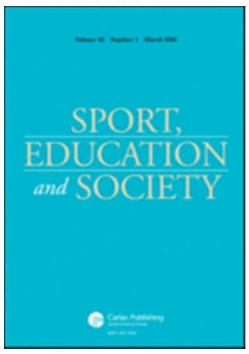
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Learning to be human in a digital world: A model of Values Fluency Education for Physical Education

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Title: Learning to be human in a digital world: A model of Values Fluency Education for Physical Education

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Abstract

It is argued that negotiation and performance of identity in contemporary society is linked with the value-laden spaces in which individuals spend time. Concepts of space, place and identity have become important when looking to understand elements of social practice, in light of the recognition that life is becoming progressively more mobile, varied and challenging. This has resulted in a shift in how subsequent generations experience space and place within digitally-mediated social landscapes. It is asserted that young people in contemporary society can be seen to occupy a *hybrid* virtual-real world (Jordan, 2009) where they experience the multiplication of place or duplication of space (Papacharissi, 2011). Such complex social geographies, we contend, have important implications for young people's negotiation and performance of identity, the acquisition of socio-technical capital (Resnick, 2001) and, ultimately, digital well-being.

In a time when there is a focus on developing global and connected citizens (Greene, 1995) we argue that pupils need to be both digitally fluent *and* values fluent as they negotiate spaces of reality and virtual reality. Both constructs require the learner to engage critically with information and misinformation as presented on ever-changing digital interfaces (Kahne & Bowyer, 2017) and to make value choices. Given that physical education (PE) has been identified as a significant place for meaning-making (Spracklen, 2015) and a core site for values-based education (McCuaig et al, 2015) it is identified as a key context in which to examine some of the challenges posed for students and educators with regard to values-based practices in digitally-mediated spaces. Within this conceptual paper, we propose a praxis model of values fluency to help PE teachers to support young people to recognise and successfully navigate hybrid spaces, to critically engage with sociotechnical capital and become adept at transferring and translating values across and between social contexts.

Keywords: Values Fluency Education, digital age, identity, physical education, Values Compass

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Introduction

Floridi (2015) outlines the radical nature of the philosophical task ahead of educators in a digital age, using the words of Neurath (1959): "No tabula rasa exists. We are like sailors who must rebuild their ship on the open sea, never able to dismantle it in dry-dock and to reconstruct it there out of the best materials" (p.201). As Floridi (2015) puts it, we are effectively "building the raft while swimming" (p.23).

This paper developed from conversations between the authors around areas of shared interest across separate research projects, which focused on young people's learning and development in values-based education within the field of PE (Chambers, 2016). More specifically, it grew from a recognition that increasingly complex social landscapes play a central role in young people's negotiation and performance of identity, and that transitions within, between and across social spaces represent a challenge for educators that has perhaps not fully been appreciated. Concepts of space, place and identity have become incredibly important when looking to understand young people's social practices, given that the nature of social life is becoming progressively more mobile, varied and challenging. The rise in new technologies, and the forms of communication, connection and expression these support, has rendered the social landscape ever more complex; fostering an interconnecting network of virtual and physical spaces which blend within the realities of everyday life (Ergler et al, 2016). As Paiva (2015) asserts, "virtual spaces have become, culturally, actual spaces" and can therefore be understood as part of the everyday lifescape (p. 2). There are real implications here for young people's sense of place and the ways in which they negotiate and perform identity within different socio-spatial and digitalised contexts.

Ergler et al (2016) contend that digital technologies are increasingly part of young people's everyday lives, asserting, "the omnipresence of new technologies such as smartphones, tablet computers and digital cameras has altered how children engage with their physical and social surroundings" (p. 129). In this instance, it may be helpful to think of digital technologies as not mere tools but rather social forces that are increasingly affecting our fundamental understanding of reality i.e. our self-conception (who we are), our mutual interactions (how we socialise); our conception of reality (our metaphysics); and our interactions with reality (our agency) (Floridi, 2015). In recognising the social power of technology, researchers are forced to think of new and

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innovative ways of engaging with youth, to understand their complex lives and everyday activities in increasingly digitally-mediated childhoods (Ergler et al., 2016). Similarly, Schaffer and Clinton (2016), drawing on Dewey (1953), describe how we now need to change how we think about thinking i.e. "the mind is an ecological system in which individuals interact with cultural tools to produce thought and action" (p.285). Therefore, in the presence of new cultural forces (such as digital technologies) our ways of being, knowing and perceiving ourselves in relation to our contexts change. Bearing in mind these calls to think and examine differently, this discussion considers how young people's socio-spatial and digitally-mediated experiences shape, in particular, their values-based practices. In this paper, we use the field of physical education (PE), a space that has been recognised as relevant for values-based education and the acquisition of life-skills (see McCuaig et al., 2015) as an illustrative context.

Contemporary notions of Space and Place and Identity

The performance of identity in the contemporary climate is inherently linked with the spaces in which individuals spend time and is influenced by the ideas and values embedded within each context (Hopkins, 2010). Recent changes in the traditional structure and organisation of social life are perceived to have precipitated the need for more fluid understandings of identity and belonging. For the younger generation, this has led to new patterns of youth transitions as well as an increase in agentic action. As social actors who are "enmeshed in richly diverse social worlds rather than separated out, disconnected individuals" (Blundell, 2016 p.41), it is important to recognise the significance of spatiality when seeking to understand the social realities in which young people live. Anderson and Jones (2009) also emphasise the connections between people and place as they seek to explore young people's lifescapes, noting that "places are intimate, peopled, and emotive…they are humanized versions of space" (p.293). This gives rise to an understanding of young people as having multi-dimensional, shifting and *spatialised* identities, where localities matter and are open to context specific interpretation (Hopkins 2010).

