schools have taken it upon themselves to conduct their own workshops on media and information literacy issues such as cyber-bullying and misinformation.

- The **Western Cape Education Department has introduced a media literacy module about online safety** in partnership with Google, consisting of four lessons each for grades 8 to 12. The curriculum has not been widely implemented, in part because of the outbreak of Covid-19 in 2020, and many educators teaching life orientation in this province do not seem to be aware of it. The implementation of this module countrywide will depend on whether it gains the approval of the national Department of Basic Education.

- Where media literacy does form part of existing curricula, a wide range of skills are being taught, particularly how to use the media, how to produce media content and how to be safe while online. However, **much less focus falls on how to fact-check and verify the media**. There are also some differences in the teaching of how to understand the media: not all the competences the past research has identified as important to teach are being taught equally.

- We found evidence that **media literacy is taught in some shape or form in all South African universities** where courses on journalism, media and communication studies are offered. However, these skills are not taught as standalone subjects, but integrated into larger modules. When asked what competences should form part of media literacy curricula at universities, a wide range of answers were given, ranging from practical/technical skills to more theoretical approaches.

- At South African universities, **there is no centralized curriculum**, so individual lecturers are free to develop their own course content. We found evidence that all 15 universities participating in our study teach media literacy to some degree, although the amount of notional teaching hours spent on this content, as well as the approaches and focal points vary significantly. The difference in approaches can partly be attributed to the different types of programmes offered at universities, where journalism courses tend to focus more on applied skills and media studies courses tend to take a more theoretical approach.

- Different stakeholders have different expectations regarding what ought to be taught in media literacy modules. For example, high school educators are more inclined to

introduce learners to how to use different media, while university lecturers and professors focus more on how to create content with media. Therefore, in order to develop media literacy materials that would be applicable in different settings and appropriate for different users, a wide range of perspectives would need to be included.

- The majority of **high school educators said they felt confident in their own abilities to teach media literacy**. Nevertheless, there was enthusiasm for the introduction of further media literacy training opportunities for teachers, and that without the necessary training, teaching media literacy is difficult.

- Media literacy training at high school level is impeded by several factors. Among these, **inequities in access to digital devices and online resources** is the most significant. Other impediments include the **bureaucratic processes surrounding the implementation of new curricula** in South African schools, lack of time and materials, and socio-cultural and religious differences, including the variety of South African languages in which media literacy could be taught. Most of the problems we identified in this report appeared to be national in nature; there were no notable differences between provinces, or even between types of schools, other than issues of access and, to some extent, socio-cultural factors such as religion or language.

Based on the findings presented in this report, we make the following recommendations:

- **Recommendation #1:** The various impediments to media literacy mean that a one-size-fits-all approach to the teaching of media literacy is bound to fail. The structural issues around teaching of media literacy pose a much broader and fundamental challenge than could be addressed by media literacy curriculum development alone. Nevertheless, media literacy materials should take cognisance of these impediments and find creative and innovative solutions to work around them.

- **Recommendation #2:** Media literacy curricula should be developed with multimedia materials and multimodal delivery methods in mind. A strong focus on mobile phones as vehicles for delivery is recommended, due to the ubiquity of mobile phones in South Africa, the relative ease of access and the possibility to zero-rate certain websites that may be accessed in mobile mode. Care should also be taken to develop materials in the language, age-appropriate idiom and with reference to actual lived experiences of the communities where they will be used.

- **Recommendation #3:** Given the extent of research about media literacy already existing globally and, to a more limited extent, in Africa and the global South, efforts should not be directed at developing materials entirely from scratch, but rather draw on best practices elsewhere and localize what others have tried and tested. It remains vitally important, however, that an immersive, context-specific approach be adopted

when drawing on material and practices developed elsewhere.

- **Recommendation #4:** Given the bureaucratic impediments to developing and rolling out media literacy curricula countrywide, higher levels of departments of education in each province should be engaged in media literacy curriculum planning. It is likely to be easier to introduce media literacy components to existing life orientation curricula on a provincial basis than attempting to devise and implement a uniform, centrally-planned curriculum on a national basis. Such a provincially-orientated approach may also facilitate better contextualization of materials and teaching methods appropriate for conditions in different provinces.

- **Recommendation #5:** Given that media access and media literacy are unevenly distributed across different communities, as well as the vast differences in socio-economic conditions, learners are not equally able to count on the support of their parents in acquiring media literacy skills. In addition to the development of media literacy material, Africa Check should offer training workshops to learners and teachers, and extend invitations to such training opportunities to other members of the community. Such community training could also provide the opportunity for further consultation with stakeholders about their media literacy needs. However, given the limited time available to teachers to attend such sessions, training should be developed in a time-efficient manner.

Section 1: Definitions

What is media literacy?

Media and information literacy (from now on, referred to as media literacy in this report) describes the ability to understand key functions of the media, how those functions are performed, and to access and engage the media with the purpose of self-expression, as well as how to evaluate and use media and information in an ethical manner (Wilson et al., 2011, p. 8). In other words, media literacy can be understood as the "the ability to access, analyse, evaluate, and create messages in a variety of forms" (Livingstone, 2004, p. 5). The various definitions of media literacy emphasize "the development of enquiry-based skills and the ability to engage meaningfully with media and information channels in whatever form and technologies they are using" (Wilson et al., 2011, p. 18). Media literacy is important because it enables people to exercise their fundamental human right to freedom of opinion and expression as stated in the Universal Declaration of Human Rights, Article 19. In the context of teaching and learning, media literacy has the following benefits (Wilson et al., 2011):

1. It equips teachers with better knowledge to empower learners as future citizens.
2. It develops knowledge about the function of media and information in democratic societies, understanding about how those functions are performed effectively and the skills to evaluate media and information providers accordingly.
3. It nurtures an appreciation of free, independent and pluralistic media and information systems.

There are parallels between media literacy and traditional literacy in the sense that media literacy entails the ability to read and write information or media messages; it also helps users interpret and understand media messages and their meanings (Potter, 2008). At a more advanced level, media literacy enables users to not only recognize and comprehend information, but apply critical thinking and analytical skills to question, analyse and evaluate information and understand the way the media industry works (Van der Linde, 2011). The aim of this literacy is to enable users to make decisions based on sound evidence, and prevent poorly informed opinions that can harm their own health, social cohesion and democracy (Africa Check, Chequeado & Full Fact, 2020).

While the wording of these media literacy definitions might differ from one expert to the other, there is a significant consensus on the basic components of the definition across academic experts, practitioners and educators. As part of the research done to write this report, we surveyed both secondary school educators teaching in the five provinces on which this report is focused, and journalism, media and communication studies university lecturers and professors. More details about the data collection process are available in Annex A1.

We asked professors to provide us with their own definition of media literacy. Here are some of them:

- "The capacity to use media – both to access it, and to critically evaluate information gleaned from it."
- "To have an understanding of media, be able to critique and analyse media."
- "An applied understanding of the general principles of media production, use and dissemination in general and in relation to mass and digital networked media within a particular local context as it relates to ethics and regulation."
- "How media operates, knowledge of its biases and their roots (political, economic and socio-structural)."

Some of the themes included in the definitions provided by university lecturers and professors can also be seen in definitions we collected from interviews and focus groups with educators, policymakers and practitioners. For example, in focus group discussions with educators, teaching media literacy was defined as "trying to develop critical thinking skills in young people to not just consume media, but to engage with media in a constructive way, to question it." Another educator referred to media literacy as the "knowledge that, while the media is a provider of information, not all information in the media is true information [...] The fact of being literate in the media and knowing how to peruse the media, [it is also about] knowing how to research the facts in the media and knowing how to find information." Summarizing the views of several of the teachers we spoke to, the head of a private school in Gauteng said:

> "For me, it means the ability to critically assess the accuracy of what you're reading, or to be able to ask questions that will help you determine the accuracy of what you're reading, to not take things at face value, to become aware of bias in a piece of work, and how to help yourself to verify what you're reading."

Issues around critical engagement with media content and the importance of knowing about the inner workings of the media are also present in the definition of media and information literacy (or MIL) put forward by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in its Media & Information Literacy Curriculum for Educators & Learners. According to UNESCO, MIL comprises "a set of competences that help people to maximize advantages and minimize harms" and "covers competences that enable people to critically and effectively engage with: communications content; the institutions that facilitate this content; and the use of digital technologies" (UNESCO, 2021, p. v). This definition, as well as those outlined above, are intentionally broad and all-encompassing. They include multiple dimensions of literacy, such as: freedom of expression and information literacy, library literacy, news literacy, computer literacy, internet literacy, digital literacy, cinema literacy, games literacy, television literacy, advertising literacy, and, of course, media and information literacy. When all of these dimensions of literacy are taken together, they form an "ecology" of literacies (Wilson et al., 2011).

In recent years, and partly because the entire world, including South Africa, has seen a rise in the amount of inaccurate information circulating online, some have suggested that one more item needs to be added to this ecology of literacies: misinformation literacy. Writing on this, Cunliffe-Jones and other researchers have identified six fields of knowledge and skills needed to identify and dismiss false information. These "6 Cs of misinformation literacy" (2021), which are built on the 5 Cs of news literacy by Tully and colleagues (2021), include:

- **Context:** knowledge of the contexts – social, cultural, economic, political, informational and events – in which false and accurate information are produced.

- **Creation:** knowledge of the types of people and institutions found to create false and accurate information, their different motivations and the skills to identify those who produce specific information online.

- **Content:** knowledge of the difference between facts and opinions, the different ways information can mislead and the skills and practices to distinguish accurate and inaccurate information.

- **Circulation:** knowledge of the processes by which accurate and inaccurate information circulates and what drives people to share information.

- **Consumption:** knowledge of the reasons individuals may believe false or misleading information to be true.

- **Consequences:** knowledge of the different forms of actual and potential harm caused by believing and sharing false and misleading information.

We can also identify some of these dimensions in the way practitioners at a fact-checking organization think of media literacy. In a focus group with some of its members, an editor at the organization referred to misinformation literacy as "addressing misinformation before it starts. […] It's about education, the general public, with a particular focus on news, to have the tools and skills to identify misinformation, and spread this knowledge amongst their peers." Adding to this definition, a member of the same team who works in education and training noted that, after all, media literacy is about "understanding how the media actually works and how communication works."

Not only is there relative consensus between educators, academics and practitioners about the main tenets of media literacy, but there is also a shared understanding of its importance in society. Take the case of high school educators. We surveyed over 200 of them between January and February 2022 using an online survey. We asked them to indicate how much they agreed or disagreed with a series of statements describing the role of the news media, and more specifically media literacy, in society. In Figure 1, we present a summary of the results. The items in the questionnaire were derived from a

scale to measure "news media literacy efficacy" proposed by researchers in the US who specialize in the measurement of news literacy (Vraga et al., 2021). An overwhelming majority of 80 to 90% of high school educators indicated their support for statements such as "News literacy is important to democracy", "People need to critically engage with news content" and "People should understand how media companies make decisions about news content." These statements are aligned with the basic tenets of media literacy included in the definitions presented here. The rest of the report builds on these ideas.

Figure 1. High school educators' views on the efficacy of media literacy
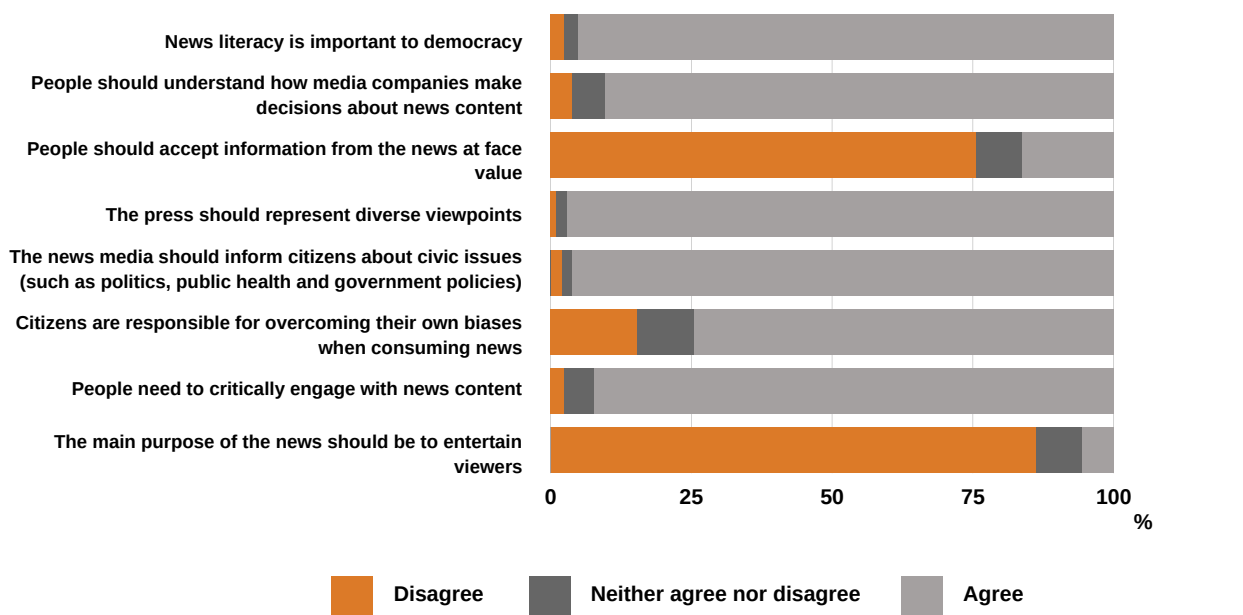
What is misinformation?

The concept "misinformation" is sometimes used interchangeably with "disinformation" or "fake news", and its definition has been the focus of much debate in the academic literature (Tandoc, Lim & Ling, 2018). The concept forms part of the broader phenomenon of what has been called "information disorder" (Wardle and Derakshan, 2017). This conceptual framework identifies three types of harmful information, distinguished on the basis of their degree of harm and falseness, as well as on the assumed intention of the sender (Wardle and Derakshan, 2017):

- Misinformation is when false information is shared, but no harm is meant.
- Disinformation is when false information is knowingly shared to cause harm.
- Malinformation is when genuine information is shared to cause harm, often by moving information designed to stay private into the public sphere. Such information might be based on reality, but used to inflict harm on a person, organization or country (e.g. email leaks, online harassment and hate speech).

When asked about their own definitions of "misinformation", university lecturers' and professors' responses overlapped in several ways with Wardle and Derakshan's (2017) three-part definition. For instance: "Information that is untrue, manipulated, and put forward in bad faith"; "false or inaccurate information, usually aimed to deceive"; "the use of partial facts or deliberate misrepresentation of facts or creation of fake data in order to create a specific narrative to serve a particular end goal or influence perceptions favourably or unfavourably of a particular issue, event, or personality"; and, "distribution of information that is intentionally manipulative, usually untruthful (but sometimes the truth used out of context) and unethically, meant to serve specific interests and mislead people."

While academic definitions of "misinformation" tend to focus on the intent of the person distributing the information, secondary school educators seem to have a more applied understanding of the concept which is based on issues they face at the schools where they work. For instance, to a science teacher in KwaZulu-Natal, "misinformation is [knowing] whether the source is actually reliable or not." The same teacher adds an example from their own experience:

> "At the school I taught before as well, it was quite an issue, because something would spread and there was no way to control it. A form of media that would go around and, sort of excite them in some way that they would then be spreading this false information."

This resonated with an English teacher at a government school, who said "misinformation is when people are just informed incorrectly. They've been told things incorrectly, or they perceive to maybe have something as incorrect, but misinformation to me is that you've been misinformed. You've been told the wrong thing or not given all the facts."

Most of the people interviewed or surveyed for this report agree that one way to reduce the amount of misinformation circulating in schools (and online, in general) would be to increase the amount of time spent teaching media literacy. This is partly backed by academic research. A study by Cunliffe-Jones and other academics (2021) found that media literacy in general, and misinformation literacy in particular, has the potential to reduce the harm of misinformation, but doing so would require teacher training, resources and support to schools. As we will outline in this report, these three requirements (training, resources and support) are currently out of reach for many (but not all) educators in South Africa.

As part of the research done to write this report, we spoke to Cunliffe-Jones who told us that, although media literacy is often seen as a tool to help counter misinformation, what is actually taught in such courses does not relate to information accuracy. According to him, traditional media literacy training is unlikely to significantly reduce susceptibility to misinformation. While there is a "tremendously broad" range of themes being taught in media literacy courses, "very little" of those curricula have to do with information

accuracy: "the essence of the problem is that a lot of the media literacy, news literacy and digital literacy doesn't relate to what we know about it."

While, in some contexts media and information literacy programmes have worked, in others, they are not always successful. In an overview of media and information literacy programmes internationally, Africa Check, Chequeado and Full Fact (2020) found that while such programmes showed great promise, differences in "populations, issues, styles of intervention and methods of evaluation adopted make it hard to generalise about a single most effective strategy." The study does conclude, however, that media and information literacy interventions had better effects the more sessions they included; programmes that tried to fit several lessons into fewer sessions had less success. The study furthermore showed the various forms that media and information literacy interventions can take, ranging from "classroom interventions with children to podcasts and online training for adults, and even newsroom-style games harnessing the power of play" (Africa Check, Chequeado, & Full Fact, 2020). The study recommended that fact-checkers can broaden their impact by "teaching audiences how to spot and resist misinformation, and work with others in the education sector to do so" (2020, p. 4).

