



LEEDS
BECKETT
UNIVERSITY

Citation:

Jarvis, P and Newman, S and George, J (2014) "Play, Learning for Life: In Pursuit of 'Well-Being' Through Play." In: Brock, A and Jarvis, P and Olusoga, Y, (eds.) Perspectives on Play: Learning for Life (Second Edition). Routledge, Abingdon, pp. 270-298. ISBN 9781315288574 DOI: <https://doi.org/10.4324/9781315288574>

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/8362/>

Document Version:

Book Section (Accepted Version)

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on openaccess@leedsbeckett.ac.uk and we will investigate on a case-by-case basis.

Play, Learning for Life: In Pursuit of “Well-Being” through Play

From: Brock, A., Jarvis, P. and Olusoga, Y. (2014) *Perspectives on Play: Learning for Life* (2nd Edn). Abingdon: Routledge.

PAM JARVIS, STEPHEN NEWMAN AND JANE GEORGE

Looking back through my school years, the experiences that have best managed to shape me as an individual have taken place during social interaction with my peers. Therefore, I feel the most educational grade to students is kindergarten . . . it was in kindergarten that I learned to share . . . and basically get along with people in general. When I entered the first grade . . . I was all of a sudden expected to sit in a desk, in an assigned row, and feel some sort of ‘connection’ with a teacher at the front of the room, lecturing to thirty-plus students at once . . . Recess [break] was the biggest relief to me! Ever since kindergarten I have become increasingly disappointed with the lessons taught within the classroom. Of course, a certain amount of math, English, history and science is necessary for later in life, but so is a certain amount of interaction with other people. My classroom education has fallen short of giving me the most vital skills needed to survive in the world today.

Amy Peterson, US high school honours student, in Schultz and Cook-Sather (2001, p. 98)

Introduction

Now you have nearly arrived at the end of this book, and (we hope!) feel that you know a lot more about the complex concept of play than you did at the beginning, this chapter will attempt to explore some current, often theoretically complex and controversial debates relating to the place of play in children’s lives in the early twenty-first century, and how lack

of such opportunities may be impacting upon the current generation. The questions addressed will be:

- Why is collaborative free play so important not only for children's social development, but for the full range of learning that they must undertake during childhood and adolescence?
- What relevance do complex theoretical debates in the area of 'learning through play' have to practice?
- How might we attempt to move forward in this area in the future?

Why is collaborative free play so important not only for children's social development, but for the full range of learning that they must undertake during childhood and adolescence?

Framing the Problem

In 2007, a survey comparing self reports from children in western nations relating to their feelings of 'well-being', *An Overview of Child Well Being in Rich Countries*, indicated that England produces the unhappiest children in the western world, with children in the USA faring only marginally better (UNICEF 2007). This acted as a catalyst for both nations to pay some attention to a growing body of evidence that indicates a steady increase in children's and adolescents' behavioural and emotional problems, and the rate of mental illness amongst young people over the past fifty years (e.g., Collishaw *et al.* 2004; Twenge 2000). In 2004 one in ten children between five and sixteen years of age living in the UK had a clinically diagnosed mental disorder (Office for National Statistics 2005, p.xxi). Twenge

(2000, p.1018) reported that in the US, “self-reports of anxiety have risen by about a standard deviation between the 1950s and the 1990s... anxiety is so high now that normal samples from the 1980s outscore psychiatric populations from the 1950s”. Collishaw *et al.* (2004) used statistical techniques to ensure that there was a *genuine* rise in such conditions in the UK rather than a rise in identification or record keeping of such conditions. They subsequently speculated upon the impact of rising divorce rates, a rise in cohabitation outside marriage, increasing numbers of single-parent and step-families and increasing numbers of dual-earner households, causing children to be “looked after in day-care facilities of variable quality” (Collishaw *et al.* 2004, p.1359). Twenge (2000, p.1017) more generally proposed that societal factors, namely “low social connectedness and high environmental threat” were the underlying culprits. She concluded: “Until people feel both safe and connected to others, anxiety is likely to remain high”. This chapter will suggest that a lack of opportunities to play should be a central consideration within this debate, a point that is now being increasingly raised within academic research in English-speaking nations, but receiving very little attention from those with the power to create policy.

Ideas in Action

In his essay *The Decline of Play and the Rise of Psychopathology in Children and Adolescents*, Peter Gray proposed:

Over the past half century or so, in the United States and in some other developed nations, opportunities for children to play, especially to play outdoors with other children, have continually declined. Over this same period, measures of psychopathology in children and adolescents—including indices of anxiety, depression, feelings of helplessness, and narcissism—have continually increased.

Gray 2011, p.443

He supported his points with some illustrative facts and figures, reported by Newsom et al in 2003 who compared two studies carried out in 1948 and 1989 that used the Minnesota Multiphasic Personality Inventory to gather information from 14-16 year olds on their feelings of well being:

Statements from the MMPI	% agreement in 1948	% agreement in 1989
I wake up fresh and rested most mornings	74.6	31.3
I work under a great deal of tension	16.2	41.6
Life is a strain for me much of the time	9.5	35
I certainly have more than my share of things to worry about	22.6	55.2
I am afraid of losing my mind	4.1	23.4

Gray (2011, p.449)



<http://www.dreamstime.com/royalty-free-stock-image-thinking-kid-image4775566>

Gray concluded:

- In play, children develop intrinsic interests and competencies

- In play, children learn how to make decisions, solve problems, exert self-control, and follow rules
- In play, children learn to regulate their emotions
- In play, children make friends and learn to get along with others as equals
- Social play makes children happy, and its absence makes them unhappy

Transforming Practice

Such a conclusion corresponds with evidence contained within several chapters in this book (for example Chapters 7, 9 and 10). How much time do the children in your setting get to play independently and collaboratively, making their own rules and working together to solve problems that arise? (You will find examples of such play in chapters 7 and 10). If you feel that such opportunities are insufficient, how might you work with your colleagues to remedy this situation?

In England, The Children's Society report *A Good Childhood* (Layard and Dunn 2009), which was commissioned to further investigate the "lack of well-being" proposed by UNICEF within the UK, concluded that, "if mental health difficulties have increased, it must be because the quality of children's experience has deteriorated" (Layard and Dunn 2009, p.116). This raises further questions relating to what aspects of 'experience', and why, and what do arguments relating to the provision of time and space for children to play (or lack of such) have to add to the discussion?

Gray provides a more considered analysis:

Humans are extraordinarily adaptive to changes in their living conditions, but not infinitely so. They evolved as a species in conditions in which children learned

through play how to get along with others, solve problems, inhibit their impulses, and regulate their emotions.... without play, young people fail to acquire the social and emotional skills necessary for healthy psychological development.

Gray (2011, p.444)

A broad sample of literature on this topic will be discussed below, reflecting upon a range of changes that have occurred over the last quarter of the twentieth century in post-industrial English-speaking nations in the ways that care and education are provided for children, and the emergent results. Reference will be made principally to English policy and practice, with some comparisons to similar and different policies and practices of other nations.

‘Becoming social’: the importance of social free play in childhood

In order to understand the importance of social free play for young children, human beings have to consider their evolutionary roots. In all primate groups, play is a central feature of the interactions that young animals carry out with parents, and with one another. MacDonald and Parke proposed that, in the later stages of infancy, gentle ‘rough and tumble’ (R&T) games, particularly with fathers and other close male relatives, create a rich source of infant social learning: “children may be learning the social and communicative value of their own affective displays as well as how to use these emotional signals to regulate the social behaviour of others” (MacDonald and Parke 1984, p.1273). R&T play is found across the full range of mammalian species, and in some species of birds. However, the element of fantasy narrative that young human beings begin attach to such play as they move into the third year of life, and the importance that this quickly assumes to them is only found within our own species (see chapter 7).

In 1934, G.H. Mead created a fledgling theory of human development that proposed 'the self is something which has a development; it is not initially there at birth but arises in the process of social experience and activity... the self is essentially a social structure' (Mead 1934, p.135). We will explore human beings as 'social selves' in greater depth later in this chapter (see the Ideas in Action box relating to 'the intersubjectivity debate' below). However, for now we will focus upon Mead's basic theory of 'symbolic interactionism', in which he proposed that make believe play formed a crucial stage in the development of the mature, socially connected 'self'. His theory was essentially that, for example, in making a cardboard box 'stand for' a boat, or a towel for Superman's cape and consequently the self for a sailor or for Superman, children become able to view the world from a number of different positions, and in so doing, take a range of different perspectives. It does not necessarily matter that they actually have no idea how to sail a ship or how to be a benevolent alien with an impressive range of super powers, the point is that they are inhabiting a different role to the one that they inhabit as their 'real' self, and in so doing, developing the ability to view the world (including the self) from a range of different perspectives.

From this premise we can propose that pretend play fulfils a vitally important developmental function in allowing children to decentre from their own immediate position and to view the world in a far more flexible fashion. As far as we know, this is a skill that only human beings possess, and only children play in this way; while young monkeys and apes will enjoy playing with children's toys if they are provided with them, their abilities to make them 'stand for' imaginary items are extremely limited. While they may nurse a doll or roll a 'Matchbox' car they do not name 'the baby' or consider who might be driving the vehicle; only human beings are cognitively equipped to do this; 'standing in the shoes of another' and contemplating the world from this position. You may find it useful at this point to look back at chapter 1 at the 'Ideas in Action' example of Sophie and Elizabeth 'breaking frame' in make-believe play.

© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com



"I'm tired of playing doctor. I'm sending you
all off to see specialists."

http://www.cartoonstock.com/directory/p/playing_doctors.asp

Improving Practice

Do you ever correct children when they are in the middle of pretend play (for example 'a nurse/ pilot/ Superman wouldn't do that')? Why do you think it might be better to wait until they have come to the end of their play narrative and ask an open question such as 'why do you think a nurse/ pilot/ Superman would do that?'

Dunn (1983), in a longitudinal study of families before and after the birth of a new child, found that where siblings played together, especially in pretend play initially introduced by the older child, by the age of 2 years the younger child was likely to show a more sophisticated understanding of 'theory of mind' (ToM) than the older child had done at the same age. In this context, ToM describes the human (and primate) ability to 'guess' what another person may be thinking (to successfully 'stand in their shoes' to some extent) and to adjust one's own behaviour accordingly for various purposes; for example, to flatter,

surprise, or deceive (Baron-Cohen 2001). We will discuss further developments relating to ToM later on in this chapter (again, see the philosophy, psychology, language and play section' below); however for the moment, we will briefly consider Dunn's core hypothesis: that the ToM difference that she found between her participant groups was due to the variable of the ability to engage in communication with a slightly older playmate. Lindsey's (2002) longitudinal research with three- to six-year old children indicated that children who had at least one mutual friend at the beginning of the study, regardless of whether such a friend was slightly older or not, were better liked by peers one year later than children who did not have any mutual friends at the beginning of the study, and that this finding was not correlated with each child's place on the liked/disliked continuum created at the beginning of the study. Lindsey concluded that, as early as three years of age, mutual friendships underpin children's social development processes. We suggest that both Lindsey's and Dunn's findings are emergent factors of children developing ToM skills in interaction with one another, with Dunn's comments relating to pretend play supporting Mead's position on the importance of 'make believe' play for the intricately intertwined development of **the reflective self** and the ability to accurately guess the opinions and concerns of others.

