Informal Home Education: Philosophical Aspirations put into Practice

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Abstract Informal home education occurs without much that is generally considered essential for formal education—including curriculum, learning plans, assessments, age related targets or planned and deliberate teaching. Our research into families conducting this kind of education enables us to consider learning away from such imposed structures and to explore how children go about learning for themselves within the context of their own socio-cultural setting. In this paper we consider what and how children learn when no educational agenda is arranged for them and we link this manner of learning to the Deweyan ideas of learning as transactional and learning-in-context. We also use our empirical evidence to explore the notion of ZPD with regard to informal learning and to consider how children, without specific guidance, go about charting a course of learning through the ZPD. We consider the quality of informal learning particularly with regard to the educational aim of developing reflective and critical thinking, showing how these are integral to informal learning. We suggest that a much wider conception of what learning is and how it happens is needed, away from the confines of formal educational structures.

Keywords Autonomous education · Unschooling · Transactional · Socio-cultural · Home education · Informal learning · Curriculum

> School seems unnatural. With a huge effort and cost and sometimes pain, you try to get something into children which would happen anyway (home educating parent).

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All children learn informally. In the first few years of life, before starting school, they acquire a massive amount of cultural knowledge including language and the foundations of literacy and numeracy. This is not learned in any organised way but simply through getting on with their daily lives in the context of family and the wider world surrounding them. Children 'pick up' knowledge in ways that are unstructured, ad hoc, apparently haphazard and yet are very efficient. Our research amongst home educating families whose approach is very informal provides an opportunity to consider what would happen if children were allowed to continue in this vein of early learning through the years when they would otherwise be in school. This paper describes some of our research, looking at what and how children learn in this type of education and at the quality of such learning. Such is the apparent effectiveness of informal learning that we are led to propose that formal education, as an activity apart, is unnecessary for most children because they have ample opportunity to gain cultural knowledge informally, in their own way and in their own time. Whilst at face value this may seem a rather shocking idea, there is much within the philosophy and theory of education that can be related to our perspective on informal learning.

Home education has grown considerably in many countries in the last 30 years or so. Research has focussed mainly on attempting to establish prevalence, what leads parents to choose home education and academic outcomes, especially in comparison with school based learning. With regard to prevalence it is probable that at least a million children are home educated in the United States (Princiotta and Bielick 2006). While home education is increasingly common throughout the rest of the world, little is known of the numbers involved. Reasons for home educating generally fall into two categories: those who are educated at home from the start for religious or pedagogical reasons and those withdrawn from school for socio-emotional or academic reasons (ibid.; Rothermel 2005). There have been numerous studies of academic outcomes, generally found to be favourable (e.g., Lines 2001; Meighan 1995; Rothermel 2004).

There is, however, a dearth of research about how parents actually go about home educating on a day-to-day basis. Certainly home education covers a very wide range of styles from structured school type education through degrees of informality to a style of education which has no obvious shape at all; education without a timetable, a curriculum, written exercises, marking, testing or even explicit learning aims. The proportion of children whose education is informal in this sense is unknown and whilst it is well recognised in home education circles, as natural learning in Australia and New Zealand, autonomous learning in the UK and "unschooling" in North America, next to nothing is known about it outside the individual experiences of those that practise it. Indeed, when Thomas, first investigated home education he was interested in analysing structured dyadic teaching and was unaware of the part that informal learning might play (Thomas 1992).

A week spent "living in" with a home educating family refocused Thomas's attention to informal aspects of learning, particularly through spontaneous, mainly social conversation (Thomas 1994). He decided to extend his research into a much broader study of approaches and methods, based on 100 home educating families in Australia and the UK. Overall, he found that parents used a very wide range of approaches from very highly structured to completely informal. As an illustration of the efficacy of informal learning, he used one parent's meticulously detailed journal of her child's day-to-day life from which he abstracted all references to numeracy; that part of the school curriculum generally thought to be the most heavily dependent on structure. It demonstrated clearly that though this child's opportunities for learning were haphazard, unstructured and arose simply on an "as and when" basis in the course of everyday living, she nevertheless ended up on a par with

her primary school contemporaries at age eleven. Somehow or other, all the seemingly unrelated bits and pieces had coalesced into a basic mathematical understanding. As an indicator of how difficult it is to document this kind of learning the mother had made only one reference to learning to tell the time; unnoticed by her parents she had mastered this skill quite satisfactorily (Thomas 1998). Such learning is typical of the kind we have found in our more recent joint research, based on interviews with 26 families in which we studied informal learning at greater depth, asking parents to explore with us how their children learnt (Thomas and Pattison 2008).