What is fact-checking?

The rise of concerns about misinformation in recent years has given rise to fact-checking as a practice which could mitigate the impact of "fake news" – both within news organizations and in the form of independent organizations (Cheruiyot & Ferrer-Conill, 2018). Across sub-Saharan Africa, fact-checking organizations are often deployed as one of a range of non-state actors to counter misinformation; as an alternative to state regulation and legislation (Research ICT Africa, 2022). Fact-checking is based on the principles of truth-telling and impartiality. Some of the core practices of fact-checking, such as verification and clarity of presentation, are not unlike good journalism (Singer, 2018). Fact-checking is often associated with journalism, but the practice has also been adopted by independent organizations to subject politicians, alternative and legacy news outlets to scrutiny (Cheruiyot & Ferrer-Conill, 2018).

Based on the definitions we collected from South African university lecturers and professors, we could identify five components of fact-checking, which reflect both the skills needed to become a competent practicing fact-checker, and the overlap that exists between some of these skills and the competences described earlier in the section on media literacy. To some, as we outline later on in the report, fact-checking skills should be taught alongside other media literacy competences.

1. Verification and corroboration processes ("verifying information by consulting various credible sources"; "This is about double checking information that is presented to you"; "To check that any information and claims are based on fact and on scientific evidence.")
2. Independent research ("doing further research on the information that you have found

or received to ensure that it is correct or (as) accurate (as possible)"; "Ensuring that any information that you are going to share with the public is supported by trustworthy sources.")

3. Ensuring quality of information ("make sure the information is factually correct and not being sensationalized by the media"; "checking whether information in the public domain is factual or not, using a range of techniques.")

4. Scrutiny of possible hidden agendas ("To be suspicious of one-dimensional narratives and to verify information that appears to fit too easily into one particular camp"; "making sure that the source of the information is credible and the content of the message correct, applying the rules of logic to evaluate the message, and finally evaluating whether the 'emotional' appeal is appropriate and balanced"; "plays and will play a crucial and more and more contested role as polarisation increases globally with different interests competing for their 'version' to count as truth.")

5. Correction procedures ("The process is to determine the nature and extent of the lapse, communicate this to rectify the information problem, and identify how procedures can be improved.")

Learning about fact-checking could be integrated as part of a curriculum that focuses on misinformation literacy, but differences might exist between the competences required by a professional fact-checker, which would or could be taught as part of tertiary education training at journalism and media/communication studies programmes, and the needs of secondary school learners. For them, learning about some of the processes included in the definitions we present above would still be seen as important. The need for learning and teaching how to "verify" information appeared recurrently in interviews and focus groups with secondary school educators. The academic head at a private Islamic school, put it in this terms:

> "There's such a barrage of information and things that come in that we tend to be trigger-happy, so to speak. We just want to press share or forward and it goes in, goes out, I think we need to make them, our kids and ourselves also aware of the fact that you need to first verify, or at least not share everything that we see, or get on our social media."

Section 2: Teaching media literacy skills and competences

What is the status of media literacy teaching in South African schools?

There is limited formal and comprehensive nationwide teaching of media literacy in South African schools, even though some competences have been part of the national and provincial curricula for some time. For example, some aspects of media literacy (including knowledge of mass media formats, media freedom, and online bullying) are taught nationally as part of the life orientation subject which is compulsory across the country. There is, however, little focus on misinformation and accuracy (that is, "misinformation literacy" as defined by Cunliffe-Jones et al., 2021). The National Curriculum Statement (NCS) for life orientation, Senior Phase (grades 7-9), recommends teaching about the influence of the media on "self-concept formation and self-motivation," as well as the impact that the media might have on sexuality and on substance abuse (Department of Basic Education, 2011a). The strong focus on issues related to learners' safety in the curriculum of life orientation is characteristic of the broader curriculum at this phase. For grades 10-12 (Further Education and Training Phase), life orientation teachers cover other topics related to the media (Department of Basic Education, 2011b):

- The role of the media in a democratic society: print and electronic media, including various social media platforms.
- Extent to which media reporting reflects a democratic society: topics covered, positions taken by editors, space allocated to topics and geographical distribution (accessibility of information to different groups in society).
- Freedom of expression and limitations.
- Critical analysis of media and campaigns.
- Impact of the media on values and beliefs about relationships.

The same NCS recommends that educators make extensive use of media texts (newspaper articles and magazines, primarily) in teaching these and other subjects, thus further expanding the range of media literacy skills, even if this is not done in a particularly systematic way as different teachers will select different learning materials. Other subjects, including English and history among others, also include references to some media literacy competences. For example, the NCS for computer applications technology (grades 10-12) includes teaching about "how to protect oneself against online villains and threats" (Department of Basic Education, 2011c, p. 37). None of the NCS guides, however, addresses issues related to misinformation or fact-checking, partly because of the recency of the societal interest in this phenomenon. The limited teaching of these media literacy skills in South African schools is not unique to the country, but in line with other African nations. In a study of misinformation literacy programmes across sub-Saharan Africa, Cunliffe-Jones et al. (2021) found that "media literacy, even in the broadest sense, was barely taught in six out of the seven countries studied." The one exception to this norm was the teaching of some misinformation literacy skills in the South African province of Western Cape, as part of the provincial component of the life

orientation curriculum.The senior curriculum planner for life orientation in the Western Cape, explained in an interview with the authors of this report that the curriculum was developed in partnership with Google South Africa and the main focus was on online safety and "cyber wellness." For the senior curriculum planner, the main goal of the module he helped develop is to get students to make use of online activities in a positive and responsible manner: "I wanted to put a positive spin on [online safety], and rather refer to cyber wellness so that we bring positivity into that space, as opposed to always looking at the negativity." For the senior curriculum planner, an important part of the module is to teach students about their "digital tattoo. Anything that you post on social media, I consider that to be your digital tattoo. So be careful because that means, whatever you post is going to be difficult to remove."

The curriculum focuses on high school students from grades 8-12, with each grade's content having a theme. For each grade, four lessons are proposed. For example, grade 8, titled "Being Safe Online", has an introduction to the online space with topics such as preserving identity, and which platforms are appropriate to use. Some of the activities proposed for grade 8 include how to create strong usernames and passwords, how to cope with inappropriate messaging, or how to react to cyberbullying. Grade 9 discusses the pitfalls and positives of online spaces. Under the title, "Being a Respectful Digital Citizen", learners are taught about social media, about selfies and texting, and about different forms of privacy violations online. There is also a lesson on identifying misleading websites.

Similar themes appear in the overview of lessons for grades 10, 11 and 12, but the focus is less on the actual usage, and more on the consequences and impact of certain types of use. Overall, each grade progresses to deeper learning and engagement with the topics. Misinformation is touched on in the curriculum, but not in-depth (Western Cape Education Department & Google, 2020).

During the development stage of these materials, several teachers from the Western Cape were taken to Google South Africa's offices in Sandton to be trained appropriately to teach this curriculum. They took part in a full day of training with the manual, which included scripted lessons so that they would be able to pick up and do a lesson in the classroom independently.

The Department's proposed teaching strategies also include elements of play, adapted for use in low-connectivity environments. Examples of these strategies include using videos offline, creating captions to make videos more accessible, empowering students to do web searches, facilitating free and open discussions, using analogies to explain abstract concepts, using websites and smart infographics, stories and scenarios, scenario-based discussions, "what-if-scenarios", senior to junior learner teaching, and hands-on demonstration and practice (Western Cape Education Department & Google, 2020).

For the senior curriculum planner, the best practices when training teachers for this curriculum would be a series of workshops. The department runs seminars looking at various aspects of cyber wellness that run over eight weeks. The seminars are broken into two hours with two speakers at each workshop, and include an opportunity for teachers to ask questions and engage. An alternative workshop model, the senior curriculum planner suggested, could be full-day training sessions or a one-to-two-days programme.

> "The one thing that we must always remember is, if we're going to bring teachers into any space to learn, [it] has to be exciting. They need to have good takeaways, they need to know that, if you if you have a series, they [will] want to come to the second one, the third one, the eighth one… They need to feel that they still want to be there, because you have presented the content, which is exciting, which is new, which is fresh. And so they don't mind coming back, because remember, you take people and you ask them to sacrifice the time."

While the Online Safety learning module is rolled out to all government high schools in the Western Cape and attempts have been made to apply some of its content to all South African educators in grades 8 to 12, we found limited evidence that the project was well known among educators. Even in the Western Cape, teachers were unaware of its existence. Not one of the participants we interviewed had heard about the implementation of the program. It is important to remember that, when the program was rolled out, Covid-19 had severely disrupted the education space in the country. When asked about the materials, a teacher at a private school in the Western Cape said:

> "We haven't actually received [the curriculum]. I think sometimes what happens is, because we're a very tiny, independent school, we sometimes miss the boat… so I haven't seen it but I'd like to have a look at it. I think implementing my own stuff has just been because I think it's important and I've been enjoying, maybe. Being able to create my own material has been quite a fun opportunity as well."

We found several other instances of educators saying that they have unilaterally introduced some media literacy related activities in their classes. These educators cover a wide range of subjects. These are some of the activities that, in their view, would fit under the umbrella of media literacy:

- "I think a good teacher should really be grappling with these issues, whether you're looking at junior grades doing propaganda in Nazi Germany as [an] arbitrary example" (life orientation teacher at private school in the Western Cape).

- "When I was in school, a couple of years ago, something that my high school did that worked quite nicely is, during the first week of the year, we'd have, you know, sometimes like an orientation week, where the learners would go to the library and learn about different media resources, how to use them, you know, what, what can be trusted, what kind" (science teacher at government school in KwaZulu Natal).

- "I teach grade 8 life orientation, and I do add media literacy to that, even though it is not in the curriculum, like you mentioned, I've even had to download TikTok myself, to see what is on there. I've done a few TikTok challenges with the kids to make the subject more up to date, our textbooks are outdated. So I add on what is relevant to them" (life orientation and isiZulu teacher at private school in KwaZulu-Natal).

- "I teach grades 11 and 12, information technology, and it is part of the curriculum, because we do teach accuracy of validation, verification, but it's just a one page thing that the kids have to learn" (information technology teacher at private school in KwaZulu-Natal).

- "I think in any school that takes itself seriously you tend to find that your language teachers would spend a lot of time on that [media literacy]. I think, to some extent, depending on the curriculum that you offer, it's already referenced, but you don't spend nearly enough time on it" (head of a private school in Gauteng).

Despite our research showing that there's been no nationwide concerted effort to roll out a media literacy curriculum or module in South Africa, some schools have been conducting their own workshops on media literacy issues such as cyber-bullying and misinformation. An information technology teacher at a private school in KwaZulu-Natal indicated that these workshops were held after a rise in cyber-bullying cases at their school:

"The reason we had to have (workshops) is that we saw a trend where cyber bullying at our school was slightly taking off, you know, in subtle ways. So we had to nip that in the bud quick and fast and explain to them the ramifications of such behaviour."

What media literacy competences are taught in South African classrooms?

Traditional academic understandings of media literacy identify three clusters of skills and competences that are often included in educational curricula (Simons, Meeus & T'sas, 2017). First, there are skills related to accessing and consuming media (labelled as "Using media" in this report); second, there's competences related to "Understanding media"; and, third, there's skills related to producing media content ("Creating with media" in this report). Even though the wording is slightly different, we can see some of these clusters of competences in the UNESCO Media and Information Literacy Curriculum for Teachers (Wilson et al. 2011). It lists three broad areas of focus: (1) knowledge and understanding of media and information for democratic discourses and social participation, (2) production and use of media and information, and (3) evaluation of media texts and information sources. In the current context of increased circulation of misinformation on digital media, a fourth cluster of skills could be added to the list. In this report, we are going to label this fourth cluster, "Media and Misinformation", which includes a series of competences based on the 6 Cs of misinformation that we introduced earlier. Much of the discussion that follows is structured around these four

clusters of competences.

To understand which of these four clusters of media literacy skills are currently taught in South African high schools, we surveyed educators who teach grades 8 to 12. We presented them with 16 competences and asked them to indicate whether said competences are part of their teaching, whether they are taught in other classes at their school, or whether they are not taught at all. We present a summary of these responses in Figure 2. For ease of interpretation, we have grouped the competences into clusters. The list of competences was developed by adapting the list prepared by Simons et al., (2017), and by adding four new competences related to misinformation based on the work of Cunliffe-Jones et al. (2021).

Figure 2. Media literacy competences taught in South African high schools
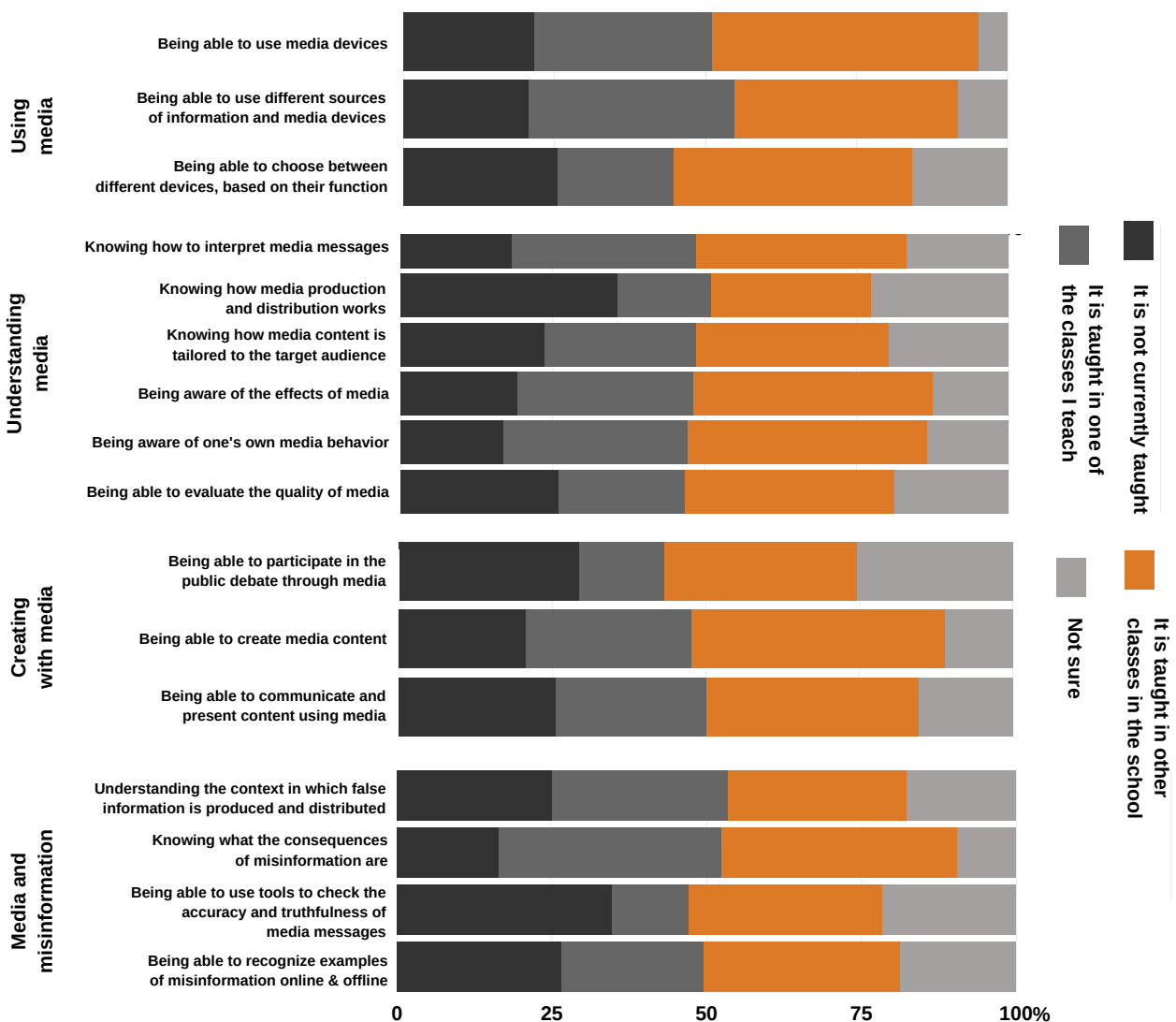
Let us focus on the respondents who said that they teach a given competence in their classes, the darker grey category in Figure 2. If we rank these competences by the percentage of educators who say that they teach them in class, "Knowing what the consequences of misinformation are" ("Media and misinformation" cluster) comes first with around 36% of our survey respondents. Second is "Being able to use different

sources of information and media devices" ("Using media" cluster) with 34%. Two other competences, both of which are from the "Understanding media" cluster, come third: "Being aware of one's media behavior" and "Knowing how to interpret media messages", both of which are taught by around 30% of educators. These two competences align with the learning objectives of the life orientation and English curricula. At the bottom of the list, that is, amongst the least taught skills, we find one of the competences in the "Media and misinformation" cluster: "Being able to use tools to check the accuracy and truthfulness of media messages" at 13%.

