Moving from traditional curriculum to Primary Years Program (PYP)

A research project by

Fadia A. Nabouli

Submitted to the Lebanese American University

in partial fulfillment of the requirements

for the degree of

Master in Education

June 2006
Project Approval Form

Student Name: Fadia Ali Nahouli   I.D. #: 199450340

Project Title: Moving from Traditional Curriculum to Primary Years Program (PYP)

Program: MA Education

Division/Dept: Education and Social Sciences

School: Arts and Sciences

Approved by:

[Signature]

Irina-Kaarnia Ghosn, Ph.D.
Associate Professor of Education and English

[Signature]

Leila Harmouch, Ph.D.
Assistant Professor of English and Education

Date: June 21, 2006
Acknowledgments

I would like to dedicate this work to the people who supported and helped me in the achievement of the MA degree and the accomplishment of this study. Much of my gratitude goes to my father Ali, my mother Mariam, and my brothers Fadi and Firas. I am also grateful for the reinforcement and the encouragement of my beloved husband Ghassan. As well, my appreciation goes to the school principal, the PYP coordinator, the preschool coordinator, and to all the staff members at the school in which this case study was held. Finally, a special thanks goes to my advisor Dr. Ghosn and my professor Dr. Harmouch for their guidance and assistance.
# Table of Contents

<table>
<thead>
<tr>
<th>I. Chapter 1: Introduction</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An overview</td>
<td>p. 6</td>
</tr>
<tr>
<td>2. Definition of Terms</td>
<td>p. 7</td>
</tr>
<tr>
<td>3. Purpose of the study</td>
<td>p. 8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Chapter 2: Literature Review</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The process of curriculum change</td>
<td>p. 9</td>
</tr>
<tr>
<td>2. Preparing teachers and parents</td>
<td>p. 11</td>
</tr>
<tr>
<td>3. Barriers to curriculum change</td>
<td>p. 13</td>
</tr>
<tr>
<td>4. The role of teachers in the change process</td>
<td>p. 15</td>
</tr>
<tr>
<td>5. Conclusion</td>
<td>p. 17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Chapter 3: Research Design and Methodology</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p. 18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Chapter 4: Results</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p. 22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V. Chapter 5: Discussion and conclusion</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p. 40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VI. Guidelines to prepare PYP unit Plan</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p. 46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VII. References</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p. 52</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VIII. Appendix A</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p. 57</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IX. Appendix B</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p. 61</td>
</tr>
</tbody>
</table>
Abstract

The pressure created by dynamic society has intensified the need for educational changes. This case study examines the nature of curriculum change as experienced by the Primary Years Program (PYP) coordinator, preschool coordinator, and two KGII classroom teachers in one private school in Lebanon. The study sheds light on the difficulties and challenges facing educators when they engage in curricular change. Data for this study was collected from interviews, observations, and documents. Findings show that pre-service and in-service programs and group work helped coordinators and teachers in implementing the changes. Data also shows that the staff faced difficulties in the implementation of the program due to lack of time. Grouping of children into centers, gaining parents’ support, ineffectiveness of some of the in-service programs, and limited resources further hindered the implementation. Although most of the teachers were not involved in the decision of adopting the new program, interviews and observations reveal that teachers seem to have positive attitudes towards the change and appear to accept the reform requirements. Change needs to be seen as a natural part of the learning process and of teachers' and principal’s professional growth.
Chapter 1

Introduction

An Overview

In the last 20 years the need for curriculum change has intensified rapidly in response to a dynamic society. Initiatives to reform curriculum have often developed in parallel in the USA and Europe, often flowing on to other countries, including Lebanon. This study reflects on the process of one private school in Lebanon moving from a traditional curriculum to the Primary Years Program (PYP), which is part of the International Baccalaureate (IB) Programs. The IB Program was developed in Geneva, Switzerland, in 1968. PYP, which was added to the program in 1997, is designed for students between the ages of three and 12 years. The program offers 'a comprehensive approach to teaching and learning with an international curriculum that provides guidelines for what students should learn, a teaching methodology, and assessment strategies' (Chmelynski, 2004, p. 60). According to the International Baccalaureate Organization (IBO), ‘it is an international program planned to foster the development of the whole child, not just in the classroom but also in the world outside. PYP offers a ‘framework that meets children’s several needs: academic, social, physical, emotional, and cultural’ (IBO, 2002, p.3). Knowledge, concepts, skills, attitudes, and action are the five elements at the center of the PYP. The interrelatedness of these elements helps learners gain a holistic understanding of the six main PYP themes. The themes are: ‘who we are, where we are in place and time, how we express ourselves, how the world works, how we organize ourselves, and sharing the planet' (IBO, 2002, p.9). According to the IBO, the philosophy of the PYP is stated in a ‘series of desired attributes and traits that characterize students with an
international perspective' (p.4). The attributes and traits which create a profile of the PYP student are: 'inquirer, thinker, communicator, risk taker, knowledgeable, principled, caring, open-minded, well-balanced, and reflective' (p.4). The PYP student profile helps teachers and students establish goals, plan units of inquiry, and assess performance. Inquiry learning is at the heart of the PYP philosophy. According to IBO, inquiry is 'the process initiated by the learner or the teacher which moves the learner from his or her current level of understanding to a new and deeper level of understanding' (p.5). Concepts, which are at the center of the PYP curriculum model, are expressed in key questions. These key questions are: 'form, function, causation, change, connection, perspective, responsibility, and reflection' (p.9). PYP also fosters a set of attitudes which include 'tolerance, respect, integrity, independence, enthusiasm, empathy, curiosity, creativity, cooperation, confidence, commitment, and appreciation' (p. 9).

**Definition of Terms**

The term 'curriculum' refers to 'a subset of a general scope and sequence plan that includes one of the following components: (1) information about all subjects taught at a specific grade level or (2) information about what is taught in a single subject area across all grade levels' (Armstrong, 2003, p. 227).

Change, according to Fullan (1985), 'is a process, not an event; it happens over a period of time to transform individuals and situations' (p. 392). However, in educational context, change involves altering the performance of the school and the school employees (Murphy & Karen, 1999).
Purpose of the Study

The West provides us with several studies on curriculum change. However, no studies were found in the Lebanese Literature on this topic. Because curriculum change is a challenging process, and because some Lebanese schools are attempting to provide international educational programs, such as the IB programs, it is important to understand how schools come to adopt educational changes and to explore the barriers and the outcomes of curriculum reform as it applies to education in Lebanon, hence the significance of this case study.

This study sought to understand and gain insight into the change process as perceived and experienced by teachers in a primary school and to examine preschool teachers' awareness and opinion of curriculum changes. It also investigated teachers' attitude towards the new program. Furthermore, the study aimed at identifying guidelines for preparing a Kindergarten unit planner based on the recommended PYP themes.

