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DIGITAL CITIZENSHIP IN K-12: INTERNATIONAL MODELS AND LESSONS FOR OMAN

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Abstract

As the world becomes more and more digital, global societies are struggling for ways to teach students how to be responsible digital citizens. Digital Citizenship (DC) encompasses the responsible use of technology including privacy, online safety and ethical behavior. This paper offers a comparative analysis of the implementation of DC education in six countries; Australia, South Korea, U.S., Finland, Estonia and Qatar. It aims to derive lessons and insights for Oman, a country that has no formal DC curriculum yet. It sheds light on the key components of DC curriculum implementation in these countries. Findings suggest that early inclusion of DC curriculum, cross-curricular curriculum, privacy consideration, parental engagement and teacher training are key components for a successful implementation of DC curriculum. Recommendations for Oman include starting DC education from early Ages, setting standards for its implementation, involving parents, training teachers, updating curriculum, empowering students, and balancing between the global best practices and the Omani identity.

Keywords: Oman, digital citizenship, K-12 education, media literacy, DC curriculum

1. INTRODUCTION

With everything becoming digital, many education systems that were once only teaching students how to use technology are now also teaching them to be safe and responsible online. DC is defined as the norm of appropriate, and responsible technology use (Ribble, 2015). It can also be defined as recognizing the rights and responsibilities associated with using information on digital platforms in a legal and ethical manner (Mossberger et al., 2008). While most K-12 programs do recognize the necessity of teaching students to be responsible digital citizens, some countries are way ahead in this regard. Despite the Sultanate of Oman being seen to be leading the way in its journey toward digital transformation with several technological infrastructure developments in education, formal curriculum on DC does not exist yet (MoE, 2019). With Omani students increasingly engaging with digital platforms, the demand for a coherent and clear approach to DC education is more pressing. Following other countries that successfully implemented DC programs, a similar framework can be created taking into account the educational goals alignment with Oman's Vision 2040 which aims to develop a national technological capability while maintaining the Omani identity (Oman Vision 2040, 2020). This paper looks into DC education developments in the United States, Estonia, South Korea, Australia, Qatar, and Finland. Oman can benefit from the best practices in implementing DC education by learning from the experiences of these countries.

2. RESEARCH PROBLEM

Oman has been making significant advancements in using technology in all fields, and the education sector is no exception. However, there is no official DC curriculum for students in grades 1-12. With no specific DC program in place, students lack the basics of online privacy, cybersecurity tips, responsible use of the internet and media literacy. Such lessons are valuable as students turn to be more social media-driven. They might be fluent in ICT, but it is not the same in regards to positive online behavior (Oxley, 2011; Vlaanderen et al., 2020).

The absence of a DC curriculum might make students vulnerable to facing various issues in the online spaces (Al-Badi et al., 2016; MoE, 2019). Students might face threats such as privacy issues, cyberbullying or just being deceived by fake news. This gap could be addressed through a DC curriculum that includes important topics like internet safety, responsible use of technology, and critical thinking about digital information (Buchholz et al., 2020; Vlaanderen et al., 2020).

3. RESEARCH QUESTIONS

This research is guided by three major research questions:

1. What strategies have some countries used to successfully incorporate DC education into K-12 educational systems?

2. What are the key components of the DC curriculum in these countries that train students to become responsible digital citizens?

3. How can Oman benefit from these global experiences to develop its own DC curriculum?

4. LITERATURE REVIEW

The importance of DC education has been emphasized lately due to the advancement of information technologies and the spread of the novel coronavirus Covid-19 Pandemic which contributed enormously to an increase in the time spent online (Frau-Meigs et al., 2019; Al-Abdullatif & Gameil, 2020). This increase in internet access time has brought with it many threats which it is crucial to train students to face (Vlaanderen et al., 2020; Tapingkae et al., 2020). Examining related literature in the field of DC in regard to K-12, a number of studies indicated that teaching students about DC promoted their level of DC.

