



THE
JUBILEE CENTRE
FOR CHARACTER & VIRTUES

Insight Series

**Cultivating Character Virtues in 12-18 Year
Olds for Responsible Use of AI**

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Foundational Positions

Any attempt to determine what character virtues and civic attitudes should be cultivated in 12–18-year-olds, to help ensure their responsible use of AI, is likely to be fraught with challenges. To ensure my focus is primarily on addressing these challenges, I put forward the following truncated foundational positions which ground the arguments I will be making.

- i) The digital world, including recent and forthcoming AI inventions, will bring both **risks and opportunities** for children and young people as well as wider society. Therefore, it is important to avoid moral scaremongering and ensure conceptual and ethical nuance when constructing theoretical positions. This is important to ensure that the opportunities are not overlooked.
- ii) There is a great deal of **conceptual confusion** in discussions about ‘AI’ and ‘character’ – the terms might both be considered semantic minefields. For this presentation I define AI very generally as: *the simulation of human intelligence by a system or a machine*¹. I define character as: *a set of personal traits or dispositions that produce specific moral emotions, inform motivation, and guide conduct*². I believe this definition is closely related to the concept of ‘civic attitudes’ that is favoured by those working on an ‘App for AI’, as **individual and collective character determines personal and societal flourishing**.
- iii) There is a tendency to be **overly deterministic** when debating the impact of new and emerging digital technologies on children and young people. Simplistic arguments run along the following lines: *‘because smartphones exist, children will become addicted to social media’* or *‘because GenAI has been invented, young people will cheat in their assessments’*. Although there is likely some truth in these statements, to be overly technologically deterministic is to overlook the importance of an individual’s character, civic attitudes and personal values. Whilst AI will undoubtedly significantly influence human behaviour, the outcomes of this behaviour are not pre-determined.
- iv) A focus on the character and civic attitudes of digital tech users does not mean that the inventors of AI technologies **should be let off their responsibilities to ‘design in’ ethical checks and balances**. Recent history shows us that Big Tech have often placed company value above human values – they have created tough ethical playgrounds for our children which are full of many moral obstacles.
- v) My paper is mainly based on presenting a **theoretical position** to guide character education practice. This is because compelling empirical research on ‘what works’ is behind the curve (for many understandable reasons).
- vi) Those tasked with teaching digital citizenship education might be seen as **‘trying to hit a moving target, whilst shooting in the dark’**. This is because the tech, including AI, keeps changing and research is not helpful in guiding our educational response. This does not mean we should not try and develop new approaches to educating children to live responsibly in the AI world and strive to keep up with AI developments.

¹Taken from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8633405/#:~:text=AI%20refers%20to%20the%20simulation,%2C%20predicting%2C%20and%20so%20on.>

² Taken from Jubilee Centre Framework – see <https://www.jubileecentre.ac.uk/wp-content/uploads/2024/04/The-Jubilee-Centre-Framework-for-Character-Education-in-Schools-April-2024.pdf>

Moral Theory

We need moral theories to guide judgments on ‘right’ and ‘wrong’ actions. Three theories have dominated moral theoretical thought in the West since the 19th century: deontology, utilitarianism and virtue ethics. Each of these theories might provide a suitable foundational position to ground considerations about how best to educate 12–18-year-olds to use AI responsibly.

Deontology – the use of rules, guidance, duty and obligation to determine right from wrong actions.

- In 2019, Floridi estimated there were around 70 AI ethics frameworks, and this number is likely to have grown since³. The majority of these frameworks are based on deontological lines of thinking – they promote the use of regulators, rules and guidance to manage the ethical development and use of AI.
- Whilst these frameworks have worthwhile aims, they are likely to have limited effect. Recent history suggests that when digital technology is ‘out of the bag’, it is very hard to retro-fit rules and regulations. This is true at the policy-maker level because the technologies span global jurisdictions and the prevailing thought is that regulation might damage economies. It is also true on a personal level: for example, parents struggle to regulate their children’s use of digital technologies even though there are many tools available to them (apps for management, internet blocks etc) and likewise teachers struggle to block the use of GenAI for assessments.
- Whilst it is important to continue to seek to manage the ethical use of AI drawing on deontological moral theory, such strategies are likely to be reactive rather than proactive; their success is likely to be limited; and alternatives need to be considered.

Utilitarian – evaluating the consequences of actions to determine right from wrong actions.