Drawing on a Bourdieusian perspective, Sandford (in press) highlights the increasingly complex social geographies of young people and emphasises the challenge many individuals face in moving within and between social fields. In particular, there is challenge in navigating the *transitional* spaces between fields; spaces of intersection

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that often require individuals to manage the demands of competing structural influences, resources and practices. The resources (capital) available to individuals in these intersecting spaces, and their capacity to make suitable decisions about how they could/should be used, can result in appropriate practice and aid an individual's sense of identity and belonging ('fit'), while failure to do so could lead to marginalisation (see Hill et al., 2015). Jordan (2009) alludes to the impact of this complex practice when she speaks of 'hybridity' and the blurring of boundaries between real and virtual spaces, commenting that here consciousness becomes "to some extent shared between an offline physical and an online virtual self" (p.3). This identification of an interstitial or hybrid space contains echoes of Soja's (1996) notion of a 'third space' (p.57). In such spaces, individuals experience the duplication of space or, as Papacharissi, (2011) has argued, the multiplication of place, with events occurring simultaneously in both real and virtual time. This is pertinent, given the growing significance of digital technologies and the access they offer to virtual space. Not only are individuals being required to navigate the complex, intersecting landscape of physical (actual) space, they increasingly need to do so whilst simultaneously engaging with multiple realities. This raises some important questions about the nature and impact of those boundary regions that sit at the intersection of social realities. In particular, there are clear implications, we contend, for the negotiation and performance of identity (real/imagined, embodied/disembodied) in these spaces. Indeed, it appears to have significant consequences for contexts in which multiple generations work/live together e.g. in physical education settings.

Generational Identity in a Digital World

In 1928, the German sociologist, Mannheim, put forward the theory that cohorts within world populations tended to gather around shared experiences rather than social class or geographical location. He recognized that chronological cohorts experiencing the same cultural events, interpreted through a similar lens based on their life-stage of sociological development, would forever share a sense of a common perspective. This was the theory of generations. Taylor (2008) later argued that such thinking led to a scholarly focus on the *values*, characteristics and behaviours of chronological generations. Building on the original work of Mannheim (1928), McCrindle and Wolfinger (2011) recently proposed a sociological definition of generations, i.e. those born within a similar span of time who share a comparable age and life stage and who

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were shaped by common events, trends and developments. They asserted that younger generations are very different to previous youth cultures due to digital technology, mass marketing, politics and pop culture. As a result, they have notably different aspirations, worldviews and digital personas, most notably as digital immigrants (reluctant adopters of technology), digital adaptives (willingly embrace technology) or digital natives (immersed in technology) (McCrindle, 2011). It was Marc Prensky (2001) who first dubbed Generation Z/Millennials as 'digital natives', although this appears to be something of a misnomer, as recent research suggests that they do not always fully understand the complexities inherent in the use of ubiquitous technologies or the implications of their impact (Organisation for Economic Cooperation and Development, 2015).

In his influential work, Erikson (1968) described how identity formation was a lifelong endeavour but that adolescence was a pivotal moment; a time where individuals try on different identities and seek affirmation from their peers in relation to their development values and beliefs. In emerging adulthood, the focus then shifts to an individual's broader purpose in society and identity becomes (relatively) more stable. However, Gergen (2000) queries whether this theory adequately captures the complexities of identity formation in a digital society. Today, identity development takes place in a world of ubiquitous social media where it is possible to craft multiple identities. As Davis and Weinstein (2017) note, this makes it challenging when trying to "disentangle 'digital life' from the contexts in which today's adolescents and emerging adults navigate key development tasks" (p.1). Given the features of networked technologies (i.e. asynchronous communication, 24/7 connectivity, feelings of anonymity/pseudonymity and the public persistent nature of online communication) they ask what the implications are for the processes of identity development in spaces that increasingly presume consistency, authenticity and accountability across contexts. Moreover, they call for educators to encourage youth to be self-reflective regarding on-line identity expression.

Kirkpatrick (2012) cites Mark Zuckerberg, chairman and co-founder of Facebook, as promoting the idea of a single identity and commenting that having multiple identities "is an example of a lack of integrity" (n.p.). However, Zimmer (2010) refutes this view,

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arguing that individuals are constantly engaged in a process of managing identity performance:

> This is how we navigate the multiple and increasingly complex spheres of our lives. It is not that you pretend to be someone that you are not; rather, you *turn the volume up on some aspects of your identity*, and *tone down others*, *all based on the particular context you find yourself* (our emphasis, n.p).

We contend that here, Zuckerberg is perhaps hinting at the need for some form of stable 'core' identity amid the multiple iterations of self - one that remains central to social practice across an individual's 'lifescape' (Anderson & Jones, 2009). Holroyd (2002) has previously noted 'enduring aspects' of young people's identities and has drawn on Bourdieu's notion of habitus to help theorise how deeply embedded ideas, values and dispositions can help individuals maintain relatively coherent understandings of self in shifting terrain. Interestingly, in an interview recorded in 2014 as Facebook turned ten years old, Zuckerberg appeared to have a change of heart in relation to identity (and anonymity) siding more with Zimmer's perspective. As he commented, "we don't need to keep on only doing real identity things… If you're always under the pressure of real identity, I think that is somewhat of a burden" (n.p.).

This also seems to link with Floridi's (2015, p.11) view of a more welcoming and freer public sphere that acknowledges "that everybody needs both shelter from the public gaze and exposure" (p.11). There certainly appears to be a struggle to understand fluid identities in digital-real contexts. To make sense of this, Lewin and Lundie (2016) discuss the philosophies of digital pedagogy and call for more sustained reflection on the complex nature of technological change. They draw on the work of Stiegler (2010) and note his focus on the impact of digital cultures/resources on intellectual and cognitive development, as well as the process of individual and social formation, arguing that this has implications for the educative purpose of 'subjectification'. Moreover, Ess (2015) also describes that "endorsing responsibility in a hyperconnected reality requires acknowledging how our actions, perceptions, intentions, morality, even corporality are interwoven with technologies in general, and ICTs in particular" (p.18). Within the following section we look to the work of Papacharissi (2011) and look more

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closely at the resources available for identity construction within those hybrid spaces where real and virtual worlds intersect. Here, we focus on individuals' connections with others, the acquisition of relevant knowledge/information, and the sharing of socio-technical capital.