We can try to draw a picture of how and where certain competences are being taught by looking at the teaching subjects of educators. In Figures 3 and 4, we select eight competences from the longer list of 16. For each of them, we present the percentage of educators who say they teach these competences alongside the subjects that they currently teach. It is important to note here that some educators might teach more than one subject and that our survey did not ask specifically in which subject they teach a given skill. Two bars stand out in both figures: language and life orientation. As we noted earlier on in the report, these are the two main subjects in South Africa where media literacy competences are part of existing national curricula. It is in these subjects, as we will explain in the next section, where educators seem to see media literacy training fit best. If we inspect the data in more detail, we can also see differences between subjects where media literacy skills might not be so prevalent, but they are also taught. For example, in Figure 4, we can see that educators of technology-related subjects appear to be teaching learners some more applied skills (such as "Being able to use tools to check the accuracy and truthfulness of media messages"), while those in the social sciences, which would include history, might be more inclined to teach in areas connected to the socio-political and cultural aspects of media literacy, such as "Knowing how media content is tailored to the target audience" (see Figure 3).

Figure 3. Subjects taught by educators who say they teach certain media literacy competences in their classes ("Understanding media" cluster)
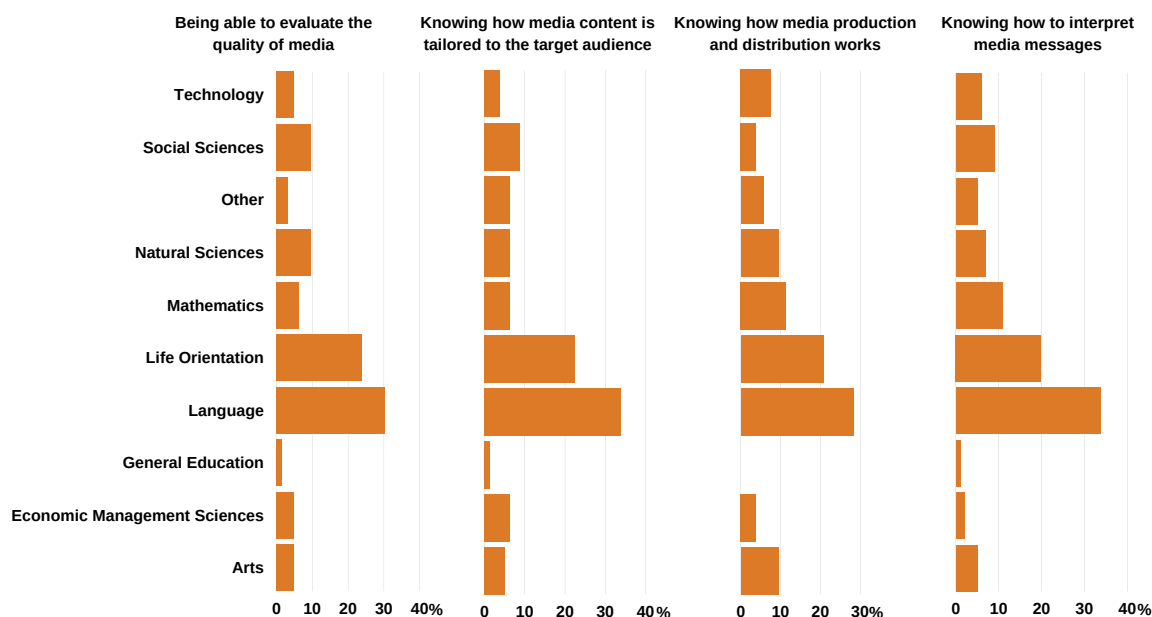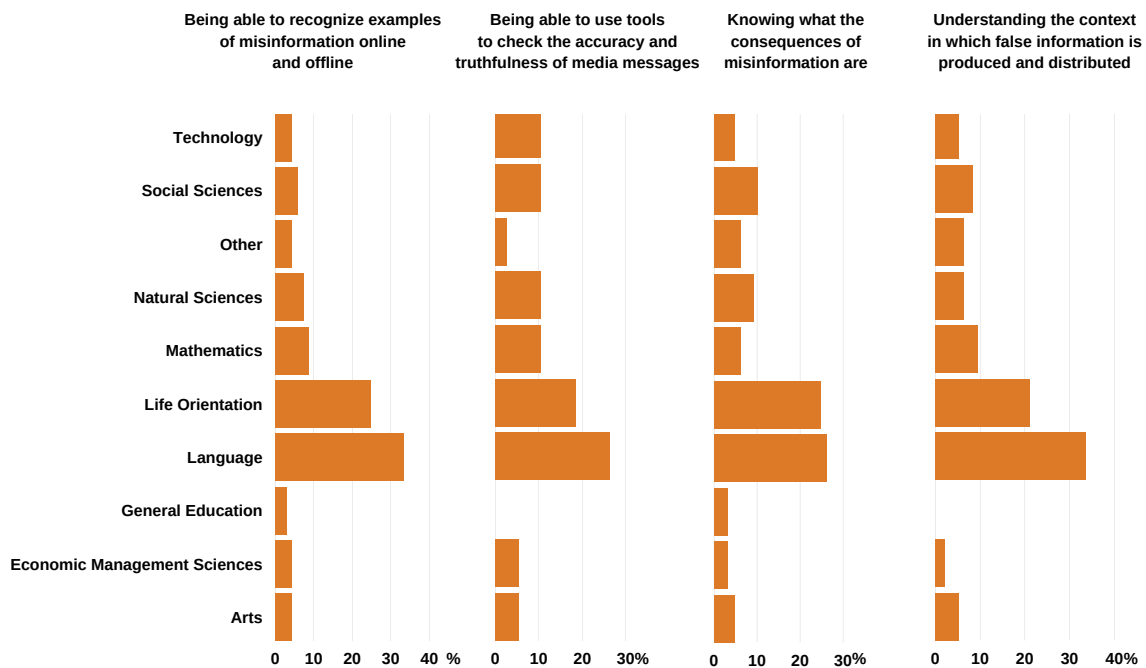
Figure 4. Subjects taught by educators who report teaching certain media literacy competences in their classes ("Media and misinformation" cluster)

This needs assessment not only focused on high school learners, but also looked at the teaching of media literacy and fact-checking skills at universities. For ease of comparison, we used the same lists of competences in our survey of university lecturers and professors, which collected responses from over 70 educators based at 15 universities, representing all the provinces in the study. Because there is no centralized curriculum in tertiary education, decisions around the topics and subjects that are to be taught in each class are left to the discretion of each lecturer or professor. In this report, we are focusing on the current state of media literacy, broadly speaking, and misinformation literacy and fact-checking more specifically, at universities that offer media and communication studies, and journalism courses. We did not survey lecturers and professors in other departments, such as those teaching history, education or library sciences, where some media literacy competences might also form part of the curriculum.

We found that, in line with what we described earlier on regarding schools, South African universities have yet to develop specific courses or specializations on misinformation and fact-checking. None of the lecturers and professors we surveyed said that their institution had created a standalone subject on misinformation or fact-checking. Our findings concur with those by Mutsvairo and Bebawi (2019), who surveyed journalism curricula in nine universities in Africa, including two in South Africa, and found that, despite none of the universities in their chosen sample having a set course on "fake news" or "misinformation", knowledge on the subject of inaccurate information had been integrated into other modules. In Figure 5, we present a summary of the competences taught at university level according to the respondents of our survey.

Figure 5. Media literacy competences taught at South African universities offering journalism and media/communication studies programmes
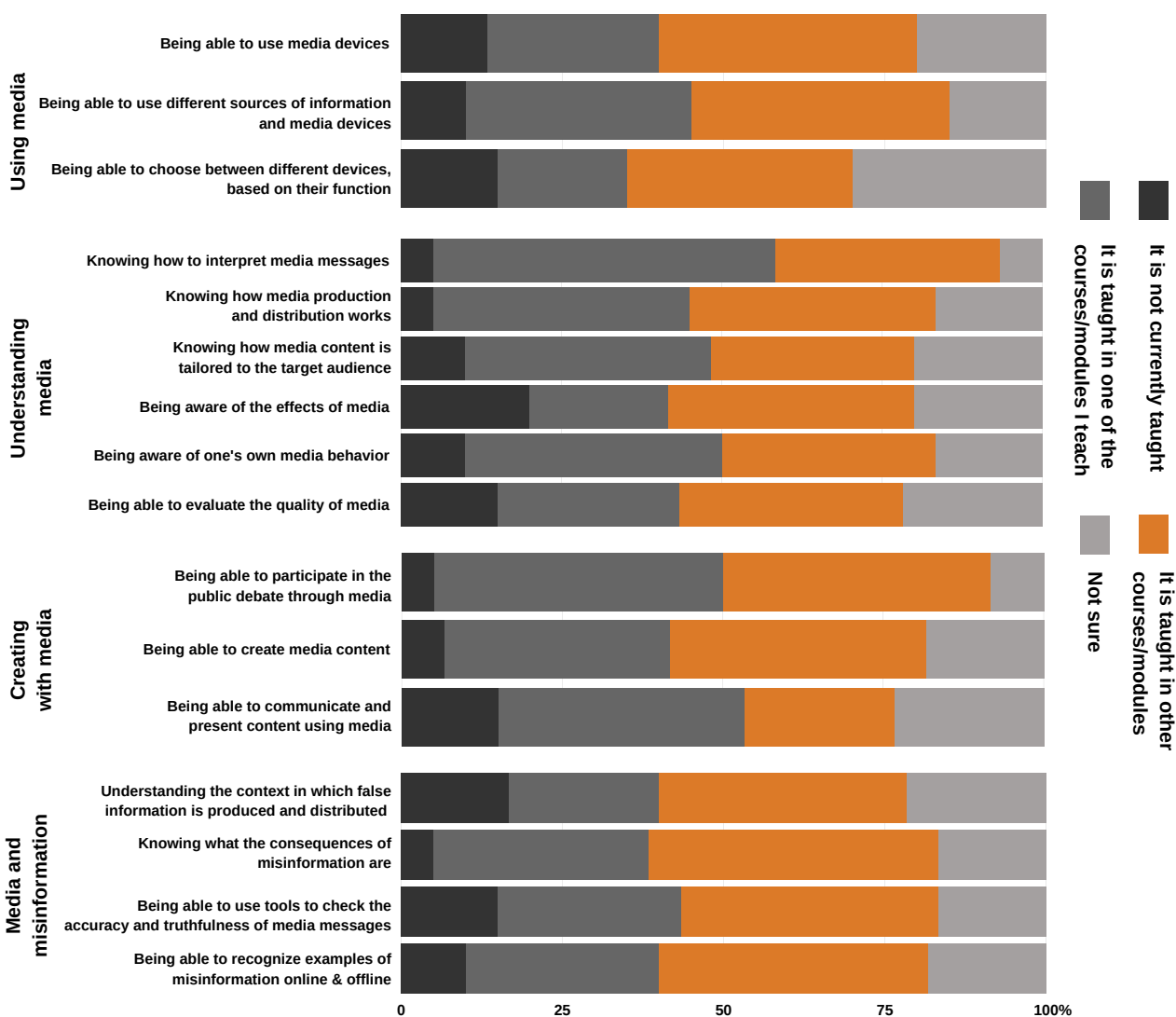
When compared to Figure 2, where we depicted the teaching of different media literacy skills in South African high schools, Figure 5, where we depict the situation at universities, reveals two significant differences. First, there's a much lower number of instances in which a skill is said not to be taught at all. On average, 24% of respondents to the survey for high school educators said that a certain media literacy skill was not taught at their school at all. In the university lecturers' and professors' survey that number decreases to 11%. Take, for example, the competence "Being able to use tools to check the accuracy and truthfulness of media messages." Around 34% of high school teachers said that it is not currently being taught at their school. When looking at the data for university lecturers and professors, the number drops to 15%. The second important difference between the two groups of educators is at the cluster of competences level. For high school teachers, competences in the "Using media" cluster are the most likely to be identified as being taught, either by the respondent or by someone else in the school. For university lecturers and professors, the other three clusters ("Understanding media", "Creating with media" and "Media and misinformation") are a lot more prominent. Of those three clusters of competences, "Creating with media" comes on top of the list of most

taught set of skills. This can probably be explained by the fact that the lecturers and professors we surveyed come, predominantly, from media production/studies or journalism programmes, where media content creation is a central pillar of the curriculum.

How should media literacy be taught in South African classrooms?

There are four main components to consider in developing a comprehensive national strategy that addresses how to best teach media literacy: what competences need to be taught, what topics should be incorporated into the learning modules, how suitable existing media literacy materials and resources are for learners across the country, and what subject or subjects would serve as the best "home" for such modules. We will start by addressing the last of these questions.

In the focus group interviews with high school educators, there was some consensus – but not unanimity – that life orientation should serve as the umbrella subject within which media literacy should be taught, if it was to be developed as a standalone module. As noted earlier, the national curriculum already recommends lessons about the role of the media in a democratic society. According to a life orientation teacher at a private (IEB) school in the Western Cape, the curriculum also has room to look at issues such as media ownership and false news. Another educator who teaches the subject added, "I teach grade 12 life orientation and I think it's essential that it goes in there because we're dealing with everyday real situations, and the kids can't, they can't identify what's real and what's fake, because they don't know it."

In addition, some educators, particularly those teaching classes other than life orientation, suggested that some media literacy competences should be taught across subjects. Some suggested that some content becomes part of Language courses (for example, "I think [it should be] English, they do a lot of media studies, and they look at media studies"), while others favoured a more cross-disciplinary approach (for instance, "I think media literacy should be across the board. So from your English, right to your specialist subjects"). Whatever the approach, one educator noted, it is important that media literacy carves out its own space so that it does not become diluted in an already very crowded curriculum:

> "I think the best place would actually be in the history curriculum. And, I do think that it should be incorporated into that curriculum, but it should have its own identity as a topic of study. The reality of trying to add a standalone something to a curriculum or to a school's program is that if you do that, chances are that nobody will own it, nobody will take it on. If you integrate it into an existing subject, but as a distinct topic of study, then your chances are better of actually [it] being addressed."

We found significantly much less consensus on the contents to be included in a potential media literacy and/or fact-checking curriculum. Media practitioners, such as fact-checkers and editors, provided us with a list that combines issues related to the online safety of

young people with technical skills that are important to the work of a fact-checker and, their view, are also important to learners. According to this group, topics that should be included in a learning module include a history and explanation of fact-checking; approaches to personal safety online (both in terms of young people keeping themselves safe from predatory online behaviour like "catfishing" (fake personas) and in terms of knowing what is considered acceptable behaviour online and how to avoid problematic behaviour like sexting and cyber-bullying); basic verification tools like a Google reverse image search to establish the veracity of pictures; where to find correct information online to corroborate or check the veracity of reports; how to responsibly use social media, and realizing the impact of information put online; issues pertaining to race, gender and LGBTQ rights online; basic legal restrictions (for example, law against sharing child pornography in the form of "revenge porn") and the ramifications of what learners share online.

Online safety, as we have seen earlier, also features high on the list of important subjects to cover in the eyes of high school educators. This might be derived from the fact that their students often face online harassment and bullying, "catfishing", scams and similar problems, and that it is educators who are the first line of defence when dealing with those issues at schools. In Figure 6, we show that more than 60% of educators say that they have encountered cases of cyberbullying in their schools; close to 50% have dealt with cases of sharing inappropriate content, particularly sexting and pornography, and around 30% have seen learners share hateful messages. Given the prevalence of all of these issues, it would seem just logical that educators would want to include discussions on these topics in a media literacy module. As noted earlier, the module on online safety developed by Google and the Western Cape department of education has a strong focus on addressing some of these problems. The learning of skills to deal with these issues is also part of the life orientation curriculum, even if it is not exclusive to the online space.

Figure 6. Prevalence of different types of unsafe online behaviours in South African high schools
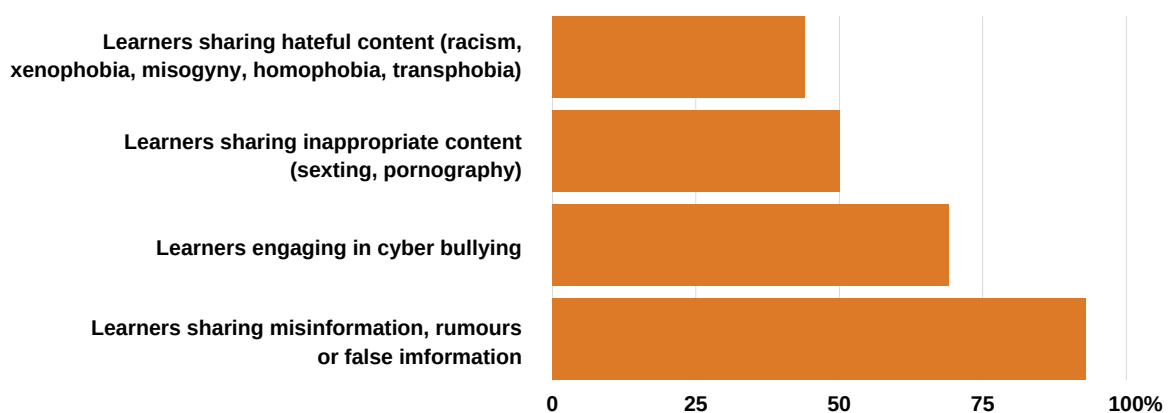
What is less prevalent in the Western Cape's online safety learning module is content related to addressing misinformation, rumours and false information. However, as our survey showed, this is precisely the most common type of problematic online behaviour that schools face. Our discussions with school teachers in focus groups showed that

there was strong support for the inclusion of media literacy content in the national curriculum, with a particular focus on misinformation literacy. Here is how three educators rationalized their suggestions:

- "Their [learners'] world is limited to what happens on social media, especially TikTok. And that's where they get the information from. So, I definitely do agree that media literacy would be a great asset to teach at school, and especially to high school kids" (art teacher and head of department at private school in Gauteng).