In addition, Vlaanderen et al. (2020) examined the effects of teaching students about cyberbullying on students' level of DC through an online questionnaire. The study targeted 298 students aged 10-12 who were divided into two groups. One group was exposed to online training on cyberbullying, whereas the other group was not trained. Comparing the results of the pre and post questionnaires using t-test, the study concluded that the DC level among students developed after being taught about cyberbullying.

Similarly, Korucu and Totan (2019) conducted a mixed-method study to examine the effectiveness of Information Technologies and Software Courses in promoting the level of DC. The study targeted 150 students from grade five and grade six, and it revealed that the level of DC improved for both grades. However, the DC level was better in grade six than in grade five. The researcher attributed this result to grade six students having received two training courses on these topics, whereas grade five students were being taught this course for the first time. The study concluded that students were satisfied with the course; however, they asked for more practical lessons.

In addition, Bal and Akcil (2024) conducted a study to determine effectiveness of a sustainability-based online course on DC skills of their undergraduate students. The study was a quasi-experimental pretest-posttest, single group design including 39 teacher candidates enrolled in an online Moodle based course. The results demonstrated that the students' attitudes and practices with respect to DC had improved markedly through structured instruction. The authors emphasize the sustainability of such initiatives within the context of postsecondary education as they can be adapted to take new technologies into account over time.

In the same vein, Alenezi and Alfaleh (2024) conducted a mixed-methods study to examine the effectiveness of incorporating mobile-based activities into DC education.The study targeted elementary schools employing interviews with 15 teachers and questionnaires with 398 teachers to collect data. Data was then analyzed using thematic analysis and descriptive and inferential statistical tests. The findings of the study revealed that there was a significant increase in students' understanding of responsible and appropriate use of the internet. Moreover, there was a descreese on the incidents of cyberbullying that students faced. The study called for integrating such activities to enhance DC among students and to adopt them in broader samples.

It is clear from the previous review that the studies conducted to examine the effect of DC education on students' level of DC indicated a positive impact regardless of the different means researchers used to convey the content. This emphasizes the importance of training students in the DC field so they are prepared to face the requirements of such a digital era.

5. METHODOLOGY

This study uses a comparative qualitative analysis based on academic literature and government reports, as well as some educational frameworks. The approach is based on three core stages of analyzing DC education studies worldwide to clearly explain the practice of DC education in different countries. Literature reviews are a critical part of qualitative research which allow studying findings from multiple studies serving as a deeper, and broader understanding of the topic (Hart, 2018). In order to understand the structuring models of the DC curriculum, the DC models from The United States, Estonia, South Korea, Australia, Finland and Qatar were studied in this research as examples of countries with lessons that Oman could benefit from. This review formed part of a larger study that explored the ways in which DC education has been rolled out across different countries and provided critical insights.

Comparative analysis was then employed to identify similarities and differences across these countries. Comparative analysis plays a key role in educational research for comparing cases and drawing patterns of similarity and difference to show unique or common attributes (Bray, 2007). The analysis was centered around fundamental aspects including early engagement, media literacy, privacy consideration and the role of governments and educators. That approach helps to identify the key elements of effective DC programs around the globe.

At the end, context analysis for Oman's educational system and digital profile was used. Contextual analysis, which enables researchers to appraise the contextual conditions of a given locality and thus determine how global practices might be best adapted locally (Merriam & Tisdell, 2015). This step was important for highlighting the DC gaps in Oman and to build recommendations to transfer existing strategies worldwide to fit the Omani identity.

6. ANALYSIS

This section explains how different countries have incorporated DC in their K-12 education. The analysis is performed by reviewing experiences from the United States, Estonia, South Korea, Australia, Finland and Qatar. It has taken place through three interconnected phases to identify the key components of what effective DC education may encompass. These key components consist of early curriculum inclusion, digital media literacy, privacy and security consideration, cyberbullying prevention and government involvement. The approach of each country is evaluated according to the key components it used to prepare students to be responsible digital citizens.