- A utilitarian response to AI, or indeed the regulation of wider digital inventions, has not been as widespread as those grounded on deontological philosophy. This is largely due to an inability, to date, to predict the consequences of new technologies on human behaviour and society more broadly. AI inventions in the future (like the Internet) are likely to be used both for more toxic, or more benign and pro-social purposes. So, whilst we can confidently predict that AI will change how we act, it is hard to predict at the current moment if this will bring net benefits or detriments to society.
- Given the obvious challenges of trying to enhance responsible use of AI grounded on utilitarian philosophical position, this moral theory is determined to be largely impractical for our current purpose.

Virtue ethics – evaluating actions based on the character virtues shown by an individual.

- Whilst not without its own limitations, virtue ethics offer some major advantages over the other two prominent moral theories for offering a promising theoretical approach to underpin app development. These are as follows:
- It is accepting of human nature and the complexity of the world – that in a complex world individuals are likely to be faced with complex ethical dilemmas where it is not always easy to determine right from wrong actions. Also, that errors of judgment can become opportunities for ethical reflection and learning.
- Virtue ethics does not seek to determine ‘hard and fast’ rules that can be universally agreed and applied. Instead, its situational nature is an advantage in the world of AI as the focus is on virtue rather than controlling new and emerging technologies.

³ <https://hdrs.mitpress.mit.edu/pub/l0jsh9d1/release/8>

- Children and young people understand and buy into the virtues – they are quick to judge friends and others who are not showing honesty, compassion, kindness, humility etc.
- Character virtues will become increasingly valuable for employers and society at large as AI takes over more routine tasks. Virtues such as creativity, critical thinking, compassion, integrity and many others will grow in currency.

Which civic virtues should young citizens (ages 12 to 18) cultivate in order to make a responsible use of AI?

As discussed above, the language of character education can be a semantic midfield and is also influenced by political, cultural and societal preferences. For the purposes of the presentation, I shall refer to character and virtues as this most closely relates to virtue ethical philosophy. I understand that for many pragmatic reasons these terms might be adjusted for use in the App development project.

Virtue Typology + possible examples from each

- It would not be possible, or indeed desirable, to develop a definitive list of virtues that all children should develop in order to flourish in the age of AI. There can be no definitive list, as the virtues will, to a certain extent, be relative to an individuals’ context, age, shifting societal expectations, amongst many other factors. In addition, we must be wary of ensuring that we do not try to define a list at the expenses of understanding and including likely cultural variations. So, whilst it is widely accepted that those from the major faith traditions, as well as those of no faith, believe that acting with compassion, justice, honesty and gratitude is a good thing, it is likely that these virtues are more pronounced in one tradition than another and will be enacted differently according to cultural norms within the broad AI field.
- For the construction of an App, I propose a good starting place is to consult with different groups to determine a list of foundational virtues that will be central to the design. It must be accepted that these virtues are likely to be both interconnected with, and synonyms for, other virtues. If this proviso is well understood, then the exercise of developing a list of virtues has several pragmatic advantages. The primary advantage is that it provides a tangible set of desirable human qualities, at which educational activities can be directed.
- I would suggest that virtues from each of the Jubilee Centre four-part typology are included in the final list. Table 1 below details the four types and provides some examples of virtues that might be of particular relevance in the age of AI.

Table 1: Typology of the Virtues

Virtue Type	Definition	Example Virtues	Example related to AI
Moral	Character virtues that enable us to act well in situations that require an ethical response.	compassion courage gratitude honesty humility integrity justice respect	12–18-year-olds need to cultivate academic integrity so as not to pass off work created by (Gen) AI as their own.
Civic	Character virtues that are necessary for engaged and responsible citizenship,	citizenship civility community	12–18-year-olds need to cultivate pro-social attitudes and behaviours like citizenship to ensure their use of AI contributes to rather than diminishes broader societal flourishing.

	contributing to the common good.	awareness service volunteering	
Intellectual	Character virtues necessary for discernment, right action and the pursuit of knowledge, truth and understanding.	autonomy critical thinking curiosity judgement reasoning reflection resourcefulness	12–18-year-olds need to cultivate their ability to be critical thinkers in order to evaluate the purpose and value of AI in their own and others’ lives.
Performance	Character strengths that have an instrumental value in enabling the intellectual, moral and civic virtues.	confidence adaptability determination motivation perseverance resilience leadership teamwork creativity	12–18-year-olds need to learn to be adaptable to thrive in a rapidly changing technological determined world.