While informal learning seems to defy a conventional analysis of cause and effect it does find echoes with a certain philosophical strand which, since Classical times, has viewed learning as transaction within context. The complexities of real life situations which this view plunges us into is developed by Osberg et al. (2008) who point out that the real world is a messy web of non-linear relationships made even more complex by our interactions with it:

> Because in acting, we create knowledge, and in creating knowledge, we learn to act in different ways and in acting in different ways we bring about new knowledge which changes our world, which causes us to act differently, and so on, unendingly. There is no final truth of the matter, only increasingly diverse ways of interacting in a world that is becoming increasingly complex (Osberg et al. 2008, p. 223).

If this view of everyday life is taken as the context not only in which, but from which learning takes place then it simultaneously questions the "classical assumption that children learn because they are taught" (Trevarthen 1995, p. 97) and illustrates how informal learning maintains a dynamic drive of its own making. The place and need for heavily organised formal education is rendered at least questionable. Osberg et al. (2008) indeed go on to consider:

> What would schooling *actually* look like if we dropped the idea that its overall aim is to ensure the acquisition of knowledge of an already existing reality that is fully present? How might such a practice of schooling actually be 'performed'? Such questions, according to Ulmer (1985), open a search for a 'non-magisterial' style of teaching. When we consider the purpose of schooling in terms of an emergentist understanding of knowledge *and* reality, we must begin to imagine schooling as a practice which makes possible a dynamic, self-renewing and creative engagement with 'content' or 'curriculum' by means of which school-goers are able to respond, and hence bring forth new worlds (Osberg et al. 2008, p. 225).

This all sounds very well but the authors offer no vision of how their aspirations might work out in the everyday realities of school. On the other hand, informal home education *does* allow us to explore learning through transaction in the messy context of the real world.

Context: The Informal Curriculum

In terms of content, the school curriculum during the primary and early secondary years consists largely of the knowledge necessary to operate successfully in the everyday adult world—literacy, numeracy, and a range of common general knowledge. Children at home encounter much of the same subject matter; the difference is that in school this knowledge is pre-digested, carefully sequenced into a curriculum and presented to the child artificially,

largely isolated from its cultural everyday usage. Children at home on the other hand encounter their subject matter as it arises in the course of their everyday lives, on a casual basis, often embedded in the other activities in which they engage. The opportunities available for learning in this manner are so widespread and prolific that they are very difficult to isolate or to analyse in terms of when and how they occur, whether and how they are engaged with. One way of considering this complex situation would be as an extension of socio-cultural theory which stresses the importance of viewing learners as located within and interacting with their own particular settings (Cole 1998; Gauvain 2001). This sort of learning is particularly apparent in situations where newcomers are becoming part of a community (Hodkinson et al. 2008) or at a more practical level through a "community of practice" (Lave and Wenger 1991).

While the idea of children learning through participation within social contexts is widely accepted, it is mainly limited to socialisation, including the acquisition of cultural customs, beliefs and values. Cole (1998) coins the term "developmental niche" to describe the socio-cultural setting surrounding the child. Any learning is so embedded in the daily world of the child that it goes unnoticed with little or no conscious awareness from either child or parent. There is simply an overarching and general expectation that it will happen. As Super and Harkness (1998, p. 37) put it: "The most interesting aspect of parental values as they influence early socialisation is that their expression is not usually a direct effort to achieve some later effect".