6.1. United States

The United States has been a pioneer in the field of DC education, specifically as part of its K-12 school system. Common Sense Education offers many resources to help teachers teach students to be safe and responsible online. Within the U.S. DC curriculum, students learn about many different aspects of navigating the online world safely and smartly, understanding privacy, managing a digital footprint that can last for years, preventing cyberbullying, recognizing signs of an unsafe relationship, and protecting themselves from scams, phishing, identity theft, and predatory adults. These topics are taught to students from early ages and they are updated every year to be aligned with changing digital challenges. The standout feature of the U.S. system is that DC can be found in all kinds of subjects, not just in tech classes, which means students come to see it as part of everyday life (Common Sense Education, 2015; 2021).

Moreover, the ISTE (International Society for Technology in Education) published standards for DC in the United States to encourage students to be respectful online, protect personal information, and understand their digital rights and responsibilities. The standards promoted the ethical as well as responsible use of technology. It also emphasizes that students are taught to critically assess the authenticity and authority of online information in order to avoid fake news and be responsible for their digital footprint. These are essential concepts now that much information is only available online, and students can be more tactical about the media that they read by questioning sources on the web. In a world where misinformation spreads through digital platforms like wildfire, learning how to verify the source of information would equally be beneficial in enabling students to familiarize with technology responsibly and conscientiously (ISTE, 2017).

The U.S. approach also shines in its involvement of parents as an active role in the digital education of their kids, which is critical when they are young as it sets the tone from then on for a lifelong journey with

technology (Hollandsworthet al., 2011). Schools strengthen the skills that students learn in school by providing resources and programs for parents to educate their children on internet safety from home. It ensures that the school and the student work closely with, including family members aiming at guiding students how to remain safe and be responsible users online (James et.al., 2019; Ribble & Park, 2022).

Another key component of the U.S. DC education is stressing the importance of critical thinking and information evaluation when dealing with information posted online. As a result of the increase in fake news and misinformation, schools are focusing on teaching students how to determine whether something they read online is accurate or not, and why it is important not to share false information. This makes students more responsible users on social media platforms and all other platforms where they get contact with others (Common Sense Education, 2021).

The U.S. model offers several lessons for Oman. One of which is to teach DC through various subjects, instead of a standalone class. Second, involving parents in educating their kids. Third, information literacy and critical thinking will also reduce the risk of misinformation for Omani students to become more critical when exploring the internet.

6.2. Estonia

Estonia, known as e-Estonia, is one of the most digitized countries which has a long history of use of technology in its educational system. Every student learns about DC from elementary school age in Estonia (E-Estonia, 2023; Himma-Kadakas & Kõuts-Klemm, 2023). Issues such as internet ethics, privacy protection, and cybersecurity have been included in the curriculum with a vision to promote responsible digital behavior. When students get to high school, they know how digital tools work and also have a grasp of the ethical implications online (Lust & Laanpere, 2024).

One key factor that distinguishes Estonia's digital education is the strong support of it by the government. The Estonian government is heavily involved in providing schools with the resources and tools to teach digital literacy and citizenship. They are committed to work towards developing a digital society so the students learn in a digitally friendly environment and technology becomes a part of their daily education (Himma-Kadakas & Kõuts-Klemm, 2023; E-Estonia, 2023).

Another aspect of Estonia’s DC education is its focus on equipping students with privacy skills. From early ages, students learn about their digital rights and how to protect their privacy when online. This curriculum teaches Estonian children to value their digital identity, now more important than ever in a new Internet reality where everyday tools threaten their privacy (Lust & Laanpere, 2024). Because the recognition of what it really means to be safe, secure and ethical in a digital space gives students a strong foundation to tackling the difficult challenges connected with life online.

The Estonian example offers Oman important lessons. Training students in this field from early ages is crucial. Oman may also draw inspiration from how Estonia's government is helping schools, by offering a national support for digital literacy that ensures every child gets practical and good quality of digital education.

