2009

Conceptualising progression in the pedagogy of play and sustained shared thinking in early childhood education: a Vygotskian perspective

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Abstract

This paper is concerned specifically with the pedagogies applied in supporting learning through children‟s play, and it is framed outside mainstream discourses on the nature of play. The development of the paper also represents one stage in a continuing effort to develop a better understanding of sustained shared thinking in early childhood education. The paper also focuses on the educational potential of shared playful activities. However, given the overwhelming consensus regarding the importance of play in early childhood development, even a diehard educational pragmatist must begin by addressing subjects that are most commonly considered by psychologists. The paper begins with an account of „sustained shared thinking‟, a pedagogical concept that was first identified in a mixed method, but essentially educational effectiveness study. Then a consideration of the nature and processes of „learning‟ and „development‟ is offered. It is argued that popular accounts of a fundamental difference in the perspectives of Piaget and Vygotsky have distracted educational attention from the most important legacy that they have left to early childhood education; the notion of „emergent development‟. Pedagogic progression in the early years is then identified as an educational response to, and an engagement with, the most commonly observed, evidence based developmental trajectories of young children as they learn through play.

Keywords

thinking, progression, early, conceptualising, shared, childhood, sustained, education, vygotskian, play, perspective, pedagogy

Disciplines

Education | Social and Behavioral Sciences

Publication Details

Siraj-Blatchford, I. (2009). Conceptualising progression in the pedagogy of play and sustained shared thinking in early childhood education: a Vygotskian perspective. Education and Child Psychology, 26 (2), 77-89.

Siraj-Blatchford I. (2009) 'Conceptualising progression in the pedagogy of play and sustained shared thinking in early childhood education: A Vygotskian perspective' in ***Educational and Child Psychology*** 26 (2) June (in press)

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Abstract

This paper is concerned specifically with the pedagogies applied in supporting learning through children's play, and it is framed *outside* mainstream discourses on the nature of play. The development of the paper also represents one stage in a continuing effort to develop a better understanding of sustained shared thinking in early childhood education. The paper also focuses on the educational potential of shared playful activities. However, given the overwhelming consensus regarding the importance of play in early childhood development, even a diehard educational pragmatist must begin by addressing subjects that are most commonly considered by psychologists. The paper begins with an account of 'sustained shared thinking', a pedagogical concept that was first identified in a mixed method, but essentially educational effectiveness study. Then a consideration of the nature and processes of 'learning' and 'development' is offered. It is argued that popular accounts of a fundamental difference in the perspectives of Piaget and Vygotsky have distracted educational attention from the most important legacy that they have left to early childhood education; the notion of 'emergent development'. Pedagogic progression in the early years is then identified as an educational response to, and an engagement with, the most commonly observed, evidence based developmental trajectories of young children as they learn through play.

Sustained Shared Thinking

To understand 'Sustained Shared Thinking' (SST) it is important to recognise firstly that it emerged as an analytic node or 'condensation symbol' in the process of qualitative research. These data were collected in the intensive case study analysis of 12 'effective' preschool drawn from the 141 settings involved in the *Effective Provision of Pre-School Education* (EPPE) longitudinal study. The term came to be defined as SST because research respondents and observers specifically referred to the sharing of thinking, and to the particularly sustained nature of some of the interactions identified in effective (in terms of child outcomes) pre-school settings. What is novel and important about SST is its evidential basis in group settings, and as a useful concept for pedagogy. Arguably, many other researchers have adopted similar terms and have described similar pedagogic practices. In reviewing the literature for this paper, the strongest theoretical resonances were found with Vygotsky (1978) who described a process where an educator supports children's learning within their 'zone of proximal development'. But interactions of this sort have also been described as "distributed cognitions" (Salomon, 1993), in terms of the pedagogy of ''guided participation'' (Rogoff, Mistry, Göncü & Mosier, 1993), and as 'scaffolding' (Wood, Bruner & Ross, 1976). Similar examples of participation and interaction also characterise 'dialogic teaching' (Alexander, 2004), 'dialogic enquiry' (Wells, 1999), 'interthinking' (Mercer 2000, p.141), and 'mutualist and dialectical pedagogy' (Bruner, 1996, p. 57).