Social and Socio-technical Capital in Hybrid Spaces

Broadly conceived, social capital refers to the benefits that can be attained from connections between people through their social networks. Bourdieu (1986) described it as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (p. 249). Social capital comprises the links, shared values and understandings in society that enable individuals and groups to trust each other and facilitate collaboration. At a more nuanced level, the role of social structure, social norms and trust, reciprocity, solidarity and the flow of information are also key. Scrivens and Smith (2011) for example, describe how social capital can be defined in relation to the following four areas: i) personal relationships; ii) social network support; iii) civic engagement; and iv) trust and cooperative norms (p.5). Putnam (2000) also spoke of two kinds of social capital for the offline world: bridging capital (connecting heterogenous groups) and bonding capital (linking homogenous group). In an online world, however, the term *sociotechnical capital* (Resnick, 2001) has come to be used, because of the reach of online communication tools to connect socially.

Resnick (2001) describes how technology changes social capital in digital spaces, enhancing a person's bridging social capital. It does this by removing impediments to interaction e.g. information flow, reach, distance and time. It also enables the formation of group identities, which can be fostered through synchronous and asynchronous interactions. Socio-technical capital involves the flow of information and images and can be seen to impact the performance of identity (Papacharissi & Easton, 2012). As argued earlier, it is accepted that technology-induced changes in the situational geography of social life (Meryowitz, 1985) mean that identity is now performed in virtual, real and hybrid contexts. Both the spaces and the individuals performing in these spaces are metamorphic, with cycles of self-presentation and impression formation being dependent on those viewing the performance. However, the boundaries between these public spheres can become blurred, as "individuals perform on multiple

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stages, and in doing so they blend social spheres online that may have been separate offline" (ibid, p.307). In this way, Papacharissi (2011) argues, we could perceive such blurring as causing a loss rather than a multiplication of place:

> It is the architectural equivalent of lifting all walls physically separating rooms, houses, offices, buildings, and all concrete structures, this rearrangement of boundaries results in a loss of the unique connection of interaction to place (pp.307-308).

As people move across the porous boundaries between real and virtual into hybrid spaces with ease, they have ready access to the socio-technical capital available within them. Boyd (2014) refers to this as context collapse. A downside here is that in these spaces the diminished role of gatekeepers means that there are vastly expanded opportunities for the circulation of both information and misinformation (McCrindle and Wolfinger, 2011). Research indicates that young people are often unware of the hybridity of their social spaces and may believe that they are 'unseen' in virtual space (Roche & Kevane, 2017); effectively donning an *invisibility cloak* which renders them 'safe', allowing them to say and do as they please. We argue that an uncritical appreciation of the acquisition and transfer of socio-technical capital between and across such spaces, holds significant implications for young people's construction of identity and associated digital well-being. We further assert that PE, with its pro-social values focus, is a key site for empowering young people to become critical prosumers [simultaneously producing and consuming] of knowledge and social capital and thus to flourish i.e. enjoy digital wellbeing.

A Case for Digital Wellbeing

Floridi (2015) describes three core risks of hyperconnected spaces that young people need to be aware of: (1) **Control of knowledge and power**; (2) **Experiencing freedom, equality and otherness in public spheres** (with implications for mediated identities/calculated interactions and related concepts such as profiling, lateral souveillance and 'big brother' surveillance); and (3) **The abundance of information** (leading to cognitive overload, distraction and disempowerment through data manipulation). Given such concerns, we contend that young people need to be taught to be/feel safe in those spaces where real and virtual worlds intersect. In other words, they

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need to enjoy **digital wellbeing**, which includes: being able to look after personal health, safety and relationships in digital settings; using digital media to foster community actions and wellbeing; and acting safely and responsibly in digital environments (JISC #1minuteCPD, 2016). Underpinning digital wellbeing are the core concepts of digital literacy and digital fluency.

The New Zealand Ministry of Education (2016) defines digital literacy as "the ability to know **how** to use digital technologies and **what** to do with them" (authors' emphasis) (n.p.). However, Miller and Bartlett (2012) push for the more sophisticated concept of digital fluency as the key skill for a digital age. They assert digital fluency is "a tripartite concept constituting critical thinking, net savviness and diversity" (n.p.) arguing that this helps to create a pedagogical framework that is more fitting for the digital age. Digital fluency in action is argued to be:

> The ability to decide **when** to use specific digital technologies to achieve their desired outcome. A digitally fluent person can articulate **why** the tools they are using will provide their desired outcome (New Zealand Ministry of Education, 2016 n.p.).

Miller and Bartlett (2012) describe how digital fluency rests on critical engagement with digital media, noting how this requires the combination of classic skills (e.g. checks and techniques to assess the trustworthiness and accuracy of information) with new forms of knowledge (e.g. understanding the cyber structure of the world-wide web). Briggs and Makice (2012) also provide a clear model depicting the road to digital fluency, through the stages of anti-literacy, pre-literacy, literacy and fluency. The model is underpinned by three facets: Knowledge, Skills and Mindset. The characteristics of 'anti-literacy' are manifested as believing that all technology is detrimental. When the person is encouraged to be more open to the possibility that there may be benefits in engaging with technology, they move to the pre-literacy stage. Having begun to work with technology the 'literate' person can use technology comfortably but may be blinkered to experimentation with technology. Again, if nudged to begin to critically engage with technology, the person moves to the 'digitally fluent' stage.