This case study sought to answer the following questions: how does a school come to implement curriculum change? what are the steps? how are parents and teachers prepared for accomplishing this decision? what barriers does the school face in the attempt of accomplishing change? and what is the role of the teachers in the change process?
Chapter 2
Literature Review

Education has been evolving in an attempt to keep pace with changes in society. Curricula worldwide have seen many changes in the last few decades. Virtually every school in Lebanon has engaged in some type of educational change reform movement during the past decade. In 2003 Lebanese public schools introduced 'a holistic, integrated approach to early childhood care and development' (Sfeir & Gilkes, 2003, p. 3). While many preschools have adopted this approach, other schools have moved toward international models such as IB and its PYP.

This literature review provides a review of studies examining schools going through implementation of new programs that influence change in curriculum and instruction. The literature review will first outline the process of curriculum change and move on to investigate the barriers to curriculum change, finally exploring the teachers' role in the change process.

The process of curriculum change

Change, in the school context, is a process which leads teachers to adjust their teaching traditions; 'it is a process of developing new skills, and above all, of finding meaning and satisfaction in new ways of doing things' (Fullan, 1985, p. 396). Each individual involved in the change process has a different personal experience. Everyone approaching a change, initially implementing an innovation, or developing skill in using an innovation will have certain perceptions, feelings, motivations, frustrations, and satisfactions about the innovation and the change process. People
move through stages when they are involved in implementing a change (Miller & Lieberman, 1991). The process of making change is ongoing and long-term, and it requires fundamental alterations in school culture and in the beliefs and values of school personnel (Anderson, 1995; Shanker, 1995). Research in curriculum change has focused mainly on the process by which change will be achieved. Understanding how change process actually works is a necessary precondition in planning for effective educational changes.

Alexander (1946) states that 'the process of curriculum change involves a systematic progression of steps between the original identification of a particular need for changing the curriculum content and the full diffusion of a desirable change in the school system' (p. 16). These steps are 'need identification, change proposal, systematic tryout, appraisal and diffusion' and, according to Alexander, schools engaging in curricular change should follow them (p. 16).

Fullan (1985) points out five components for fundamental change process: 'theory, demonstration, practice, feedback, and coaching' (p. 394). These elements, according to Fullan, consist of teachers interacting and learning about the underlying theoretical principles of an innovation, seeing it demonstrated, practicing it, and obtaining feedback and ongoing coaching or support.

Pennell and Alexander (1990) point out that the process of curriculum change can be achieved effectively through discussion in order to clarify the value system which operates within. The clarified agreements must be carried out to action and written-up as policy if the effort is to have a lasting effect and the change is to become
implemented permanently. They further suggest that once changes have been implemented, evaluation of the progress should be traced. This change can be achieved when teachers are being involved in the process of change.

According to Dixon (1995) and Tsui & Cheng (1997) curriculum change process can be seen as a series of stages: the initial step involves recognizing the need for change and deciding to initiate planning for a specified development. This is followed by the planning stage, or the freezing stage, in which a team of teachers is identified to plan goals and policies, and prepare the necessary resources for the change to occur. In the next stage, the changing stage, teachers are occupied in the actual implementation of the new curriculum. The last stage is the evaluation stage, or the refreezing stage, in which teachers conduct periodic and ongoing evaluations.

**Preparing teachers and parents**

It is understandable that the teacher is a central concern when devising a plan for curriculum change. Teachers engaged in change are personally invested in the process and devote large amounts of time and effort to achieve success (Anderson, 1995). Studies that have focused on teachers experience with change processes shows that curriculum renewal efforts are dependent upon teachers' attitudes towards the changes and their capabilities in implementing the change. Teachers' attitudes towards the change process affect their decision to remain or leave the school. Feeling threatened by or dissatisfied with the changes may push teachers to seek transfer to more traditional schools (Ross et al., 2002). Moreover, studies have emphasized the nature and role of teachers' professional development (Jacob & Frid, 1997; Wetherill & Applefield, 2005). Teachers must have opportunities to learn about the reform and
should have adequate professional development and training in the implementation of
the reform. In addition, they have to be involved in the planning process and should
experience satisfaction with the professional development that is implemented to
support the reform initiative (Dixon, 1995; Wetherill & Applefield, 2005). Pre-
service and in-service training is a key component of any change efforts; to insure
curriculum change is effective, professional development must be provided (Jacob &
Frid, 1997; Wetherill & Applefield, 2005).

Curriculum change calls upon school personnel to engage in increased levels of
collegial work in a more cooperative way (Lieberman & Miller, 2001). In order to
achieve successful curriculum change, it is necessary to put more emphasis on team
work and collaboration among teachers (John, Williamson, Chung, & Michael, 2005;
Tsui & Cheng, 1997, Wallace & Braunger, 1998). Teachers need to work with each
other to think, analyze, and create conditions for change and be active participants in
their own growth and learning, as Short (1993) points out. Thus, they need to be given
the time to work together to plan; they have to work with one another to help improve
one another’s practice (John, Williamson, Chung, & Michael, 2005; Jones &
Anderson, 2001; Shanks, 1995; Short, 1993; Wallace & Braunger, 1998). Working
together gives teachers an opportunity to interact on regular basis about issues of
concern and gives them a chance to see how other teachers overcome the difficulties
and problems encountered in curriculum change (Short, 1993; Tsui & Cheng, 1997;
job will thus move from one of isolation to collegiality, sharing expertise for the
benefit of other teachers, students, and the curriculum’ (p. 5). The outcomes of the
change process should be monitored to provide evaluative results that are meaningful
to the teachers. Modifications that will lead to better results in implementing new programs can be established by continuous assessment. Wetherill and Applefield (2005) and Dixon (1995) caution that without systematic evaluation techniques used throughout the change effort process, valid information and opportunities for meaningful intervention or support could be lost.

Traditionally, parents have been involved minimally in education and educators have had difficulty communicating their educational programs to parents (Erickson, 2001). In recent years, discussions of successful schools have focused on the notion that good schools actively reach out to involve parents in defining the aims of education (Beck & Erickson, 2001; Murphy 1996). As Afflerbach (1996) notes, ‘Communication between school and home is crucial for introducing new programs. The communication educates parents about what is happening in schools and it can gain support for innovation and change’ (p.16). The support of parents is one of the important factors that leads to success in implementing curriculum changes (Jones & Anderson, 2001). Progressive schools cooperatively plan the educational program with parents and see that they are involved in the educational process whether at the school site or as support to their children at home (Erickson, 2001). Parents want and deserve to be active partners in their children’s educational experience.

