



Date 2<sup>nd</sup> version : 24/07/2006

## A Strategic Framework for an Evolving Model of Information Literacy for Young People in a Changing World

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<b>Meeting:</b>	<b>142 School Libraries and Resource Centers (part 1)</b>
<b>Simultaneous Interpretation:</b>	No
WORLD LIBRARY AND INFORMATION CONGRESS: 72ND IFLA GENERAL CONFERENCE AND COUNCIL <b>20-24 August 2006, Seoul, Korea</b> <a href="http://www.ifla.org/IV/ifla72/index.htm">http://www.ifla.org/IV/ifla72/index.htm</a>	

### *Abstract*

*The success of evolving models of information literacy for young people in a changing world depends on a well developed strategic framework that supports and sustains existing and newly designed models. Recent research conducted by P.R. van der Walt in South Africa in obtaining a Masters Degree in Library and Information Studies at UNISA has concluded that an information literacy model for young people based on five design principles can form a strategic framework for evolving models for young people who are facing a changing world. The five principles are information literacy skills; characteristics of young people; educational curriculum; design and development principals and a product. Each of these principles consists of guidelines that will help children's librarians and school librarians to develop an information literacy model that will support and guide young people to be information citizens in an ever changing world.*

### Introduction

The success of evolving models of information literacy for young people in a changing world depends on a well developed strategic framework that supports and sustains existing and newly designed models. The core theme of the 72nd IFLA conference - Libraries being dynamic engines for the knowledge and information society - highlights the important role of the Library and Information sectors in developing information literacy amongst all people.

Therefore the theme of the School Library and Resource Centre section - Information Literacy for Young People: Evolving Models in a Changing World – emphasise that all young people can not precede into adulthood without information skills anymore. School libraries therefore have the challenging responsibility to sustain and develop information literacy models that are on par with the changing world - at that point in time - that will equip all young people with the necessary skills to survive the demands and challenges of the information society.

A research study undertaken by myself - to obtain a Masters Degree in Library and Information Studies at the University of South Africa - has developed a framework for information literacy models for young people. The framework consists of five principles that form the foundation (rationale) to design and sustain evolving information literacy models. The five principals are: information literacy skills; characteristics of young people; educational curriculum; design and developing and a product.

The aim of the paper is to discuss the five principles as a strategic framework that school librarians can use in the designing/developing and sustaining of information literacy models for young people.

## Background

My research study aimed to design an Information Literacy Instruction Programme for the upper elementary child in the public library. However it is clear from my study that school libraries and public libraries have equal important roles to play in ensuring that young people are information literate in an ever changing world.

The rational of my (van der Walt, 2005) study was based on different research studies undertaken by Librarians (De Beer, 1996, p.16; Fourie, 1996, p. 205; Hart, 1998, p.16 and Crase, 1999, p. 19) that concluded that many schools limit the teaching of information skills, due to insufficient resources, such as a lack of adequate media centres and teachers. The result of this is that young people turns to the public library for their information needs. In order to address the new role of the public library and the neglected role of many schools I designed a programme that both sectors can use to help young people to use information skills to their advantage. The importance of the study was to compile a design framework that could be used to design and develop an information literacy model. The next section describes the five principles needed to develop an information literacy model.

## Five Principles

The following five principles are considered important in the process of developing information literacy models for young people. Each principle is an individual discipline that are strategically linked together to form a unique foundation to design or sustain information literacy models that are in line with current changes and development.

### *Information Literacy Skills*

The concept information literacy is internationally acclaimed and debated. For the purpose of this paper the concept should already be known to all librarians and will therefore not be explained but a brief definition is included to reinvigorate the memories of the audience:

Behrens, Olën and Machet (1999, p. 19) define information literacy as

...the ability to access, evaluate and use information effectively for specific purposes from a variety of formal and informal sources.

The *National Forum on Information Literacy* (2004, p. 1) defines information literacy as

... the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.

