



Inquiry is an important aspect of children's learning

(Re)defining inquiry for international education

Stephen Taylor urges a pragmatic approach across the educational continuum to suit all age groups

"The history of educational theory is marked by opposition between the idea that education is development from within and that it is formation from without."

(Dewey 1938: 17)

In our mission-driven international schools we strike a unique and delicate balance between the ideals of internationalism in education for a better world and the globalist reality of a demand for success - exemplified by access to top universities. With programmes such as the International Baccalaureate Organisation's (IBO) Primary Years Programme (PYP), Middle Years Programme (MYP) and Diploma Programme (DP), we are committed to delivering a high-quality, inquiry-

based education, yet as students close in on the high-stakes terminal assessment of the DP, it becomes increasingly challenging to convince stakeholders of the importance of inquiry as pedagogy. To ease this tension, do we need a common definition of inquiry that works across the continuum of learning, supported by high-impact teaching practices?

A pragmatic approach to inquiry

Inquiry forms the heart of an IB education, though its meaning may not be universally understood.

The tension between inquiry-focused teaching and outcomes-focused instruction echoes the ongoing debate between progressive and traditionalist approaches to



education, yet we do not need to fall into the trap of this false dichotomy in our practices. A century ago, the same discussions were taking place, with John Dewey proposing an open, student-driven approach to inquiry and L. S. Vygotsky increasingly emphasising the role of the teacher in guiding learning and setting the foundation for inquiry. It might seem that we have not come so far in the debate since then, as we see the behaviorist/empiricist characteristics of the exam-focused high-school instructors balanced by the more cognitive/rationalist views of inquiry-focused teachers (Greeno *et al*, 1996). However, we now know much more about how learning takes place and how effective pedagogies can help this learning to stick.

A careful (re)definition of inquiry as ‘critical reflective thought’ (Elkjaer, 2009) may help us to bridge the gap between our internationalist ideals and their practical realities. Scriven and Paul (1987) define critical thinking as ‘the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing and/or evaluating information’, a collection of command terms immediately recognisable to any IB teacher as embedded in our programmes through the top-level descriptors of many assessment rubrics. Reflection is defined in the Oxford Dictionary as ‘serious thought or consideration’, another behaviour valued by teachers at all levels of education. Elkjaer modifies her definition of inquiry further to give the pragmatic approach, which in Dewey’s sense is ‘a method to think and act in a creative (imaginative), and future oriented (*ie* consequential) manner’. Even the PYP, whose approach

to inquiry may be perceived as more open and student-oriented, defines inquiry as ‘structured and purposeful’, through which students are engaged ‘actively in their own learning’ (IBO, 2009: 29).

Curriculum Before Pedagogy: Making room for inquiry

We cannot make meaningful inquiries without a foundation of worthwhile, suitably-challenging disciplinary content.

As we design curriculum within our frameworks, we have the opportunity to engineer educational experiences, moments in which ‘habitual thinking and action are disturbed and [which] call for inquiry’ (Elkjaer, 2009). The curriculum we design is a selection from our culture in that ‘certain kinds of knowledge, certain attitudes and values are regarded as so important that their transmission to the next generation is not left to chance in society but is entrusted to specially-trained professionals (teachers) in elaborate and expensive institutions (schools)’ (Lawton, 1975). A curriculum packed with esoteric content, geared only towards standardised testing, is unlikely to become the ‘moving force’ that will ‘arouse curiosity (and) strengthen initiative’ (Dewey, 1938) in the learner, but we must not discount the important roles of a good foundation of disciplinary knowledge and of expert teachers. There is a personal and cultural importance to our curriculum and if we know nothing, we cannot inquire meaningfully. Although the IB’s programmes are moving to a more concept-based model, the construction of a solid, transferable conceptual understanding is built upon a scaffold of carefully-chosen

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and effectively-taught disciplinary knowledge and skills (Erickson, 2002). Once we have proposed an appropriate and worthwhile core curriculum we can evaluate its ability to encourage inquiry; to invite students to think critically, creatively and with consequence. To achieve this, we need to make room for inquiry, ensuring our curriculum leaves sufficient time and space for the higher-order skills of authentic inquiry.

Making Teaching Matter: Building a solid conceptual foundation

Teaching matters as we ensure effective learning of foundational content and skills.

Where we started as the architects of a curriculum that invites and makes room for inquiry, we need now to become the on-site contractors, the guiding hands that help students build their own factual and conceptual foundations for that inquiry. As we define inquiry as critical reflective thought, we must recognise that teaching critical thinking is notoriously difficult (Willingham, 2007), and although we might be honouring the ideals of Dewey in the construction of a programme of inquiry, our practical conceptualization perhaps aligns more with Vygotsky and his more modern counterpart: evidence.

We can employ high-impact teaching and learning strategies such as direct instruction, metacognitive techniques, formative assessment and feedback (Hattie, 2012) that ensure that students are given the raw materials (knowledge) and tools (skills) they need to enhance future learning. By acting as activators of learning, rather than simple facilitators (Hattie & Yates, 2013), we may help close 'the Gap' between where a learner is and where he/she needs to be. As David Asubel notes, 'the most important single factor that influences learning is what the learner already knows. Ascertain this and teach him accordingly' (in Hattie & Yates, 2013: 114), where the power of prior learning can have a positive or an interference effect. We must ensure that we do not promote misconception and that we evaluate our teaching so that the knowledge, skills and conceptual understandings that our students use for inquiry are correct. If we fail in this mission, we set up problems for future learning that are very difficult to reverse (Abdi, 2006), weakening the potential of future inquiry that builds on those conceptual understandings.

A pragmatic approach to inquiry as critical, creative, consequential and reflective thought can be implemented to suit all age-levels; these are attributes that we all want in our students. We could employ the pragmatic approach to our own practices in schools as we consider teaching and learning, curriculum and assessment, professional development and evaluation. We are all lifelong learners – let's model that for our students.

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