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To enjoy digital fluency, therefore, a person must be digitally literate i.e. proficient in key **digital skills/competences**. The European Commission's (2016) 'A new skills agenda for Europe' document and the more recent 'Key Competences for Lifelong Learning' proposal (2018), set out how Europe will address the current skills challenges. It aims to ensure that all EU citizens will have a core set of competences needed for personal development, social inclusion, active citizenship and employment. These competences include literacy, numeracy, science and foreign languages, as well as more transversal skills such as digital competence, entrepreneurship, critical thinking, problem solving and 'learning to learn'. As part of this core drive, the 'European Digital Competence Framework for Citizens' (DigComp 2.1) offers a tool to improve citizens' digital competencies (e.g. relating to information and data literacy, communication and collaboration and problem-solving). In the fields of education, training and employment, this provides a common reference framework of what it means to be digitally 'savoir faire' (savvy) in an increasingly globalised and digital world.

In 2017, the Chambers & Sandford also highlighted another core aspect of digital wellbeing: values. It is important to acknowledge that both technology and the user are values-laden, as are the spaces in which they interact. It is therefore crucial to consider the role of both 'internal' values (those characteristic of technology) and the 'external' values (concerned with a particular human undertaking) when seeking a better understanding of practice in digitally-mediated spaces (Gonzalez, 2015). Given the issues highlighted earlier in this paper, we contend that both *digital fluency* and *values fluency* are constituent parts of digital wellbeing for young people. In this context, we define

values literacy as the ability to read a situation (real or virtual), make a value judgment on it and then enact that value judgment. More recently, we have moved to a more nuanced understanding of values literacy in action, settling upon the notion of **values fluency**. We argue that a values fluent person can articulate why they enact particular values in real and virtual settings and gauge the consequences of such actions (Chambers & Sandford, 2017). By teaching young people to be values fluent, therefore, we can help to then to ethically and empathically re-engage and desist from digital inhibition (Hargreaves, 2016), which can often lead to digital forgery (Boyd, 2014) of their identity online.

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Having outlined the theoretical framework underpinning our model, we now move on to consider the role of education in facilitating the journey to values fluency within the school context of PE; a space in which multiple generations are working together and there is a clear values-focus to practice. Ilgen et al (2005) speak of deep-level diversity (such as differences in values, thoughts, and attitudes) in this context. This has important implications for how teachers educate pupils within the arena of values-based education and values fluency.

Values Based Education in Physical Education

Dewey (1938) argued that the primary intent of education and schooling is not so much to *prepare* students to live a useful life, but to teach them how to live the current environment. More recently, Maxine Greene (1995) suggested that young people must be well informed and have the educational abilities and sensitivities needed to critically examine the world in which we live. As outlined above, however, the current environment is characterised by constant change and flux, which presents limitless moral dilemmas for young people across local, national and international contexts. Nonetheless, education has a transformative power and as such has a key role in developing a positive moral/values compass for young people: values education is thus a core purpose of schooling. This can be defined as the aspect of educational practice in which moral values as well as norms, dispositions, and skills grounded in those values are mediated or learned by students (e.g. Halstead & Taylor, 2000). The enterprise of education is inextricably linked with the development of values, although internationally values-based education is known by a number of names (including moral education and character education) and has been presented as a "pedagogical imperative for student wellbeing" (Lovat, Toomey & Clement, 2010, p. 1). In this paper, we borrow Halstead and Taylor's (2000) definition of values education, which comprises the following aspects: moral education, character education, ethics education, civic education, and citizenship education. While acknowledging that this is something of a 'catch-all' term, this definition is deemed valuable in that it embraces personal, social and cultural issues that are so central to our broader argument. Furthermore, we suggest that all aspects are important to consider in supporting digital wellbeing.

Schools are perceived to be central places in which to shape the character, life skills and values orientation of young people and "are uniquely placed to teach the knowledge,

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skills and attitudes that underpin responsible citizenship" (McCuaig et al, 2015, p.21). More specifically, Spracklen (2015) has also argued that the geography of PE renders it a pertinent space for meaning-making. Certainly, policymakers have traditionally turned to PE to provide young citizens with the values and attitudes "that underpin a peaceful, productive, healthy and cohesive population" (McCuaig et al, 2015 p.3). Moreover, there is a considerable body of literature supporting the potential for participation in sport, PE and physical activity to yield numerous benefits for young people (see Rossi & Jeanes, 2016). Within this literature, there is a strong emphasis on the capacity for such activities to enhance social and interpersonal skills. Recent debates have included, for example, the capacity for sport and PE to: build character, facilitate the development of 'life skills', support positive youth development, promote citizenship, aid socio-moral development and, more broadly, promote community development and conflict resolution (ibid). Thus, while we make no argument here that PE is the only vehicle through which we can promote values fluency, we do contend that it is a pertinent one.

In discussing why PE is such a suitable context for social development, several authors point to the unique nature of practice in this space. In their summary of literature, McCuaig et al., (2015) note that research identifies three 'special' characteristics' that are somewhat unique to PE and school sport programmes: the subject matter, the learning environments and the caring teacher-student relationships. Moreover, they contend that there is considerable agreement that values, morals and life skills need to be 'taught, not caught' through PE and sport and that careful consideration be given to the development of educational resources, practices and approaches to learning in this respect. Bearing in mind the earlier discussion, this latter point is perhaps worthy of further consideration. As learning is a set of personal and interpersonal activities, deeply rooted in specific social and cultural contexts, when those contexts change how people learn changes, also. We therefore perhaps need a revised appreciation of the processes of learning within an increasingly digitally-mediated world.

