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Tackling inequality and underachievement through free-flow play (Schemaplay 4 of 4)

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According to the Annual Report of the Education Policy Institute published on 30th July 2019, little or no progress is now being made in closing the attainment gap between disadvantaged and non-disadvantaged children in early childhood, and this gap is widening in secondary education. Pupils eligible for Pupil Premium funding are now more than 18 months behind their peers when they leave school. Shockingly, the report concludes that taking into account the progress made over the past 5 years it will take 560 years to close the gap, and there is a; ***“real risk that we could be at a turning point and that we could soon enter a period where the gap starts to widen”*** (Hutchinson et al, 2019).

The gap in achievement is apparent from early childhood, and it widens throughout the course of schooling, so that from the perspective of many educational policy makers it seems as if the problem might only be solved if all children enter school ‘ready’ to benefit from it. From a preschool perspective we very reasonably argue that it is the school that should be ‘ready’ for the child, rather than the child ready for the school, except that we also know from studies such as the Effective Provision of Preschool Education (EPPE) project (Sylva et al, 2010) that the gap in attainment is also apparent at age 3, so that we must apply the same argument to ourselves as well.

As David Ausobel (1978) argued: If all our knowledge about educational psychology had to be reduced to one general practical principle it would be that:

“...the most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly”

The logic, and the irony, of ‘school readiness’ comes from the overwhelming evidence across all age groups that you can only teach a child to do something new if you build upon what they already know and can do. In other words; what you teach has to make sense to them. And here lies the ultimate challenge to early childhood education, the EPPE study has shown us that the most effective preschools, with parental partnership do close the achievement gap, and they achieve this through individualised, formative, child-centred education.

The SchemaPlay Community Interest Company was created specifically to support early years practitioners in the improvement of inclusion and equality, and in improving outcomes in learning through free-flow play. The distinction that we make between schemes and schema has been discussed in our three previous articles in this series for EYE, and we have shown their practical relevance in a variety of case studies, including studies relating to girls and STEM and Education for Sustainable Citizenship. There are many different understandings of the word ‘schema’, but we refer in these articles to the later work of Piaget in his *Mechanisms of Perception* (1969) where he wrote: “The terms scheme and schema correspond to quite distinct realities, the one operative (a scheme of action)...and the other figurative” (Piaget, 1969: ix).

Effective practice requires that practitioners appreciate the value of observing, know what to observe, and ensure that the activities 'seeded' in the play environment are anchored in what each child 'can do' (their operational schemes, such as transporting, containing, rotating, etc) and also what they 'know', their schemas (figurative knowledge gained through experience, such as knowing what a 'jar' or a 'jug' looks like). Of course, we can appreciate that all knowledge is dependent upon both; we cannot appreciate the difference between a jar and a jug, for example, which are typically made of glass and contain fluids (they are figuratively similar) without understanding their unique operations (such as one affords pouring and the other doesn't). Cat's and dog's look very similar to a small child and they first learn the difference, through their behaviour, what they do, whether they meow or bark, drink milk, or bury bones etc. When we fully appreciate this, and can also appreciate the importance of observing both the schemes and schemas displayed in children's play, and effectively scaffold and build upon these in supporting their holistic development and emergent learning of complex operations, that include literacy and numeracy, we can start to truly provide the child-centred learning in free-flow play which every child deserves.

The following case study provides an insight into how one SchemaPlay practitioner, who was concerned about the lack of literacy engagement by boys in her setting, started to appreciate that literacy does not have to start with introducing letters and sounds, and that all new learning needs an anchor and a meaningful context. For a child to appreciate the value of looking at books they need to have observed other people's enjoyment and value of books or other texts. There are also many pre-requisite operational schemes that the child will need to support their transition into literacy such as vocabulary, matching, ordering, sorting. Horizontal and vertical trajectories and rotation schemes are also significant. All of these are necessary for being able to read and write. Early matching, sorting and ordering activities prepare the child for the visual discrimination that is required to identify the small differences between letter symbols, such as a 'd' and 'b', or 'c' and 'o'. Such activities also support blending; being able to match a letter to a sound, and to sort and order the letters of their first words; first letter, medial letter, and final letter.

Another interesting feature that this case study demonstrates is that it is not always necessary to be able to hold a pencil in order to start writing. If the intellect and the motivation is driving the child forward, they do not need to be held back due to emerging motor skill development.

Robert and Kevin

Robert, aged 4, was observed in his freely chosen independent play by his key person. Robert seemed to be particularly enjoying matching cups, plate, knives and forks to a place setting template. After some weeks he started to set up place settings on several tables, and it was during this observation that an adult in the setting overheard him say to a passing friend, "I will get the food ready. You will need to buy it." Robert's preparation of the pretend food was also interesting, as he was selecting food resources to 'cook' that he had first matched to pictures of healthy foods displayed on a nearby poster.

Robert's observed play enabled the practitioner to note a secure '*matching*' scheme, and the possibility of an emerging scheme of *exchanging*; through 'buying food'. She considered that he might have acquired the schema of a café or restaurant from a recent experience. Kevin 3:8 years, a peer of Robert's, was also observed in the same role-play area, but he had a different agenda: He appeared to enjoy applying *sorting, grouping, counting and containing* schemes: He counted and grouped foods, which he then contained in a set of boxes in the role-play area. First counting all the cabbages and containing them, then the broccoli, strawberries, and a range of other foods. This play was taking place daily and was

often sustained for over twenty minutes at a time. Kevin was already counting effectively up to eighteen.