An area of formal education in which the importance of social context has been championed is that of democracy and citizenship education where advocates such as McCowan (2009) propose a seamless enactment between the presentation of subject matter and the demonstration of such principles in action. His argument is that knowledge presented in the classroom needs to be attached to the wider world, for instance through teachers' own lives. Biesta (2006) goes further and argues that democratic education is not something which can be simply undertaken in school but is instead the responsibility of all society through its adherence to democratic principles demonstrated through democratic actions.

The possibility that such osmotic learning might extend to more academic subject matter, such as the school curriculum, has hardly been touched on. Interesting exceptions with regard to older children concern "street learning." Carraher et al. (1985) describe how Brazilian children become competent in handling money as part of their daily and real-life business of serving customers in the market place. Mitra et al. (2005) describe how rural Indian children (without any previous experience of computers) become computer literate in English simply by having access to a computer that suddenly appears in a hole in the wall in their village.

The informal curriculum for the families we have studied consists of the things that members of a family, community and society need to know and which are constantly "there" in the forms of cultural knowledge, skills, beliefs, ideas, objects, behaviour, habits and understandings.[1] Being part of this world ensures that children are not only provided with an ongoing demonstration of cultural situations and skills but are constantly interacting with these things through their own everyday lives. For example, with regard to

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[1] Our interest here lies not with judging the desirability of competing values, ethics and world views as they may be handed on to children within families. Whilst these matters may be considered integral to serious debates about mainstream education they stand on different ground in home education, abutting as they do with questions of civil liberties and the integrity of family life. In any case, this lies outside the scope of this paper in which we concentrate on the *acquisition* of knowledge, of certain capabilities and understandings.

literacy, written material is present in abundance both within and outside the home whilst family and community members provide countless demonstrations of how, when and why reading is put to use. Thus resource, purpose and incentive are supplied as a single intertwined entity.

Whilst philosophers such as Dewey argue that a "key task for educators lies in the organisation of contexts … creating opportunities for participation in particular practices" (cited in Biesta 2009, p. 71), for the home educated children context and opportunities to participate are simply there. Children are unavoidably living the life that they are learning about. Subject matter, the demonstration and experience of it are one and the same thing; an interwoven entity rather than facets of learning which can be considered separately from one another. There is no intention that teaching or learning should take place; this is simply the way that daily life functions. One consequence of this is that there is little to differentiate between "intellectual" and other types of subject matter, certainly not as far as the children are concerned.

Taking learning in context to its logical conclusion means that the question of how subject matter can best be presented so that it is truly engaged with becomes unnecessary. The cultural context is the presentation. There is an unspoken, mostly implicit, expectation that children will become fully fledged members of their culture coupled with the child's equal expectation that he or she will fulfil this obligation. These expectations are lived out through the common assumptions and purposes of family life—that all members of the family will become contributing ones, will join and will want to join in the common way of life. There is an almost imperative cultural demand, mediated by societal and parental expectations, which provides a framework within which children forge their own paths in coming to grips with growing up and all that it entails.

Engaging with the Informal Curriculum

If children receive little or no structured guidance, how do they go about charting their own way through the cultural curriculum? We take as our starting point the Vygotskian concept of the ZPD which organises the intellectual space around an individual's knowledge to provide a zone of possibility for potential learning. Neo-Vygotskian theory often gives the impression that this zone is a coherent space and the material—skills, knowledge and behaviour within it are planned, ordered and obvious. Adults decide what it is that children should learn and guide them in particular ways in order to maximise specified outcomes. This is very much the impression given by experiments in early childhood learning, an example of which is a construction task in which the adult sets the goal and then leads or "scaffolds" the child step-by-step towards it, tailoring the assistance provided contingently on the child's responses (Wood et al. 1978). Within this largely positivistic view lies also a far reaching ontological supposition that the path of learning can be projected forward through the ZPD in a series of set stages to achieve a planned outcome. Learning appears as cognitive acquisition without reference to such matters as purpose, motivation, context, emotion and so on (Hodkinson et al. 2008).

In informal learning where children must find their own ways forward through the cultural curriculum there is no straightforward or clear cut pathway through the ZPD. Instead of the ZPD being a route of obvious order, it is rather a pool of possibilities in which children dabble and play and generally move around in accordance with their own ideas. Certainly there is no ordering of subject matter to make its content either appealing or accessible; children must find their own ways of transacting with their environment.