It is clear that the advent of digital technology has caused the socio-cultural context for learners to change, with almost borderless classrooms encouraging greater learner mobility, choice and access to knowledge (Chambers et al (in press). Indeed, Bates (2016) has described the nature of knowledge in a digital society as 'amorphous', while Siemens (2005) pronounced that knowledge is created beyond the level of individual

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human participants and is constantly shifting and changing. Siemens asserts that this seismic change requires a new learning theory for a digital age - Connectivism. This theorises that decisions are based on mercurial foundations, where there is a deluge of new information, which is iteratively altering the social landscape and the learner needs to decipher between important and unimportant information 'in the moment'. In other words, there is a need for learner agility. For Siemens (2005), the amplification of learning, knowledge and understanding through the extension of a personal network is the epitome of connectivism. Bates (2016) also outlines how knowledge is a chaotic, shifting phenomenon, moving through a complex network of nodes (which themselves are transient). Speaking of the power of the network and knowledge flow and creation within, Siemens (2005) purports that "the pipe is more important than the content within the pipe" (n.p.).

As outlined earlier in this paper, we recognise that young people's increasingly complex social landscapes play a central role in their on-going construction and negotiation of identity. Moreover, the complex transitions within this nodal landscape represent a particular challenge for educators. Schools (and, more specifically, PE) have an important role to play in educating young people to make those transitions confidently and competently and to enjoy digital wellbeing (Beetham, 2016). To do this, we argue, they need to be educated to be both digitally fluent and values fluent. The role of the teacher becomes crucial here as they strive:

> To help young people know where to find knowledge, to know what to do with it when they get it, to know 'good' knowledge from 'bad' knowledge, to know how to use it, to apply it, to synthesize it, to be creative with it, to add to it even, to know which bits to use and when and how to use them and to know how to remember key parts of it – *in other words all the things computers can't do yet* (Gilbert, 2014, p.30, our emphasis).

To help teachers to fulfil this role, in the following section we present a proposed model of praxis for values fluency education. Through this model, we consider how educators (and, in this context, physical educators) can support young people to recognise and successfully navigate hybrid spaces, critically engage with sociotechnical capital and become adept at transferring and translating values across and between social contexts.

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A Model of Praxis for Values Fluency Education

Within PE, the use of models-based practice is well established, and some existing models specifically focus on the development of pro-social values such as those discussed above e.g. Sport Education (Siedentop, 1994) and Teaching for Personal and Social Responsibility (Hellison, 1995). However, as noted by Chambers (2016), a digital society challenges our understanding of pedagogy and invites new forms of learning activity and existing pedagogical practices may thus no longer be sufficient to develop values fluent children in a hybrid world (ibid). We have suggested that children need to be simultaneously digitally fluent and values fluent to be digitally well. Therefore, what is required now perhaps is a mechanism of 'rethinking pedagogy for an age of digital information and communication' (Beetham & Sharpe, 2013, pp.4-6). In developing this, it is important to consider that a digitally literate and fluent person, becomes hyper-connected across places and spaces. Geddes (2011), an expert in neuroscience, identified that consciousness is correlated with the synchronisation process of brain activities. Viewing learning as connectivism (Siemens, 2005) helps to make sense of this, as the learning is the constant state of connecting nodes (people) and augmenting knowledge as it flows through this network of nodes. From an individual's point of view, Csikszentmihalyi (1990) describes that when we are most conscious we disconnect, somewhat paradoxically, from the world around us. Our senses are effectively 'turned off' and we lose track of time - we are in a state describes as *flow*. We can engage in flow through positive and negative behaviours.

Taking an ecological systems perspective to Values Fluency Education (VFE) acknowledges the composite of individual and environmental forces that mutually influence and constitute how basic values are constructed and reinforced. The concept of *Terroir* seems to help explain the intricacies of such a context, capturing the situated nature of learning values (Lave & Wenger, 1991). According to Chambers (2015, p.16):

> Terroir is [...]translated as a 'sense of place' [...]. The theory of *terroir* encompasses the almost metaphysical circle of soil, nature, appellation and human activity. Culture is etymologically related to *terroir*, as it has at its root the Latin *colére,* meaning to till. Culture, therefore, is akin to *terroir*.

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In applying this very compelling metaphor to values fluency, the contention is that a young person is influenced by (and influences) the culture in which s/he is located, in real or virtual space. An adapted version of Bronfenbrenner's (1979) multilevel ecological systems perspective (Chambers, 2015, 2018) is used to underpin VFE. This model is pertinent here as it involves collaboration between individuals, which is a component of whole systems (Chandler, 2011). The model considers how values fluency is enacted and shaped by systems at Bronfenbrenner's (1979) multiple levels: (a) The ontogenic system/level (psychological and demographic individual characteristics (Tinbergen, 1951); the microsystem/level (the immediate social context); and (c) the macro level/system (broader societal influences). There are echoes here, too, of the complex social landscapes discussed earlier in this article. It seems prudent, therefore, that effective VFE should adopt an ecological perspective to educate students to enact pro-social values in a highly mercurial and dynamic learning environment (Chambers, in press).

Insert Figure 1

Developing a model of VFE is clearly a messy or 'wicked problem' (Rittel & Webber, 1973). The proposed *Model of Praxis for Values Fluency Education* strives to reinforce positive or pro-social behaviours, which can both transfer and translate across hybrid spaces. It does this by adopting pedagogies, which encourage young people to 'pause' and reflect on their values and behaviours. Note that in the literature, personal values are linked to beliefs concerning what situations or actions are desirable (Hawaja, 2018) by that person and to broad motivational goals (Schwartz, 1994). Schwartz sees values as stable standards by which we evaluate everything else, including the appropriateness of any norms, attitudes, traits, or virtues that are presented to us. Our values are hierarchical, in that some are more important than others, which has implications for situations in which we are placed and the actions we choose.

