Approaches to teaching and learning across the Diploma Programme

Executive summary

A summary of the outcomes of the first external programme development meeting
Introduction

This purpose of this brief report is to share current thinking arising out of an initiative presently entitled “Approaches to teaching and learning across the Diploma Programme”. The initiative began internally with Diploma Programme (DP) development staff working throughout 2011 culminating in the first curriculum review meeting with external participants held in The Hague in December 2011. Ten IB educators were selected from over 60 applications based on our usual selection criteria for curriculum review. We favoured applications at this early stage from Middle Years Programme (MYP) and continuum schools and those who had already started work in this area within their own DP schools. These 10 educators and all other applicants have been asked to comment on the full report in a virtual group. This summary report and connected surveys will be placed on the Online Curriculum Center (OCC) for feedback from all DP coordinators and teachers.

This report is also intended for specific internal IB stakeholders; plans will be shared with the schools services for implementation advice and input, professional development due to the potential for workshops and publications for planning ahead on resources (support materials). School services colleagues will specifically be invited to report on whether the project effectively supports schools meeting all programme standards and practices C1-C4 at authorization and evaluation stages. It will also be shared with the academic team as part of our continuum work of programme alignment and has some high level connections to the continuum overview and current programme directions.

A DP development internal team of curriculum managers from all DP groups have played a full role in the work behind this report, and the wider DP development team has been asked to contribute. Since approaches to learning (ATL) skills may well be assessed and pedagogy of teachers is so linked to subject assessment demands in DP, assessment colleagues will also wish to be fully involved.

Programme research colleagues have commissioned papers and our curriculum managers are providing the project with important research underpinnings. Some of the work may also sit neatly with access work on IB pedagogy.

At a later stage this project may need to reach the IB’s Education Committee and/or other forums for approval and has already received full support from the Diploma Programme Committee in February 2012. It will be tabled at Diploma Review Committee (DRC) in March 2012 for information.

First external meeting

We set ourselves a few broad aims for this first three-day meeting in December 2011:

- to define “approaches to teaching and learning” in the context of the Diploma Programme within the continuum
- to explore “approaches to teaching and learning” and the distinctions and connections between ATL skills of students and pedagogical approaches of teachers
- to draft a list of potential project deliverables to meet the needs of DP schools
- to construct a project survey to ascertain opinions and needs of stakeholders
• to identify the unique challenges of relating “approaches to teaching and learning” to the high stakes DP assessment model
• to explore the pedagogical influences and theoretical underpinnings of the IB that will be more explicitly articulated and recommended to DP schools through this project
• to share expertise of external participants and IB staff in this field.

Draft definition

Approaches to teaching and learning in the Diploma Programme describes purposeful strategies, skills and attitudes that permeate the teaching and learning environment. These tools and approaches, intrinsically linked with the Learner Profile attributes, enhance student learning and assist student preparation for assessment. Among the essential approaches to teaching and learning are critical and creative thinking, inquiry and managing information, understanding and applying key concepts, the development of inter- and intra-personal skills (this list will evolve with the project).

The new “continuum overview” defines this area as the following.

Driven by inquiry, action and reflection, IB programmes aim to develop a range of skills and dispositions that help students effectively manage and evaluate their own learning. Among these essential approaches to learning are competencies for research, critical and creative thinking, collaboration, communication, managing information and self-assessment.

We will ensure any definition is in line with the other programmes.

Rationale: The benefits of approaches to teaching and learning (ATTL)

It was decided to step back from the initial aims of the meeting and ask, “Why do we need this project”? or “What is the rationale behind such a project”? This was not due to our own personal doubts but the possible need to convince busy DP schools and teachers that there is a need for this “layer” in the DP and that it has ‘added value’ for IB schools.