6.3. South Korea

South Korea, a leading digitally connected nation, has implemented a comprehensive DC program that includes important issues as privacy management, cyberbullying identification and prevention mechanisms (Kim et al. 2024; Lee, 2023). The way they address this starts at a very young age, and goes all the way through high school. The Korean Internet Safety Commission works closely with schools to provide a program to educate students on how to be safe online. The course covers how to safeguard personal information, address cyberbullying and insights into the legal implications of online behavior (Korean Internet Safety Commission, 2021; MOE, 2023).

Preventing cyberbullying is among the most critical elements of the country's DC effort. Social media is widely used by Korean young people, so schools have a responsibility to teach students the risks and consequences of cyberbullying through campaigns as well as certain rules for social interaction in an online environment. Students are taught to spot bullying, report it and stop it. Further, this curriculum places an importance on the legal outcomes of cyberbullying in order to help students learn their actions taken online are applicable offline (Choi & Park, 2023; Lee, 2023; MOE, 2023).

Privacy education is another key component of the South Korean program. With digital transactions and online interaction now a basic part of daily life, it is important that young people know what to do with their personal details. Students learn about encryption, creating strong passwords, privacy settings in social media and many more. With privacy at the forefront, South Korea is able to educate their students on how to

safely and responsibly use their digital footprints (Korean Internet Safety Commission, 2021;Lee, 2023; MOE, 2023).

Moreover, teacher training programs are given a great importance in the South Korean educational program. Teachers are trained on topics including cyberbullying prevention and privacy protection. They understand the different emotional and social challenges students face online, including cyberbullying. South Korean teachers are being taught to identify warning signs of cyberbullying, how students should report them and what legal and moral implications could arise from actions in digital platforms. This strategy is believed to let teachers create a more secure online experience for their students (Choi & Park, 2023; MOE, 2023).

Oman can learn a lot from South Korean experience. By introducing similar programs, it will help the youth of Oman to understand what they can and cannot do online in an ethical as well as legal way. In a similar vein, South Korea's partnership between the government and school is an excellent model for Oman to use when designing a robust curriculum on DC. Moreover, involvement of teachers in the training program is crucial for its success.

6.4. Australia

Australia successfully offers us a model of DC curriculum that balances the rights and responsibilities for students in their online world. Australian Curriculum, Assessment and Reporting Authority (ACARA) embeds DC into a number of syllabus areas focusing on online safety, digital rights, digital responsibilities and ethical behavior. This approach allows students to learn not only how to use technology responsibly but also the ethical implications of their digital deeds (ACARA, 2019; Office of the eSafety Commissioner, 2023). One of the key themes in Australia's approach to DC is respectful online communication. At schools, Australian students learn how to have respectful discussions online around hate speech, misinformation and cyberbullying. In addition, coursework on ethical communication helps students engage with social media and forums in a productive manner. This approach has placed Australia on the forefront of curriculum pedagogy emphasizing respect with online participation (Frau-Meigs et al., 2019).

Furthermore, the Australian curriculum puts focus on digital rights. The students are provided with training about data privacy, freedom of expression and intellectual property. But the emphasis on rights is also balanced with lessons about responsibilities, like the realities of illegal downloading, plagiarism and other practices online. This is done through the teaching of rights and responsibilities, which enables Australia to produce students who are educated in DC, being able to understand that their online decisions also have real life consequences (ACARA, 2019; Office of the eSafety Commissioner, 2023).

Oman could learn from the Australian method by implementing a solid DC curriculum targeting fundamental rights and stressing on the need to be responsible citizens online. It would also be beneficial if lessons in various aspects of respectful communication and how to use the Internet provide a positive impact on the digital world.

6.5. Finland

Finland's education system is widely known to be one of the leading examples of teaching critical thinking, and that approach can be seen in how they teach DC as well. But in a country like Finland, teaching digital literacy is more than showing students how to use technology. Instead it tries to teach them in what way the digital tools and platforms in societies actually work, and which behaviors they elicit. As part of the curriculum, students learn media literacy, which helps them analyze what they find on the internet. They learn how to identify misinformation, which is particularly significant nowadays as fake news has been getting more serious (KAVI, 2021; Finnish National Agency for Education, 2022).