Self reflective

Self examination, introspection

The Free Dictionary (online)

Researchers have found in studies of childhood sociability that children who are popular among their peers in the primary school years deal skilfully with the society of the playground, competently recognizing teasing and R&T overtures from other children as invitations to play (Pellegrini and Blatchford 2000), indicating that they have well-developed ToM competencies. Correspondingly, children who are rejected by their peers are more likely to mistake such overtures as real aggression (Dodge, Coie and Lynam 2006), indicating faulty ToM processes. These findings might offer some explanation for a recent

wave of claims and counter-claims surrounding 'bullying' in school described by The Children's Society (2012). Is it possible that these may emanate from increasing numbers of children who lacked the necessary socialisation experiences to develop the necessary level of ToM skills to cope within the hurly burly of a human peer environment, where a grasp of the dynamic, symbolically complex pattern of competition, collaboration and cooperation that characterises primate social life is essential for full integration?

But *why* might they lack such experiences; what has happened over the past thirty years to create such a situation? We offer below an outline of a range of social changes that have occurred over the last 30 years in England and the US which, when considered together, can be posited to have had the unintended effect of greatly reducing children's opportunities to engage in organic, independent and collaborative free play with peers, which in turn, can be theorised to be an important factor underlying poor ToM competencies and a resulting sense of poor well-being amongst members of a primate species that has evolved to routinely engage in complex, deeply symbolic interaction.

The human primate in the post-industrial society

In modern family lives within Britain and the US, it is not unusual for both parents to work many miles away from their home locations, with the emergent result that children are frequently taken out of their immediate neighbourhood during the working week, to be cared for in a succession of settings. Both inside and outside the school day in England, even within settings caring for the very youngest children, state-registered adults are now routinely paid to direct children's activities, being closely scrutinised and reported-upon by the national inspection body OFSTED for the perceived ability to structure children's moment-to-moment activities in ways aimed at mechanically developing 'learning' via the rote transmission of facts and skills. Many twenty-first century Anglo-American children are used to a routine

from early infancy that utilises the family home only as a place in which to eat and sleep during their parents' working week (See for example the Ideas in Action box that describes 'Aimee's' day in chapter 1). An AA poll found that the average modern British parent drives for 2,000 miles per year to ferry their children around, with a minority (11%) travelling up to 4,000 miles per year (AA 2010, online).

Contrastingly, in the family environment prior to the last quarter of the twentieth century, independent socialisation opportunities were unconsciously but routinely provided for Anglo-American children within a local neighbourhood inhabited by a wide circle of familiar peers and adults. The majority of adults undertook their day-to-day working lives within easy travelling distance from such communities, while their children engaged in a substantial amount of independent, outdoor social free play, casually over-seen by familiar neighbourhood adults who could administer minor on-the-spot admonishments, and take reports of seriously bad behaviour back to the relevant parents. So while it may certainly be that there was little conscious thought given to children's need to play prior to the mid-20th Century in such societies, children were unconsciously given ample time and opportunity to engage in collaborative free play during their out-of-school daily lives. Since then, however, out-of-school play spaces have been increasingly consumed by motor vehicles and sensational mass-media heightened adult fear of predatory stranger abduction, creating an "adult colonisation of children's lives" (Corsaro 1997, p.38) and a loss of time and space for children's independent free play in the out-of-school environment. A contemporaneous development has been the decrease in break-times (or play-times) in English schools since the emergence of the National Curriculum in 1989 and subsequent 'key stage' Standard Assessment Tests (SATs), in order to give more time for children to attend to the adult-defined, outcome-based learning demands of this modern statutory curriculum (Pelligrini and Blatchford 2002). Henley et al (2007) propose that the US is currently in a similar situation, driven by the pressures created by the federal (national) 'No Child Left Behind' Act (2001), which imposes 'payment by results' upon the public education services within each state,

based on the results that children attain in regular testing exercises resembling English SATs (see Ideas in Action box below). As such, it can be proposed that both physical and temporal 'spaces' for children to engage in independent, collaborative free play withered and, to a great extent, died within Anglo-American society over the last two and a half decades of the twentieth century.

Ideas in Action

Childhood in the past

British researchers Opie and Opie carried out an extensive study of children's free play in streets and playgrounds during the 1950s and 1960s, either interviewing or directly observing the play of some 10,000 children across England, Scotland and Wales. In 1969, they reported 'there is no town or city known to us where street games do not flourish' (p. vi), and further suggested that successive generations of playing children might be the sole guardians of many ancient oral traditions, proposing that: 'to understand the "wanton sports" of the Elizabethan day, and the horseplay of even earlier times is to watch the contemporary child engrossed in his traditional pursuits on the metalled floor of a twentieth-century city' (Opie and Opie, 1969, p. ix).

It is clear, however, that these researchers would find something distinctly different on British streets today, due to the fears of parents who do not allow their children out unaccompanied until they enter early adolescence. The Children's Society (2007) interviewed 1148 British adults on this topic, of whom 43 per cent proposed that children should not be allowed to go out unaccompanied by an adult until they were 14.

Opie and Opie (1959) reported that some of the terms their 1950s and 1960s child participants used in their outdoor free play could be directly related back to much earlier forms of spoken English. They discovered a range of terms that children used to call 'truce' on play fighting or chasing which were specific to their regional location, for example 'fainites' in southern England, and 'kings', 'crosses', 'keys' or 'barley' across northern England, Wales and Scotland. Children in the area around Cornwall used 'bars', which would seem more closely related to the northern than the southern terms, suggesting an aspect of Celtic similarity between these areas that is also found through the Gaelic languages of Cornwall, Wales and Scotland. Opie and Opie recorded that J.R.R. Tolkien (of *Lord of the Rings* fame, who was an English scholar in his professional life) described how, in the fourteenth-century collection of published moral stories, *The Canterbury Tales*, Chaucer tells us that 'lordes mowe nat been yfeyned'; in modern English translation: 'lords' orders must not be declined'. This indicates that 'fainites' has descended from 'fains I', in both cases meaning 'I decline'. 'Barley' is also found in fourteenth-century literature, in the poem '*Sir Gawayne and the Grene Knight*': 'to dele him an other barley . . . and yet gif him respite' (Opie and Opie, 1959, p. 148). This appears to be used in a similar frame to the term 'parley', (from the French *parlez*, to speak) which was used mainly in the English vernacular to mean a halt in a battle for peace talks. This would seem to have a clear similarity to pleading for a halt in a game or to miss a turn to take a rest, or to catch one's breath before engaging once more with the (pretend) 'enemy'.

It is sobering to think that generations of playing children dating back at least to Chaucer's time, probably much longer, have transmitted scraps of dialect directly to one another that are the only echoes of linguistic forms which are otherwise dead. It is even more thought provoking to consider that this has been halted during the contemporary lifetimes of adults aged 35 and over at the turn of the twentieth century.

A Personal Account (Author's interview data)

'John' was born in 1959 and spent his childhood in a Kentish village in England. He recalled: I must have been about 6 when I first played in the woods – I don't remember a summer holiday when I wasn't out in the woods; every day I would be out with my schoolmates. The church was the beginning of the woods. You went down through the churchyard and then into the woods. We spent whole days out there; we walked all the way down to the golf course. It took a long time for a kid to walk that far, so you'd spend all day in the woods and walk for what seemed like miles and miles. We took packed lunches and bottles of water because we were out for so long.

I don't remember getting instructions from adults about strangers – there weren't any, we generally knew everybody. There were TV ads telling you not to talk to strangers, and on the odd occasion we saw someone we didn't know we ignored them . . . I wouldn't have liked to have been in a town. Once you were in the woods you could do whatever you liked.

Games he remembered playing included:

- Play battles, mostly World War II stuff, sometimes cowboys and Indians. "Truce" in war games was called by saying "fainites". We used to try and avoid being seen, like Indian scouts. Then we wouldn't use the path at all. It was fun to avoid the older boys. You used to pretend that they were the bad guys and hide; they were the enemy. You'd try to avoid being seen just for the fun of it. We used to try tracking each other, which generally didn't work. You ended up

getting separated and going home on your own. It was never scary, but it could be a bit annoying.

- Digging places up to make hides, and making fires (We'd try two sticks for about a minute then we would use matches), and making pretend traps.
- Damming little streams very unsuccessfully.

The end of the summer was marked by playing with the bales of hay in the farmer's field:

I think the farmer saw this as useful because we used to pile up the bales of hay to make castles, and the machine he used dropped the bales at regular intervals across the field, so we made some piles for him that were useful when he loaded the hay on to his wagon. He never got cross with us as long as we didn't break the bales apart.

Playing with the hay meant that it was nearly the end of the summer holidays.

Stop and Reflect

Look back at the concept of 'cotton wool kids' explored at the beginning of chapter 1. If you work with, or have access to children aged between 7 and 13, it would be very interesting to carry out some short interviews with them (no longer than 15 minutes) to study how they spend their time when they are not in the setting environment, and how far they are allowed to 'roam'. Do make sure that you have their parents' explicit permission for your interviews. It would also be useful to interview these parents to try to understand the rationales that they use when setting 'roaming' boundaries for their children.



New Environments for Play: creating the next generation of consumers

Contemporary English speaking post-industrial cultures sometimes claim to be more 'child oriented' than they were in the past, but on closer examination, many recent developments in this area consist of increasingly sophisticated marketing of various products to children through their parents; what Bryman (1999) referred to as the 'Disneyization effect'. This is particularly prevalent within virtual, online play and socialisation 'spaces' for both children and adults that are currently proliferating on the Internet. Below, we will briefly consider three such websites, which are specifically aimed at pre-teenage children.

We introduced the idea of children playing in virtual worlds in chapter 1, in the frame of adult ‘moral panic’ about any new technologies that come along; the very human attempt to protect the young from the dangers of the unknown, while youthful curiosity conversely leads the young to venture out to meet the new experience! Marsh (2010, p.24) proposed that ‘play and technology are frequently positioned as oppositional’; we do not espouse this orientation. We are not looking at virtual worlds being potentially harmful due to the simple fact that they are *online*, but to the extent to which they have been infiltrated by giant corporations whose principal aim is to make the maximum profit from users, with the result that any play activity in such environments becomes controlled by the relentless profit-seeking activities of the businesses who administer them. Marsh investigated children’s play activities on two popular networking sites for English-speaking children, Club Penguin and Barbie Girls. Barbie Girls is owned by the manufacturers of the Barbie Doll, Mattel, while Club Penguin was acquired by Disney for \$350,000,000 in 2007. In both online games, children interact with each other via **avatars** which become their online personas; a ‘Barbie’ in Barbie Girls and a penguin in Club Penguin.