The research methods applied in the case studies to identify effective pedagogy in the EPPE project have been described fully elsewhere (Siraj-Blatchford, Sammons, Sylva, Melhuish & Taggart, 2006). For the purposes of this paper it will be enough to explain that the research provided a qualitative extension to the ten-year (so far) longitudinal EPPE study which has followed the progress of over 3,000 children in England. EPPE controlled for the influence of family and child characteristics and was able to establish the 'effectiveness' of each of the pre-school settings attended by the children in its sample. The qualitative case studies drew upon these findings to construct a stratified random sample of 'good' to 'excellent' settings for further in-depth qualitative data collection and analysis. EPPE was also able to provide data on the 'quality' of each of the settings as measured by the Early Childhood Environment Rating Scale: Revised (ECERS-R: Harms, Clifford & Cryer, 1998) and the Early Childhood Environment Rating Scale: Extended (ECERS-E: Sylva, Siraj-Blatchford & Taggart, 2006).

Pedagogy was defined broadly in the qualitative analysis to include all of those processes and provisions that could be considered to initiate or maintain learning processes, and to achieve educational goals. Such a wide definition was considered important so that it would include the common practice of providing resources for exploration and (constructivist) 'discovery' learning environments (e.g. sand and water play). The analytical process was initially 'grounded', as the process began with induction, and this was only followed later by stages of deduction and verification using the ECERS scores for quality. All of this initial work was also carried out blind in the sense that the researcher was unaware of the particular learning outcomes achieved by the settings and identified by EPPE. In the identification of 'sustained shared thinking', the pedagogic 'Instructional techniques' were at first coded with a multitude of subcategories that included 'Questioning', 'Demonstrating', 'Telling', and 'Dialogue'. The re-classification of some of the 'Dialogue' as 'Sustained Shared Thinking' (SST) with subcategories of 'Child initiated SST' and 'Adult Initiated SST' initially took place after data such as the following were revealed:

CONTEXT: Children engaged in water play.
BOY 8 (4:1) (who has been watching various items floating on water), "Look at the fir cone. There's bubbles of air coming out."
NURSERY OFFICER 1 "It's spinning round."
BOY 8 (4:1) "That's 'cos it's got air in it."
NURSERY OFFICER 1 (picks up the fir cone and shows the CHILDREN how the scales go round the fir cone in a spiral, turning the fir cone round with a winding action), "When the air comes out in bubbles it makes the fir cone spin around."
GIRL 2E (4:9) (uses a plastic tube to blow into the water), "Look bubbles."
NURSERY OFFICER 1 "What are you putting into the water to make bubbles?..... What's coming out of the tube?"
GIRL 2E (4:9) "Air."
(Dialogue continued…)

The analytical process was continued further through theoretical sampling informed by an analysis of the EPPE multi-level outcomes data, and the centre quality ratings of the ECERS-R and ECERS-E environmental rating scales. Various positive correlations were found between child outcomes on e.g. Early Number outcomes with

the ECERS-R interaction Sub-scale ($r = 0.26$, $p < 0.005$). Setting 421 (referred to above), for example, was found to have achieved 'excellent' (95% confidence level) practice in terms of the children's developmental progress according to their 'non-verbal' and 'number concepts' assessments. Performance in 'Language' was also found to be 'good' (above 68% confidence level). Further analysis soon revealed a general pattern of high cognitive outcomes associated with sustained adult-child verbal interaction along with a paucity of such interactions in those settings achieving less well. SST thus came to be defined as an effective pedagogic interaction, where two or more individuals 'work together' in an intellectual way to solve a problem, clarify a concept, evaluate activities, or extend a narrative. This can also be achieved between peers.