- "I teach grade 9, 10, 11 and 12 boys, and I'm absolutely shocked and horrified by how little they know about the world and what's going on in the world around them and how much misinformation they have. [...] It's so easy to mislead them because their general knowledge and their knowledge of the world and society is poor. So, I really honestly think an introduction to media literacy and helping them navigate their way better through whether it's websites or whether it's the news that they listen to, or whatever, is imperative in terms of nurturing young men, in our instance, at our school, that will be able to be strong, informed leaders" (English teacher at private school in the Eastern Cape).

- "Just a generalized view of how the media works, you know, how reporters report. The fact that even when a reporter walks into the newsroom and is told by his editor, 'There should be no bias in your reporting.' Basic education of how the media operates in any country, the kind of pressure the media is exposed to in terms of political pressure, or anything like that. So, I think a whole basic media course, starting with the basics of how media works, and then how media can positively influence your life, [or] negatively influence your life" (English teacher at a private school in the Eastern Cape).

Fact-checking practitioners' "wish list" of topics for a media literacy course was mostly focused on technical skills and online safety; for high school educators, the focus was on competences that can improve the everyday life of their learners and the realities of their schools, and that includes issues related to safety online too. For university lecturers and professors, the focus was somewhere else. To prompt their responses, we asked for a list of the five topics/issues that could not be left out of a media literacy and/or fact-checking module. Although some of their suggestions included more practical, technical skills, they also highlighted broader conceptual and theoretical frameworks within which such training should be embedded. We found their suggestions to fall under six broad categories:

1. Media and society ("critical thinking about context"; "influence of media content on society"; "social media as a public sphere"; "global and comparative perspectives of mis/disinformation"; "geopolitics of internet information"; "entertainment education in media"; "democracy and voting rights"; "public health"; "free expression, censorship, hate speech and disinformation"; "the South Africa Press Council and the code of ethics").

2. Political economy of misinformation ("communicative capitalism"; "political economy of the news media"; "social/political/economic causes of media bias").

3. Media-audience relationships ("critical thinking about audience/producer relationship"; "active audiences and new media technology").

4. Representation ("language of the media"; "representation in the media, e.g. gender, race, nationality"; "cyber misogyny").

5. Practical media literacy skills ("what is media literacy"; "why do we need to be literate"; "recognising a reliable source and how to spot misinformation"; "distinguishing fact vs fiction"; "fact verification skills"; "searching the internet and databases"; "how fact-checking and fact-checking agencies work").

6. Media theory ("basic sign-system studies"; "information disorder"; "rhetoric with a focus on Aristotle's rules for ethical rhetoric"; "media ethics"; "media and coloniality"; "historical overview of information flows": "hegemony"; "cultural studies, e.g. semiology/semiotics").

The importance of these wider conceptual and theoretical frameworks to underpin practical training implies a need to incorporate scholars and researchers into the development of media literacy materials in order to make them contextually relevant, theoretically sound and conceptually clear.

Figure 7. Comparison of high school educators' and university lecturers' and professors' view on how important different media literacy competences are to their students
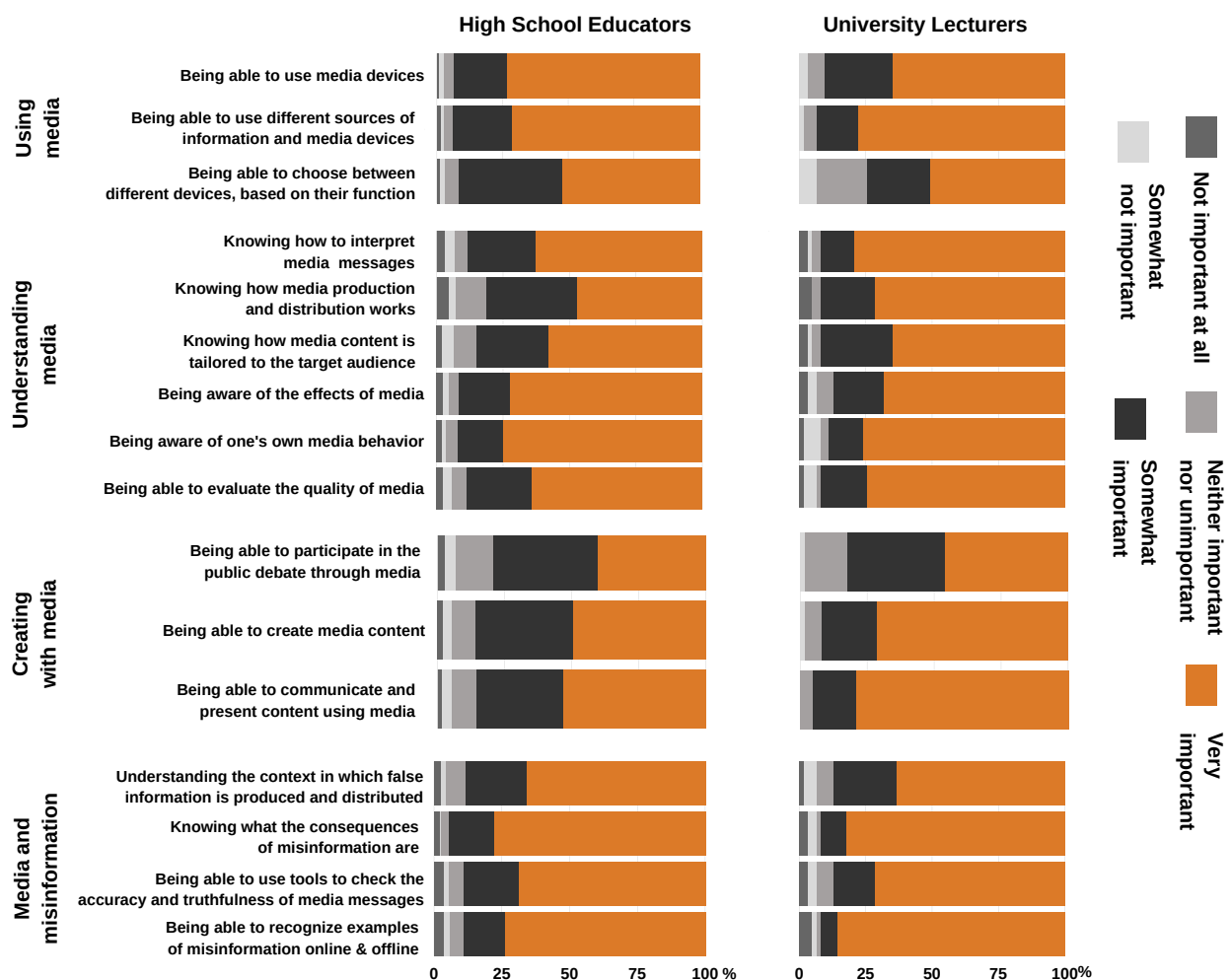
While there were different perspectives on the themes and issues to be included in a potential media literacy and fact-checking curriculum across stakeholders, high school educators and university lecturers and professors were a lot more "in sync" when it came to identifying the importance of different media literacy competences. To examine this, we went back to the list of 16 competences we presented in the previous section in Figures 2 and 5. For each of the competences, we asked survey respondents to tell us how important it would be for their students to acquire them. The responses for each group are summarized, side by side, in Figure 7. There are only small differences between the two groups. On the one hand, university lecturers and professors appeared to be less inclined to say that, overall, competences were not important at all to their students, but that might be a product of the smaller sample size for that group in this study. On the other hand, and further confirming the findings of which competences are most likely to be taught in classrooms, university lecturers and professors seem to give greater importance to skills in the "Creating with media" cluster than high school educators do. Both groups, however, placed equally high importance to teaching the competences and skills in the "Media and Misinformation" cluster.

The final component to consider in developing a comprehensive national strategy that addresses how to best teach media literacy is to assess how relevant teaching materials already in use are. If existing materials are seen by those educators not using them yet as useful, there might be less of a need to develop new content, and efforts could instead be focused on enhancing what is already available. Conversely, if educators don't see the value or relevance of existing materials to their pupils, their concerns and views ought to be taken into account when developing alternative content. As part of our survey of high school educators, we tested two sample teaching/learning materials. One was an infographic developed by Africa Check (Image 1), a fact-checking organization, on how to identify inaccurate information on WhatsApp, a widely used mobile phone messaging app. The other example was part of a lesson from the Western Cape's online safety module that we have introduced in previous sections of this report (Image 2). The page we selected was for grade 8 and focuses on how to react to cyberbullying. As we noted early, issues around cyberbullying and online harassment appear to be rather common in schools. We selected these two examples because, at least thematically, we expected them to resonate with the needs of educators and their learners.

In Figure 8, we show how likely high school educators are to use the two sample teaching materials. We found that the one about WhatsApp (Image 1) was slightly more likely to be used than the one about cyberbullying (Image 2). Around 81% said they would definitely use the former, while 64% would definitely use the latter. In general, neither of the two options was outright ruled out by most educators. Those that indicated that the materials were useful, described it as "practical and relevant", especially with reference to the anti-bullying content. One respondent wrote, "many learners suffer from cyber-bullying. The more informed learners are, the more they can protect themselves." Another respondent, however, criticized the scenarios presented in the material, saying that they are "a little bit simple" or that they lack "realness."

They further elaborated by saying, "if we want learners to be media literate in their online world, we must ask them to deal with topics they would actually put into a digital space. It is very unlikely that a high schooler is going to be posting anti-bullying posters on their Instagram page."

Image 1. Sample infographic developed by Africa Check on how to identify inaccurate information on WhatsApp

Image 2. Sample activity from the "Online Safety" learning module developed by the Western Cape department of education

Figure 8. Likelihood of using sample media literacy teaching materials by high school educators
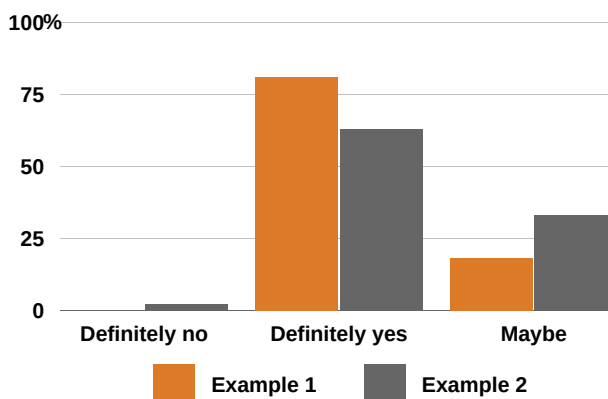
There were differences not only in the topic of the two samples we showed to educators, but also in the format. While the first example was a short, one-page list of actions that could be distributed in class so that students could read it at home, or it could be discussed in class as part of debate on using WhatsApp, the second included a much more elaborate lesson plan. Responses to the survey noted these differences. Some teachers also expressed some doubts about the feasibility of teaching the material, particularly Image 2. "Teachers do not have time to do some of these strategies. I see them for 40 minutes a day and have to get through a vast syllabus. I would, however, read through it and try to engage with certain groups if it is urgently required," one said. Others noted that "it seems complicated." Some also referred to more logistical issues: "time constraints are always a problem", and "some of our classes are too small (to teach the material)."

Aside from the survey where we showed the two teaching samples, we also had discussions with educators during interviews and focus groups around what type of materials would be most useful to them to teach media literacy, and what format these materials should be in.

Three characteristics emerged from these discussions:

1. Practical content: "I would think it must be very practical, very hands on, a lot of discussion, less theory. [...] Theoretical knowledge of how this information landscape actually works and how things spread [is] important as a basis, but I think there really needs to be a big practical element to it, like using verification tools, having discussions around what to be on the lookout for that kind of thing."
2. Accessible and manageable content: "To follow up any training or teaching with bite-sized portions, whether it's shared by WhatsApp or something I can take away. I found that a lot of young people are better at learning little bits every day as opposed to like large chunks in one go.". Also, "stuff in graphic form, you can send in very short audio clips, anything that's kind of like a bite size take away that sticks in your mind." Furthermore, one educator added, "I think a really cool aspect to integrate in the learning is either simulation or gamification. And that doesn't necessarily have to be something online, it could be something much more physical as well, so that they can practice the behaviour that they need to integrate as well."
3. Resource issues: "I can't tell you how many kinds of ICT related projects I worked on, they just did not work if it wasn't done by the school. People just do not have these resources. There's also an issue of 'I took the laptop home, and so and so sold it or it got stolen.' [And] to also understand that a lot of the public schools, to get this assistance, are overwhelmed by a number of programmes. So, to add another after-school program to teachers who already feel overburdened by the curriculum is asking a loss as well. And then who's going to, you know, pick up those kids from school? When are they going to take the taxi, it's like it becomes quite an endeavour."

Section 3: Knowledge gaps, impediments and limitations

How do educators rate their own media literacy and digital skills?

While there was broad consensus among South African educators that media literacy should be taught at schools to develop critical media skills among school learners, the question still arises whether teachers themselves possess the skills needed to teach such material. In our discussions with teachers, we asked them if they thought that they were media literate enough, and what could be done to improve media literacy of those who did not feel media literate enough. There was widespread acknowledgement that not all teachers are well enough equipped with media literacy skills. According to an English Language teacher at a public government school in KwaZulu-Natal, only "a very small handful" of teachers at their school were equipped to teach media literacy skills, "and I do think that there's a need for that. I think a lot of teachers are just focused on their subject. And they don't think outside of that." A science teacher from another public school in the same province agreed:

> "I don't think teachers are well prepared. Personally, the most I've been exposed to different types of media, how to use them and how to trust them, was in tertiary education. And that's probably because of the course I studied. I know friends and cousins who have never been taught how to use different media resources."

A similar view was expressed by an information technology teacher at a private school in the Free State, who indicated that media literacy skills among teachers at their school were "not very high" and that most teachers were "not very advanced with computers or media literacy." Other educators said that language teachers and school librarians were more knowledgeable about media literacy than most teachers. The same science teacher remarked, "at my school, I can confidently say it's the English teachers and the librarians that know the most about this kind of topic. So I agree that teachers in all different subjects need to be trained."

The assessment from the qualitative data differs slightly from the data we gathered through surveys. For example, in Figure 9, we show responses to six statements that are often used by academics (see Vraga et al, 2021) to measure how individuals perceive their own media literacy abilities. These statements focus on news literacy which, as we have shown earlier, is just one component in the "ecology of literacies" that constitute media literacy. The results indicate that less than a fifth of high school educators see themselves struggling with news literacy. When presented with statements such as "I understand how news is produced in my country" (14% disagreed or somewhat disagreed with it) and "I have the skills to interpret news content" (6% disagreed or somewhat disagreed), the majority answered favourably. There were two reversed items in the scale, one of which reveals that, of all the components of news literacy, it is determining the quality of news and information that appears to be where educators see themselves less well-equipped: around 35% of respondents said that they often feel confused about the quality of news and information. These data would seem to make a strong case for

further training on competences in the "Media and misinformation" cluster.