Based on the above definitions, ten information literacy activities were compiled in my study that young people should master. The ten key activities were compiled from authoritative models used internationally. The following authoritative models were used:

- Australian School Library Association Information Literacy Skills (Cruse, 1999, p. 19)
- Big 6 Skills (Eisenberg, 2001, p. 1)
- ISD77's Information Skills Curriculum (Mankato School ...,2003)
- K-12 Five Stage Information Literacy Model (Langhorne. 1998, p. 15)
- Library and Information Association (LIASA) School Libraries and Youth Services Interest Group (SLYSIG) Information Literacy Guidelines Grade R-12 (LIASA, 2003, p. 3)
- Typology of Information Skills (Behrens, Olén and Machet, 1999, p. 17)

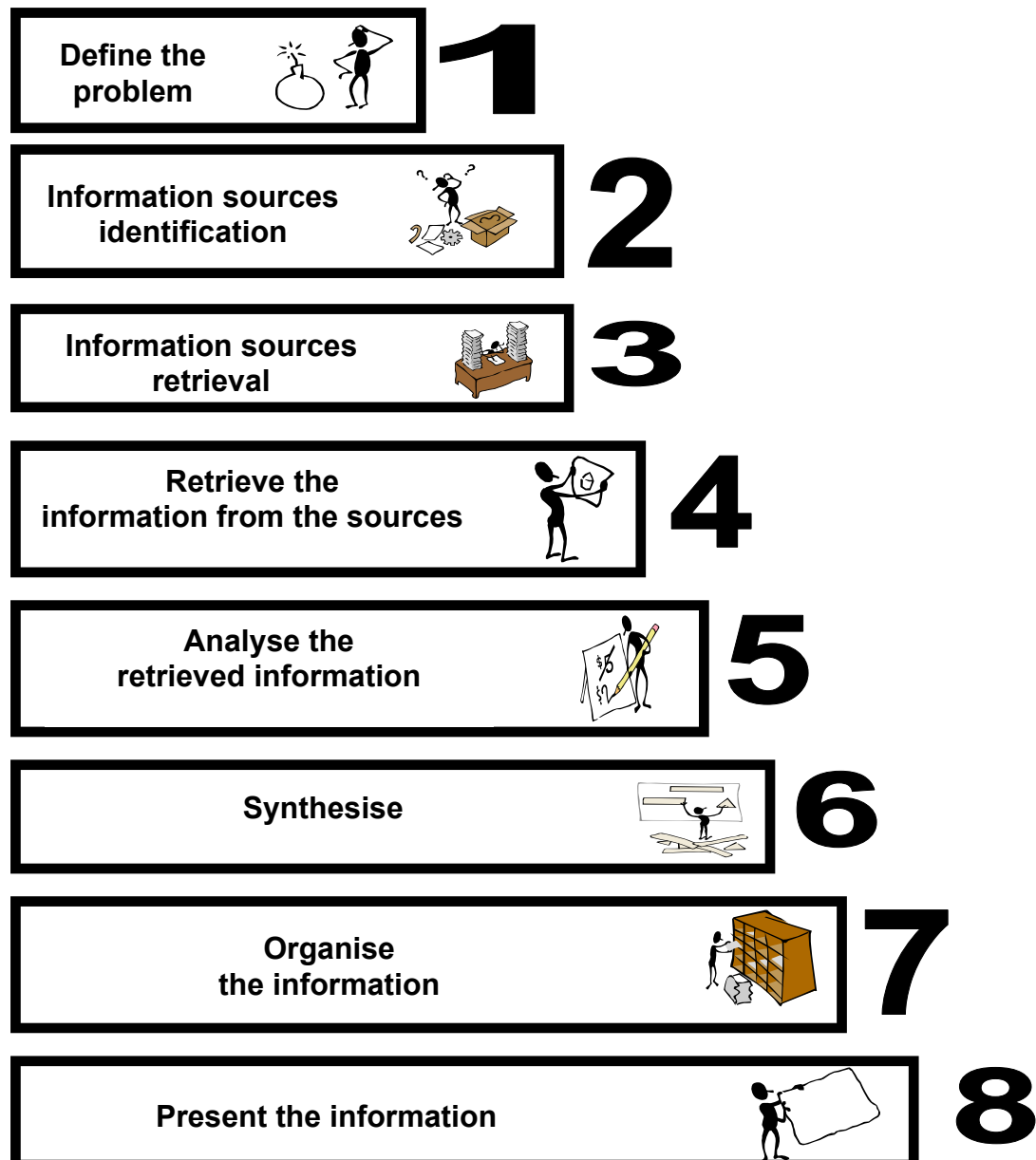




Figure 1. Activities to be included in a model Information Literacy Programme Model.