In the following example a Nursery Officer was observed supporting some SST that was initiated by a child and entirely unrelated to the activity that the adult had planned:

1.20 BOY 3 (3:11) has finished his cake and starts to sing 'Happy Birthday' to NURSERY OFFICER 1.
NURSERY OFFICER 1 pretends to blow out the candles. "Do I have a present?"
BOY 3 (3:11) hands her a ball of playdough.
NURSERY OFFICER 1 "I wonder what's inside? I'll unwrap it." She quickly makes the ball into a thumb pot and holds it out to BOY 3 (3:11), "It's empty!"
BOY 3 (3:11) takes a pinch of playdough and drops it into the thumb pot "It's an egg."
NURSERY OFFICER 1 picking it out gingerly "It's a strange shape."
BOY 1 (4:0) tries to take the 'egg'.
NURSERY OFFICER 1 "Be very, very careful. It's an egg." To BOY 3 (3:11) "What's it going to hatch into?"
BOY 3 (3:11) "A lion."
NURSERY OFFICER 1 "A lion?.... I can see why it might hatch into a lion, it's got little hairy bits on it." She sends BOY 3 (3:11) to put the egg somewhere safe to hatch. He takes the egg and goes into the bathroom.……

BOY 3 (3:11) returns to the group.
NURSERY OFFICER 1 "Has the egg hatched?"
BOY 3 (3:11) "Yes."
NURSERY OFFICER 1 "What was it?"
BOY 3 (3:11) "A bird."
NURSERY OFFICER 1 "A bird? We'll have to take it outside at playtime and put it in a tree so it can fly away."

SST was found to occur most commonly in 1:1 adult/child interactions. An early association was also found between SST and 'open ended' questioning (Siraj-Blatchford & Manni, 2008). Most of the examples of SST that were identified in the study really were quite extended and readers will need to refer to the technical report (Siraj-Blatchford, Sylva, Taggart, Sammons & Melhuish, 2003) for more examples. But these findings have led to a series of engagements with the theoretical literature (Siraj-Blatchford, 2007, 2008), of which this paper may be considered another.

Child development and learning

It is often observed that Piaget believed that a child's ability to learn depended upon their current stage of development. Educators therefore developed their curriculum and pedagogy to suit the child's cognitive capability. Vygotsky (1978) by contrast, considered the relationship between learning and development to be more complicated. As Bodrova and Leong (2007) have put it, Vygotsky argued that:

"For certain knowledge or content and for certain ages, one step in learning may mean two steps in development. In other cases, learning and development proceed at a more even pace. However, teaching should always be aimed at the child's emerging skills, not at the existing ones". (p31)

But it is simplistic and mistaken to claim (as many do) that the major difference in perspective between the two theorists is one of seeing 'learning leading development' and the other as 'development leading learning' (e.g. Wood & Attfield, 2005, p. 91). Both saw the potential for learning grounded in, and essentially limited by, even if not 'within', the child's current developmental capabilities; for Vygotsky this was the whole point of defining the '*zone* of proximal development' as:

"The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (1978, p. 86)

But to understand Vygotsky's more complicated relationship between learning and development we need at first to consider the difference between learning *the solution to a problem*, and the development of *capability in solving particular kinds of problems,* and then secondly we need to consider the *emergent* nature of child development. 'Emergence' is actually a philosophical notion that dates back to the very earliest writings in 19th Century Psychology, and also to classical views of society being considered to act as a living organism (Sawyer, 2003, p. 14).

In terms of child development, 'emergence' may be considered to involve processes that occur over time that result in the development of higher order structures of the mind. Most significantly in terms of the arguments presented below, these may relate to particular intellectual, social and cultural competencies and capabilities, and they are initially developed in social interaction and following the acquisition of a range of communication and collaboration skills (Siraj-Blatchford, 2007).

