



Cyber-wisdom: Proposing a new framework for understanding and cultivating wisdom in the digital age

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Abstract

Based on the theoretical work that is currently being undertaken by the Jubilee Centre for Character and Virtues, this paper proposes a framework for understanding and promoting via formal education the concept of cyber-wisdom as a multi-component construct, defined as the ability to do the right thing at the right time, when using the internet. Building on three prominent models of wisdom, the framework suggests that cyber-wisdom, which is essential for navigating online risks and opportunities, relies on four components – cyber-wisdom literacy, reasoning, self-reflection, and motivation. Each component is discussed both conceptually and, in terms of teaching delivery methods, practically.

Context and project overview

This presentation is based on the theoretical work that is currently being undertaken at the Jubilee Centre for Character and Virtues at the University of Birmingham in relation to the concept of cyber-wisdom. Rooted in Aristotelian virtue ethics, this concept – also referred to as “*cyber-phronesis*” at the Jubilee Centre – can be broadly understood as practical wisdom in the context of using the internet (Harrison, 2016).

The theoretical work conducted at the Jubilee Centre is part of a project called Cultivating Cyber-*Phronesis* (Jubilee Centre for Character and Virtues, 2021). This project is based on the development, delivery and evaluation of a cyber-wisdom programme in secondary schools in England. More specifically:

- The research aim of the project is to evaluate the extent to which the programme is effective in promoting different aspects of wisdom among 13-16-year-olds in relation to how they use the internet.
- The goal of the programme is to provide 13–16-year-olds with the ability to exercise wisdom when using the internet in ways that can enable them to navigate both online opportunities (e.g., for learning, for socialising, for entertainment, for employment, and for participation in society) and online risks (e.g., in terms of privacy, misinformation and forms of online abuse such as cyberbullying).
- The project frames cyber-wisdom education as a form of moral and character education that overlaps with digital citizenship education. This form of education is concerned with the teaching of how to use digital technologies responsibly (Ribble, 2007). We argue in our work that more efforts are needed to adopt a virtue ethical lens, which is what underpins the

concept of cyber-wisdom, in the context of approaching, researching and promoting digital citizenship education.

When it comes to the UK, not only is there no unified or coherent framework for how to teach digital citizenship, but schools often teach elements of moral education in relation to using digital technologies by relying primarily on deontological and utilitarian principles (Polizzi & Harrison, 2020). These principles, whose effectiveness remains unclear, encourage students respectively to follow rules (for example in terms of screen time) and to reflect on the consequences of their own online actions (for example in terms of privacy and of the repercussions of one's own digital footprint). Little emphasis, however, is placed on the importance of possessing character virtues such as compassion, honesty and respect, and ultimately wisdom as a meta-virtue, that can help students to decide which virtues to act upon online, depending on context (Polizzi & Harrison, 2020).

This is why in our work we approach the concept of moral decision making online – that is, the decisions that users make to navigate the ethical implications of online opportunities and risks – primarily from the perspective of virtue ethics, yet in ways that intersect with deontology and utilitarianism (see, for example, Harrison & Polizzi, 2021; Harrison & Polizzi, in press). Relatedly, this is why we argue that digital citizenship education needs to overlap in practice with cyber-wisdom education (Harrison & Polizzi, 2021). But what does cyber-wisdom mean in the first place, and how can it be conceptualised?

Conceptualising cyber-wisdom

Cyber-wisdom can be broadly understood as to the ability to do the right thing, at the right time, when online (Harrison, 2021). In order to conceptualise what it involves as a construct, in our theoretical work at the Jubilee Centre we draw both on Aristotelian virtue ethics and on moral

psychology, and do this by drawing on three different models of wisdom that are prominent in the literature. The reason underlying this decision is to better position the concept of cyber-wisdom as a multi-component construct, while also building on previous models.

More specifically, the cyber-wisdom framework that we are currently developing takes inspiration from two models that are grounded in moral psychology. These are Ardel's (2004) model of wisdom as well as Grossmann et al.'s (2020) recent common model of wisdom. In addition, it builds on a recent model of *phronesis* as practical wisdom developed at the Jubilee Centre (Darnell et al., 2019; Kristjánsson et al., 2021) – a model that is grounded primarily in Aristotelian virtue ethics.

Our decision to propose a distinct conceptualisation of cyber-wisdom is embedded in the recognition that the digital age presents challenges that are intrinsic to using the internet. As mentioned above, the internet presents considerable opportunities, including for learning, socialisation and participation in society. However, it also presents considerable risks – think for example about the spread of online misinformation or about the risks that it entails in terms of privacy, safety and cyberbullying (Livingstone et al., 2017).

