## MARIST SCHOOL INTEGRATED INFORMATION LITERACY PROGRAM (MASINFORM PROGRAM): INTEGRATION OF INFORMATION LITERACY SKILLS AND LIBRARY LESSONS IN A SCHOOL'S CURRICULUM

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#### Abstract

The paper aims to design an integrated information literacy program and to assess its effect on the information literacy skills of Marist School Grade 1-6 pupils. The research design of this study employed a mixed method approach, descriptive for the development phase and quasiexperiment for the assessment stage. The study found out that an essential factor in designing an integrated information literacy program is the strong collaboration of teachers and librarians. It also revealed that Grade 1-6 pupils information literacy skills improved after attending sessions on information literacy.

*Keywords:* information literacy skills, school library, integrated information literacy program

#### Introduction

In an age where information can be easily accessed by many, information literacy skills are more vital than ever. These skills can be best learned in schools and universities, libraries in particular. Libraries today are not only providers of information, they are also responsible for strengthening and improving student learning and achievement by developing their lifelong learning skills through information literacy (UNESCO Manifesto, 2000). Information literacy enables them to live as empowered individuals and responsible citizens of the country. With this phenomenon, school librarians have assumed a new responsibility as information specialist, teacher, and consultant. They have become forerunners in providing adequate and appropriate sources and empower pupils to become critical thinkers, enthusiastic readers, skillful researchers, and ethical users of information (Association of American School Librarians, 2009). In addition, the Code of ethics for librarians and information workers Sec. 2 (2012) stated that librarians and other information workers have tasked to

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offer services that will increase reading skills and develop information literacy skills such as the ability to identify, locate, evaluate, organize and create, use and communicate information. For these reasons, school librarians are encouraged to develop an information literacy program that will not only meet their pupils' academic goals but also their lifelong needs.

Marist School Learning Resource Center like any other school libraries develops a library instruction program to adhere with the school's mission to become a premier Christ-centered basic education institution renowned for quality holistic education forming competent, self-disciplined and service-oriented lifelong learners who integrate faith, life and culture (Marist School, 2015). However, the existing library instruction program needs improvement for it is a stand-alone program or taught in isolation. Isolation of library instruction lessons to classroom lessons result to pupils not taking the sessions seriously, making lessons less meaningful to them. According to Thomas (2011), it is generally believed that integrating information literacy skills in classroom activities enhances students' knowledge and skills. The study of Palmer (2004) which designed an information literacy program for engineering and technology students resulted that students took the activities seriously. The study of Kelly (2011) which integrated information literacy instruction in Introduction to accounting suggested that information literacy skills can be learned for application in subsequent coursework. Repetition of lessons enhances students' retention on different concepts. Meanwhile, the study of Cavabyab (1976) showed that the integration of library instruction in the curriculum can only be realized with the effective partnership of the librarian and subject teachers. With classroom teacher's commitment and support, librarians can easily determine library lessons that can be integrated to subjects or topics discussed in the classroom. Furthermore, it is generally believed that integrating information literacy skills in classroom activities enhances student's knowledge and skills (Thomas, 2011). Thus, this paper aims to expand the current K-6 library instruction program of Marist School by developing an information literacy program integrated to K-6 Marist School courses through collaboration with faculty members.

Specifically, the study sought to answer the following questions:

- A. Development of MaSInform Program Module
  - 1. What library lessons and information literacy skills can be integrated into K-6 subjects / topics of Marist School as determined by librarians and teachers?
  - 2. What strategies / techniques can be used to teach K-6 pupils library lessons and information literacy skills as determined by librarians and teachers?
- B. Assessment of the MaSInform Program Module
  - 3. What is the difference between the information literacy pre-test and post-test scores of Marist School Grade 1-6 pupils?
  - 4. What is the difficulty index of information literacy test items before and after conducting information literacy instruction?
  - 5. Is there a significant difference in the information literacy skills of Marist School Grade 1-6 pupils before and after receiving library instruction?

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# **Conceptual Framework**

Eisenberg's Big6 Model of Information Literacy

Several models of information literacy have been developed; however, Eisenberg's Big6 model has been currently being used by thousands of school librarians worldwide and is a central focus of information literacy instruction on K-12 level (Thomas, 2011). The major advantages of this model are its simplicity and being user-friendly because pupils can easily grasp and understand the six steps of doing research.

