

Digital Game-Based Learning and Gamification Of Ethics Education in Maltese Schools: A Multidisciplinary Approach to Innovative Methodologies

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as fulfilment of the requirements for the degree of

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Abstract

This dissertation aims to build a conceptual rationale by investigating through philosophical inquiry the potential of Digital Game-Based Learning (DGBL) and gamification to enhance ethics education in Maltese schools. It adopts a multidisciplinary approach which integrates philosophy of education, game studies, and psychology of motivation; specifically, Self-Determination Theory and Flow Theory. The research question investigates why digital games should be adopted in ethics classrooms in Maltese schools, and how their effective implementation can be supported. Key contributions indicate that digital games significantly enhance student engagement, intrinsic motivation, ethical reasoning, inclusivity, and overall wellbeing. Using Dewey's experiential learning, Lipman's Philosophy for Children (P4C), and Schrier's Ethics Practice and Implementation Categorisation (EPIC) framework, this inquiry highlights the practical usability and educational benefits of DGBL. This study also emphasises the distinction between trend-chasing superficial gamification and more impactful narrative-based games for ethics. Additionally, this study highlights digital games as inherently inclusive spaces, capable of fostering empathy, tolerance, and collaborative problem-solving in safe, consequence-free moral laboratories. This dissertation concludes that integrating digital games into ethics education aligns effectively with the current paradigms of the Maltese ethics syllabi. It recommends further empirical research and proposes a pilot study to evaluate the effectiveness of DGBL methodologies in Maltese ethics classrooms.

Keywords: digital game-based learning, ethics education, EPIC framework, Philosophy for Children (P4C), multidisciplinary, intrinsic motivation

Dedication

Dedicated to the memory of my father,

Roger S. Tirazona Senior,

1954-2024

Seaman and Chief Mate,

who taught me integrity, kindness, love of excellence, and care –

and bought me my first gaming console.

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List of Abbreviations

AI	Artificial Intelligence
DGBL	Digital Game-Based Learning
EPIC	Ethics Practice and Implementation Categorisation
ESA	Entertainment Software Association
ESRB	Entertainment Software Rating Board
Gen Alpha	Generation Alpha
GFC	Games for Change
GTA5	Grand Theft Auto V
ICD-11	11 th Revision of the International Classification of Diseases
MATSEC	Matriculation Secondary Education Certificate
MHA	Malta Humanist Association
MGIEP	Mahatma Gandhi Institute of Education for Peace and Sustainable Development
MQF	Malta Qualifications Framework
NCF	National Curriculum Framework
NES	National Education Strategy 2024-2030

P4C	Philosophy for Children
PVGU	Problematic video game use
SDT	Self-Determination Theory
UNESCO	United Nations Education, Scientific and Cultural Organisation
VVGs	Violent Video games
WHO	World Health Organization

Chapter 1 – Introduction and Overview

1.1 Old-School Gamer

In 1986, at seven years old, I eagerly awaited my father's return from work. Often away for months on an expedition cruise liner, he always brought exciting gifts to Malta. This time was no exception; he surprised me with my first digital gaming device: the *Atari 2600 Jr.* Before this, I played with action figures from *Masters of the Universe* and *The Transformers*, reliving stories from television and creating new ones. Digital gaming was different. Those 10cm game cartridges transported me to a war-torn landscape, where I defended six cities from missiles in *Missile Command*. I felt like an adventurer in *Sword Quest*, and I reserved *Haunted House* for special occasions when I felt brave, usually with others for support.

Digital Games, once exclusive to arcades, generating high revenue, transitioned to accessible home gaming with a series of devices. I started with *Atari*, then *Amiga 500*, *Super Nintendo*, and now play on PC and consoles like *PlayStation*. As someone who has been playing video games since the 1980s, I identify as an 'old-school gamer', proudly trying to keep up with the younger players, who are blessed with faster response times and hand-eye coordination. This personal affinity to gaming fuelled my research-based conceptual investigation for this dissertation, which I also consider a bias to be aware of, while exploring the link between digital games and ethics education, a field where I am professionally engaged as an ethics educator.

1.2 Transformation of Education: The Need for Innovation in Ethics Education

As digital technology integrates into education, exploring digital game-based learning (DGBL) and gamification offers a chance to enhance ethics education in Maltese schools. This dissertation investigates how these technologies can effectively teach ethics, focusing on their potential to engage students and promote ethical reasoning. With ethics education starting its second decade, it's a fitting time to reflect on progress and consider how innovative methodologies like DGBL can further its development. The research question is: Why should video games be used to teach ethics in Maltese schools, and how can Philosophy of Education, Psychology of motivation, and Game Studies support this? This study will conduct a conceptual analysis and investigation through philosophical inquiry on using digital games in ethics education, aiming to provide a rationale as a roadmap for future research or implementation.

Busuttil et al. conducted a Maltese national study on a random sample of 1268 participants, thus making the results statistically significant, and found that 74% of Maltese people aged between 3 and 55 play video games, with 53% of this cohort claiming to do it every day, and 20% claiming to play for more than an hour per day (Busuttil et al., 2014). Admittedly, it is data that is already eleven years old, but those were already staggering numbers, justifying any research on digital game-based learning. A repeat survey more than a decade later could potentially provide different statistics. An educated guess would be that, following global trends, the numbers would now be larger (Gill, 2025).

The introduction of ethics education in Malta in 2014 was a significant milestone, providing opt-in students with a structured curriculum aimed at fostering moral reasoning

and critical thinking. This approach contrasts with traditional approaches to learning, which often rely heavily on lectures and discussions and may not fully engage today's digital-native students. Paxton (2024) argues:

Teaching and learning are the only ways that ethical knowledge can be transmitted and incorporated into practice; and teaching and learning are inherently *interactional* activities. The aim cannot be realized (*sic.*) as long as we rely on monologues, lectures, or sermons. (Paxton, 2024, p. 1725)

Schrier also addresses the limitations of traditional educational approaches, noting that games provide additional support for practising essential ethics and civics skills, complementing traditional instructional methods like lectures, case studies, books, films, worksheets, expository writing, debate, and field trip maps. Schrier, therefore, does not diminish the validity of traditional methods, however acknowledges that the need for new pedagogical strategies is evident, and argues that digital technologies, particularly those that leverage the engaging power of games, offer a promising alternative (Schrier, 2021, p. 419 fn 19).

The introduction of the ethics programme in Malta came as a result of the national consultation for the National Curriculum Framework (NCF) 2012 (Government of Malta, 2012). In it, there is a repeated prescription “to reflect the rationale of the NCF and the Learning Outcomes Framework which will be based on a pedagogy that is student-centred, inquiry-based, integrated with the cross-curricular themes, and supported by an e-Learning based approach” (A National Minimum Curriculum Framework for All, 2012, p. 12). For

decades, the philosophy of John Dewey has placed the student at the centre of learning, focusing on their curiosity and imagination, while more recent views, such as Lipman's Philosophy for Children (P4C), have also kept building on the importance of developing the learner's curiosity within a community of inquiry. Lim states that P4C "creates a culture of critical thinking, inquiry and open-minded discussion..." (Lim, 2006, p. 67), thus making it ideal for a methodology of choice to bring about the National Curriculum Framework's prescription, including for ethics education. In addition to the alignment with the Maltese national paradigm and to further support the role of P4C in ethics education, "participation in the community of philosophical inquiry helps to forge the character of its participants in such a way that, by increasing self-consciousness, along with self-esteem and empathy, the person builds a moral sensibility, and acts with the conviction that it is possible to build reasonable and just forms of living together" (García-Moriyón et al., 2020, p. 124). Furthermore, "The community of inquiry enables a certain way of acting in the world. It constitutes a means of personal and moral transformation that necessarily leads to a change in the meanings and values that affect the daily actions and judgments of all participants" (García-Moriyón et al., 2020, p. 125).

The Philosophy for Children methodology is notably important in the Maltese context, especially in relation to the curricular framework. The University of Malta offers a P4C methodology study unit to all prospective ethics teachers graduating from the Faculty of Education, serving as a foundation for the formation of ethics teachers in Malta (University of Malta, 2024). The Non-Governmental Organisation, the Malta Humanist Association, now Humanists Malta, advocated for the ethics programme in Malta and identified P4C as a favoured methodology during the NCF consultation. At the time, I was

part of this organisation and contributed to this effort. The organisation highlighted P4C's success in student performance, arguing that philosophical argumentation and critical thinking align with many studies embraced by the P4C strategy, which has shown significant results in overall student performance. Furthermore, the MHA stated:

...for primary schools the work done within the context of the activity of the Philosophy for Children (P4C) activities is particularly pertinent. The approach for children of this age appears to be primarily based upon reading stories from books and then discussing the moral dilemmas and issues that can arise from these stories. A number of texts exist of this nature, but there are also traditional texts that can be used such as Aesop's Fables. Clearly the P4C concept covers more than issues of ethics or morals, but we feel that this is not to be considered a disadvantage. (G. Vella et al., 2011)

The importance and relevance of the community of inquiry for ethics education in Malta, therefore, cannot be understated. According to one of the first ethics education curriculum developers, Kenneth Wain:

The whole ethics [Education] programme is taught through the numerous resources offered by philosophy, and it draws on considerable work done over the last decades in philosophy programmes with children in classroom settings. Central to these programmes is the representation of the classroom community as a

‘community of inquiry’, which is the responsibility of the ethics teacher to set up from the first years. (Wain, 2016, para. 4)

Giordmaina (1994) critically examined the Maltese education system and advocated for integrating P4C within a democratic tradition. He aligned P4C methodology with Paulo Freire’s concept of education as a dialogical act. He proposed that philosophical inquiry could counteract inert, uncritical knowledge in Maltese schools. Giordmaina argued P4C could significantly contribute to moral education, critical attitudes, and democratic citizenship among students. Thus, ties between P4C and the Maltese context can be traced back to research from the 1990s.

After ten years of gradual implementation of the subject to date, ethics education is now offered in most Maltese State and Independent Schools, throughout compulsory schooling, that is, from Year 1 (ages 5 to 6) to Year 11 (ages 15 to 16). From its inception, ethics education in Malta has been viewed as an opportunity for ethics students, together with their educators, to form a community of inquiry in the classroom throughout all compulsory education. This approach has been practically implemented in Maltese schools since the introduction of ethics as an alternative to Religious Education. Giordmaina and Zammit (2019) reflect on this development, noting that P4C serves as the foundation for the ethics curriculum, aiming to instil universal values such as justice, honesty, and compassion while fostering a democratic community through collaborative inquiry. Thus, this dissertation aims to connect digital game-based learning with the P4C methodology, making the inquiries relevant in the Maltese context.

Dewey emphasised the importance of creating learning environments that reflect real-life social settings, as these environments foster critical thinking and collaborative problem-solving. “In contrast to traditional classrooms, Dewey thought that schools and classrooms should be representative of real-life situations, allowing children to participate in learning activities interchangeably and flexibly in a variety of social settings...” (Williams, 2017, p. 92). This is particularly relevant to ethics education, where students are often tasked with navigating complex moral dilemmas. However, reflecting Paxton (2024) and Schrier’s views (2021), ethics educators also need to embrace a very important concept into their practice; the fact that the way that learning has traditionally taken place cannot be expected to be as effective with the digital-native generation today. Integrating DGBL and gamification meets this need, providing an interactive learning experience. This dissertation will explore how current technologies can achieve this. It will address those concerns by investigating more student-centred approaches linked to ethics education, particularly those of Dewey and Philosophy for Children (P4C), and examine how gamification and game-based learning can enhance these approaches.

This dissertation will also explore the intersection between games and virtue ethics, particularly Sicart’s points of view, due to games and simulations contributing to good habits and character formation, echoing Aristotelian views on virtue ethics. Sicart states that:

To be able to play the good life, we need to think about play as a focal practice that can help develop virtues and practice morality. For that to happen, though, we need the support of technologies of play, from toys to playful devices. Designing these technologies is not easy: it requires thinking about designs that are open,

contextualised in a practice at the same time that they take over such practice. More than mediating ethics, what playful ethical technologies should do is encourage and guide ethical practices through play. (Sicart, 2015, p. 345)

1.3 The Stigmatisation of Play

Throughout my life, I have heard many say that I need to grow up and that I'm "too old for games." This cultural bias limits play, especially digital games, to the young. No one would mind if I said I played chess or played poker – those are viewed as adult games. Since many digital games are R-rated and age-restricted, should they not also be for adults? Furthermore, digital game-based learning can play a role in lifelong education, challenging how our culture views play. Play is often seen as something for children, who lack economic power, and becomes stigmatised as we age. Walsh argues:

Adults can play act in amateur dramatics societies, or carry out physical play in sports clubs, but outside these socially approved settings, play tends to be seen as socially unacceptable. Taking a playful attitude to work, education, or visibly playing in public is therefore reduced, particularly free or imaginative play. (Walsh, 2019, p. 1)

The "need to grow up" seems to be a cultural archetype, even central to the lore of fables like Peter Pan, who wanted to play and have fun and "never grow up." The stigmatisation of play, even in children as they gradually grow older, is an issue that needs

to be addressed at a cultural and anthropological level. In an online article, Emma Leaning writes:

The refusal to share a sandbox with our own playfulness is no childish matter. Play is recognised as a universal right by the United Nations, and its denial is damaging our mental health... We dismiss it. As adults, we define play as the opposite of work; it's not productive, so what's the point? (Leaning, 2021, para. 2)

This quote highlights the undervaluation of playfulness in adulthood and its critical role in mental health. It challenges the misconception that play is unproductive and emphasises that denying play is a profound issue with real consequences. By framing play as a universal right recognised by the United Nations, the quote underscores its importance for both children and adults, urging us to reconnect with our playful nature for better wellbeing. Moyles argues that play was likely “invented” by nature to facilitate effective and joyful learning. “Being told something involves only a fraction of [one’s] learning: doing things for [oneself] and finding out – as children do in their play – is a far superior way to learn, especially when experiences are new” (Moyles, 2014, p. 17). This further strengthens the need to revert to the Deweyan views on experiential learning through digital gameplay.

Further to the argument on mental health and wellbeing, the argument by Cohen is that children also feel the urge to mature quickly, in addition to academic stress. Preteens yearn to be teenagers, while teenagers aspire to reach adulthood. Engaging in play is argued to be a remedy for this pressure, allowing children to truly experience their childhood. Furthermore, play provides a means for children to bridge gaps that could otherwise divide

them, such as those related to gender, race, class, and physical differences (Cohen, 2002). Stigmatising play as children grow up, calling it a “waste of time”, is therefore arguably denying them the opportunity for personal growth through new experience and experimentation. Play is not only a tool of pedagogical value but also contributes towards wellbeing.

Play is often seen as a fun activity which belongs in leisure time and not in a context of work or productivity. However, this need not be the case. As Mobily and Rudzinski (2017) argue in their paper examining the intersection between the stigmatisation of leisure and the stigmatisation of disability, the industrial revolution created a culture of productivity, thus creating a binary between work and leisure, with the behaviours and activities related to leisure being demonised as unproductive and therefore worthless. They further argue that leisure in modern society is enigmatic. It is a temporal and spatial terrain acting as a reward for a job well done; therefore, one ‘earns’ leisure through work and work justifies leisure; with the old anecdotal trope ‘work hard – play hard’ printed on bumper stickers, T-shirts, and published in song. Simultaneously to it being a reward for work, it is also reviled as a time and place for loafing, a refuge for malingering, and a complete waste of time (Mobily & Rudzinski, 2017).

As more environments are being increasingly gamified, one can start seeing how this binary could very well be a false dichotomy; that work and behaviours usually associated with leisure, such as play, have become part of the reality of work and productivity. Chou suggests that enabling employees to express creativity at work, paired with immediate feedback and empowerment, fosters intrinsic motivation akin to play. This fundamental behaviour, he argues, can be replicated in a gamified workplace, leading to enhanced

engagement and productivity (Chou, 2016). One, therefore, has to ask if this is applicable to schools, where many children may not have the same motivation to learn as they have to excel and win at games like *Fortnite*.

1.4 Gamification: Definition and Perspectives

Gamification in education uses game mechanics like points, badges, and leaderboards to boost engagement and motivation. It integrates gaming elements into educational settings that might lack excitement or interactivity to capture student interest. Chou, a self-published author on gamification, states that this involves applying game elements to non-game contexts and highlights that effective gamification transcends superficial rewards, emphasising meaningful engagement (Chou, 2016). Gamification aims to align learners' intrinsic motivations with educational goals, fostering deeper engagement.

It originates from behavioural psychology, using rewards to modify behaviour. By incorporating game elements like points, badges, and leaderboards, educators motivate students to engage with content, appealing to their competitive nature. Linehal et al. conclude that:

Specifically, all games, and all gamified products and services, follow strict patterns of highly structured behavior (*sic.*) management, feedback loops, and reward mechanisms in order to effect changes in player behavior (*sic.*). Just as one can beat the boss in battle by applying skills learned through the game or change one's lifestyle through participation in a gamified experience, game

design elements have a predictable and measurable effect on one's behavior (*sic.*). (Linehan et al., 2015, p. 154)

These mechanisms increase motivation by rewarding students with immediate feedback on their achievements, which fosters a sense of progress. This dissertation will further explore these mechanisms in the context of ethics education and a moral life. In other words, students do not need to wait for the next meeting with the teacher to receive feedback and rewards. In B.F. Skinner's Operant Conditioning Theory, immediate reinforcement is crucial (as shown in the Skinner box experiments with mice receiving food pellets for desired behaviours) because it strengthens the link between behaviour and consequence, thus increasing the likelihood of repetition. Immediate reinforcement ensures that the subject clearly understands which specific action led to the positive outcome, facilitating more effective learning (Cooper et al., 2019).

Merely applying a 'Behaviourist' lens on the effectiveness of gamified ethics education can run the risk of creating platforms that elicit behaviours and responses from students that are merely after the acquisition of badges and trophies, rendering the pedagogy into a tokenistic regimen. Bogost states that "gamification is not really a style of game design or a manner of putting games to use. Rather, it's a style of consulting that happens to take up games as its solution" (Bogost, 2014, p. 111). Bogost, therefore, shows scepticism towards gamification regarding its marketing use, but the same principle can be applied to education. Schrier states:

Gamification relates to the application of game-like activities, such as rewards or points, to nongame environments, such as

healthcare, workplaces, or schools. This would be like someone plopping game-like mechanics onto a school worksheet, such as providing points and badges for its completion, but not fully transforming the experience to be that of a game. (Schrier, 2021, p. 426)

It is therefore important to investigate how the inclusion of gamified elements to current non-gamified paradigms in ethics education is more than just merely introducing a digital sticky star for a well-filled worksheet, and applying basic positive reinforcement. Schrier (2021) is critical of creating mechanisms that merely teach behaviours for the sake of reward or reinforcement. Digital transformations in learning can either be comparable to the reward food pellet provided to the mice in Skinner's experiments when a task is done, or something more. Perhaps one should investigate an alternative approach to mere gamification of pre-existing systems, by adding digital badges and leaderboards for novelty, and investigate digital game-based learning through fully developed games.

1.5 Digital Game-based Learning – Not Merely Gamification

Digital Game-Based Learning usually refers to the use of pre-developed games that are used in the classroom. These games can be either purposefully created for specific learning outcomes, or they can be off-the-shelf commercial games that can have a pedagogical effect on gamers, the same way a commercial film does within communities. Schrier explains:

Just as games come in many different forms and formats, there are many terms that have been used to describe their different pedagogic functions. Games that aim to teach have been called “educational games,” “games for change,” “games for social impact,” and “serious games.” The intersection of games and learning typically describes teaching, instruction, and learning environments that incorporate games or playful experiences into the classroom, school, library, home, or other location. A game could even become a classroom itself, where students can meet virtually to create and experiment, or discuss and deliberate. (Schrier, 2021, p. 23)

Some academics argue that digital games are the gamification of film or movies, that is, a transformation through adding gamified elements to the aesthetic film language and narrative. Some games can be considered as “interactive cinema”, where “video games creators keep experimenting with their craft, often bringing games closer to cinema in unexpected ways (or, sometimes, wholly expected and often planned for)” (Figueiredo & De Sousa, 2024, p. 567). With these perspectives in mind, film and digital games are comparable, at least from the aspect of being a storytelling medium with narrative.

This comparison will be supported in this dissertation through exploring the questions of whether a digital game can be considered to be a creative and immersive art form, the same way film and literature are. Whether or not film narrative and similarly digital game narrative have a pedagogical value to teach philosophy is an essential exploration for this dissertation. Game mechanics and the actual immersion of the player in

a game can add to the process of learning from the view of storytelling, considering that the player is the direct actor within that narrative, rather than a passive recipient of narrative as in film. “Films can provide vivid and emotionally engaging illustrations of philosophical issues, and when sufficient background knowledge is in place, reflections about films can contribute to the exploration of specific theses and arguments, sometimes yielding enhanced philosophical understanding” (Livingston, 2006, p. 11). In her book *Bioethics at the Movies*, Shapshay defends the pedagogical value of the artistic medium of film as philosophy: “...we should see film’s greatest role in the philosophical enterprise as pedagogical, as a complement to writings by philosophers” (Shapshay, 2009, p. 5).

Apart from digital games having narratives and lore, which is something they share with literature and film, the game elements and mechanics of a game turn the player into the protagonist and moral actor within that narrative – and it is this element that also needs to be explored in terms of its pedagogical value towards ethics education. Camilleri argues that some games, which are set in specific worlds, position the player at the heart of the story and create scenarios that require problem-solving. As in real life, players’ interpretations and choices influence the game, allow for different paths, encourage collaboration, and can boost user engagement (Camilleri, 2015b). Schrier also equates game mechanics and game design with student and community wellbeing. She argues that good design encourages imagination, experimentation, and exploration of new solutions, challenging the status quo. These skills are vital for civic problem-solving and addressing community needs while improving institutions, policies, and processes. Engaging in design allows us to critically assess and refine our institutions, enabling a more equitable uplift for everyone to flourish (Schrier, 2021, p. 309). It is, therefore, essential to explore how various

game mechanics and designs can offer habit-forming narratives, ethical reasoning and decision-making, and the growth of well-being of students and the community.