Avatar

An electronic image that represents and is manipulated by a computer user (as in a computer game)

Merriam Webster online dictionary

Barbie Girls is set directly within a shopping mall, in which The New York Times (2008, online) reported that those who spend the most are given access to a special area, and a ‘VIP tiara’ for their avatar to wear. Marsh (2010) reflected that one of the benefits that Club Penguin website has over Barbie Girls is that it contains some areas that depict natural outdoor environments such as trees and mountains. However, she noted that shops and shopping feature highly within both websites: ‘commodity purchasing is a key activity in both Barbie Girls and Club Penguin... both virtual worlds offer free membership and an additional

layer of paid membership which provides access to additional goods and in-world activities' (Marsh 2010, p.27-28).

We would suggest that it is perhaps a little early in the developmental process for the core Club Penguin player, who is typically in the 5-10 age group, (a little younger than the typical player in the Barbie Girls environment) to be introduced to 'child oriented worlds... shaped by social, economic and cultural capital' (Marsh 2010, p.28). Marsh further described how commercial activity constantly drives the games that children play on Club Penguin: 'each narrative theme involves children collecting special "pins".... This encourages children to keep returning to the site and mirrors the collection-driven play offered by other commercial products such as Pokemon and Beanie Babies' (Marsh 2010, p.30). She reflected 'many children adopted a "collector-consumer" role in Club Penguin' (Marsh 2010, p.34).

A wiki-how online page relating to Club Penguin powerfully demonstrates this point:

Burst into that gift shop.... like you are the richest penguin alive. Purchase a new wig so your buddies can "ooh" and "aaah" over your freshly styled hair....Flip through your igloo catalog and invest in some new furniture....Now you and your igloo will look fantastic.

(Wiki-how 2012, online).

We propose that what children principally learn through such activities, conventional or online is that the amount of fun they can have, and that their level of self-worth is determined by the amount they are able to spend on a commodity or experience, and that such events link to the increasing sense of materialism that Gray (2011) connects with narcissism, anxiety and a consequent feeling of poor 'well-being'. This is no doubt of little concern to the international conglomerates who host the websites; The New York Times offers a wry

warning to parents: 'Just watch out for free trials that require a credit card. If you fail to cancel, these services will happily keep withdrawing \$6 to \$12 a month from your bank until you're well into your 90s' (New York Times 2008, online).



http://www.cartoonstock.com/directory/c/children_playing.asp

Ideas in Action

NeoPets: enjoyment or exploitation?

The NeoPets website is a website dedicated to children's online gaming. It was invented by two college students in 1999 as a way to keep themselves and their friends entertained in between exam revision sessions. An additional benefit was the possibility of earning some money from any banner advertising that the website might attract. The idea is that the player adopts a pet, and looks after it in the virtual world in terms of

giving it love, attention, food, grooming... etc. The website, which was placed openly on the world wide web, very quickly became popular with young players between 7 and 14 across the English speaking world, and was subsequently purchased by Viacom in 2005, with the express purpose of linking the website content into its children's entertainment products. Viacom own the Nickelodeon cable TV channel and have a large stake in Paramount Pictures.

In the Viacom-hosted game, NeoPets players pay to purchase a vast variety of products for their pets (e.g., food, toys, clothes). They may also subsequently sell these products, many of which are offered by the website on a 'limited edition' basis, to other players. Some associated products are also now available in the 'real' world; see chart below. Grimes and Regan Shade (2005, p.185) proposed: 'embedded throughout NeoPets is a strong culture of consumerism and acquisition.' They concluded

When popular children's arenas are owned and operated under the sole prerogative of industry interests, the best interests of young users are at risk of being suppressed and exploited. Although NeoPets claims to foster a space 'for kids, by kids', their sweeping intellectual property claims over children's online contributions greatly restricts and undermines children's cultural participation.

Grimes and Regan Shade (2005, p.194)

Stop and Reflect

Grimes and Regan Shade produced the following breakdown of children's interactions with 'Neopets' and their relevance to real world consumption activities:

	Game Activities	Real World Activities
Shopping	NeoPets Marketplace (Official Items stores); NeoPets Bazaar (User-generated Items stores); Auction House (small scale eBay auction for Items); Specialty Shops (Items shops particular to certain theme areas); Real Estate (Homes for pets)	NeoPets Merchandise (Product announcements, catalogue); 99 Dogs.com (Online store, NeoPets merchandise); Thinkway Toys (Online store, NeoPets merchandise); Limited Too (Online catalogue for NeoPets merchandise)
Service Industry	Neolodge Hotel (Users pay for room and board for their pet at the hotel) Beauty Shop (Beauty and grooming products)	General Mills Cereal Adventure (Sponsored movies, games, activities, General Mills cereal for pets) Disney Theatre (Advertising, movies, games, Disney pet food) McDonald's (Ads, games, pet food)
Trade	Trading Post (Users can organize Items trades)	
Investing	Rare Items; Collector's Cards; Post Office (Virtual stamp collecting) Coin Shop (Virtual coin collecting); Stock Market (Neodaq Index); Bank and Safety Deposit Box (To store NP, accrue interest)	NeoPets Trading Card Game (Product announcements, input codes from card purchases into website for extra level); NeoPets Collectibles (Product announcements, store locator, online catalogue)
Employment	Employment Agency; Faerie Quests (Users are sent to retrieve/purchase Items in exchange for NP or rewards)	Polls/surveys; Special Offers (Fill out surveys, click on ads in exchange for NP)
Entrepreneurialism	User Shops (Users create a shop, sell items); Plushie Tycoon (Users run a simulation toy manufacturing company)	
Training/Education	Battledome (Battle other players for experience points); Swashbuckling Academy (Users pay "tuition" to have experience increased)	
Social Services	The Money Tree (Donate or receive donated items); Soup Kitchen (Free food); Neopian Hospital (Lists Items needed to cure pet illnesses); Adoption Centre (Get rid of/adopt unwanted pets)	General Mills Cereal Adventure (Free cereal for your pet upon completion of product preference survey)

(Grimes and Regan Shade 2005. p.186).

Of course, it should be pointed out that that aggressive 'concept' marketing to children did not originate in the online environment, but in ventures such as the 'teenage doll' of the 1960s (e.g. Barbie in the US and Sindy in Britain) and even before this in dolls and games based on popular cartoon characters, for example through the Disney franchise. In the early 1980s the 'cartoon leads to associated toys' direction was reversed for the first time, when the Masters of the Universe cartoon was created to cement the

popularity of the He-Man range of toys (Rutgers 2012, online). However, the entry of the world wide web into this type of complex and interconnected consumption can be posited to add a layer of highly immersive sophistication to the experience. Overall then, do you think children's play activities are being exploited in such online environments, to the detriment of their future development? Discuss these points with your coursemates/ colleagues- and don't expect to come to any quick, easy conclusions!

Gray (2011, p.452) found that over the past thirty years, children and young people have become far more materialistic; for example the percentage of first-year U.S. college students who ranked "being very well off financially" among their most important goals increased from 46 percent in 1967 to 73 percent in 2006; and another question on this repeated survey found that those who wished to "develop a meaningful philosophy of life" dropped from 86 percent in 1967 to 42 percent in 2006. There were also indications that unrealistic expectations amongst young people relating to their future careers gradually increased over this period, as did the likelihood they would cheat in order to get high grades! It could of course be counter-argued that these factors are not *caused* by increasing materialism in children, and/ or that increasing materialism does not *cause* a low sense of well-being; the evidence Gray presents is **correlational** rather than **causal**.

Correlation:

A statistical index used to represent the strength of a relationship between two factors, how much and in what way those factors vary, and how well one factor can predict the other; such conclusions are frequently drawn from opinion surveys. Discovering

correlations does NOT provide you with cause and effect information; it will not tell you if or how one factor causes or is caused by another.

Causation:

The demonstration in experimentation of how one factor influences another. When one factor is conclusively demonstrated to have a specific effect on another, you can claim that you have detected "causation".

Alley Dog online psychology glossary: <http://www.alleydog.com/glossary/>

The Effects of 'Transmit and Test'

Now we will turn to the role of classroom practice in the quashing of 'learning through play' under the umbrella of the National Curriculum introduced in England in 1989; you will find far more information on this point in chapters 2, 3, 5 and 6; what follows is a brief summary.

Reay and Williams (1999) proposed that many creative and collaborative activities that had been part of day-to-day classroom practice in English schools prior to the introduction of the National Curriculum were quashed in favour of 'spoon-feeding' individuals to attain narrowly targeted outcomes, in order for schools to demonstrate that the highest possible number of pupils at any given stage are able to 'perform' at the maximum possible level in predictable questions within key stage SATs. McNess, Broadfoot and Osborn (2003) concluded that within English education:

A growing policy emphasis on accountability, and the need to raise school standards ... [resulted in] ... a performance oriented, transmission model of learning [being] given preference over a

sociocultural model which recognised and included the emotional and social aspect (pp.245–246).

As further time has passed, it has become increasingly clear that what English state education in particular currently deems ‘teaching and learning’ tends to be based upon simple transmission of facts and skills within a classroom environment, which must be successfully regurgitated by the individual in regular pencil and paper testing. This has gradually become a priority for all English care and education settings, who have absorbed the national message that children need to be relentlessly prepared for a culture of ‘transmit and test’ from the earliest possible opportunity. In the US, the pressure of No Child Left Behind, and its implication for the withholding of resources from ‘failing’ states has had a similar impact. Whitebread and Bingham (2011, p.3) proposed:

The model of ‘readiness for school’ is attractive to governments as it seemingly delivers children into primary school ready to conform to classroom procedures and even able to perform basic reading and writing skills. However, from a pedagogical perspective this approach fuels an increasingly dominant notion of education as ‘transmission and reproduction’, and of early childhood as preparation for school rather than for ‘life.’

These authors concluded (p.2) “it is not *whether* a child is ready to learn, but *what* a child is ready to learn”.