In this new model of praxis, the pupil's *Personal Values Compass* is firstly established and then reinforced. This is achieved by using two pedagogical tools (a) the development of a *Personal Values Compass* using the Onion Model of Reflection (Korthagen & Vasalos, 2005) and (b) the reinforcement of the Personal Values Compass through the critical analysis of *Values Dilemmas*. We propose that Values

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Dilemmas are drawn from authentic scenarios which amplify any or all of the five key digital competencies for EU citizens in the DigComp 2.1 framework: *1: Information and data literacy 2: Communication & collaboration; 3: Digital content creation; 4: Safety; and 5. Problem solving* (see also Chambers et al, in press)

The Onion Model of Reflection (ibid) allows the individual to establish their *Personal Values Compass*. This approach was initially designed for PE teacher educators (Chambers, 2018) but, we argue, the process also holds relevance for young people – hence its adaptation/application here. The *Personal Values Compass* comprises empirical tools to unlock an individual's personal mission, identity, beliefs, competencies, behaviour and environment. Specifically, the young person interrogates themselves in the following order: Personal Mission [what is their purpose in life?], Personal Identity [what is their personality type?] and Personal Beliefs and Values [to what beliefs and values do they subscribe?]. These three components may synthesise to form the pupil's *Personal Values Compass* which itself has implications for the pupil's behaviour in real, virtual and hybrid settings. This baseline *Personal Values Compass* is then continuously tested and validated through the critical analysis of Values Dilemmas (real, virtual and hybrid) that might occur during PE lessons (e.g. pupil uploading an image of another pupil's performance to SnapChat without their permission). The PE teacher encourages pupils to translate this learning into all aspects of their digital/hybrid lives in and out of school. By using such approaches, we acknowledge that young people now learn connectively in widespread hybrid and interconnected networks, which rely on the individual and social capital of the network nodes. More than this, it addresses the maxim that values need to be 'taught and not caught'.

The idea that the acquisition of life skills (including values-based practices) should be deliberately targeted within education has implications for teachers and teaching, learners and learning and curriculum. In 1964, Krathwohl and colleagues developed a key taxonomy which informs the praxis of VFE. Within this work they sought to explain the learning trajectory in the affective domain. The taxonomy is ordered according to the principle of internalisation, which refers to:

> …the process whereby a person's affect toward an object passes from a general awareness level to a point where the affect is 'internalized' and consistently guides or controls the person's behaviour (Seels & Glasgow, 1990, p. 28).

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There are five levels in the taxonomy, the baseline being 'receiving' and leading up to internalisation, when values are internalised and guide behaviour. More specifically:

> Receiving is being aware of or sensitive to the existence of certain ideas, material, or phenomena and being willing to tolerate them. Examples include: to differentiate, to accept, to listen (for), to respond to something/someone.
> Responding is being committed in some small measure to the ideas, materials, or phenomena involved, by actively responding to them. Examples are: to comply with, to follow, to commend, to volunteer, to spend leisure time, to acclaim.
> Valuing is willing to be perceived by others as valuing certain ideas, materials, or phenomena. Examples include: to increase measured proficiency in, to relinquish, to subsidise, to support, to debate.
> Organization is to relate the value to those already held by that person and bring it into a harmonious and internally consistent philosophy. Examples are: to discuss, to theorise, to formulate, to balance, to examine.
> Characterisation by value or value set is to act consistently in accordance with the values he or she has internalised. Examples include: to revise, to require, to avoid, to resist, to manage, to resolve, to be viewed by others as having that particular value.

We suggest that the idea of the Personal Values Compass can be used *with* Krathwohl's Taxonomy by a PE teacher to both plan and assess pupil learning in the area of Values Fluency Education. Although beyond the scope of this paper, further detail on the development and application of the Personal Values Compass is outlined in Chambers, Jones, Murphy & Sandford (2018).

Conclusion

Given the focus of education (and PE within this) is in part to move citizens toward *eudaimonia* i.e. human thriving and flourishing (Chatfield, 2012), educative practice must morph and change to meet this challenge. The discussion above has documented the potential to enhance young people's development through Values Fluency Education in physical education. However, it has also highlighted the complex social landscapes of young people and the challenges they face in traversing both real, virtual and hybrid spaces. Hybrid spaces can be potential places of conflict or contestation, yet

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in the hands of the expert PE teacher there is clear opportunity for these places to be sites of 'productive tension' (Somerville & Perkins, 2003) and educational spaces, offering authentic opportunities to learn about the intricacies of social practice. Furthermore, we have recognised the crucial role of schools in the digital age in promoting the capacity and commitment of pupils to use and identify accurate information (Chambers et al, in press) and to "prepare youth to be informed about controversial issues, able to critically assess evidence and factual claims related to such issues, and able to judge and construct well-reasoned arguments" (Kahne & Bowyer, 2017, p.5). Taking this view, there are some important implications to consider for educators and, moreover, key questions to ask around the nature and structure of pedagogical practice. For example: To what extent does VFE need to recognize and embrace the complex social experiences of young people?; (How) can PE teachers support young people as they navigate these complex social landscapes and, in particular, those challenging transitional or borderland spaces?; How do we ensure we are all on 'the same page' with regard to values and the interpretation of values by context?; and, how can we best prepare young people to recognise that values hold different currency (capital in different places) and develop the key skills of transferal and translation? Such questions fuel our continued work in this area and serve as important reminders that, as Shaffer and Clinton (2016) argue, in a world where educational culture is heavily influenced by technological change, it is imperative for researchers (and practitioners) to make reflective spaces in which such issues can be considered. We assert that supporting the development of each pupil's Personal Values Compass can provide this space and, moreover, that with such a resource at their disposal, pupils can be empowered to flourish and thrive as humans in a digital world.

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References

ANDERSON, J., & JONES, K. 2009. The difference that place makes to methodology: Uncovering the 'lived space' of young people's spatial practices. *Children's* Geographies, 7, 291-303.

BATES, A. W. 2016. *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning*, Creative Commons Attribution-NonCommercial 4.0.

