

[IASL Thematic Area: Methodology or research: Searching for information through the school library]

Title: **“They are never too young to develop research skills : primary age students in the library following the IB Primary Years Programme”**

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### **Abstract**

The International Baccalaureate’s Primary Years Programme (PYP) described in the framework document “Making the PYP happen” (2007) promotes learning through guided inquiry. It is an educational programme spanning the years from ages 3 to 12.

This paper will introduce the audience to a very brief overview of the five essential elements of the PYP and demonstrate how Information Literacy skills, arguably one of the main charges for school librarians, are embedded within the programme. Mention is made of constructivism to place inquiry and information literacy within this context.

Understanding the programme will help the school librarian in developing a programme of authentic learning in the library for the students through collaborative planning with the class teacher or grade level teams.

### **keywords or phrases**

**International Baccalaureate Programmes (IB) ,  
primary school library education,  
guided inquiry, collaboration**

## 1. A brief overview of the Primary Years Programme framework

The International Baccalaureate's Primary Years Programme (PYP) described in the framework document "Making the PYP happen" (2007) promotes learning through guided inquiry. It is an educational programme spanning the years from ages 3 to 12. This paper will introduce the audience to a very brief overview of the five essential elements of the PYP and demonstrate how Information Literacy skills are embedded within the programme.



Figure 1: Model of the PYP from the IB website, May 2009: <http://www.ibo.org>

Central to the PYP, indeed to each of the other two International Baccalaureate (IB) programme for older students – the Middle years programme (MYP) and the Diploma Programme (DP), is the IB Learner Profile\* which is defined as:

*“IB mission statement translated into a set of learning outcomes for the 21<sup>st</sup> century” (IBO 2006),*

and which,

*“provides a long-term vision of education. It is a set of ideals that can inspire, motivate and focus the work of schools and teachers, uniting them in a common purpose”.*

\*Further comments on the Learner Profile in the context of the school library can be found in the parallel conference paper entitled: "What's in it for me: Connecting the school librarian with the three International Baccalaureate programme". (2009 Skirrow, I)

Within the Primary Years Programme it is important for the school librarian to understand the three interrelated aspects of curriculum as defined in the PYP framework document "Making the PYP happen" (IBO 2007). This will drive how the school and teaching and learning works i.e. the educational processes, and will also enable a common educational dialogue between fellow professionals within the school.

These three parts are:

**The Written Curriculum:** the identification of what's worth knowing

**The Taught Curriculum:** the theory and application of good classroom practice

**The Assessed Curriculum:** the theory and application of effective assessment

The model in Figure 2 below has been adapted from the PYP document for an earlier presentation and shows the interaction between the three interrelated parts.

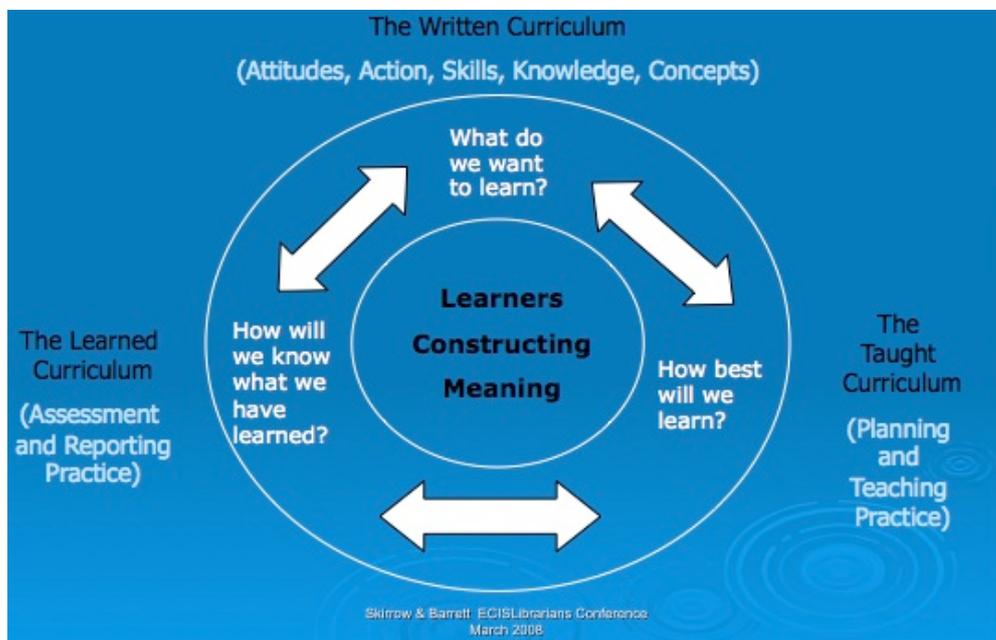


Figure 2: Model of the PYP definition of curriculum (adapted by the author from "Making the PYP happen" IBO 2007) 2008

To further clarify the distinct parts, figure 3 focuses on the ' five essential elements' which make up **the Written Curriculum**, and then breaks down each of those further into more manageable pieces.