1.6 The Motivation to Play and Learning – Evidence-Based Theoretical Framework

Before commenting on Chou's (2016) views, one ought to consider that he is forthcoming about the fact that he is a designer, not an academic (Chou, 2025). However, his book *Actionable Gamification* has been well reviewed (Mokosiy, 2019) and can at least be considered as grey literature. One point of criticism is that in *Actionable Gamification*, he uses the discourse of left and right-brained approaches, which have been debunked by neuroscientific research, the most notorious being the extensive study by Nielsen et al. (2013) on 1000 subjects. The team found some lateralisation in regions associated with different tasks; those associated with language in the left hemisphere and with controlling attention on the right. However, they found no evidence to support the idea that individuals are inherently left or right-brained in the way their brain is 'wired':

It has been conjectured that individuals may be left-brain dominant or right-brain dominant based on personality and cognitive style, but neuro imaging data has not provided clear evidence whether such phenotypic differences in the strength of left-dominant or right dominant networks exist. (Nielsen et al., 2013, p. 1)

Chou defends his position by saying that this left brain, right brain dichotomy does not describe the physical brain but is rather symbolic language to refer to the "logical brain" and the "emotional brain". He considers this as simply an issue of semantics and insists on

keeping the terminology to appeal to the social sciences (Chou, 2025). Chou's framework refers to Self-Determination Theory (SDT) to explain intrinsic motivation, which is supported by evidence within the discipline of neuroscience (Di Domenico & Ryan, 2017) and discussed in further detail in section 5.2. Although its neglect of extrinsic motivation and rewards in SDT has been challenged (Cameron & Pierce, 1994), the more recent neuroscientific research also bridges the gap between SDT and behaviourist rewards for extrinsic motivation (Luria et al., 2021). Games often inherently incorporate both the principles of SDT and external reinforcement. The review by Luria et al. (2021) argues that effective learning hinges less on who controls the motive (intrinsic vs. extrinsic) and more on how the task is neurologically appraised, as an opportunity for reward or a risk of punishment. Structuring classrooms to maximise reward-oriented interrogative goals, through gamified, low-penalty, high-feedback activities, should therefore foster deeper knowledge formation. They believe one should use intrinsic motivation where possible, but recognise that well-designed extrinsic structures can achieve comparable cognitive outcomes. In chapter 5, this dissertation will therefore delve more deeply into the perspectives of intrinsic motivation, particularly in relation to game-based learning and ethics education. It addresses concerns about performative grandstanding, where students may act in class merely to earn a badge or a grade for completing the task, lacking intrinsic motivation to behave ethically outside the classroom. After Plato's writings on Socrates' reply to Glaucon and *The Ring of Gyges*, virtue benefits the soul irrespective of external rewards and self-interest (Shafer-Landau, 2024).

This dissertation will also address the relationship between virtue ethics and SDT, linking virtue ethics education with the neuropsychology of intrinsic motivation to validate

the Aristotelian view of virtue ethics as a force of character formation, and bringing together the experience of digital games and gamification within this paradigm. Self-Determination Theory will therefore be explored in detail as a core framework to support gamification or game-based learning in ethics education.

A second evidence-based approach one ought to consider in terms of research for ethical learning through game-based learning is Flow Theory (van der Linden et al., 2021). Csikszentmihalyi found that people find genuine satisfaction in a state of consciousness known as Flow. In this state, they are completely absorbed in an activity, particularly one that utilises their creative abilities. During this “optimal experience,” they feel strong, alert, in effortless control, unselfconscious, and at the peak of their abilities. Csikszentmihalyi asserts that happiness does not simply occur. It must be prepared for and cultivated by each individual by setting challenges that are neither too demanding nor too simple for one’s abilities. As a pioneer of positive psychology, his theory on Flow is foundational to the ever-expanding legacy of happiness (Pursuit-of-happiness.org, 2024). One can see a clear relevance of Flow theory to the concept of eudaimonic happiness, the development of virtues, and how this can be linked to the flow state gamers achieve during game-based learning. Aristotle’s concept of eudaimonia refers to human flourishing, where true happiness is derived not from fleeting pleasure but from the pursuit of virtue, self-improvement, and the fulfilment of one’s potential. Most importantly, it is happiness that can be learned. In this sense, the deeply engaging and goal-oriented nature of game-based learning and the achievement of a flow state through games fosters a sense of achievement and mastery, aligning with Aristotle’s idea that happiness stems from actively cultivating one’s abilities and virtues over time through practice. Kiili et al. (2021) suggest that flow and

situational interest help explain why people engage with games, making them useful for evaluating learning experiences. These insights can help designers create more engaging and effective educational games that improve learning. They also propose that a game's core mechanics can be used to collect player feedback, making it easier to assess engagement and improve game design (Kiili et al., 2021). These approaches should serve as an important lens to explain the reason why students are motivated to play games extensively – in short, because games are designed to access these neurological mechanisms.

1.7 A Holistic Multi-Disciplinary Hypothesis

This dissertation aims to hypothesise, through research, the reasons for incorporating gamification and digital game-based learning into Malta's ethics education programme. It will examine games as experiences and challenges in the Deweyan philosophical framework, viewing them as pedagogical narratives suitable for the Philosophy for Children (P4C) methodologies, which align with Malta's National Curriculum Framework, as previously discussed. The justification will also be reinforced by the importance of play within Aristotelian Virtue Ethics, highlighting how play facilitates positive habit-building. The objective is to inspire motivation to pursue a good life beyond the classroom setting.

However, it raises crucial questions: Why does living the good life feel rewarding? Why does our brain react positively to rewards and play, and why do teaching methods fail to transfer students' enthusiasm for their devices to the classroom? This dissertation

explores these questions through Self-Determination Theory and the Flow State, grounded in empirical research and reliable literature. These frameworks connect various dimensions: neuroscience of learning, insights from gamification experts, character development through play, virtue ethics, and the communal aspect of collaborative inquiry. Throughout the dissertation, comparative analyses of educational serious games and commercial games with potential pedagogical value for the Maltese ethics programme will support innovative methodologies in ethics education, including gamification and DGBL.

Chapter 2 – Why Digital Game-based Learning?

To understand digital game-based learning (DGBL) and gamification in ethics education, one must analyse key concepts to clarify what defines a game. This includes distinguishing between serious games, games for change, and commercially available games with educational purposes. This chapter synthesises scholarly perspectives to contribute to the dissertation's aim: to investigate the rationale for integrating DGBL in ethics education in Malta.

2.1 Defining Ethics

Before discussing the role and use of digital games in ethics education, it is important to define ethics to establish a logical connection between the impact and assessment of games and our aims of raising ethical individuals through education. Defining ethics deserves a dissertation of its own, yet I will limit the discussion to a brief overview to create a logically coherent and complete framework for this dissertation, which maintains a specific perspective on what constitutes ethics education.

Ethics constitutes "a science which concerns the question of right and wrong in human behavior (*sic.*)" (Meng et al., 2014, p. 134). Unlike morals, which typically refer to universal truths, or public rules or principles (Tierney, 1994) that drive behavioural decisions, ethics encompasses the cognitive and reflective processes related to applying these moral principles to specific situations and choices (Wines, 2008). This distinction underscores ethics as an active, interpretive practice rather than merely a set of codified

standards. The field recognises multiple theoretical frameworks, including utilitarian, deontological, or Kantian ethics (Shafer-Landau, 2024), each offering unique perspectives on determining ethical action. These frameworks may operate through different moral orientations, such as "a justice-oriented approach to ethics (maintaining equality and fairness)" or one that is "care-oriented (maintaining relationships and others' needs)" (Botes, 2000; Gilligan, 1982)

At its core, ethical engagement requires what Schrier identifies as "ethical thinking," defined as "the assemblage of skills and cognitive processes related to determining how to act ethically and how to think through ethical choices and scenarios" (Schrier, 2014; Schrier, 2015a, p. 394). This conceptualisation positions ethics as teachable competencies that include "interpretation, analysis, and prioritization (*sic.*); systems thinking and multi-causality; awareness of and reflection on one's personal ethics, societal ethics, and other systems of ethics; perspective taking and emotional understanding; bias identification; as well as logic and reasoning" (Schrier, 2015a, p. 394). Ethics education thus emerges as critical for both "everyday ethical decisions and longer-term, more complicated challenges" (Schrier, 2015a, p. 395), with Paul and Elder (2012) identifying ethical reasoning as one of the core critical thinking "competency standards" (pp. 30-31). Ultimately, ethical thinking represents a fundamental literacy essential for human development and full participation in humanity and civic engagement (Schrier, 2015b).

These various frameworks suggest a very important direction for ethics; that as Hinman (2013) argues, the approach to ethics should be a pluralistic approach; primarily because he recognises there is no single all-encompassing definition of morality, with significant disagreements between various schools of thought on what constitutes good

ethics (Hinman, 2013). Therefore, within the context of this dissertation, and by repackaging the above views, any reference to ethics and ethics education will refer to the following: helping students develop critical and reflective competencies, in order to participate in conversations between different and competing concepts of moral principles that guide our decisions on what ought to be done in different contexts or situations.

2.2 Defining a Game

Scholars generally agree that games are distinguished by certain essential characteristics, particularly rules, clear goals, and immediate feedback mechanisms. Games give a sense of progress and accomplishment (Rahiman et al., 2023). These elements set games apart from other activities and are instrumental in driving player engagement. These characteristics not only differentiate games from non-game activities, but they also distinguish between “game” and “play” in literature. Play is a broader term, often referring to open-ended, spontaneous activities undertaken for enjoyment, which may lack the characteristics of a game. In other words, a game is a form of play, but not all play is a game. A game has purpose, goals, and strict rules (Moyles, 2014) and this is a very important consideration in educational contexts. There is a difference between unstructured play and structured games, and it is important to make this distinction within educational rhetoric and teacher training. Deterding (2015) states that a game is “the rule-structured, challenging pursuit of goals” (p. 296), which makes it a closed-ended experience happening in an agreed-upon game-space with a set of rules. Play, on the other hand, is “the

unstructured, curiosity-driven exploration and recombination of behaviors (*sic.*), objects, and meaning” (Deterding, 2015, p. 296)

Goals and purposes of a game can be varied. They can be set by the narrative and rules of the game, including what would constitute the end of a game through successful exploits of winning in or “beating” the game. Goals can be set by the players themselves in certain game genres that are “sandbox” creative games, like *No Man’s Sky* or *Minecraft* having as much creative freedoms as possible. Humans can engage in playing games for a myriad of reasons, not excluding simple pleasure, achieving social status and belonging, as well as ritual (e.g. the Mesoamerican religious ritual ball game known as *Ollamalitzli*). However, for the purposes of this dissertation, I find these three elements to relate directly to the definition above and to player engagement within educational contexts. To illustrate these basic elements of what constitutes a game:

Goals: Games present players with clear objectives and outcomes to achieve. Having explicit goals gives players a sense of purpose and direction within the game space (Kapp, 2012). For example, a game might require solving a mystery or reaching the end of a narrative, providing a concrete end-point for the effort.

Rules: A game operates within a framework of rules that set limitations on what players can and cannot do with the purpose of challenging players to accomplish their goals while following these rules, to make it difficult to do so (Fullerton, 2014). The rules, therefore, create the challenge required to turn that game-space into a space where the player has to master new skills and experiences, including with other players (McGonigal, 2011).

Feedback: Immediate feedback is another hallmark of games, as the game system responds to player actions in real-time (e.g. scoring points, progress bars, narrative consequences like cut scenes or ascending to a higher level). Feedback informs players of their progress towards their goals and rewards their achievements, sustaining motivation and guiding improvement (Rahiman et al., 2023).

2.3 How Serious Are Games?

2.3.1 Serious Games

A serious game is designed with a primary purpose other than pure entertainment – for instance, education, training, stimulation or raising awareness. Whether through gamification or fully fledged games, they share the idea of “using positive gameful experiences for the sake of a serious purpose, for example, education or behaviour change, rather than focusing on entertainment” (Krath et al., 2021, p. 2). A serious game, therefore, has the goal of leaving an impact on a personal and social level, and this is usually done with intention.

One could argue that the rigid categorisation of games into entertainment and serious games may overlook the complexity of the gaming experience. For example, many games are created as entertaining interactive adventures, yet still contain elements that provoke critical thinking, owing to intelligent scriptwriting and game design. This challenges the notion that something designed for enjoyment excludes it from being considered “serious”. Thus, one might be forgiven for viewing such a dichotomy as moot. However, one

can appreciate the difference in intent when creating the game. If the game is designed to achieve learning outcomes through structured play, this is referred to as a serious game; if the digital game is created for entertainment and commercial profit, with the fortunate side effect of possessing pedagogical value, it can simply be referred to as a game or a commercial product game (Krath et al., 2021).

Once again, one has to comment on the difference between DGBL and Gamification discourse. Krath et al. (2021) note that the distinction lies in scope: serious games are games with serious aims, whereas gamification is about adding select game features to existing activities. This theoretical distinction attempts to provide clarity within this dissertation. The interest is in both approaches, as both have the potential towards ethics education, but they operate differently. The question remains, which approach is more effective in bringing about an impact in ethics education where the student does not merely perform well academically in assessments, but is also successful in achieving positive changes of character towards educating citizens for a better society?

2.3.2 Games for Change

Another innovative approach is the rhetoric of “Games for Change”, which is championed by authors like Schrier (2021) and highly active global entities like the United Nations Educational, Scientific and Cultural Organization (UNESCO). In 2024, the UNESCO’s Mahatma Gandhi Institute for Education for Peace partnered with the gamesforchange.org organisation for the 2024 Games for Change Festival in India, dealing with the social impact of games for change in different communities, games for learning and assessment,

neuroscience and learning games, health and wellbeing, and games and policy (UNESCO MGIEP, 2024). Gamesforchange.org (hereinafter GFC) states:

Games for change empowers creators and social innovators to use games and immersive media to drive real-world impact – helping people learn, improve their communities, and make the world a better place. Our vision is a world where games are widely understood to have a purpose beyond entertainment and are used to power new approaches to social impact. (Games For Change, 2024)

One can therefore observe that the discourse of "games for change" has repurposed "serious games". While maintaining the same social objectives inherent in that gaming dimension, it is now more purposeful and provides greater clarity to the mission of social impact. GFC recognises the impact of games in general, stating there are around 3.2 billion players worldwide, with a gaming industry of US\$ 187 billion, an addressable market, with a revenue surpassing the film, television, and music industries combined. Their report also states that 73% of players say video games improve their creativity, 63% say they help them feel happier, 69% say they help improve their cognitive skills, and 71% say they help provide stress relief (Games For Change, 2024). Their sources for these percentages, however, were not scholarly articles or peer-reviewed research. Some sources are not cited, while some sources are from organisations with possible bias, such as the Entertainment Software Association in their report titled "2023 Essential Facts about the U.S. Video Game Industry". The ESA and the ESRB owe their existence to game content, which could pose a bias or conflict of interest. However, they claim that their research was conducted by a reputable

marketing research company, Circana, using an online methodology, gathering data from 4000 American individuals, meaning that the percentages quoted by Games for Change are only relevant to the United States (Entertainment Software Association, 2023). Extrapolating US statistics to a global view of games for change is dubious, to say the least, without consideration of possible divergences in culture and the technology divide that exists across various nations with communities that only have basic access to information technology, or no access at all. Research highlights that cultural factors significantly influence how learners engage with games in ethics education. Studies in business ethics education have identified differences in learners' responses to serious games across Anglo and Confucian cultures, high-performance and low-performance orientation cultures, and emotionally oriented shame and guilt cultures, for example (Siala et al., 2025). These findings suggest that games for ethics education must be culturally nuanced to maximise effectiveness. Thus, research should also be conducted within different communities.

Camilleri (2015a) gives insight into the local context and argues that it reveals that successful technology integration depends on teachers' interpretations and temporal adaptation patterns—insights that have significant implications for implementing games for change in ethics classrooms. Camilleri observes that several teachers believe that such technologies can make a difference, with many educators recognising digital tools' potential to enhance project-based learning (38%) and improve critical thinking skills (29%). These findings suggest that while games for change can offer promising mechanisms for ethics education, their successful implementation in Maltese schools would require attentiveness to local educational contexts and teacher perspectives. Any form of implementation would

need to take into consideration the culture of Maltese schools and the teachers (Camilleri, 2015a).

Thus, games for change can be broadly defined as purposefully designed gaming experiences that aim to promote social change through interactive engagement. In educational contexts, these games create immersive environments where players can safely explore ethical dilemmas and experience the consequences of various moral choices (Dhiman, 2023). Unlike conventional teaching methods, games provide experiential learning opportunities that simulate real-world ethical challenges without real-world risks – games allow students to experiment with moral choices without real-world consequences (McConnell & Thueme, 2022). This approach, when used well, allows abstract ethical concepts to be experienced in a relatable and concrete way.

2.4 Mechanisms of Impact

2.4.1 How Do Digital Games Bring Change?

Once it is established through this conceptual investigation that the intention behind games for change is to contribute to ethics education and the betterment of society through innovative methodologies, one must ask how this is achieved to delve deeper into the philosophy of education and the psychological theory of these same mechanisms. Several mechanisms underpin the effectiveness of Games for Change, but for the purposes of this dissertation, a focus has to be selected. Here are some examples:

Experiential learning: Games allow students to directly experience ethical dilemmas rather than merely discussing hypothetical scenarios (Lin et al., 2022; McConnell & Thueme, 2022).

Safe Experimentation: Learners can safely explore ethical boundaries and make serious decisions with consequences that are not real-world consequences and without real-world implications (Facchino et al., 2025).

Immediate Feedback: Apart from being a purpose of a game, differentiating it from random play as highlighted in previous sections, it is also a necessary mechanism of impact to reinforce learning by providing feedback on ethical choices (McConnell & Thueme, 2022; Lin et al., 2022).

Perspective-Taking and Empathy: Role-playing elements and role reversals enable learners to adopt different perspectives, fostering empathy and understanding of diverse viewpoints (Schrier, 2021; Dhiman, 2023).

Schrier (2021) summarises the method of action into three distinct dimensions. She identifies three primary mechanisms: the first is “Real-world knowledge and action. Games can enhance knowledge of real-world issues and topics; encourage the understanding of real-world concepts, institutions, processes, and policies; and enable real-world action and change”. Secondly, “Community and connection. Games are civic communities. They can help to strengthen social interactions, communication, and a sense of belongingness in a community of learners”. The third dimension is “Critical thinking and critical inquiry. Games are ethical systems, and players are moral actors who engage in them. Games can help people practice relevant critical thinking and inquiry skills such as reasoning, decision-

making, problem-solving, systems thinking and analysis, interpretation, evaluation, information gathering, and design and creation". Schrier further emphasises that games should not merely teach civics but reveal what civics is, noting that "games are civics, and civics is playful. Games are how students are already engaging with the world and with the public". This perspective challenges traditional educational approaches by recognising that games naturally embody civic engagement rather than simply being tools for teaching it. Additionally, she positions games as "public spheres and public matters... communities where deliberation, civic engagement, ethical decision-making, socialisation and norm-sharing, and civic problem-solving take place" (Schrier, 2021, pp. 27-29).

These mechanisms collectively demonstrate how games function not merely as entertainment but as powerful spaces for ethical development and civic participation, allowing players to experience, practice, and reflect on their roles as members of society through interactive engagement. These mechanisms, backed by research, will help provide the perspectives necessary and what to look for when asking philosophical questions and when asking questions about psychological motivation for this research. A comprehensive exploration of these mechanisms should intersect with the perspectives of various scholars in the field of education studies, both historical and contemporary.

Complementing Schrier's framework, Camilleri (2022) examines gaming environments as platforms for developing crucial soft skills. His research with Maltese esports participants demonstrates how competitive video games foster decision-making, strategic thinking, and community-building traits. Camilleri argues that the facilitation of soft skills, especially communication skills, through video games and competitiveness, can enhance inclusion, suggesting that the personalisation of skills possible in gaming

environments creates pathways for greater inclusivity. This perspective adds another dimension to understanding how digital games bring about change, not only through their content but also through the competitive structures they create. This includes the need for selecting leaders and different strategic roles in these games, thus further arguing in favour of games being a reflection of human communities (Camilleri, 2022).

2.4.2 How effective are games at bringing the sought-after change?

McConnell and Thueme's (2022) study using a custom-built game found that students who learned ethics through gaming approaches were three times more likely to report a better understanding of ethical concepts than those taught using traditional case studies. This research was done within a context of military education. They conducted a mixed-methods study at the US Army Command and General Staff College (CGSC) during the 2019 academic year with 125 participants. They divided participants into two groups: one receiving ethics instruction using a traditional case study approach, and another group learned ethics through a gaming approach. This study is interesting because it offers a context of game-based learning in a Master's Level training institution for adults, thus showing the effectiveness of games in higher learning and adult education and contributing to the debunking of the "games are for children" myth. The McConnell and Thueme research was based on a single sample in one staff college. However, it has a methodical and repeatable approach for other possible future research.

The study's theoretical foundation was rooted in a rhetoric based on the vocabulary of "honour", asking the participants to make choices based on what they believe an honourable person might do. The researchers approached their training curriculum through

an “ethical triangle” based on Virtues, Principles, and Consequences. Most worthy of note from their research was that post-test results, using a Likert Scale, revealed that the students who learnt ethics through game-based learning were over three times more likely to feel that they had understood the concepts, having taken the game-based approach, thus implying an increased self-efficacy within the learner. Faculty observers present on-site reported that they had observed both approaches to be effective. However, the gaming approach was far more engaging. The researchers noted that:

In the ethics game class, students were more likely to be actively involved and learn experientially. Because students had to interact with the ethical concepts and apply them not only in solving a moral dilemma but evaluating somebody else’s solution, the concepts were more likely to stick. (McConnell & Thueme, 2022, p. 62)

Games offer an exercise of simulation, and they can create situated, authentic learning environments. With the use of Virtual Reality technology and other hyper-immersive digital tools, even more so. Learners can actively manipulate and apply ethical concepts in real-time, thus helping learners move beyond simple comprehension of knowledge and concepts to synthesis, analysis, and evaluation of ethical issues (Lin et al., 2022). In their qualitative study with 40 college students, Lin et al. (2022) suggest that knowledge of information ethics was improved through the use of simulation games.