Figure 9. High school educators' self-perceived media literacy levels
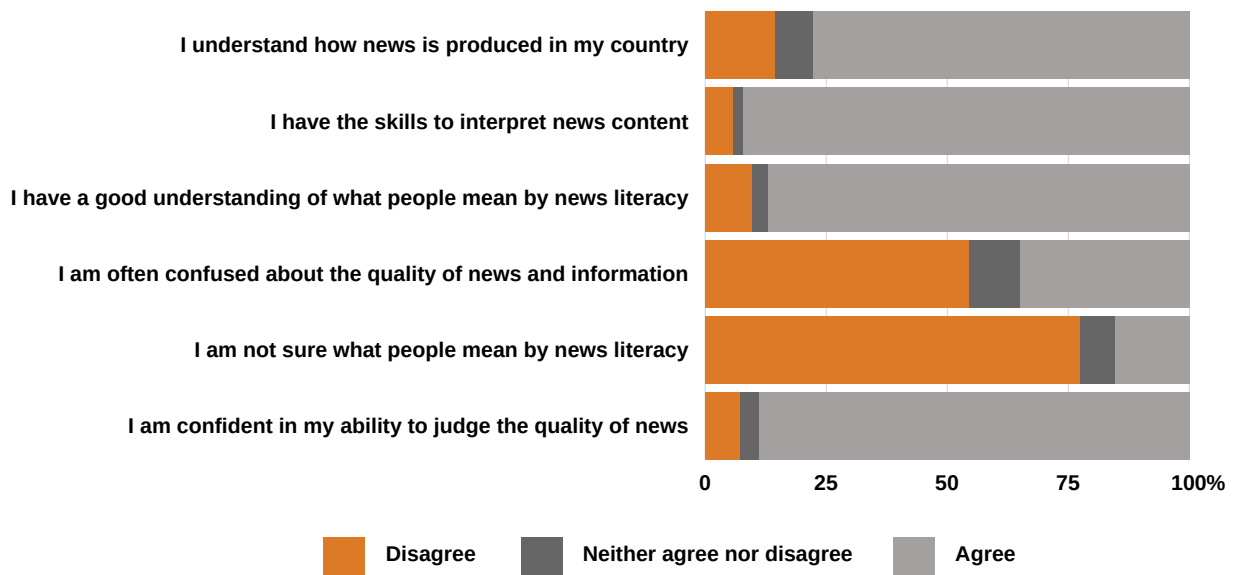
Differences between the qualitative and quantitative data point towards two interrelated, but slightly different, dimensions of media literacy abilities among educators. On the one hand, there is the ability of individuals to engage with the media in their everyday life. As the survey data show, many educators score themselves high in that dimension. On the other hand, there is the question of whether having these abilities translates into being able to teach them to learners in a classroom. As the qualitative data suggests, not all educators think that themselves, or their peers, are able to do so. This perception is, in fact, confirmed by some other findings in our survey. Approximately one in ten educators we surveyed said that they do not feel confident teaching about news and the media (Figure 10). In the words of the academic head at a private Islamic school in KwaZulu-Natal,

> "a lot of teachers are not that confident to actually go in and integrate their subject with or use any type of media other than the normal, maybe a few articles here and there... I think it's very important that we get, you know, teachers trained to be able to use and to help us to train our children."

We further examined levels of confidence in high school educators' abilities to teach about news and the media by comparing the responses across different demographic groups. Because the sample size of respondents for this study is relatively small, these results need to be taken as exploratory. A larger, more comprehensive survey of educators might be needed to see the full extent of some of the differences we suggest here. Based on our data, those groups that feel slightly less confident teaching on the topic of media literacy include educators that have been working at schools for more than 35 years (Figure 11) and educators who work at schools in predominantly low income communities (Figure 12). Around 13% of educators teaching at schools in predominantly

low income communities said they did not feel confident teaching about news and the media compared to 4% among those who teach in predominantly upper income level communities. The gap between groups of respondents was larger when dividing educators based on the number of years they have been teaching. Around 30% of those who have been teaching for more than 35 years said they do not feel confident, compared to 5% of those who have been teaching for five years or less. These differences might have to do more with the age of the respondents and their relationship with technology. We also saw different degrees of confidence by province (Figure 13), with respondents in the Eastern Cape and KwaZulu-Natal reporting the lowest levels of confidence.

Figure 10. High school educators' confidence in their own abilities to teach news and media literacy
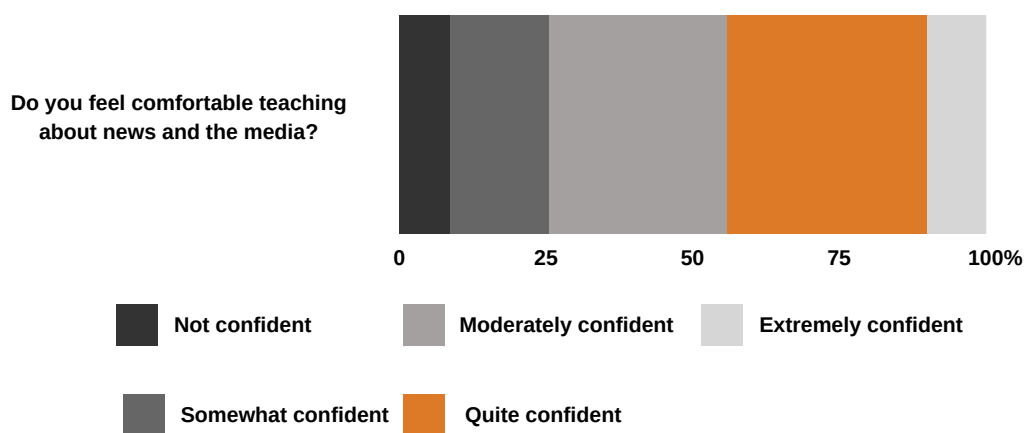
Figure 11. High school educators' confidence in their own abilities to teach news and media literacy (by number of years they have been teaching)
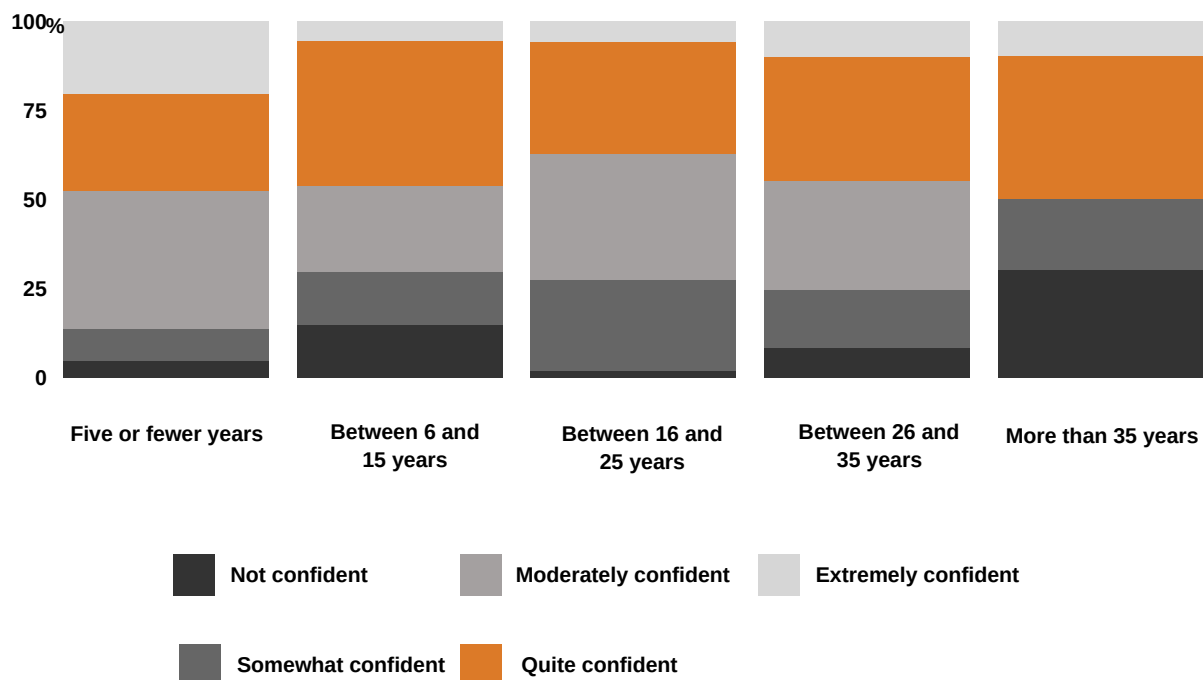
Figure 12. High school educators' confidence in their own abilities to teach news and media literacy (by predominant income level of the community where the school is located)

| Not confident | Somewhat confident | Moderately confident | Quite confident | Extremely confident |
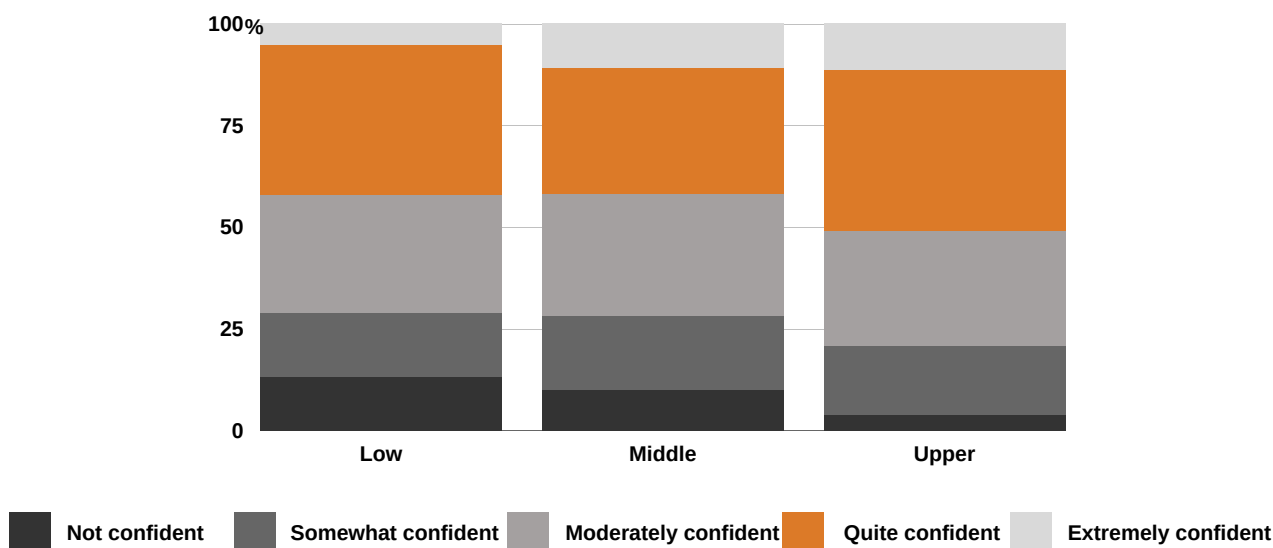
Figure 13. High school educators confidence in their own abilities to teach news and media literacy (by province)

| Not confident | Somewhat confident | Moderately confident | Quite confident | Extremely confident |
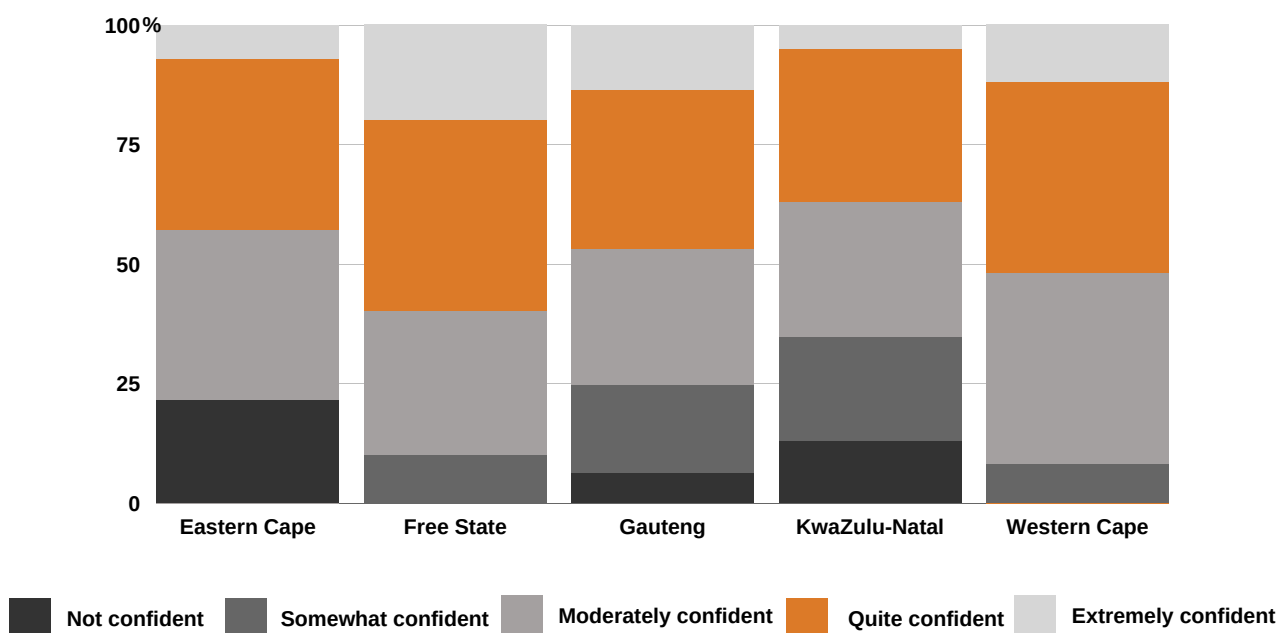
The importance of paying attention to the media literacy skills of members of the wider community (such as parents and religious and community leaders) was also noted during discussions about educators' own abilities. Even if the media literacy skills deficit among teachers were to be addressed, learners would still need support from parents in their home environment. During the Covid-19 lockdown, it became apparent that even parents of learners in wealthy private schools did not always have the requisite skills to assist their children in accessing online resources, as an art teacher and head of department in a private school in Gauteng remarked:

"We expect the kids, because they are online, to know how to use the platforms. [But] it was not just the kids that struggled with the platform like Google Classroom, [...] it was also the parents who couldn't help them. Because most of the parents didn't have any skills to go on to work on these online platforms. I had to do training with teachers in the afternoon after classes that added on to their workload."

Previous research on the non-inclusion of media literacy competences in South African classrooms, such as work done by Saleh (2012), has revealed that part of the deficit in teaching these skills is related to shortcomings in the training of some educators on how to use information and communication technologies (ICTs). Our own survey data show that these gaps in knowledge might have been reduced in the last decade. Only a very small fraction of high school educators rated themselves as not proficient at using common digital tools such as word processors, email or Google (Figure 14). However, a larger number said that they do not see themselves proficient in using several social media platforms (Twitter, 48%; Facebook 19%; social media in general, 9%). In fact, when ranked by level of proficiency, these three skills appear towards the bottom of all the skills we asked educators about. These are not only tools that can be used for instruction, but they are also the spaces where misinformation commonly circulates, thus creating a significant knowledge gap that would need to be filled, if misinformation literacy was to be introduced more widely in the curriculum.

Figure 14. Educators' proficiency in using selected digital skills
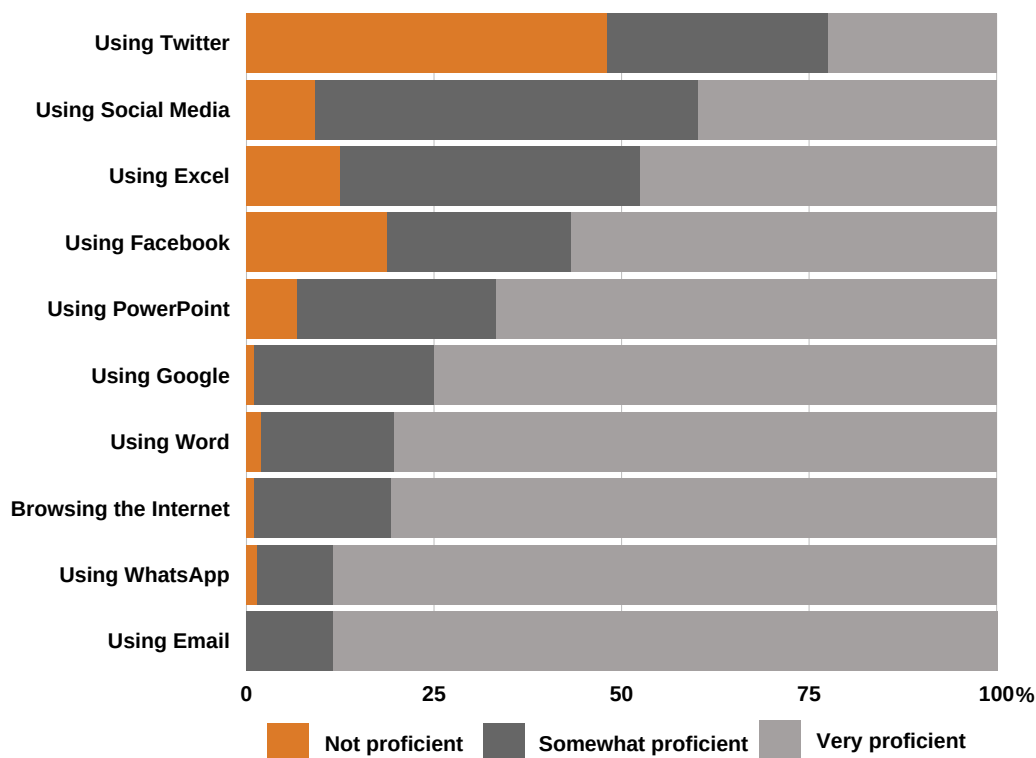
To further illustrate this significant knowledge gap we can look at the results presented in Figure 15, where we provide an overview of the use of certain social media platforms in teaching among high school educators. We included a range of tools, from video-based applications (for instance, YouTube, TikTok), to social interaction tools (for example,

Facebook, WhatsApp, SnapChat) and some that might be somewhat marginal in the South African market (for example, Reddit or Discord). On average, 51% of the respondents said that they do not have an account on some of these platforms. There's a significant range of responses, however. While close to 90% don't have accounts on Reddit and Discord, just 2% said they do not have a WhatsApp account. Classroom usage of these tools also varied widely. Around 67% of educators said that they use YouTube in class, the most widely used of the social media platforms we asked about, followed by WhatsApp at a rather distant 51%. As we explain later on, WhatsApp was adopted by many as the main communication tool between learners and the school during the peak of the Covid-19 pandemic, which forced the closure of learning centres. Given the central role that some of these social platforms play in the distribution of misinformation, and how central they have become in the strategies to reach potential audiences by fact-checking organizations and other stakeholders working in countering misinformation, efforts should certainly be made to narrow the gap in skills, knowledge and use of these tools in the classroom.