Each activity is shortly described to provide a clear understanding why the activity was included:

*Activity 1: Define the information problem*

*Aim*

*To have a clear understanding of what the information task requires from a young person.*

*Guidelines*

1. Read the information problem carefully  
Young people must read the task a few times to familiarise themselves with the information problem. Reading the task carefully will allow young people to move to the next step of analysing the information problem.
2. Analyse the information problem  
The process of analysis involves breaking the information into easily identifiable concepts. This can be done by using the following steps:  
 Step 1: Identify the key words.  
 Step 2: Identify the main theme of the problem.  
 Step 3: Determine the meaning of the instructions that accompany the problem.  
 Step 4: Determine the format in which the final product should be presented.  
 Step 5: Identify the type of information needed.  
 Step 6: Determine the amount of information needed.
3. Complete a checklist  
To ensure that the requirements of a task are followed, a checklist can be drawn up as a reminder of the important aspects of the task.

*Activity 2: Information sources identification*

*Aim*

*To identify potential information sources that might assist in finding the information needed to complete the task.*

*Guidelines*

1. Identify possible sources that might be of use  
Sources are available in different formats. Each source presents information in a different way and that must be taken into consideration when a source is selected. Sources are compiled for specific users, such as children or tertiary students.

Examples of information sources are: magazines, journals, newspapers, subject books, encyclopaedias, Internet, CD-ROM and people.

2. Identify the place/institution that will be able to assist and supply information  
Potential sources are available at different venues/institutions. The venues/institutions must be reliable and accessible to be considered as a resource. Examples of venues/institutions are: home collections, school libraries, public libraries, the media, Internet, CD-ROM, etc.
3. Identify tools that will be needed to capture the information  
The steps in Activity 1 give guidance pertaining to the tools that are needed to execute the task. Examples of tools needed are: paper, pens, pencils, ruler and money for photocopies or to access the Internet via the library. A checklist should be compiled from the information gathered in Activity 1 to list all tools needed to complete the task.

### *Activity 3: Locating information sources*

#### *Aim*

To locate the information sources by making use of information retrieval systems.

#### *Guideline*

1. Use the information retrieval system of the institution to locate the source  
The library stores information sources according to international classification systems, such as the DDC. The use of Dewey classification numbers are the same in every library which makes it easy to retrieve sources once the user understands the information retrieval system. Besides the DDC, there are various retrieval aids - like catalogues, bibliographies, indexes, etc.  
It is imperative for the school librarian to assist young people in learning how to use the DDC system and retrieval aids in order to find information sources.

### *Activity 4: Retrieve the information from the sources*

#### *Aim*

To access the information from the identified sources

#### *Guideline*

1. Retrieve the information from the source  
Retrieving information from sources involves two steps, namely:
  - Accessing the section or page where information is stored.
  - The intellectual retrieval of information.

### *Activity 5: Analysis of the retrieved information*

#### *Aim*

To analyse the information retrieved in order to answer the issues central to the stated problem.

#### *Guidelines*

1. Read and compare the different pieces of information retrieved from the different information sources
2. Extract and record information applicable to the information problem

### *Activity 6: Synthesis*

#### *Aim*

To integrate and evaluate all the recorded information logically.

#### *Guideline*

1. Evaluate the information recorded

During this activity, information that has been recorded is evaluated to determine whether it is appropriate for solving the problem. This can be done by answering the following questions:

- *Is the information understandable?* Advanced sources aimed at older users may prove to be difficult to understand. Only information that is understandable should be used.
- *Is the information recent and reliable?* The most recent information must be used. The publication date of the source will indicate how recent the information is.
- *Is there enough information to complete the task?* The total amount of information recorded should reflect the quantity instructed in Activity 1.

### *Activity 7: Organise the information*

#### *Aim*

To organise the relevant information to create a new information product.

#### *Guideline*

1. *Create a new information product*

The purpose of organising the information is to create a new information source. The following two guidelines can be used to ensure the effective organisation of the synthesised information:

- *Merge the information in a logical order.* The recorded information is merged together to form the final product. Merging eliminates any duplication and gives the product a structure.
- *Group the information in sections and give these headings so that it forms a structure.* Divide information strategically into sections with headings to give a structure to the final product. Headings serve as an outline that gives structure to the contents.