Table 1

Skills	Indicators	
Task definition	1. Define the information	
	2. Identify information needed (to solve information problem)	
Information seeking	1. Determine all possible resources (brainstorm)	
strategies	2. Select the best sources	
Location and access	1. Locate sources (intellectually and physically)	
	2. Find information within sources	
Use of information	Engage	
	2. Extract relevant information	
Synthesis	1. Organize from multiple sources	
	2. Present information	
Evaluation	1. Judge the product (effectiveness)	
	2. Judge the process (efficiency)	

# The Fully-Integrated Collaborative Model

Montiel-Overall (2005) has introduced a series of models that illustrates a more collaborative approach in which there is a little separation between instructional responsibilities for information literacy between the library media specialist and classroom teacher. Among the models, the Fully Integrated Collaborative model (Figure 1) has the most potential for improving student learning. In this model, integrated curriculum does not only involve teachers and librarians, it also involves the principal. Teachers and librarians work to integrate subject content and information literacy at all grade levels through shared vision, objective, thinking, planning and creation on integrated instruction. Meanwhile, the principal is instrumental in establishing the climate for teacher and librarian collaboration and extending it across the curriculum. According to Montiel-Overall (2005), this strong collaboration results to improve student's thinking, writing, reading and research skills leading to academic achievement.

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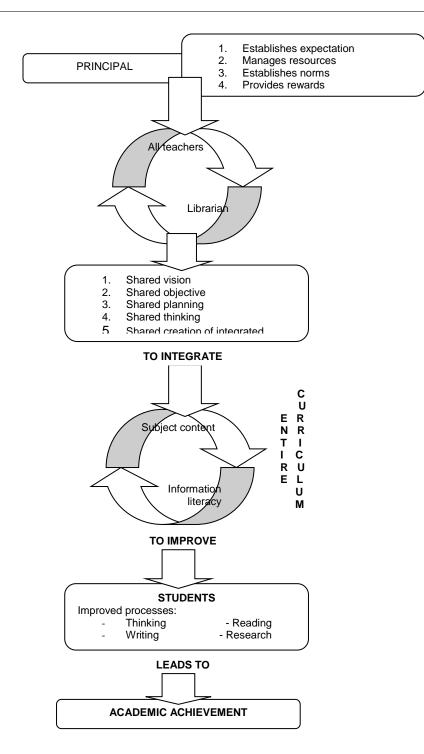


Figure 1. The Fully-Integrated Collaborative Model of Integrated Curriculum.

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#### Development of the Integrated Information Literacy Program

Figure 2 illustrates the application of the Fully Integrated Collaborative Model of Integrated Curriculum (Montiel-Overall, 2006) in the development of an Integrated Information Literacy Program. The Principal and Assistant Principals' support is important in order to establish an environment for teacher and librarian collaboration and to provide resources needed for it like time and professional development.

Teachers and librarians share a common goal of improving students' achievement. This goal can be best achieved through collaboration. According to McNee and Radmer (2017), in order for collaboration to be effective, teachers and librarians' commitment is essential in working together to determine the goals for instruction. Teachers share their expertise on the subject matter, strategies for teaching, and knowledge on students' learning abilities while librarians contributes their expertise in information literacy and research skills by making sure pupils are equipped with necessary skills to use information effectively. Effective collaboration between the classroom teacher and librarian leads to a statistically significant higher level of student skill development for it provided more benefits like access to resources, expertise, and connections to a broader school community (McNee and Radmer, 2017). This means that teachers and librarians can work together in integrating subject content and information literacy at all grade levels to give greater learning experience to pupils and an example of which is the Integrated Information Literacy Program.

