

Navigating new learning horizons: with children at the helm

by Mick Waters, Professor of Education

Teachers, like the early explorers navigating the vast seas of curriculum, pedagogy and assessment, are guided by different stars that rise at different times. Government changes for curriculum expectations or inspection focuses upon a new dimension and therefore our course changes. The move to 'knowledge driven' curriculum promoted by Michael Gove¹ has led to a dominance in consideration of pedagogy in terms of the way a teacher 'delivers' content.

Many have turned to the structures emanating from those such as Rosenshine² and his work on principles of instruction. These ideas have their roots in cognitive psychology. There has been an emphasis on quizzing (as opposed to testing) which builds on the work of Roediger and Butler³ who emphasize the critical role of retrieval practice in long term retention of knowledge. This



in turn dwells on Ebbinghaus's 'forgetting curve'⁴ which shows how knowledge is forgotten over a relatively short period of time unless there is a programme of review to reinforce it.

Recently, Ofsted⁵ has talked about curriculum breadth and depth, to encourage schools to review their

intentions. While the techniques that grow from those mentioned above have validity for some aspects of curriculum, other aspects need a wider pedagogic base. The works of Eliot and Norris⁶ and Stenhouse⁷ consider the quality of classroom exchange in terms of placing knowledge in a context and applying it to a wider context.



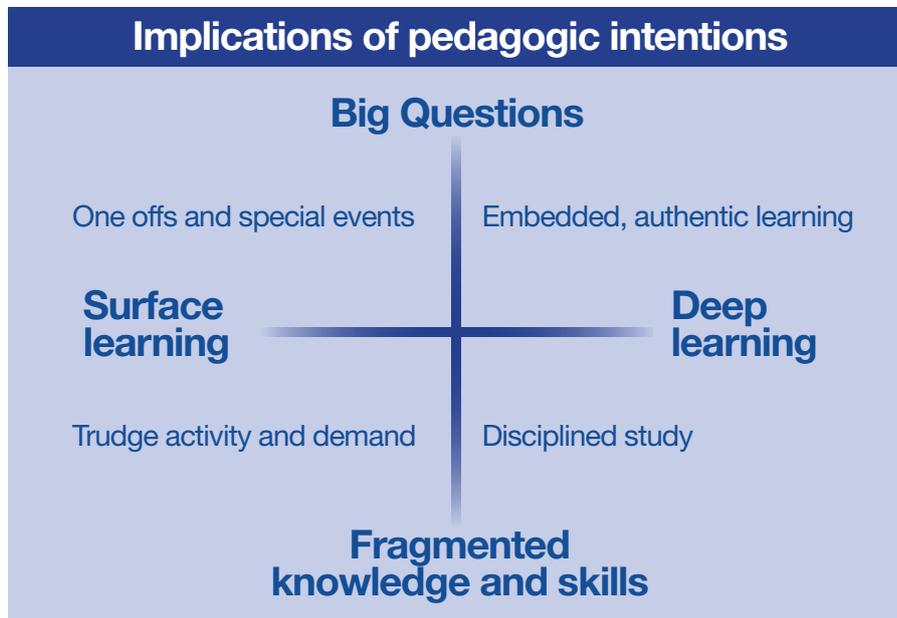
The teacher becomes an ‘arranger’ as the children have memorable days to supplement their ‘proper’ work. In these experiences the learners are ‘comfy’.

Hattie⁸ has always emphasised the importance of coherence in his ‘effect’ analysis of over 130 positive influences that are related to learner outcomes. It is the capacity to steer the path of learning and make best use of all approaches to teaching within the context of learning intentions that is needed now: a touch on the tiller.

The diagram opposite⁹ might be useful. What teachers try to achieve is deep and purposeful learning where children get to grips with big ideas and big questions. That’s what I find most schools have produced in terms of their ‘intent’ to satisfy the deep-diving inspector. At the same time, the content emphasis within the national curriculum is upon knowledge and facts. These ambitions are not exclusive of each other. Good teachers help children to make sense of the knowledge they gather to explore deep understandings rather than dwell on a surface, usually insecure.

This diagram draws out the children’s experiences when their learning is consistently in any one quadrant. Of course the quadrants do not have to be equal, moving the horizontal and vertical axes changes the balance. ASPE seems to be exploring the upper right quadrant, surely the ambition of all schools and teachers, as well as politicians?

In the lower left quadrant, the learning experience is at the end of the continuum of ‘putting the curriculum into the child’. The teacher ‘delivers’ learning with high levels of pupil compliance, which might be perfectly enjoyably managed,



through the motivation of correctness and rewarded effort. Children and their families believe they are making progress because they receive high marks, stickers, progress through obvious incremental levels or positive regard from their teacher.

The upper left quadrant sees surface learning being used to touch big ideas through special events, often to supplement or distract from the quadrant below. The rhythm of the exercise driven approach of the lower left quadrant is balanced by fleeting opportunities to engage with events such as an eco-week, educational visit or artist in residence. The teacher becomes an ‘arranger’ as the children have memorable days to supplement their ‘proper’ work. In these experiences the learners are ‘comfy’. While the experience is often worthy, too often it only fleetingly punctures the surface. Dressing up for ‘World Book Day’ emphasises the joy to be gained from the literature and is the spoonful of sugar that sweetens the medicine of reading

schemes and phonics for another year. Learning to be a reader is more than that.

