Laying the Foundations in the Early Years of Schooling

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There are many aspects to consider when planning for teaching and learning in the early years. For prep to year 4 it is important to have knowledge of children’s growth, development and learning, as it will aid teachers to select the most supportive environment and most effective teaching and learning strategies. Teachers need to consider how a child learns and what the child is capable of learning within their cultural and social context of development. In this essay we will be looking at various resources, including Victorian Educational Department documents. These documents include the discussion paper on ‘learner characteristics’ (Reeve & Ainlee, 2004) and the discussion paper on ‘social, emotional and cognitive relationships’ (Bellhouse, Johnston, Fuller & Deed, 2004) and how it pertains to this particular stage of learning and how it demonstrates the connections between curriculum teaching and learning in the early years of school. The most influential constructivist theories to be discussed, for effective planning of activities for younger learners, are: Piaget’s stages of development, Vygosky’s zone of proximal development, Bruner’s scaffolding, Brofenbrenner’s social context and Loris Malaguzzi’s Reggio Emilia Approach.

Jean Piaget said “the teacher should know not only his science but also be well versed in the details of the development of the child or adolescent’s mind” (Mooney, 2000, P. 59). Piaget’s work provides an in-depth view of how children create knowledge, although he was often referred to as a psychologist, he was also an epistemologist (someone who studies the nature and beginning of knowledge). His work provides the foundation on which constructivist theories are based, he claimed that children actively construct their own knowledge by giving meaning to the people, places and things in their environment (Duffy & Jonassen, 1992, P. 49).

Early years children begin their education with a great amount of accurate and inaccurate knowledge and skills. It is important for teachers to teach students to ‘reflect on their learning and to focus on what is important, what is true and what is useful. Piaget described this process as assimilation, where new information is integrated with prior knowledge (Bellhouse et al, 2005, P. 4).

Piaget identified stages of cognitive development of children that influence the early years of schooling: the pre-operational stage 2 to 7 years and the operational stage 7 to 11 years. During the pre-operational stage ‘intelligence is egocentric and intuitive, not logical’ (Wood & Grossniklaus, 2001). In the operational stage ‘the use of logical and systematic manipulation of symbols related to concrete objects’ (Wood & Grossniklaus, 2001)
demonstrates that thinking is less egocentric at this developmental stage. Piaget believed that
that these phases are essential for children to advance to the next level of cognitive
development and exhibit the intellectual abilities and increased understandings as they
advance to the next phase. (Wood & Grossniklaus, 2001) They should also remember that
children have their own individual rate of development stretching over a broad continuum
(Wood & Grossniklaus, 2001, P. 1). Teachers should have an awareness of the stage
characteristics of the thought process and individualise learning experiences so each student
is working at a level that presents a mismatch between what the student knows and the new
knowledge to be acquired, to ensure they are challenged. Teachers can make use of
resources, materials and ITC that encourage creative thought. (Webb, 1990, P. 96)

Scaffolding developed from the work of Vygotsky and Bruner, it is a process where a teacher
provides temporary guidance and support to children moving from one level of competence
to another, so they can develop independent learning skills. ‘In a scaffolded approach to
literacy there is a place for the teacher to model, share and guide and encourage independence
in reading and writing (Hill, 2010, P. 89)’. Constructivists believe children learn best when
doing work themselves and creating their own understanding, instead of just being given
explanations by adults. ‘Children’s curiosity and engaged creativity drives their learning
(MacNaughton & Williams, 2003, P. 332).’ In using the constructive theories ‘the teacher’s
role is to facilitate learning by providing a variety of experiences’(Wood & Grossniklaus,
200 P.3) for early year’s learners. ‘Discovery learning provides opportunities for learners to
explore’ (Wood & Grossniklaus, 2001, P.3) and have hands on experiences which give
students opportunities to advance to a more mature level of understanding.

Vygosky’s was particularly interested in cognitive and language development and their
relationship to learning. His work showed that social and cognitive development work
together and builds on each other. The world children inhabit is shaped by their families,
communities, socio-economic status, education and culture. Children developed language
skills and grasp new concepts when they socialise and communicate. One of the most
important concepts of Vygosky’s theory is that of the zone of proximal development (ZPD).
The definition of ZPD is the distance between the most challenging task a child can perform
unassisted and the most challenging task a child can perform with assistance. Change takes
place within the ZPD when a child demonstrates that he can do something independent today
that he could not do yesterday without assistance (Charlesworth, 1996, pp. 210-219).

Constructivists place great emphasis on the importance of observation. By careful watching
and listening teachers can accurately assess children’s development within a child’s ZPD and make good judgements about how best to support their learning. ‘Vygotsky believed that a child on the edge of learning a new concept can benefit from interaction with a teacher or classmate’ (Mooney, 2000, P. 85). The Victorian Principles of Learning and Teaching (POLT) stress the importance of these constructivist theories by stating that children ‘learn best when the learning environment is supportive and productive and promotes independence, interdependence and self-motivation and the students are challenged and supported to develop deep levels of thinking and application’ (Department of Education and Early Childhood, 2009, para1).

