

Finding the Golden Thread – encouraging effective creativity and innovation in teaching, learning and the curriculum

Summary

For many teachers being creative is central to their love of learning and supporting learning in others. Learning itself is a creative process expanding, as it does, possibilities and experiences, and connecting sometimes wildly different ideas, concepts and phenomena and fashioning things of worth. In this sense teachers' work is rooted in both art and craft. The requirement to engage learners with the established knowledge base and to work within specified assessment regimes also roots teachers' work in science. The role of the teachers in reconciling these disciplines is to ensure that the learning experiences they create for young people are purposeful, build on their starting points and interests, fulfill their potential *and* meet the requirements of the National and School curriculum.

Such demanding goals cannot be translated into a logical algorithm (demonstrating specific techniques + regular practice of tests that ask pupils to demonstrate them = success in tests). They involve creating the conditions and frameworks for informed innovation within the constraints imposed by working with significant numbers of different people with different starting points, in rigid, physical and time spaces and with finite resources.

This paper considers six core principles to inform the art, science and craft of curriculum development and innovation that have been shown to be important all around the world for enhancing learning and increasing innovation, whether the curriculum is organised by subject or by theme.

1. **Contextualise curriculum and teaching and learning experiences and link learning in school with learning at home and in the community-** The international evidence emphatically highlights the importance of contextualising learning, of ensuring young people encounter ideas and phenomena in a range of practical contexts that are meaningful to them. Learning activities that enable pupils to explore their identities and treat them as whole people such as role play or drama and exploring big society issues such as sustainability or the moral implications of scientific and technological breakthroughs, seem to offer effective vehicles for contextualising learning in ways that help to unleash and engender creativity.
2. **Create curriculum experiences that involve learners actively in identifying and building on their existing knowledge, understandings and skills-** The international evidence base highlights the importance of designing curriculum experiences that identify and build on learners' starting points iteratively together with the importance of engaging with pupils' beliefs and understandings as well as their knowledge and skills. Learners often start with conceptual understandings that are partial or even incorrect, which are an important ingredient in learning: recognised and worked through, they help all members of a class explore an issue in depth, they bring to the surface partial

explanations and different perspectives, and they illustrate the way that learning is about how we reach answers rather than just about the answers themselves. The evidence also emphasises the importance of an active role for pupils in this process.

- 3. Structure group work for interdependence by teaching effective group talk skills and planning tasks that use and reinforce such skills-** There is also strong international evidence about the importance of careful planning for the structuring of group work and the explicit teaching of group work skills. Such effective preparation for group work depends on teachers setting or agreeing clear rules for group working and planning tasks that mean pupils have to depend upon each other and so practice group work skills, and that require them to use each others' perspectives to expand their sense of possibilities.
- 4. Foster a less compartmentalised approach to the curriculum to promote conceptual development-** Evidence from international research and from schools who are effective curriculum innovators highlights the contribution that planning learning across the curriculum makes to promoting depth in young people's conceptual development. Curriculum experiences which made connections between subjects were also important for overcoming the difficulty learners sometimes had in transferring thinking and learning from one subject to another. Cross curriculum and cross subject planning by teachers occurred in both theme-based and subject approaches. What seems to be key to making learning meaningful and contributing therefore to creativity is that teachers with different subject specialisms have chance to work together.
- 5. Planning for challenging all pupils from the start-** Between 2007 and 2010 surveys of large numbers of pupils from year 4- year 10 reveal that a significant proportion of learners in England (20-25%) felt themselves to be under-challenged. International research highlights the importance of planning for challenging *all* pupils from the start through both content and process. It also highlights three broad approaches to doing this:
 - collaborative inquiry and problem solving where there are no fixed or right answers—developing thinking skills – with guided interaction between learners
 - developing a more facilitative and probing role amongst teachers that encourages learners to take increasing responsibility for their learning; and
 - using diagnostic tasks and activities, including pupil enquiry to provide a springboard for planning projects, lessons and progressive schemes of work.
- 6. Aligning curriculum and professional development (CPD) to build capacity and secure excellence in subject knowledge-** The international evidence base highlights the importance of excellence in subject knowledge and CPD for all aspects of teaching, learning and curriculum development whatever pedagogies or curriculum approaches are used. Indeed the more creative or thematic the approach the greater the need for excellence in CPD and in subject knowledge; it is confidence in content that enables teachers to let go of control, to listen more accurately to learners and to design genuinely meaningful, engaging, creative and challenging learning activities.