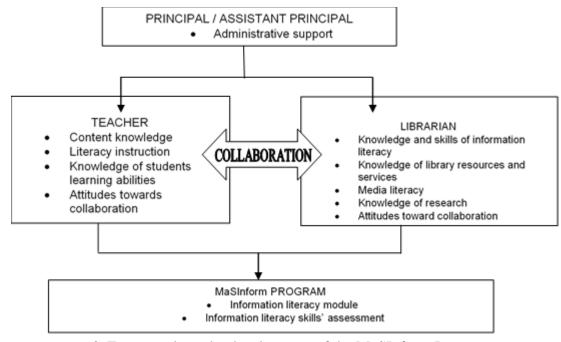


Figure 2. Framework on the development of the MaSInform Program.

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## Assessment of the Integrated Information Literacy Program

Figure 3 shows the second part of the study which is the assessment of the MaSInform Program. Pre-test/post-test was made after the development of the MaSInform Program. Pre-test serve as the baseline or reference point of the current information literacy skills of Grade 1-6 pupils of Marist School based on the lessons included in the Integrated Information Literacy Program while post-test serve as assessment of learnings of pupils after the implementation of the program. The effect of the implementation of the MaSInform Program was assessed through descriptive statistics, difficulty index and paired t-test.

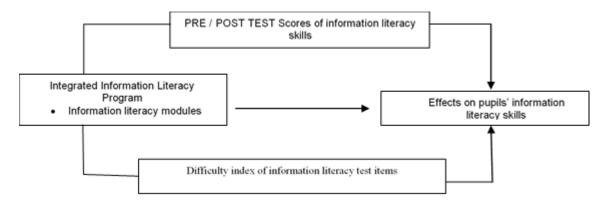


Figure 3. Framework on the assessment of the Integrated Information Literacy Program

#### Methodology

The study made use of a quasi-experimental research design for the assessment. One section from Marist School Grade 1-6 was assigned to take the pre-test. The pre-test assessed what pupils know about the topics to be discussed in the Integrated Information Literacy Program. The same test was administered at the end of all modules. Pre-test and post-test scores were analyzed through descriptive statistics, difficulty index, and paired t-test.

### **Descriptive Statistics**

The distribution of scores in the pre-test and post-test were described using the mean, median, mode, and standard deviation. "Mean", also known as the "average" is the value when all scores were combined divided by the number of participants who took the tests; "median" is the middle value of the scores when arranged from smallest to largest; "mode" is the score obtained most often by the participants; and "standard deviation" is the quantity calculated to indicate the extent of deviation for a group as a whole (Spiegel, 2008).

### <u>Z-score</u>

Z-score is computed to signify the distance between the raw score and the population mean in

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units of the standard deviation. This is calculated based on the formula below:

$x-\mu$	x = score of a sample group
<i>z</i> =	$\mu$ = mean of all sample groups
σ	$\sigma$ = standard deviation of all sample groups

## Difficulty Index

Difficulty index measures the quality of questions based on the response of pupils to the individual items of the given test. Difficulty index is also known as p-value and it is measured according to the formula below (Hingorjo, 2012):

p value = 
$$\begin{pmatrix} no. of pupils with correct answers \\ no. of total students who took the test \end{pmatrix} x 100\%$$

The result can be interpreted using the following:

- $\blacktriangleright$  if the result is < 30% the item is too difficult;
- $\blacktriangleright$  if the result is > 70% the item is too easy, and;
- $\blacktriangleright$  if the result is 30 70% the item is average.

#### Paired T-test

A paired t-test is administered to examine if means of pre-test and post-test differ significantly. The result of the paired t-test is used to draw conclusions about the effect / impact of the Integrated Information Literacy program on the information literacy skills of Marist School K-6 pupils. T-test is computed based on the formula:

XD	$X_{p}$ = mean of differences between pairs
t =	Sx <sub>p</sub> = standard deviation of differences between pairs
$\frac{S_{D}}{\sqrt{n}}$	d.o.f = degrees of freedom
$\sqrt{n}$	n = total number of values in first (second) dataset
<i>d.o.f</i> = <i>n</i> -1	

The *null hypothesis* for this study is:

Ho:  $\mu d < 0$ : There is no significant difference in the pre-test and posttest scores after implementation of the Integrated Information Literacy Program.