Figure 15. Educators' use of social media in class
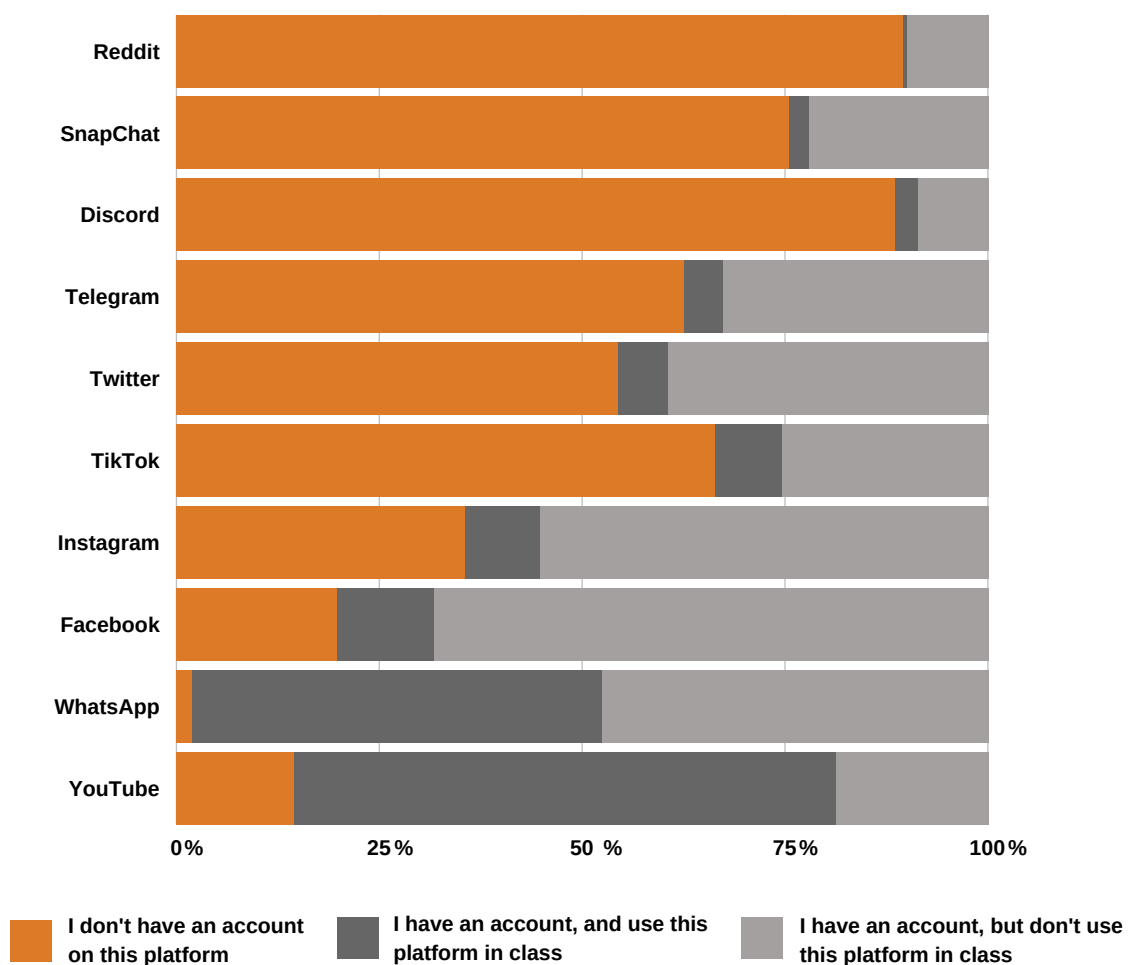
One last important point to highlight regarding educators' digital skills has to do with how their skills compare to those of learners. In Figure 16, we show how educators rate the proficiency of learners when it comes to using the same digital tools we presented in Figure 14. To understand differences better, we can compare the tools that educators see themselves as most proficient at, and the tools they believe their students are best at using. While, for both groups, WhatsApp is at the top (or close to the top) when tools are ranked by level of proficiency, the rest of the list shows some stark differences. Around 40% of educators said that they are very proficient in using social media compared to 67% who think that their learners are very proficient. These differences do not reflect actual gaps in knowledge – these are based on perceptions – but might hint at actual differences based on the experiences of educators. Other significant differences include the use of email (89% for educators see themselves as very proficient as opposed to 29% who say that their learners are very proficient). Emails are an important avenue through which scams circulate online. Learning how to use email accounts safely features extensively in the "Safety Online" module developed by the Western Cape department of education. Another difference worth mentioning in the context of where misinformation circulates, and where fact-checks can be found, is in perceptions of proficiency at browsing the web. While 80% of educators say they are very proficient at browsing the internet, only 57% of them think their learners are too. As for using Google, the gap is almost as large: 75% of educators see themselves as very proficient, but only 49% think their learners are.

Figure 16. Learners' proficiency in using selected digital skills
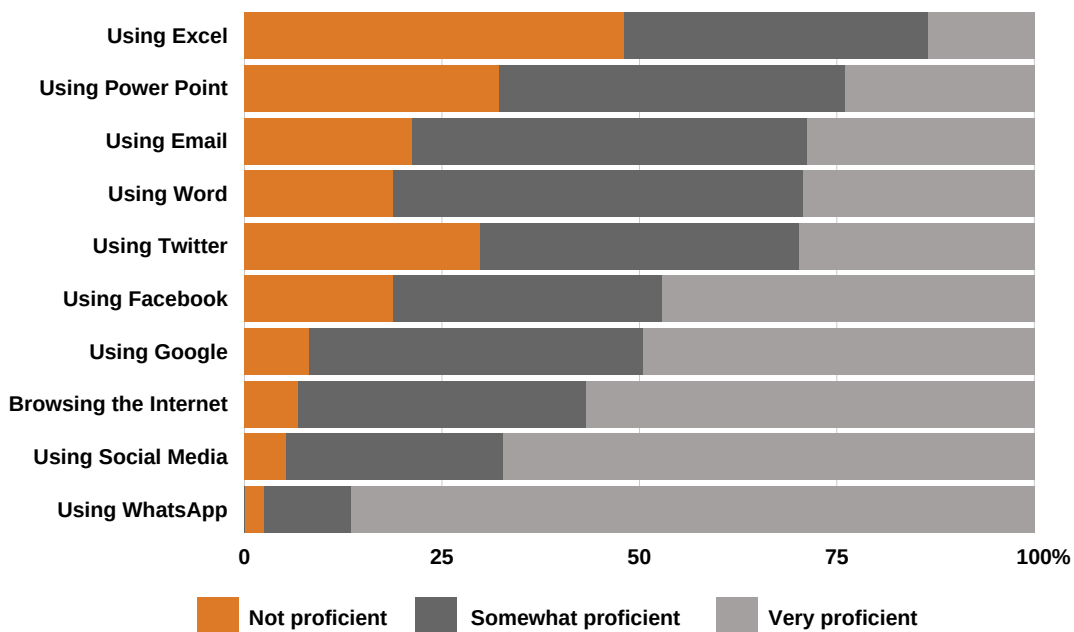
What challenges exist in access to digital tools and technology?

A recurring theme in the focus group discussions, which also emerged in survey responses, was that inequalities in access to devices and the internet are limiting factors to contend with when considering the delivery of media literacy materials. While teachers from some, mostly private, schools, said that their learners had good Wi-Fi and access to

devices and therefore "it would be easy to watch the videos and look at the websites to get a discussion going" during an online-based media literacy module, several teachers pointed to access problems. "Not all learners have access to [the] internet at home," noted one in the Eastern Cape.

Responding to one of the activities included in the sample teaching materials we showed in the survey (Image 2), another educator indicated that "learners do not all have devices to scan QR codes. This would need to be led by the educator." Still, speaking about the same activity, another educator said that "the activity needs a phone/laptop and an internet connection to be completed and our school has a zero tolerance policy for cell phones."

Based on the discussions we had with educators in interviews and focus groups, inequalities in access were especially pronounced when the situation in private schools was compared with that at public schools. One teacher at a public school in KwaZulu-Natal responded as follows when asked whether they could expect learners to access online resources:

"Previously I was at a private school and then I would say, 'Yes, go for it. That's a great idea,' because we had the resources. But now I'm at a government school in Durban and it's different. I'm learning that it's a good government school, but the resources are limited."

But even among public schools, there were different levels of access. Some of them had good Wi-Fi and computer labs, which means that learners could access online resources during school hours, but some remarked that they cannot be expected to go online after hours. In some schools, even teachers could not be assumed to have access to online resources, as became evident during remote learning in the pandemic:

"The other challenge would not only be for the students, but also for the educators. That we as the teachers […] who are supposed to do this training, we ourselves don't have the devices and the data and all of that, like when we were in lockdown. I struggled teaching online. I had to use a phone and a tablet. And now with this meeting, I had to decide whether I am going to stay at school, or am I going to come home and use my phone?" (life orientation and isiZulu teacher at private school in KwaZulu-Natal).

Even within private schools, disparities were noted. A mathematics teacher at a private school in Gauteng observed:

"I come from a privileged school, and 95% of our children have fibre at home, and we were fine during lockdown, but we do have about 60 boys on full scholarships. And, we did have to give them devices and data, and record who was absent from lessons online. Because there were challenges in terms of data, and then they would also not want to put their cameras on, because when they had their cameras on, then you'd be able to see their homes."

A similar observation was offered by a teacher at a private school in the Eastern Cape:

"So, just speaking for our school, they are fine at school, we can provide the Wi-Fi, they're not fine at home, at least 50-60% of them. And, as I say, this is a privileged school, but we are surrounded by about 27-28 schools in just our town and area. And I'd say, out of those schools, 80% of them would battle severely with access."

Another teacher, also from a private school, in this case in a small town in the Free State, remarked on the low levels of skills of teachers: "Most of our teachers are also from town and they're also not very advanced with computers or [media] literacy. Not at all."

Data from our survey of high school educators confirmed many of the findings from interviews and group discussions related to access to technology. We offer an overview of these findings in Figure 17. As noted earlier with other similar survey questions, these responses don't reflect actual access, but they describe perceptions about the situation of educators and learners. Perceptions might differ from actual access. Across the four scenarios we measured (access to the internet at school and home, and access to computers at school and at home), educators believed that learners were generally in a more precarious situation than their peers. For instance, when it comes to accessing a computer at home, around 23% of respondents said that none, or only a few, of the learners at their school would have such possibility. That number drops to just over 4% for educators. We see similar trends with the other indicators: internet access at home (11% believe no learners or just a few have access at home, compared to less than 1% of educators); internet access at school (just over 3% of educators think that their peers lack access at work, compared to 19% for learners); and computer access at school (less than 2% think that all or a few educators lack access, compared to 27% for learners).

Figure 17. Perceptions among high school educators regarding internet access and access to computers at school and at home for learners and educators
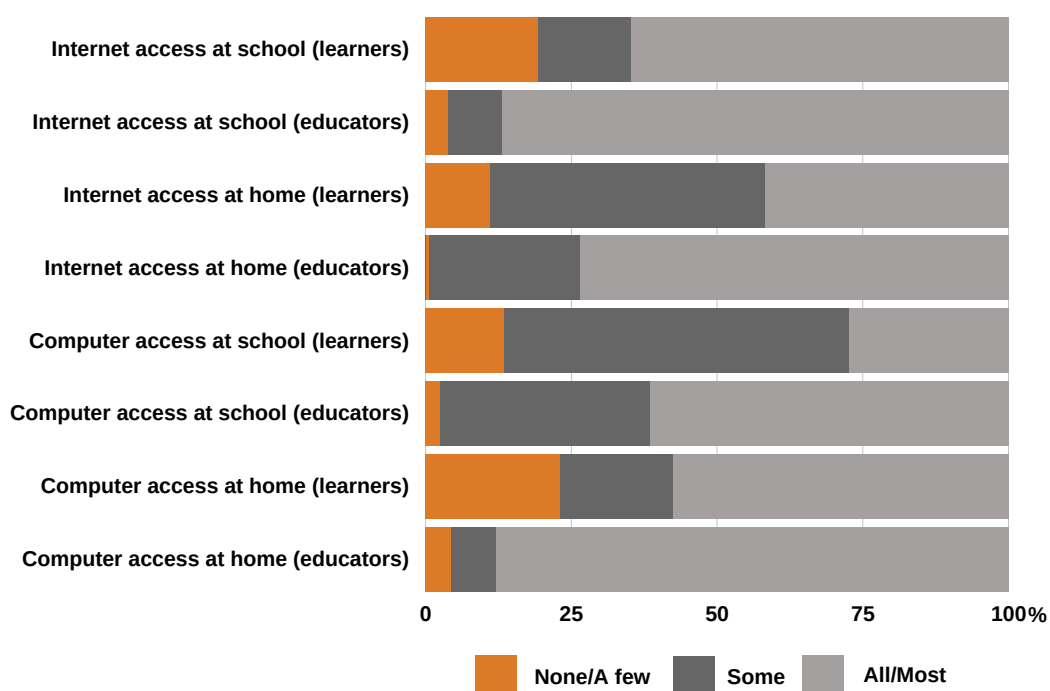
Aside from problems that are specific to technology, there are other resource limitations that do not have to do with particular schools, but with the country as a whole, for instance rolling electricity blackouts. Because different neighbourhoods would experience power outages (known as "load shedding") at different times depending on the schedule, synchronous online teaching proved difficult during the Covid-19 pandemic, as a teacher from KwaZulu-Natal observed:

> "Load shedding is a very real problem for a lot of our kids and for us, as well. So I don't know how we're going to work around that one. But, that was one of the challenges that I found during lockdown. So when I had electricity, the kids didn't have it; some had [electricity] and some didn't. And we just couldn't coordinate that, because we all live in different areas."

For others, resources were a less important consideration in the teaching of media literacy than the ability to engage media critically:

> "Thinking in terms of resources, and I'm not convinced that we need to be bound by whether we have resources or not resources, depending, I don't think this conversation relies primarily in social media only. […] For me, the primary the most important thing for young people going into the adult world is how to critically engage with whether it was a TV advertisement, whether it's a billboard, you see, whether it's a picture in a newspaper, you know, so whether I'm cutting out pieces of the newspaper and getting small groups of children, we've I'm reading it to them, you know, I think it can be brought down to a very basic level with without resources" (life orientation teacher at IEB School in the Western Cape).

What factors are stopping the teaching of media literacy in South Africa?

In the previous pages, we have showed that most educators in South Africa believe that media literacy is important to society and that, therefore, it should play an important role in the curriculum. We have also provided evidence that, despite there being isolated efforts to include more media and information literacy competences in school curricula, there is still no nationwide, uniform and structured program to do so. In this section, we present some of the reasons that, according to our research, are preventing the goal of including more media literacy education in classrooms. We will start by reviewing some of the reasons included in existing academic research on the topic. Then, we will present some of the findings collected via interviews, focus groups and surveys.

In their study *The State of Media Literacy in Sub-Saharan Africa 2020 and a Theory of Misinformation Literacy* (2021), Cunliffe-Jones and colleagues outlined three main obstacles to teaching misinformation literacy in schools in several sub-Saharan African countries, including South Africa:

- Bureaucratic challenges within the education sector and lack of political will to combat misinformation.

- Limited time spent at school and poor teaching performance. Low participation numbers in schools and early dropouts mean the average number of years that learners spend in school are lower than legally required in these countries.

- Overall low literacy and numeracy rates. Basic numeracy and literacy skills are recognised by fact-checking organisations as essential to be able to identify false information. As a result of poor performance in the education system, literacy and numeracy rates remain low in many countries across sub-Saharan Africa.

The problems observed in this study of sub-Saharan African countries are similar to those found in a similar one conducted by UNESCO (2020) in East and South East Asia. The report identified five impediments to better media literacy training in that region: (1) lack of political and cultural sensitivity towards media and information literacy; (2) emphasis on the technical side of ICT competency rather than the critical reading of the media; (3) lack of adequate trainings for teachers; (4) lack of coordination and empirical impact assessment; and, (5) differences in media literacy approaches across stakeholders, which are connected to difference in how media literacy is defined. In fact, we see these issues and limitations appearing in many other contexts. In Australia, for example, Corser and colleagues (2021) found that challenges such as timetable constraints, curriculum structures and limited time would prevent educators from implementing teaching news-related content, such as news literacy.

Our research shows similar impediments to the teaching of media literacy in South Africa. We found that in addition to administrative and bureaucratic hurdles in the way of rolling out media literacy programmes in schools, issues pertaining to equipment and access, as well as social and cultural barriers are further hindrances. In addition, we found that there are relatively low levels of awareness among educators about resources that could be used for and organizations that could assist in teaching media literacy.