2.4.3 Games and Narrative

By further delving into Schrier's work, one can reflect on how digital games are not only academically or cognitively beneficial; they also offer an effective platform for teaching ethics and morals. Ethical and moral decision-making can be intrinsically woven into games and mechanics. Schrier (2021) argues that games provide a unique medium for practising ethics: they present players with choices that have consequences, mirroring the decision-making process in real life. Just like the distinction made by the McConnell and Thueme's (2022) study, one sees a difference between a textbook case study where a student might passively read about a moral dilemma, and a game which can *situate* the student within the dilemma, requiring active choice and then showing the outcome of that choice. This active learning of ethics through games can reinforce moral reasoning skills. For instance, a game about honesty might allow a student to choose whether or not to lie in a given situation and then witness the fallout of that decision within the game world. By engaging emotions and agency, the lesson is often more deeply felt.

One compelling genre for moral and ethical education is narrative-driven games, that is, those with strong storylines and character development. These have been found to impact players' attitudes and behaviours. A recent meta-analysis using a pre-test, post-test design by Kolek et al. (2023) concluded that narrative video games can indeed influence players' attitudes, both explicit and implicit. They also found that the longer the players engaged with the games, resulted in larger implicit attitude change. In the context of ethics education, this means a well-crafted story game can potentially shift how students feel or think about real-world issues. For example, a narrative game about social justice might change a student's attitude toward fairness or prejudice by immersing them in the

experiences of a marginalised character, thereby engendering empathy. Kolek et al. (2023) identified that narrative games are particularly effective at reducing resistance to new ideas. When players become engrossed in a story, they lower their guard and open up to different perspectives, which can lead to attitude change. This finding is promising for educators addressing sensitive or challenging ethical topics. If a game can gently lead students to consider a viewpoint they had not considered before (such as understanding the importance of integrity, or the complexities of a moral conflict), it can be a catalyst for attitudinal and behavioural change in the classroom (Kolek et al., 2023). However, it should be noted that not all games automatically produce positive ethical outcomes – the game’s content and how the teacher frames it are critical. A violent video game with no reflective component is unlikely to teach compassion, for instance.

Therefore, educators selecting games for moral education must consider the narrative and the debriefing discussions that accompany gameplay (Schrier, 2021). The mechanism mentioned by Kolek et al. (2023), which involves the players’ lowering of their guard (by mitigating credibility bias through perspective taking), needs to be assessed from the perspectives of ethics of games in education – as lowering of one’s guard can also be translated to a creation of psychological vulnerability towards persuasive tactics. Does accessing this mechanism risk making games into instruments of indoctrination? After all, games can be designed to have persuasive game mechanics aimed at promoting certain behaviours and ethical reflection. Such game mechanics can be tailored to influence players’ attitudes and behaviours. Orji, Mandryk, and Vassileva (2017) demonstrated that personalising a game’s persuasive strategies to the player’s personality traits increased the game’s effectiveness in encouraging healthy behaviours. In their study, a serious game that

adapted its feedback and challenge style to different personality profiles led to better outcomes (such as more willingness to change behaviour) than a one-size-fits-all design. This insight is valuable for ethics education: it suggests that games can be not only generally engaging but strategically designed to instil specific values or habits (Orji et al., 2017).

A game cultivating respect could feature mechanics where collaboration and listening produce better results than selfish actions, thus rewarding respectful behaviour. Similarly, a game promoting responsibility may simulate long-term consequences for short-term actions, teaching players to consider outcomes (commonly used in environmental education games to instil community and planet responsibility). By integrating these strategies into game rules and feedback, the game serves as a character teacher. Students receive consistent messages that some behaviours are beneficial while others are not. As mentioned earlier, these game experiences must be followed by reflection (Schrier, 2021). One must not underestimate these learning tools' capabilities for both education and indoctrination. If users think critically, they might reject persuasive tactics as coercion. Games which employ these tactics are further discussed in section 5.2.2.

Schrier (2015a) proposed an *Ethics Practice and Implementation Categorisation (EPIC) Framework*, which helps educators choose games for ethics education purposes. This will be examined in detail in Chapter 4. Outside the classroom, students engage with games purely for entertainment, created by non-Edtech developers who are not obligated to offer educational scaffolding, such as critical thinking and deep reflection mechanisms. While the social impact of commercial games warrants a separate research question, the role of ethics education in addressing this issue is essential, even though it extends beyond traditional classroom contexts. The effectiveness of narrative in games discussed in this section

resolves the inquiry raised in section 1.5, from the perspective that game narratives can be seen as effective as narratives in other media, such as film, for their pedagogical value.

2.5 Are Digital Games Good For Our Learners?

When discussing the integration of DGBL in education, one has to address common concerns found in a lot of social and political discourse that demonises the use of video games in everyday life, thus vilifying their implementation in educational settings. Following moments of crisis, such as tragic school shootings, video games frequently become political scapegoats, despite research suggesting more nuanced relationships (Suziedelyte, 2021). Policymakers often assert causal connections between gaming and violence, simply because of the existence of Violent Video Games (VVGs). Drummond, Sauer, and Garea (2018) state that:

Although the idea that playing VVGs causes aggression is intuitively appealing, empirical evidence suggests that strong claims about a positive relationship are unjustified. In the laboratory, playing VVGs leads to only small increases in aggression, and, when issues such as publication bias are accounted for, these estimates decline further in size. In terms of societal violence, the evidence consistently shows no relationship between VVG use and violence, sometimes even showing decreases in violence associated with increased VVG use... (Drummond et al., 2018. pp. 23-40)

This research, together with a comprehensive study tracking gaming behaviour and aggression, which determined that “violent video game engagement is not associated with adolescents’ aggressive behaviour” (Przybylski & Weinstein, 2019, p. 1), contradicts simplistic political narratives. The evidence suggests that the political discourse surrounding video games and violence often reflects moral panic rather than empirical reality, with researchers consistently finding minimal or no connection between gaming and real-world violence.

However, digital games do have a direct impact on learners’ personal and social well-being, thus making it an area of concern for educators and policymakers (Zheng et al., 2024). Modern students live in an environment saturated with digital media and online interactions, which means their well-being is intertwined with their digital experiences. When leveraged positively, digital games can support well-being by reducing stress and providing healthy outlets for social connection (Zheng et al., 2024). For example, research has shown that certain game genres can promote relaxation and mental health; a study on open-world games found that such games offer cognitive escapism that significantly improves players’ mood and stress levels (Anto et al., 2024). In a school context, this suggests that incorporating some game-based activities could help students unwind and feel happier at school, thereby contributing to personal well-being. Moreover, collaborative or multiplayer games used in class can strengthen social bonds among students, building a sense of community and belonging, which is vital for social wellbeing, as observed by Camilleri (2022).

On the other hand, there are well-documented risks to wellbeing associated with digital gaming – issues of excessive screen time, online toxicity, or gaming addiction are

often raised. This is precisely why studying game-based learning in a structured way is urgent: it allows educators to harness the positive aspects of games while also addressing and mitigating the negatives. Digital citizenship and digital etiquette education become crucial in this regard. Digital etiquette, a core element of digital citizenship, refers to the norms of appropriate and responsible behaviour online (Zheng et al., 2024). As students engage with digital games (and digital platforms generally), they must learn how to communicate respectfully, protect their privacy, and navigate the online world safely. Gamified learning environments can be an ideal place to teach these lessons. Zheng et al. (2024) conducted a pilot study in a Chinese primary school where a game-based learning course was specifically designed to improve students' digital etiquette literacy. The results were striking – students who learned through the digital game-based course showed a significantly higher understanding of online etiquette and also had increased motivation and engagement in learning. This indicates that gamified approaches not only teach academic content but can also impart vital life skills for personal and social wellbeing in the digital era. Since issues like cyberbullying, misinformation, and digital addiction are pressing concerns, educating students on digital citizenship through interactive and engaging means (like games) is a timely strategy (Zheng et al., 2024). It equips learners with the values of respect, responsibility, and safety in online interactions, thereby improving their overall wellbeing and that of their communities. The urgency here is apparent: as young people spend more time in digital spaces, education must proactively guide them in ethical digital conduct, and game-based methods have proven effective in doing so.

The question of whether digital games benefit learners has resonance in the Maltese educational context. Camilleri frames this issue through the lens of authentic learning,

arguing that education's primary goal is not merely transmitting facts but weaving facts into meaningful forms of knowledge to be easily understood and employed in students' reasoning (Camilleri, 2015b). His view suggests that digital games can serve as vehicles for this knowledge transformation, positioning games as tools that help educators create more meaningful and authentic learning experiences. Given Malta's increasing investment in digital education frameworks, Camilleri's perspective provides an important local context for understanding how digital game-based learning might be integrated into ethics education specifically.

Chapter 3 – Student-Centred Digital Playgrounds: Pedagogical Theory for Digital Games

This chapter establishes the philosophical and theoretical framework underpinning the pedagogical justification for integrating Digital Game-Based Learning (DGBL) into ethics education. It examines how the progressive educational views of John Dewey, particularly experiential learning and democratic education, resonate with contemporary pedagogies that use digital games. It also explores Matthew Lipman's Philosophy for Children (P4C) approach, as illustrated by his seminal novel *Harry Stottlemeier's Discovery*, and discusses parallels between Lipman's use of narrative for ethical inquiry and the narrative experiences afforded by digital games. This chapter also explores games as virtual meaning-making playgrounds, seeing games as spaces where learners construct meaning together. The aim is to articulate a robust foundation for using DGBL in school-based ethics education, one that is grounded in philosophy of education and pedagogy.

There is a gap in the research on ethics teachers' attitudes towards P4C, or their attitudes towards student-centred approaches to pedagogy. However, Maltese research on teachers of other subjects sheds some light on Maltese teachers' attitudes. Borg (2021) found that Chemistry teachers still adopt teacher-centred didactic approaches to teaching. This is mainly because they are concerned with covering the Secondary Education Certificate syllabus for public examinations at the end of compulsory schooling. The time constraints and the need for performance in exams with syllabi that are content-laden hinder teachers' choice of student-centred pedagogies (Borg, 2021). Such findings create an impetus to investigate Dewey and Lipman's views further.

3.1 John Dewey: Experiential Learning and Democratic Education

John Dewey's educational philosophy serves as a cornerstone for the framework of this dissertation, especially his emphasis on learning through experience and the creation of democratic, participatory learning environments. Dewey famously argued that education "is a process of living and not a preparation for future living" (Dewey, 1897, p. 78), suggesting that learning must be fully integrated with the real experiences and social life of learners rather than treated as a detached rehearsal for future living. It should accurately reflect the current experiences of life, that is, experiences that are authentic and significant to what the child encounters at home, in their community, or on the playground. In his view, knowledge arises from the active adaptation of the learner to the environment through experience and reflection, rather than passive absorption of information. As Dewey put it, every present experience is to be seen as "a moving force in influencing what future experiences will be" (Dewey, 1938, p. 39). As a pragmatist and educational reformer, Dewey rejected the rote transmission of facts and argued that education should be rooted in real-life experience and active engagement, where one experience leads to another. Schrier (2021) also invokes Dewey to argue that students stay engaged "when they are able to take their learning and apply it to the real world, rather than just reading textbooks and memorising facts for exams" (p. 90). The rejection of education as merely the transferring of facts is also argued for by Camilleri (2015b), stating that "teaching is not that facts are transmitted and received, but that these facts can be weaved into meaningful forms of knowledge to be easily understood and employed in students' reasoning" (Camilleri, 2015b, para. 2).

In *Democracy and Education*, Dewey famously contended that “a democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience” (Dewey, 1916, p. 90). In his view, a democratic society is one in which individuals learn by doing and by interacting with others in a community. This has profound implications for ethics education: it suggests that children learn and develop moral understanding not through didactic instruction of rules, but through participating in a mode of associated living – essentially by living and working together in conditions that mirror a democratic community. The classroom, for Dewey, is a miniature society where students practise communication, cooperation, and problem-solving as preparation for ethical and civic life. Dewey posited that genuine education arises from the interaction of experience and reflection. Simply having an experience, even a morally relevant one, is insufficient – it must be processed reflectively to become educative. Schrier (2021) elaborates:

We also need to continually reflect on and review the answers we find, the consequences of our choices, and the results of our actions. Having an experience is often not enough for full transformation or engagement; rather, learning requires reflection on that experience. Reflection includes thinking through choices and their consequences and outcomes. It involves reconsidering decisions, and thinking about the evidence, information, processes, and perspectives that led to that decision. It also includes critiquing one’s assumptions and engaging in discourse with others about our decisions. (p. 240)

Dewey discusses related concepts of reflection, critical inquiry, and intelligent action in the context of communication, habit formation, and social direction. In *Democracy and Education*, he emphasises that genuine understanding arises from shared activities and communication, requiring individuals to “assimilate, imaginatively, something of another’s experience” (Dewey, 1916, p. 3), and formulate their own experience critically. He also links habits (which can be applied to habits of virtuous decision-making) to intellectual dispositions, stating that habits involve “modes of thought, of observation and reflection” to enable purposeful engagement with society (Dewey, 1916, p. 25). Discussing Dewey, Schrier argues that reflection involves pausing to think about actions. It entails asking what was done, how it was done, and if the same choices would be made again in similar or different situations. It also includes considering how decisions affect relationships and outcomes over time, both in the short and long run (Schrier, 2021). In the context of applying this to ethics education, Dewey’s approach means that students learn ethics by confronting real or simulated moral problems (such as dilemmas), making decisions or taking action, and then reflecting on the consequences and moral principles involved. Thus, education becomes a laboratory of life where learners experiment with ethical decision-making in a safe environment and learn from their successes and mistakes. The provision of safe spaces within digital games for ethics has already been discussed in Chapter 2. Schrier (2021) further invokes Dewey to state that knowledge (including ethical discernment) is not something to be passively absorbed but is “bringing some of our dispositions to consciousness with a view to straightening out a perplexity, by conceiving the connection between ourselves and the world we live in” (Schrier, 2021, p. 90), thus bringing all of our faculties to the table to unravel the moral problem. This emphasis on resolving perplexities through active inquiry aligns closely with ethics education as envisaged in Malta, which

often presents students with complex social and moral problems to navigate. DGBL offers the possibility of the creation of such laboratories that are immersed within stories or narratives, offering opportunities for resolving such perplexities within the game through quests or other tasks. This can also happen in multiplayer game environments to reflect Dewey's views on the classroom to mirror a democratic community.

This consideration of digital games as democratic communities is a fundamental pillar in Schrier's (2021) work. Dewey believed that the skills and values of democratic life, such as deliberation, mutual respect, and collaborative problem-solving, should be fostered within the school environment itself. Schools should be a place set apart from life as a place for learning lessons, where one can experience incidents of shared experiences. The participatory students, who are active learners rather than receptacles of information, get the opportunity to discuss issues openly, work together on class decisions, and respect diverse viewpoints. This student-centred climate helps cultivate what Dewey saw as the aim of moral education: the development of individuals who are not only knowledgeable but who can think critically and act responsibly within a community. Indeed, Dewey maintained that education and democracy are intertwined, since a healthy democracy relies on citizens capable of reflective thought and empathic collaboration (Dewey, 1916). From this perspective, one needs to view ethics education, even through DGBL, as not merely the teaching of rules or theories, but the nurturing of character and judgment through experience in a community. This echoes the argument in section 1.6, that ethics education is not after performative moral grandstanding for the sake of external rewards, but rather the formation of character. Thus, Dewey's work justifies further the need to explore motivational psychology backed by educational neuroscience in later sections.

In summary, Dewey's experiential and democratic education framework suggests that an effective ethics education engages students in active learning experiences and communal inquiry. By "learning by doing" in a social context, children practice ethical thinking in much the same way they will need to in real life. This Deweyan approach sets the stage for integrating digital game-based learning. If digital games can provide immersive experiences and simulate social interactions, they may serve as potent platforms for the kind of experiential, participatory learning Dewey advocated. In future chapters, games that use the Deweyan approach will be considered. However, it is helpful to consider how these ideas were advanced by Matthew Lipman's Philosophy for Children, which explicitly apply Deweyan principles and is a valuable approach to ethics education and critical thinking in the classroom (García-Moriyón et al., 2020; Williams, 2017).

3.2 Lipman's Philosophy for Children (P4C) and Moral Inquiry

Matthew Lipman's Philosophy for Children (P4C) programme builds directly upon Deweyan principles, placing philosophical inquiry and democratic dialogue at the heart of ethics education. Developed in the late 1960's by Lipman and his colleagues, P4C was an innovative pedagogical response to the question of how children can engage in serious moral and philosophical thinking from a young age (Lipman, 2011). Relying strongly on Dewey's work, Lipman recognised that traditional schooling often underestimated children's capacity for abstract thought and ethical reasoning. For Lipman, true education involves guiding students to think for themselves in a community of equals (García-Moriyón et al., 2020). Like Dewey, Lipman believed that school should represent a social environment and

emphasised Dewey's view where students collaboratively inquire and develop virtues necessary for democratic life (Lipman, 1988).

At the core of P4C is the idea of the classroom as a community of inquiry. Rather than the teacher lecturing on moral truths, students are encouraged to raise questions, share perspectives, and reason together about ethical issues or philosophical problems. The students' inquisitiveness and curiosity, as well as the joy of exploration and discovery, are the hallmarks of P4C, contrary to merely knowing the right answer to the question coming from the teacher as a figure of authority. The teacher shifts from instructor to facilitator, guiding the discussion with open-ended questions and ensuring a respectful, constructive dialogue (García-Moriyón et al., 2020; Williams, 2017). This mirrors Dewey's ideal of participatory learning: in a P4C session, students learn ethics by 'doing philosophy', where they actively deliberate on what is right or fair, consider hypotheticals, give reasons, and listen to their peers. The process itself instils necessary moral dispositions.

3.2.1 Harry Stottlemeier's Discovery

Lipman's novels for children (and indeed any appropriate story aimed at reflection not necessarily written by Lipman) and accompanying teacher manuals, are the tools by which this inquiry unfolds. The most famous of these is *Harry Stottlemeier's Discovery* (1974), a philosophical novella intended for young students. Lipman aimed to introduce children to logical and ethical thinking through an engaging story about a group of schoolchildren who reason philosophically about everyday problems. In crafting this story, Lipman's intentions were profoundly educational, yet never didactic. He explains that he

deliberately packed *Harry* with ideas from the great philosophers, albeit in a way accessible to children, to spark curiosity and discussion. As Lipman (2011) recounts:

...throughout the writing of *Harry*, I tried to see to it that virtually every event reverberated with ideas or fragments of ideas from the history of philosophy...These ideas...showed up as a result of my own free associations...They were there for children to pick up and examine...much as if they were so many pretty shells on the beach.

(Lipman, 2011, p. 4)

In other words, the narrative is layered with philosophical puzzles and insights (from Plato, Aristotle, Leibniz, and others) scattered like shells, waiting for students to collect and contemplate them. The young learners are “free in turn to select for discussion what interested them and, together with the others in the class, to puzzle over it” (Lipman, 2011, p. 4). This elegant metaphor illustrates Lipman’s inquiry-based approach: rather than force-feeding moral lessons, he provides an enriching environment and stimulus, and students lead the way with their own questions and interpretations. When guided by the skilled facilitator/teacher, this results in a deeply engaging form of moral education. Children practise critical, creative, and caring thinking (three dimensions that Lipman emphasised) as they consider, for instance, why it is important to be consistent in one’s beliefs, or whether a given action in the story was fair (García-Moriyón et al., 2020). In other words, they learn to give reasons for their judgments and to examine the quality of those reasons, essentially honing the skills for ethical deliberation.

3.2.2 P4C and Digital Games for Ethical Deliberation

P4C does not teach ethics through traditional lectures or rule memorisation. Instead, it helps children think ethically by deliberating dilemmas, considering others' perspectives, and reasoning about goodness. The ethical content is integrated with the topics chosen by the children. For example, if using *Harry Stottlemeier*, students might end up debating whether it was fair for one character to treat another in a certain way, or whether having a logical method means we should always tell the truth. The teacher facilitates the discussion by encouraging students to support their views with reasons, to question assumptions, and to connect the debate to real-life contexts. This methodology encourages what Dewey would call "reflective thinking", which is interpreted in Schrier (2021) as involving:

stopping, looking, and listening to what you did, how you did it, and whether you would do it the same way given the same or different circumstances. It also means filtering through dynamically changing relationships and outcomes to see how decisions impacted them in short-term, longer-term, and systemic ways. It requires a type of metacognition that Shaenfield describes, where students can look back and see what they have done and use this process to analyse their approaches moving forward. (Schrier, 2021, p. 240)

Reflective thinking is a crucial element in an ethics education setting and as highlighted by Schrier (2021), needs to be present in game design for ethics, where students learn to examine why they think something is right or wrong and to hear out differing

viewpoints in a respectful manner. Games ought to include Lipman's metaphorical shells on the beach for students to be able to collect.