And an *alternative hypothesis* is:

 $H_a: \mu d > 0$ : There is a significant difference in the pre-test and post-

test scores after implementation of the Integrated Information Literacy Program

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# **Principal Findings**

The study found out the following:

1. Library lessons and information literacy skills can be integrated to classroom lessons through collaboration with subject teachers. Table 2 shows the subject in which library lessons and information literacy skills were integrated as determined by librarians and teachers.

Table 2

Library Lessons and Information Literacy Skills Integrated into K-6 Courses as Determined by Librarians and Teachers

Grade level	Subject	Classroom lessons	Library lessons / skills	Information literacy skills
Kinder	Reading	Literary appreciation skills	Library orientation	<ol> <li>Task definition</li> <li>Information seeking strategies</li> </ol>
	Filipino	Pagtukoy ng detalye sa kuwento	Aklat Filipiniana	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	Math	Numbers	Filipiniana books	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	Reading	Noting details and sequencing of events	Taking care of books	<ol> <li>Task definition</li> <li>Information seeking strategies</li> </ol>
			Parts of a book	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
Grade 1	Reading	<ol> <li>Noting details</li> <li>Following directions</li> </ol>	Library orientation	<ol> <li>Task definition</li> <li>Information seeking strategies</li> </ol>
		1. Noting details	Parts of a book	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
		1. Distinguishing reality from fantasy	Fiction vs nonfiction books	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	P.E.	1. Proper hygiene 2. Health habits	Filipiniana books	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	Filipino	Mga bahagi ng aklat	1. Mga bahagi ng aklat 2. Aklat Filipiniana	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>

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Table 2	(cont.)
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Grade level	Subject	Classroom lessons	Library lessons / skills	Information literacy skills
Grade 2	Reading	Alphabetizing	<ol> <li>Library orientation</li> <li>Book arrangement / organization</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
		Noting details	1. Caldecott award	<ol> <li>Task definition</li> <li>Information seeking strategies</li> </ol>
	Filipino	Mga bahagi ng aklat	<ol> <li>Mga bahagi ng aklat</li> <li>Aklat Filipiniana</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	English	Spelling of the months of the year	<ol> <li>Parts of a book</li> <li>Filipiniana books</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	Science	Solar system	Fiction vs nonfiction books	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>
	Araling Panlipunan	Mga Tao sa pamayanan	Caldecott award	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>
Grade 3	English	Talking about cleanliness and orderliness	Library orientation	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	Filipino	Pang-uri	Filipiniana books	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
		Mga bahagi ng aklat	Mga bahagi ng aklat	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
	Reading	Using a dictionary	Using a dictionary	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>
		Literary appreciation	Caldecott award	<ol> <li>Task definition</li> <li>Information seeking strategies</li> </ol>
		Parts of a book	<ol> <li>Reference books: atlas and almanac</li> <li>Parts of a book: table of contents</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>

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# Table 2 (cont.)

Grade level	Subject	Classroom lessons	Library lessons / skills	Information literacy skills
Grade 4	Reading	Parts of a newspaper	<ol> <li>Library orientation</li> <li>Library rules</li> <li>Different library resources with focus on newspaper</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
		Distinguishing between fantasy and reality	<ol> <li>Fiction vs nonfiction books</li> <li>Dewey Decimal Classification (DDC) System</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
			<ol> <li>Fiction vs nonfiction books</li> <li>Dewey Decimal Classification (DDC) System</li> <li>Online Public Access Catalog (OPAC)</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
		Parts of a book: glossary and index	<ol> <li>Reference books (dictionary, encyclopedia, almanac, atlas)</li> <li>Review of parts a book (table of contents, index, glossary)</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>
	English	Haiku	Review of Dewey Decimal Classification system with emphasis on Literature class (800- 899)	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>
Grade 5	Reading	Identifying primary and secondary sources	<ol> <li>Library orientation</li> <li>Primary and secondary sources</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>
		Using reference aids	Reference aids	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>
		Newbery award	Newbery award	<ol> <li>Task definition</li> <li>Use of information</li> </ol>
	Computer	Microsoft PowerPoint	Organizing information using MS PowerPoint	<ol> <li>Task definition</li> <li>Use of information</li> <li>Synthesis</li> <li>Evaluation</li> </ol>
	Filipino	Card catalog	<ol> <li>Card catalog</li> <li>Online Public Access Catalog (OPAC)</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> </ol>

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### Table 2 (cont.)