We start this review of impediments by looking at data from our survey of secondary school educators. We asked respondents what was preventing them from teaching some of the media literacy competences we presented in Figures 2 and 5. The main reasons given are lack of training (39% of respondents), lack of teaching materials (31%), lack of time (30%) and lack of equipment (27%). We present the full list of reasons in Figure 18. We also provided them the option to include their own reasons. Among the reasons provided, we can highlight the following: lack of knowledge and awareness about the topic, media literacy not being part of the national curriculum, a lack of syllabus integration from the department of education, the "digital literacy curriculum" needing revision, and a lack of consideration of the importance of this topic. As already noted above, access to equipment and online resources was a major impediment to teaching media literacy skills in high schools. This has an impact not only on the ability of teachers to implement media literacy material within their own school curricula (as discussed in a previous section), but it would also make it difficult for outside organizations to do training at schools.

Figure 18. Reasons provided by high school educators as to why they are not teaching certain media literacy skills
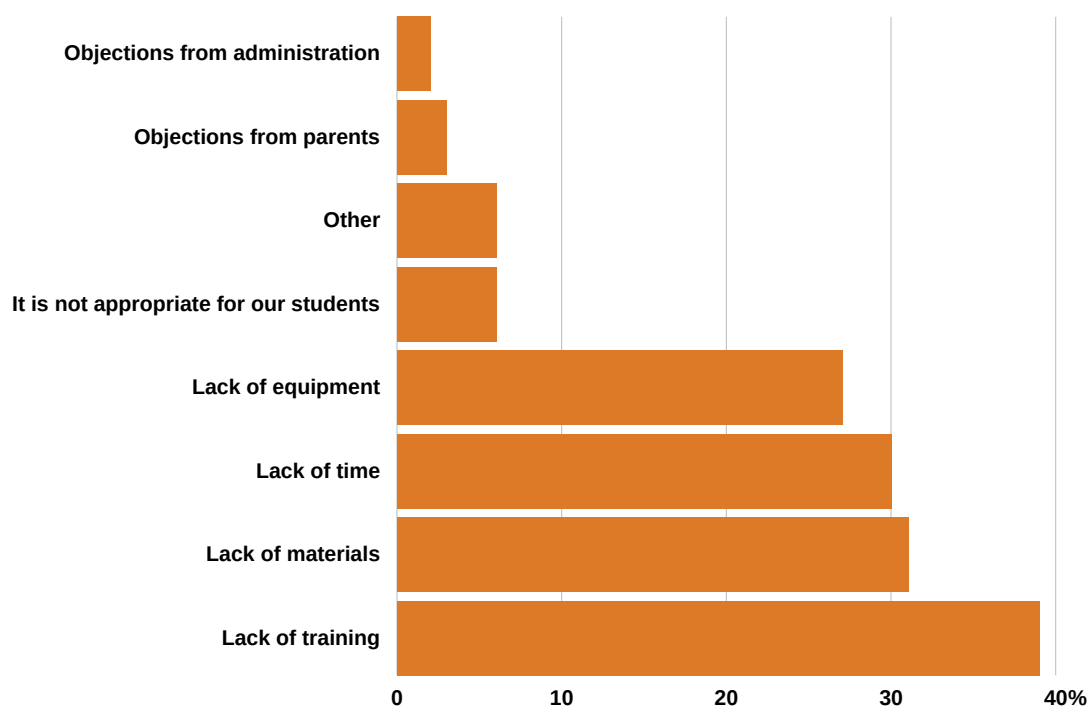
We now turn to discussing some other impediments that were not listed in our quantitative survey, but that nonetheless featured prominently in interviews and were also mentioned by some respondents who selected the option "Other" option (6% of responses in Figure 18) in the survey. A set of factors that contributes to explaining the limited progress in deploying a national media literacy curriculum nationally includes the difficult bureaucratic processes involved in making changes to the materials taught nationally. In particular, the way in which provincial and national competences for education departments are distributed makes it difficult to roll out a uniform curriculum across the country. Let us take the case of the Western Cape as an example. The Department partnered with Google to develop aspects of this curriculum. However, this curriculum is currently only being implemented in the Western Cape province, because although the province legally has the competence to run it in its schools, it cannot be implemented in other provinces until the national department of education has given its approval. The Minister for Basic Education has to approve it for use in curricula on a national basis, but the current Minister has not yet considered this. Moreover, the process of changing a national curriculum is a very long one and, according to the Curriculum Planner we spoke to, can take "anything from two, five or ten years." Decisions about national curricula also need to involve the Teachers' Union (SADTU) and school governing bodies. It is therefore easier to "plug media literacy into" existing curricula than attempting to change it. Provinces can change curricula in their own area, but this would require that they act proactively rather than wait for the national department of education to design and implement curricula. This, according to the Curriculum Planner, is the reason why "the Western Cape is a few steps ahead of everybody else because people are very bureaucratic."

This disconnect between provincial and national education departments means that provinces have substantial leeway in deciding how they want to deliver the national curriculum, according to the head of a private school in Gauteng. This can lead to different interpretations and approaches. For media literacy curricula to be successfully implemented in schools across the country, he says, there would have to be "consensus in the teaching community," and, he adds, "what that means quite often is that you're going to have to do a lot of very basic work with some teachers to get them to fully appreciate what you're trying to do. And never assume that the teachers can do it." This lack of consensus further means that there are no consistent training programmes for teachers:

> "The curriculum might have beautiful ideas behind it, but nobody is properly trained to deliver it in the way it should be done. And that's why the topic, the subject itself gets a very bad reputation. And people think it's a waste of time, because it is a waste of time, in most cases, because you have people who have no training in delivering that kind of content to students. So yes, if you want something to be taught in a school, it is absolutely crucial that the people [who] are going to teach it be equipped to do it."

Similar points about teacher training and motivation were raised by the senior curriculum planner in the Western Cape, who added that this lack of motivation may be exacerbated by access issues:

> "The challenges are depending on what kind of approach you're going to have. So, if we ended up doing it online, then of course, everybody doesn't have access to the online space. You will have issues with connectivity when they have issues with data. We've experienced that over the past 18 months in terms of trying to do online work with teachers with learners in various schools, that is a one. The second impediment is going to be that you need to get motivated teachers, teachers who want to learn more about this particular activity. And, so we need to be doing some groundwork before we actually get to the training in terms of saying: 'This is critically important and we need all of you to know this.' So those are the two major stumbling block barriers that you need to have in terms of landing this way we want it to be."

A related issue is the question of how to fit media literacy training into existing curricula, which are already very full. This makes it difficult for external organizations to do media literacy training with learners and teachers. According to one member of one such organization, training programmes often fail because teachers "just do not have the resources" to implement media literacy programmes, because they are "overwhelmed" and "already feel overburdened by the curriculum." Even if teachers manage to incorporate media literacy into their existing life orientation curriculum, for example, the subject itself is often neglected and teachers are not given enough time to engage learners about these topics in depth, as a life orientation teacher at an independent school in Cape Town observed in a focus group discussion.

Aside from bureaucratic hurdles, we also identified a series of social and religious factors that may also play a role in impeding the teaching of media literacy in South African schools. A science teacher at a public school in KwaZulu-Natal described the situation as follows:

> "With any topic, there will always be cultural or religious clashes. And, I think it's up to just reminding our learners that they are independent, and they need to then sort of judge for themselves how are they going to learn this? How are they going to approach it? We can't really say media literacy must only be for a certain target audience, whatever the case is, because then we, you know, we would be excluded, and that's a whole other issue."

In some cases, sensitivities related to religion or cultural values are used as a criterion to limit access to online resources, as was the case at a private Islamic school in KwaZulu-Natal, where the academic head remarked:

> "Because we come from quite a conservative Muslim background, you will find that we are restricted with some of the media. So, at the moment, only our teachers have complete access to the internet, the learners only get access to it when they need to actually do something under a controlled situation."

Similar concerns were not noted by a teacher from an independent Christian school we spoke to, who said that although their curriculum is "Christian-based", they have a diverse student body and their Christian values would "not necessarily" be an impediment for teaching media literacy.

The socio-economic inequalities that result in different levels of access to online resources mentioned above also play out in other ways. Some learners do not have social media accounts, so integrating social media into the syllabus is "a bit tricky" and prevents teachers from teaching "from a common point," according to a science teacher at a public school. The distances learners have to travel to school, often as a result of apartheid's spatial geography where townships are far removed from urban centres, mean that it is often difficult for learners to stay after school to access online resources needed for media literacy training. This implies that media literacy training would have to be integrated into the main curriculum and taught during school hours:

> "If it can be done in school time, it can, it will be possible. But, out of school time, it will be a problem because our children and our schools only last until half past one. So, it's not a lot of time. And, at the end of the day, the children go, get into the taxis and they go home, so they don't have that access to come back to school after school hours" (information technology teacher at private school in the Free State).

Other socio-cultural factors that impede media literacy training are demographic considerations such as age and language. According to a member of a fact-checking organization, media literacy training is sometimes pitched at the wrong level for the

intended audience. Terminology used in training is often too sophisticated for school learners, or it doesn't speak to their life experience:

"For instance, what the typical teenager goes through in a day is very different to what someone my age or the working person goes through. So, therefore, if you give me information on false information that I'm not necessarily interested in, or doesn't really speak to me, I wouldn't use it. [...] So, I think relatability to content and how it's presented in a way where someone can relate and actually consume it is important. [...] Because, when information is put in a certain way, you kind of tend to ignore it because you feel it's not something you should be engaging with. Because it's written in a way that speaks to you or [...] something as simple as slang could help the content come alive so that the kids understand what we're really talking about."

Another member of the same organization pointed to the importance of using local languages in training:

"We have so many languages and it makes such a big difference in research with how people understand. If you're not speaking the language, a lot of the time, you're going to lose them. Just the way it is in South Africa. So I would consider if at all possible, having people teaching people in the [school's main] language"

This combination of bureaucratic, access and socio-cultural and environmental factors identified by South African educators as impediments to the teaching of media literacy were echoed in our conversation with Peter Cunliffe-Jones, founder of Africa Check, who has conducted extensive research into misinformation literacy and teaching in sub-Saharan Africa. According to him, identifying the roots of misinformation in societies is a complex task, and requires a socio-technical approach. This means that solutions need to take technical issues such as access to resources into account alongside socio-cultural factors such as trust in authoritative figures. Just providing access to online resources might not be enough, as "people who have good access are not immune to misinformation."

The solution proposed by Cunliffe-Jones and his colleagues is that country-appropriate misinformation literacy curricula be developed with the help of misinformation specialists. This is the same recommendation made by Mutsvairo and Bebawi in regards to preparing misinformation literacy materials for university students. In their view, it is crucial that journalism courses share the local, historical, educational, cultural and political heritage and developments of the country where the students are based, as all of these factors influence the way that people recognise the impact of misinformation. "For example, citizens of a country that is politically free, open, and democratic may easily identify 'fake news' because of media literacy skills possibly embedded in their high school courses, whereas this may not be the case for those living in a dictatorship" (Mutsvairo and Bebawi, 2019, p. 10).

The challenges in implementing a deeper media literacy program that we have presented so far could be described as systemic: they speak of more complex issues that are connected to South African society, the country's political system and history. Overcoming these challenges requires significant political will. We close this section by describing a much "smaller" obstacle – the lack of awareness among educators of existing resources in the media literacy space. In our survey to high school teachers, we asked them how familiar they were with several organizations/digital resources related to misinformation and fact-checking (Figure 19). The organizations/resources we included are:

- The US Young African Leaders Initiative (YALI). Founded in 2010, YALI is the US government's effort to invest in the next generation of African leaders. YALI develops workbooks and toolkits focusing on community service, entrepreneurship, health, professional development, youth development and media literacy. The media literacy initiative, YALIChecks is designed to help individuals become smarter news consumers by learning how to identify and stop misinformation from spreading (Young African Leaders Initiative, 2022).

- UNESCO's Media and Information Curriculum for Teachers is a competency framework aimed at helping teachers explore and understand media and information literacy (Wilson et al., 2011). In response to the surge of misinformation and lack of access to reliable and fact-based information during the Covid-19 pandemic, the programme has developed a revised curriculum developed over 18 months of global consultations (UNESCO, 2021).

- Real411 is a platform run by Media Monitoring Africa that allows the public to report digital harms such as disinformation. Real411 works to ensure that online content is assessed and addressed in an open, independent, transparent manner which is within South Africa's laws and constitutional rights. Users can report disinformation, hate speech, incitement and harassment (Media Monitoring Africa, 2022).

- Web Rangers is a digital literacy programme piloted by Google. Launched in 2016, Web Rangers gives young people the opportunity to gain critical skills and knowledge relating to online safety. These tools can be used to create innovative campaigns that promote internet safety (Web Rangers, 2022). The programme has trained over 1,500 young people across South Africa.

- Facebook's Digital Literacy Library contains a collection of lesson plans for educators, designed by experts. These resources aim to help young people develop skills that are essential to navigating the digital world, consume information critically and responsibly produce and share content (Facebook, 2022). These lessons include group discussions, quizzes, games and other engaging activities that have been designed in consultation with teens.

- Africa Check is Africa's first independent fact-checking organisation. Founded in 2012, it is a non-profit organisation that aims to promote accuracy in public debate and in the media. Africa Check identifies important public statements, interrogates the best available evidence and publishes fact-checking reports, fact sheets, guides and spot checks (Africa Check, 2022). A key goal for Africa Check is to further and support a community of nonpartisan fact-checkers across Africa. To that end, it has published over 1,300 fact-checking reports, fact-checked over 1,800 claims, and has trained 4 500 journalists on best practices for verification (Africa Check, 2022).

Of these organizations, the least well known was Google's Web Rangers (89% of educators said they hadn't heard about it), followed by US' YALI (80%) and, coming close in third and fourth places, UNESCO's Media and Information Curriculum (77%) and Africa Check (76%). With regards to digital resources that could be used to teach media literacy, the best well-known one was Facebook's Digital Literacy Library: 6% of educators said that they were aware of the library and used some of its resources in class. If we exclude this resource, on average, less than 3% of respondents acknowledged knowing about and using resources from the other five organizations and programmes. While introducing changes to the systemic challenges preventing the teaching of media literacy in South Africa is a tall order, increasing awareness of programmes, resources and organizations appears to be a more cost-effective strategy that could be undertaken by any of the organizations we listed. Increasing awareness of these resources and the work done by groups working on media literacy projects might also lead to more educators deciding to incorporate the teaching of media and information literacy competences and skills in their classes, even if changes in the national curricula take years to implement.

Figure 19. High school educators' awareness of media literacy related resources and organizations
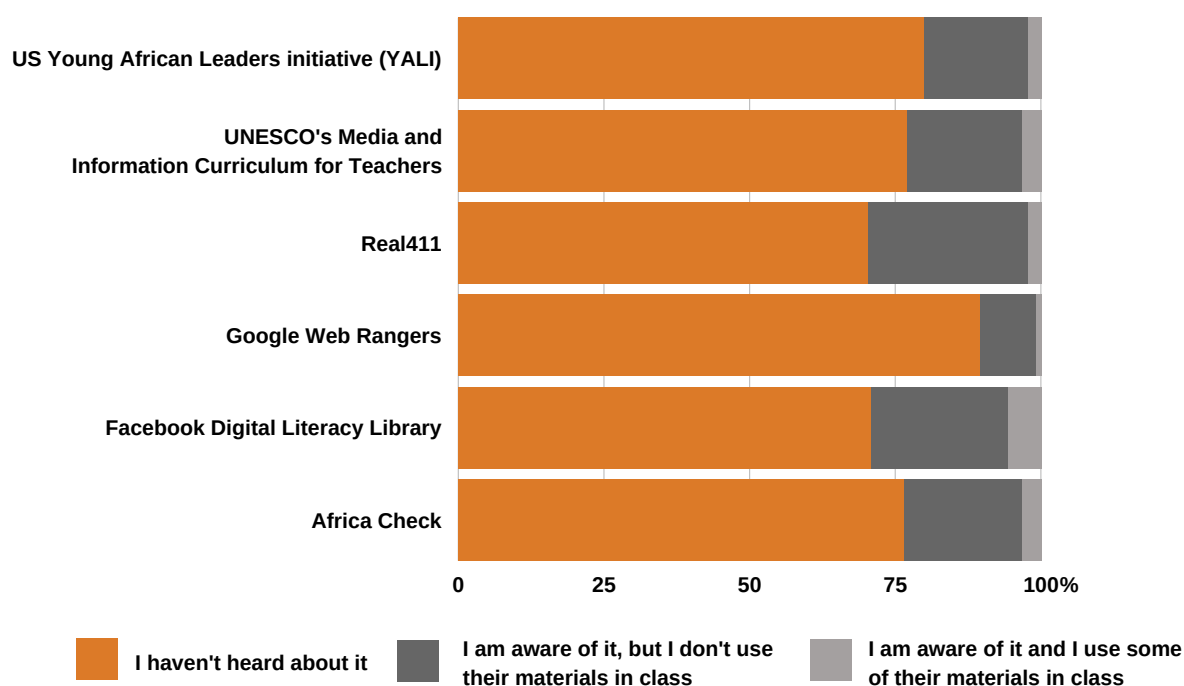
Section 4: Needs and Solutions

Case study: How did educators teach misinformation online during Covid-19?