Similar to South Korea, Finland regards training teachers in the field of DC is critical to the success of DC implementation. However, instead of teaching the technical use of digital tools as an end in itself, the Finnish teacher training program is designed to ensure educators understand how to support media literacy and critical thinking among their students when encountering all kinds of online content. Following this approach, teachers can coach students through spotting fake news, teaching them digital ethics as well as protecting their privacy in the online world (Beroš, 2022).

Another key element in Finnish DC education is student empowerment and leadership. Finnish schools provide students with a curriculum that develops necessary skills on how to behave when surfing online. It also empowers students to be young leaders as digital ambassadors are encouraged to help in educating their peers on online ethics, privacy and media literacy. The idea is that this way students take personal accountability for their behavior when they use digital devices, and they build a healthy and respectful school environment around technology. In this way, not only are Finnish students equipped with strong digital skills but they are also shaping an online community that cares to behave ethically (Finnish National Agency for

Education, 2022).

In the same vein, Finnish students learn through collaborative learning. This teaches students to respond more ethically in the digital world. The focus is on promoting ethical decision-making in digital spaces and encouraging students to consider what the outcomes may be of their online behavior. This is done through developing critical thinking skills through DC lessons especially when students are analyzing news and considering the ways sharing their personal data online can affect them. In this manner, students do not only become proficient in using technology but also critical and ethical digital citizens (Lankshear & Knobel, 2018).

Another significant feature of the Finnish DC program is that the curriculum is consciously updated. Just as new technology is ever-evolving, the DC program changes to ensure students are taught the most current information about online rights, responsibilities and ethics. Finnish schools are in close cooperation with tech experts and policy makers to keep the curriculum updated, preparing students for the information society they already live at home and will certainly be at their workplaces (Finnish National Agency of Education 2022).

Oman can gain insight into integrating lessons of Finland's model through DC education that covers critical thinking and media literacy. In addition, Oman could also incorporate lessons of critical thinking about digital media. Encouraging critical thinking will enable Omani students to better optimize their approach towards navigating an increasingly digital world. Oman could gain a great deal from this by introducing a curriculum that teaches students how to evaluate digital information critically, and updating the curriculum regularly to account for technological advances. This will help develop Oman's students' critical thinking skills, which could make them more effective in a rapidly changing digital world. Finally, Oman should implement Finland's approach in encouraging students to emerge as leaders who speak to their peers about responsible behavior online and empower in both schools and societies safe DC.

6.6. Qatar

As a part of its National Vision 2030, Qatar has taken important steps to implement cyber security and DC in its educational system. Recognizing the importance of teaching students in an era that is more interconnected than ever, plans are under way to move student digital literacy forward. The Ministry of Education and Higher Education in Qatar has created a digital literacy curriculum which is focused on the responsible use of social media, online safety, and also ethical usage of technology (National Cyber Security Agency, n.d.; Qatar Ministry of Education, 2022).

In Qatar, children are taught DC in elementary school programs including internet safety, online privacy and respectful online behavior. Topics include digital footprints, cybersecurity, and legal issues related to their online behavior that become more advanced as students move through their grade levels. Moreover, to ensure that its curriculum fulfills the global standards, Qatar has partnered with overseas institutions, making its education system more effective as well (National Cyber Security Agency, n.d.; Qatar National Vision 2030, 2018).

Qatar has always focused on using Technology responsibly in a way that maintains its ethics and Culture. The lessons take on global issues students face when online, while still staying true to Qatari values. This would allow Qatari students to take by the moral and ethical values that hold importance in Qatar at the same time becoming productive members of the digital society. This ensures that a large portion of DC implementations are taking place in the lives of Qatari students while also preparing them for participation in the global digital economy (National Cyber Security Agency, n.d.).