**Barriers to curriculum change**

Change is not easy to implement and curriculum change, as any change, may encounter barriers (Shanks, 1995). Accomplishing change is associated with barriers that may weaken the intention of reform. Miel (1947) has recognized several key problems which include:
securing initial interest, improving attitudes toward change, dealing with the phenomenon of crystallization, managing helps and hindrances to curriculum change in the environment, using leaders and experts to foster curriculum change, organizing for curriculum development, improving the quality of cooperative planning, improving communication and human relations, securing adequate curriculum materials for study and developing a common philosophy of education for those involved in curriculum change (p.365).

Afferbach (1996) has identified five barriers faced by schools when implementing new programs:

(1) lack of alignment of the current and the new instruction and assessment;
(2) lack of alignment between teacher practices and beliefs and those underlying the new assessment and instruction; (3) lack of resources needed to meet the demands placed on schools, teachers, and students by the new program; (4) the nature of the performance assessment itself; and (5) the quality of communication related to the nature and intent of the program and assessment (p.14).

The lack of support and time are other barriers reported in research. Because of lack of both support and time, teachers find it difficult to do research, to set agendas, to talk and plan strategies together, and to build the collegiality needed to initiate reform (Anderson, 1995; Conley & Goldman, 1995; Shanks, 1995; Short, 1993; Wallace & Braunger, 1998).
Moreover, teachers may encounter difficulty and resistance from parents in implementing curriculum changes (Anderson, 1995). Because parents resist the changes if they can not understand the need for change or the reasons for the new curricular emphases, schools should raise parent’s awareness of new curriculum initiatives and involve them at every opportunity to gain their support (Jacob & Frid, 1997; Jones & Anderson, 2001).

Aflerbach (1996) and Broadhead (1999) point out that overcoming barriers in implementing new programs calls for an organized method that offers the means to aid change, valuable exchange of ideas between school personnel, teaching and assessment change processes, and continuing modification of the assessment program and the performance assessment resources and procedures.

The role of teachers in the change process

Although teachers play a central role in education, traditionally, they have not had a major voice in educational change. Teachers have often been viewed as a passive receiver of a change product or as a reactor to change and have been separated from the reform process (Montgomery & Way, 1995; Shanks, 1995). However, when teachers are not directly involved in the development process, and when the change in the curriculum is a top-down imposition, the revised program will not last (Conley & Goldman, 1998; Jacob & Frid, 1997). Moreover, imposing new practices on teachers may lead to changes in practice but not necessarily improved practice, as Conley and Goldman (1995) found out. Top-down approaches diminish the commitment of teachers and could result in their performing considerably below capabilities (Broadhead, 1999; Wetherill & Applefield, 2005). Additionally, top-down nature in
Curricular reform can lead to significant clash between educators who are confident that they are presenting effective instruction for their learners (Afflerbach, 1996; Conley & Goldman, 1998). Further more, imposed change generally means there is a failure to account for teachers’ beliefs, values and ideas about education or learning (Montgomery & Way, 1995). As Shanks (1995) points out, 'without the involvement and dedication of teachers, change process will be without the strength needed to implement true reform' (p.6).

Recently, more attention has been given to the involvement of teachers in the change process (Montgomery & Way, 1995; Shanks, 1995). Greater teacher involvement in the decisions related to change has been stated as essential for change to actually occur. Conley and Goldman (1998), assert that ‘change occurs when top-down mandates and bottom up initiatives connect’ (p.5). Moreover, when teachers are given adequate opportunity to study new developments and new materials, they can become helpful participants in selecting change proposals (Alexander, 1964). Shanks (1995), indicates that successful reform takes place when teachers are empowered to have a central role in the process of change; this will involve teachers in more decisions than those involving only their own classrooms. Moreover, true involvement means that teachers will be involved in every step of the reform process. Shanks adds that teachers must be allowed to and be willing to change before the process is started, be involved in the planning of the change process, actively work in implementing the program, and help in subsequent evaluation of the process (Shanks, 1995). Because teachers are the essence of the innovation process they should play a major role in material development and curriculum planning, as well as being involved in the evaluation of the effectiveness of new materials and methods.
Moreover, they should play a role in the decision making processes associated with curriculum changes and subsequent in-service professional development needs (Conley & Goldman, 1998; Jacob & Frid, 1997). Collaborative decision-making among school staff tends to significantly improve implementation of new programs (Seifert & Seifert, 1999; Wetherill & Applefield, 2005).

Conclusion

To prepare children for productive lives in the 21st century, educational change must take place to match the drastic changes of the dynamic society. However, this change needs to be rooted in meeting the needs of students and teachers as well. Thus, it is important to ensure that when new programs are implemented they are implemented by teachers who are appropriately prepared. Further, equally important is the conduction of a continuing evaluation process to ensure that ongoing successful change is being implemented. Because educational change is an ongoing process which does not seem to have an end, research studies should focus on this issue.
Chapter III
Research Methodology

Method

Case study approach is a method usefully employed in many areas of education and usually involves 'the observation of an individual unit' (Burns, 2002, p. 459). The unit studied in this research was the preschool of one private school in Lebanon. Participants in this case study were teachers of a Lebanese private school which was in its second year of implementing PYP. The study used multiple sources of data as Van Tassel (1995) suggests. Data were collected from observations, documents, and interviews, which provided for triangulation and added validity. How the school came to implement curriculum change, what the process was, how parents and teachers were prepared for accomplishing this decision, what barriers the school faced in the attempt of accomplishing change, and what the role of the teachers was in the change process were the questions that this case study sought to answer. Data were analyzed descriptively using sorting and categorizing.

Context and participants

The school is one of the new private schools in a coastal city south of Beirut. The school started accepting students for the preschool level in 1995 and since then has added one grade level each year. The school comprises three buildings: the preschool level, the elementary level, and the intermediate level. The preschool building is equipped with big classrooms, an indoor and outdoor playground, a music room, a storage room, a small library, an audio-visual room, teachers' lounge, and office rooms. Classrooms are big in size, clean, and colorful. There is a small storage room, washroom, and balcony for each class. The preschool classes are divided into centers
in which materials are displayed in a way that attracts the child's attention and are easily reached.

Upon the principal's request, the regional manager of the International Baccalaureate of Europe and African Middle East (IBEAM) visited the school during the school year 2003/2004. After this visit, a report was developed by the IB Organization which declared that the school was qualified to be a member of the PYP candidate schools among the world. The school started implementing PYP in 2004/2005 and is expecting to take the IB accreditation in the year 2007.

Four staff members of the school participated in the study: the PYP coordinator, Miss Amal, the preschool coordinator, Miss Leila, and two Kindergarten teachers Mrs. Rita and Miss Mona. Observation took place in the two KGII English section classes due to the recommendation of the preschool coordinator. Thus, the two teachers who were teaching these classes were interviewed. In order to protect the privacy of the participants, the names are pseudonyms.