The creation of immersive environments for ethical experimentation through digital games aligns with Lipman's P4C pedagogical approach. The digital game offers a communal space for moral deliberation as a physical classroom, with the added advantage of not having setups and structures that may invoke traditional rote learning. In these digital communal spaces, learners encounter dilemmas requiring reflective judgment (Iglesias, 2023). Nardo and Gaydos (2021) refer to ethical dilemmas in games as 'wicked problems' that serve as catalysts of learning in educational ethics games. They follow Dewey and Lipman's rejection of traditional rote learning and propose digital games as an effective medium for simulating ethical dilemmas to foster deeper engagement with ethical considerations. Some key points include the necessary ambiguity in 'wicked problems' that are often complex and lack clear solutions or consequences. These problems cannot be reduced to simple black and white/right or wrong scenarios, but should invite students to think critically and dabble with the 'grey areas' through moral reflection. This mirrors both Dewey's and Lipman's views of offering students opportunities for perplexity which need to be unravelled through reflection. They also argue for the importance of creating games which have mechanics that differentiate between instrumental gameplay (that is, actions driven by the goal of winning the game) and ethical gameplay (action reflecting moral deliberation and personal values). They propose that educational ethics games should avoid explicitly rewarding or punishing ethical decisions to preserve ambiguity and authenticity (Nardo & Gaydos, 2021). This echoes current approaches in ethics education in Malta, where, as evidenced by publicly-available assessment marking schemes for examinations,

there are often instances of ambiguous case studies for assessment with allowances for various moral perspectives (Government of Malta, 2025). Ethical decisions, therefore, are seen as goal-driven meaning negotiations in the digital game, which should allow multiple interpretations and outcomes, emphasising the negotiation of meaning through exploration rather than pre-defined ethical outcomes that are rewardable or punishable, echoing Dewey and Lipman (Nardo & Gaydos, 2021). This is a clear rejection of a doctrinal approach to ethics education in schools, and in digital game-based learning. As mentioned above in section 2.3.2, the P4C approach to building virtual communities in game-based learning requires the fostering of equity and mutual respect in the classroom, and research demonstrates how digital games provide safe spaces for ethical experimentation, thus bringing more depth to the argument made by Lin et al. (2022).

There is a critical point to be made about Nardo and Gaydos' (2021) position on ambiguity, which many argue could encourage and overemphasise relativism. Games often allow any choice without moral judgment from the system, where the judgment usually comes in the form of consequences and narrative changes, rather than condemning the player. Some could argue that this could send a message that "anything goes" or that all viewpoints and all opinions are equal in an absolute relativistic way. However, as argued by Daniel (2013), with the correct use of P4C, time, and the facilitation and guidance of teachers, the students can move from absolute relativism to post-relativism (Daniel, 2013). The findings in Daniel's (2013) research suggest therefore, that P4C aims to transcend absolute relativism. This can be achieved through fostering deeper critical thinking, where students reflect on the justifications and the "why" questions – in other words, learn to be their own self-critics. One must ask how to achieve this in games for learning ethics. Daniel's

research suggests that games should develop and assess critical thinking, guiding pupils from a nonchalant view to a shared understanding of self and the community, such as in multiplayer games. Games could require students to justify their actions and choices, fostering deeper critical thought about their engagement.

3.2.3 From Digital Classrooms to Digital Playgrounds

In sum, Lipman's P4C provides a philosophical and pedagogical framework where ethics education is conducted through dialogue and inquiry. It takes Dewey's philosophy of experiential, democratic learning and applies them to a classroom method that has now been implemented worldwide. P4C's success underscores a key point for this dissertation: narrative and play, guided by skilled facilitation, can be powerful vehicles for ethics education. Lipman used a fictional story and a collaborative discussion game of sorts to engage students in moral reasoning. This invites the question: could digital games serve a similar function? If a print story in the 1970s could transform a classroom into a laboratory of philosophical learners, might a digital interactive narrative in a game in the 21st century do the same, perhaps even more vividly? The next sections explore this possibility by examining digital games as modern "meaning-making playgrounds" and drawing parallels between P4C's approach and digital game-based learning in ethics.

3.3 Digital Games as Virtual “Meaning-Making” Playgrounds

Digital games have emerged as a prominent medium in young people’s lives. Potter and Cowan (2020) suggest that these games (like social media) function as virtual playgrounds, which serve as spaces where children can actively construct meaning and engage in play-based learning, much like in physical playgrounds. They position play itself as a form of meaning-making and describe the playground as a “rich and dynamic ‘meaning-makerspace’” where creative, collaborative meaning-making occurs constantly through multiple modes (talk, gestures, imagination, and so on) (Potter & Cowan, 2020). They state that “contemporary play exists not only in physical playgrounds but increasingly in globalised ‘virtual playgrounds’ such as video games and social media” (Potter & Cowan, 2020, p. 248). This perspective is another invitation to see digital games not as isolated, mindless entertainment but as an extension of children’s natural play, offering an arena in which children can explore ideas, roles, relationships, culture, and society. Thus, this approach further impacts the importance of distinguishing between mere random play and a game with purpose, as mentioned in section 2.1 – digital games are also meaning-making spaces.

In a traditional playground, children might role-play scenarios, negotiate game rules, or collaboratively build imaginary worlds, the same way many do in the sandpit, all of which contribute to learning. Similarly, in a virtual playground like in the game *Minecraft*, or other sandbox games like *No Man’s Sky*, or multiplayer games like, for example, *World of Warcraft*, young people are engaging with peers (or characters), making choices, expressing themselves, and often encountering moral or ethical situations in game narratives. Potter and Cowan (2020) found that children bring themes and narratives from video games into

their real-world play and vice versa, indicating a porous boundary between virtual and real-life meaning-making. They also found, for example, that a group of children might export out of the game and reenact dances from Fortnite, blending the digital narrative with their own imaginative twists within the real world (Potter & Cowan, 2020). This permeability between the virtual and the real is an important take within DGBL, because it points at the fact that the learning and meaning-making that happens through games for ethics, using Lipman and Dewey's views, has the ability to transfer to the real world. However, game designers need to know that the permeability goes both ways. In fact, we see how cultural elements from the real world are also preset within games for players to play within the virtual space. For example, all the different races of characters in Blizzard's *World of Warcraft* are equipped with the ability to dance in the way of certain iconic styles from the real world, one unique to the particular race and gender of the character (fandom.com, 2012). Potter and Cowan (2020) conclude that play should be viewed as a series of "laminates", or layers, of media culture, folklore, and everyday life experiences that children re-mix in inventive and creative ways. This theoretical lens conceptualises digital games as part of the continuum of play through which children interpret the world and create shared meanings, which is also applicable to playing for ethical interpretation through P4C ideals.

For ethics education, the notion of games as virtual meaning-making spaces can be significant. It suggests that digital games, when thoughtfully selected and integrated, could provide fertile ground for experiential moral learning and experimentation, much like the community of inquiry does. Potter and Cowan's (2020) work shows that in these virtual spaces, children draw on their own experiences and cultural resources to make sense of what is happening. For example, a child playing a narrative-driven game (which some might

refer to as a gamified movie or even an interactive movie) might draw parallels between the game's story and a situation from a book the students read, or an event in their own life, thus constructing personal meaning from the gameplay. In doing so, they could be processing ethical themes. In chapter 4, I will be discussing specific examples of narrative-driven games, as well as games of social deduction that involve players in negotiation, rule-making, and collective problem-solving.

However, to harness games as meaning-making playgrounds for ethics, educators must be discerning. Not all games are equally conducive to the moral inquiry as envisaged by Dewey and Lipman. Some games present rich narratives and dilemmas that stimulate ethical reflection. In contrast, others may offer only shallow content or promote an absolutist worldview of things being either black or white, good or bad. A clear example is Walker's (2009) critique of *Star Wars Knights of the Old Republic*, which is based on the widely popular *Star Wars*, owned by Lucasfilm/Disney (Schrier & Gibson, 2010). The entire narrative of the *Star Wars* franchise is based on a binary morality – good and evil (the light side and the dark side), are clearly delineated. If educators were to use such games without context, students might get the wrong impression that ethics is a straightforward calculus of good and bad actions, which contradicts the nuanced, context-dependent view espoused by Dewey and Lipman. In other words, the ideal candidates for DGBL in ethics education are games that embrace complexity, invite players to see multiple perspectives, and do not provide easy answers but rather provide open-ended, meaning-making virtual playgrounds rather than moral quizzes.

3.4 Digital Games and P4C Parallels

As discussed in section 3.2, there are striking parallels between Lipman's use of a philosophical story (*Harry Stottlemeier's Discovery*) as a stimulus for moral inquiry and the potential use of digital game narratives for the same purpose. Both approaches leverage storytelling and imagination to engage students in ethical thinking. In Lipman's case, the fixed text of *Harry* provides scenarios for students and teachers to discuss; in the case of digital games, the interactive narrative provides scenarios that students navigate through decision and action. Despite the obvious differences in medium, the educational underpinning is similar: creating a fictional yet relatable context in which learners can grapple with philosophical questions.

One parallel is the emphasis on experiential learning through narrative. *Harry Stottlemeier's Discovery* immerses students in a story where the protagonist and his friends confront logical puzzles and ethical questions. Students reading it often empathise with the characters, for example, considering what they would do in Harry's situation, which blurs the line between fiction and the students' own moral experience. In a well-crafted digital game, players likewise assume the role of a character or protagonist, making choices that carry moral weight. For instance, in the game *Papers, Please*, the player takes on the job of an immigration officer in a fictional dystopian country, deciding whom to let through the border and whom to turn away. The gameplay simulates a series of ethical dilemmas under pressure – do you follow the corrupt government's strict entry rules and separate families, or do you bend the rules to help someone but risk a penalty? "*Papers, Please* is an example of how games can help players think through ethical and civic issues because the game represents an oppressive system that a player can explore" (Schrier, 2021, p. 301).

Effectively, *Papers, Please* places the player in a moral scenario which could be a case study in a P4C discussion, but instead of merely reading about it, the player experiences it first-hand through gameplay. This offers a direct experience to provoke the needed reflection and discussion after play, which Schrier calls a “need to continually reflect on and review the answers we find, the consequences of our choices, and the results of our actions” (Schrier, 2021, p. 240).

Another parallel lies in open-ended engagement and student agency, or a student-centred approach. Lipman purposely designed his stories to have philosophical richness without preaching a single moral lesson, allowing each community of inquiry to draw its own conclusions. Similarly, many educational or serious games avoid one-dimensional morality. For example, *Quandary* is a digital game explicitly created for ethics education, where players must govern a colony on a new planet and resolve disputes among colonists. The game is designed “to engage students ... to develop critical thinking and perspective-taking, practice empathy, and learn to make ethical decisions through fun and engaging gameplay” (Learning Game Network, 2025). In *Quandary*, “players need to solicit input from [the] citizens, mount arguments, weigh pros and cons, and iterate through choices and consequences to make the best decisions” (Schrier, 2021, p. 30). Notably, there are no clear “right” or “wrong” answers in the game – outcomes are nuanced, and the scoring rewards how well players reason (such as distinguishing facts from opinions and considering different viewpoints) rather than which decision they choose (Schrier, 2021, p. 302). This mirrors the P4C approach of focusing on the quality of reasoning rather than arriving at some form of predetermined answer. After playing *Quandary*, teachers often hold an in-class deliberation, much like a P4C discussion after a story, and the game website offers

resources for teachers to this effect, as well as a system for gathering analytics from every student for assessment.

These parallels between storytelling in DGBL and Philosophy for Children warrant further investigation, which is why chapter 4 is an in-depth analysis of game studies and Schrier's framework. The next chapter will critically evaluate the relationship between games, narrative, and, in the spirit of Dewey's views on democracy in education, the role of the classroom and the impact on society.

Chapter 4 – Digital Games as Ethics Education Tools

This chapter examines how digital games can serve as tools for ethics education.

Previous discussions highlighted the potential of digital game-based learning and relevant educational philosophies. Now, the focus shifts to analysing frameworks that help educators choose and use games effectively, including in Maltese schools. Narrative-driven and purpose-built serious games particularly enhance ethical learning. The approach is guided by Karen Schrier's *Ethics Practice and Implementation Categorisation* (EPIC) framework (2015a), which provides a lens to categorise educational goals and strategies that games can fulfil in the context of moral education. Using this framework as a scaffold, this chapter will analyse the role, value, and application of certain games in teaching ethics. These insights serve as a scaffolding for individual teachers or schools and for curricular developers who might consider a possible digital-game-infused ethics curriculum, even for a pilot study.

4.1 The EPIC Framework: Goals and Strategies for Ethical Gameplay

Schrier's (2015a) EPIC framework offers a systematic way to think about the intersection of game design and ethics education. At its core, EPIC posits that effective ethics learning through games requires aligning educational goals, that is, the desired learning competencies and outcomes, with appropriate strategies that facilitate those outcomes. Schrier derived this framework from established theories of moral development and learning, integrating insights from both classic ethics education models and research on games and ethics (Schrier, 2015a). Her approach inspired this dissertation and prompted me to further investigate and include more viewpoints in the inquiry. The result of her work is a multi-layered categorisation scheme that helps educators both identify what they want

students to learn (for example, empathy or justice) and select how a game can support that learning (for example, through specific genres like narrative-driven games). The EPIC framework was chosen for its structured, comprehensive, and contextually relevant approach to integrating video games in ethics education. Its alignment with the dissertation's multidisciplinary approach, emphasis on reflection and critical thinking, and practical applicability for Maltese schools sets it apart from other models, which may lack depth, specificity, or alignment with local educational goals. This choice is supported by the dissertation's analysis and academic literature, towards a robust foundation for further research and implementation.

4.1.1 EPIC Educational Goals

Schrier's (2015a) EPIC framework defines seven key goals for ethics education through digital games. Summarily, these are (the letter 'E' stands for Educational Goal):

E1. Enhance ethical awareness, which is explained as recognising when ethical issues arise, and understanding the implications of these issues on the self and others.

E2. Enhance emotional intelligence, which includes identifying, understanding, and managing one's own emotions and those of others during ethical decision-making, thus including elements of emotional regulation.

E3. Practice care or empathy-related skills, which is fundamentally based on the ability to appreciate the perspectives of the other, developing compassion for the experience and feelings of others.

E4. Practice ethical reasoning, which involves critically analysing ethical dilemmas by weighing evidence, identifying biases, and evaluating consequences using the faculties of logic.

E5. Practice ethical reflection, which involves the competence of knowing the value of deep reflection on one's ethical beliefs, assumptions, and decisions to gain greater insight and understanding. Here, Schrier (2015a) invokes Dewey (1910) to assert the importance of assessing and questioning one's beliefs, by which one's convictions are justified.

E6. Enhance character, thus fostering virtues such as responsibility, respect, fairness, and active civic participation. This further justifies the importance given by this dissertation to virtue ethics in a framework for ethics education (further discussed in Chapter 5, also in conjunction with psychological theories of motivation).

E7. Cultivate facility with major ethics issues, approaches, and frameworks, which in sum, refers to understanding and applying various ethical theories (like Consequentialism or Kantianism for example) and recognising key ethical quandaries and applied ethics in society.

Schrier also aims to encapsulate both the affective and cognitive dimensions of moral learning. For example, E1 (ethical awareness) involves helping students to recognise ethical issues and their own moral decisions in contexts, while E3 also deals with care and empathy, which many theorists also frame within the emotional/affective dimension

(Pulcini, 2016; Pulcini, 2017; Ratka, 2018). E4, E5, and E7 (ethical reasoning, reflection, application and theory) are clear examples of the cognitive dimensions of learning, as they focus on intellectual skills of analysing moral problems and engaging cognitively with one's values. The cognitive dimension of such reasoning was supported by Kohlberg's theory of six stages of moral development linking progressive moral discernment to cognitive abilities (Kohlberg, 1974), as well as Rawls' concept of reflective equilibrium which illustrates the cognitive labour required to harmonise moral discernment, principles, and theory (Daniels, 2020).

This approach has parallels with ethics education in the Maltese context. If one looks at the current syllabi, starting from the Matriculation Secondary Education Certificate (MATSEC) syllabus in force at the time of this dissertation, the learning outcomes are organised in the three levels of the Malta Qualifications Framework (MQF), as the example below taken from one of the ten learning outcomes of the MATSEC syllabus:

8.1a Identify some characteristics of abusive relationships.

8.2a Describe the harmful effects of an abusive relationship.

8.3a Discuss why an abusive relationship is unethical. (MATSEC

Examinations Board, 2025b, p. 17)

At MQF Level 1, the learning outcome does not require the same cognitive load as the subsequent ones. It is, in fact, typical of MQF levels 1 and 2 to require students to merely "identify" and "describe" the ethical issue, thus also aligning themselves with Schrier's (2015a) E1 desired outcome of ethical awareness. MQF Levels 2 and 3 then require explanation, application and discussion more often, thus invoking the cognitive

dimension of ethics education as described by Schrier (2015a) in E4, E5. The MATSEC syllabus further builds on moral principles and ethical theories, since in its learning outcomes it includes items like the doctrine of double effect, applied bioethics and actions that create, sustain, conserve, and take human life (MATSEC Examinations Board, 2025b, p. 18), which are aligned with Schrier's (2015a) E7 goal. Schrier's (2015a) E3 goal is very strongly aligned with the MATSEC syllabus, since respect for the self and others, ethics of care, and ethics of dependence, aimed at fostering virtuous habits of happiness, care and compassion, are listed as entire subject foci in this document (MATSEC Examinations Board, 2025b). Schrier's outcomes, therefore, can align with the current ethics education paradigm in Malta. Although they do not follow a hierarchical framework like the MATSEC syllabus, future curricular development could integrate elements of the qualifications framework into Schrier's framework. The same can be said for the current Year 8 syllabus for ethics education in state schools (for 12-13 year-olds). This has been developed by the current ethics education department within the Ministry for Education, Sport, Youth, Research, and Innovation (I am currently co-head of this department and partly responsible for the development of this document). The seventh learning outcome in this document is "I can explain how emotional regulation helps manage negative feelings (like anger, impulsivity, jealousy, and self-isolation) also arising from the problematic use of digital technologies" (Tirazona et al., 2024, p. 3). This shows how the Maltese context also gives the same priority as Schrier's (2015a) E2 outcome to developing emotional intelligence. The fact that different Maltese curricular institutions align themselves strongly with Schrier's (2015a) educational goals gives validity to one of the objectives of this dissertation, which is to further investigate her framework for application in the Maltese context.

4.1.2 EPIC Strategies

Further to the educational goals, Schrier (2015a) proposes 12 game elements or strategies to achieve the desired educational goals through digital game-based learning. They are a practical categorisation framework for game type and genre selection. In short, these are (the letter 'S' stands for Strategy):

S1. Emotion, mood, and tone, which are game elements “that convey emotion in ways that help us see new perspectives on humanity” (Schrier, 2015a, p. 408).

S2. Diaries or personal reflection devices. These are for games that have built-in devices that allow the user to keep journals, diaries, or personal reflection opportunities. Self-reflective journaling has been established as an effective method for engaging students in the complex process of ethical reasoning and moral development: “compels the student to actively think about a feeling, event, behavior (*sic.*), emotion, or action and to record those thoughts” (Swindell & Watson, 2006, p. 46). Effectively, journal writing is also a recommended coursework in the Maltese ethics education paradigm. MATSEC Examinations in Malta recommend reflective journal writing, including for the purpose of school-based assessments in their exemplars (MATSEC Examinations Board, 2025a).

S3. Role-taking and role-playing, referring to games that incorporate roles and characters to explore various ethical viewpoints and identities, or even one’s own.

S4. Story or narrative, referring to games that use story-telling to practise ethics. This genre resonates strongly with Lipman’s P4C methodology, as discussed in section 3.2.

Considering the importance of P4C in the Maltese context, S4 will be looked in more detail than the other strategies in later sections.

S5. Modeling, which involves games that model moral behaviour using one's avatar.

According to Szolin et al.:

An avatar is a visual representation of a character that the gamer uses to navigate and interact with a virtual world through which gamers are able to seek out and achieve in-game objectives.

Avatars can often be highly customised characters whose visual design and in-game behaviour are controlled by the gamers themselves. (Szolin et al., 2023, p. 374)

S6. Choice and Consequences, which refer to games that incorporate ethical choices and decision-making tasks, have a direct effect on the gameplay, and sometimes even on the direction the story takes.

S7. Simulation, which as the name implies, are game features that simulate an aspect of humanity, or an issue or topic.

S8. Social Interaction, which are game elements (usually found in multiplayer games) that raise ethical dilemmas and moral problems because of their social aspects, including community rules, guild interactions, and interpersonal relationships.

S9. Deliberation, dialogue and discourse, which are features in games that encourage communication on various issues, choices, or consequences, for the purpose of deliberation.

S10. Application to real-world issues. These are game designs that may enable players to think about realistic issues or situations, especially those that may not have immediately obvious connections to ethical issues, but the story around the game spurs real-world ethical questions and problem-solving. This is a very interesting perspective for ethics education, as it also deals with commercial entertainment games that may even reward players in the game for acting violently or immorally (violence and theft), but still offer perplexing applicability in ethics education. This perspective will be analysed further in sections 4.3.1 and 4.4.

S11. Procedural exploration. These are games that clearly articulate an opinion on an ethical issue through gameplay and mechanics. In this strategy, the game is making arguments through the rules and mechanics of the game, including interactions with other players or non-playable characters (Bogost, 2007).

S12. 'Nudges'. These are game elements which offer clues, adjustments, and personalised nudges to influence behaviour, that is, in-game triggers that 'nudge' a player through situational or social cues to behave in certain ways or to show sensitivity to certain issues in order to affect decision-making.

About these strategies, Schrier (2015a) remarks:

Many video games could use multiple strategies, just as they could fulfill (*sic.*) multiple goals. In addition, many of these strategies overlap and could be subsumed or integrated into other strategies. Thus, the strategies listed here are not entirely distinct, but could be used in tandem with each other. (Schrier, 2015a, pp. 408–409)

By mapping which strategies a given game employs, educators can discern how that game might achieve certain learning outcomes. Importantly, the EPIC framework encourages a mix-and-match approach; since a single game often employs multiple strategies simultaneously, and one educational goal can be addressed through different types of game experiences. For example, a narrative-heavy game could simultaneously engage students emotionally (using S1: mood and tone), invite empathy by role-playing a character (S3), and present ethical choices and consequences (S6). This means that a single game can touch on goals of empathy, reflection, and ethical reasoning simultaneously. Schrier (2015a) argues that this layered approach reflects the complexity of ethical learning; moral growth is multifaceted and thus benefits from games that activate emotion, cognition, and social interaction together. However, the EPIC framework serves as a guide and not a rigid prescription, helping educators to thoughtfully select games for ethics education and to thoughtfully incorporate them into practice in both formal and informal settings (Schrier, 2015a).