But it is important to recognise that this involves much more than any simple accumulation of specific skills or understandings. The developmental structures that finally emerge are considered *irreducible* to their component parts. In fact, from the perspective of emergent development, it is considered impossible to deduce the child's development as a whole from any observations of their previously learnt behaviour or behaviours (Sawyer, 2003). When children's play is considered to support their development, this should be understood in emergent terms, where the first order (and relatively superficial) *reproductive* (Vygotsky, 2004) or *empirical* (Piaget, 1950) learning that is involved is contributing towards, but not itself constituting the achievement of, either a series, or a continuous process, of irreducible restructurings of the mind. These developmental achievements are often seen to involve a 'renaissance' or gestalt change in the mind:

"A child's play is not simply a reproduction of what he has experienced, but a creative reworking of the impressions he has acquired" (Vygotsky, 2004, p. 11).

While we might observe a child's behaviour and their use of various skills, knowledge, attitudes etc, these should be recognised as representing only the material conditions required for development. Both Piaget and Vygotsky applied these notions of 'emergence' (Sawyer, 2003), but while Piaget applied in his analysis the heuristic notion of discrete 'stages', Vygotsky always considered development as a continuous process, and only Vygotsky was concerned, and wrote explicitly, about pedagogy (Moll, 1990, p.15).

One of the many insights that we might be at risk of losing by not appreciating this complex relationship between learning and development is the wider relevance of emergent development to the whole curriculum. While literacy is now widely seen as an emergent developmental accomplishment, and this has also been extended in some quarters to Mathematics (Hughes, 1986) and to 'emergent science' (Siraj-Blatchford, 1999, 2006), in other subject areas very little has so far been written. 'Emergent Literacy' was a term first applied by Marie Clay (1966) and Whitehurst and Lonigan (1998) further defined the concept as:

"…the skills, knowledge, and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing", as well as; *"…the environments that support these developments."* (*op cit* p. 849)

Clearly this definition may be applied much more widely, with 'Emergent Curriculum' practices and resources being applied to support young children in learning the skills, knowledge and attitudes identified as developmental precursors to a much wider range of curriculum subject areas.

Play, Pedagogy and the Emergent Curriculum

Play is widely recognised as a leading context for the child's acquisition of communication and collaboration skills. For neo-Vygotskians play is also considered to be a 'leading activity', but it is important to recognise here that this does not mean that play should be considered to predominate in the life of young children, that play is the only way that young children learn, or that all kinds of play promote development. But play does provide an important *context* for learning and development, as Vygotsky (1933) put it:

"Only theories maintaining that a child does not have to satisfy the basic requirements of life, but can live in search of pleasure, could possibly suggest that a child's world is a play world" (p1). But: *"The child moves forward essentially through play activity. Only in this sense can play be termed a leading activity that determines the child's development."* (*op cit*)

In terms of empirical progression we know that play begins with solitary play and the child goes on to *develop* the capability to share, then to co-operate, and finally to collaborate in their play. We also know that these *developments* open up much wider opportunities for learning. But 'solitary play', shared play, co-operative and

collaborative play are not discrete 'stages' that the child works through. Even solitary play serves us well at times throughout our learning lives. In most theoretical accounts describing the ways in which these different forms of play open up the possibility of learning, the notion of emergent development is often implicit. For example, when describing play as a 'leading activity' (Leontiev, 1964; Oerter, 1993), it is only being suggested that it should be seen as a *driving force* in the child's development of new forms of motivation and action.

Activities that may all be considered examples of SST (Siraj-Blatchford, 2007) are considered by many neo-Vygotskian writers (Karpov, 2005), to mark the transition from *learning activities* that are characterised by "**emotional communication with caregivers**" (Lisina, 1986), then to **"object-centred joint activity"** (Elkonin, 1989) where the child begins object substitutions, and then on to **Socio-dramatic play** (Leontiev, 1964), with finally activities that reflect the child's desire to learn more formally and embrace formal **Learning** (or schooling) as the dominant learning activity.