### *Activity 8: Present the information*

#### *Aim*

To present the information in the specific, prescribed format.

#### *Guideline*

1. Present the product according to the prescribed format

### *Activity 9: Evaluate the final product*

#### *Aim*

To determine whether the final product complies with the task requirements.

#### *Guideline*

1. Use a checklist to ensure that every step has been successfully completed

## Activity 10: Acknowledge sources used

### *Aim*

*To acknowledge all the sources and authors consulted in compiling the final product.*

### *Guideline*

1. Apply the correct bibliographic methods / standards

### *Characteristics of Young People*

The second principle is important because the target group is a unique but changeable group of people. Any educational instruction programme including information literacy models will have no effective or successful outcome if the characteristics of the specific age group are not included as a key design principle. The cognitive and motor ability of young people develop differently from the one development phase to the next. It is imperative that different levels of information literacy models are designed to link with the specific development phase.

Child development is divided into five stages, namely:

- Prenatal period – conception to birth
- Infancy and toddlerhood – birth to 2 years
- Early childhood – 3 to 6 years
- Middle childhood – 7 to 12 years
- Adolescence – 13 to 20 years (Berk, 2003, p. 241).

Each development phase describes the unique characteristics of the child's ability to use information. These characteristics will give clear guidance to school librarians on what level and in what intensity an information literacy model should be designed. School librarians are advised to read and study the specific age group they intent to develop information literacy model for.

### *Educational System (Curriculum)*

The ability to use information is at the heart of any educational curriculum. A sound knowledge of the educational curriculum is therefore important to link the unique principals of the educational system with the ten information literacy activities. This will help school librarians to design an information literacy model that is on par with the specialised level of activities and outcome of each curriculum stage.

In my research study I indicated that the South African Outcomes Based Education System is learner-centred that means young people should learn through instruction with a result-orientated outcome. This is exactly what the effect of the information literacy model should be. The ten information literacy activities should instruct and guide young people to use information to produce a product which reflects the desired outcome of the expected instruction.

School librarians should make a study of their educational system from their respective countries in order to link the information literacy model with the curriculum.

### *Design and Development Principles*

The fourth principle is to design the information literacy model according to appropriate designing principles. Designing principles are guidelines that form the foundation of the design and should be integrated with the core aspects of the information literacy skills, the characteristics of young people and the educational curriculum.

In my study I compiled an *integrated design model* for information literacy programmes. The integrated model was compiled from three design principles that are imperative for instruction programmes / models. The three design models were:

- Analysis Design Develop Implement Evaluate (ADDIE) Model (Kruse, 2002)
- Association of College and Research Libraries Information Literacy Programme (ARCL, 2003, p. 1)
- South African Outcomes Based Education (SA OBE) System (Naicker, 1997, p. 87; Van der Horst & McDonald 1997, p. 7)

The purpose of the integration design model was to establish a structure for evolving modes.