What is distinct about the digital age is that these risks are exacerbated by the affordances of digital technologies – that is, by their technical features and by the ways in which they are designed (Suler, 2004). The internet makes it easier to connect with users who are physically distant, but the absence of body language has been found to reduce empathy among perpetrators of online abuse (Campbell, 2005). Also, the internet affords users the ability to interact with others anonymously (Christopherson, 2007). Anonymity, however, makes it more likely for perpetrators of online abuse to reinforce their behaviour, since they can conceal their identities (Suler, 2004).

At the same time, the internet is not just designed in ways that amplify online risks, but so does its political economy. More precisely, the digital environment depends on the ways in which the

internet is managed. Problematically, the internet is under-regulated, and not just by governments but also by internet corporations themselves (Dahlberg, 2020; Polizzi, 2021). This means that what happens online is subjected to reduced monitoring and supervision, which makes it harder to tackle online risks. Not to mention, furthermore, that internet corporations use algorithms that, in the name of personalising content, contribute not only to forms of data tracking that are invasive of privacy but also to perpetuating issues of misinformation and polarisation, among others (Vaidhyanathan, 2018).

It follows that possessing wisdom in the digital age means, from a user perspective, that users need to be able to navigate the ethical implications of online risks and opportunities that are specific to the digital age and that apply to contexts that may well be different online than offline.

With this in mind, on the one hand our conceptualisation of wisdom includes four different components – i.e., 1) cyber-wisdom literacy, 2) cyber-wisdom reasoning, 3) cyber-wisdom self-reflection, 4) cyber-wisdom motivation – that build on different aspects of the three models of wisdom mentioned above. On the other hand, while these models are not necessarily concerned with digital technologies, each component of cyber-wisdom, as presented below, applies more specifically to the digital age.

Each component of cyber-wisdom is now briefly discussed.

Cyber-wisdom literacy

We define this component as an understanding of the nature of different virtues such as compassion and honesty as well as of the contexts in which different virtues apply to the digital age. As such, this component relies on cognition – the mental processes that are involved in gaining knowledge and comprehension. In these terms, it builds on Ardel's (2004) component of cognition, which is based on knowledge of human life and events. It also resonates with Grossmann et al.'s (2019) component

of perspectival meta-cognition (PMC) in relation to the role that cognition plays as the foundation of the meta-cognitive processes that are pivotal in navigating this kind of knowledge. Finally, it echoes Darnell et al.'s (2019) and Kristjánsson et al.'s (2021) constitutive function of *phronesis*, which involves the use of cognition for understanding how different virtues apply to different events.

At the same time, cyber-wisdom literacy, which is specifically concerned with the digital age, requires an understanding of how multiple virtues can be acted upon in ways that strike a balance between pursuing online opportunities while avoiding or coping with online risks. Having cyber-wisdom literacy includes, for instance, appreciating the value of using social media to access information and interact with other users while understanding the importance of producing and sharing information online in ways that are underpinned by honesty, or in ways that are enhanced by compassion towards users who receive, for example, negative comments on social media.

Cyber-wisdom reasoning

The second component of cyber-wisdom is cyber-wisdom reasoning. This component, which is also grounded in cognition, refers to the ability to choose the right course of action online, especially when confronted with moral dilemmas based on the clash of two or multiple virtues. As such, this component builds on Grossmann et al.'s (2019) component of PMC, particularly in terms of its relevance to navigating moral dilemmas, as well as on Darnell et al.'s (2019) and Kristjánsson et al.'s (2021) integrative function of *phronesis*, which relies on the ability to evaluate different events, especially when these present moral dilemmas. However, unlike their models of wisdom, cyber-wisdom reasoning is based on the recognition that moral dilemmas online may be amplified by the technical features as well as the political economy of the internet.

Examples of such dilemmas may include accessing information free of charge as opposed to observing copyright laws (which may be particularly problematic for users with limited access to

financial resources), whether to show respect or compassion to users who use abusive language on platforms like Facebook, or whether or not to use social media in the first place (as opposed to engaging in face-to-face interactions) to show compassion to others. What is specific about this component is that users need to take into account whether, and if so how, experiencing moral dilemmas online may include scenarios that are specific to using the internet as opposed to dealing with moral dilemmas offline.