Schrier also acknowledges the limitations of the framework, by acknowledging the fact there is a need to empirically validate this framework and further research is needed to determine if these strategies truly promote ethical development (Schrier, 2015a). This is especially true since new games are being developed all the time, and the landscape of games and game design is constantly evolving. This is why it is important to view Schrier's work as a guide, and any digital game-based-imbued ethics curriculum based on this framework would need to be a pilot for the purpose of research and consultation. In the next sections, the framework will be applied to concrete examples, illustrating how various

digital games can meet ethics education goals in practice, using a grid template based on Schrier's (2015a) framework.

4.2 Game Genres and Ethics Education

Previously in chapter 2, arguments have been made regarding the validity of games as effective ethics education tools but this will be further explored through other perspectives and the EPIC framework. In a 2022 podcast interview, Schrier suggested that games in ethics education “build deeply immersive and rewarding learning experiences” for students engaging with ethical concepts (Wisehart & Schrier, 2022). The effectiveness of games as ethics education tools stems from their ability to engage players in experiential learning. As noted by Swain in *The Mechanic is the Message*, when “the mechanics of a game align with the values the game’s designer strives to communicate, then the player is learning those values experientially” (Swain, 2010, p. XII), thus further aligning with the Deweyan views discussed in section 3.1.

In section 2.4.3, Kolek et al.’s (2023) study on attitude change through video games was cited, and it is important that it is kept in the paradigm of this chapter as well. Shliakhovchuk (2024) also supports the transformative power of digital games: the proposed transportation theory “underscores the transformative potential of video games, casting players as ‘travellers’ who, traversing stages of reality dissolution, emotional connection, and altered return, present a pathway for attitude transformation” (Shliakhovchuk, 2024, p. 1). This research gauges player engagement in games like *Survival*, *Papers, Please*, and *Against All Odds* to explore the effectiveness of video games in

addressing the refugee crisis, to increase awareness of the issue at hand (echoing Schrier's E1 goal in the EPIC framework) and changing perceptions. It further validates and shows alignment with Schrier's (2015a) perspectives within the EPIC framework. Shliakhovchuk concludes that the three video games mentioned above were designed to "increase ethical awareness of the issues involved, arouse emotions, make people see things from the point of view of refugees, change people's perceptions, and encourage them to take action in real life" (Shliakhovchuk, 2024, p. 8), which echoes the educational goals E1, E2, E3, and E7 discussed above in section 4.1. Shliakhovchuk (2024) uses other theoretical frameworks that explain attitude change, which, although related, are not solely focused on ethics education, which is why Schrier's work was favoured as the foundation of this dissertation.

The importance of narrative-driven games, that some people see as "interactive cinema" (see section 1.5) for ethics education cannot be understated, especially because of the importance given to the storytelling element in ethics education within the P4C methodology (see section 3.2). The effectiveness of narrative games in shifting attitudes and engendering moral reflection is increasingly supported by empirical research. A 2023 meta-analysis by Lukáš Kolek et al. found that narrative video games can indeed influence players' attitudes – both explicit attitudes and implicit biases – about the topics depicted in the game. Narrative engagement appears to reduce resistance to new ideas: when players become immersed in a story, they tend to let their guard down and consider perspectives they might otherwise dismiss (see section 2.4.3) (Kolek et al., 2023; Šosvald & Kolek, 2024). This suggests that a well-crafted story game about an ethical issue can open players' minds to new viewpoints. At the same time, who decides what are the viewpoints to open oneself to? Researchers caution the importance of reflection after a game is played. It would be

naïve to assume, without evidence, that all games automatically produce ethical learning outcomes on their own. The Deweyan perspective (discussed in section 3.1) asserts the importance of reflection after an experience, to assert the pedagogical impact of the experience. This theme is repeated in other media studies used in ethics education, like in the use of movies for pedagogical impact in ethics (Shapshay, 2009) and this is aligned with games, as asserted by Schrier in an interview with Farber (2021):

...games are an opening to a conversation. It's not like, "Here, just play a game and you'll learn!" The game is part of the journey, but there's so much more than that. A teacher can use activities around the game, with the game, or through the game, and students can continue to discuss, deliberate, and apply the learning beyond the game. (Farber, 2021, para. 10)

McDaniel and Fiore (2012) empirically researched guidelines for developing applied ethics games and their implementation. They emphasise the importance of guidance plans, not just to frame correctly the intended learning outcomes from the use of games, but especially to design assessments and guidance strategies that do not interfere with the immersion of the players in the game within the gaming-flow without breaking immersion (McDaniel & Fiore, 2012, p. 19) This would be another take on Dewey's experiential perspective and the need for reflection after the experience, but rather than after, weaved within the experience of the game.

Teachers, or facilitators, as Lipman's P4C framework refers to them, must help students process their in-game decisions and emotions, drawing connections to real-world

ethics. This might involve class debates, personal journaling (as Schrier's (2015a) S2 strategy prescribes), or connecting game scenarios to philosophical frameworks (Schrier's E7). When executed thoughtfully, such a debriefing can transform a powerful in-game moment into a lasting lesson. In summary, narrative-driven and serious games offer a rich medium for ethics education, but their impact is maximised when coupled with guided reflection and dialogue. The forthcoming sections will deal directly with case studies of games that can be used in ethics education and within Schrier's EPIC framework.

4.2.1 *Quandary*

Quandary is a free web-based serious game that presents players with complex social dilemmas in a science fiction colonist setting. It was developed by Learning Games Network (LGN) with funding from a private family foundation, in collaboration with experts from Tufts University and the MIT Education Arcade. The game launched in September 2012 and was designed specifically to foster ethics-related skills in children aged 8-14 (Osterweil & Bers, 2022). It situates players as leaders of a space colony on planet Braxos, where they must navigate complex ethical dilemmas without clear right or wrong answers. Rather than quizzing players on right or wrong answers, *Quandary* requires gathering facts, hearing out stakeholders' perspectives, and then making a decision with no clear "correct" outcome. Schrier praises this design, noting that *Quandary* "supports the practice of civics and ethics skills" (Farber, 2021, para. 15), by having students analyse evidence, consider diverse viewpoints, and build reasoned arguments instead of seeking a single solution (which is of importance to P4C methodology as commented on in sections 3.2 and 3.4). In other words, the game operationalises EPIC goals like ethical reasoning (by breaking down the steps of

problem-solving) and empathy (by forcing perspective-taking). The game features an interesting task, which requires players to consider all the viewpoints of all the different citizens of Braxos, separate the views by differentiating between fact, solution, and opinion, and then choose which of those pieces of information to use in the decision-making process. This process of evaluation of information reflects strategies of thinking towards ethical reflection (Osterweil & Bers, 2022). *Quandary* even includes classroom materials to prompt discussion, exemplifying how serious games can be embedded into curricula to stimulate ethical discourse.

4.2.2 *Fable III*

Fable III is a commercial game, developed by Lionhead Studios and published by Microsoft Studios in 2010, represents a significant example of how video games can facilitate ethics education. This role-playing game places players in a fictional universe called Albion, where the players go on missions to level up their avatar. The players make "ethical decisions in the game, such as whether to drain or preserve a lake, or sacrifice a friend or villagers" (Schrier, 2015a, p. 410). These decisions have meaningful consequences within the game world.

Schrier's (2015a) EPIC framework provides a systematic approach for analysing how games like *Fable III* can support ethics education. According to Schrier (2015a), *Fable III* effectively employs several key strategies from the EPIC framework. Most prominently, it utilises role-taking and role-playing (S3) and also employs the "choices and consequences" strategy (S6), creating what Stevenson (2011) classifies as an ethical game where "decisions

could result in changes in, for example, reputation, goodness or evilness, or karma" (p. 412). This approach allows players to experience the consequences of their ethical choices in a safe virtual environment, as described within this dissertation in Chapter 2, specifically by Camilleri (2015b) in section 2.3.2, Facchino et al. (2025) in section 2.4.1, and Schrier (2021) in section 2.5.

Strategies S3 and S6 are only two of the ones adopted by *Fable III* for teaching ethics. Schrier illustrates a template for the EPIC framework using *Fable III* to show how a game can be appraised for its use in ethics education; and as discussed earlier, having multiple educational goals and using various strategies. Table 1 below is:

...an example of the strategies and goals (highlighted in grey) that are potentially employed by...*Fable III*, as suggested by empirical results...and extrapolated from personal gameplay experiences with *Fable III* (however, these would need more empirical evidence to support). *Fable III* could potentially meet different permutations of goals and use different strategies to fulfil those goals; however, evidence does not lend as much support to *Fable III*'s ability to meet goals E6 and E7, or use strategies S1, S2, S7, S10, or S11. Designers and educators could use this chart to identify a particular

game's potential for meeting particular goals and strategies.

(Schrier, 2015a, p. 415)

Strategies		Goals						
		E1: Ethical Awareness	E2: Emotional Intelligence	E3: Empathy	E4: Reasoning	E5: Reflection	E6: Character	E7: Facility with Issues
	S1: Emotion							
	S2: Diaries							
	S3: Role-play							
	S4: Story							
	S5: Modeling							
	S6: Choices							
	S7: Simulation							
	S8: Social							
	S9: Deliberation							
	S10: Real-world							
	S11: Procedural							
	S12: "Nudges"							

Table 1 Framework grid for using video games in ethics education (Schrier, 2015a)

Schrier argues that role-play games like *Fable III* "can motivate participants to experiment with new identities and roles, take risks and push boundaries and practice certain behaviours, without worrying about the dire consequences that could occur in real life or in a traditional classroom" (Schrier, 2015a, p. 397), thus further supporting the idea that games can be used as moral experimentation laboratories. *Fable III* is rated by ESRB as

M-Mature audiences 17+, thus raising ethical questions on its use for classroom contexts. This will be commented on in sections 4.3.1 and 4.4.

4.2.3 Journey

Journey represents yet another strategy to ethics in gaming, focusing on the emotional connection rather than explicit moral choices. Created by ‘thatgamecompany’, *Journey* was designed with the explicit purpose of delivering a cathartic emotional perspective and experience to games. According to Jenova Chen, *Journey*’s designer, the game was specifically created to address “the connection people form with one another in their journey through life” (Crecente, 2013). Schrier (2015a) places the game squarely in the S1 Emotional strategy, where unlike games that present explicit ethical dilemmas, *Journey* embeds ethics in the fabric of its cooperative gameplay, where players that randomly meet each other during the game’s (or journey’s) progress can assist each other but cannot communicate verbally. The developer describes how the game was designed after identifying the emotion of “connection” through market research, including speaking with astronauts who described how space travel left them “more spiritual and more philosophical” (Crecente, 2013).

Therefore, by using game mechanics to attempt to foster genuine human connection in a digital space, *Journey* aims to help players develop empathy and consideration for others, which is Schrier’s (2015a) E3 educational goal. This approach aligns with emerging research showing that “immersive gaming experiences can induce significant changes in attitudes, decrease denial, and increase empathy” (Shliakhovchuk, 2024, p. 1), and

“affecting individuals emotionally could lead to more profound and lasting changes in attitudes and views” (Shliakhovchuk, 2024, p. 3).

Recent scholarship underscores emotional education as foundational to ethical development, bridging cognitive and affective dimensions in moral reasoning, as discussed in section 4.1.1. Schneider et al. (2022), through theory and empirical results, propose the application of a Cognitive-Affective-Social Theory of Learning in Digital Environments, or CASTLE, which emphasises that learning in digital contexts is not purely cognitive but significantly influenced by social elements that activate learners’ cognitive, affective, motivational, and metacognitive processes. This further validates *Journey* as a good candidate for an ethics educational tool and supports this dissertation’s inquiry into psychological theory in later sections. This perspective also supports further research and investigation in this area for ethics education.

4.2.4 A Curriculum to Meet the Challenge

The scholarly discourse around *Quandary*, *Fable III*, and *Journey* reveals different but complementary strategies to ethics education through digital gaming and this supports further Schrier’s multiple strategy and goals approach to the EPIC framework. However, the fact that different games cater for different outcomes using different strategies and competencies could also be a limitation for such different games like *Fable III* and *Journey*. While applying Schrier’s (2015a) EPIC framework, we have to ask ourselves if there is such a game that ticks all the boxes. In the absence of such a game, the first step to an implementation for research or a pilot study, would be the creation of a digital-game based

ethics curriculum for the Maltese context which uses a game library, rather than merely one or a just a few games; that is, a DGBL curriculum with a library of games that ticks all the boxes in the EPIC framework, with guidelines for all the strategies and outcomes for ethics teachers.

Fable III and *Journey* are examples that had commercial releases and were not released strictly for educational use and design, as a serious game. However, as discussed above, this does not mean they should not be taken seriously. Narrative-driven and serious games offer a rich medium for ethics education but their impact is maximised when coupled with reflection and dialogue. These insights set the stage for considering a provocative question: If even commercial entertainment games can spark ethical thinking, how might we deliberately repurpose them in the classroom? The next section focuses on that challenge.

4.3 Repurposing Entertainment Games for Ethics

4.3.1 The Case for Grand Theft Auto

In recent years, educators and scholars have increasingly experimented with repurposing commercial video games for education. These refer to titles that are originally developed for fun and profit. This approach differs from using purpose-built serious games in that it takes existing popular games and reframes them within a learning context. This may include controversial games that may even have gameplay that places the player and/or their avatar in immoral action. Many students are already deeply engaged with these

games and if these games contain ethical dilemmas or social themes, why not leverage that already pre-existing engagement for education? In his doctoral ethnographic study of how white adolescent males critically engage with race in *Grand Theft Auto V* (GTA5), Paul Darvasi (2019) argues that instead of shunning controversial or violent games, schools might embrace them critically. He states that GTA5 is:

“emblematic of the public controversies that associate video games with violence, misogyny, and damaging depictions of race and gender. However it is also a layered referential and self-reflexive text that roundly critiques US culture, including the pernicious complicity of media on issues of identity.” (Darvasi, 2019, p. II)

As educators, we need to reflect on the benefits of sanitising our approaches to ethics education. How can we teach resilience, reflection, and ethical decision-making for challenging real-world issues if we do not find a way to discuss them in the classroom? GTA5 by Rockstar Games, and other games that include violence and other immorality, are where many students are spending their time, especially considering GTA5 has over 210 million copies sold worldwide (Takahashi, 2025). “The tendency for schools to keep controversial games at a distance may neglect a need to better equip adolescent boys with the tools to critically consume the complex media in which they are immersed” (Darvasi, 2019, p. ii). This research’s focus on male players stems from it taking place in a boys’ schools, and the game’s appeal to the male gender. In fact, statistics show that in the UK, “despite *Grand Theft Auto*’s overall popularity, more than four in five female gamers reported never having played in this series of video games” (Clement, 2024).

Darvasi's work is a well-cited example of pedagogically repurposing an entertainment game with open-world crime gameplay, infamous for its violence and amorality, turned into a learning tool and case study on social issues. He had the students play the game at home (with parental consent since the game is also rated by ESRB as M – Mature Audience 17+) and document their in-game experiences through journals and creative projects. This once again echoes Schrier's (2015a) EPIC framework, focusing on S2 and S1 strategies, respectively, leveraging the effectiveness of reflective writing, even if the diary is not part of the game mechanic. Although not cited by Darvasi (2019), one can see the applicability as discussed in the previous sections of this chapter.

Darvasi sees the educator as a facilitator in this case (echoing Lipman's P4C approach) to guide interpretation. He notes that games like GTA5 are inherently political because they depict and exaggerate societal divisions and economic disparities satirically, but younger players might miss the irony and critical commentary altogether. The game became a springboard for analysing power and prejudice: students debated, for example, whether the game's hyper-violent sandbox was glorifying immoral behaviour or lampooning the player's own willingness to engage in virtual crime. By the end of the unit, Darvasi observed students starting to view the game not just as mindless entertainment but as a literary narrative to be "interrogated" for meaning (Campbell, 2017). Being an open-world sandbox invokes the discourse of the game being a meaning-making virtual playground as viewed by Potter and Cowan (2020) (see section 3.3). This outcome illustrates that with skilled facilitation, an entertainment game, even with a gameplay rewarding what in the real world is considered illegality and immorality, can be transformed into a serious inquiry into ethics and society. This places an onus on the ethics educator to be instrumental in adopting

methodologies based on facilitation (Lipman) and post-experiential reflection (Dewey) for digital game-based learning.

Narrative research explored using another version, *Grand Theft Auto: San Andreas* in urban high school English classes to analyse racial and gender narratives through urban literacy pedagogy meant to recognise (E1 ethical awareness in Schrier's [2015a]) and address issues of race and gender (E4 and E5). The study, led by Tanner (2023), demonstrates how the game, when taught alongside canonical texts like *To Kill a Mockingbird*, engaged students in critical discussions about stereotypes, resistance, and identity. Findings revealed that nontraditional texts (and as Darvasi's (2019) view, the game can be seen as a literary text) can foster vital, emergent learning experiences by connecting classroom content to students' lived realities. This related research, therefore, also leveraged the controversial GTA series of games successfully as an alternative *text* for deep reflection, similarly to Darvasi (2019). The use of such controversial games in an educational context raises important ethical questions, which will be commented on in section 4.4.

4.3.2 Pandemic Power

Another example of repurposing is the use of *Plague Inc.* by Ndemic Creations (ESRB Rating E-Everyone 10+), a popular pandemic simulation (using Schrier's (2015a) S7 strategy). In this game, the player assumes the role of a pathogen creator, evolver and spreader, trying to infect the world with the aim of annihilating humanity – an inversion that, surprisingly, can provoke thoughtful consideration of public health ethics. Some educators have leveraged this game to discuss topics like global justice (who gets the cure first),

utilitarian decision-making (sacrificing one city to save another, or when in the direst of situations should we impose human testing without ethical safeguards) and the ethics of misinformation during outbreaks.

Kelly (2021) reports a case study in which high school students played *Plague Inc.: Evolved* (an update to the original) and then engaged in a structured writing project analysing the ethical dimensions of pandemic response. By treating the game scenario as a prompt, students could reflect on real dilemmas like quarantine measures and resource allocations in a creative and critical way. One can only imagine how conducting this research, playing the game and reflecting on it during the actual COVID19 pandemic further compounded the game's impact. This illustrates how even a game about fictional pathogens, which positions the player as some kind of megalomaniacal villain bent on destroying humanity, can be recontextualised to teach empathy and moral reasoning during times of crisis. The key, therefore, is the framing provided by the educator. Without reflection, students might play a game and focus only on winning or on surface-level fun. As Schrier stated in Farber (2021), it is not enough to just provide students with a game, let them play and expect them to learn. With reflection, the game session becomes a forum for deep conversation.

4.4 Some Considerations

Reflecting on games like GTA5 that have very mature themes, in implementing entertainment games for ethics education, a few considerations are paramount. Firstly, age appropriateness and context must be taken into account. Not all commercial games are

suitable for all classrooms. For example, GTA5 might only be appropriate for older students (if at all), whereas a game like *Minecraft* can be adapted for younger learners to explore ethical themes. It could be a point of criticism for Darvasi's (2019) doctoral research considering the game was used with students possibly younger than the age restrictions of the game. He remarks that the reality he faced was that most students were already playing the game, and their parents consented to it. However, one needs to question the ethics of using an R-rated game in a classroom of age-ineligible students, even if some students are already playing it, there is parental consent, and it is being done in a controlled environment. One should question whether we, as ethics educators, held to high professional standards, should normalise or even encourage the purchase and usage of R-rated games by minors, especially for research purposes. There is also the matter that since not all students already play the game, would it mean the other minor-age students are going to be compelled to play the game? Apart from objections from students and parents, one also has to consider the possibility of conscientious objection from educators or entire school communities from using controversial game content in the classroom. When recontextualising commercial entertainment games, prudential judgment would be recommended as it can prove to be more complex, than using an expert-designed, purposefully made serious game. In summary, entertainment games – from big-budget titles like GTA5 to mobile or web games like Plague Inc. can be pedagogically repurposed to excellent effect, when done professionally. When students' passion for games meets a teacher's guidance, it creates a powerful synergy: enjoyment drives deeper exploration of ethics. Researchers like Darvasi and others show this approach can lead to increased critical consciousness, empathy, and ethical reasoning in learners. This paves the way for the next

chapter that deals with this passion and enjoyment for games, providing us with insights in engagement and leveraging that engagement to develop intrinsic motivation to be ethical.

It is worth noting that not all outcomes of games are automatically positive, and this is where a critical lens is important. Studies of youth playing commercial video games have found mixed effects on moral development. Some research suggests that certain types of gameplay can correlate with higher moral reasoning – for example, one study found a correlation between adolescents who played a greater variety of game genres scoring higher in moral reasoning scores on a standard test (Hodge et al., 2019). This could further confirm the need for a game-based curriculum that “ticks all the boxes” of Schrier’s (2015a) EPIC framework, and not merely using digital games sporadically as some sort of novelty factor. This reminds us that content and context matter greatly. Games that are ethically engaging – rich in narrative, dilemma, and require reflection – are more likely to promote moral growth, whereas games that merely reward violence or selfish behaviour without consequence could just as easily reinforce those patterns, unless recontextualised.

Another consideration is inclusivity and equity in technology democratisation. Some commercial games require high-cost devices, potentially pressuring students and teachers to upgrade hardware. Given possible digital divides in the school community, we must question the wisdom of using games that demand high-end devices, like those with dedicated graphics or other costly specifications.

For a more applicable use of Schrier’s (2015a) Epic Framework, I have distilled her educational goals and strategies into a checklist with straightforward instructions as an exemplar. The intention is for this to be usable by educators to assess whether a video game

is suitable for their practice (see Appendix A). In Appendices, B, C, D I applied the framework to 3 other games as an exemplar of outcomes that can come out of such analysis.