Data collection procedures
The period for collecting data for this case study ranged from November 2005 & January 2006 during which observations and interviews took place.

Observations
Observations took place in the classroom at the beginning of the second year of their implementing the PYP. A record of teachers' schedule was obtained so that each teacher was observed once a week, for two months, during the 'Center Time'. Field notes about the students, the teachers, the classroom setting and decoration, the
interaction that took place between the teachers and students, and the implementation of the PYP unit planner in the classroom were recorded. During observations detailed notes were taken to find out how teachers follow the PYP unit planner steps in teaching KGII students. Teachers' knowledge of how to implement PYP in the classroom was evaluated through observation and compared to their interview responses.

Interviews

Following observations, interviews were held at school, each lasting between 30 and 50 minutes. The interviews were tape-recorded and transcribed for analysis. The interviews yielded information on (1) what kind of changes occurred at the preschool; (2) how teachers and parents were prepared for this change; (3) the barriers encountered by the school personnel in initiating the new program; and (4) the role of teachers in the change process.

Documents

A variety of documents were collected. These included PYP books, PYP yearly plan, lesson plans, assessment sheets prepared by teachers, and letters sent to the parents and teachers when the new program was introduced. These documents were examined in order to understand how teachers and parents were prepared for the change and the steps to prepare PYP unit planner.

Gaining Access

After the purpose of the study was explained to the principal, permission was obtained to conduct the study at the school and to observe and interview teachers and
coordinators. Informed consent of all participants was then also obtained (Burns, 2000), and all participated willingly. Participants were assured that their identities would be kept confidential.

Data analysis

The data collected from observations, documents, and interviews were analyzed descriptively using sorting and categorizing. A file for each category was developed and data was organized in each file according to its relevance to the category. This kind of analysis is used to rearrange, order, or manipulate the raw data to transform it into a form that will make it easy to understand and interpret it. First, data collected was segmented; material was broken into chunks. Each segment of data was then allocated into relevant categories; each set of data was placed in the pile of data relevant to the category (Burns, 2000). For example, data relevant to preparing teachers and parents for change, which was collected from interviews and documents, was placed under the category "preparing teachers and parents". Another example relates to the data which reflects how teachers are implementing PYP in the classroom. This pile of data, which was collected from observations and interviews, was used to show how change is taking place in the classroom and in the guidelines to prepare a PYP unit planner. The following categories were identified from the literature review and used in the analyses:

1. process of curriculum change
2. preparing teachers and parents for change
3. role of team work and in-service and pre-service programs
4. barriers faced by coordinators and teachers
5. teachers' role in implementing PYP
Chapter IV
Results

Results of the study are presented in this chapter in categories, beginning with the process of moving from the traditional curriculum to implementing PYP, which shows how teachers and parents were prepared for this change. Next, the chapter describes the barriers which the school personal faced in their attempt to implement the change and the factors which helped them move forward. Finally, the role of the teachers in the change process is discussed.

Process of curriculum change

The passage from the traditional old curriculum to the new PYP curriculum required the school to go through a major shift which can be outlined in stages. However, the interviews with the PYP coordinator and the preschool coordinator showed that no blueprint was followed to lead for the proposed change. Yet these interviews revealed that the process which the school followed reflects the stages identified by Dixon (1995) and Tsui and Cheng (1997).

Initial stage

The process of change began with the initial stage when the principal of the school recognized the need for change. As the preschool coordinator explained: “After implementing the traditional curriculum for ten years, the principal felt that it is time for change and found that the content of the PYP is exactly what she’s looking for in her vision of the school.” The PYP coordinator elaborated on the vision:
Actually the principal is the person who wrote the vision of the school. We wanted to do some integration and to introduce the idea of an integrated curriculum. We looked for and we researched what was offered, we considered other options but the principal felt that this decision was the best and the most suitable to achieve the vision of the school.

The principal's decision led the school to go through several steps before PYP was implemented in the classroom. This is how the PYP coordinator described the process:

There were many steps; we had to read the literature and documentation that is related to PYP and we had lengthy discussions and reflections on what we read with the principal. Then we had to contact the IBO to see what the requirements were. The IBO team had to make a preliminary visit to school to see if it is able to go through with the authorization journey before it is started. They made a visit to the school, they interviewed some teachers, they walked around to see the facilities, and they looked at the draft of our current curriculum. They made a report which included some of our strength points that make it possible to implement PYP and some of the recommendations that they need us to work on in order to make the implementation successful.

At this stage, teachers and parents were informed about the principal's decision. This was evident in the documents which included a letter sent to the teachers requesting from them to attend a meeting which was assigned to inform them about the PYP "the principal gathered all the teachers for a meeting and informed them about this program and the school's intention to be part of it", said the preschool coordinator.
Because teachers play a central role in educational change, they were not separated from the change process and some teachers were engaged with the negotiations before the decision was carried out. "There were discussions with some teachers. The discussions first were at the administrative level to check out the program, start examining it, and the possibilities of implementing it. Then we told teachers about it", explained the PYP coordinator.

To gain parents' support in introducing the new program, the school informed parents about the planned change. This was evident in the documents which included a letter sent to the parents asking them to attend a presentation which would inform them about the intention of the school to go through the journey of curriculum change. The PYP coordinator explained further,

> According to parents, we invited them to a presentation at the very beginning in 2004 before the program was implemented at the school; we invited them and the principal gave a presentation defining the program and describing it and informing them of the intention of the school to go ahead with it.

The preschool coordinator also emphasized on the role the parents had to play in this program:

> We had to work with parents step by step. That's why the principal decided to gather the parents for a presentation to inform them about the program. She explained to the parents about the program and about the reasons which made the school wants to adopt it.
Planning stage or the freezing stage

This initial stage was followed by a planning stage or the freezing stage defined by Dixon (1995) and Tsui and Cheng (1997). As the preschool coordinator explained, "then we made our plan, submitted the application, continued to do readings, and planned for training some of our staff by sending them abroad, and hosted foreign regional trainers from the IBO." Coordinators and some teachers did, indeed, attend a workshop in Geneva during summer 2004 and received a number of training sessions on PYP and curriculum implementation in order to prepare them to train their colleagues. The training of the coordinators and teachers before the program was put into practice encouraged them to make sense of the new curriculum. According to the preschool coordinator, "the workshops that we have attended helped us manage with all the new ideas of the PYP."