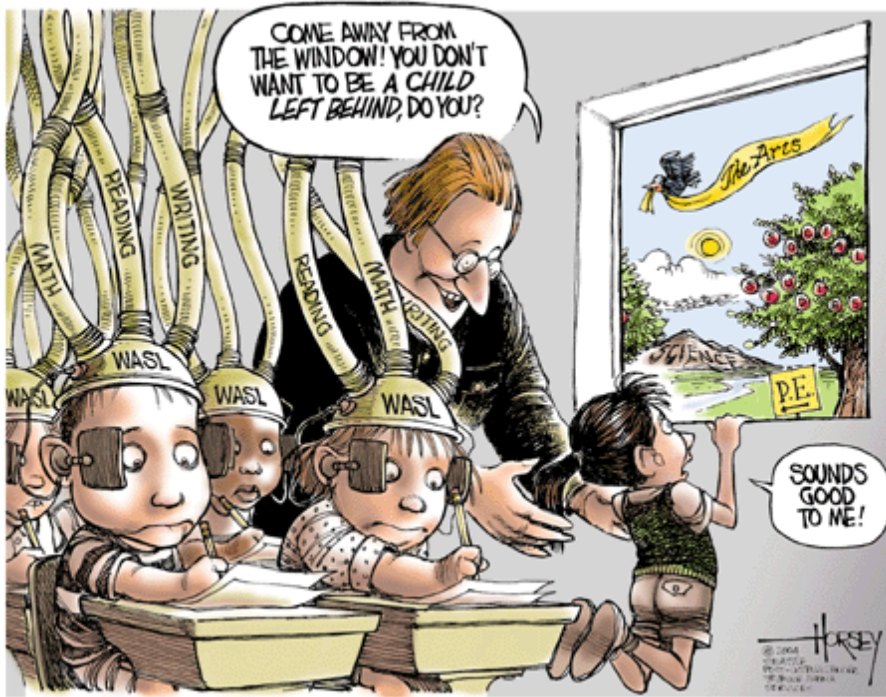
Ideas in Action

The American Perspective

In 2007, American educational researchers Joan Henley, Jackie McBride, Julie Milligan and Joe Nichols from Arkansas State University wrote:

The playground at Maple Street Elementary School is quiet these days. The only movements on the swing sets are a result of a strong west wind edging the swings back and forth. The long lines that once formed for trips down the sliding boards are empty. There are no softball or kickball games nor are there any games of tag or duck-duck-goose being played. There won't be a fifth grade musical this year. Children will not be learning to play the recorder nor will they be learning to march to rhythms or learn the traditional songs that have transcended the years of music instruction in elementary schools. There will be no art to display. Daddies' old long sleeved shirts that were handed down to children to cover up school clothes to keep from being stained with tempera paint and water colors are no longer needed. No, Maple Street Elementary School is not closing. It is squeezing every minute of the school day to meet the mandates of the No Child Left Behind Act (NCLB) [2001].... Maple Street Elementary School is a metaphor for elementary schools across the nation.... the one commonality is that each student has affective and social needs that, according to some, are being compromised (p.56).....

It has been reported.... that none of the nation's states have been able to meet the 'quality-goal' outlined in the [No Child Left Behind] Act. As a result, at least one-half of the states are facing the possibility of receiving reductions in federal funding for educational programs..... The larger question remains: Is No Child Left Behind robbing American children of their childhood? (p.61)



http://tednellen.blogspot.co.uk/2008_10_01_archive.html

[Author's note: WASL is the Washington Assessment of Student Learning process]

Stop and Reflect

What similarities can you detect in changes that have recently occurred in both the English and American education systems?

It could thus be posited that 'transmit and test' modes of 'education' in England and the US break down the aspect of 'social connectedness' that Twenge (2000) describes and instead, creates a population of winners and losers, with individual worth defined in terms of how accurate and compliant the individual is with respect to regurgitating transmitted information under test conditions. This situation can of course be directly related to online 'play' environments in which children are encouraged to engage in relentless competitive consumption; individuals sitting alone at a technological interface with the aim of becoming the

highest-spending consumer in a group of virtual ‘playmates’. Both environments can be proposed to be equally individualistic and unnatural arenas for human development.

The way that children most naturally learn is through a range of face-to-face collaborative play-based activities, in which they independently interact on a moment-to-moment basis, learning that in general it is most adaptive to grasp how to share, collaborate and ‘be social’ if you want to remain in the game (see for example Nathan’s eventful playtime described in Chapter 1, and the quote from a young person that opens this chapter). Competition, where it arises, tends to be more subtle than we find in the transmit-and-test classroom and the consumption-driven online game. It is more frequently the result of a challenge offered by one group to another, rather than between individuals, and as such, likely to additionally involve simultaneous collaboration and co-operation. Where such complexity is removed by an unnatural environment, the individual is likely to find himself in situations where he alone is pitched against an unfriendly world; is this a key source of Twenge’s (2000, p.1017) ‘low social connectedness and high environmental threat’?

Ideas in action

What English children say about school in the early twenty-first century (Author’s interview data)

The continual testing of children at school, and the huge emphasis on individual achievement, rather than a balance between individual and collective activity, leaves those children who are judged to be at the bottom of the pile feeling “‘thick”, “stupid”, not wanted in the school’ (Riley and Docking, 2004, p. 166). One of the writers of this

chapter carried out a series of 'student voice' interviews in several English schools during the summer of 2006, with children of both genders aged between 11 and 15, who had experienced teaching and learning under the direction of the National Curriculum for at least seven years, including six years of primary education. These participants were from a wide range of ethnic groups and socio-economic backgrounds, and their placement in assessed ability groups reflected a broad spread of ability across the mainstream range. The overwhelming content of their combined 'voice' was a general perception that school-based activities were essentially artificial and alienating. One working-class white boy who had been placed in the bottom ability group in his cohort contributed a vivid metaphor for how he and his friendship group felt in school: 'It's like saying if a black person came in, like take your skin off, you're the wrong colour. That's how we feel.'

Others more straightforwardly complained that a lot of the work teachers set them in preparation for tests was 'pointless and repetitive'. A pupil from the highest ability group in his cohort made the point that countless revision sheets 'just get stuck in your book – a bit pointless'. Even when pupils were set collective tasks in group work, the culture of the contemporary classroom appeared to dictate that the goal was perceived by the pupils concerned as to *individually* reach a particular target or standard rather than to collectively discover and reflect. The consequent result was outlined by a pupil in a mid-range ability group, that the 'not so clever [relied] on the brainy person to do it for them'. Another pupil from the highest ability group in her cohort commented: 'when teachers try and mix it . . . so . . . the clever people are with people who are not as clever . . . it tends to happen that those people don't really want to work so you just get kind of left [to do all the work]'.

Stop and reflect

Pick an activity that you have undertaken in the past with children in your setting, and consider how this would be approached from the perspective of 'transmission' learning, and then by a group working together to solve a particular problem. Ask yourself the following questions:

- Which method would be likely to have the quickest result?
- Which method would be likely to result in the deepest learning?
- Which method would be likely to create the most interesting experience for the children?

Improving practice

If you get into the habit of this type of reflective practice at the start of your career, you will be well on the way to providing what several of these 'student voice' participants referred to as 'funner' ways to learn.

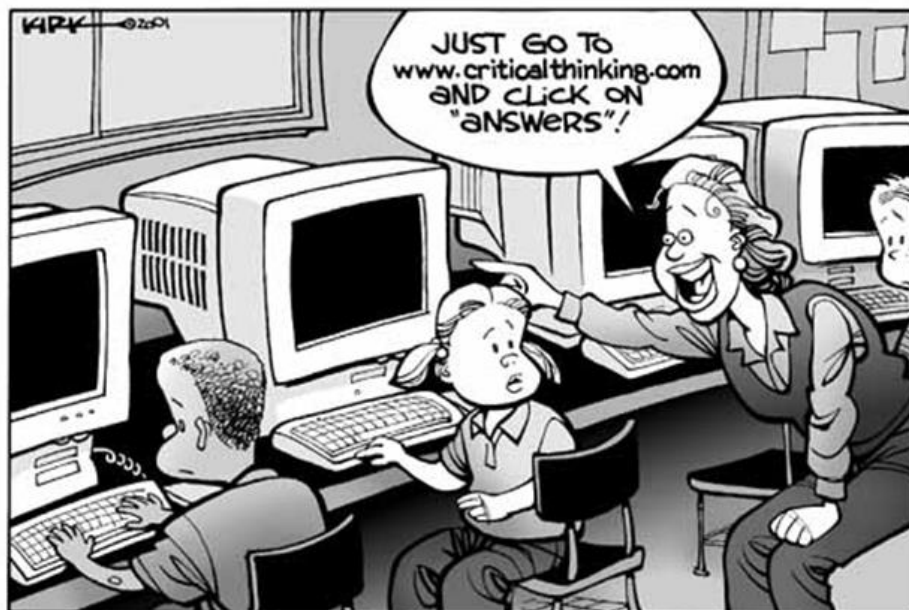
An important emergent result of engagement in collaborative activities undertaken in a natural face to face environment in peer groups, is that children exercise their natural ability to use ideas and objects flexibly in the creation of co-constructed cognitions. The narratives that unfold between the participants are open ended, as are the uses of objects within them. Logically, if children do not have sufficient experience of being confronted with open-ended problems, they will not effectively learn how to find open-ended solutions; all problems will be perceived as having one fixed solution, to which a teacher- or other 'more intelligent person'- will provide a standard answer. This was demonstrated in a finding made by Jarvis in the 'student voice' research referred to in the 'Ideas in Action' box above:

Homework or tests set on topics where 'the answers' had not been previously directly communicated by the teacher in the classroom were unanimously perceived as extremely unfair by a focus group of 11-year olds. When the researcher asked

'aren't you sometimes asked to read something, think about it and come to your own point of view on what you have read?', one student doggedly insisted: 'if the teacher hasn't taught it, it shouldn't be on the test', an opinion that was clearly shared by others within this group.

Jarvis (2009, p.71)

This area of research raises many questions about how the replacement of play-based 'discovery' activities by 'transmit and test' regimes, and the replacement of organic collaborative free play by online consumption driven cyber-interaction will impact upon children's development of the reflection and critical analysis skills that underpin the capacity for independent learning. A further question relates to how individuals will be equipped by 'transmit and test' to fully engage in democratic processes requiring reflective and critical skills in their adult lives (for example playing a full role on a court jury, or becoming an informed voter).



<http://www.psychbytes.com/Teaching/index.htm>

Carla Rinaldi, the president of Reggio Children, a framework for early years practice that grew out of a resistance to the anti-democratic practices of Italy's fascist government during the World War II (see chapter xxx for a discussion of the Reggio Emilia framework) outlines her construction of a human child: "a child who, very early on, is able to attribute meanings to events and who attempts to share meanings and stories of meanings" (Rinaldi 2005, p.84). Consequently, education for her is seeking "possibilities ... for the individual child and the group of children, the protagonists of the experience, to have a story, to leave traces, to see that their experiences are given value and meaning" (Rinaldi 2005, p.86); this is part of an education system based upon a very human primate premise:

The central focus is on the relationship between children and adults. The [school]... should be seen not as a single system, but as... a system of relationships and communication among children, teachers and parents... a living organism that pulses, changes, transforms, grows and matures.'

(Rinaldi 2005, p.85).

The Reggio Emilia framework clearly recognises the fact that children become far less effective learners when opportunities for the integrated social, emotional and intellectual experiences that characterise primate development are insufficient, while some English and American practices conversely tend to view the provision of such opportunities as time wasted that could have been spent preparing children for a passive role in transmit-and-test regimes!

Guy Claxton (1997) proposed in his book *Hare Brain, Tortoise Mind* that adults also produce more original and insightful solutions to work-based problems when they are encouraged to 'play' creatively with ideas, particularly in groups. Claxton reflected: 'The slow ways of

knowing will not deliver their delicate produce when the mind is in a hurry . . . people need to know how to make use of slow knowing . . . This . . . must surely be the true function of education' (pp. 214–15).