Chapter 5 – Intrinsic Motivation, Flow, and Virtue in Ethical Gameplay

The previous chapter explored game-based ethics education, arguing that effective learning can occur through sound strategies focused on meaningful ethical goals. Virtue development, particularly traits like empathy, fairness, and responsibility, emerged as key aims of ethical gameplay. However, achieving these outcomes requires an understanding of what motivates students to engage with ethical challenges. This chapter aims to do this by examining motivation and morality in educational games, particularly how Self-Determination Theory (SDT) enhances our understanding of student engagement in ethics learning. It also considers empirical findings from educational neuroscience, Flow Theory as a model of optimal engagement, and Virtue Ethics for moral development, arguing that digital games can motivate ethical action by aligning with SDT principles, fostering flow experiences, and providing opportunities for virtuous behaviour. The goal is a comprehensive understanding of how digital games can function as “a public sphere for rehearsing decision-making skills and performing different ethical mindsets or civic pathways” (Schrier, 2021, p. 243), to develop aware, virtuous youth. Understanding the student demographic in Maltese schools (ages 6 to 16), referred to as *Generation Alpha*, is essential.

5.1 Who are Generation Alpha?

Today’s young learners, often called *Generation Alpha* (Gen Alpha), are growing up deeply immersed in digital technology and interactive media. From a very early age, they navigate touchscreens, apps, and video games with ease. This ubiquity of technology shapes

not only their learning preferences but also their expectations of engagement in the classroom. Educational researchers Galea and Sayer (2025) note that Gen Alpha is sometimes termed “screenagers” (a portmanteau of “screen” and “teenagers”) due to their technological fluency, which offers opportunities and poses challenges for educators (Galea & Sayer, 2025, p. 67). One defining feature of this generation is the integration of gamification and AI in a visually driven world into everyday experiences. These can span from educational applications to routine tasks, which means that “screenagers” are frequently exposed to game-like reward systems in learning contexts (Galea & Sayer, 2025, pp. 67–90). Galea and Sayer further argue that:

On the one hand, gamification can enhance engagement, motivation, and learning outcomes; on the other, it raises concerns about reduced attention spans due to anxiety and stress, the blurring of lines between entertainment and education, the loss of motivation, and the potential for over-reliance on external rewards. (Galea & Sayer, 2025, p. 67)

In short, Gen Alpha learners thrive on interactivity and instant feedback, which DGBL excels at (Rahiman et al., 2023), as discussed in section 2.2. However, educators must be mindful of the possibility that extrinsic rewards can undermine deeper learning or intrinsic interest. Chou (2016) notes that gamers find fun in strategy and social interactions, not just problem-based learning. This suggests that ethics games should go beyond badges and leaderboards to engage students meaningfully. This chapter will explore what keeps students engaged in digital games, what they love about them, and how to teach them to embrace an ethical life. This resonates strongly with Schrier’s (2021) views on distinguishing

between mere trend-chasing superficial gamification and digital game-based learning, as discussed in section 1.5.

5.2 Intrinsic Motivation and DGBL in Ethics

Discussions of games and motivation must start with a key question: Why do we play? In this dissertation, I explore how DGBL can promote ethics. This leads to examining the another question: Since Gen Alpha is motivated to play digital games; why not harness that motivation for learning ethics in the classroom and beyond?

Self-Determination Theory (SDT), developed by Deci and Ryan in 1985, provides a powerful framework for understanding human motivation in terms of basic psychological needs. According to Ryan and Deci, “perhaps no single phenomenon reflects the positive potential of human nature as much as intrinsic motivation, the inherent tendency to seek out novelty and challenge, to extend and exercise one’s capacities, to explore, and to learn” (Ryan & Deci, 2000, p. 70). In other words, human beings are naturally inclined to find enjoyment and stimulation in learning and mastering new experiences, especially when those activities are freely chosen and satisfy our inner needs. This echoes Lipman’s views on P4C, and the joy of unravelling the discoveries and quandaries; the metaphorical shells on the beach that ought to be found and collected (see section 3.2.1). Extrinsic (external) motivation differentiates itself from intrinsic motivation because it refers to engaging in an activity to earn a reward or avoid punishment, through theories like *Behaviourism* (see section 1.4). On the other hand, intrinsic motivation involves doing something for the sheer inherent satisfaction of the activity itself. A child solving a puzzle for fun, or a student

immersing themselves in a complex game scenario out of curiosity, exemplify this drive. As discussed in section 1.5, a possible reconciliation between extrinsic and intrinsic reward can happen as suggested by Luria et al. (2021), but intrinsic motivation in ethics also implies being ethical even in the absence of any rewards; hence the focus of this dissertation.

However, the research in SDT also emphasises that the development of intrinsic motivation “will flourish if circumstances permit” (Ryan & Deci, 2000, p. 70), meaning that this motivation can therefore be diminished by unfavourable conditions. According to their findings, Ryan and Deci (2000) found that key conditions for sustaining intrinsic motivation are the satisfaction of three psychological needs, which will be discussed next.

5.2.1 Competence

Competence refers to the psychological need to feel effective in one’s interactions with the environment, enabling mastery of tasks and skill development. Competence is nurtured through optimal challenges, positive feedback, and opportunities for growth. Research shows that competence-supportive environments enhance intrinsic motivation and resilience, particularly in educational and workplace settings (Elliot & Dweck, 2005; Ryan & Deci, 2000). Its satisfaction correlates with improved performance and wellbeing across cultures. An easy way to understand this when applied to games is that if a task is perceived as too challenging, a student can lose interest and give up on playing, learning, or both. Excessive game difficulty undermines the psychological need for competence, leading to disengagement. In their research, Chase et al. (2021) and Ratinho and Martins (2023) found that overly challenging gamified tasks and competitive elements lose their novelty

factor and reduce students' failure tolerance and intrinsic motivation, leading to disengagement. Further research published by Karumbaiah et al. (2018) found that students who spent more than five minutes on a task were more likely to quit future tasks or levels. Frequent restarts of tasks or levels also correlated with frustration and increased likelihood of quitting, showing that tasks perceived as too difficult directly affect the persistence of student engagement (p. 174).

5.2.2 Autonomy

The need for autonomy involves volitional self-regulation, where individuals perceive their actions as self-endorsed, rather than being controlled externally (Ryan & Deci, 2000). Unlike independence, autonomy reflects an internal locus of causality, facilitated by choice, rational provision and minimal pressure. Deci et al.'s (1994) research shows that participants reporting greater pressure to do well displayed less subsequent intrinsic motivation. It concluded that contexts that support autonomy enhance intrinsic motivation, facilitate internalisation of external regulations, and promote wellbeing. Elements fostering autonomy include providing meaningful rationales, acknowledging feelings, offering choice, and minimising controlling language (Ryan & Deci, 2000). The validity of autonomy was also supported in research within healthcare (G. C. Williams et al., 1998) and demonstrated in education (Reeve et al., 1999). Thwarting autonomy predicts disengagement and diminished wellbeing. The universality of the need for autonomy across cultures was also studied and confirmed by Chirkov et al. (2003). While the results were compelling, a point of contention is that the study focused on Korea, Russia, Turkey, and the United States, thus limiting its

scope to the global north and omitting the global south, challenging any possible claims of universality. The issue of autonomy in SDT informs strategies of digital repression, as mentioned in section 2.4.3. Digital game developers can design games to indoctrinate or coerce students towards a single right answer in an authoritarian style. Coercion in games leverages power dynamics to restrict player agency or manipulate decisions through tactics like choice architecture, which steers players towards specific outcomes. (Goltz, 2020). It can also be done with tactics like narrative manipulation, where ideological messages are embedded through scripted scenarios (such as propagandistic quests) that limit critical engagement (de la Cruz et al., 2025). Thus, denying players their agency and autonomy with such tactics, not only misaligns with the views of Dewey (1938) and Lipman (2003) (See Chapter 3), but also misaligns with Self-Determination Theory. This misalignment with autonomy erodes the motivation to engage with the game and, consequently, to learn from it.

5.2.3 Relatedness

Relatedness encompasses the need to feel connected, valued, and secure within social groups, and humans thrive best within contexts of relatedness and mutuality (Ryan & Deci, 2000). Satisfying relatedness fosters emotional security, trust, and internalisation of social norms (Baumeister & Leary, 1995). Attachment research links secure relational bonds to exploratory behaviours and prosocial motivation (Ryan et al., 1995). Empirical cross-cultural studies argue for the universal role in wellbeing, though expression varies by societal values (Chirkov et al., 2003). A question about this approach might arise concerning

the potential incompatibility between the need for autonomy and a more collectivist or communitarian understanding of being human. In other words, how does one reconcile the need to be autonomous with the need to be connected to others? As explained by Chirkov et al. (2003):

There are other ways to consider why autonomous functioning is not incompatible with collectivism or other cultural forms that emphasize (*sic.*) interdependence and relatedness. Because autonomy concerns volition, persons who are strongly connected with others often function with those others' interests in mind. Put differently, if others are integrated within oneself, doing for or conforming with those others could be fully volitional...those who identify with a group or collective may adopt values or behaviors (*sic.*) that lend priority to that group, and, in doing so, they can be acting autonomously. (p. 107)

In DGBL, this need is addressed through social interaction, collaborative gameplay and community engagement. Unlike traditional learning environments, digital games inherently facilitate social dynamics through multiplayer modes, leaderboards, and shared objectives, creating opportunities for learners to interact within structured yet flexible frameworks (Ryan et al., 2006; Aguilera & de Roock, 2022); spaces which Potter and Cowan (2020) refer to as meaning-maker virtual playgrounds (see section 3.3). Relatedness and community also do not exclude a healthy rivalry and competitive gameplay to stimulate intrinsic motivation. Empirical research validating self-efficacy and learning motivation

confirms that DGBL in a competitive environment produces higher learning achievement than just digital game-based learning alone (Chen & Tu, 2021).

Games can satisfy all these needs. A well-designed educational game offers meaningful choices (supporting autonomy), adaptive challenges and feedback that foster effectiveness (supporting competence), and often a social or narrative context that connects players with others or characters (supporting relatedness). When these needs are met, players are more likely to value the activity. They play not for a teacher's prize, but for the satisfying experience, reflecting the mindset desired for ethical behaviour – to do good for its own sake, even without rules or authorities. An ethically themed game, where students assume the role of a justice-seeking hero and can make decisions, could motivate them to engage with fairness or empathy, as those decisions feel meaningful and self-endorsed. Indeed, SDT posits that people in general experience “deep levels of satisfaction and experiences such as increased happiness, well-being, growth, and even flourishing” when their basic psychological needs are met (Rigby, 2015).

Liang (2024) explores how video game design uses scaffolding techniques to enhance player engagement by meeting psychological needs like autonomy, competence, and relatedness, based on SDT. Liang also invokes Vygotsky's views to argue that effective scaffolding is crucial to assist the competence of students so that tasks are not perceived as exceedingly difficult, leading to quitting. However, games should balance structured guidance with freedom of exploration to satisfy different players' needs. For instance, a game should allow players to skip or disable any tutorials for assistance, for the sake of the more skilful or experienced players. Games ought to offer enough structure to facilitate player learning, while also permitting exploration, creativity, and self-directed discovery

(Liang, 2024). Liang focuses on specific games, which may not generalise to others, yet their theoretical framework and empirical study enrich the cited literature. This underscores the necessity of establishing solid rationales for implementation before concentrating on games, as this dissertation aims to achieve. The emphasis should be on educational outcomes and ethical core values, then utilising a solid framework to identify or create the most fitting game, rather than simply exploring existing options.

5.3 Flow in Moral Learning

The relationship between playing digital games and the element of fun in a learning context has also been studied, leading to empirical findings on engagement that support SDT and the Flow theory approach discussed in this section. As Nadeem et al. (2023) have found through empirical research, “digital game-based learning has a more positive impact on student engagement and motivation compared to traditional online activities” (Nadeem et al., 2023, p. 1).

5.3.1 Being In the Zone

Flow is defined as a state of optimal experience where individuals are completely involved in an activity, experiencing deep absorption and intrinsic reward. This internal sensation of reward or satisfaction relates to the satisfactions and intrinsic motivation discussed in the previous section on Self-Determination Theory by Ryan and Deci (2000). Games captivate players by inducing flow, where they can merge action and awareness, becoming fully immersed in an “autotelic” activity, which is pursued for its own sake (Csikszentmihalyi, 2014). This autotelic nature (from Greek *auto* [self] and *telos* [final end]),

“an end in itself”) underscores why gaming feels fulfilling beyond mere outcomes and why the intersection between games and flow is being discussed in this dissertation. Coined by Mihaly Csikszentmihalyi, flow describes being “in the zone”, where players lose track of time and self-consciousness, finding the process intrinsically rewarding irrespective of external goals. It is the state achieved by athletes who are completely immersed in their activity and by actors or singers during a performance – it is what one would colloquially refer to as a state of “concentration”.

Flow emerges under specific conditions: an optimal balance between perceived challenge and skill, clear goals, and immediate feedback, the latter making it parallel with SDT. Well-designed games maintain this “flow channel”, which is the zone between anxiety and boredom, by scaling difficulty with players’ abilities. “Flow denotes the holistic sensation present when we act with total involvement” (Csikszentmihalyi, 2014, p. 136). Furthermore, echoing SDT’s (Ryan & Deci, 2000) concept of competence, “flow seems to occur only when persons face tasks that are within their ability to perform” (Csikszentmihalyi, 2014, p. 138), because it deals with a balancing of dopamine (the pleasure chemical transmitter in the brain, or neurotransmitter) with noradrenaline (the stress neurotransmitter) in the brain, requiring tasks to be pleasurable, yet challenging, in the right amounts (van der Linden et al., 2021). A musician's performance of a manuscript seen for the first time differs from playing a rehearsed piece. While the latter still incurs stress from live performance pressure, rehearsal alleviates some of that stress, balancing it with the pleasure of making music.

5.3.2 Flow and Intrinsic Motivation

Flow contributes directly to intrinsic motivation (due to the controlled release of dopamine as a reward) and tends to motivate repetition and persistence. “Because the flow state is intrinsically rewarding, students seek to replicate flow experiences” (Admiraal et al., 2011, p. 1186). This leads students to push themselves to meet new challenges and develop new skills (the same way a gamer chooses higher levels of difficulty in a game because the challenge is more fun):

As students seek to master new challenges, they develop greater levels of skill. Once mastered, they must identify progressively more complex challenges to create an ideal match for their skills. Flow thereby invokes a growth principle, in which a more complex set of capacities is sought after and developed. (Admiraal et al., 2011, p. 1186)

In essence, after a learner has enjoyed the fulfilment of tackling a difficult problem or making a challenging decision in a game, they are likely to embrace the next challenge, no matter how tough it is. This establishes a positive feedback loop, where the game consistently demands greater skill and a deeper comprehension. This is what Csikszentmihalyi describes as a “growth principle, in which a more complex set of capacities is sought after and developed” (Admiraal et al., 2011, p. 1186). The growth principle mentioned here is not to be confused with Dweck’s (2006) *growth* mindset views, although they may share similar discourse. Csikszentmihalyi’s growth principle is rooted in the experiential state of flow, where personal growth emerges from the immersion requiring

increasing amounts of challenges as the person becomes more skilful. This is done in order to maintain the access to that optimal experience of flow. It is described as a teleonomy of the self, whereby “the optimal level of challenge stretches existing skills...resulting in a more complex set of capacities for action” (Csikszentmihalyi, 2014, p. 244). In contrast, Dweck’s growth mindset is a theory about the relationship between ability and belief. In it, she proposes that a “growth mindset” is a belief that one’s basic qualities and abilities are things that one can cultivate and develop through effort, good strategies, and support from others, rather than fixed traits. This enables people to embrace challenges and persist through them in order to achieve higher levels of success, leading to personal development (Dweck, 2006; Dweck & Yeager, 2019).

In ethics education, Csikszentmihalyi’s growth principle suggests that students can gradually tackle more complex moral situations, enhancing empathy, judgment, and moral reasoning through ethics games. This supports a game design that aims for educational goals and a hierarchy of required skills, similar to the qualifications framework in Maltese ethics assessment methods discussed in section 4.1.1. As students reflect on outcomes and retry, they practise morality in a safe yet engaging environment, necessitating increasing challenges to maintain engagement without overwhelming them. This ties into the competence need in SDT from section 5.2.1.

5.3.3 Repetition, Habits, and Virtue

What are, therefore, the implications of repetition of ethical practice? Virtue ethics provides an insightful lens, where unlike rule-based ethics that investigates the right action, Virtue Ethics asks “what kind of person should I be, and how do I become that person?” It

emphasises habits and character developed through practice. From an Aristotelian perspective, moral virtues are acquired by doing moral acts repeatedly until they become second nature. Aristotle wrote, “we become just by doing just acts, temperate by doing temperate acts, brave by doing brave acts” (Stevenson, 2009). Repeated actions form mental habits. While slaying a dragon or solving a village dispute in a game differs from reality, the mindsets overlap. Aristotle highlights habituation, where the formation of virtue as part of a person’s character is a matter of habit (Stevenson, 2009); just like a skilled musician practises music, so does one become virtuous. Educational games allow practising virtue in engaging ways, especially when they induce flow. In flow, students commit fully to in-game decisions; so moral choices feel significant. This investment ensures that lessons become internalised. Games provide what is known as situated learning; concepts learned in context and tied to experience. A student experiencing an ethical dilemma in a game may internalise the lesson more deeply than reading about it in a textbook. Therefore this intersection between flow theory, habituation, and virtue further strengthens Schrier’s (2015a) EPIC framework and the emphasis on the E6 educational goal. It also shows that DGBL can be an excellent vehicle for moral development and Virtue Ethics.

Arvanitis and Stichter (2023) integrated Self-Determination Theory with Virtue Ethics. They analyse scholarship on motivation, basic psychological needs and moral development towards “moral integration”. Intersecting with Self-Determination Theory (SDT), moral integration refers to the deep embedding of moral values and virtues within the self, leading to morally virtuous behaviour that is motivated internally rather than by external rewards or pressures. It involves the internalisation of self-endorsed values. The authors, referencing SDT, assert that for an individual to consistently and authentically

engage in moral actions, they must weave moral values into their personality. This involves not just understanding and identifying with these values, but also harmonising them with thoughts, emotions, and motives. When this integration occurs, moral actions feel aligned with one's identity—referred to as moral self-concordance. When considering Digital Game-Based Learning (DGBL), this concept intersects with flow theory. It emphasises the need to respect the student's autonomy and the authenticity of learning in fostering good habits, particularly through mechanisms that support the student's flow experience. This process is essential for integrating moral virtues into the student's personality, thereby enriching this dissertation's exploration of the connections among SDT, flow theory, and Virtue Ethics. Arvanitis and Stichter (2023) see moral integration (the process of becoming virtuous) as

- needing a gradual developmental process through a supportive environment,
- requires the internalisation of values rather than simply obeying rules (further supporting the methodologies and strategies discussed in Chapters 3 and 4)
- involving a harmony between beliefs, feelings, and intentions,
- requiring critical reflection, thus also echoing Schrier (2021), Sicart (2015).

Ultimately, moral integration is essential for developing moral virtue and wellbeing, or *eudaimonia*, which is a state of flourishing that includes living meaningfully and ethically (Arvanitis & Stichter, 2023).

5.4 Games as a Vehicle for Virtue Ethics

Virtue ethicists argue that ethics is not just a system of rules to follow, but a journey of personal growth towards the good life – a life of flourishing (*eudaimonia*) through the

development of virtue. As Russ Shafer-Landau explains, instead of starting with rules or consequences, “we would start with a picture of the good life and the good person, and define our duty by reference to these ideals. That is precisely what virtue ethics recommends” (Shafer-Landau, 2024, p. 279). Teaching ethics from a virtue perspective encourages students to aspire to do good, not merely understand rules. This approach aligns with educational games that inspire intrinsic ethical motivation explored in this chapter. A game can illustrate a good life through narratives and characters reflecting virtues or vices, allowing exploration of those roles. Instead of lecturing on honesty, a game immerses students in scenarios of cheating temptation, letting them experience the consequences of honest versus dishonest actions. These experiences demonstrate that a virtuous life with honesty, courage, and justice yields better outcomes like trust and respect, compared to a life of vice, thus illustrating the good life interactively.

In his chapter on play and virtue ethics in *The Gameful World*, Sicart (2015) argues that play is not just mindless fun; it can be a serious form of “practising life”. He asserts that, “the good life is not only the practice of activities, it is also the capacity to reflect about the role of those activities in one’s life and sense of well-being” (Sicart, 2015, p. 226). However Sicart makes sure, like Schrier (2021), to distinguish between a superficial trend-chasing gamification of education and games that include mechanics of reflection. The need for reflection echoes the arguments made in this dissertation in section 2.4.3 and Dewey’s views discussed in section 3.1. Sicart states:

My main concern with many gamified systems is their focus on making the activities that lead a good life look like (competitive) games, disregarding the need for internal reflection and effort to

perform activities that we think will lead to our good life. (Sicart, 2015, p. 226)

Sicart also unifies the pursuit of the good life through games with Self-Determination Theory's requirements of autonomy and Flow Theory's autotelic requirement. Play is something that students choose to do freely, thus making it autotelic, and "because play is autotelic, it is better suited to encourage autonomous thinking" (Sicart, 2015, p. 240). Sicart emphasises self-expression; through play, students express who they are or explore who they could be. A normally timid student might role-play as a brave leader in a cooperative game, exploring courage in a safe environment, which could then be acted out in real life, as observed by Potter and Cowan [2020]. These experiences turn virtues into tangible parts of students' narratives and identities in the game world and beyond (Sicart, 2015).

Habituation, however, does not only train people in virtue – it also has the potential to train people in vice, as taught by Aristotle. Therefore habituation in digital games cannot be seen as isolated from ethical game design that not only keeps in mind the frameworks of Chapter 4, but also prioritises the wellbeing of the students from the perspective of character formation. This is further discussed in section 5.5.

When considering this character-forming aspect of DGBL, we are reminded of the importance of careful curation and design, as discussed in section 4.4. As argued by Sicart (2015), educators should select games that embody the kind of ethical complexity and the virtue-relevant challenges that invoke deep reflection; pursuing what Sicart (2015) calls playful, ethically relevant technologies. Educators using digital game-based learning must frame the game experience and guide reflection to achieve educational goals. They should

also grasp the power of this technology through SDT and Flow theory, leading to the next section.