This sort of engagement has been observed in a study similar to Wood et al. (1978) except that it was conducted in the relatively naturalistic setting of the nursery classroom rather than in a psychological laboratory. In this more informal setting, the observers noted that children clearly found the imposed adult agenda an inconvenient obstruction to carrying out their own exploratory ideas (Ireson and Blay 1999). Similarly, in the families with whom we spoke, learning did not follow a clear or pre-ordained structure and the paths which children took to different areas of knowledge were diverse and unpredictable with outcomes that were not always clear. This lack of predictability brings to mind Dewey's transactional view of learning in which knowledge arises through individual experience and transactional relationships between people and their environment rather than through the revealing of pre-existing truths. For the home educated children the ZPD is a zone of being within the transactional world of their own individual contexts rather than a path of given stages towards a pre-set decontextualized goal. By way of example is the child who learned the 20 × table as a result of collecting 20 cent coins from supermarket trolleys abandoned in car parks in inclement weather, before she learned any of the 'simpler' multiplication tables that her mother endeavoured to teach her (Thomas 1998).

Some of our most startling examples come from learning to read, an area of intense learning and teaching effort in formal primary education. At home it was quite possible for a parent who had spent the majority of their waking hours with their child since birth to be unable to say how or even exactly when the major skill of reading had been accomplished:

> I honestly don't know to this day how he learned to read. Sometimes he used to sit in bed with us when [his brother] was reading and it was bed time when we read. One day when he was eight, he was reading a Tintin book and I thought he was looking at the pictures and he was laughing. What's so funny? Is the picture funny? "No, the joke is …" and he read the joke and I said: "Well how do you know that?" and he read it and he started reading the book out loud to me and I thought Wow! How on earth has he done it? Where he got it I don't entirely know (Thomas and Pattison 2008, p. 104).

This is just one of very many examples we found in the course of our research in which learning cannot be explained through imposed linear understandings of the growth of knowledge. Rather this would seem an example of the organic development of understanding through dynamic interaction and emergence such as complexity theory proposes (Osberg 2009). In the sense that this kind of learning cannot be accounted for in the conventional way and is not predictable in advance, it has escaped the confines of the mainstream fundamental principle of sequential, goal orientated learning through teaching. There is a richness and excitement to the uncertain world of informal learning in which everything within the child's environment becomes a potential resource as they seek their own meaning, their own threads of relevancy and understanding from infinite possibilities.

Informal Learning Processes

Once the certainties and predictabilities of linear learning towards pre set goals have been abandoned, what will learning actually look like, how can we recognise it or even be sure that it is happening at all?

Attempting to analyse how children go about learning for themselves is beset with difficulties. The children we studied appeared to simply get on with their lives within the setting of their families. Sometimes there were identifiable instances of "intellectual search" of the kind described by Tizard and Hughes (1984). There were also more

prolonged enquiries into various topics or the purposeful pursuit of a hobby. Most of the time, however, there was no indication of distinctive learning behaviour. In fact, when we attempted to analyse how the learning which was clearly taking place was actually happening, we simply arrived at a list of children's everyday activities which may provide potential learning opportunities but have no explanatory power.

Children observe and listen to what is going on in the world around them; they explore things that capture their interest; they play; they talk to parents, other adults and each other; they practise skills for necessity or pleasure; they pick up information from a variety of sources including the media, the written word and other people; they entertain themselves in a variety of ways, they imitate and attempt to join in and they do nothing (at least apparently). The very ordinariness of these behaviours helps explain why their relevance to learning is so easily overlooked. For school children this kind of behaviour carried out in leisure time at home is considered inconsequential or recreational, having little relevance for "real learning". It needs re-emphasising that these behaviours simply describe things that children do. In practice and in real situations they may or may not include opportunities for learning which may or may not lead to any learning. Breaking down this kind of informal learning does little justice to the complex cocktail of subject matter, dynamics of engagement and level of purpose on the part of children.