The 5 essential elements of the <i>Written Curriculum</i> :	Consists of:
<p style="text-align: center;"><b>Concepts:</b></p> <p><b>What do we want students to understand?</b></p> <p>[These are central to 'purposeful, structured inquiry' through asking '<b>key questions</b>' arising from the concept. The PYP has also defined a list of related concepts for subject areas.]</p>	<ul style="list-style-type: none"> <li>-Form</li> <li>-Function</li> <li>-Causation</li> <li>-Change</li> <li>-Connection</li> <li>-Perspective</li> <li>-Responsibility</li> <li>-Reflection</li> </ul>
<p style="text-align: center;"><b>Knowledge:</b></p> <p><b>What do we want students to know about?</b></p> <p>[Taught as transdisciplinary "<b>organising themes</b>" called "<b>Units of Inquiry</b>". The traditional subjects of language, Maths, Science, Social Studies, the Arts, PE, PSPE, are mainly embedded within each of the six themes taught at each year level each year. The resulting whole school matrix is known as the "<b>Programme of Inquiry</b>"]</p>	<ul style="list-style-type: none"> <li>-Who we are</li> <li>-Where we are in place and time</li> <li>-How we express ourselves</li> <li>-How the world work</li> <li>-How we organise ourselves</li> <li>-Sharing the planet</li> </ul>
<p style="text-align: center;"><b>Transdisciplinary Skills:</b></p> <p><b>What do we want the students to be able to do?</b></p> <p>[defined as those skills common to all areas of learning]</p>	<ul style="list-style-type: none"> <li>-Thinking skills</li> <li>-Social Skills</li> <li>-Communication skills</li> <li>-Self-management skills</li> <li>-Research skills</li> </ul>
<p style="text-align: center;"><b>Attitudes:</b></p> <p><b>What do we want students to feel, value and demonstrate?</b></p>	<ul style="list-style-type: none"> <li>-Appreciation</li> <li>-Commitment</li> <li>-Confidence</li> <li>-Cooperation</li> <li>-Creativity</li> <li>-Curiosity</li> <li>-Empathy</li> <li>-Enthusiasm</li> <li>-Independence</li> <li>-Integrity</li> <li>-Respect</li> <li>-Tolerance</li> </ul>
<p style="text-align: center;"><b>Action:</b></p> <p><b>How do we want students to act?</b></p>	<ul style="list-style-type: none"> <li>-Choose</li> <li>-Act</li> <li>-Reflect</li> </ul>

**Figure 3: The Written Curriculum or, What do we want to learn?**

Collated by I.Skirrow from 'PYP Making it Happen' IBO 2007 (May 2009)

## 2. Information Literacy and the Primary Years Programme framework

For the school librarian involved in the teaching of Information Literacy skills as part of a formal teaching programme in the library context, the “Transdisciplinary skills” may need further scrutiny. Concern has been expressed within the IB School Librarian community that Information Literacy (IL) was not being addressed and that the IB had not developed a suitable programme for school library and librarians or, for Information Technology and IT teachers ( IT / ICT).

In an earlier study, Skirrow (2005, 2007) compared popular and well-known published library programmes in the North America and Australia with the PYP transdisciplinary skills. The chart below shows that the PYP indeed addresses most aspects of Information Literacy through the Transdisciplinary Skills - It is just that the current vocabulary traditionally describing IL is not used and also, that the PYP establishes information literacy are the concern of all of a child’s teachers not solely the responsibility of the library media specialist as may have been in the past.

Arguable however, the intervention of the library specialist will help teacher to develop an understanding of IL skills as part of the modelling and collaboration process. In this case, the school librarian demonstrates an important role in curriculum development and professional development within an educational setting.