5.5 SDT, Flow, and Gaming Addiction

As discussed in section 2.4.3, games can be designed to facilitate changes in attitudes. This highlights a link between playing games and personal growth and transformation – an idea further explored in this chapter from a psychological perspective. It is therefore imperative that educators investigate the implications of what wielding such powerful tools means, as this can be double-edged (Hodge et al., 2019). As Kolek et al. stated in their research:

Narrative video games are widespread phenomena in our societies and culture. Our meta-analysis provides evidence that they are not only part of our world, but that they are also shaping how we think about it. (Kolek et al., 2023, p. 13)

5.5.1 Vulnerable to Our Needs

When applying the SDT and Flow frameworks, one can understand some of the vulnerability that human beings, including students, may have to the negative aspects of media content. Mills et al. (2018) applied the SDT framework to understand problematic video game use (PVGU), highlighting that video games are designed to satisfy the psychological needs of SDT proposed by Ryan and Deci (2000), as highlighted in this chapter in section 5.2. Through this chapter, one can see that the satisfaction of these needs makes games highly appealing, making students feel powerful and in control, autonomous, and

connected to others out of volition. It follows that students will seek these satisfactions, especially when not found elsewhere. In fact, this study also found that when daily life frustrates these needs, such as feeling incompetent or isolated, individuals may over-rely on games as a compensatory mechanism, leading to PVGU and addiction (Mills et al., 2018). The consequences of excessive gaming are recognised by the World Health Organisation (WHO) and included in their 11th Revision of the International Classification of Diseases (ICD-11). For the purposes of this dissertation, gaming addiction (gaming disorder) and PVGU are defined based on the ICD-11 as:

...a pattern of persistent or recurrent gaming behavior (*sic.*) (“digital gaming” or “video-gaming”), which may be online (i.e., over the Internet) or offline, and manifested by the following three criteria: (1) impaired control over gaming (e.g., onset, frequency, intensity, duration, termination, context), (2) increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities, and (3) continuation or escalation of gaming despite the occurrence of negative consequences. (Darvesh et al., 2020, p. 2)

5.5.2 Loss of Control

Flow experiences, as explored by Footitt et al. (2024) can further exacerbate this risk. They identified flow profiles, such as “High Flow With High Loss of Control” (p. 5), where intense immersion and loss of time perception (from being in the zone) are linked to higher risks of disordered and excessive gaming. Hull et al. (2013) also noted flow, alongside

happiness and game characteristics, as a predictor of gaming addiction, suggesting that the engaging nature of flow can become a double-edged sword. On the other hand, Kuss & Griffiths (2012) question whether flow experience is associated with addiction to internet games. Although their publication is not as recent as that of Hull et al., they do raise the interesting question of whether or not a gaming addict can still access the flow experience. They argue that addicted players are unlikely to experience flow. Addicted gamers continue playing despite a lack of enjoyment. This highlights the work by Footitt et al. (2024) and calls for further investigation, as their research includes not just frequency or intensity of flow, but also the player's loss of control. Thus, addiction can be seen as surrendering control, akin to enslavement to technology for desired outcomes. In terms of flow, these outcomes involve chasing a certain mix of neurotransmitters, particularly dopamine, which induces pleasure. Nurlaelasari et al. identified dopamine and loss of control as factors in addiction to technology, especially gadgets, in Gen Alpha:

Positive experiences from gadgets, such as playing games or watching videos, trigger children to continue repeating these activities, creating a pattern of dependency. And low self-control also contributes to this addiction. Children, who are still developing, often do not have the skills to manage gadget usage time or recognize (*sic.*) boundaries. When faced with stimuli from gadgets, they may find it difficult to resist, making them even more susceptible to addiction...Many applications and games are designed with elements that intentionally make users addicted, such as reward systems, constant notifications, and interactive

features that stimulate dopamine. (Nurlaelasari et al., 2025, pp. 61–62)

Their study indicates that one of the factors causing children to become addicted to gadget use is the lack of parental supervision and parenting, which causes problems with children's physical and mental health. They suggest strategies like scheduled usage or screen time regulating applications installed on the children's gadgets (Nurlaelasari et al., 2025), thus not denying the use of technology, but prescribing regulation and balanced use. In her research within the Maltese context, Zammit (2022) corroborated the same stance, where many of the participants in the study highlighted "the importance of supervising adolescents' screen time" (p. 138). However, in some of the participants' responses, the interesting narrative resulted in the onus of responsibility not just on the parents and the young users alone, but also on the rest of society. It would be interesting to look at how, for instance, algorithms and other factors like marketing and FOMO (fear of missing out) are stacked against us to make us maximise our screen time, so the rest of society should not be exonerated from this. She advocates against a deficit mentality, which exclusively blames youths and their parents and in favour of focusing on the role of all stakeholders in education in helping students make more ethical use of technology. As two of the participants in the study stated, "It takes a village to raise a child" (Zammit, 2022, p. 218).

SDT's highlight on "relatedness" as a psychological need, also finds its way in group psychology, thus highlighting further the importance of triangulation between DGBL, Flow and SDT. It invokes peer dynamics involved in a need for belonging to a group, which although beyond the scope of this dissertation, sheds light on pressures like the ones mentioned above:

Some of these pressures may include the fear of missing out (FOMO) on experiences that they see online, an addiction to and overreliance on digital validation for self-esteem, the pressure to 'look good' and achieve success, the challenge of measuring up to one's online persona, and the perception that there is no room for failure, as social media often creates the illusion that everyone is always succeeding and happy. (Galea & Sayer, 2025, p. 37)

5.5.3 Powerful Tools Should Be Wielded Wisely

The inquiry into Self-Determination Theory and Flow Theory shows that educators utilising DGBL for ethics education wield significant influence due to gaming's immersive and motivating nature. This power of influence needs to be tempered by the educator's attitudes and choice of methodology as discussed in section 2.4.3 and in section 3.2.2. Indoctrinating approaches in methodology should be avoided in favour of preserving ambiguity and authenticity (Nardo & Gaydos, 2021), otherwise, the use of these tools could be a hinderance to critical thinking rather than its conduit.

This dissertation focuses on DGBL in schools and teaching "with" games, but it is also important to teach "about" games for student wellbeing, especially when creating a digital game-based curriculum. Content addressing issues like excessive use, societal pressures such as FOMO, mechanisms for addiction, self-awareness of addictive behaviours, self-regulation, and strategies for resilience should be part of ethics education, using any

learning tools. The development of good habits through engagement with digital games must be balanced against the risk of forming bad habits or vices.

Educators should involve students in learning by setting clear gaming guidelines, ensuring a balance with other activities, and monitoring engagement to prevent excessive play. Tailored serious games designed for educational purposes can include time management features and analytics to track playtime. This underscores the need for dialogue among educators, game developers, and EdTech companies to create and vet educational games with safeguards in place to align with the preventive goals outlined in this chapter.

At home, parents and other guardians play a critical role, but their role is not restricted only to the home. Implementing safeguards in general should be a school community effort, as inferred by Zammit (2022). It should be a collaborative effort between the school community, the parents or caregivers, and indeed, the community at large. Maltese schools and educational institutions should be active in community outreach. To this effect, the digital education strategy of Malta for 2024-2030 states that it will “facilitate information sessions for parents on safe internet and technology use to address concerns about addiction, isolation, and electronic crime” (Directorate for Digital Literacy and Transversal Skills, 2025, p. 55), showing that community outreach on such matters is a top national priority.

5.6 The Digital Native Mindset

For Generation Alpha, the appreciation of the approaches discussed in this chapter may be not just effective, but essential. This generation's "digital native" (born in a generation of immediately available digital technology) mindset means they will respond to interactive, gamified learning, but they will also demand authenticity and autonomy. Educating Gen Alpha means "aligning with their specific needs, and creating a more personalised, student-centred approach" (Galea & Sayer, 2025, p. 91).

Ethics digital games, when thoughtfully integrated, can be a part of such an approach, as they meet students in their digital world, speak in the language of stories and gameplay, and allow personalisation through choice and role-play. A student-centred approach to moral education might involve letting students choose which ethical dilemmas interest them to explore in a game, or encouraging them to even design their own mini-games about issues they care about. With the exponential rise of Artificial Intelligence (AI), we are now at a point where we can all create games for use in the classroom, leveraging AI. *Rosebud AI* is an online platform for such a purpose and it would be interesting (and beyond the scope of this dissertation) to look into how AI tools will be able to create games for ethics and how well they can be aligned to frameworks and theories discussed in this dissertation, including the safeguards to prioritise student wellbeing.

In conclusion, when executed with care, educational digital games can do more than engage students; they can inspire them to become better and more virtuous people, through a variety of strategies. This chapter has discussed the power of influence and psychological transformation that students garner through practising virtues like justice,

empathy, courage, and honesty, in ways that are both fun and formative. They allow students to see themselves as protagonists of heroic stories of wisdom and good practice in safe laboratories of virtue ethics, thus rehearsing what Schrier (2021) calls “ethical mindsets.” They can be provided with opportunities to reflect on what kind of person they ought to be. Such experiences, complemented by critical dialogue, can help bridge the gap between knowing what is good, to loving what is good, which is ultimately the aim of moral education. As Aristotle taught, the goal is not simply to perform good actions, but to cultivate a good character. Games, surprisingly or not, have a unique capacity to contribute to this timeless educational aim. In the hands of a trained and caring educator, with the right safeguards and policies, and with the inquisitive minds of Gen Alpha, the marriage of gameplay and virtue offers a promising path to develop ethical, empathetic, and intrinsically motivated citizens for our future world.

Chapter 6 – Conclusion and Implications for Ethics Education in Malta

This dissertation presented a conceptual investigation into the potential of digital game-based learning (DGBL) and gamification as innovative methodologies for ethics education in Maltese schools. It engaged with a multidisciplinary approach, merging the philosophy of education (with regards to teaching and learning methodology), game studies, and psychology of motivation. The principal contributions of this research demonstrate the significant educational potential of integrating digital games into ethics classrooms, highlighting their capacity to promote ethical reflection, intrinsic motivation to keep engaged with learning, and student wellbeing. By addressing this pedagogical value of games and the psychological mechanisms underpinning their efficacy for engagement, the study has constructed a rationale for adopting DGBL in ethics education in Maltese schools. This concluding chapter will summarise the key findings of this research, reflect on the implications for the teaching profession within the Maltese context, propose ways forward for research and pilot studies, and frame this study within the vision of Malta's current National Education Strategy 2024-2030.

6.1 Main Arguments and Contributions

This dissertation established that DGBL offers a transformative approach to ethics education by fostering active engagement, critical thinking, and moral reasoning in students. Drawing on Dewey's views on experiential learning and Lipman's Philosophy for Children (P4C), it argues that digital games align with student-centred pedagogies, creating immersive environments where learners can explore ethical dilemmas through narrative-

driven scenarios (Dewey, 1938; Lipman, 1988) (Chapter 3). The inquiry within this area highlights the compatibility of DGBL with Malta's National Curriculum Framework, which advocates for inquiry-based, student-centred learning (Government of Malta, 2012). The investigation of the intersection between P4C and DGBL proposed in this dissertation is also of great importance to the Maltese context, since the community of inquiry and P4C serve as a foundation for the ethics curriculum in Malta (Giordmaina & Zammit, 2019; Wain, 2016). The link between P4C and DGBL emphasised the importance of games not being coercive, preachy or doctrinal in their approach, but to allow room for authenticity, ambiguity, and the navigation of grey areas of morality, by neither being absolutist, nor overemphasising relativism. Not only is it important to preserve ambiguity within games, but coercive tactics that rob students of agency in decision making, were argued to be detrimental to the autonomy required for students to play games, have fun with them, and learn from them (de la Cruz et al., 2025; Goltz, 2020).

One of the first core clarifications of this dissertation was to distinguish between DGBL and Gamification. Gamification is viewed as introducing digital game elements like badges and leaderboards to non-game scenarios. The literature shows that many theorists advise against a superficial approach of merely chasing external rewards for ethics education (Bogost, 2014; Schrier, 2021; Sicart, 2015), and that one should aim higher than merely gamifying a worksheet or pop-quiz into a digital platform for mere novel appeal. The aim is to use games fleshed out with stories, enabling experiences for students that they can use as safe moral laboratories, free from real-world consequences and implications. This was a recurring theme throughout all the chapters of this dissertation, as different theorists implied similar arguments. Another theme is digital games being leveraged as spaces that

prioritise inclusivity by facilitating communication and group dynamics in the digital space (Camilleri, 2022; Schrier, 2021).

Central to this research was the EPIC (Ethics Practice and Implementation Categorisation) framework, proposed by Schrier (2015a) (See Chapter 4). This was critically assessed as a practical tool to guide educators in effectively selecting and implementing digital games for ethics education. It was also seen through the lens of its applicability in the Maltese context, viewing its parallels with the frameworks, content, and syllabi that are already established in Malta's ethics education programme. The potential and efficacy of digital games for critical reflection, when guided by educators, were illustrated through the analysis of different games, both serious and commercial. Games such as *Quandary*, *Fable III*, and *Journey* (also see Appendices B, C, and D for exemplars on assessing games through the EPIC framework) illustrate how narrative and mechanics can facilitate ethical deliberation as supported by both Schrier (2015a) and Camilleri (2015b). The framework's educational goals—empathy, perspective-taking, interpretation, and critical thinking (E6)—provide clear objectives for ethical learning, aligning with the cognitive and reflective processes defined by Schrier (2014). Its strategies, such as guided reflection and scenario-based gameplay, ensure that games are used purposefully to foster ethical deliberation rather than mere entertainment (Schrier, 2015a). The dissertation demonstrates the framework's applicability through examples like *Quandary* and other games (including in appendices B,C, and D), where players navigate moral dilemmas that mirror real-world ethical challenges, supported by the framework's emphasis on narrative-driven learning (Schrier, 2015a).

The EPIC framework's usability is enhanced by its flexibility, allowing educators to adapt it to various game genres and classroom contexts. For instance, *Quandary* targets younger learners with structured ethical scenarios, while *Journey* fosters empathy through abstract, non-verbal gameplay (Crecente, 2013; Osterweil & Bers, 2022). The framework's emphasis on reflection ensures that gameplay translates into meaningful learning, addressing concerns about superficial gamification (Sicart, 2015). However, its successful implementation requires teacher training to ensure educators can select appropriate games and facilitate post-game discussions effectively (McConnell & Thueme, 2022). The framework's alignment with P4C methodologies further enhances its relevance in Malta, where the community of inquiry is a pedagogical cornerstone (Giordmaina & Zammit, 2019; Wain, 2016) for ethics education.

This study distinguishes between serious games, like *Quandary*, designed for ethics, and commercial entertainment games. Serious games, with their resources and analytics, may better suit classroom settings. However, students engage with commercially available games frequently. Ethics educators can teach about these games for digital ethics and also teach with them by recontextualising. Ethical considerations include age appropriateness, conscientious objection, parental consent, and the pressure on students and teachers to own or purchase necessary games and hardware.

The psychological frameworks of Self-Determination Theory (SDT) and Flow Theory (See Chapter 5) provide evidence-based explanations for the motivational appeal of games. SDT's emphasis on autonomy, competence, and relatedness underscores how games can satisfy intrinsic psychological needs, fostering engagement and persistence in ethical learning (Ryan & Deci, 2000). Flow theory, with its focus on optimal experience, growth of

skill from challenges, and immersion, explains why games captivate learners, encouraging repeated practice (Csikszentmihalyi, 2014). The flow experience that encourages repetition and habituation aligns with classic Aristotelian Virtue Ethics and habit formation (Stevenson, 2009). However, this dissertation cautions that the immersive nature of games carries risks, such as gaming addiction or disorders. SDT and Flow theory can both explain the efficacy of DGBL in ethics education and these risks. This necessitates safeguards to prioritise student wellbeing (Darvesh et al., 2020; Mills et al., 2018), discussed in section 5.5.

Wellbeing also extends to the ethical design of games, ensuring they promote virtues rather than vices. Sicart (2015) underscores the importance of games that encourage reflection and autonomy, avoiding manipulative mechanics that exploit psychological vulnerabilities. Educators must curate games that align with the EPIC framework's goals, fostering empathy and critical thinking while mitigating risks like FOMO or digital validation-seeking (Galea & Sayer, 2025). Community involvement, including parental engagement and school outreach, is crucial to support balanced technology use, as highlighted by Zammit (2022). By embedding wellbeing-focused content in ethics curricula, such as discussions on self-regulation and societal pressures, DGBL can empower students to navigate digital environments ethically.

6.2 Implications for the Teaching Profession

Teacher preparation emerges as a pivotal factor influencing the successful integration of DGBL in schools. Effective utilisation of digital games (like any other digital technology) depends significantly on teachers' openness, adaptability, digital literacy skills,

and even general attitudes towards games (Camilleri, 2021). This dissertation started in Chapter 1 by commenting on the stigmatisation of play (Leaning, 2021; Paxton, 2024; Walsh, 2019) that could potentially permeate into the classroom. It also highlighted that research in Malta shows that teachers may favour teacher-centred approaches to learning, due to their perceptions of examination pressures (Borg, 2021). This landscape can stifle the openness to innovative student-centred methodologies. Bonnici (2015) found that most science teachers hold a positive view of DGBL but also showed that teachers who had already used games recorded a significantly higher attitude score than those who had not.

Teachers may lack familiarity with games and have varying levels of digital literacy. Therefore, teacher training programmes should include modules on DGBL that focus on game selection, facilitating reflective discussions, and integrating P4C methodologies to help teachers understand digital spaces frequented by digital natives. Training should also prepare educators to navigate the technical and ethical challenges of using digital games, prioritising ethical use, screen time management, and student wellbeing.

Classroom limitations and resource availabilities in school contexts also need to be considered. Ethics lessons are no longer than forty minutes long and embedded within busy timetables. School logistics can pose a challenge where students might need to relocate for their ethics lessons, thus further eroding the allocated time. Immersive game-based activities might require setup, play, and debriefing, and such short time spans could pose a challenge to ensure immersive and productive play. This could mean that play would have to be continued at home, potentially requiring parental or guardian involvement and supervision.

6.3 Challenges of the Multidisciplinary Approach

The interdisciplinary analysis and synthesis, and the triangulation of various theories in this dissertation ensured a more holistic perspective, addressing both the theoretical and practical dimensions of DGBL. Grounded in the rationale of robust theoretical and evidence-based frameworks, this dissertation avoids superficial advocacy for gamification, which Bogost (2014) critiques as tokenistic. Instead, it offers as much nuance as possible to arguments to respect the complexity of ethics education and the needs of what Galea and Sayer (2025) call our screenagers from Generation Alpha.

Adopting a multidisciplinary approach helps synthesise distinct and various disciplinary insights, which may also be useful to catalyse further research and be holistically informative and instructive to educators in training. A multidisciplinary approach makes this dissertation more relevant to different branches of academia, thus spreading more awareness of the findings and the efficacy of innovative educational methods. It also ensures that this dissertation offers a comprehensive and innovative integration of scholarship, especially in the intersection of DGBL and P4C. This enables a broader and more holistic understanding of ethics education, facilitating the intersection between the three principal disciplines mentioned above.

Conversely, the disadvantage of this approach lies in the risk of denying oneself from deeper investigation. Each discipline, theory, framework, or game could support individual dissertations. While breadth was achieved, depth was sometimes compromised due to the extensive scholarship on digital games. Ensuring coherence across disciplines required

careful navigation and mind-mapping during the research. Notably, super-specialisation is beyond the scope of this research.

6.4 Other Limitations

Due to the constraints of this dissertation, this study kept its focus on the inclusion of digital games in the ethics curriculum and Maltese schools. It precluded what I would consider an important aspect of games and the ethical formation of adolescents. An in-depth exploration into the sociology of online gaming communities is warranted. Considering how SDT places an emphasis on relatedness and sense of belonging, this warrants a deep sociological and even anthropological analysis to further illuminate how community norms, collective community standards, and peer interactions within online gaming communities shape learners' moral development and social behaviour on and offline.

Finally, considering this dissertation is a conceptual investigation, no empirical data was collected, and no data analysis was performed. Thus, its contributions remain hypothetical and in need of empirical and qualitative validation. Moreover, this dissertation relies heavily on the Maltese context of ethics education, which is a Western European context and not necessarily transposable to other countries.

6.5 Recommendations for Future Research

Given the findings and critical reflections, several concrete avenues for future research have emerged:

- Further research in Maltese ethics teachers' attitudes towards student-centred methodologies across Primary, Middle, and Secondary Schools. This would have implications for possible attitudes towards DGBL in ethics education in the future.
- Focus groups on particular games could be used to conduct further research on the attitudes of Maltese ethics teachers towards games, especially serious games and recontextualised commercial games.
- Further research on the attitudes of educational leaders, school senior management teams, and policy makers on DGBL.
- Further research is needed on the attitudes of parents or guardians in Malta regarding DGBL, especially since effective DGBL might mean further immersion into games after school hours.
- Updated research is required in the changing demographics of gamers in Malta, repeating the study by Busuttil et al. (2014) with adjustments to show sensitivity to the diverse cultures in Malta.
- Research is required on using games that fulfil the criteria and findings of this dissertation, but could fit within the timetables and logistical constraints of Maltese schools (see section 6.6).
- Empirical validation of the EPIC framework: Further empirical studies are necessary to assess EPIC's practical effectiveness within diverse classroom

contexts, including longitudinal studies evaluating ethical behaviour changes over time.

- A possible repetition of Schneider et al.'s (2022) framework and research using Cognitive-Affective-Social Theory of Learning in Digital Environments, or CASTLE, in the Maltese context, to investigate ethics from the rational and emotional perspectives.
- Further research is required into the possibility of teachers and students creating their own bespoke games with commercially available AI platforms and how to train such AI models to specifically build and programme games that follow criteria and frameworks, similar to this study's contributions.
- Research in using AI as a mode of journaling and post-game self-reflection as part of the serious game mechanics. This is being implemented by games like *Quandary*.
- Sociological investigation of online gaming communities: Future research should explicitly examine the influence of online gaming communities on students' ethical and social development, exploring how digital interactions have a pedagogical impact on moral reasoning and identity formation, especially in the Maltese context.
- Detailed case studies on inclusivity: Additional qualitative studies, specifically focusing on inclusivity, would illuminate precisely how digital games support diverse learners in real-world classroom environments.
- Professional development for educators: Further research should design and evaluate targeted teacher training programmes that effectively integrate digital game literacy into ethics education practice.