Understandably, parents in our study also struggled and, on occasion, admitted they were at a loss when asked to explain how their children were learning. All the quotes that follow are taken from Thomas and Pattison (2008) and are illustrative of parents' thoughts on their children's learning. Space does not permit us to do justice to the myriad of examples which parents and children provided us with. Here are just a few:

> I think that a lot of their learning, a big percentage is through conversation, general knowledge I suppose … [we talk about] anything, absolutely anything – could be the state of the environment to what we're going to cook for supper (Thomas and Pattison 2008, p. 57).

> It's practice from a self-motivated point of view. Rather than having a teacher say, "You need to practise these things to develop automatic response" or something like that, it is the child thinking, "I want to be able to write like Mum and Dad so" … and then they practise (ibid., p. 67).

> My son's current obsession is Yu-Gi-Oh cards which is just cards like Pokemon but more advanced and in actual fact what Yu-Gi-Oh has actually done for him is that it has improved his English reading because there is tons to read and really complicated words. It's improved that, it has made him think about looking after things, it's made him think about collecting things, he's been looking at the art on the cards (ibid., p. 44).

> She makes up a lot of stories that she does not want to write down. She talks to herself a lot, in her own world, her own inventions and that can be for hours at a time … it's playing and learning (ibid., p. 79).

> Reading was always an interest for them and they loved it and I think they just picked it up (ibid., p. 108).

> She just knows things you wouldn't imagine she could know. Sometimes she can tell you where she gets things from, sometimes she just knows them … she picks up from everybody, I think they all do. Watching them they are like little sponges and taking what they want, not what they have been told to take (ibid., p. 54).

Apart from those occasions in which children have a specific learning agenda, if they want to find out more about dinosaurs or volcanoes, it is impossible to see most of what

they learn as a separate activity because it is inextricably embedded in everyday life. At school, learning itself is the activity: What did you learn in school today? Children go to school in order to learn. At home, learning just happens in the course of living. It happens implicitly, when no one knows how something has been learnt. It happens incidentally, for example, learning maths through the course of board or internet games, or cooking. It is only when learning is self-directed and sustained over a period of time that it is discernible. Even then, from the child's point of view it is unlike learning in the school sense. Rather it is satisfying a curiosity or pursuing an enjoyable and extended topic of interest. The concept of learning as something apart is redundant.

The Role of Adults

Clearly children themselves are active agents in their own learning in the ways in which they select from and engage with their environment of possibilities in terms that are meaningful to them. Equally clear however is that children do not learn in a social vacuum, raising the question of what and how it is that others contribute to informal learning.

Potential for learning within spontaneous, social conversation has been strikingly illustrated among part time primary school reception class children (Tizard and Hughes 1984). They show how these 3–4 year olds discover a wealth of information and develop thinking skills through everyday conversation with their mothers at home, contrasting it with the mostly artificial exchanges between children and teachers in the classroom. As we have found throughout our researches, parents place a huge emphasis on mainly social conversation and the opportunities it provides for learning. These are from Thomas (1998, p. 69):

> During a visit to [a nature reserve] he asked me: How do they harvest the reeds? We talked about the water table, end of summer harvest, drying out of land, etc. He didn't have to write about it; he had the answer immediately he wanted to know. It was a real life situation, no books, just human interaction.
> I always preferred going places and talking about things and giving them my attention, than sitting down with books.
> We talk and do things without too much organizing them. It just happens … All the things you talk about … It's incredible.

Through conversation and by other practical and observable means, parents own lives provide children with access to the world around them, including trips to the shops, doctors, church, library, parks, community groups, to visit relatives and friends; and access to computers, books, dvds, pens and paper, money, clocks, keys, transport etc. Thus children become familiar with a wide range of common cultural situations and artefacts and learn to behave and use them accordingly.