Grade level	Subject	Classroom lessons	Library lessons / skills	Information literacy skills
Grade 6	Reading	Print and nonprint	<ol> <li>Library orientation</li> <li>Print and nonprint</li> <li>Dewey Decimal Classification (DDC) System</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> </ol>
		Sources of information (Primary and secondary sources)	<ol> <li>Sources of information</li> <li>Citation using American Psychological Association (APA) style</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> <li>Evaluation</li> </ol>
		Online searching	<ol> <li>Online searching</li> <li>Citing sources</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> <li>Synthesis</li> <li>Evaluation</li> </ol>
	Science	Invertebrates	<ol> <li>Reference sources: dictionary and encyclopedia</li> <li>Citing sources</li> </ol>	<ol> <li>Task definition</li> <li>Information seeking strategies</li> <li>Location and access</li> <li>Use of information</li> <li>Evaluation</li> </ol>

- 2. Through collaboration of teachers and librarians, different strategies / techniques in teaching library lessons and information literacy skills were identified, namely:
  - a. presentation software, PowerPoint in particular, was used as an alternative tool for manila paper and chalkboard;
  - b. worksheets assessed what pupils learned after each session;
  - c. story telling was used as a springboard to lessons;
  - d. songs were used to recall concepts;
  - e. videos enabled pupils to stay entertained and engaged in the lesson;
  - f. games were used as an interactive way to assess pupils;
  - g. art activities enabled pupils to remember concepts discussed in a more enjoyable and creative way; and
  - h. hands-on activity / research activities gave pupils a firsthand experience in using, locating and summarizing information they need.
- 3. Generally, all grade levels obtained a higher average score in post-test compared to pretest. Table 3 presents the average scores of each grade level.

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#### Table 3

Average Scores of Each Grade Level

Grade Level	Pre-Test	Post-Test
Grade 1	14	18
Grade 2	11	18
Grade 3	8	18
Grade 4	12	19
Grade 5	13	20
Grade 6	13	16

- 4. The following are the difficulty index of pre-test and post-test scores of Marist School Grade 1-6 pupils:
  - a. Grade 1: In the pre-test, questions that obtained an easy difficulty index were about knowing who takes care of the library, borrowing procedure such as what books they can borrow and what they need to bring when they want to borrow a book, and some library rules like listening to the librarian, use of indoor voice, having clean hands before reading a book, and keeping the library clean and orderly. Questions that received an average difficulty index discussed about number of books Grade 1 pupils can borrow, handling of books, and returning of books on time. Questions that acquired a difficult difficulty index tackled the parts of the book, Filipiniana books, distinguishing fiction and nonfiction books. After receiving information literacy sessions, all the questions resulted with an easy difficulty index in post-test.
  - b. Grade 2: In the pre-test, no questions received an easy difficulty index. Questions that obtained an average difficulty index were about the arrangement of books in the library. Questions that resulted with a difficult difficulty index focused borrowing procedure, Filipiniana books, fiction and nonfiction books, and parts of a book. After conducting information literacy sessions, questions on library orientation, organization of books in the library, fiction and nonfiction books, and parts of a book obtained an easy difficulty index. The only question that received an average difficulty index was about Filipiniana books.
  - c. Grade 3: In pre-test, the only question that obtained an easy difficulty index was about the library instruction. Questions with an average difficulty index were about library rules, borrowing of books, Filipiniana books, Caldecott Award, and parts of a book. Questions that received a difficult difficulty index tackled location of books, reference books, and other parts of a book. On the other hand, in post-test, questions

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that obtained an easy difficulty index were about library instruction, library rules, borrowing procedure, locating books in the library, knowing what a dictionary is, Caldecott Award, and some parts of a book (i.e. table of contents, author, copyright, illustrator, title). Questions that resulted an average difficulty index were about Filipiniana books, atlas, almanac, and some parts of a book (i.e. glossary, index, call number, spine) while questions that received a difficult difficulty index were about the parts of the dictionary.