6.6 Proposal for a Pilot Study

Based on the dissertation's rationale, a structured pilot study is proposed for illustrative purposes that could serve as a plan for future multimodal research:

Aim:

To empirically evaluate the impact of selected digital games on students' ethical reasoning, intrinsic motivation, and inclusivity within Maltese ethics classrooms.

Participants:

- Three Maltese secondary schools with established ethics programmes.
- Ethics educators, Year 9 students (ages 13-14), Parents and Guardians.

Methodology:

- Pre-intervention training sessions for participating educators on EPIC framework utilisation and digital literacy and DGBL skills.
- Selection of digital games using EPIC framework (commercial games or specifically designed educational serious games).
- Proposing a digital game-based curriculum through research, such as this dissertation, to formulate a scheme of work and lesson plans for the entire duration of the pilot, with all the findings considered.
- Dissemination of information to parents, recruitment, collection of consent forms, and other logistical measures of accountability and research ethics.

- Implementation over one academic term or scholastic year (12 weeks or 20 weeks), with weekly sessions integrating gameplay, ethical reflection, and structured community-of-inquiry discussions.

Data Collection Methods:

- Pre- and post-intervention ethical reasoning assessments. Time-window of assessment is crucial to measure game impact.
- Student and teacher reflective journals.
- Focus groups/interviews with students and teachers evaluating intrinsic motivation, wellbeing, and perceived inclusivity.

Analysis:

- Qualitative thematic analysis of journal entries, focus group transcripts, and interviews.
- Quantitative comparison of pre- and post-intervention ethical reasoning assessment scores.

Expected Outcomes:

- Empirical insights into the EPIC framework's practicality.
- Data-driven recommendations for integrating DGBL into Malta's ethics curriculum.
- Evidence to inform teacher professional development programmes.

6.7 Final Remarks

This dissertation demonstrates that the thoughtful integration of digital games into ethics education can positively impact motivation, ethical understanding, inclusivity, and wellbeing. Despite methodological limitations inherent in its multidisciplinary scope, the research establishes a robust conceptual rationale for DGBL's potential role in reshaping ethics education in Malta.

Ongoing investigation and empirical validation are necessary to fully realise these innovative methods' educational potential, transforming Maltese ethics classrooms into vibrant, inclusive, and student-centred environments. Malta's National Education Strategy 2024-2030 (NES) emphasises three pillars: Wellbeing, Growth and Empowerment, and Equity and Inclusion (Vella & Borg Saliba, 2024). DGBL in ethics education supports Malta's NES by addressing its three strategic pillars. It enhances student wellbeing through immersive learning experiences prioritising intrinsic motivation and emotional engagement. It fosters equity and inclusivity in interactive environments where diverse learners are valued. Additionally, DGBL empowers students by nurturing critical thinking, ethical reasoning, and digital literacy, equipping them with skills for lifelong learning and responsible global citizenship. It also provides educators with tools for attitude change and character formation towards virtue, helping to build a society of integrity.

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Appendix A

This checklist assists teachers in assessing whether a video game is suitable for ethics education based on the EPIC Framework (Ethics Practice and Implementation Categorisation) (Schrier, 2015a). It is divided into two parts: Educational Goals and Educational Strategies. For each statement, answer "Yes" or "No" by ticking the appropriate box. After completing the checklist, review the "Yes" responses to identify which goals the game may support and which strategies it employs. This will help determine if the game aligns with your teaching objectives.

How to Use This Checklist

1. Evaluate the Game: Play the game or review its documentation, then answer each question with "Yes" or "No" based on your observations.
2. Analyse Results: Count the "Yes" responses for each goal (E1-E7) and strategy (S1-S12). A higher number of "Yes" answers indicates stronger support for that goal or strategy.
3. Create a Table (Optional): Create a grid with strategies (rows) and goals (columns). Highlight cells where a strategy is present ("Yes" for most questions in that strategy) and supports a goal ("Yes" for most questions in that goal), based on your judgment of how the strategy contributes to the goal in the game.
4. Match to Objectives: Compare the results to your teaching goals and preferred strategies to determine if the game suits your ethics education needs.

Note: This checklist is a tool to aid evaluation, not a definitive assessment. It should be used alongside professional judgment and consider factors like age appropriateness, game length, and platform accessibility.

Educational Goals Checklist

	E1: Enhance Ethical Awareness	Yes	No
1	The game presents situations where players need to identify ethical issues or dilemmas.		
2	The game encourages players to consider how their actions affect others.		
3	The game provides feedback that highlights the ethical aspects of players' decisions.		
	E2: Enhance Emotional Intelligence	Yes	No
1	The game involves interpreting or responding to characters' emotions.		
2	The game requires managing emotions, either of the player or characters.		
3	The game includes mechanics related to understanding or using emotions appropriately.		
	E3: Practice Care or Empathy-Related Skills	Yes	No
1	The game allows players to take the perspective of different characters.		
2	The game provides opportunities to show care or empathy towards characters.		
3	The game rewards or encourages empathetic behaviour.		
	E4: Practice Ethical Reasoning	Yes	No
1	The game presents complex ethical problems that require analysis.		
2	The game involves weighing pros and cons or considering multiple factors in decisions.		
3	The game encourages players to justify their ethical choices.		
	E5: Practice Ethical Reflection	Yes	No
1	The game provides opportunities for players to reflect on their decisions and consequences.		
2	The game includes features like journals or debriefing for reflection.		
3	The game prompts players to consider their own values and assumptions.		
	E6: Enhance Character	Yes	No
1	The game models or encourages virtues such as respect, responsibility, or fairness.		
2	The game allows players to develop their character's moral traits.		
3	The game addresses themes of civic engagement or social responsibility.		
	E7: Cultivate Familiarity with Major Ethics Issues, Approaches, and Frameworks	Yes	No
1	The game introduces or references specific ethical theories or frameworks.		
2	The game includes scenarios that illustrate key ethical issues or dilemmas.		
3	The game encourages applying ethical concepts to solve problems.		

Educational Strategies Checklist

	S1: Emotion, Mood, and Tone	Yes	No
1	The game uses audiovisual elements to evoke emotions related to ethical themes.		
2	The game encourages players to consider how their actions affect others.		
	S2: Diaries or Personal Reflection Devices, and Tone	Yes	No
1	The game includes tools like journals or logs for players to record thoughts.		
2	The game provides prompts or spaces for reflection.		
	S3: Role-Taking and Role-Playing	Yes	No
1	The game allows players to assume different roles or identities.		
2	The game involves making decisions from a character's perspective.		
	S4: Story or Narrative	Yes	No
1	The game has a narrative that explores ethical issues.		
2	The game features branching storylines or multiple endings based on choices.		
	S5: Modelling Through Avatar or Character	Yes	No
1	Characters in the game demonstrate ethical or unethical behaviour for players to observe.		
2	The player's avatar develops in ways reflecting their ethical choices.		
	S6: Choices and Consequences	Yes	No
1	The game presents ethical decisions with meaningful consequences.		
2	The game tracks players' moral choices and affects the game world or story.		
	S7: Simulation	Yes	No
1	The game simulates systems or situations involving ethical considerations.		
2	Players can experiment with different approaches to see effects on the simulation.		
	S8: Social Interaction and Collaboration	Yes	No
1	The game includes multiplayer elements that allow the raising of ethical questions.		
2	The game provides opportunities for dialogue about ethical issues or important decisions.		
	S9: Deliberation, Dialogue, and Discourse	Yes	No
1	The game includes mechanics for debate, discussion, or negotiation.		
2	The game provides opportunities for dialogue about ethical issues.		
	S10: Applications to Real-World Issues	Yes	No
1	The game addresses or references actual ethical problems or current events.		
2	The game encourages players to consider how their actions affect others.		
	S11: Procedural Exploration and Interaction	Yes	No
1	The game's mechanics and rules convey ethical messages or arguments.		
2	Players can learn about ethics through interacting with the game's systems.		
	S12: 'Nudges' or Contextual and/or Personalised Cues	Yes	No
1	The game provides subtle hints or feedback guiding ethical reflection or behaviour.		
2	The game has adaptive elements responding to players' actions to promote ethical thinking.		

Appendix B

Among Us

This appendix applies the Ethics Practice and Implementation Categorisation (EPIC) Framework (Schrier, 2015a) to the commercially available video game *Among Us* to evaluate its potential for ethics education. The analysis draws on the game's mechanics, educational applications reported by practitioners, and general research on game-based learning to assess its alignment with the framework's goals and strategies.

Among Us is a multiplayer social deduction game developed by Innersloth (ESRB rating Everyone 10+), where 4–15 players are assigned roles as crewmates or impostors on a spaceship. Crewmates must complete tasks and identify impostors through discussions and voting, while impostors aim to sabotage operations and eliminate crewmates without being detected. The game's core mechanics revolve around trust, deception, communication, and collaboration, creating a dynamic environment for exploring ethical issues (Baughcum, 2020; (Gracey, 2021).

Epic Framework Analysis

Strategies employed by *Among Us*

- S3: Role-Taking and Role-Playing: Players assume roles as crewmates or impostors, each with distinct objectives. This role-playing allows players to experience different perspectives, such as acting ethically as a crewmate or deceptively as an impostor.

- S4: Story or Narrative: Each game session generates a unique narrative driven by player actions, creating scenarios of suspicion, trust, and betrayal that can be analysed for ethical implications.
- S6: Choices and Consequences: Players' decisions, such as accusing others or completing tasks, directly impact the game's outcome, encouraging consideration of the consequences of their actions.
- S7: Simulation: The game simulates a social environment with hidden roles, requiring players to navigate trust and deception in a controlled setting.
- S8: Social Interaction and Collaboration: *Among Us* is inherently social, requiring players to communicate and collaborate to achieve their goals, whether as crewmates or impostors.
- S9: Deliberation, Dialogue, and Discourse: Players engage in discussions during meetings to present evidence and argue about who the impostor might be, fostering deliberative skills.
- S11: Procedural Exploration and Interaction: The game's mechanics allow players to explore different strategies, such as how to present themselves or interpret others' actions, within the game's rules.

Educational Goals Supported by *Among Us*

- E1: Enhance Ethical Awareness: Role-playing (S3) and narrative (S4) expose players to ethical dilemmas, such as identifying deceptive behaviour or deciding whom to trust. For example, players must recognise when someone acts against the group's interest, heightening their awareness of ethical issues.

- E2: Enhance Emotional Intelligence: Social interaction (S8) and deliberation (S9) require players to read social cues and interpret others' emotions to detect deception, thereby improving emotional intelligence. For instance, players may observe tone or behaviour to gauge trustworthiness.
- E4: Practice Ethical Reasoning: Choices and consequences (S6) and deliberation (S9) encourage players to weigh evidence and decide based on incomplete information. During discussions, players must reason about who is most likely the impostor, considering the ethical implications of false accusations.
- E5: Practice Ethical Reflection: While *Among Us* does not include built-in reflection tools, post-game discussions facilitated by educators can support reflection (S9). Players can analyse their decisions, such as why they trusted or accused certain players, and consider the ethical outcomes.
- E7: Cultivate Facility with Major Ethics Issues, Approaches, and Frameworks: The game's themes of trust, deception, and group decision-making (S4, S7) provide a platform for introducing ethical frameworks. For example, educators can discuss utilitarianism (voting out a player for the group's benefit) or deontology (adhering to truthfulness) in the context of gameplay.
- Other goals, such as E3: Practice Care or Empathy-Related Skills and E6: Enhance Character, are less directly supported but can be facilitated through teacher-led activities. For instance, teamwork as crewmates may foster empathy (E3), and discussions about honesty versus deception can promote virtues like integrity (E6).

While *Among Us* supports several EPIC goals, it lacks built-in reflection tools (S2) and explicit connections to real-world issues (S10), requiring teacher intervention to fully realise

its potential. Additionally, the game's focus on deception may raise concerns about promoting unethical behaviour, though this can be mitigated through guided discussions emphasising ethical analysis.

Among Us is a promising tool for ethics education, leveraging strategies such as role-playing, social interaction, and deliberation to support key educational goals. Its engaging mechanics and accessibility make it suitable for classroom use, particularly when supplemented with teacher-led activities to enhance reflection and connect gameplay to ethical frameworks.

Appendix C

Resilience

This appendix evaluates the serious video game *Resilience* by Sungrazer Studio (available for free) for its potential in ethics education, using the Ethics Practice and Implementation Categorisation (EPIC) Framework (Schrier, 2015a). *Resilience* is a humanitarian sci-fi city-builder game that fosters empathy for displaced peoples and examines the impact of resource distribution on civilian wellbeing in refugee camps. The analysis integrates the game's mechanics, educational objectives, and general research on game-based learning to assess its alignment with the EPIC Framework's goals and strategies.

Resilience places players in the role of a refugee camp manager on a distant moon, tasked with ensuring the livelihood of an alien race fleeing planetary disaster. Players build and manage camp infrastructure, allocate scarce resources, and navigate the challenges of an underfunded aid system. The game, inspired by real-world refugee crises such as Camp Moria in Greece, aims to educate players about the struggles of displaced populations and the complexities of humanitarian aid. Developed as a senior capstone project by an interdisciplinary team of 18 students at Drexel University, *Resilience* won the Best Student Game award at the 2020 Games for Change Awards.

EPIC Framework Analysis

Strategies employed by *Resilience*

- S1: Emotion, Mood, and Tone: The game's serious tone and sci-fi setting create an atmosphere that encourages reflection on the gravity of refugee issues, fostering emotional engagement with ethical themes.
- S3: Role-Taking and Role-Playing: Players assume the role of a camp manager, making decisions that impact refugees' lives, allowing them to experience the perspective of a humanitarian leader.
- S4: Story or Narrative: The narrative, set in a refugee camp, presents scenarios mirroring real-world crises, providing a context for ethical decision-making.
- S6: Choices and Consequences: Players' decisions on resource allocation and camp management directly affect refugee wellbeing, highlighting the consequences of their choices.
- S7: Simulation: *Resilience* simulates the complexities of managing a refugee camp, enabling players to experiment with strategies and observe outcomes.
- S9: Deliberation, Dialogue, and Discourse: The game includes a diplomacy aspect, allowing players to interact with settlers and negotiate solutions, fostering deliberative skills.
- S10: Applications to Real-World Issues: Explicitly designed to educate about refugee crises, the game connects gameplay to real-world challenges, such as those at Camp Moria.
- S11: Procedural Exploration and Interaction: City-builder mechanics allow players to explore various management strategies, learning through interaction with the game's systems.

- E1: Enhance Ethical Awareness: Role-playing (S3) and narrative (S4) expose players to ethical dilemmas, such as prioritising resources among refugees, raising awareness of issues like fairness and justice.
- E3: Practice Care or Empathy-Related Skills: The game's focus on fostering empathy using strategies of real-world issues (S10) and emotional tone (S1) encourages players to understand and care about refugees' struggles, supported by interactions with settlers (S9).
- E4: Practice Ethical Reasoning: Choices and consequences (S6) and simulation (S7) require players to weigh options, such as balancing immediate needs against long-term sustainability, fostering ethical reasoning.
- E5: Practice Ethical Reflection: While lacking built-in reflection tools, the game's narrative and choices (S4, S6) provide material for educator-led reflection, allowing students to analyse their decisions' ethical implications.
- E6: Enhance Character: Managing the camp to improve refugee wellbeing (S3, S7) promotes virtues like compassion, responsibility, and fairness, aligning with character development.
- E7: Cultivate Facility with Major Ethics Issues, Approaches, and Frameworks: The game's real-world connections (S10) and narrative (S4) offer a platform for discussing ethical frameworks, such as utilitarianism (maximising collective wellbeing) or deontology (duty to aid), though this might not be integrated within the game and would need the teacher's input and direction in order to achieve this goal.

- The goal E2: Enhance Emotional Intelligence is less directly supported, as the game's single-player nature limits social interaction. However, teacher-led discussions could enhance this by encouraging students to interpret settlers' needs and emotions.

Resilience offers significant potential for ethics education by immersing players in the ethical challenges of managing a refugee camp. Its alignment with EPIC Framework strategies, such as role-playing and simulation, supports key educational goals, including ethical awareness, empathy, and reasoning. While further research into its classroom application is needed, *Resilience* can be a powerful tool for teaching ethics when supplemented with educator-led activities.

Appendix D

Bad News

This appendix evaluates the potential of the video game *Bad News* for ethics education, applying the Ethics Practice and Implementation Categorisation (EPIC) Framework (Schrier, 2015a). *Bad News* is a browser-based serious game designed to enhance media literacy by immersing players in the role of a fake news creator, exposing them to common misinformation tactics. The analysis synthesises the game's mechanics, educational objectives, and scholarly research to assess its alignment with the EPIC Framework's educational goals and strategies, providing a resource for educators seeking to integrate it into ethics curricula.

Bad News, developed by DROG in collaboration with the University of Cambridge, is a free, browser-based game where players assume the role of a fake news tycoon. The objective is to build a media empire by attracting followers and maintaining credibility through tactics such as impersonation, emotional manipulation, polarisation, conspiracy theories, discrediting opponents, and trolling. The game, accessible at getbadnews.com, takes approximately 5–15 minutes to complete (depending on classroom pace as well) and is grounded in inoculation theory, which posits that exposure to weakened misinformation tactics fosters psychological resistance (Roozenbeek & van der Linden, 2019). Players earn badges for mastering each tactic, learning to recognise these strategies in real-world media contexts.

EPIC Framework Analysis

Strategies employed by *Bad News*

- S3: Role-Taking and Role-Playing: Players adopt the persona of a fake news creator, engaging with the ethical implications of producing misinformation.
- S4: Story or Narrative: The game presents a narrative arc where players build a fake news empire, encountering scenarios that illustrate misinformation tactics.
- S6: Choices and Consequences: Players make choices about which tactics to employ, with outcomes affecting their follower count and credibility, highlighting the consequences of unethical actions.
- S7: Simulation: *Bad News* simulates a social media environment where players create and spread fake news, providing a controlled setting to explore misinformation dynamics.
- S10: Applications to Real-World Issues: The game explicitly addresses the global issue of fake news, connecting gameplay to real-world media literacy challenges.
- S11: Procedural Exploration and Interaction: Players interact with game mechanics to experiment with misinformation strategies, learning through active engagement.

Educational Goals Supported by *Bad News*

- E1: Enhance Ethical Awareness: Role-playing (S3) and narrative (S4) expose players to unethical media practices, such as impersonation and polarisation, increasing their awareness of ethical issues in information dissemination.
- E2: Enhance Emotional Intelligence: The “emotion” badge (S11) teaches players to recognise emotional manipulation in media, enhancing their ability to interpret emotional cues and resist misleading content.

- E4: Practice Ethical Reasoning: Choices and consequences (S6) and simulation (S7) require players to evaluate the implications of their actions, fostering reasoning about the ethics of misinformation.
- E5: Practice Ethical Reflection: While the game lacks built-in reflection tools, post-game discussions facilitated by educators (S4, S6) can prompt students to reflect on the ethical implications of their choices and real-world parallels.
- E7: Cultivate Facility with Major Ethics Issues, Approaches, and Frameworks: By addressing fake news (S10), the game provides a platform to discuss ethical issues like truth, deception, and media responsibility, potentially introducing frameworks such as deontology (duty to truth) or consequentialism (impact of misinformation).
- Goals E3: Practice Care or Empathy-Related Skills and E6: Enhance Character are less directly supported, as the game focuses on media tactics rather than interpersonal empathy or virtue development. However, teacher-led activities could bridge this gap by discussing the societal impact of fake news, fostering empathy for affected communities (E3) or virtues like integrity (E6).

Bad News is widely used in educational settings to teach media literacy and critical thinking, particularly in grades 7–12 (Common Sense Education). Its short duration makes it suitable for a single class session. Research demonstrates its effectiveness, with a study of 14,266 participants showing significant reductions in perceived reliability of misleading content post-gameplay (Roozenbeek & van der Linden, 2019). Educators report that it engages students, prompting questions like, “So, anyone can just make up stuff and say it’s news on the internet?”.

To enhance its use in ethics education, teachers can:

- **Facilitate Reflective Discussions:** Post-game discussions can encourage students to reflect on the ethics of misinformation tactics and their real-world implications, supporting E5 (Ethical Reflection). For example, students might discuss how polarisation affects public discourse.
- **Introduce Ethical Frameworks:** Use gameplay to introduce ethical theories, such as consequentialism (harm caused by fake news) or virtue ethics (importance of honesty), aligning with E7 (Ethics Issues).
- **Design Structured Activities:** Assign tasks like analysing real news articles or writing reflections on the societal impact of fake news to deepen understanding and foster empathy (E3).

Despite its strengths, Bad News has limitations. Research suggests it may lead to overly conservative responses, where players distrust all information rather than developing nuanced discernment (Modirrousta-Galian & Higham, 2023). The game's focus on a Twitter-like platform may not resonate with all students, and its choice-based mechanics can lead to similar outcomes, potentially reducing engagement, due to the lack of familiarity of students with the X/Twitter platform. Additionally, its emphasis on media literacy over explicit ethical training means goals like E3 (Empathy Skills) and E6 (Enhance Character) require teacher intervention to be fully realised. Critics argue that the game alone is not transformative and should be part of a broader media literacy curriculum (Barabas, 2023).

Bad News offers a compelling and accessible platform for ethics education by immersing players in the mechanics of misinformation. Its alignment with EPIC Framework strategies,

such as role-playing and simulation, supports educational goals like ethical awareness, emotional intelligence, and reasoning. Scholarly evidence confirms its efficacy in enhancing media literacy, though its limitations necessitate integration with teacher-led discussions and supplementary activities. By fostering critical thinking about media ethics, Bad News can be a valuable tool for educators aiming to equip students with the skills to navigate an information-saturated world responsibly.