Six common components of information literacy skills models in the USA		PYP Transdisciplinary skills: Research IBO, 2000, 2007	Learning for the Future: Information and ICT literacy matrix of student learning: ASLA, 1993, 2001
Component	Descriptors used in the variety of models		
1. The need for information	defining, recognising,, appreciate, initiate,	Formulating questions, Observing, Planning	Defining information needs
2. Information literacy skills	re: Library media specialist intervention: examples:- -Effective use of multi-modal information resources/sources -Assessment and differentiation of student learning needs -development of questioning and inquiry [lifelong learner strategy] -use of keywords for information searching -reader development [with literature appreciation in TS: Communication]		
3. Location of information	Locating, accessing, finding, identifying, retrieving, develop appropriate search strategies,	Collecting data	Locating information
4. Evaluation and organization of information	Organising, analysing, arranging, categorising, evaluating, examining, extracting, generalising, grouping, interpreting, selecting, synthesising, critical evaluation,	Recording data Organizing data	Selecting information Organising information
5. Use of information	Communicating, presenting, using, applying, Learning from it, synthesising, internalising as personal knowledge	Interpreting data Presenting research findings	Creating and sharing information
6. Evaluation of process and product	Assessment, peer review, teacher evaluation, reflection, quality, expectations, critical analysis,	PYP Concepts: Reflection PYP Trans. Skills: Thinking IBO Learner Profile: Thinkers; Reflective; Inquirers	Evaluating information and the information process
Adapted from Beverly, B. & Brodie, B. in Stripling, B. (1999) Learning and Libraries in an Information Age: Principles and Practice, a Comparison to PYP & ASLA models developed by I. Skirrow 2007 iskirrow@vis.ac.at			

Figure 4: Comparison of popular library programmes for Information literacy skills with the PYP (Skirrow 2007)

### 3. Guided inquiry for successful learning

The IB, in describing 'What do we believe about how children learn' states that

*"the PYP curriculum model is dependent on our commitment to a particular belief about how children learn, encapsulated most clearly in the constructivist approach."* (IBO, 2007 p.6)

Further, the works of the constructivist thinkers Vygotsky and Bruner as well as Gardner's theory of multiple intelligences, are quoted as being influential in the creation of the PYP which provides,

*"opportunities for students to build meaning and refine understanding, principally through **structured** inquiry".* (IBO, 2007 p.6)

There is much evidence to be found that an inquiry approach to learning has had a long and illustrious tradition and is irrevocably tangled with concepts additional to constructivism: of child-centred education, progressive education, and discovery learning to name a few. Early educational philosophers as far back as Rousseau, Pestalozzi, Froebel and later Piaget, all expounded a belief that children have a natural curiosity to discover and are able to learn through experience and play.

John Dewey was influential in North America in the early twentieth century through his social constructivist theories paralleling similar but unconnected research by Vygotsky in Russia at the same time. (Darling, 1994)

Explained simply, the difference between independent constructivist discovery learning and social constructivism, is that the advantageous roles language and working collaboratively within a communal, social environment can make are much greater than by independent means. Further, there is the important concept of the 'Zone of Proximal Development'. ZPD is the 'guided or structured' part of learning where another 'agent' takes the child from the point where he/she would independently achieve, to construct or 'scaffold' a learning experience to take the child to another level or levels. The intervention therefore accelerates the learning experience.

Indeed, connected to the concept of developing and structuring what comes naturally for children i.e. curiosity, recent educational trends in teaching thinking skills and problem solving skills are part of this scaffolding process. Socially too, other educational trends espoused by the IB such as the emphasis on language development and learning in collaborative and co-operative groups, will likewise help implement a social constructivist rather than a constructivist approach to learning.

Pragmatically speaking though, structured or guided inquiry implies all teaching and learning happening in a PYP school and is based on a constructivist philosophy.

In the field of school librarianship, Loertscher and Wools (1997) referred to the development of resource-based learning in the late 1980's when interest in information literacy slowly began to take on a momentum. To enable successful

implementation of an inquiry approach to learning, which might possibly include ‘every topic under the sun’, as much information as possible in the form of multi-medial resources will need to be available for students and teachers to choose from to support this method of learning. Information literacy, although this term remains arguably firmly fixed in the field of librarianship, thus becomes synonymous with the use of multi - modal resources and indentifies its purpose with that of guided inquiry and independent learning.

For successful inquiry learning in the PYP school the school library is an important place for students to access information or, for the teachers to find resources to supplement and extend classroom resources. The school librarian’s multipurpose role begins to be further defined through the responsibilities of creating and establishing suitable collections of resources, and the role of professional development leader demonstrating the most efficacious methods in accessing and using multi-modal resources.

The seminal research work “Seeking Meaning: A process approach to library and information services” by Kuhlthau, explains not only the actions and thoughts but also the emotional stages students go through when undertaking research and has played a vital role in supporting school librarians in teaching in the library context. (2004).