BEETHAM, H. (2016). What is Digital Wellbeing. HelenB's e-learning blog. Retrieved on 3rd February 2017 from:http://design-4-learning.blogspot.ie/2016/03/what-is-digital-wellbeing.html

BEETHAM, H. & SHARPE, R. 2013. *Rethinking Learning for a Digital Age: How Learners are Shaping their Own Experiences,* London, Routledge.

BLUNDELL, D. 2016. *Rethinking children's spaces and places.* London: Bloomsbury.

BOURDIEU, P. 1986. The forms of capital. *In:* RICHARDSON, J. G. (ed.) *Handbook of theory and research for the sociology of education.* Westport, CT: Greenwood

BOYD, D. 2014. *It's Complicated: The Social Lives of Networked Teens,* New Haven, Yale University Press.

BUCKINGHAM, D. & WILLETT, R. 2013. *Digital generations: Children, young people, and the new media.* London: Routledge.

BRIGGS, C. & MAKICE, K. 2012. *Digital Fluency: Building Success in the Digital Age*, SociaLens.

CHAMBERS, F.C. (in press). Developing the Values Compass. In F.C. Chambers, A. Jones, O. Murphy & R.A. Sandford (in press) *Design Thinking for Digital Wellbeing: Theory and Practice for Educators*. London: Routledge

CHAMBERS, F.C**.,** JONES, A., MURPHY, O. & SANDFORD, R.A. (in press) *Design Thinking for Digital Wellbeing: Theory and Practice for Educators*. London: Routledge

CHAMBERS, F.C. & SANDFORD, R.A. (2017). *Lost in Translation: Proposing a model of values fluency for physical education.* PHE Canada & PESIC National Conference, St John's, Newfoundland

4-7 May

CHAMBERS, F.C. (2016) *Alternative futures for values-based education in sport and physical education.* In Carraro, A., **Chambers, F.C.** , Greguol, M. Macdonald, D. (2016). Values-Based education through sport and physical education: myths and reality, Invited Symposium ICSEMIS, Santos, Sao Paolo, 2 - 4 September

CHAMBERS, F.C., MURPHY, O., O'BRIEN, W. & SHERRY, J. (2016). *James: Physical Education Teacher*. In A. Casey, V. Goodyear & K. Armour (Eds).

For Peer Review Only

Pedagogical Cases: Digital Technologies in Youth Physical Activity, Physical Education & Sport'. London: Routledge

CSIKSZENTMIHALYI, M. 1990. *Flow: The Psychology of Optimal Experience,* New York, Harper and Row.

DAVIS, K. & WEINSTEIN, E. 2017. Identity development in the digital age: An eriksonian perspective. *In:* WRIGHT, M. F. (ed.) *Identity, sexuality and relationships among emerging adults in a digital age.* Hershey, PA: Information Age Reference.

ERGLER, C. R., KEARNS, R., WITTEN, K. & PORTER, G. 2016. Digital methodologies and practices in children's geographies. *Children's Geographies,* 14**,** 129-140.

ERIKSON, E. H. 1968. *Identity, youth and crisis,* New York, Norton.

EUROPEAN COMMISSION (2016). A New Skills Agenda for Europe. Working together to strengthen human capital, employability and competitiveness. European Commission: Brussels

EUROPEAN COMMISSION (2018). Proposal for a Council Recommendation on Key Competences for Life-Long Learning. European Commission: Brussels.

ESS, C. 2015. Charles Ess - Commentary on the onlife manifesto. *In:* FLORIDI, L. (ed.) *The onlife manifesto: Being human in a hyperconnected era.* London: Springer Open.

FLORIDI, L. (ed.) 2015. *The onlife manifesto: Being human in a hyperconnected era,* London: Springer Open.

GERGEN, K. J. 2000. *The saturated self: Dilemmas of identity in contemporary life,* New York, Basic Books.

GILBERT, I. 2014. *Why Do I Need a Teacher When I've got Google? The essential guide to the big issues for every teacher,* London, Routledge.

GONZALEZ, W.J. (2015) New Perspectives on Technology, Values, and Ethics. London, Springer.

GREENE, M. 1995. *Releasing the Imagination: Essay on education, the arts and social change,* San Francisco, CA, Jossey-Bass.

For Peer Review Only

HALSTEAD, J. & TAYLOR, M. (2000). Learning and teaching about values: A review of recent research. *Cambridge Journal of Education*, 30(2), 169-202.

HARGREAVES, A. 2016. Leadership Direction. *European Conference on Educational Research.* Dublin.

HELLISON, D. 1995. *Teaching responsibility through physical activity,* Champaign, IL, Human Kinetics.

HOLROYD, R. (2002). 'Body work': Physical capital, habitus and the field of school. *Annual Conference of the British Educational Research Association*, University of Exeter, England, 12-14 September 2002

HOPKINS, P. (2010) *Young People, Place and Identity.* London, Routledge.

ILGEN, D. R., HOLLENBECK, J. R., JOHNSON, M. & JUNDT, D. 2005. Teams in organizations: From input process-output models to imoi models. *Annual Review of Psychology,* 56**,** 517-543.

JORDAN, B. 2009. Blurring boundaries: The 'real' and the 'virtual' in hybrid spaces. *Human Organisation,* 68.

KAHNE, J. & BOWYER, B. 2017. Educating for Democracy in a Partisan Age: Confronting the Challenges of Motivated Reasoning and Misinformation. *American Educational Research Journal,* 54**,** 3-34.

KIRKPATRICK, D. 2012. *The facebook effect: The real inside story of mark zuckerberg and the world's fastest growing company,* New York, Simon Schuster.

LEWIN, D. & LUNDIE, D. 2016. Philosophies of digital pedagogy. *Studies in Philosophy and Education,* 35**,** 235–240.

LOVAT, T., TOOMEY, R. & CLEMENT, N. 2010. *International research handbook on values education and student wellbeing,* London, Springer.