Evidence to suggest that transmit-and-test modes of 'teaching and learning' are impoverished is powerfully illustrated by the differences between both policies and results within the English and Finnish education systems. Finnish children (who, alongside the other Scandinavian countries, are rated within the top five for high levels of 'well-being' in the 2007 UNICEF report) are not judged ready for formal schooling of any kind until the school year in which their seventh birthday falls. Even then, their days are constructed so there is a substantial amount of time for social free play and collaborative problem-solving activities. Yet they academically outperform British and American children by the mid-teen years (PISA 2009, online). Somewhat ironically perhaps, it was OFSTED who noted that:

Finnish pre-school teachers placed less emphasis on reading and writing than the Year 1 teachers in England; yet, by the time they are 15, Finnish pupils are outperforming their English counterparts....by a considerable margin in reading literacy and by smaller margins in mathematical and scientific literacy (OFSTED 2003, p.2).

Ideas in Action

Finland's care and education system:

- Generous parental leave entitlement and heavily state-subsidized early years care
- A school entry age of seven
- A large amount of time for free play throughout childhood
- Free school meals for all
- No league tables and no inspections

(The Guardian 2010, online)

Improving Practice

Later on in this chapter, we reflect that it is impossible to simply 'graft' the practices of one culture on to another and expect them to immediately 'work'. Consider with your coursemates/ colleagues what problems might arise if the English government proposed that as from tomorrow, England's state education system was going to adopt the same practices as Finland's. Consider why Anglo-American nations' concepts of childhood and education may differ so greatly from the nations of Scandinavia (of which Finland is one). You may find it helpful to briefly research the cultural milieus within all three nations

In conclusion, it seems that there are good grounds for arguing that 'educational' modes of interaction with children in contemporary Anglo-American culture do not adequately tune into their social and emotional needs and, further, that our education and care practices do not recognise the vital need for collaborative play-based and open 'discovery' learning activities in the holistic developmental processes of complex human primates. It is only the recognition of such factors that will help us to develop a framework that can fully nurture the potential with which children's human heritage has equipped them: to become independent learners, developing deeply rooted skills and knowledge that they can flexibly apply to a range of situations, not simply to the situation in which they have been 'trained' by an adult.

Transmission-based instruction is also inevitably a dreary experience for a creature who instinctively realises that what s/he is being taught is not tapping into the full extent of his/ her potential capabilities. As Gray proposes:

A world that orients children toward building grade-point averages and résumés for uncertain future gain is a world that says, in effect, "Life is a chore, you are always

striving for something in the future; you are not even quite sure what it is that you are striving for or why, and you have no guarantee of achieving it.” This latter view seems, at face value, to be a perfect recipe for anxiety and depression.

Gray (2011, p.454)

Ideas in action

An urban play project (Author’s interview data)

‘Andrea’ works on a charity-funded play project in a large city in northern England, which consists of a small team of people who manage an inner city adventure playground, and originate other projects that involve taking play experiences out to children in various settings around the city. The ethos of their practice is to encourage practitioners to let children take the leading role in their play activities. They have occasionally visited local schools to introduce the children- and their teachers- to ‘learning through play’. Teachers, however, were inclined to view the project with some suspicion:

Andrea explained: one teacher sat me down and said, OK, can you tell me exactly what they are learning from this? I said well, in terms of wood play, you can look at what tools they use and what conversations they are having when they are doing it . . . look at the self-directed things that are going on, like there’s a lot of investigation going on. For example, they might try to make a cart and put different size wheels on one side, and then they figure out it will only go round in a circle, it won’t go forwards, all those investigative things. One teacher got enthusiastically involved, but ‘ended up squashing [the children’s] play; he said like, ten minutes to make a den, and then he tore one den down saying that it wouldn’t withstand any kind of strong weather. Even the teachers who were more in tune

with the ethos of the play project seemed nervous about using the equipment and wanted a lot of training, so the playworkers then had to explain that they were not 'expert' in wood play or in any specified uses of any of the other play equipment and resources.

Stop and reflect

How do you think the staff in your setting would respond to a visit from 'Andrea' and her colleagues and why?

We have explained the reasons for our belief that the governments of England and the US allocate little importance to children's core developmental needs beyond a relentlessly individualistic and shallow fact- and skills-based transmit and test 'education', and that contemporary children living within these societies lack the out-of-school opportunities for free, independent associative play that their ancestors were afforded. As such, within two of the most economically wealthiest societies that have ever existed, we have unwittingly created extreme social and emotional impoverishment. We propose that this is likely to be a central factor underlying a poor sense of well-being within an environment of consumer plenty; anomic children adrift within an anomic society. But what might lie at the heart of such **anomie** specifically in terms of faulty developmental *processes*? We offer below a new blend of philosophical and psychological theory that may shed some light on this question.

Anomie

Personal unrest, alienation, and uncertainty that comes from a lack of purpose or ideals (Merriam Webster online dictionary).

What relevance do complex theoretical debates in the area of 'learning through play' have to practice?

Philosophy, psychology, language and play

A plethora of evidence from psychological and philosophical research indicates that meaning is created *between* human beings using a vast range of different inputs, rather than directly transmitted from one individual to another in a simple linguistic 'from my store directly into yours' fashion. Human beings are *not* computers who transmit information in a fashion that resembles downloading data onto a memory stick from one machine, and simply plugging it into the other! This has huge relevance for the ways in which socialisation and education opportunities should be matched to the natural potential of the developing organism. Children are not *vessels* to fill with knowledge and skills, but *apprentices* to induct into the multitude of ways in which human beings create shared meanings.

One perspective on this issue is that offered from a cultural psychological paradigm by Moghaddam, who suggests that developmental scientists have for too long concentrated on what he calls the 'embryonic fallacy', characterised as 'the assumption that as soon as life begins, the individual becomes the source of psychological experiences' (Moghaddam, 2010, p.466). Such a view leads to the notion of the child as a "self-contained individual [who is]... assumed to be the sole or main source of psychological experiences" (Moghaddam, 2010, p.466). In contrast to this, Moghaddam draws on some of his earlier work (Moghaddam 2003) and work by others (e.g., Sammut *et al.*, 2010) to argue that it is the understandings shared within and between cultures about social reality that develop the notion of **interobjectivity**, and that it is from this notion that **intersubjectivity** develops (p.466). Intersubjectivity is here taken to mean how individuals understand other individuals,

and “how individuals perceive others” (Moghaddam, 2010, p.466). Such concepts are also beginning to emerge in neuropsychology, where Hood (2012, p.ix) argues that “while the daily experience of our self is so familiar.... brain science shows that this sense of self is an illusion”. Hood’s central point is that the ability of human beings to collectively create a complex dynamic culture has the emergent property of each individual creating an illusionary sense of self, which is largely used as a social navigation tool; in this area of theory, the collective mind precedes and actually *produces* the existence of what we perceive as our own individual mind. We can find the philosophical roots of this debate in the mid-twentieth century philosophy of Ludwig Wittgenstein, who, in his later writings, created the underpinning philosophical debate relating to arguments against the existence of ‘private languages’. This perspective, we believe, has important implications for the role of social, collaborative play-based activity in the intricately interconnected development of children’s social, emotional, intellectual and linguistic skills, and subsequent sense of well-being.

Intersubjectivity

Shared understanding that occurs between two or more separate conscious minds in direct interaction with one another.

Interobjectivity

A word currently limited to cultural psychology which describes a separate conscious mind in interaction with external ideas that are not specifically rooted within another individual, but society as a whole- for example a set of cultural beliefs relating to a particular political or religious position.

One important point is that ‘primitive’, natural expressions’ (Wittgenstein *Z*, §218)* of fear, anger, joy, pain, playfulness and so on, provide the setting (Wittgenstein *PI*, §257) for the

acquisition of a first language; by training and persuasion, infants can be brought into a community of shared certainties which provide the frame of reference through which verbal language can be first acquired (Gilroy, 1996, p.113). In any particular context, we (as experienced users of verbal and non-verbal language), and children (as novice users) observe, hear, and imitate, gestures, actions, expressions, tone of voice, and the like (Wittgenstein *OC*, §10; Wittgenstein, 1935/1968, p.248); “linguistic and non-linguistic behaviour are woven together into an intricate organic whole” (Pitcher, 1964, p.240) or ‘language-game’ (Gilroy, 1996, p.109). With this perspective, terms such as ‘fractiousness’, ‘friendliness’, and so on are not seen as having meaning because of an underlying psychological state or process within an individual, but by being used to describe certain behaviours in certain circumstances within a language-game (*Z*, §540), where a language-game consists of “language and the actions into which it is woven” (*PI*, §7). Such a view recognises that an infant “learns to react in such-and-such a way; and in so reacting it doesn’t so far know anything” (*OC*, §538). Infants naturally behave in certain ways even before they can employ language – ways which can be described by others as fractious, friendly, thankful, desiring something, playful, and so on (Malcolm, 1981, p.4). Just as there are behaviours which we would consider natural for a human being who is in pain, so too there are behaviours which we would consider normal to see in a human being who is angry or afraid, or who is friendly, thankful, and so on (Wittgenstein *PI*, p.229e). A key point here is that children have difficulty in learning how to play the ‘language game’ unless they engage in a range of fully organic interactions, where they are required to pay close attention to the communications of other people, and independently construct their own original responses to these- it is not until they do so that they can fully engage in human ‘intersubjectivity’.

The type of ‘classroom talk’ that goes on within western schools can be seen from this vantage as an extremely ‘reduced’ mode of communication, in which a teacher asks a

closed question to which the pupil has to guess at one specific 'right' answer, which, it is implied, has already been communicated to him by the teacher:

Most teachers are "useless" at ensuring that proper group discussion takes place in their classes, a leading teacher trainer has warned. Neil Mercer, a Cambridge University education professor, says group work is a vital part of teaching because neuroscience shows the brain is designed to learn in collaboration.

"We don't just exchange information when we talk; we actually create new knowledge together," he said. "From learning to reason together they (pupils) get better at solving problems on their own."

Teachers need to allocate enough time to allow pupils to work out answers between themselves, according to Professor Mercer. But too many were asking children closed questions that focused on whatever nugget of information was in the teacher's own head.

The TES (2010, online).

Ideas in Action: The 'intersubjectivity debate'

One of the most interesting new discoveries to support Wittgenstein's (and later) theories of the intersubjective nature of the human 'self' is that of 'mirror neurons', firstly in the brains of monkeys and then within the human brain. Mirror neurons fire not only when an individual is engaged in a particular action, but when they see another individual engage in this action. For example if you are watching a gymnast go through his routine on TV, the same neuronal area will fire in your brain as the area that is firing in his, the only difference being that the activity in the individual actually carrying out the physical activity will be more intense.

Mirror neurons have been introduced into discussions about language, theory of mind, empathy, imitation, perspective-taking, understanding, self-consciousness and agency... might the mirror neuron system be the neurological correlate of intersubjectivity?