In a table in the Appendix I have endeavoured to summarise these major developmental phases and identify some of the major features of pedagogic progression. The table follows the example of the English *Early Years Foundation Stage (EYFS) Guidance (DfES, 2007)* in referring to some of the most significant, overt and immediate learning that takes place throughout each phase as something for practitioners to 'Look, listen, and note', and to identify the potential developmental significance of this separately. In place of pedagogy I apply the more common phrase 'effective practice'. The first three developmental phases that are identified broadly correspond with Broadhead's (2001) empirical account of the "social play continuum" levels for 'Associative Play', 'Social Play and Highly Social Play', and 'Co-operative Play'. I have resisted the temptation to include any specification of the ages to which these apply but can see no particular problem with these being defined as broad and overlapping phases (as *again* applied in the EYFS). But arguably these processes do not end with play, or in school, or even in adult life. There is an essential continuity between the playful collaborations of the nursery and the more formal collaborations between peers, and between teachers and pupils in schools, in working partnerships, in the provision of apprenticeship and tutorial relationships and even professional mentors and collaborators at the academic and professional level. In terms of competence, progression goes from mastering the very informal and strongly improvised *sustained and shared* interactions to more highly structured and much more formal *sustained and shared* interactions in adult life.

If we now consider how SST develops over time in progressively more sophisticated contexts, as sustained and shared 'moments of activity' (Leontiev, 1978), we can begin by drawing upon George Herbert Mead's account of the processes that are involved in children's early 'emotional communications with caregivers' seeing these as gestural symbols that are at first recognised by babies as communicative acts. To paraphrase Morris (1962): *"The **'significant gesture'**, itself a part of a social process, internalises and makes available to the [child] the means which have themselves emerged earlier, non-significant, stages of gestural communication"* (op cit pxxii). 'Significant gestures' thus provide the means by which a baby is able to at first objectify the behaviour (or role) of the other, and control their own behaviour in

response to these roles. It is also in this process that the child first develops a conscious awareness of the 'self'.

The interactive contexts for these very early learning experiences usually involve the parent or primary carer playing 'peek-a-boo' or other baby games that involve taking turns. But the development of higher mental functions only 'emerges' following a multiplicity of these relatively simple interactions. The pedagogy that might be considered implicit in these interactions follows a sequence where the adult at first repeatedly models a particular action or gesture (an early example may be a big smile following eye contact), the adult then observes the child initially providing rewards when they respond and then, as the child begins to initiate the game themselves, progressively reduce the scaffolding (in this case the adult initiation and rewards). The adult may then extend the game by employing props (e.g. hiding their face behind a book) or by encouraging others to play. More often that not, the adult is entirely unaware of the pedagogy that they are applying. S/he is playing a game with (probably ancient) cultural roots. They may also be considered to be operating within the child's 'zone of proximal development'.

This pedagogic sequence of *modelling – progressive reduction of scaffolding – extension* may continue to be employed in supporting children's learning in a wide range of play contexts throughout the early years. As children develop, a range of particular (and increasingly unique) cultural, personal and situational factors will make some contexts more significant to the individual child than others, but in the child's first significant gestures, and later in many other communications both positive and negative emotional influences are likely to motivate their learning, with the operation of interests, desires and impulses being applied on the one hand (perhaps dominating in the earliest years), and concerns about what Piaget referred to as 'disequilibrium', (and *cognitive dissonance or conflict*) being applied on the other.