Cyber-wisdom self-reflection

The third component of cyber-wisdom is cyber-wisdom self-reflection. This the most distinct component of cyber-wisdom since, unlike the other models, it lies more explicitly at the intersection of meta-cognition (that is, the mental processes that we use to evaluate our own cognitive processes) and affect. This component consists of the ability to navigate a) our own perspectives and those of others and b) our own emotions and those of others. These are two aspects that are particularly important when it comes to using the internet. This is because both its affordances and its political economy amplify online risks that are fuelled by emotions, including sentiments of hatred and division – emotions that exacerbate issues of misinformation and polarisation, among others, affecting both individual users and online communities.

Conceived as such, this component builds partly on Ardel's (2004) component of reflection, understood as the self-examination of events from multiple perspectives, which is also relevant to Grossmann et al.'s (2019) component of PMC. In addition, it builds on Darnell et al.'s (2019) and Kristjánsson et al.'s (2021) component of emotional regulation, which consists of the ability to regulate one's own emotions. Concerned with the digital age, this component implies that users need to be able to reflect on their own biases and to regulate their own emotions when presented with moral dilemmas online (e.g., when experiencing feelings of empathy or anger as a result of

interacting with users who tend to show abusive traits). At the same time, users also need to be able to navigate the emotions of others within settings in which their own biases may clash with the views of others (e.g., when engaging online in public debate undermined by polarisation fuelled by feelings of hatred).

Cyber-wisdom motivation

Finally, the fourth and last component of cyber-wisdom is cyber-wisdom motivation. This component, which has to do with moral identity, refers to a desire to act on different virtues online in line with ideals of the common good. This is why this component builds on Grossmann et al.'s (2019) component of moral aspirations, especially when approached as an orientation towards the common good. Furthermore, it resonates with Darnell et al.'s (2019) and Kristjánsson et al.'s (2021) blueprint component of *phronesis*, which refers to the motivation that is necessary to adjust one's own identity in line with principles of the common good.

In practice, possessing cyber-wisdom motivation means to construct and mobilise expectations of how oneself and other users should deploy different virtues when using digital technologies and interacting with one another within online contexts. This means that users' moral aspirations could include, for example, the expectation that users should interact online in ways that are honest and compassionate, as well as the expectation that online communities should engage in public debate in ways that are mindful not only of their different concerns but also of a certain degree of civility.

Finally, users' moral aspirations could also include the expectation that internet corporations should make more efforts to tackle online risks in line with principles of transparency and accountability.

Cultivating cyber-wisdom through formal education

This paper has discussed how we conceptualise cyber-wisdom at the Jubilee Centre. This conclusive section focuses on how to cultivate cyber-wisdom through different teaching delivery methods that can be adopted in the classroom and that match the different components of cyber-wisdom.

When it comes to cyber-wisdom literacy, this could be taught across different key stages through the use of narratives and stories, thus encouraging students to gain an understanding of the role of different virtues online. The relevance of this method to the teaching of moral character are well-discussed in the literature (see, e.g., Carr & Harrison, 2015) This means that teachers could use, for instance, real stories of virtuous practice that are based on users pursuing online opportunities (think, for instance, of online communities working together in the name of solidarity). At the same time, educators could use stories of online abuse, or of other online risks such as plagiarism, with a view to teaching students about the importance and benefits of showing different virtues online.

In terms of teaching cyber-wisdom reasoning, we know from moral research that asking students to explore and discuss moral dilemmas contributes to their ability to rely on moral reasoning in order to evaluate different scenarios and choose the best course of action in a given situation (Harrison et al., 2018; Hedayati-Mehdiabadi et al., 2020). This means that a useful way to teach cyber-wisdom reasoning could be to have classroom discussions aimed at encouraging students to reflect on and evaluate online dilemmas both hypothetically and in relation to their own online experiences.

Meanwhile, cyber-wisdom self-reflection could be taught by asking students to keep journals and diaries – a method that is beneficial for encouraging students to develop character through reflection on their own experiences and experiences (Arthur et al., 2016). More specifically, students could be asked to write about and reflect on the moral implications of their experiences online, on the extent to which these may be driven by different emotions, and on whether and how they manage to

regulate their emotions in ways that are conscious of their own biases as well as of the perspectives and emotions of other users.

Finally, cyber-wisdom motivation could be taught in the classroom by relying on the use of stories and discussions about role models and exemplars aimed at encouraging students to develop and deploy, through emulation and admiration, moral aspirations that concern the internet and apply to different online contexts. The benefits of this teaching method for character and moral education are well-documented (see, e.g., Zagzebski, 2017). This means that educators could draw, for instance, on exemplars of online activism committed to campaigning against cyberbullying, including activists such as Lizzie Velasquez.

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