Moreover, at this stage some of the PYP required resources for the classroom and the library were made available for the teachers. In Mrs. Rita’s words, "they gave us a lot of books which we had to read and summarize and then present what we have read and understood to all the other teachers." The preschool coordinator indicated that they realized they “had to have more centers in the classroom which required us to get lots of new materials as puzzles, educational games, and books for the reading center.” According to the PYP coordinator, as well, resources was one of the areas that needed attention. She noted that when they assessed the school based on the PYP standards, they identified the areas in which they “were not doing very well” and targeted these areas for improvement. One of the identified targets was increasing the resources in the library, “because inquiry needs a plenty of resources for teachers and children.”
Implementation stage or the changing stage

The process moved towards the implementation, or the changing stage. At the implementation stage of a new curriculum, teachers often have feelings of frustration, incompetence, discomfort, and uncertainty (Orland-Barak, Kemp, Ben, & Levi, 2004). This was true also in this case. Even though teachers in the school had done a lot of readings to get acquainted with the new program, translating the documents into practice was not easy for them. Mrs. Rita expressed her frustration when she said, “I felt lost at the beginning, and whatever I used to do in the classroom made me think that everything I did was wrong.” Miss Mona’s comment reflected also a sense of unease: “I couldn’t grasp the whole set of new terms. For many years we applied certain terms and then there was a need to get a whole new set of terms and to be able to implement it.”

However, as teachers get more familiar with the PYP approach, they overcame these feelings. For example, Miss Mona noted that “this year I feel that we’re working better than last year.” The PYP coordinator’s comment well reflects the situation: “I don’t want to tell you that it was very smooth; it was hectic for teachers. Everybody in the school was going crazy at the beginning but when they understood how it works and saw how the children started to get more engaged, everybody here started to sense the value of the program.”

Evaluation stage or the refreezing stage

The process ends up with the evaluation stage or the refreezing stage. Periodic and ongoing evaluations are taking place to identify the areas of strengths and areas of
weaknesses which the school needs to work on and improve. This was reflected in the comment of the PYP coordinator:

We at school ask for a consultation group and we ask for training. We ask trainers to come and visit our classes a day before the training so in an informal way they give us some recommendation on what to change and on what we did right and what to go on with and what to change so this is one way of knowing what we’re doing.

The preschool coordinator also pointed out that “during their last visit, the consultation group noticed that we need to work more on reading and writing and that’s why the coming workshop will be about this issue”. The in-service programs assigned for the school staff after the visits of the consultation group provided support for the process. In other cases the school asked the IBO to hold workshops for teachers in areas which required improvement. These workshops are held to meet needs identified by the school during the school year.

Preparing teachers

Interviews indicated that teachers were engaged in greater levels of professional development. Numerous in-service training sessions were held to familiarize teachers with the new curriculum. The trainings helped teachers learn about the new curriculum, develop new materials, and plan instruction and assessment. However, both the teachers and coordinators confessed that the training they had received was not enough for them. In Miss Mona’s words, “we have attended many workshops each one was concerned with different issues related to PYP. We still need more
workshops. Till now we have just covered 25% of what we need to know.” Mrs. Rita echoed similar feeling:

We have a lot of training and workshops in summer vacation and during the school year. I can not say that I got the required training because every year and at every workshop we learn something new so we have to keep attending workshops and to be trained every now and then.

Interviews showed that teachers and coordinators emphasized on the value of communication among teachers and coordinators. Teachers and coordinators relied on each others to discuss concerns, doubts, and feelings of resistance. Teachers were encouraged to ask questions and received feedback in a supportive atmosphere as the preschool coordinator reported:

IBO provides candidate schools with a code to enter the IBO webpage and get all the information they need. The PYP coordinator can connect online with other PYP coordinators around the world and with the IBO leaders who are always ready to answer questions and provide help in solving problems. The exchange of information between the PYP coordinators and the IBO leaders helped us find suitable solutions whenever we are faced with problems. So teachers have to communicate with the PYP coordinator all the time.

In addition to staff development, collaborative planning was incorporated into teachers’ schedules. To achieve successful curriculum change, teachers were engaged in collegial work. Coordinators and teachers reported a greater degree of sharing and collegiality and this was clear in the words of the PYP coordinator: “teachers can not plan by themselves; they can never do it. They have to sit together and I’m not talking
about subject teachers; I’m talking about teachers teaching math and languages and
science and computer plus specialists who have to teach music and art and PE.” Miss
Mona and Mrs. Rita have also stressed on the effectiveness of collegiality: “We have
to work with each others in groups, and group work helps us a lot because each
teacher gives an idea and many ideas are better than one.” “We learn better when we
sit with others. Group work draws our attention to things we don’t think about when
we plan alone.” Thus, a common planning time was provided to teachers to work
collaboratively on developing curriculum and to reflect on their work as the PYP
coordinator explained:

There are previously set schedules for planning time where teachers have to sit
together and write minutes of their meeting and whatever they brainstorm for
the plan they have to brainstorm in writing. It’s not like hearing everyone’s
idea and meeting is wasted and nobody knows what’s happening. It has to be
written and reported. Saturday classes leave earlier; on Saturday students leave
at one p.m. so teachers have two hours of meeting time.

**Barriers faced by coordinators and teachers**

Regarding the barriers the school faced in its attempt to achieve curriculum
change, five main factors were identified that appeared to hinder implementation of
the new program: lack of time for the additional hard work, grouping children into
centers, gaining parental support, ineffectiveness of some of the in-service programs,
and limited resources.
Lack of time for the additional hard work

The first barrier was related to lack of time. Teachers and coordinators complaint that was frequently heard during observations and interviews was that implementing change demands a lot of hard work and thus teachers were tired. Although teachers were provided with extra time, with the load of hard work required this time was not enough. This is how Mrs. Rita put it: “time is a problem because we just have one hour after the departure of the children. During Saturdays we have two hours to work together but when we are preparing a unit, two hours are not enough at all to finish it.” Miss Mona also pointed out that: “the problem is that we don’t have much time to sit and work together. They tried to solve this problem by having Saturday classes leave earlier, but still these two hours are not enough for us to sit and work together.”

While the teachers mentioned that they were working harder, the coordinators felt that teachers ‘nag’ more now because of the load of work implementation of the PYP required. This was clear in the words of Miss Mona: “I believe that this is a good program but it needs a lot of work”; the words of the preschool coordinator: “teachers nag all the time. They are happy with the results but not with the type of work. Sometimes they ask me why don’t we just forget about this program and go back to implementing what we were doing in the past”; and the words of the PYP coordinator: “I know that they are excited and happy with what they are doing but they are not happy with the fact that it needs a lot of hard work.”