For Van Oers (1998), the creative processes of learning that are involved can be characterised as a process of 'progressive continuous re-contextualisation' (pcr-c) where it is considered that as soon as the individual recognises the potential of achieving a recalled (and motivating) object (or outcome) they may chose to re-contextualise that object, transforming (or 'transferring') their (structure and meaning) of the activity to that end. The developmental significance of these first separations of meaning from objects is enormous:

"At that critical moment when a stick – i.e., an object – becomes a pivot for severing the meaning of horse from a real horse, one of the basic psychological structures determining the child's relationship to reality is radically altered." (Vygotsky, 1933, p. 1)

It is in this context that the power of play and pretence may be seen most clearly. Vygotsky (1933, p.1) argued; in the child's 'real' life, action always dominates over meaning. The evidence suggests that the crucial practice of **substituting a real object for a symbol** may occur spontaneously in play, but that this is also greatly facilitated in the playful interaction with others. So the role of primary carers may therefore be paramount before the age of two years, while peer play may be more significant around age four. As Moran and Steiner (2003) argue, citing Smolucha and Smolucha (1986):

"Children do perform spontaneous object substitutions as early as 12 months, but most [early] substitutions occur during their second year through pretend play initiated by caregivers" (op cit p. 69)

As suggested earlier, this does not just relate to artefacts, the child learns to be an object to themselves, and to objectify 'others'. In play the child is at first able to be another to her/himself, developing the capability of 'interacting with pretend others (increasingly acknowledging 'their' perspective), and then is able to 'switch' freely between roles (Fein, 1991).

Progressively, as the child continues to communicate with adults and other children, the meanings that they are constructing are mediated by all of their previous historical moments of significant activity. Increasingly we can see that the child's **socio-dramatic play** becomes reciprocal and collaborative. At this point conceptual knowledge and understanding of the 'other', and of the 'self', develop further and learning 'dispositions' become more significant (e.g. probably most clearly identified in studies of gender preference). The development of these sophisticated levels of abstraction (and meta-consciousness) commonly referred to as a **theory of mind,** also facilitate the development of a wider Meta-cognition (*the knowledge and awareness that children come to develop of their own cognitive processes).* The meta-cognition that is so important in learning-to-learn, also develops as the child finds it necessary to describe, explain and justify their thinking about different aspects of the world to others.

Whenever play partners communicate they do so from their own historically constructed perspective, which includes their understanding of the perspective of themselves constructed by the other participant in the communication (or SST). This has important implications for development as*: "…the child's position towards the external world changes…and the ability to co-ordinate his point of view with other possible points of view develops"* (Elkonin, 1978, p. 282).

Forman and Cazdan's (1998) research suggests that children's problem solving improves in collaboration, as the partners alternately provide scaffolding for each other within the partners 'zone of proximal development' (ZPD). That is, the 'zone of capability' that extends beyond what the partner is capable of doing on their own to include those activities they may successfully do with the support of their peer.

Thus, from an early age**,** young children learn to separate objects and actions from their meaning in the real world and give them new meanings. This provides the basis for early representational thinking and inn more advanced forms of representational thinking these 'props' are no longer required, so that problems may be solved entirely 'in the head'. Co-operation and collaboration provides scaffolding in the development of meta-cognition and learning-to-learn. As Moran and Steiner (2003) suggest, in the context of collaborations later in life:

*"Collaboration is shared creation and discovery of two or more individuals with complementary skills interacting to create a shared understanding that none had previously possessed or could have known on their own" (*Schrage, 1119, p. 40). *It is not just an intellectual endeavour; rather, it is like an affair of the mind in which*

emotions can transform the participants and the work itself is interesting and supportive" (p. 82).

A creative learning mechanism something like Van Oers' pcr-c may be considered to operate as much in these more challenging contexts as in the earlier learning. But as children get older: *"Play is converted to internal processes at school age, going over to internal speech, logical memory, and abstract thought."* (Vygotsky, 1933, p. 1). As an illustration of the ways in which the pcr-c learning processes may be applied in the case of the child's later reasoning and development we can borrow a short dialogue cited by Donaldson (1992) needs adding to refs who uses it to illustrate what she refers to as children's 'spontaneous wonderings' (p. 44). The dialogue also illustrates rather well the syncretic motivation to reconcile apparently contradictory experiences or stimulations referred to earlier. Jamie (3 years 11 months) was standing in a lane beside a house in the English countryside. It was a warm and dry day, and a car was parked on a concrete drive nearby:

Jamie: *Why is it* [the car] *on - that metal thing?*
Adult: *It's not metal, it's concrete.*
Jamie: *Why is it on the concrete thing?*
Adult: *Well, when it rains the ground gets soft and muddy, doesn't it?*
[Jamie nods, bends down and scratches the dry earth.]
Adult: *So the wheels would sink into the mud.*
But the concrete's hard, you see.
Jamie [excitedly]: *But the concrete's soft in the mix!*
Why is it soft in the mix?