- Ideally, an app would not just focus on the cultivation of these virtues in isolation but as an integrated whole. It is for this reason that I would propose an overarching focus on *phronesis* or practical wisdom – commonly defined as the ability to do the right thing at the right time (and crucially when no one is watching). Practical wisdom helps 12–18-year-olds make the right decision when the virtues clash and know what the right amount of a virtue is in any given situation. My work on cyber- and digital wisdom provides greater detail on the concept, as well as how it might be educated and evaluated⁴.

How can the virtues be taught in general and in the context of a mobile app?

How, and even ‘if’, the virtues can be educated is contested. I draw on the research of the Jubilee Centre to provide some ideas below for approaches to educating character and the virtues that might be utilised in developing an app. It is important to note that I have not previously used an app for character education. The suggestions below are intended to offer some promising starting points, based on Jubilee research on character education, for consideration as an app is developed and piloted.

- Character virtues are primarily caught – from the environments we grow up in and the people who influence us. Although this is an important consideration for character education, I feel it is less pertinent for the development of a potential app and I shall therefore focus my comments on character taught and character sought.

⁴ See, for example, Harrison, T 2021, THRIVE: How to cultivate character so your children can flourish online. Hachette UK, London. <https://www.littlebrown.co.uk/titles/dr-tom-harrison/thrive/9781472144737/> or Harrison, T, Polizzi, G, Mcloughlin, S & Moller, F 2023, 'Measuring cyber wisdom: preliminary validation of a new four-component measure', Education and Information Technologies. <https://doi.org/10.1007/s10639-023-11953-9>

- Character can be taught, or perhaps more accurately educated, in more formal and informal teaching settings. Character taught is the deliberate and intentional use of formal and informal learning opportunities to help individuals learn about and develop character virtues. There is potential for an app to target a number of components of virtue through well-constructed and targeted learning activities accessed through the App. A few examples are suggested in the table below:

Virtue component	Definition	Character taught example that could be integrated into an app.
Perception	Noticing situations involving or standing in need of the virtues.	Learners are presented with AI related dilemmas and asked to pick out the ethical problem and the virtues related to it.
Knowledge and understanding	Understanding the meaning of the virtue term and why the virtue is important, individually and as part of a well-rounded, flourishing life.	Learners could be presented with definitions and expected to pick out the current definition. Learners could be asked to apply the virtue to an example from their own lives or an example related to AI.
Identity	Understanding oneself as strongly committed to the virtues.	Learners could access exemplars of the different virtues via video clips / other interactive means via the App and explain what they admire about the individuals exemplified.
Reasoning	Discernment and deliberative action about virtues, including handling situations where virtues conflict or collide.	Learners could be presented with dilemmas, presented in a number of ways on the app, where they are asked: what would they do in the situation; and, why? Choices could be offered and automated feedback offered after the activity is completed.

- Ultimately good character should be sought. 12-18-year olds need to be encouraged to strive to make the right decision when presented with a situation that calls for character and virtue. If it is not sought, then character becomes a form of behaviour control, is more about moral restraints and does not allow for autonomous decision making and actions. Blueprints for virtuous actions and a motivation to show virtue / civic attitudes can be developed through character caught and taught approaches. However, caught / taught educational approaches should aim towards character sought. In order to give prominence to this, it is advised that a potential app includes opportunities for 12–18-year-olds to engage in critical thinking, expression of their real-life experiences, opportunities for reflecting on their character-based actions and the outcome of them, and, if possible opportunities for experiential learning (for example, links to external activities).

Summary

In summary, cultivating character virtues in children and young people is essential for their responsible use of AI. While AI presents both risks and opportunities, an overly deterministic approach overlooks the role of individual character. Among moral theories, virtue ethics offers a promising foundation for educating children and young people to help them live well in an increasingly AI-driven world. Virtue ethics emphasises personal growth and ethical decision-making rather than rigid rules or uncertain consequences. A well-rounded virtue education should include moral, civic, intellectual, and performance virtues, with a particular emphasis on practical wisdom. An app designed to foster these virtues should integrate structured learning activities, ethical dilemmas, and opportunities for self-reflection. Ultimately, character education should aim to inspire young people to actively seek virtue, equipping them to navigate AI's evolving landscape responsibly.



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