Grouping children into centers

The second barrier was related to the issue of organizing students into groups. To get children acquainted with the idea of being divided into groups and having to rotate among centers in the classroom was a problem reported by Miss Mona: “we used to
divide students into two groups. Now they are divided into five groups. We had difficulty teaching students how to move among centers but once they have learned the procedures of entering and leaving the center we were relaxed and they were relaxed as well. But it was very hard for us and for the children at the beginning of the year”. Mrs. Rita also pointed out this issue by saying: “how to organize the children to go from one learning center to another was one of the problems but it didn’t take us too much time and children get used to it quickly. We faced this problem just the first year when we started implementing the program and children were not used to this routine.” The preschool coordinator confirmed the problem as she said: “We had to add more learning centers in the classrooms and to have students learn and explore information through these centers. So we had worked a lot on how to introduce these centers to students. The organization for this issue was bit a hard for teachers and students and this took us some time.”

Gaining parental support

The third barrier was related to lack of parental support. The interviews revealed that while some parents supported the changes in principle, other parents did not. According to the PYP coordinator, parents' main concern was the national examination and they wanted to know how the school was going to prepare children for the transition to middle school if they are working with a PYP, and how PYP links to the middle school program. Miss Rita also reported about this parent fear by saying: “parents are afraid because they are not sure if this program will work with their children or not because of the official exams.” According to the preschool coordinator parents who had doubts about the success of this program preferred to move their children to another school. She continued:
Some parents supported this change and some parents were against it. They were afraid of it and that's why they withdraw their children from the school. They don't want their children to go through this experience since there is no evidence that this program will work out with their children. Around thirty students in the preschool left.

However, according to the PYP coordinator, parents who did not move their children from the school were now overcoming their fears as they have come to see the positive effects of PYP on their children:

Parents started to see how their children started to ask critical questions, they started to relate ideas in a better way than before. Children are not consumers anymore, they are producers of knowledge, they are not humans who just absorb what ever they are told, they have to negotiate and discuss and research, they don't rely on a single book, and know how to look for information so parents started sensing these changes and this deepens their understandings of what's happening.

Coordinators and teachers reported that the success of the PYP requires cooperation and support from the parents, who should be active participants in the education of their children at home. Some parents, while keeping their children at school, were not very cooperative as the preschool coordinator mentioned: "some parents are not very helpful. We send newsletters to parents before we start implementing any theme. Some parents work with their children but many others don't. If parents are not inquirers themselves, their children will not be encouraged to be inquirers either."
Teachers also reported that they have faced problems with parents who are not ready to be involved in the education of their children at home. “In this program we have to work more with parents and parents have to work more with their children but some parents are not prepared for this change. Every time during open house and during parents’ meetings we inform parents about the way they have to work with their children but not all of them are encouraged to work with their children”, said Mrs. Rita.

Miss Mona also pointed out this “children have to work with their parents and we faced a problem here because some parents don’t know how to work with their children. Some parents just give their children the solution or the information that we want the students to look for.”

**Ineffectiveness of some of the in-service programs**

The fourth barrier was related to the ineffectiveness of information presented to teachers during some of the in-service programs. Teachers admitted that the pre-service and in-service programs helped them understand the main features of the program and how to implement it, but they still felt that these programs were not enough and that there was a lot of repetition of information. In Miss Mona’s words, “some of them were good and effective and some of them were just lecturing especially the last one which was about assessment. We thought that they are going to introduce to us new ways to assess students’ performance but it was all repetition of previous information.” Mrs. Rita pointed out that “there is some repetition in the workshops which makes us feel bored.”
Limited resources

The fifth and last barrier was related to lack of resources. Bloomington (1992) stated that “the work of change requires attention not just to resources, but to re-sourcing” (p. 750). Teachers and coordinators both noted that this program required a lot of resources, such as books, puzzles, educational games, and other resources required for different learning centers in the classroom. The resources were not made available to the teachers. Miss Mona claimed that they did not “have all the materials that we need so we have to prepare some of them ourselves. The materials are not made available for us, but the school is trying to provide us with more materials related to the themes every year.”

According to the preschool coordinator and the PYP coordinator, this was a problem, but one which they were able to manage. “The availability of materials is another problem but we solved it by doing some materials as puzzles and educational games ourselves if we couldn’t afford getting them,” stated the preschool coordinator. The PYP coordinator found that this program helped them be more selective in purchasing new materials, especially in ordering books.

There is always something to start with and make use of it and with time we start to decide what are the best resources to get. So now we know for example this is a library and we need to increase the books in this library. Before the PYP we used to go to a book store and find whatever is interesting and buy it of course according to the budget. Now we know, we have this budget and we have this unit for grade one let us say, I have to focus getting resources about so and so unit to make it richer. So we have more focused choices now and better resources than before; more relevant and useful resources.
Regardless of these barriers, there were factors that supported the school in moving ahead with implementing the PYP. Coordinators pointed out the provision of teacher in-service training programs, the approval of the board of trustees, and the support from the parents committee. Another important factor which the PYP coordinator stressed on was the young, competent teaching staff at the school: “The teacher is basically the main person in this implementation. We had some good teachers who were very excited and who were very encouraged to do something new; they were young and this is the very important factor that we built on.”

**Role of teachers**

One of the key issues that emerged in this study is the role of the teachers in the change process. Not only administrators but also teachers should be involved in curriculum planning and decision making to achieve effective change. When teachers are sufficiently involved in the process of curriculum change, the curriculum will be changed effectively. The active role and participation of teachers are assumed to be really important in curriculum planning and change (Conley & Goldman, 1998; Jacob & Frid, 1997; & Shanks, 1995). However, this was not the case in the school in this study. When the preschool coordinator and the teachers were asked about the teachers’ participation in the decision of implementing PYP, they confirmed that teachers did not contribute to any of the discussions that took place before a decision was made to adopt the program. The preschool coordinator affirmed this: “the principal was interested in the program and took the decision of implementing it and then informed the teachers.”
The teachers felt that the program was imposed on them. In Mrs. Rita's words, they didn't ask us if we want to implement PYP or not; they just told us that we have to implement a new program and we were tense and shocked, and it was very difficult for us at the beginning, but we got used to it now because it is a nice program.

This was also reflected in the comment of Miss Mona, We were just informed that the school will adopt the PYP, and that it is expected from us to be helpful members to get the authorization. The principal just told us that we are going to implement the program and the next year we started implementing it. We had to learn about it and we were obliged to do it.

On the other hand, the answer of the PYP coordinator contradicted with the teachers' response It was the principal's decision but her decision was not built only on her observation. She consulted with everybody; she had impact from all teachers and from subject coordinators and the parents and board of trustees. So the decision was the result of many discussions and reflections and feedback.