1MINUTECPD. 2016. Digital Wellbeing. *1MinuteCPD* [Online]. Available from: https://1minutecpd.wordpress.com/category/jisc-6-elements-of-digital-capability/digital-identity-and-wellbeing-self-actualising/digital-wellbeing/ [Accessed 3rd February 2016 2016]

MCCRINDLE, M. 2009. *The abc of xyz,* Australia, UNSW Press.

MCCRINDLE, M. & WOLFINGER, E. 2011. *The abc of xyz: Understanding the global generations,* Australia, UNSW Press.

URL: http://mc.manuscriptcentral.com/cses Email: john.evans@lboro.ac.uk

For Peer Review Only

MCCUAIG, L., MARINO, M., GOBBI, E. & MACDONALD, D. 2015. Taught not Caught: Values based Education through physical education and School Sport: Literature Review. AIESEP Partners for WADA, ICSSPE, IOC, Fairplay & UNESCO.

MERYOWITZ, J. (1985) No *Sense of Place: The Impact of Electronic Media on Social Behavior.* New York: Oxford University Press.

MILLER, C. & BARTLETT, J. 2012. Digital fluency: Towards young people's critical use of the internet. *Journal of Information Literacy,* 6**,** 35-55.

NEURATH, O. 1959. Protocol sentences. *In:* AYER, A. J. (ed.) *Logical positivism.* Glencoe: The Free Press.

NEW ZEALAND MINISTRY OF EDUCATION. 2016. Digital Wellbeing. Retrieved on 10th July 2016 from http://elearning.tki.org.nz/Teaching/Digital-fluency

OECD 2015. OECD Digital Economy Outlook 2015. Paris: OECD Publishing.

PAIVA, D. 2015. Experiencing virtual places: insights on the geographies of sim racing. *Journal of Cultural Geography,* 32.

PAPACHARISSI, Z. 2011. *A Networked Self: Identity Community and Culture on Social Network Sites,* New York, Routledge.

PAPACHARISSI, Z. & EASTON, E. 2012. In the Habitus of the New: Agency, Structure, and the Social Media Habitus. *In:* HARTLEY, J., BRUNS, A. & BURGESS, J. (eds.) *A Companion to New Media Dynamics* New York: Blackwell.

PUTNAM, R. D. 2000. *Bowling Alone: The Collapse and Revival of American Community,* New York, Simon & Schuster.

PRENSKY, M. 2001. Digital natives, digital immigrants. *On the Horizon (NCB University Press),* 9.

ROCHE, G. & KEVANE, R. 2017. Evaluating the impact of a digital literacy programme on students' digital wellbeing in our school. Bandon: Bandon Grammar School.

ROSSI, T. & JEANES, R. (2016) Education, pedagogy and sport for development: addressing seldom asked questions, *Sport, Education & Society*, 21(4) 483-494.

SANDFORD, R.A. (in press). *Values fluency as a key skill for young people within the digital age.* In F.C. Chambers, A. Jones, O. Murphy & R.A. Sandford (in press) *Design Thinking for Digital Wellbeing: Theory and Practice for Educators*. London: Routledge

For Peer Review Only

SCRIVENS, K. & SMITH, C. 2013. Four Interpretations of Social Capital: An Agenda for Measurement. Paris: Organisation for Economic Co-operation and Development.

SHAFFER, D. W. & CLINTON, K. A. 2016. Tool for thoughts: Re-examining thinking in the digital age. *Mind, Culture, and Activity,* 13**,** 283 - 300.

SIEDENTOP, D. 1994. *Sport Education: Quality PE Through Positive Sport Experiences,* Champaign, IL, Human Kinetics.

SIEMENS, G. 2005. Connectivism: A Learning Theory for the Digital Age. *International Journal of Technology and Distance Learning,* 2.

SOJA, E. 1996. *Thirdspace: Journeys to los angeles and other real-and -imagined places,* Oxford, Blackwell.

SPRACKLEN, K. (2015) *Digital Leisure, the Internet and Popular Culture: Communities and Identities in a Digital Age.* London, Palgrave Macmillan

STIEGLER, B. (2010) *Taking Care of the Youth and the Generations*. Redwood, CA: Stanford University Press.

TAYLOR, J. C. 2008. Whither march the cohorts: The validity of generation theory as a determinant of the sociocultural values of Canadian forces personnel. Canada: Canadian Forces College – College des Forces Canadiennes.

URICK, M. J. 2012. Exploring generational identity: A multiparadigm approach *Journal of Business Diversity* 12.

ZIMMER, M. 2010. Facebook's Zuckerberg: "Having two identities for yourself is an example of a lack of integrity".

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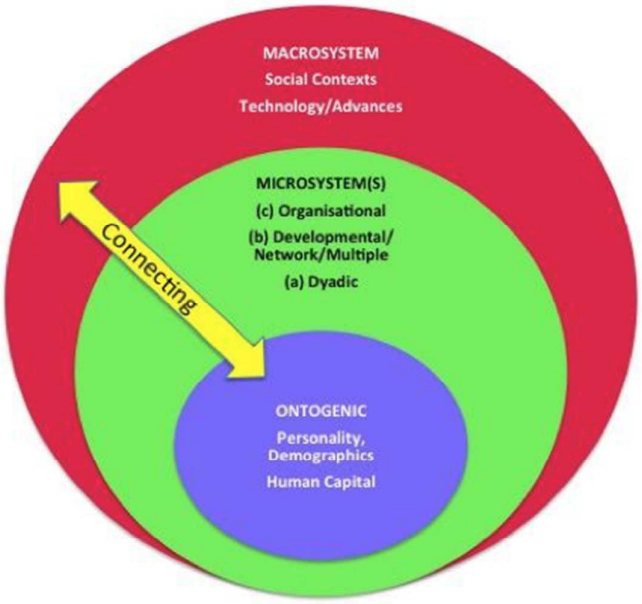


Figure 1: Values Fluency Education Schematic [adapted from Author]

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