(Donaldson; 1992, p. 44)

A strong clue in understanding what is happening here is in Jamie's use of the word 'mix'. At some point in the past he may have seen concrete being mixed with a shovel or concrete mixer. If so, he will have been left with an apparent contradiction when he was told that this hard floor material was also 'concrete'. He had only ever seen it very soft and fluid. In recontextualising concrete as a hard substance Jamie's conceptual understanding of scientific notion of 'matter' was being challenged, and following further examples will ultimately be transformed to one that accepts the general principle that 'matter' often exists in more than one 'state'.

Donaldson tells us that the adult was thrown into some confusion by the child's question and was not able to answer. So there may have been a missed opportunity here, had the adult listened (or reasoned themselves) more carefully they might have been able to explain how concrete, after it is mixed, then 'sets'.

Bodrova and Leong (2007) cite Vygotsky and Elkonin in recommending the encouragement of extended play (over several days) to promote self regulation and planning and memory (op cit p143). Case studies conducted by Van Oers (1994, 1996) have shown that symbolic construction can be introduced as an appropriate pedagogic activity for young children from the age of around five. As Van Oers (1999) has suggested, when children consciously reflect upon the relationship between their 'pretend' signs and 'real' meanings in play, they are engaged in a form of semiotic activity that is a valuable precursor to new *learning* activities (p. 278). In

discussing the transition from play to learning as a leading activity Carpay and Van Oers (1993) argued that:

> *"…learning activity must be fostered as a new special form of play activity. As a new quality emerging from play activity, it can be argued that learning activity has to be conceived as a* ***language game*** *in which negotiation about meanings in a community of learners is the basic strategy for the acquisition of knowledge and abilities".* (cited in Van Oers 1999, p. 273 author's emphasis)

As previously suggested, this approach is also implicit in emergent literacy and numeracy practices where educators specifically encourage children to recognise the value of using symbols to represent and quantify artefacts. Educators who know the children in their care, who know their interests, capabilities, and potential quite naturally plan ahead and initiate activities that they know the child will enjoy and benefit from. Such an approach is not curriculum centred, it is child-centred, but it offers the possibility of monitoring the child's activities for breadth and balance. Left to their own devices we know that the play of children often becomes repetitive, and effective educators therefore encourage children to take on new challenges and introduce new and extended experiences.

Child development progresses as children experience more challenging SST in their play initially with adults, then in reciprocal peer play and later in sophisticated collaborative play. We can support this process in early childhood education (ECE) by providing children with these more challenging forms of SST and by providing more sophisticated and abstract scaffolding props. These transitions to social and cultural competence are very gradual but they are inevitable and it may therefore be considered surprising that for many ECE educators there remains an open question about how much, at any point they should be emphasising the individual and immediate 'rights' of a child to 'childhood', or focusing our attention on any future 'needs' that they may have. But there is really no contradiction between these two, young children realise this themselves very quickly.

Pedagogical progression and transition

Researchers have always found it useful for the purposes of analysis to identify different developmental stages, phases and/or contexts for learning. Practitioners and policy makers also routinely differentiate between home, nursery, kindergarten and school contexts. But we must accept that one of the central challenges of good practice must be to provide individual children with the lived experience of smooth transition and continuity in their learning across these phases and contexts. As Sanders, White, Burge, Sharp, Eames, McEune and Grayson (2005) have put it:

"The process of transition may be viewed as one of adaptation. This study has shown that the best adaptation takes place where conditions are similar, communication is encouraged, and the process of change takes place gradually over time" (p. 9).