Oman can learn from Qatar's experience by integrating DC education with its national objectives. The Sultanate may develop a structured DC teaching plan that aligns with its own educational and social objectives, in line with Oman's Vision 2040. Oman can look at how Qatar is trying to embed its cultural values in the education system through digital education, so that the curriculum is not just global but also reflective of local traditions and values focusing on preserving the Omani identity which is a pillar of Oman's 2040 Vision. This might ensure that the program is unique and that revisions have been made in accordance with local values and beliefs.

7. FINDINGS

By examining how countries around the world have managed to implement DC in their education systems, a few important aspects could be listed. Analyses of practice in countries where the DC curriculum has been applied such as Qatar, South Korea, Australia, Estonia, Finland and the United States reveal strategies that are common to successful practices in implementing DC education. These results stress the need for an early introduction of DC, integration across subject areas, a focus on privacy and cyberbullying prevention as

well as greater government involvement and media literacy education. These insights will help in steering Oman to formulate its own DC curriculum, one that better equips students with the tools for a safer digital life.

First, DC needs to be integrated early, as it establishes a base of using the internet properly. Estonia, for example, implements lessons on DC in primary schools and Finland ensures that the students of today will indeed be well-informed about their online actions. Exposing students to concepts of online safety, privacy and ethics from an early age can help prepare them for the digital issues they may face in future.

Second, another key component was the importance of cross-curricular integration. In the US and Australia, DC is not just in ICT classes, but integrated into other subjects like social studies, language arts, and even science. This helps students understand the applicability of DC to multiple aspects of life, and embeds it in their general education. Students learn what it means to be good digital citizens through incorporating DC throughout the curriculum.

Third, an effective DC curriculum will consider privacy protection and cyberbullying prevention. For instance, South Korean schools prioritize proper behaviors regarding personal information protection and cyberbullying. More information on the ethical and legal implications of their actions online which contributes to a safer digital environment. By teaching these topics, social awareness could be raised, and students could better navigate the world of social media and their digital lives.

Fourth, the success of DC programs relies heavily on the involvement of government and related stakeholders. Estonia and Qatar are two countries where government support has helped improve deliveries of DC education by giving schools better equipment and infrastructure. Therefore, with the funding and push from local governments to help schools offer DC education to all students.

Fifth, another key factor in teaching powerful DC is in teacher training. Teachers in different countries receive training targeted at navigating students though involved digital matters which include privacy, security and ethical conduct online. In countries such as Finland and South Korea arming teachers with the relevant set of skills and knowledge, they are at a better position to tackle digital world obstacles by assisting students step by step in order that they become accountable digital citizens.

By contributing to teacher training, a high-quality DC education can be ensured in schools. A teacher able to teach DC is capable of leading a class through cyberspace and training students on how to use the internet responsibly. The teacher training element will be key for Oman to realize a successful DC program. Teachers need to be well-educated in order for them to help their students face the challenges of digital life.

Sixth, setting standards for DC education which stem from the Omani values and culture can create a clear path for its implementation. Like the U.S., Oman may set its own standards for training students in the field of DC while benefiting from the international models. As Oman moves forward in educational activities, it should reconsider spreading such policies tailored to its cultural context. This approach ensures students maintain respect for the cultural and social norms important to Omani values while teaching them the foundations needed to become responsible global digital citizens.

Finally, engaging parents in DC education is critical. In the U.S. model, parents play a critical role in students' digital education by providing resources and guidance for parents to assist in promoting responsible behavior at home online. This partnership between schools, parents, and students means that students are getting similar messages about responsibility in the digital world at school and at home.

8. RECOMMENDATIONS FOR OMAN

In light of the mentioned reflections regarding the implementation of DC education in countries such as the U.S., Estonia, South Korea, Finland, Australia and Qatar, it is crucial to emphasize some insights that can be useful for Oman's educational system. By benefiting from the international models and adjusting them to suit Oman's context, students in Oman will be on a better path towards becoming responsible users in the digital age. Elements like early incorporation into the curriculum, engaging it cross-curricular, protecting privacy and helping prevent cyberbullying could be considered in developing the Omani DC curriculum. The recommendations also emphasize the need for teacher preparation in addition to media literacy, parental engagement and safeguarding Oman's national identity in the digital area.