- d. Grade 4: In pre-test questions that received an easy difficulty index were library services and rules. Questions about knowing what and when to use reference sources like dictionary, atlas and almanac, and distinguishing fiction and nonfiction books resulted with an average difficulty index. Questions on parts of a newspaper, haiku, DDC, OPAC, encyclopedia and parts of a book (i.e. index, glossary, table of contents, call number) obtained a difficult difficulty index. Meanwhile, in the posttest, questions on rules and locations of books, parts of a newspaper, fiction and nonfiction books, reference books and parts of a book resulted with an easy difficulty index. Questions on DDC and OPAC received an average difficulty index. No questions received a difficult difficulty index.
- e. Grade 5: In the pre-test, questions that received an easy difficulty index were about library services and rules. Questions on identifying the different types of books and locating them in the library obtained an average difficulty index along with reference sources, and parts of a book (i.e. glossary and table of contents). Questions resulted with a difficult difficulty index were about primary sources, secondary sources, card catalog, OPAC, index, PowerPoint and Newbery Award. On the other hand, in the post-test, questions on library instruction, library rules, locating books in the library, glossary, table of contents, reference sources, index, and Newbery Award yielded an easy difficulty index. Questions about card catalog, OPAC, and PowerPoint achieved an average difficulty index while difficult difficulty index was obtained by questions pertaining to primary and secondary sources.
- f. Grade 6: In the pre-test, questions on library services and rules received an easy difficulty index. Questions about locating books in the library, reference sources and parts of a book resulted with an average difficulty index. Questions that obtained a difficult difficulty index are DDC, primary sources, secondary sources, OPAC, online searching, and citation of sources using APA format. Meanwhile, in the posttest, questions that yielded the easy difficulty index were about library rules, services, reference sources and parts of a book. Questions resulted with an average difficulty index focused on locating books in the library, Filipiniana books, primary sources, secondary sources, and citation of sources using APA. Questions on DDC, OPAC and online searching obtained a difficult difficulty index.
- 5. Table 4 presents the difference in the pre-test and post-test scores of Grade 1 to 6 Marist School pupils.

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## Table 4

Grade Level	T-value	Critical Value	Significant Difference Fevel
Grade 1	-9.1252	2.032	
Grade 2	-9.689	2.03	
Grade 3	-17.1222	2.018	<ul> <li>All are significantly</li> <li>different at the 95%</li> </ul>
Grade 4	-12.7527	2.021	level of significance
Grade 5	-11.9572	2.021	
Grade 6	-6.0121	2.015	

Difference in the Pre-Test and Post-Test Scores of Each Grade Level

## **Conclusion and Recommendations**

Based on the findings, the researcher came up with the following conclusions:

- 1. Strong collaboration of teachers and librarians is an essential factor in the success of designing and implementing an integrated information literacy program. Through collaboration, teachers and librarians have identified topics/subjects in which library lessons and information literacy can be integrated. In addition, support of the principal and other school administrators is also vital for they have provided an avenue in which collaboration can take place.
- 2. By working together, teacher and librarians have identified presentation software, worksheets, storytelling, songs, videos, games, art activities, and research activity as strategies in teaching library lessons and developing information literacy skills.
- 3. In general, Grade 1-6 pupils have obtained higher scores in post-test than pre-test.
- 4. Generally, many items in the information literacy pre-test of Grade 1-6 pupils obtained a difficult difficulty index. However, after implementation of the MaSInform Program, several questions in the information literacy post-test attained an easy difficulty index.
- 5. There is a significant difference in the information literacy skills of Marist Grade 1-6 pupils after receiving library instruction. Therefore, the null hypothesis has been rejected.

Though these conclusions have been reached, the study has given rise to recommendations that can further enhance this study. First, the study may be used as a framework for other school libraries on how to integrate library lessons and information literacy skills in classroom lessons. Second, since the MaSInform Program has been found to enrich information literacy skills of Marist Grade 1-6 pupils, the researcher recommends its continuous implementation. However, topics in which library lessons and information literacy skills will be integrated should always be reviewed to ensure effectiveness of

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the program. Lastly, a follow-up study on attributing factors such as attitude of pupils towards the program, age, gender, and approach used can be conducted. Through this, it can give light on why some grade levels have performed better than the other grades.

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