Children in prep to year 4 are often referred to as universal novices who need to develop their problem-solving skills. During this stage children view themselves as learners and curiosity is a strong motivation for information seeking and knowledge acquisition. “An important function of schooling in Prep - year 4 is to build student’s interests in the new and unfamiliar into more enduring personal interests around the core domains of mathematics, science, language, humanities and art” (Reeve & Ainlee, 2004, P. 10).

Inquiry learning is a pedagogical approach to teaching and learning used in many primary schools. The Victorian Essential Learning Standards (VELS) supports the inquiry learning approach by ‘encouraging students to ask key questions for investigation throughout the domains’ (Victorian Essential Learning Standards, 2009, para 1). ‘Inquiry learning is a collaborative process in which teachers and students work together to negotiate various aspects of the curriculum. Inquiry learning involves students posing their own questions, exploring answers and solving problems (Wilson & Murdoch, 2004, P. 2)”.

The VELS, influenced by constructivist theories, provide teaching and learning strategies to support student learning and prescribe collaborative learning strategies for the early years. Examples of these are ‘problem-based learning (PBL), an active learning approach that involves students solving problems similar to those they may find in life … teachers act as facilitators and coaches, enabling students to take responsibility for learning and developing higher order thinking skills’ (VELS, 2011, Para 2), inquiry-based learning whose focus is on “how we know” instead of what we know, with students actively participating in constructing their own language. Teachers also need to remember that early learning is task focused, skill acquisition and the development of foundational competencies and for young learners the importance or value of task is intrinsic (Reeve & Ainlee, 2004, P. 13).
To support children’s social learning teachers can encourage conversations and provide opportunities for children to work together on projects. Through interaction, collaboration, conversation and experimentation, children increase their skills and accomplish their goals. Language presents the shared experience necessary for building cognitive development. Language is made up of phonemes, words and word syntax and meaning (semantics). ‘Being able to hear language and perceive differences in meaning and articulate language is crucially important for learning to read and write (Hill, 2009, P. 20)’. In the first years of school children develop foundational basic reading, writing and number skills which ‘provide a pathway to independent learning and the development of complex thinking strategies’ (Bellhouse et al, 2005, P. 6). In the early years teachers need to plan activities to extend children’s language including reading aloud, dramatizing stories, storytelling as well as posing questions and scaffolding children’s language. Children’s experiences and abilities in the early years before school have an impact on the learning to read and write in the first years of school. ‘Differential instruction - assessing what children can do and then planning appropriate literacy program is necessary to support children to read, write and comprehend (Hill, 2009, P. 17)’. Reading aloud is a useful teaching strategy in the early years as it builds children’s enjoyment of books, literary language, vocabulary and knowledge about how to read.

Listening is a useful teaching strategy, if staff listens to children, they can learn more about what children understand and thus make their teaching more relevant to the children’s growing interests and developmental abilities. ‘When children are listened to by staff and other children, they feel valued and included which increases their self-esteem and confidence (MacNaughton & Williams, 2003, P. 115)’.

Constructionists stressed the importance of viewing children in all their roles in all areas of their environment, which includes their relationship to home, school and neighbourhood. It is vital, especially in the early years of schooling, that teachers study young children and their families within their unique cultural context as it can have a great influence on their learning (Daniels & Clarkson, 2010, P. 9). Reggio Emilia (a city in Italy) developed an education system for young children through the collaborative efforts of parents, teachers, and the general communities and places strong emphasis on ‘children’s social construction of knowledge through their relationships within the context of collaboration, dialogue, conflict, negotiation and cooperation’ (Hewett, 2001, P.96). These approaches have great implications for teachers today who teach students with unique abilities, from diverse communities and
cultures with unique social values that influence their emotional and behaviour social skills and learning. The classroom is a community of learning where diverse students, with individual needs and identities (gender, race, class and culture), are taught social skills so they can belong, engage with others and accept their differences. An equity-based pedagogy exists when teachers adapt their ‘curriculum environment and teaching strategies to the unique talents, needs and differences of diverse student population’ (Latham, 2006, P. 80).

By examining the Victorian Curriculum and Assessment Authority discussion paper on the social, emotional and cognitive development (Bellhouse et al, 2004) of early year’s students and its relationship to learning in schools, we can identify the skills students acquire at various stages of development and gain an understanding of the effect emotions have on cognition. Feelings are created and perceived by the brain and directly influence our behaviour and attitudes. Stress, fear, helplessness and anger may inhibit learning while feelings of calm, confidence, safety and self-determination enhance thinking. These developmental factors also need to also need to be considered in their relationship to learning in the early years. Starting school can be a major upheaval for young children, especially those who have been at home. Teachers are faced with the challenge of behavioural engagement which involves helping students manage change, become engaged in the development of behaviour ‘habits of pro-social conduct, pro-learning attitudes, and participation in extra-curricular activities’ (Bellhouse et al, 2004, P. 4) and to promote confidence and optimism which will result in the development of resilience.