Eberhardt (1979, p. 9) argues that cultural acquisition does not simply consist of observable behaviour but is a "conceptual apparatus by which a people classifies, orders and interprets" the world around them. Children need more than familiarity with objects and/or situations; they need to develop the conceptual structures that give these things meaning. It is not the recognition or appropriate use of cultural objects that implies culture acquisition but rather the conceptual understandings behind them—the meanings and significances of these things. A key for instance is not just a tool for opening a door but a culturally significant object that embodies ideas of private property and the place of different people in relation to that property. In their interactions, including conversation, both with and in front of their children, parents share their own underlying conceptual

understandings, their ideas, beliefs and the functioning of their culture through their actions and reactions, through their speech and through their priorities. In this sense adults are living aspects of culture and the more they fulfil the functions of their own lives and engage with the cultural world in the view of their children the more they demonstrate this. Behaviour, skills, knowledge and speech (competencies which can be displayed and assessed) are only the visible end of children's culture acquisition. Below the surface and extending beyond although linked to these things, children must create for themselves a conceptual structure of understanding about how the world works which can be used for guidance in all situations, regardless of whether they are familiar or not. Lehman, cited in Eberhardt (ibid., p. 11) points out that "from a fairly small input of affect, action and precept observed the human organism actively, even if unselfconsciously, constructs a conceptual representation of the world and of itself". Thus, as Eberhardt argues, learning the culture and cognitive development are not two separate things, nor is one dependent on the other, rather the connection between culture and cognitive development is inextricable.

How Do We Know they Are Learning?

We have already explained how informal learning becomes subsumed in everyday life and is inherently hard to pin down to precise actions or moments. Learning which accrues over the years in unremarkable dribs and drabs, the kind of drip, drip effect which some parents believed in the end leads to fully fledged skills such as literacy, computing or mathematical knowledge can be impossibly hard to trace. Despite this, parents often insist that they "know" their children are learning.

Here's an example, remarkable yet typical of what we found:

At nine and a half he really enjoyed street signs. In 6 months he was reading signs on cornflakes and packaging. He wanted to know what they said. He also got interested in advertisements. When he was nine and a half he was writing [MOT] instead of [TOM], so we called him [MOT]. You're faced with a problem and you've got to get over it. There was a little bit [of worry] in the background. Outside people asked why he couldn't write. They said you've got to get the problems seen to early on. Then at ten he was reading from the newspaper. 2 months later he started to learn Spanish. It really puzzled me. He was reading an adult textbook. We chewed on this for a while. I was mystified. At school he'd have been told how far behind he was (Thomas and Pattison 2008, p. 99).

Such experiences are obviously at odds with our understanding of the age related, normatively measured, growth of knowledge during the school years, dominated as it is by "an ontology of improvement that privileges assessment as its driving force" (Peim and Flint 2009, p. 343). Part of this ontology is the idea that knowledge and skills can be broken down and then reconstructed from their component parts. The mastering of these component parts can then be used to judge progress on the path towards the named goal. Such an ontology hardly features for the families in our study Although parents wanted and expected their children to learn and to go ahead and accomplish whatever they wanted in life there was very little in the way of specific goals or necessary achievement that would stand as milestones in this journey. Having said this, home educated children, like the rest of us, live in an achievement orientated world and were not immune to the reasons this might provide for pursuing a subject formally. Though not a focus of our research it seems that a significant proportion of children eventually embark on formal study, especially when they reach the age at which qualifications become important for future career

prospects. Somehow or other the apparent unremarkable dribs and drabs have been sufficient to prepare them for more formal study.

Quality of Thought in Informal Learning

So far we have discussed the what and how of informal home education, describing the process as a continuation of the acculturation which all children experience from birth and through their early years. Although this learning appears to be highly effective and to cover much of the same ground as the primary school curriculum, it varies immensely from school education in that it appears to take place with very little in the way of structure, management or deliberation. But whilst the efficient handing on of a heritage of cultural knowledge and thought may be regarded by some as a sufficient achievement for education, as discussed by Standish (1999), there are others from more liberal schools of thought who might argue that such an education would fail to furnish children with the kind of rational autonomy which can be used to reflect critically on the world around them and to develop as individual learners and thinkers. The cultivation of critical thinking as the key to liberation and personal empowerment, as articulated by John Stuart Mill, has a long history as a cornerstone of educational aspirations. Precisely what these things are and how they can be imparted to the next generation is far less clear.