Although the principal paid little attention to teachers' role in the decision of implementing PYP, observations and interviews indicated that teachers were encouraged to be involved and committed to curriculum planning. Teachers reported that they have shared in modifying and developing the curriculum. This was obvious when Mrs. Rita declared: “we were in charge of selecting and organizing curriculum content.”
Moreover observations proved that change is taking place in the classrooms. The learners profile, attitudes, the central idea and inquiry into, PYP key questions, and teacher and student questions for the unit have been posted on the bulletin board in each class. Teachers were relating student attitudes, questions, actions, and behaviors to each of these posted materials which are in the center of the PYP curriculum. For example, during the theme "Health and Well Being", one child asked the teacher a question "To what food group do lollipops belong?" the teacher explained for the whole class that the child was asking a connection type of questions. Then the teacher pointed to the PYP "Key Question Form" on the bulletin board, wrote down the child's question on a piece of paper, pasted the paper near the type "Connection Questions", explained for the students what makes this kind of question a "connection question", and encouraged students to think about the answer. Another example is when some students brought with them posters, pictures, or objects related to different kinds of food. The teacher explained how and what makes these students inquiries while pointing out to the "Student Profile" on the bulletin board.

Reform that relates to changes in the organization of the classroom was obvious in the additional centers as the discovery and listening centers. In the discovery center, for example, teachers provided students with materials which allow them to discover and learn new concepts that are related to the unit plan such as offering materials that allow them to understand and distinguish between things that are "sweet or salty". Changes in the classroom were also related to the materials which were made available for students. Stories in the reading center, cassettes in the listening center, CD’s in the computer center, educational games and puzzles in the toy center, and toys in the dramatic center were all related to the unit plan being discussed.
Change was also related to the varied teaching strategies that were employed. One example of restructuring is student-centered instruction in which interaction occurred in small groups rather than on the approach of whole-class instruction as teachers were used to do before. After introducing the unit, writing down the central idea, the inquiry into, teacher and student questions, and informing students about the activities, children were divided into groups and teachers were rotating among groups during the "center time". Another example is that students were not exposed to fragmented knowledge in different areas but rather to integrated subjects which required from the students to be critical thinkers who are able to produce knowledge rather than reproduce the facts for the teacher. For example, the teacher did not inform children about healthy food and healthy habits in the theme "Health and Well Being". Rather she told the children a story about a child choosing unhealthy food to eat and unhealthy habits. Then the children discussed with the teacher the consequences of these choices and the impact of them on the child's life. In other activities children had to complete a fruit pattern, or to sort fruit and vegetables to relate this theme to math. Language activities were also related to the unit. For example, children had to identify the letter names and sounds in the "Healthy letter necklace". In this activity each child had to name and draw, on a card, a healthy food that starts with a certain letter to form a necklace.

One more example is teaching based on inquiry approach. This approach depends on students to raise self-selected inquiry questions, ask and seek answers, and conduct research. In this approach, 'teachers pose question, listen to students' thoughts and arbitrate their discussions' (Walley, 1995, 259). For example, Learners did not just receive the information from the teacher but played an active role in their learning.
When the teacher introduced the unit "Health and Well Being" to the students, she asked students what they know about that unit and what they want to learn more about it. Students were encouraged to ask questions, the types of questions asked were further explained and written down. Teachers then added new activities to the prepared unit planner to meet students' interests.

Change was also evident in the methods and kinds of evaluation being employed. Assessment was of two types: formative assessment and summative assessment. Anecdotes, rubrics, and checklists were developed by teachers to assess students' performance. For example, after their visit to the dentist, the students had to fill a self assessment anecdote by putting a mark under the happy face or sad face for each of the following sentences: I sat quietly, I listened to the dentist, I said thank you, and I asked questions. Then the students had to draw what they have learned from the dentist.
Chapter V
Discussion and Conclusion

The case study began with a focus on the process of curriculum change and how coordinators, teachers, and parents responded to change brought about by the implementation of the PYP, and ended up with the role teachers played in this process.

Process of curriculum change

Interviews and observations indicated that in the process of implementing PYP teachers gradually reduced inconsistencies between their old traditional curriculum and alternative modes of teaching with the new curriculum. Going through these inconsistencies was anticipated by the school personnel and this helped them overcome this aspect of the change process. According to Bloomington (1992), the 'absence of early difficulty in a reform effort was usually a sign that not much was being attempted; superficial or trivial change was being substituted for substantial change. Anxiety, difficulties, and uncertainty are intrinsic to all successful change' (p. 748). The process of change can be illustrated by an initial phase which was characterized by the recognition of a need to make a switch, followed by a planning stage which was illustrated by involving teachers in pre-service and in-service training and obtaining the required resources. Implementation step at a later stage followed and was characterized by a feeling like novice at the beginning of the implementation of the new curriculum. Evaluation, an ongoing process, took place after implementation and is illustrated by a need to see how PYP works in actual practice. According to Wetherill and Applefield (2002), it is important at this stage to
acknowledge the changes that have been made, helping participants recognize their accomplishments and thus reinforcing their positive efforts' (p.210).

Preparing teachers and parents

The case study has also gained insights into this shift and the way in which teachers learned to make sense of the new curriculum in a collaborative in-service framework. Applying the program was not easy for teacher at the beginning of the first year of implementation. As they recognized how PYP is practiced, they began to interpret a new approach to teaching and learning, not based on dictating information to students but rather on engaging the students in the learning process. However, it is too early to tell if the implementation of the program have more success with students.

Even though the principal ignored the role of the teachers in the decision of implementing PYP, she did not ignore the nature of teachers' professional development and their involvement and commitment to curriculum planning. Interviews indicated that teachers were engaged in greater levels of professional development and peer collaboration. One of the key characteristics which helped teachers and coordinators understand how PYP can be implemented in the classroom appeared to be the training they had received. The principal asked PYP team leaders to visit the school and viewed these visits as an opportunity to gain new insights into the work. They required from the teams information about the performance of the school and asked visitors for observation of the classrooms and of the implementation of the educational program. These visits were perceived as an opportunity to ask for help when it is needed, to reveal to teachers what is going well, and to afford teachers
with in-service programs on areas which needed improvement. The pre-service and in-service programs provided to the coordinators and teachers should be continuous despite of the period of time the school will be engaged in the restructuring effort to attain the IB accreditation. Teachers appeared to be particularly in need of more professional support and development and of more effective in-service programs. Results showed that both teachers and coordinators agreed that they need more effective in-service training programs.

This case study supported the argument that the process of curriculum change should be maintained by collaborative conversational frameworks, where by teachers support each other within an atmosphere of trust and support. This situation seemed to play a crucial role in helping teachers to connect forces as they negotiate their way through uncertainties brought about by curriculum change. Opportunities for collaborative work may be considered one of the valuable resources for overcoming difficulties. According to Yeager (1997), when implementing changes in a school curriculum, teachers should be willing to consult experts, to work cooperatively with others, and to be researchers of their own teaching. Without achieving new knowledge and new skills, curriculum change will not happen.