The lower right quadrant takes the child deeper as the teacher uses their expert knowledge of the subject discipline to provide intellectual challenge in a structured approach, using the precise pedagogic techniques described by Rosenshine and others. What develops in children, sometimes quite early, is the concept of being good or not good at the subject, based on the ability to grasp the content, especially abstract concepts. Children begin to consider whether that they are any good or not at history, geography, art, science or maths. They are in the foothills of the subject disciplines but believe they are on the lower rungs of a ladder of incremental steps to accomplishment. They are either climbing or stuck and for some children it seems an awfully long ladder.

The upper right quadrant is obviously the one that brings us nearest



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to 'immersing the child into the curriculum'. It is here that children build intellectual coherence with an awareness of integrated subject disciplines because the teacher is the authoritative architect of experience.

It seems to me that this quadrant is the star now coming into view. How do we make learning authentic rather than create engaging but undemanding experiences? How do we apply learning so that children develop their competence within disciplines that help them to believe they are young historians, geographers, scientists, mathematicians or artists? How do we get children to grapple with big ideas and become more informed by delving deeply into detailed and sometimes disputed knowledge domains and avoiding simplistic understanding? How do we help them to deal with contentious issues as maturing young people by involving them in conflicting or alternative versions of reality?

One way to address these questions is to teach children to become researchers, scholars, performers, activists and inventors, helping them to manipulate the detail of knowledge, facts and skills learnt and come to terms with complexity. This is what many refer to as promoting 'pupil agency', including Briceno¹⁰, building on the work of Bandura and Dweck.

Many teachers now need to give one of those important touches on the tiller that shifts the emphasis away from the teacher as the performer on the stage and towards the teacher as director of the drama of learning.



The pedagogy of instruction for 'standard' lessons that has been honed over recent years becomes part of a pedagogy of organisation using the instructional element at the right moment for the right purpose.

For pupils to exercise agency over their learning, the teacher places before them the sorts of challenge that will take them further into the subject disciplines, and to new levels in terms of embedded understandings, by setting in place real audiences and purposes that enable processes such as making things, carrying out experiments, doing research, using artefacts or holding debates.

At the heart of this lie decisions, as the first step in planning, about what we want the children to learn, both in terms of specific concepts, knowledge and skills but also in terms of children's products and their behaviours as inventors, constructors or reporters. Once this is decided, the teacher's task is to sequence the

story of that learning into the time available: to build an organisational narrative of how learning will unfold through activity in the classroom. The trick is to avoid breaking the content into one hour teacher 'performances' of the standard lesson. If we want them to develop agency as historians does a weekly lesson on one teacher-selected explorer for six weeks with a class producing thirty versions of the same thing help them to understand exploration? Or would pairs of children studying a total of fifteen explorers build a wider collective and cumulative understanding?

Of course the latter would be more effective and if we spread paired research work over time, then the rest of the class can be the audience to a daily presentation as each pair reaches the end of their short study. The teacher needs to set parameters and expectations for each pair, instruct the class appropriately, for instance, on how to carry out effective research and how to



present to an audience. The children will become adept at presentation with well-managed reflection on each presentation's effectiveness which exemplifies essentials of public speaking, managing questions and presenting an argument or illustrating points made. Done well, this aspect of pedagogy, exposition, has the effect of lifting the outcome incrementally over time as children learn from the efforts of others.

Four weeks on, with a new pair of children starting daily on a five-day research of their designated explorer, the class has knowledge of fifteen different explorers. This is enough insight to build a class construct of big ideas of exploration: venturing into unknown territory, physically or intellectually, making discovery that adds to previous thinking, that some discovery is accidental and some with purpose. Our organisational pedagogy will have enabled these big ideas to flourish. This is way up

into the top right quadrant of the earlier diagram as opposed to a that which can be achieved through a weekly lesson about one explorer at a time, which is in the lower quadrants. Thirty replicas of the same information about six specific explorers can hardly compare with the exploits of fifteen explorers understood and appreciated within the concept of explorations itself.

Yes, but what about secure knowledge? The skill of the teacher becomes central in drawing out key facts and perhaps using the quizzing techniques that have gained traction recently, as already discussed at the start of this article. A low stakes weekly class quiz of five questions on each explorer presented, means a twenty-five-question quiz weekly. Make it competitive, with the challenge to beat last week's class score. Watch the children collaborate and redo the same test to offer comparison

while adding the new week's questions. After five weeks, the number of facts being tested will sit at 125 with a potential class total of 3750. Children will know a lot! They will also have learnt to research, exhibit, speak to an audience, analyse questions, help each other and memorise.

The teacher's own mental narrative unpicks the best way to organise people, time and other resources. Such examples of 'organisational pedagogic planning'¹¹ bring agency to the learner and see a classroom as more than the teacher introducing a standard class lesson in each session of the day. Such lessons are part of the repertoire of the good teacher but the development of agency in children demands that other approaches are built into the planning through a narrative that enables teachers and children to picture learning unfolding. Enjoy some new explorations in pedagogy!

References

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Pen Portrait

Mick Waters is a Professor of Education who each year spends time in many schools across this country and abroad helping teachers and leaders to develop their practice. He applies his insights to policy work for governments in teaching, curriculum or leadership.

Mick's ideals are driven by unquenchable optimism, unflinching challenge and realistic recognition of what schools are and could be. He is devoted to bringing learning alive and making schooling fit the needs of a global society today and in the future.

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