Brown (1998) points out the myriad theoretical differences in circulation about the nature of thinking skills and the alternative ways in which it is argued they may be incorporated into school education. Biesta (2006) provides just one approach to this question by arguing that learning should not be thought of "as the acquisition of something that already exists, but instead sees learning as responding … if we look at learning in this way we can say that someone has learned something *not* when she is able to copy and reproduce what already existed, but when she responds to what is unfamiliar. Here learning becomes a creation or an invention, a process of bringing something new into the world: one's own, unique response" (ibid., p. 68). In school, this goal is achieved when "the curriculum becomes a tool for the emergence of new worlds rather than a tool for stabilisation and replication" (Osberg et al. 2008, p. 225). The question for the kind of informal learning that we have been describing is whether any kind of critical reflection can arise spontaneously without a curriculum that sets out to "teach" it.

Evidently, the relationship between rational autonomy, critical thinking, 'normal' thinking and cognitive skills is a matter of ongoing debate. Our own observations do not attempt to clarify philosophical taxonomies but serve instead, we would argue, to show the kind of criteriological perception and communication which children appear to employ spontaneously and from a very young age. Such evidence may eventually lend itself to assist in the development and establishment of boundaries between thinking types should this philosophical project be pursued.

Do Opportunities Exist to be Creative, Reflective and Questioning in Informal Learning?

It is easy to underestimate the uncertainty and inconsistency that surrounds the world of babies and young children or the mental effort which goes into imposing an order upon it. Their inexperience means that everyday life is full of contradictions, puzzles, anomalies and fantastical possibilities which adults barely notice. Instances in which children make "mistakes" offer us the easiest access to their ways of thinking and demonstrate some of

the reflective thinking skills which even very young children are able to employ. For example, a 3 year old girl toys with the idea that the family cat will grow into a tiger after having heard a tiger described as a big cat. This little girl is making a rational assessment of the expression "big cat", basing her understanding on a logical transference of what the words "big" and "cat" mean in other contexts as well as drawing in her further knowledge about how growth can transform. Her conclusion is only remarkable because it is wrong.

Our research reveals examples of how children continue to be extended by the real life problems of the world around them. Here is an example of a 5 year old boy using the skills of hypothesis building, testing, re-evaluating, evidence gathering and self correcting to lead him to a working conclusion. He is playing football at a soccer school for the first time and struggling with the matter of what the rules are when the ball leaves the pitch:

> The first week whenever the ball left the pitch he ran after it. When I asked him, he said you could have it if you got there first. By the second week he had stopped running after it, and when I asked him about the rule again, he said he did not know. … We had videos on football skills and a couple of library books and [he] could always have asked one of the coaches, even if he preferred not to display his lack of knowledge to the other players. However he chose to work things out for himself rather than use any of these resources. His strategy continued as before; watching the others, following the ball, involving himself with cautious commitment and, eventually the difference between corner kicks and throw ins became clear in his mind to the extent that he could explain it [to his mother] a few weeks later (Thomas and Pattison 2008, p. 84).

In another example, three primary aged children spend considerable time and mental effort in uncovering the relationship between two acquaintances:

> [The three of them] began to puzzle over the relationship between one of the coaches and one of the children at their Saturday soccer club. They had picked up from the way that these two interacted with each other that there was more to their relationship than coach and club member and now they wanted to know what. A number of speculative conversations taking place over a period of weeks, considered the various possibilities. Hypotheses were made, considered, elaborated and either dismissed or retained to be tested against further evidence when it became available … It soon became crucial to gather some more evidence in order to move their investigation forward. Again, they discussed at length what would be the most important thing to know and what would be the best way to go about finding it out. In the end, already knowing the coach's surname, [one of them] was tasked with asking the younger boy what his surname was (ibid. 2008, p. 63).

