**Back to the Future - The Primordial Pedagogy**

In ‘coming to terms’ with the pace, scale and sheer complexity of the changes that confront us in the modern world, there is one stable constant at the centre of our concerns, and that is the developing child. Increasingly brain research is showing that despite our many differences (shape, size, colour, temperament and speed of learning) there is a basic underlying ‘human nature’; in short, we can also root our thinking about school design in the basic contours of the human species and its ‘natural’ learning spaces.

This insight has led thinkers like David Thornburg to go back into our primordial past and begin to build a pedagogy (a theory of teaching and learning) that resonates with our essential human characteristics. It has led him and others to coin the phrase ‘primordial pedagogy’ and this is reflected in a set of concepts that has provided us with a useful reference point when considering the relationship between ‘human learning and space’.

Thornburg conceives of four essential spaces for human learning: the cave, the campfire, the watering hole, and the hunter-gatherer space (‘real life’); and to these we have added a fifth - the wilderness

4.1 The Cave

The cave is somewhere safe and secure where individuals go to quietly reflect and introspect. It is a space where they integrate learning, gain deeper insight, and develop judgement and ultimately wisdom. It is somewhere an individual may be alone or in the company of close associates (mentors or peers) who provide nurture and support. In learning terms it equates to an enclosed or bounded space where an individual feels safe, secure, relaxed and ‘at home’; it is a place where they feel they ‘belong’ and where they can retire to think and work alone or with close associates. In Thornburg’s terms it is essentially a ‘one-to-self’ learning space. Individualised, ‘cave spaces’ are rare in state education but we are determined to use furniture design and classroom layout to create personalised learning areas that are ‘owned’ by the children.

4.2 The Campfire

The campfire is where members of an extended family group gather to share their personal stories, history, myths, legends and deep narratives. It is a ‘one-to-group’ form of learning encounter characterised by one person (an elder or one noted for wisdom) recounting a significant narrative (demonstration, description, explanation, and illustration). It usually involves an emotionally engaging performance on the part of the narrator, focus and deep listening on the part of the recipient, but also interaction. It is an organised and a secure ‘tribal’ or extended family area close to the cave space. Such spaces most closely approximate to traditional ‘classrooms’ and as with all modern schools these occupy a central role in the learning environment.

4.3 The Watering Hole

The watering hole is often some distance away from the cave and the camp fire space, and is a place to meet strangers, share informal news, gossip and rumour with others and engage in trading activity. It is a place of both tension and excitement where an individual might meet a future mate but also be devoured by a wild animal. In learning terms it is an ‘informal and unstructured learning space’ and has been shown to be essential if learning is to become and remain lively and vibrant. In modern schooling this most closely equates to unstructured ‘break-time’. This not only relates to children; research on conference structures for instance has shown that without frequent ‘breakout-time’ and regular opportunities for informal learning conversations (often with strangers), conferences are invariably judged to have poor learning outcomes, however good their main (campfire) speakers are. Though the immediate parallel here is with ‘lesson breaks’, implicit in Thornburg’s thinking is the suggestion that loosely structured ‘watering hole’ learning needs to be built-in to planned learning activities. An exhibition of student work that is designed and manned by the students themselves and where peers engage in informal conversations about their learning is a good example of ‘structured’ watering-hole learning. There has been a conscious effort to build a range of watering hole spaces into the new school and key amongst these is a dedicated exhibition space adjacent to the main hall.

4.4 The Hunter-Gatherer Space (‘Real Life’)

At the core of this metaphor is ‘learning by doing’, with both the application of knowledge ‘to’ life and direct learning ‘from’ life. At its heart lies the idea of ‘relevance’ which is an essential component of motivation and ‘deep learning’. Tribal members may have heard someone describe hunting or talking about gathering techniques around a campfire but until they have gone out and experienced them as part of the development of practical mastery, there is always ‘something missing’. Much of current school life is spent within the confines of secure ‘campfire’ space and the majority of this time is spent on what Thornburg calls ‘just in case’ learning – passive shallow learning about things that one ‘might need’ later if one can recall them.

But he advocates ‘just in time’ learning by relating learning to practical tasks that are undertaken ‘for real’. The Charter School movement in the USA is devoted to ‘real’ learning with a real ‘product’ at the end of a real ‘process’ (be it a book, a play, a poem or a lampshade). Currently children tend to write stories to get a mark from a teacher rather than for a real audience. The goal here is to foster ‘motivated engagement’ through learning that is ‘applied’ to real-life problems with real outcomes - be it a product or performance. The ‘spaces’ needed for this kind of learning calls for the whole campus – and beyond - to be turned into a practical learning area. It is for this reason that the whole campus has been designed as an extension of the school buildings with the ‘campus-as-classroom’.

4.5 The Wilderness

To Thornburg’s four conceptions we have added the idea of ‘the wildernesses'. It is clear from the way that primordial man spread out of Africa and across land bridges to every corner of the globe, that, at key points in the life of a tribal group (usually when it reached around 150 members), sub-groups have set off into the wilderness to establish a new community. The ubiquity of the modern ‘gap year’ is a good example of the pioneering dimension of the human spirit but it is one that is fostered on every trip beyond the bounds of the school - the ‘known’ - into what, for the child, is often ‘the unknown’. We aim to ‘go beyond’ the confines of the campus and into the wider environment – local, regional, national, global – to seek out engaging spaces for learning, both virtually and in reality.

By linking pedagogy and space with aspects of human learning that are grounded in our evolutionary past, we have used these concepts as part of a dialogue about how we create and use space in a 21st century learning organisation.