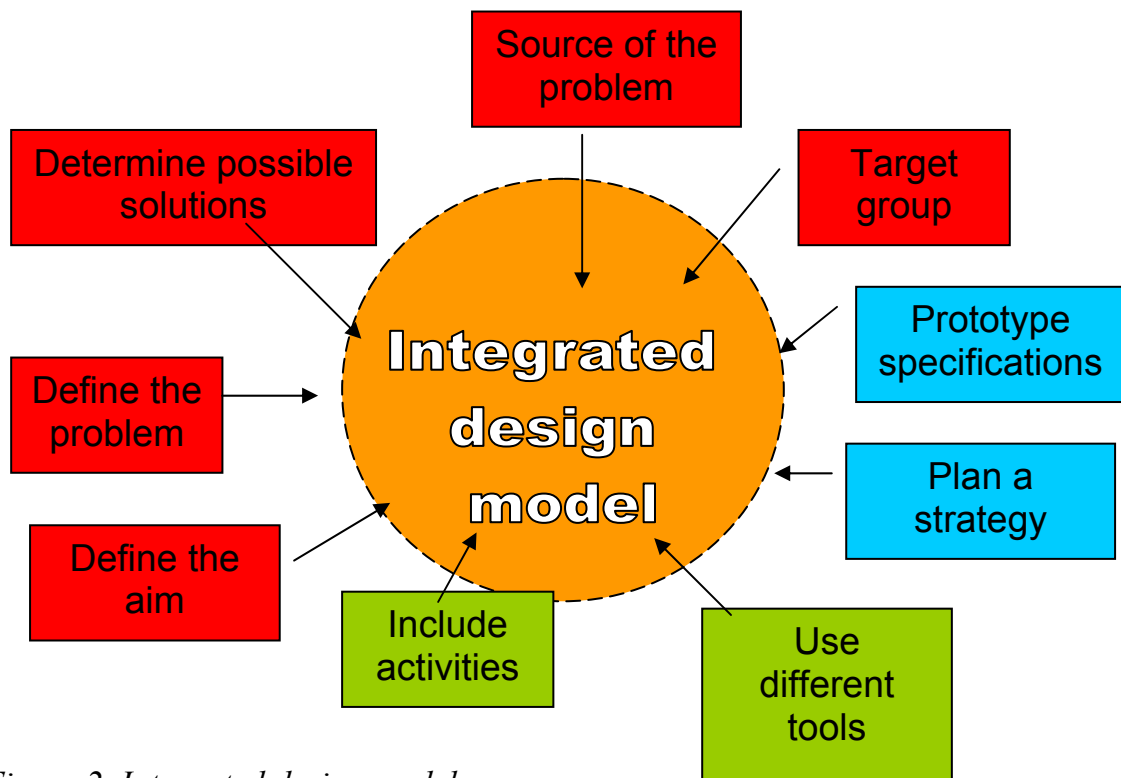


Figure 2. *Integrated design model.*

#### *Description of the integrated design model*

##### *Analysis*

Analysis is a process to determine which components are necessary for the design and development phase (McGriff, 2000).

Aspects that should be used to successfully design the programme include the following:

- Define the problem under investigation.
- Identify the source of the problem to determine what the background of the problem is.
- Determine possible solutions through a research strategy.
- Identify the target group.
- Define the aim of the programme that will reflect the desired achievements.



### *Design*

Design is the process of planning a strategy – based on the outcomes of the analysis process – with which to develop the programme (McGriff, 2000).

Aspects that should be used to successfully design the programme include the following:

- The planning of a strategy refers to the creation of a storyboard.
- Prototype specifications structure the development process.

### *Development*

Development is the process to generate the material for the programme (McGriff, 2000).

Aspects that should be used to successfully develop the programme include the following:

- Use different tools and processes that are related to the prototype specifications.
- Include activities that are related to the curriculum of the target group.

### *A Product*

The last principle needed to ensure that an information literacy model is successful, is to design the model to create an active, attractive, practical and informative product such as a game, workbook, brochure or maps that are modernised with a theme which is attractive to the specific youth group.

The final product I used in my research study was a workbook that is identified by Henning (1997:163) as a type of instruction material used by libraries. Henning indicates that the use of a workbook is effective in teaching information literacy skills only if the workbook is practical and easy to use.

Important but practical tips when designing a final product:

- Theme
- Story-line
- Layout of the product
- Graphics
- Font size and type
- Publishing tools

### *Test / evaluation*

Evaluating the final product is important to establish whether the product is projecting the requirements and principles of the design aspects.

## Conclusion

The paper concludes that a successful information literacy models depends on five strategic principles that forms the foundation of any model for young people in a changing world.

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### *Author Note*

Flippie (P.R.) van der Walt, is currently Senior Control Librarian at the Primrose Library in the Ekurhuleni Metropolitan Municipality in Gauteng, South Africa. He started his career 10 years ago in the Alberton Public Library from there on he was appointed the Head: Edenpark Library in Alberton. During this time he developed and implemented a very successful library orientation programme with the focus on information literacy for children. In addition to his interest in the topic he obtained in 2006 his Masters Degree in Library and Information Studies at the University of South Africa, UNISA, entitled: *The design of an information literacy instruction programme for upper elementary in the public library*.

He is also involved in the professional association for librarians in South Africa – LIASA – where he was chairperson of the Public and Community Interest Group in the Gauteng South Branch. In 2004 he received the LIASA/SABINET Public Librarian of the year award that afforded him the opportunity to go on an extended study tour to the Würzburg City Library in Germany. In January 2006 he attended the UNESCO/COMLA workshop on Information Literacy for public librarians as the official LIASA representative in Jamaica. He also published articles in the Free State Librarian and Cape Librarian sharing his experiences with others.