More recently, Kuhlthau in her latest collaborative work, “Guided Inquiry: Learning in the 21<sup>st</sup> century”, has provided clear examples of what guided inquiry is not and is for the school librarian. (2007)

<b>What guided inquiry is NOT and IS</b>	
<b>Guided inquiry is NOT</b>	<b>Guided Inquiry IS</b>
Preparation solely for the test	Preparation for lifelong learning
An add-on subject	Integrated into content areas
Isolated information skills	Transferrable information concepts
Relying on one textbook	Using a variety of sources
Finding answers to a prescribed question	Involving students in every stage of the learning, from planning to the final product
Curriculum without meaning to students	Curriculum connected to the students’ world
Individual students working exclusively on solitary tasks	A community of learners working together
Solely teacher directed	Students and teachers collaborating
Overemphasis on the end product	Emphasis on the process and product

Figure 5: What guided inquiry is Not and Is from Kuhlthau, Maniotes, & Caspari“ Guided Inquiry: Learning in the 21<sup>st</sup> century, (2007 p. 6)

Thus inquiry learning, thinking skills, problem solving, resource-based learning, information literacy, language development, social forms of learning such as collaboration, can all be seen as parts of a forward looking goal of education – that of the promotion and development of self-motivated, life-long learning in students. And for this, all teachers of a child – and this includes the teacher librarian / library media specialist - are responsible.

#### ***4. Collaborative planning for authentic guided inquiry teaching and learning***

Understanding the Primary Years Programme will help the school librarian in developing a programme of authentic learning in the library for the students through collaborative planning with the class teacher, grade level teams and other specialists.

It is 'authentic' because the library programme will connect directly with the guided inquiry teaching and learning happening in the classroom. This will include not only what the teachers believe is important to learn and based on sound educational practices and be part of the schools scope and sequence, but will also include the students own inquiries as these emerge from the originally planned ones.

The basis of teacher planning for learning in PYP schools is the coming together of collaborative grade level teams consisting of the class teachers and relevant support specialist teachers to develop six units of inquiry at regular intervals over an academic year. There is an official PYP planning document to which all the team will contribute. It is therefore important that the school librarian participates in the development of these planners.

It is during the planning that the librarian's ongoing contribution to curriculum review or development will occur through initial input or during the end of unit review and evaluation. Further, the planning process will inform the librarian of the lines of inquiry the unit will take, the type of resources needed.

Each unit covers a teaching period of between six to eight weeks. This is where the librarian will also be able to make suggestions as to the information literacy skills or reader development focus connecting with the specific unit or, if necessary, the type of library based inquiries the students could be introduced to as 'stand-alone' sessions, i.e. sessions which are not connected directly to the unit studied at that time but needed in the greater picture. A system of record keeping for lessons taught by the librarian for each class is useful for tracking the multiple grade level lessons necessary in any size of school, and also for maintaining an overview and record of work done.

The presentation of this paper at the IASL Conference, Padua, Italy in September 2009 will detail examples of library planning and record keeping, show students at different stages of learning and ages within the context of the library, and will seek to illustrate some aspects of information literacy and research for pre-secondary school students. There will be descriptions of the purposes of the activities and how they relate to the learning in the classroom and to the school curriculum expectations. These will be best illustrated with a slide show and power point presentation.

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### **Biographical Notes**

Ingrid Skirrow is teacher-librarian at Vienna International School (from Sept. 2009 on leave of absence). She is also closely involved with the International Baccalaureate Organisation (IB) as a workshop leader for the Primary Years Programme (PYP) and as Faculty Member for libraries on the IB Online Curriculum Centre (OCC).

In addition to leading PYP workshops in many schools throughout the IBAEM region, Ingrid has organised three PYP workshops for international school librarians and has been workshop leader at four librarian workshops. She co-presented a paper at the IBAP Singapore Conference in 2007, and in the past has presented at various European Council of International Schools (ECIS) conferences about librarianship.

Ingrid holds a Teacher Certificate from Mather College of Education, Manchester University; a MA in International Education from Oxford Brookes University; and an MSc (Econ) in Information and Library Studies from the University of Wales, Aberystwyth, UK.

In 2008 she became the IASL Regional Director for International Schools.

### **Statement of Originality**

This statement certifies that the paper above is based upon original research undertaken by the author and that the paper was conceived and written by the author(s) alone and has not been published elsewhere. All information and ideas from others is referenced.

I agree with this statement: I. H. Skirrow