The meeting concluded the following rationale in writing on the last day:

• to empower teachers as teachers of learners as well as teachers of content
• to empower teachers to create clearer strategies for facilitating learning experiences in which students are more meaningfully engaged in structured inquiry and greater critical and creative thinking
• to allow students to have increased confidence in approaching rigorous assessment tasks through demonstrating independent learning skills
• to promote both the aims of individual subjects (making them more than course aspirations) and linking previously isolated knowledge (concurrency of learning)
• to encourage students to develop an explicit variety of skills that will equip them to continue to be actively engaged in learning after they leave school, and to help them not only obtain university admission through better grades but also prepare for success during tertiary education and beyond
• to help to further promote the IB mission, which affirms connected attributes and attitudes that help to create a more peaceful world through intercultural understanding and respect
• to provide a structure for sharing within the IB community the best available pedagogical research and wealth of experiences in terms of exemplary teaching practices and strategies across 2,300+ DP schools
• to enhance further the coherence and relevance of the students' DP experience
• to allow schools to identify the distinctive nature of an IB Diploma Programme education, with its blend of idealism and practicality
• to give value to content by helping it be utilized in meaningful, practical and theoretical applications
• to guide the effective harnessing of technology and its impact in changing the nature of how we learn
• to assist all members of IB World School communities in sharing a common understanding of how students can be supported in their learning.

Research underpinnings of the project

The project is building on historical and current knowledge of teaching and learning. The project will seek to be influenced by the work of others and will acknowledge this where relevant. We cannot hope to cover the wealth of understandings available to us but will synthesize evidence and guide schools to produce works of great minds in this area for their own stimulus. Equally we will be wary of “fads and fashions” in this area and only evidence the most credible sources. Working in conjunction with research, other programmes, colleagues in the access department and across the DP development team will be essential.

Specific areas may include:

• mind, brain and education
• critical thinking approaches
• assessment for learning
• technology and the changing nature of learning in a virtual world
• constructivist teaching
• conceptual approaches
• differentiation.

Approaches to learning “generic” categories — fixed across all three programmes

The following five categories of ATL have been agreed across all three programmes. The International Baccalaureate Career-related Certificate (IBCC) will evolve later.

The lists under each category below are connecting ideas; however, final definitions are still to evolve.
1. **Research skills**  
   LP: Inquirers  
   - formulating research questions  
   - referencing sources  
   - observational skills  
   - collecting, organizing, interpreting and presenting information

2. **Communication skills**  
   LP: Communicators  
   - presenting  
   - recording information  
   - reading for meaning  
   - listening  
   - viewing  
   - non-verbal communication  
   - multi-literacies

3. **Thinking skills**  
   LP: Thinkers, Knowledgeable, Reflective  
   - problem solving  
   - connecting subjects  
   - thinking creatively  
   - critical thinking  
   - application of knowledge and understanding in familiar and unfamiliar  
   - reflection

4. **Social skills**  
   LP: Principled, Caring, Open-minded  
   - collaboration and group work  
   - respect for other cultures and points of view  
   - global/intercultural awareness and sensitivity  
   - affective/emotional skills  
   - ethical behaviour

5. **Self-management skills**  
   LP: Risk-takers, Balanced, Reflective  
   - organization of learning materials  
   - time management  
   - meeting deadlines  
   - affective/emotional management  
   - positive action
Pedagogical “teaching principles”

It was agreed that this project viewed ATL as a sub-set of the wider “approaches to teaching” theme. IB pedagogy is more explicit in the Primary Years Programme (PYP) and MYP though implicit in many DP subject guides. We need to bring these ideas together into a broad, agreed set of principles for the programmes. Currently, we are considering the following draft categories of “approaches to teaching” that were identified and discussed:

- Constructivism and inquiry-based teaching
- Conceptual approach to curriculum planning and teaching through concepts
- Differentiation in the classroom
- Teaching with innovation through technology
- The physical learning environment
- Teaching for lifelong learning
- Contextualized/authentic/experiential learning
- Teaching in the student-centred, collaborative classroom

Towards a continuum of international education presently encourages the following best practice that connects well with the above:

- Learning is in context/context is relevant.
- They can learn collaboratively.
- The learning environment is provocative.
- They get appropriate feedback to support their learning.
- Diverse learning styles are understood and accommodated.
- They feel secure and their ideas are valued and respected.
- Values and expectations are explicit.
- There is a culture of curiosity at the school.
- They understand how judgments about learning are made, and how to provide evidence of their learning.
- They become aware of and understand how they learn.
- Metacognition, structured inquiry and critical thinking are central to teaching in the school.
- Learning is engaging, challenging, rigorous, relevant and significant.
- They are encouraged in everything they do in school to become autonomous, lifelong learners.