The boys were both engaged in free-flow play that was independent from any adult, and from each other, but both boys were choosing to carry out their activities in the same area, and both were drawn to the foods for different reasons and were choosing to repeat their operational schemes daily. The practitioner therefore provided other contexts for counting, matching, sorting and grouping to be applied to, and planned a short-focussed activity to introduce to both children, which drew upon what they could both already do, their schemes and potentially support new schemes helpful for early and later literacy and numeracy engagement - it was a *provocation*.

Frank Smith's writings on Literacy in the 1970s and 80's, argued that in order to join the literacy club, children often needed to be accompanied in their first engagements with it by an established member.

A café role-play was set up. The menu offered pictures of foods and written alongside each were three letter phonetic consonant, vowel, consonant words, such as bun, jam, and ham. Each item was priced 1p, 2p, 3p, with pictures of coins alongside, that could be counted. The practitioner, unsure of how much Robert and Kevin knew about cafes, read stories with props about café's and also provided pictures of people buying and serving food, as well as organising a visit to a local cafe. Role-play costumes were provided, and two adults in the setting, after inviting Robert and Kevin to see if they would like to run a café in the nursery, modelled how to be a waiter and take orders from customers, and how to be a cashier, preparing the bill and collecting payment. Both boys looked on enthusiastically and observed the adults' behaviour carefully. Kevin was drawn to counting the number of letters which indicated how many buns, jams, etc., was being ordered, and Robert enjoyed seeing how, when a child ordered something, the practitioner selected a magnetic letter which matched the first letter in the words. 'b-un', 'j-am' and 'h-am'. Robert quickly took to taking the orders, selecting the relevant magnetic letters and then passing the magnetic order board to Kevin. Kevin counted the number of b[un]s, j[am]s, and h[am]s and put them on a tray for Robert to take back to the table. As Kevin counted, he was shown how to record the quantity using a tallying method. When the 'customers' had got their foods, and were 'eating' them, Kevin took them a bill, which displayed his tally lines and he told them how many pennies he needed by counting up the lines. When receiving payment, he counted the pennies to check that the amounts were the same.



The two boy's initial schemes complimented the play theme very well, which enabled a good collaboration. The play was meaningful, and most importantly the recording – making tally

lines, and the matching of the magnetic letters to represent the first letter of the food ordered, was supporting both boys literacy, both appreciating that text carries meaning, that letters exist in words, and that text can be found in a variety of contexts, including a menu. Robert was so excited about matching the letters, that he enjoyed another focussed introduction to tracing sandpaper letters and learning the corresponding phonic sound of the words displayed in the menu. Six weeks later, Robert appeared to draw upon all the schemes he had previously applied in play and started to say the phonetic letters in each word on the menu, sorting through the magnetic letters, to find the right ones and construct the words 'ham', 'jam' 'bun'. At the end of the nursery year he had started to blend letters together and write with a pencil, which was self-driven and motivated in a later facilitating role-play theme (the hairdressers).

Kevin's counting and recording of tally lines led to him asking about the 1p, 2p and 3p printed on the menu, which in turn led to an introduction of numbers 1, 2, and 3. His practitioner introduced number symbols using loose quantities to support labelling of his counting and contained onions and cabbages, etc, and he became a very good at stock-taking! Both the schemes of writing letters and recording quantities were enjoyed in the café role play for many weeks and later in a hairdresser's role-play, which developed following Kevin's keen interest and following his own visit to a hairdresser. The new schema

knowledge of hairdressers, led to a creation of a different type of menu, a menu of haircuts with prices, so they had 'bob' and 'wet' cuts to record, blending phonetically and this time it was Robert who manned the till and counted up the cost of a wet cut or a wet and a bob cut and Kevin that was now using the magnetic letters to record the styles he would create. Both boys had modelled for one another new schemes in a meaningful context, both boys were in 'flow', there was no pressure to follow rules, but the play facilitated the children to bring together everything they knew, could do, understood, and they were in control, confident to take on new challenges both supported by their key person and each other.



Key Points:

- Children enter pre-school with different schemes and schemas, as their life experiences will be different. Therefore, careful observation and sensitive scaffolding of these is important:
- All new activities offered must be meaningful, and this requires activities to have a relationship to what the child can already do (their schemes) and/or knows (their schemas).

- Complex operations, such as reading and writing, as well as measuring and adding, etc. have their origins in operational schemes. The child pulls them together when they are ready – when it is meaningful.
- The ‘gap’ in literacy does not need to exist. We can do more: Boys might find a route into reading by following pictorial instructions to make a robot or be introduced to writing for a purpose by issuing tickets to access a dinosaur hide in role-play!
- Young children must learn through play, they should not be expected to engage in literacy activities which are prescribed, adult-led, activities requiring the construct and de-construction of text in a formal way. These prescribed activities are meaningless and therefore learning does not occur, and a joy of learning does not evolve.

For more information about SchemaPlay training, email: admin@schemaplay.com

References

Ausobel et al, (1978) *Educational Psychology: A Cognitive View*, Holt

Hutchinson, J., Bonetti, S., Crenna-Jennings, C and Akhal, A. (2019) Education in England: Annual Report 2019, *Education Policy Institute and Fair Education Alliance*

Piaget, J. (1969) *Mechanisms of Perception*, Routledge & K. Paul

Siraj-Blatchford, J. and Brock, L. (2016) Putting the Schema back into Schema Theory and Practice: An Introduction to SchemaPlay, SchemaPlay Publications

Smith, F. (2004) *Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read*, Lawrence Erlbaum

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2010). *Early Childhood Matters: Evidence from the Effective Pre-school and Primary Education Project*. Oxford: Routledge.