1. Early introduction of DC education

Oman could replicate good examples in countries like Estonia and Finland by launching DC education from primary school. If the training begins early, good digital habits will be cultivated amongst students which will enable them to practice online safety and ethics. By introducing students to these concepts earlier it makes sure that they become adults who know their digital responsibilities and are taught how to leave a positive

impact on the online communities.

2. Setting standards for DC education

Setting standards for DC education is crucial for a successful educational plan. Standards offer a clear framework for instructing students on how to use technology in an ethical, safe, and responsible manner and this will result in developing a coherent curriculum that helps students learn crucial abilities like assessing digital information critically, communicating politely online, and comprehending online privacy. The standards should benefit from the international models while retaining the Omani identity.

3. Cross-Curricular Approach

Similar to the U.S. model, Oman could embed DC lessons in many subjects across the educational plan, such as ICT, social studies, language and arts. Incorporating DC lessons across different subjects will make students automatically associate them as a way of life rather than something they need to remember every time they are in front of a screen. It enables students to receive a comprehensive knowledge from it that enables them to act responsibly as digital citizens.

4. Focusing on privacy and cyberbullying

Following the example of South Korea, Oman could concentrate on training students on topics such as privacy protection and cyberbullying prevention. Lessons in privacy protection will ensure students know how to keep their data safe, and cyberbullying prevention will remind them to treat others with respect on the internet. Teaching students the ethical and legal implications of what they do online will breed a healthier cyber environment.

5. Government and stakeholder support

Inspired by the experiences of Qatar and Estonia, Oman can create a national framework to practice DC involving government. This collaboration ensures that the material is comprehensive and contextually appropriate for the Omani students. It will make sure Oman's DC education is enabled, supported at all levels including teachers, policymakers and technology suppliers.

6. Media Literacy and Critical Thinking

Like Finland, Oman should be including media literacy into its broader DC curriculum. If students are taught what to look for in digital content when trying to separate the wheat from the chaff, it will help them navigate misinformation and fake news fast and quick. This would make the Omani students responsible and critical users of online information, making them better prepared to navigate the complexities of our global digital age.

7. Teacher Training

DC education should begin with teacher preparation. Learned from countries like South Korea, this model of promoting specialized training for educators to facilitate the teaching of specific content areas such as privacy protection, cyberbullying and proper social media use is a best practice that Oman should invest in. Continuous professional development will enable teachers to remain well-informed of the changing digital trends and challenges, providing students with up-to-date support.

8. Parental Involvement

Oman can learn from the United States model of engaging parents to provide DC education. Parents should be involved by way of schools to reinforce the lessons that children are learning in school. This will actually give additional strength to the whole training since it will instill responsible digital behavior at home while supporting a consistent online safety and ethics approach throughout.

9. Preservation of National Identity

Just as in Qatar, Oman will have to be mindful of how its DC curriculum aligns with the cultural and ethical values of the country. The program in Oman should be catered to suit its own culture and identity by making sure that Omani students learn how they could work and live in a digital world yet hold onto their traditions and values. This way, Oman will raise generations of respectful digital citizens who add to local as well as global online communities without losing their national identity.

10. Student Empowerment and Leadership

Oman needs to have more student-led initiatives around DC programs. Programs that enable student leadership in promoting responsible online behavior can create a more positive DC culture for schools. Peer education and student ambassadors would help create awareness on cyber safety, ethics and respect

among the students.

11.Updating curriculum

Technology is evolving and the challenges around it as well. Like Finland, Oman needs to refine and update its DC curriculum to keep pace with technological development and changes in the digital world. Updating the curriculum will make sure students are always being taught the most current requirements to adapt new digital trends safely.

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