Further work is needed across the programmes to reach an agreed consensus on terms used in this area.
Project deliverables

This set of resources will be defined in June 2012 and planned with publications and professional development (PD).

The initiative hopes to give DP schools:

- an ATTL document of explanation for teachers that is either standalone or an expanded chapter in *DP Principles into Practice*
- videos of good DP teaching pedagogy in class that exemplified the pedagogy with “clips” from a variety of subjects around themes. Such videos would need to come in packs with clear explanations and activities not simply for uncritical viewing.
- an obvious student resource such as a study handbook for approaching the Diploma Programme. Such resources as “survival handbooks” are appearing in the market and the IB could capture the need of parents and students for a study success DP publication.
- in-school workshop resources made in consultation with PD or directly for schools. The concept would be a coordinator pack for DP teacher training.
- workshop leader resources for face-to-face workshops
- online courses on ATTL in the DP for all teachers
- a specific resource on collaborative planning of TOK and subjects
- model planners/planning advice of DP courses, taking into account ATTL and ATL
- resources of academic honesty for students around the theme of principled learning
- teacher PowerPoint presentations for ATL skills for use with faculty and students.

The role of assessment

Assessment is often the driver in DP schools and creates the high stakes and the intense nature of the programme. The approaches to teaching aspects of the project need to show teachers how to take DP assessments (IA, EA and examinations) and plan effectively to approach them without overwhelming students. The ATL aspects of the project need to prepare students’ skills to face effectively the rigorous demands of the subject IAs and core requirements as well as give student resources for effective study skills and revision/exam preparation skills. Equally we need to have a serious discussion about what assessment models and tools we are currently using across the DP and see if we can assess content and understanding but with a greater emphasis on the lifelong learning skills articulated in the new ATL categories. One major issue to research, for example, is assessing collaborative skills effectively for the qualification of an individual student.

Themes for discussion with assessment colleagues will focus around:

- commitment from assessment to ensure internal and external assessments reflect the ATL skills
- advice from assessment on formative assessment teaching strategies in the classroom
- commitment to reduce over-assessment for the programme to be able to incorporate the “learning to learn”.

Planning — the written curriculum

Throughout the meeting the issue of “planning” and planners arose for discussion. One IB educator who had worked on the PYP-MYP joint planner pilot project went as far as to suggest a three-programme joint planner. The meeting acknowledged that the PYP had a structured planner for the reorganization of a variety of national curriculum into trans-disciplinary units of inquiry, and that the MYP had produced a planner within which advice is given for planning, though no compulsory format. As the DP curriculum content and summative assessments are provided by the IB, there was less perceived need for subject “planners” to be as structured and/or stipulated. DP schools have been given freedom in how they choose to plan courses, although the new standards and practices of C1/C2 stipulate certain requirements to be considered in planning. It was very much agreed that schools need advice in this area and for theory of knowledge (TOK) (and indeed all core elements) to be better integrated to the subjects. There was already a perception that we do not give enough material in this area. If ATTL were to be genuinely integrated into DP schools, more would need to be done. Advice from school services will be essential in this area as to what can be/should be expected of schools.

Planning advice and samples would probably include:

- collaborative planning across the DP faculty
- making links to TOK and maybe CAS
- make explicit reference to the learner profile outcomes
- stipulate the approaches to teaching and learning adopted
- foster international-mindedness and make connections with “global contexts”.

Next steps

The next stage of the project will include:

- a second curriculum review meeting in June — details on one or two ATL categories and specific approaches to teaching will be analysed as exemplars/templates for future commissioned work
- some commissioned research in 2012 in the areas mentioned
- a report on the OCC with surveys
- collective virtual feedback of 40 IB educators by March 2012
- 3 regional conference presentations and focus groups throughout 2012
- continued discussions across the programmes/continuum on terms and categories
- presentations to other divisions as requested
- a call for good practice/resources in schools to be shared.

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