Gillespie 2012, pp.45-46

This theory takes Mead's (1934) concept of 'standing in the shoes of the other' and Wittgenstein's 'language game' into a vast, new arena for the twenty-first century, and offers a huge challenge to what transmit-and-test education cultures consider 'effective' teaching and learning. Gillespie goes on to propose that what children specifically need to grasp to effectively operate within the adult social world is a concept of 'position exchange', which is underpinned by the action of mirror neurons:

Specifically, children become able to regulate their behaviour as listeners (e.g., not to speak but to listen) by virtue of reflecting upon themselves from the previous experience of being a speaker, and also, they become able to regulate their behaviour as speakers (e.g., speaking clearly) by reflecting upon their own behaviour from the standpoint of previous experience of listening..... Such integration could also lead to identification, for example when observing another person getting embarrassed during public speaking leads to vicarious embarrassment and squirming discomfort..... Position exchange does not rely on a mysterious cognitive capacity..... although actors cannot 'take' each other's experiential perspectives directly, they can quite literally take each other's social position and thus experience a similar perspective.

Gillespie 2012, pp.57-58

Transforming Practice?

The intersubjectivity debate is far from over. As with many aspects of psychological research, much of it is now moving into the neurobiological arena, particularly with respect to the development and function of mirror neurons. While practitioners in the children's workforce are (thankfully!) not expected to be expert in neurobiology, they do need to follow the gist of such debates and reflect upon what relevance they may have for practice. In this particular debate, the gist of the argument is that it appears that organic social interaction, of which play is a central medium, particularly in childhood and adolescence, may be far more important for the development of children's core human primate abilities- a holistic *blend* of the social, emotional, intellectual and linguistic- than it is currently given credit for, and as such theoretical areas expand, it is likely that Anglo-American culture will need to develop new theories of care and education to keep pace, in which play-based and discovery learning are given a much larger role.

Stop and Reflect

What are your own views about what children are learning when they are engaged in organic social interaction; i.e., rather than 'learning from the teacher' as described by Mercer in the TES (2010) above? Have they changed as you have read through this chapter so far?

The rapid development of neurobiological theory, particularly that relating to mirror neurons suggests that that we need to recognise that verbal and non-verbal meanings develop from organic social interactions in which children freely respond to partners with whom they are conversing, and that 'transmission based' instruction given by an adult in a classroom setting is not of similar value in the development of deep understanding of self and others. As Bruner (1986, p.45) concluded, human beings collectively create "products of the mind [and]

build them into a corpus of culture”; we create our understandings of the world in the spaces *between* people rather than in separate storage areas residing *within* each individual, A key mode for children to engage in such interactions is within collaborative free play, where they are required to independently construct responses to the complex and environmentally embedded communications of others, on a moment to moment basis .

Ideas in Action

Watch the following clip on youtube (from a BBC television programme), firstly with sound only, and then with sound and picture:

<http://youtu.be/kAG39jKi0II>

‘My Blackberry isn’t Working’!



Stop and reflect

When you have finished laughing (!) consider why the sound only presentation was so much less amusing than the sound and picture together, and how this sketch demonstrates that the basic ‘to and fro’ of language alone does not constitute a complete communication.

Improving Practice

Discuss with your coursemates/ colleagues what you have learnt from this clip about the way human beings routinely make meaning from complex interaction that *includes* spoken language, rather than from spoken language alone (how they achieve 'intersubjectivity'). Consider how much learning young children may need to undertake to become even a novice conversationalist in their native tongue. Remember this will not only relate to the spoken language itself, but also to the broad range of symbolic skills and cultural knowledge that adults use so skillfully, and to a great extent, unconsciously, as they embed language within the broader **semiology** that they use in everyday interactions. You may find the book 'Children's Minds' by Margaret Donaldson (published by HarperCollins in 1986) will help you to extend your thinking along these lines.

Semiology

(As 'semiotics'): 'the study of signs and symbols as elements of communicative behavior; the analysis of systems of communication, as language, gestures, or clothing' (Dictionary.com, online). Sociologists have also included studies of signs such as flags, emblems, tattoos and home decorations/ furnishings in their studies of semiology.

The Results of Play Privation

The evidence provided above collectively suggests that over the last quarter of the twentieth century, and into the opening decade of the twenty-first, Anglo-American society has increasingly placed children within highly adult-directed environments where transmit-and-test processes are the principal modes of 'education', and greatly reduced the time and space provided for children to engage in spontaneous social free play. Online play, which

has to some extent replaced outdoor play in such societies is also essentially isolating, in the sense of the physically removed nature of the communication, which hugely reduces the amount of associated social signalling that human beings have evolved to utilise, frequently in an unconscious fashion; see for example the explanation of the 'play face' in chapter 7. We therefore propose that psychological problems and mental breakdown may be the inevitable result of raising human primates in such unnatural 'caged' situations where they do not have sufficient opportunities to experience developmentally appropriate sharing of complex, authentic meanings that are so critical to their healthy social, linguistic and psychological development.

It does not take a huge leap of imagination from this point to intuit some possible reasons (and solutions) for children's unhappiness within societies which do not offer them sufficient free play and collaborative learning opportunities for species-appropriate co-operative socialization, and plunge them into pressurized, individualistic and highly competitive situations at a very early stage in development, where one's perceived worth is shallowly tested by one's ability to rote-remember nuggets of information within a transmit-and-test environment, or the ability to purchase the most luxury virtual 'commodities' within an abstract online world. Human beings, in common with their primate ancestors, have evolved to be collaborative, co-operative and competitive in organic social situations. The environments provided for children in our contemporary society can therefore be posited to artificially remove many of the experiences that develop the collaborative aspects of the primate nature, while hugely magnifying the experiences that develop the competitive drive, through immersion within isolating and anxiety-provoking situations.

A complex set of circular psychosocial relationships can be theorised, consisting of underlying feelings of social disconnectedness and the resultant feelings of anxiety and eventual mental illness in socially-privated members of a species that has evolved to live within highly socially connected environments. Such feelings are thence subsequently

exacerbated by the resulting dysfunctional society, comprised of individuals with poorly developed social skills. As Bruner (1976, p.56) wrote: 'development which is separated from a natural social environment 'provides no guide, only knowledge... These are the conditions for alienation and confusion'.

This is summarized in Figure 1

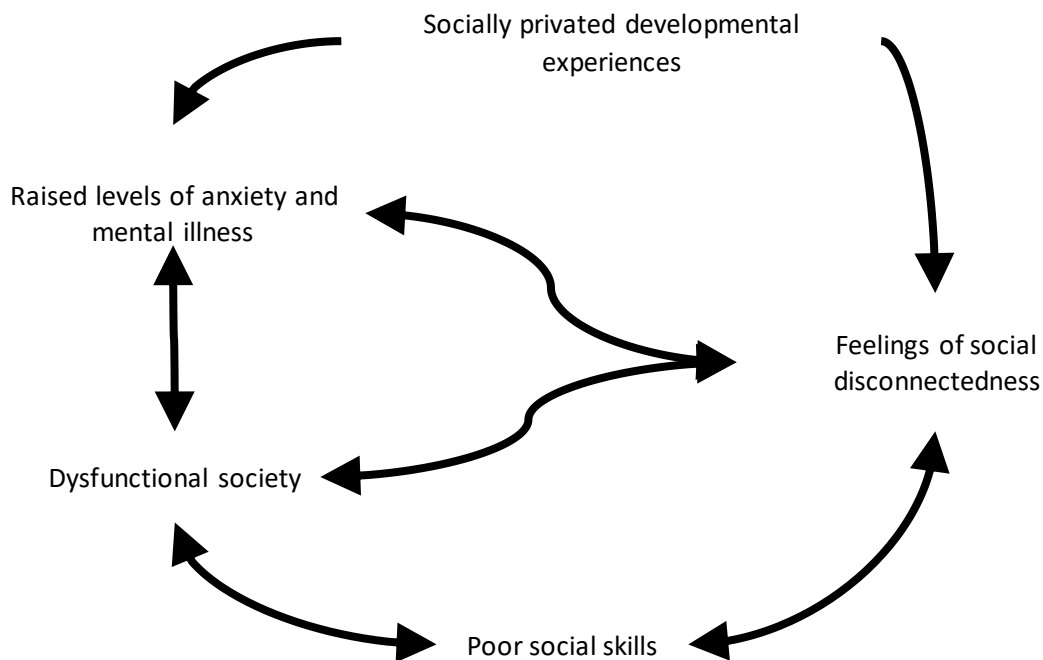


Figure 1: Individual and societal dysfunction interrelationships resulting from socially privated developmental experiences in a significant proportion of one or more generations

At the beginning of the second decade of the twenty-first century, not only are we questioning our modes of care and education on the basis of producing a generation of children where one in ten has a diagnosed mental disorder (Office for National Statistics 2005) and who report the poorest sense of well-being in the western world (UNICEF 2007); we are also facing the greatest economic downturn since the Wall Street Crash of 1929, and a major breakdown of trust between individuals and institutions in society, occasioning a

flurry of national and international enquiries into grave lapses of moral integrity within government, policing, media and banking services. This suggests that Bruner's 'alienation and confusion' is fast becoming a costly reality, with many such tendrils infiltrating post-industrial society in Britain and the US.

The stakes for primate societies that have forgotten how to play could not be higher. Policies that view economic factors as the most important aspect of day-to-day life have created a model of childhood that views the role of adults principally as fact-and-skill transmitters/ consumer experience vendors, and of other children as competitors in a race to determine who can 'get the most marks' in a highly artificial classroom test, or who can afford the most consumer commodities for an avatar which exists solely within a cyberworld. There is no importance placed on organic collaborative play and discovery activities within such a culture, and as such, the resulting policies inevitably operate in ways that are not conducive to the development of psychologically healthy human beings, or to sociologically healthy societies. Here it is argued, we have an important source of Twenge's (2000, p.1017) 'low social connectedness and high environmental threat', and some clues as to how to pursue remedies that will result in 'people feel[ing] both safe and connected to others'.

How might we attempt to move forward in this area in the future?

What now for play?

We suggest that we could usefully begin with a debate that centres around some key requirements for children of all cultural backgrounds:

- To develop in environments where they both are, and *comprehend* that they are protected, safe and loved.

- To be both sensitively supported and given enough freedom to engage in independent social interaction, developing positive relationships with a wide range of peers;
- To receive social and emotional nurturance and the correct amount and level of intellectual stimulation from engaged and well-informed adults, appropriate to the child's own highly individual stage of development and ongoing needs.
- To receive sufficient time and space for free collaborative play and open-ended discovery activities, that as Gray (2011) suggests, lie at the root of emotional self-regulation and problem solving skills that can be flexibly utilised, both independently and collaboratively. These in turn create the basis of 'transferability' of cognition- the ability to transfer problem-solving concepts from one situation to another, rather than needing to be taught specific answers to specific problems on a serial basis.