In such examples we can see that the material for intellectual challenges arises through the course of everyday events; in conversation, from curiosity, sparked by observation, through play and in researching an interest. Indeed we have found it virtually impossible to isolate reflective thinking from other activities. Children simply and pro-actively reflect on their knowledge and engage with their information where this has seemed patchy, contradictory and uncertain; building, testing, discarding or amending hypotheses, identifying missing information and seeking ways to discover more, until they reach a satisfactory conclusion. The opportunities for such learning in informal situations may well be increased because no single authoritative, teacher figure, exists. There is no one central source from which knowledge is seen to be acquired. Instead, information arrives piecemeal from a variety of sources or has to be created for oneself. The product of the

children's thinking is not original in any absolute sense but the manner in which they work it out, create sense for themselves and attach it to their own lives, certainly is.

Our examples show how children employ some of the techniques of reflective thinking such as problem formulation, experimentation, hypothesis building and testing etc. Indeed it must be testimony to the effectiveness of informal learning that even very young children are able to employ these strategies so readily. Perhaps they have seen them demonstrated by adults, perhaps they have learned them through the implied logic of our language— words like "because", "why" and "if … then", that carry within their meanings a certain way of looking at the world that children adopt as they master speech. Perhaps, cognitive faculties develop as an integral part of acculturation, a line taken by Dewey in his argument that the formation of habits through social mediums includes those of rational thought in the creation of "acculturated organisms" (Dewey cited in Biesta 2006, p. 71). The difference is that Dewey, in common with most educational philosophers, assumes that school is the necessary vehicle of acculturation. We on the other hand propose that critical thinking and open-mindedness are simply integral to informal acculturation without recourse to anything other than the self within the surrounding everyday cultural environment. Indeed devising opportunities intended to elicit such thinking, the stuff of curriculum planning in school, is simply unnecessary and arguably inhibits its development.

Conclusion

The study of informal home education opens up a whole uncertainty about the nature and course of learning, at the same time raising some startling questions about the assumptions on which mainstream educational theory is founded. These questions are not new. From within the philosophy of education many strands of thinking reflect what we have observed empirically; how children come to engage with the world around them; how this engagement can be classed as learning and the hallmarks of quality by which "good" learning can be recognised.

Our research challenges the view of learning as a separate, definable, deliberate activity and suggests that learning itself needs to be problematized in a very radical manner. From an empirical standpoint learning can cover such a multitude of forms, situations, activities and shades of self consciousness that identifying when a child is learning or not learning, what they are learning and how they are learning becomes a near impossible undertaking. In consequence we are forced to wrestle with whether "education", "teaching" and "learning" as separate entities are valid concepts at all, except when applied to the formal transmission of knowledge. They certainly sit uneasily with the circumstances and activities uncovered in our research in which it seems much more accurate and parsimonious to say that children are simply growing up at home. The constructs used to describe and explain formal education are not only irrelevant but themselves create barriers to moving our understanding forward.

A large part of the difficulty in discussing informal learning is our lack of accurate and meaningful vocabulary. Whilst preferring to eschew such terms as "teaching", "the learner", "curriculum", "engagement," we have, nevertheless, found ourselves often forced into using them for lack of alternatives. The moment is perhaps ripe to develop a new vocabulary based on a new epistemology of learning; one able to outline the terms of debate on how children learn, encompassing a much wider understanding of learning that does not rest on what is formally imposed, nor on the matrix of time and goals as its sole form of assessment. The following exchange between a home educating parent and a local

authority inspector neatly captures the essence of these qualitatively different perspectives. The parent had decided before the inspector arrived that she was going to be honest rather than attempt to show how their lives related to his expectations.

> So I said, "We don't do anything. We just hang out." And he said, "Well when your children do writing would they be doing it in exercise books or on loose paper?" and I said, "They only do purposeful writing; they write letters and lists and stuff that they want to write" so he said, "Well what about maths?" and I said, "They get pocket money, we do cooking" (Thomas and Pattison 2008, p. 36).

Our challenge then, is to develop philosophical and theoretical concepts of learning as flexible and as dynamic as the learning contexts and processes we have described. Alongside the never ending debate about how learning in school can be made more effective there is a need to initiate an inquiry which seeks to better understand learning integral to the culture within which it is lived.

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