The Covid-19 pandemic provided educators with a teachable moment during which they were able to explain to learners how misinformation works. In a focus group with high school educators, respondents indicated that misinformation about the pandemic was a problem at their schools. The academic head at a private Islamic school in Kwazulu-Natal put it as follows:

> "We all know, you know, this whole Covid thing, there's a lot of misinformation. We've been getting all the conspiracy theories and so on. And, when the time came for vaccinations, and you'd hear kids telling each other, 'No, it's not good to have a vaccination, because this is going to happen to you, and that is going to happen to you.' And, they take it so seriously that this is exactly what's going to happen to you. And, as far as the vaccine was concerned, as I said earlier, I come from, I mean, the school that I'm in is very orthodox. So, a lot of the parents don't buy into that as well. So, we had to be very unbiased, very neutral about the whole thing. We couldn't say it was so good, neither could we say: 'Don't go for it'. We just had to be quite neutral, as far as coming out of the institute itself."

Other teachers also recounted examples of misinformation pertaining to the Covid-19 pandemic that circulated at their schools, such as "a microchip going into your arm" during vaccination, or a rumour that the President would be doing away with the mask mandate:

> "Now, I've got a class of 30 girls that started this. And they are going around and telling the whole school. We noticed within this week that girls are just not wearing the masks anymore. And, when you ask them why suddenly all of them are saying, 'Oh, the President is going to do away with it.' [...] I think it was social media. Because, like I'm saying, personally, my girls [that is where they] all get the information online." (science teacher at public school in KwaZulu-Natal).

Some schools conducted workshops for learners to help them discern accurate information from falsehoods. A private school in KwaZulu-Natal held sessions for learners from grade 4 up until Matric, where they were taught "what to share, how to share and which sites to visit, according to their age groups, and if they're not sure of what the site is offering, who to ask, and how to ask and all of that." Similar workshops were held at a private school in Gauteng, in which parents were included so that they could also learn "about the dangers of social media and of going online."

Social media were also used to promote positive communication around Covid-19 vaccinations in schools. For instance in a private school in Gauteng where, according to the principal, they

"Tried to build a huge excitement in our communication channels around it. So you know, you have a staff WhatsApp group, and the people who went would all be [posting] mostly pictures of them getting the vaccine, the joy, the pleasure and all of that. Gradually, I think that sort of got most people to start reconsidering their own reservations."

The closure of schools that was caused by the outbreak of the pandemic also brought to light some of the discrepancies in access that we noted earlier. Some teachers had to resort to innovative, low-data use of technologies.

"When we were in lockdown, most of our students were able to [access learning materials online], and a few were not able to access. We had to make like a Plan B. Maybe, go on to WhatsApp and put the messages there and the work there because they couldn't have data for the Zoom lessons."

Other issues related to access at the time of school closures included the need to have enough equipment to loan to students, the importance of finding strategies that work for all learners, such as communicating on WhatsApp, and the unexpected problems associated with vaccine disinformation circulating around school WhatsApp groups, which became a primary tool of communication between schools, parents and learners. Here is how some educators presented these issues during group discussions:

- "I think it's just not everybody having access to data was a big problem. So a lot of the learners were getting left behind a bit […] We were trying to get WhatsApp groups going and put information on there and work and there, but if there's no data, it's a big issue. Not everybody does have access out of school to the internet" (English teacher at government school in KwaZulu-Natal).

- "With us, it was also data and devices. We had to identify some kids and we got them tablets, which we loaned them out to them, and gave them data as well. We have quite a few kids from the underprivileged group. However, I must also say that there are many of us who had to be trained into using technology as well" (academic head at a private Islamic school in KwaZulu-Natal).

- "There was one thing that we recently had to address at our school with the chain of how people contact the school. During Covid, we used WhatsApp groups, and we used Google Classroom and everything. And the kids and the parents all had all the teachers' and the principals' and everybody's numbers. And, we had to directly address that. You can't, on a Sunday afternoon, send your homework to the principal. […] After five, it really becomes inappropriate to send your teacher WhatsApp to ask them about this assignment or that assignment. This is something that we had to address at our school" (art teacher and head of department at private school in Gauteng).

When school reopened after the worst of Covid-19 was left behind, differences in access did not fully disappear. Even in normal times, access to the internet is not easy for some. In some provinces, like the Western Cape, Wi-Fi is provided to all public schools, but according to a deputy principal at a public school in this province, getting the learners enrolled in it has been a "long process" and not all learners have been enrolled. And, "once the learners are on it, it slows down [the connection] so dramatically."

What media literacy training and support should be provided to educators?

There was general enthusiasm about the idea that teachers could receive further training to help them teach media literacy. During one of the focus groups, a life orientation teacher at a private IEB school in the Western Cape expressed it as follows: "Teacher training would be a fantastic opportunity for us as adults, we need to learn as well, we are also bombarded with a whole lot of different information from different platforms." They added that, "as teachers, we can train, we get an opportunity to reflect on our own critical analysis of the world around us. So [...] teacher training, I think could be a wonderful thing." Survey data supports this view. An overwhelming majority of respondents (84%) said that they would be somewhat or extremely likely to attend training on how to teach about the media, including issues such as misinformation (Figure 20).

Figure 20. Levels of support for media literacy training programs among high school educators
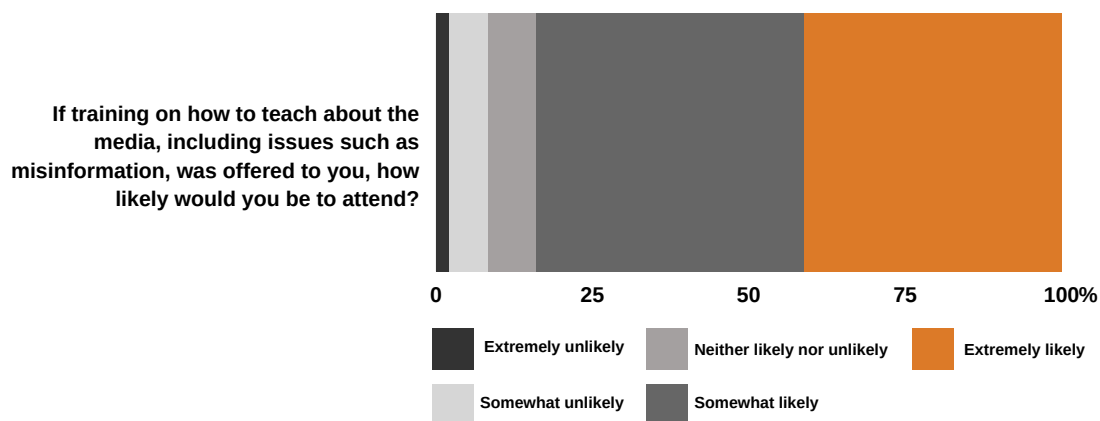
To the 8% who said they would be extremely or somewhat unlikely to attend, and to the 8% who said they didn't have a clear position, we asked them a follow-up question: why? One of the main reasons mentioned was time: "time is a scarce resource," opined one. Several respondents noted that as teachers they have many academic commitments and limited time that would prevent them from attending additional training: "Teachers have enough on their plate as is," was a common refrain. One respondent stated that they are not comfortable with some of the areas of media literacy that they would be expected to teach: "I read accredited journals and newspapers for all relevant information, [but] I concentrate on my own field of expertise, which is Geography." Additional responses for not attending the training included "lack of resources," the prevalence of negativity in the news, and an indication that their school provides a lot of professional development for

teachers already. Not all participants agreed that they have enough institutional support to teach subjects related to the media. As we show in Figure 21, one in three respondents said that the South African curriculum does not support them to teach students about news media. As we have indicated in several passages of this report, while some isolated media literacy competences form part of the latest versions of national curricula of different subjects, there is no standalone module.

Figure 21. Perceptions around institutional support to teach news literacy among high school educators
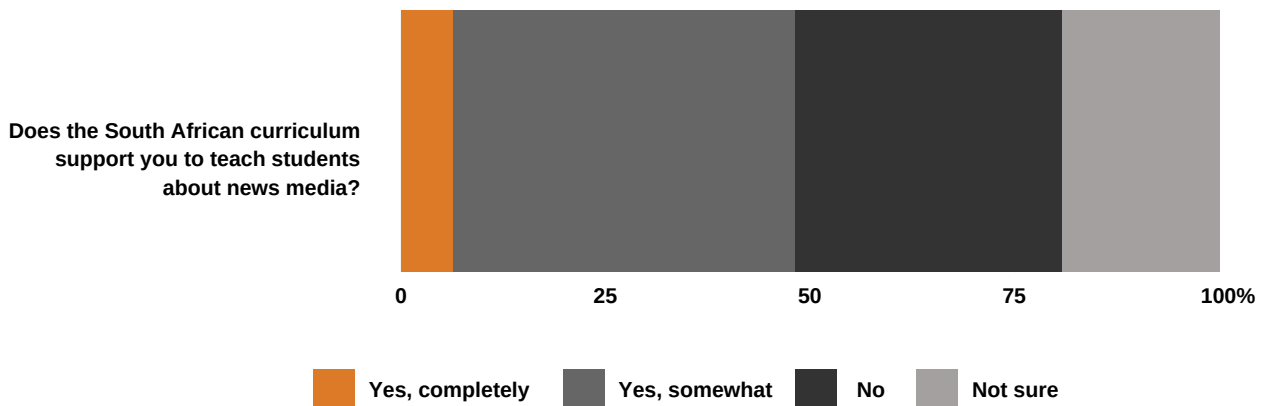
University lecturers and professors were more positive about the prospect of training opportunities. In the survey we administered at 15 South African universities, they were asked how Africa Check, Africa's leading fact-checking organization based in Johannesburg, could help them with the development of media literacy competences at university level. Some suggestions offered include:

- Provide guest lectures, workshops, webinars and research seminars to staff, which could include findings about the state of misinformation in Africa. This could extend to an annual conference on the topic.

- Distribute materials among students, such as infographic pamphlets and video material for use in coursework.

- Conduct fact-checking workshops for university educators to capacitate them with the skills they need to teach media literacy as part of their courses.

- Journalism and media studies students would be the obvious target audience for workshops, seminars and lectures, but invitations should also be extended to students in other departments and faculties, especially those where communication is taught in some form, e.g. business students, library information systems students, maths students, nutrition science students. Moreover, all students consume media, especially social media, and therefore need training in misinformation.

- Assist lecturers in the development of curricula that include a focus on misinformation in the African context, for instance by providing course packs/readings and activities. Such curricula could include interactive games for students to do fact-checking.

A few lecturers mentioned that they were unfamiliar with Africa Check and its work, while others noted that Africa Check already provides training for career-entry students in incorporating fact-checking in their everyday reporting practices. However, some concerns about adding media literacy to the university curriculum were also noted. Among these, and similar to the concern expressed by school teachers, was time constraints:

> "Much time is utilized in teaching. Assessment of large classes makes it impossible to spend time on other things. If possible the non-profit organization can provide training to our student assistants, which is a students' support group. These students conduct skills development activities for their lecturers"

What strategies can help increase the teaching of media literacy?

Our research has shown that the media literacy needs of teachers and learners are bound up with the socio-cultural and economic conditions in the country. Schooling takes place in a highly unequal society, within culturally diverse communities, and draw on unevenly distributed resources and skills. For these reasons, the first priority of media literacy training should be to ensure its contextual relevance by developing material that is appropriate for the various settings within which it is to be applied. With this broad aim in mind, we make the following recommendations:

- **Recommendation #1:** The various impediments to media literacy mean that a one-size-fits-all approach to the teaching of media literacy is bound to fail. The structural issues around teaching of media literacy pose a much broader and fundamental challenge than could be addressed by media literacy curriculum development alone. Nevertheless, developers of media literacy materials should take cognisance of these impediments and find creative and innovative solutions to work around them.

- **Recommendation #2:** Media literacy curricula should be developed with multimedia materials and multimodal delivery methods in mind. A strong focus on mobile phones as vehicles for delivery is recommended, due to the ubiquity of mobile phones in South Africa, the relative ease of access and the possibility to zero-rate certain websites that may be accessed in mobile mode. Care should also be taken to develop materials in the language, age-appropriate idiom and with reference to actual lived experiences of the communities where they will be used.

- **Recommendation #3:** Given the extent of research in media literacy already existing globally and, to a more limited extent, in Africa and the Global South, efforts should not be directed at developing material entirely from scratch, but rather draw on best

practices elsewhere and localize what others have tried and tested. It remains vitally important, however, that an immersive, context-specific approach be adopted when drawing on material and practices developed elsewhere.

- **Recommendation #4:** Given the bureaucratic impediments to developing and rolling out media literacy curricula countrywide, higher levels of Departments of Education in each province should be engaged in media literacy curriculum planning. It is likely to be easier to introduce media literacy components to existing life orientation curricula on a provincial basis than attempting to devise and implement a uniform, centrally planned curriculum on a national basis. Such a provincially-orientated approach may also facilitate better contextualization of materials and teaching methods appropriate for conditions in different provinces.

- **Recommendation #5:** Given that media access and media literacy are unevenly distributed across different communities, as well as the vast differences in socio-economic conditions, learners are not equally able to count on the support of their parents in acquiring media literacy skills. In addition to the development of media literacy material, Africa Check should offer training workshops to learners and teachers, and extend invitations to such training opportunities to other members of the community. Such community training could also provide the opportunity for further consultation with stakeholders about their media literacy needs. However, given the limited time available to teachers to attend such sessions, training should be developed in a time-efficient manner.

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Annex

A1. Methodological approach

Data presented in this report comes from two online surveys (one with secondary school educators, and one with university professors and lecturers), three focus group discussions and four interviews with educators, media practitioners and media literacy experts. In addition, an extensive review of existing academic literature on the topic of media literacy in South African was also conducted. The overall research design for this study was approved on October 5, 2021 by the Ethics Committee at the Centre for Film Studies at the University of Cape Town. In addition, we also obtained permission to conduct research from the Education Departments that had such requirement.

Survey of high school educators
An invitation to take an online survey was sent out to all schools teaching grades 8 to 12 in the five provinces included in the report. In the Eastern Cape, Gauteng and KwaZulu-Natal, we were provided with the email addresses of schools and, invitations were sent out directly by the research team. In the Western Cape and Free State, emails were sent on our behalf by staff at the department of education.

We collected responses from February to March 2022. We received complete responses from 208 educators. The majority of these educators were females (72%). Our sample includes responses from all provinces (Gauteng: 39%, KwaZulu-Natal: 38%, Western Cape: 12%, Eastern Cape 6%, and Free State 5%). A large number of respondents teach at independent or private schools (49%), followed by those teaching at fee-paying public schools (37%) and non-fee paying public schools (13%). In terms of school size, teachers from schools with fewer than 100 learners represent the smallest percentage in our sample (3%), followed by those in very large schools with more than 1,000 learners (23%). The largest groups are educators from schools with 100 to 500 learners (27%) and those with 500 to 1,000 learners (47%).

On average the survey took 20 minutes to complete. As a compensation for their time and as an incentive to take the survey, we raffled five R500 gift cards among all survey respondents.

Survey of university professors and lecturers
All professors and lecturers teaching at university departments offering courses in journalism, media or communication studies in the five provinces included in this report were invited to take an online survey. Email addresses were collected by our research team from the websites of the following universities: Cape Peninsula University of Technology, Central University of Technology, Durban University of Technology, Nelson Mandela University, Rhodes University, Stellenbosch University, Tshwane University of Technology, University of Cape Town, University of Fort Hare, University of Johannesburg, University of KwaZulu-Natal, University of South Africa, University of the

Free State, University of Witwatersrand and University of Zululand.

Data from the online survey was collected between February and March 2022. We received 73 responses out of 220 invitations, for a response rate of 33%. A majority of respondents were females (40%). The median age of respondents was 49 years. A large number of respondents identified themselves as lecturers (40%), followed by those who said they were associate professors (29%). On average, professors in our sample spend 48% of their time teaching, while 27% of the time goes into research, and 22% into administration.

The media length of the survey for university professors and lecturers was 8 minutes. As a compensation for their time and as an incentive to take the survey, we raffled three R500 gift cards among all survey respondents.

Focus group discussions and interviews
We convened three focus groups and conducted four in-depth interviews between October 2021 and March 2022. Interviews lasted, on average, 47 minutes, while group discussions averaged 58 minutes. All discussions were held online via Zoom, and were audio recorded with the consent of all participants. Recordings were transcribed using automated software and edited for accuracy by the research team.

The focus group discussions we convened involved 22 participants in total. One focus group brought together a dozen of members of a fact-checking organization, while the other two were with high school educators (two from the Eastern Cape, two from the Western Cape, three from KwaZulu-Natal, two from Gauteng and one from the Free State). Separate interview guides were used for the focus groups with fact-checkers and with educators. The discussion with fact-checkers focused on the concept of media literacy and on effective strategies to teach media literacy. The interview guide with educators had four sections: media literacy, access and digital skills, misinformation and online safety.

In addition, we interviewed two educators, a media literacy expert and the senior curriculum planner for life orientation for the Western Cape department of education. Different interview guides were used for each interviewee.

Copies of the questionnaires as well as the surveys are available from the research team.