It is especially important to support every generation of children in their development of transferable skills and independent learning abilities so they can keep abreast of ongoing societal developments. No western generation following the industrial revolution has ever been able to fully predict the world in which their children are going to live as adults; we continually strive to manage technological advance, as it progressively impacts upon our world. One of the most harrowing examples of this is the use of trench warfare in World War I, a battle strategy that had been successfully used for centuries that nevertheless within an environment of new technology (e.g. the machine gun), resulted in a devastating amount of human slaughter. In a more 'everyday' example we can reflect on the fact that ever more sophisticated technological advance inevitably makes some career pathways that exist within each generation's childhood obsolete by the time they become adult, whilst simultaneously creating new opportunities. For example, in the childhoods of those aged 40 and over in 2012, there were no adults working in a non-existent 'smart phones' industry, while millions owned and worked within all manner of lone-trader high-street businesses that

have now largely disappeared due to the inability to compete with huge international corporations.

However, we cannot simply take practices that have organically arisen in other cultures either within other nations or within our own nation's past and simply graft them on to our own contemporary social milieu; we need to carefully adjust our practices to reflect our increasing theoretical knowledge and give resulting frameworks sufficient time to develop within the relevant cultural context. Our current thoughts are that we should initially focus upon the possibility that less pedagogy (in the sense of 'strategies of instruction') and more education (in the sense of its Latin root, *educare*, meaning to lead or draw out) will be likely to locate us at the start of a productive pathway.

Summary and review

- Why is collaborative free play so important not only for children's social development, but for the full range of learning that they must undertake during childhood and adolescence?

Human beings have evolved to learn through organic interaction with one another, in particular, in interaction in which there is some flexibility of response, which allows a developing child to learn how to independently problem solve by 'trying out' different ideas and strategies for size, rather than being given 'off the peg correct' answers and being expected to remember them. Human communication takes place within a complex and multi-layered social arena, and our cognitions occur in connected patterns, schemas or 'nets' and therefore each new piece needs to make sense before it is fully integrated into an individual's store of skills and knowledge. Social play is the most flexible arena in which we can engage in these types of interactions with other people, and learn in an organic,

embedded fashion, solving problems both independently and collaboratively. It should be noted that the concept of school was initially created as an environment in which children spent a few hours each day being rote-taught to read, write and count, not how to learn absolutely everything that they needed to know to become a successful adult!

As Whitebread and Bingham (2011, p.3) propose, we have become seduced by an 'increasingly dominant notion of education as 'transmission and reproduction' and an imperative to prepare infants 'for school rather than for life.' As such we suggest that it is high time for us to consciously interrogate this notion, and consider what needs to change in order to bring a more organic, collaborative and above all, authentically *human* element back into Anglo-American childhoods. We propose that one important adjustment though which these aims could be realised is in the expansion of time and space allocated to children for independent, collaborative free play and discovery activities.

- What relevance do complex theoretical debates in the area of 'learning through play' have to practice?

The British state-funded education system arose from a background of political pragmatism rather than from a background of developmental theory. It has grown from utilitarian origins in early industrial period factory schools aimed at producing literate, numerate but most essentially, socially and politically uncritical workers, through Victorian 'board' school education as social control, to the mid-twentieth century focus upon schooling as preparation for work and the 'New Labour' focus on children as trainee consumer-workers in a complex post-industrial global society. All such systems had very little concept of the development of flexible, independent minds through play and discovery activities. British reformers such as Margaret McMillan (1861-1931), Susan Isaacs (1885-1948) and Bridget Plowden (1910-2000) all tried to introduce practices rooted in developmental psychology into mainstream state education, (see

chapter xxx?) but such individuals were typically perceived as highly controversial within their own culture, while their ideas were taken up more enthusiastically by others, for example in Scandinavia and other European areas (e.g., Reggio Emilia) and in an interesting blend with traditional Maori culture in New Zealand's Ti Whaariki early years framework (see chapters ??? Avrils?).

It should also be noted in England and the US that most of the relevant time and space for play has disappeared from children's *out-of-school* environments in which families, neighbourhoods and religious institutions were traditionally viewed as the core socialising influences. As such, perhaps education systems should not shoulder quite as much blame as some propose for the recent aridity of children's collaborative free play opportunities. However, the complexity of post-industrial society indicates that the scope of the children's workforce will inevitably reach beyond the provision of basic education and health care in the foreseeable future, and well-trained practitioners who can engage with theories relating to human development emerging from ongoing psychological, biological and sociological research will be required to develop flexible programmes of 'learning through play', and mould them into frameworks that are compatible with a contemporary Anglo-American cultural milieu. We have already seen the emergence of a debate in England relating to the range of roles for adults in the children's workforce (e.g. Nutbrown 2012); this is only one of the emergent questions that we need to further explore. There is clearly much to do in the practical arena, and it is here that further questions can be carefully explored by graduate and post-graduate practitioners in **action research**.

Action Research

A form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these

practices, and the situations in which the practices are carried out (Carr and Kemmis 1986: 162).

- How might we attempt to move forward in this area in the future?

We have indicated above that we do not intend to endorse any type of ‘quick fix’ packages. What we are advocating is an ongoing discussion between a wide range of theorists and practitioners in the pursuit of developing culturally relevant opportunities for children to learn through genuine, organic, collaborative free play and open-ended discovery activities, alongside gradually more structured programmes of learning as they move into mid-childhood and adolescence; several possible models that could provide a basis for such development can be found within the Scandinavian nations. Above all, as Singer (1999, p.61) proposed, the way that we engage in teaching and learning should above all ‘be grounded on the best available evidence of what human beings are *like*’ rather than upon the requirements of national and international economies and the endless political machinations of successive governments. This is a challenge for the children’s workforce as a whole as we move more deeply into the 21st century, and we hope that some of you will be instrumental in pioneering solutions and developing new practices. Many of you will be representatives of the first generation of ‘digital natives’ (Prensky 2001, see chapter 1) to engage in educational/ child development research, and we look forward to engaging with your discoveries and innovations in the future.

In Conclusion...

Ideas in action

‘On children’

Your children are not your children.

They are the sons and daughters of Life's longing for itself.

They come through you but not from you,

And though they are with you, yet they belong not to you.

You may give them your love but not your thoughts.

For they have their own thoughts.

You may house their bodies but not their souls,

For their souls dwell in the house of tomorrow, which you cannot visit, not even in your dreams.

You may strive to be like them, but seek not to make them like you.

For life goes not backward nor tarries with yesterday.

You are the bows from which your children as living arrows are sent forth.

The archer sees the mark upon the path of the infinite,

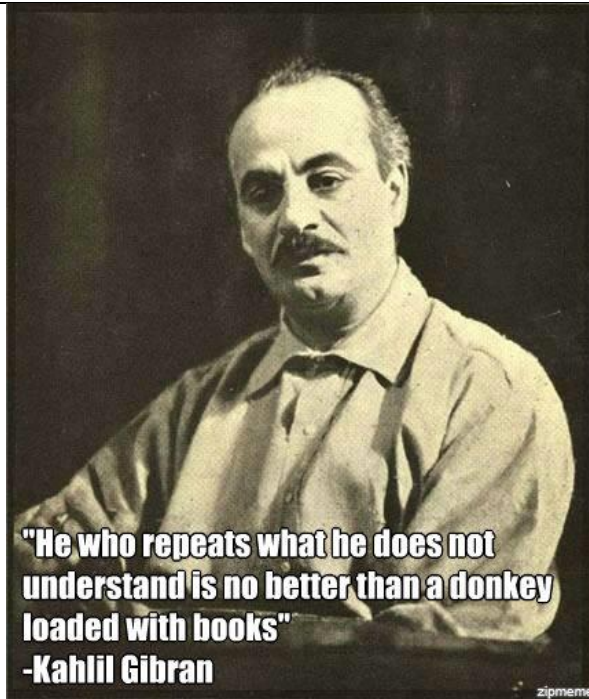
and He bends you with His might that His arrows may go swift and far.

Let your bending in the archer's hand be for gladness;

For even as He loves the arrow that flies, so He loves also the bow that is stable.

Gibran 1923, online

These words were written by Khalil Gibran (1883–1931) shortly after World War I. Gibran was thus a member of one of the earlier generations who experienced the psychosocial dissonance that rapidly changing technology can evoke. Perhaps if we as adults can learn this one lesson that he phrases so beautifully – that every successive generation of children will ‘dwell in the house of tomorrow, which [adults] cannot visit, not even in your dreams . . . For life goes not backward nor tarries with yesterday’ – every successive generation of adults will subsequently be motivated to fiercely guard the independent, flexible collaborative play and discovery activities in which their children develop the vital foundations of independent and collaborative problem-solving abilities.



<http://zipmeme.com/meme/Kahlil-Gibran/41460/>

Stop and Reflect

What objections do you think Khalil Gibran might have raised to 'transmit and test' teaching and learning regimes? Discuss this point with your coursemates/ colleagues.

Psychosocial dissonance

Psychosocial: relating to both the psychological and the social; dissonance: inharmonious or harsh sound; discord or incongruity (Dictionary.com). Psychosocial dissonance is therefore a description of a feeling that one's society and one's place within it is somehow unbalanced, in particular that some societal factors do not properly synchronise with others, or with one's own ideas of how interactions with others ought to proceed.

The chapters in this book are designed to take you a few steps along the road in your continuing professional development, and to give you the confidence to conceive of future environments and practices that may significantly differ from those of the past. We have attempted to communicate some (inevitably time-bound) ideas to help you in your pursuit of educating and nurturing a generation of playful, curious children, most importantly in the pursuit of enjoying their childhood as a specific life stage rather than as *only* a phase in which one prepares for adulthood, and secondly towards their development into socially connected, intelligent and cognitively flexible adults. We have had great pleasure in acting as Gibranian 'bows' to your 'arrows' by inviting you to join us as lifelong learners in this fascinating endeavour, and, through you, the reader, to take this process forward into as yet unknown cultures of the future.

Recommended Reading

Claxton, G. (1997) *Hare Brain, Tortoise Mind*. London: Fourth Estate.

McNiff, J and Whitehead J. (2011) *All you need to know about Action Research*. London: Sage

Naravaez, D., Panksepp, J., Schore, A. and Gleason, T. (2012) *Evolution, Early Experience and Human Development: From Research to Practice and Policy*. New York: Oxford University Press.

Opie, I. and Opie, P. (1969) *Children's Games in Street and Playground*. London: Oxford University Press.

UNICEF (2007) *An Overview of Child Well-being in Rich Countries*, available at: http://www.unicef-icdc.org/presscentre/presskit/reportcard7/rc7_eng.pdf

* Note on referencing: In view of the posthumous publication of much of Wittgenstein's work, and of the translations into English, the following initials rather than dates have been used, with one exception, to refer to his work.

Abbreviation	Title	Date of writing
<i>PI</i>	<i>Philosophical Investigations</i>	1930-1949
<i>Z</i>	<i>Zettel</i>	1945-1948
<i>OC</i>	<i>On Certainty</i>	1949-1951

In each case references to sections in Wittgenstein's work are given by the section number for the English translation, for example (*PI*, §347).