According to Kay Margetts, adaption to school is reliant upon the student possessing the required ‘social, behavioural and academic skills’ (2000, P. 2) to engage with the expectations of the classroom environment and to be able to work independently. “Children at this stage (five years of age) are in the process of developing self-awareness, forming peer relationships, forming simple symbolic concepts, mastering increasingly complex physical skills, making moral judgements, learning independent self-help skills, and in many cases accepting extended separation from parents” (Margetts, 2000, P. 2). Children need to develop social skills such a co-operation, which involves the listening to instructions and ignoring distractions, assertion to work in groups, responsibility and self-control. Curriculum can also be challenging as there is more focus on verbal and symbolic activities, less art and tactile experiences and there are more formal rules and routines in the classroom. Early years teachers should identify children at risk of adjustment difficulties and support them by implementing comprehensive transition program to enhance a child’s independence and
successful participation (Margetts, 2000). Teachers need to create an environment that nurtures positive attitudes towards mistakes and encourages the development of ‘positive coping strategies for solving social problems and managing stress’ (Bellhouse et al, 2004). Emotional engagement helps children to control their emotions through cognitive engagement.

Modelling is a low-intervention powerful teaching technique in the early years. Staff can teach children how to behave appropriately through presenting them with examples/models and demonstrations of the dispositions, attitudes and values that children observe, copy and learn (MacNaughton & Williams, 2003, P. 135).

In order for constructivism to flourish in a classroom, teachers need to have an understanding of the concept of constructivism and focus of student understanding as part of their classroom practice. Teachers should create an atmosphere that encourages children to put forth new ideas and caters for learners to make use of new concepts in a variety of contexts. Teachers can facilitate learning in a variety of ways that will result in increased student understandings as they participate in problem- based educational activities. ‘These strategies can include gradual approximation of practice, in which the most difficult components of complex tasks are strategically facilitated by the teacher, modelling in which the teacher either thinks aloud or acts out’ (Windschitl, 2002, P. 45), coaching, guiding, or advising to learners. Windschitl (2002) also suggests teachers develop a strong understanding of constructivism and how it can be applied to their classroom while considering the dynamics and culture of their students within the context of the classroom and how it can be incorporated with traditional teaching and learning strategies (P. 145).

‘Assessment of children’s development and learning is essential process for teachers and programs in order to plan, implement, evaluate the effectiveness of the classroom experiences they provide’ (Mcafee & Leong, 2011, P. 1). The teacher’s focus of assessment in the early years is to find out what children know and determine their capabilities, their attitudes, interests, and approaches to learning. This will enable teachers to apply curriculum accordingly not simply to grade, rank, sort, or group children. According to the National Professional Standards teachers should ‘regularly evaluate all aspects of their teaching practice to ensure they meet the learning needs of their students’ (Australian Institute for Teaching and School Leadership, 2011, P.4). It is necessary for teachers to interpret and make use of student assessment data in order to identify learning obstacles and to promote
student progress. The Australian Institute for Teaching and School Leadership (AITSL) states that at all stages of the teaching and learning cycle teachers need to implement detailed plans of curriculum, teaching methods, assessment styles, types of feedback for students and strategies for reporting to parents/carers (AITSL, 2011, P.4).

In conclusion, the early years provide critical opportunities for children to develop foundational skills in a number of domains: physical development, cognitive (the mind), speech and language, creative, social, emotional and moral/ethical and attitudes towards learning. Teachers need to have an understanding of the multiple theoretical perspectives of child development. Each theorist has his own unique point of view. The most practical way to select theory for practical application is to have a framework of knowledge of theories, in order to fit a theory to a problem or situation. Theories should be viewed as complementary rather than contradictory, so they can be used to develop a framework of learning and teaching strategies to guide children’s instruction (Charlesworth, 1996, P. 223).

This essay focuses on the constructive cognitive-development which deals with how the mind works, the adult takes the role of guide and sets the stage for learning. The teacher questions the child to encourage the development of thought and to assess the stage of development of the learner and then provides the appropriate learning experiences. “Teachers need to be aware of the social, cultural capital children bring with them from their early childhood setting and be consciously aware of their own world views” (Hill, 2009, P. 39). The best strategy for early year’s curriculum is to keep children curious, make them wonder, offer them real life experiences, problem solving strategies and give them opportunities to think by making use of questions and allow them to do things for themselves.

Learning is a joint experience between adult and children, not just a transmission of knowledge from adult into the heads of children as traditionally thought (Charlesworth, 1996, P. 210). No one program or approach works for all children and teachers need to weave together and activities and teaching strategies to fit the context, the individual abilities, learning capabilities and experiences of children (Hill, 2009, P. 17).
References