This research (*op cit*) identified a number of studies that showed significant discontinuities (Potter & Briggs, 2003, Corsaro & Molinari, 2000, Clarke & Sharpe,

2003) and emphasised the need for teachers of 4 to 6 year-olds to be given more guidance on how to introduce literacy and numeracy activities in ways more suitable for young children. As Sander et al. (2005) found in their study of the effectiveness of the transition from the English Foundation Stage (which applies to children aged birth to five years) and Year 1 of school (for children aged five to six):

"Schools should encourage staff to adopt similar routines, expectations and activities in Reception and Year 1. School managers should allocate resources to enable children in Year 1 to experience some play-based activities that give access to opportunities such as sand and water, role play, construction and outdoor learning".

Their findings also suggest that children from minority ethnic groups, those with English as an additional language, and children with special educational needs find transition more difficult (Margetts, 2003). Many of the practitioners interviewed in the EPPE case studies were also concerned that chronological age should not be taken as an indication of a child's level of development and that there should be some differentiation in the pedagogy applied for children (Siraj-Blatchford et al., 2002).

While this concept of 'transition' may have often been viewed exclusively in terms of 'school readiness' in the past, it can be seen much more fruitfully in terms of: *"pedagogical, curricular, and/or disciplinary approaches that transcend, and continue between, [all] programs"* (Kagan & Neuman, 1998, p.1).

In this paper I have argued that SST, as a high order pedagogical concept, and as a common approach, has the potential to provide just this sort of continuity.

Conclusions

In this paper SST has been presented as a form of 'pedagogy' in the sense that it is something adults ***do*** to support and engage children's learning. But as I have argued more fully elsewhere (Siraj-Blatchford, 2008), it is important to recognise that every learning episode has both *pedagogical and curricula* content. Learning has *content* as well as *form*, and whenever learning takes place we can say that a 'curriculum' is involved (however implicit or hidden it might be). This paper has been concerned to identify *pedagogic progression* in play and much of this is implicit (never rationalised) in the English curriculum, EYFS Guidance (DfES, 2007). But the EYFS *is* concerned with more than just the *pedagogy* to be applied in the early years in England, it prescribes some limited curriculum content as well. Content analysis (Siraj-Blatchford, 2009) suggests that this curriculum almost exclusively follows the 'emergent' curriculum model with most of the learning representing the sort of 'reproductive' or 'empirical' learning described earlier. The National Curriculum in England requires conceptual development only at a later stage in schooling.

Drawing upon broadly Vygotskian sources the model that I have presented suggests that the adults that children grow up with, progressively introduce them to the cultural tools that they require to integrate fully as contributing members of the society around them. The tools that they begin with are quite modest communicative competences but increasingly they provide access to significant products of cultural achievement, such as the world of literature and texts (Wolf, 2007). The most recent results from the longitudinal EPPE study (Sammons et al., 2007), clearly show the importance of

the early years home learning environment (HLE) and identify its influence over and above that of parental education and socio-economic status. The early HLE was found to remain a powerful predictor of better cognitive attainment at age 11 even after 6 years in primary school. As Snow, Tabors & Dickinson, (2001) have shown, extended discourse and exposure to rich vocabulary in the home is a strong predictor of early elementary language and literacy growth and as I have argued elsewhere (Siraj-Blatchford, 2009), these practices are ubiquitous in middle class, western family contexts, but they can't be taken for granted elsewhere. The EPPE research (Siraj-Blatchford & Sylva, 2004) provides only one of the most recent contributions to a growing body of evidence that shows that there are many disadvantaged children in even the wealthiest of countries that deserve our very best pedagogical efforts when they attend pre-school settings.

EPPE has shown that a quality pre-school experience can be supportive in terms of children's learning and development in the long term, so that a more conscious awareness of the pedagogic processes that are involved are likely to be extremely valuable in the development of professional early childhood educational practice.

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