References

- AA (2010) *Dad's Taxi*. Available at: <http://www.theaa.com/motoring_advice/news/kids-cost-parent-taxi-drivers-dear-aa-finance-april-2010.html> Accessed on 12/4/2012.
- Baron-Cohen, S. (2001) 'Theory of mind in normal development and autism', *Prisme* 34: 174-183.
- Bruner, J. (1976) 'Nature and uses of Immaturity'. In: Bruner, J.S., Jolly, A. and Sylva, K. (eds.) *Play: its Role in Development and Evolution*: 28-64, New York: Basic Books.
- Bruner, J. (1986) *Actual minds, possible worlds*. Cambridge, MA: Harvard.
- Bryman, A. (1999) *The Disneyization of Society*. Available at: <http://www.canyons.edu/Faculty/haugent/Disneyization%20of%20Society%20Article.pdf> accessed on 20th April 2012.
- Carr, W. and Kemmis, S. (1986) *Becoming Critical. Education, knowledge and action research*, Lewes: Falmer.
- Collishaw, S., Maughan, B., Goodman, R. and Pickles, A. (2004) 'Time Trends in Adolescent Mental Health', *Journal of Child Psychology and Psychiatry* 45, 1350-1362.
- Corsaro, W. (1997) *The Sociology of Childhood*. Thousand Oaks, CA: Pine Forge Press.
- Dodge, K., Coie, J. and Lynam, D. (2006) Aggression and anti-social behaviour in youth. In: W. Damon, W., Lerner, R. and Eisenberg, N. *Handbook of Child Psychology*, 719-788. Hoboken, NJ: Wiley.
- Dunn, J. (1983) 'Sibling relationships in Early Childhood', *Child Development* 54: 787-811.
- Gibran, K. (1923) *The Prophet*, available at: <http://leb.net/~mira/works/prophet/prophet4.html> [accessed 23 December 2007].
- Gillespie, Alex (2012) *Position exchange: the social development of agency*. *New ideas in psychology*, 30 (1). 32-46.
- Gilroy, P. (1996) *Meaning without words: Philosophy and non-verbal communication*. Aldershot: Avebury

- Gray, P. (2011) The Decline of Play and the Rise of Psychopathology in Children and Adolescents. *American Journal of Play*, 3 (4), 443-463.
- Grimes, S. and Regan Shade, L. (2005) Neopian economics of play: children's cyberpets and online communities as immersive advertising in NeoPets.com. *International Journal of Media and Cultural Politics* 1 (2),181-198
- Henley, J., McBride, J., Milligan, J. and Nichols, J. (2007) Robbing elementary students of their childhood: the perils of No Child Left Behind. *Education* 128 (1),:56-63
- Hood, B. (2012) *The Self-Illusion: How the Social Brain Creates Identity*. New York: Oxford University Press (USA).
- Jarvis, P. (2009) Play, narrative and learning in education: a biocultural perspective. *Educational and Child Psychology* Vol 26 (2) pp.66-76.
- Konner, M.J. (1972) 'Aspects of the Developmental Ethology of a Foraging People'. In: N. Blurton Jones (ed.) *Ethological Studies of Child Behaviour*, 285-304. Cambridge: Cambridge University Press.
- Layard, R. and Dunn, J. (2009) *A Good Childhood*. London: Penguin.
- Lindsey, E. (2002) 'Pre-school children's friendships and peer acceptance: links to social competence', *Child Study Journal* 32: 145-156.
- MacDonald, K. and Parke, R. (1984) 'Bridging the gap: parent-child play, interaction and peer competence'. *Child Development* 55: 1265-1277.
- McNess, E., Broadfoot, P. & Osborn, M. (2003) 'Is the effective compromising the affective?', *British Education Research Journal*, 29 (2), 243-257.
- Malcolm, N. (1981) *Wittgenstein: The relation of language to instinctive behaviour*. Swansea: University College of Swansea.
- Marsh, J. (2010) Young children's play in online virtual worlds. *Journal of Early Childhood research* 8 (23): 24-39.
- Mead, G. H. (1934) *Mind, Self and Society*. Chicago, University of Chicago Press
- Moghaddam, F.M. (2003) 'Interobjectivity and culture', *Culture and Psychology*,9, 221-232. Referred to in: Moghaddam, F.M. (2010) 'Intersubjectivity, interobjectivity, and the embryonic fallacy in developmental science', *Culture and Psychology*, 16 (4), 465-475.
- Moghaddam, F.M. (2010) 'Intersubjectivity, interobjectivity, and the embryonic fallacy in developmental science', *Culture and Psychology*, 16 (4), 465-475.
- New York Times (2008) *When web time is playtime* by Warren Buckleitner May 8, 2008 http://www.nytimes.com/2008/05/08/technology/personaltech/08basics.html?_r=1&fta=y
Accessed 16th August 2012
- Newman, S. (1996) 'Reflection and Teacher Education', *Journal of Education for Teaching* 22 (3), 297-310.
- Newman, S. (1999) *Philosophy and teacher education: a reinterpretation of Donald A. Schön's epistemology of reflective practice*. Aldershot: Ashgate Publishing.
- Nutbrown, C. (2012) *Foundations for quality: the independent review of early education and childcare qualifications*. London: DFE.
- Office for National Statistics (2005) *Mental Health of Children and Young People in Great Britain 2004*. Norwich: HMSO

- OFSTED (2003) *The education of six year olds in England, Denmark and Finland: An international comparative study*. London: OFSTED Publications Centre.
- Opie, I. and Opie P. (1959) *The Lore and Language of Schoolchildren*. London: Oxford University Press.
- Opie, I. and Opie, P. (1969) *Children's Games in Street and Playground*. London: Oxford University Press.
- Pellegrini, A. and Blatchford, P. (2000) *The Child at School*. London: Arnold.
- Pellegrini, A. and Blatchford, P. (2002) 'Time for a Break', *The Psychologist*, 15 (2), 60-62.
- Pitcher, G. (1964) *The philosophy of Wittgenstein*. Englewood Cliffs, NJ: Prentice-Hall.
- PISA (2009) *What Students Know and Can Do: Student Performance in Reading, Mathematics and Science*. Available at: <http://www.oecd.org/pisa/46643496.pdf> Accessed 9/9/2012.
- Prensky, M (2001). Digital natives,digital immigrants. *On the Horizon*, 5, 1–2.
- Reay, D. and Williams, D. (1999) 'I'll be a nothing: structure, agency and the construction of identity through assessment', *British Education Research Journal* 25 (3), 343-354.
- Riley, K. and Docking, J. (2004) Voices of disaffected pupils: implications for policy and practice. *British Journal of Educational Studies*. Vol. 52, No. 2,166–79.
- Rinaldi, C. (2005) In Dialogue with Reggio Emilia: Listening, Researching and Learning: Contextualising, Interpreting and Evaluating Early Childhood Education (Contesting Early Childhood). London: Routledge
- Rutgers, E. (2012) He-Man Action Figures: cartoon series history. Available online at: <http://ezinearticles.com/?He-Man-Action-Figures:-Cartoon-Series-History&id=5404870> Accessed 26th August 2012.
- Sammut, G., Daanen, P. and Sartawi, M. (2010) 'Interobjectivity: Redefining objectivity in cultural psychology', *Culture and Psychology*, 16 (4) 451-463. Referred to in: Moghaddam, F.M. (2010) 'Intersubjectivity, interobjectivity, and the embryonic fallacy in developmental science', *Culture and Psychology*, 16 (4), 465-475.
- Santer, J., Griffiths, C. and Goodsall, D. (2007) *Free Play in Early Childhood*. London: National Children's Bureau.
- Schultz, J. and Cook-Sather, A. (2001) *In Your Own Word: Students' Perspectives on School*. Oxford: Rowman and Littlefield.
- Singer, P. (1999) *A Darwinian Left*, New Haven: Yale University Press.
- The Guardian (2010) Finland's schools flourish in freedom and flexibility. Available at :<<http://www.guardian.co.uk/world/2010/dec/05/finland-schools-curriculum-teaching>> accessed on 12/4/2012.
- The Children's Society (2012) *The Good Childhood Report 2012*. Leeds: The Children's Society. Available at: http://www.childrenssociety.org.uk/sites/default/files/tcs/good_childhood_report_2012_final_0.pdf Accessed on 26th August 2012.

- The Children's Society (2007) *Reflections on childhood*. Leeds: The Children's Society. Available at: www.childrenssociety.org.uk/NR/rdonlyres/DA92712B-5C3F-47C2-87E6-51B8F0C11FFE/0/ReflectionsonChildhoodFriendship.pdf Accessed 10th September 2007.
- The TES (2010) Teachers branded as useless at discussion, 8th October 2010. available at: www.tes.co.uk/article.aspx?storycode=6060286 Accessed on 20th August 2012
- Twenge, J. (2000) 'The Age of Anxiety? Birth Cohort Change in Anxiety and Neuroticism, 1952-1993', *Journal of Personality and Social Psychology*, 79, 1007-1021.
- UNICEF (2007) *An Overview of Child Well Being in Rich Countries*. Available at: http://www.unicef-icdc.org/presscentre/presskit/reportcard7/rc7_eng.pdf [Accessed 14th February 2007].
- UNICEF (2012) Children's Rights and Responsibilities leaflet, Available at: http://www.unicef.org/rightsite/files/rights_leaflet.pdf Accessed 30/3/12
- Whitebread, D. and Bingham, S. (2011) School Readiness; a critical review of perspectives and evidence: Occasional Paper 2. TACTYC Conference, Birmingham: *Ready for School? Research, Reflection and Debate*. 11-12 November 2011.
- Wiki-how (2012) How to accept the disappearance of Club Penguin babies. Available at: <http://www.wikihow.com/Accept-the-Disappearance-of-Club-Penguin-Babies> Accessed on 24th August 2012.
- Wittgenstein, L. (1935/1968) 'Wittgenstein's Notes for Lectures on "Private Experience" and "Sense Data"' (R. Rhees (ed.) (1968) *Philosophical Review* 77: 271-320. Reprinted as "Private Experience" and "Sense Data" in O. R. Jones (ed.) (1971) *The Private Language Argument*. London: McMillan, pp. 232-275.
- Wittgenstein, L. (1953/1958) *Philosophical Investigations*. Oxford: Basil Blackwell (3rd edition 2001). [The German text, with a revised English translation by G. E. M. Anscombe].
- Wittgenstein, L. (1967) *Zettel*. Oxford: Basil Blackwell (G. H. von Wright, R. Rhees and G. E. M. Anscombe (eds.)) [translated G. E. M. Anscombe].
- Wittgenstein, L. (1969/1975) *On Certainty*. Oxford, Basil Blackwell (G. E. M. Anscombe and G. H. von Wright (eds.)) [translated D. Paul and G. E. M. Anscombe].