Doubts and questions were raised by parents when the new program was introduced. Parents who suspected the success of the new curricula, preferred to move their children from the school. Even though the role parents had to play in the education of their children at home had been emphasized in every occasion teachers meet with parents, still some parents did not show any cooperation.
Barriers to curriculum change

Implementation of PYP was accompanied by barriers related to the concept of time and hard work, the organization of the children into groups, the worries of parents, the repetition of information during in-service programs, and the lack of resources. One of the major obstacles to implementing PYP was finding the time for teachers to meet together, plan, and learn new skills. Another barrier faced by teachers was teaching children the new routine of moving around centers in the classroom at the very beginning, but with time teachers and children were able to overcome this impediment. One more barrier that teachers and coordinators mentioned was parents’ reluctance to or fear of change. Because people tend to resist any change, it was normal for parents to feel afraid and resist it at the beginning. Pre-service and in-service programs were very much effective in helping teachers learn about the program but teachers found that some of the presented information was being repeated in these programs and this is another barrier faced by teachers. The last barrier was related to lack of resources and this is an obstruction which the teachers tried to overcome by preparing the materials themselves.

The role of teachers in the change process

Eventhough, most of the teachers were not involved in the decision of adopting the new program, no evidence was found to show that teachers opposed curricular reform. Results exhibited that teachers had complete freedom to plan, develop, implement and evaluate their PYP unit planner. Moreover, teachers had engaged in activities related to reform as developing the new curriculum, modifying the curriculum to meet the Lebanese scope and sequence, participating in in-service programs, and visiting other school that are implementing the PYP to learn more
about the program. The change process in the school was spearheaded by the principal and driven by a personal vision of how the school needed to change. To accomplish this vision, a linkage between “top-down” and “bottom-up” approaches was applied. The principal consulted with the board of trustees, parents committee, and some teachers before the final decision was carried out for the whole staff. Results showed that teachers supported curricular reform because they had to play a major role in modifying and developing the curriculum. The program was top down in its relation to decision making, but it was also bottom up in that attention was given to teachers in shaping the content of the school’s curriculum to meet PYP standards.

Limitations

This case study attempted to shed some light on the difficult road to change based on the school’s experience in implementing PYP. However, few limitations have been faced on the attempt to gather information for this case study. First, research based on the effectiveness of PYP is limited even though this program has been implemented for nine years. Second, because the program has not been spread in Lebanon yet, data gathering and analysis is restricted to one school. Third, minutes of meetings for the principal, coordinator, and teachers were not recorded at this school. Thus, the results of the case study can not be generalized.

Conclusion

This case study calls for further research on the effectiveness of this program on raising levels of student achievement. The connection between implementing this program and students’ academic outcomes has not been firmly established. Researchers should take a closer look at the results of implementing PYP; they need
to explore the question of students’ intellectual achievement. Further new questions were developed leading to further exploration:

- What are the results and impact of PYP on learners?
- How can Lebanese schools integrate PYP, MYP, and DP into the Lebanese national program?
- What are the effects of implementing international programs in Lebanese schools?
Chapter VI
Guidelines to Prepare a PYP Unit Planner

Difficulties for preparing a PYP unit planner

Before presenting the guidelines of preparing a PYP unit plan, a brief description of difficulties faced by teachers in preparing a PYP unit planner will be explained.

First, it was difficult for teachers to integrate the stand alone unit with the PYP unit. In addition to the six PYP themes, this program provides space for teachers to incorporate stand alone units to each theme. These units cover the language, math, and concept objectives that are listed in the scope and sequence for each grade level. The organization of the unit planner thus requires from teachers extra time and hard work to plan language, math, and concept activities that match with each of the six PYP themes. The preschool coordinator explained this by saying: “we have stand alone units and the planners; in the stand alone unit we choose the math, language, and concept which we want to cover and we include them in the PYP unit.”

Second, time provided for teachers to meet and prepare the unit was not enough. Teachers faced difficulty in preparing the unit plan because it takes too much time to be prepared and it requires from all subject teachers to meet and integrate the activities across all subject matters. Even art, music, and P.E. teachers should meet with subject teachers to plan activities related to the theme “the first unit took us a whole week to finish preparing it”, said Mrs. Ria.
Third, it was not easy for teachers to re-prepare the unit planner after discussing the theme with the students. The PYP unit planner leaves a space for student questions. After introducing the theme to the students, teachers should include students’ questions into the prepared unit plan and include activities that relate to these questions as Mrs. Rita mentioned, “we then have to include extra activities to the planner to answer students’ questions.”

The last problem faced by teachers was the lack of feedback on their work especially on the way of preparing the unit plan. After being introduced to the guidelines on how to prepare a unit plan, teachers were not given any feedback on their planners. This was expressed in Mrs. Rita’s words: "They never tell us that this is good or bad; they just offer us general standards and we have to work on them and choose our own method."

**PYP Unit Planner**

“The IBO provides a structured approach to collaborative planning in the form of a unit planner designed to assist teachers in planning effectively for inquiry” (IBO, 2002, p. 11). The PYP planner is divided into six stages (Appendix B). The following section is a sample that shows how teachers can prepare a PYP unit planner.

First, the teacher has to choose a unit title for one of the six PYP themes mentioned in the introduction. For example, for the theme "Sharing the Planet" the unit title can be "The World of Animals." In this section the teacher should also include the subject areas that this unit will focus on. Moreover, the class level, the
time teachers need to cover the unit, the name of the teachers and school are all included in this section.

<table>
<thead>
<tr>
<th>Theme: Sharing the Planet</th>
<th>PYP Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Title:</strong> The World of Animals</td>
<td><strong>Proposed duration:</strong> 4 weeks</td>
</tr>
<tr>
<td><strong>Focus:</strong> Language – Math – Science – Art – Drama – P.E.</td>
<td></td>
</tr>
<tr>
<td><strong>Level:</strong> KGII</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher(s):</strong></td>
<td></td>
</tr>
<tr>
<td><strong>School:</strong></td>
<td></td>
</tr>
</tbody>
</table>

Depending on the theme and the unit, the teacher then has to develop a central idea. The central idea is a short statement that states clearly what students are going to learn about. For this unit the central idea can be "All animals have life cycles characterized by physical changes." Under the central idea, the teacher has to state two or three inquiries. These inquiries declare the expected learner outcome. An inquiry into for this unit can be: (1) the different kinds of animals; (2) the life cycles of animals.

Stage 1: What is our purpose?

A concise description of the central idea to be addressed and the scope of the inquiry

a) Central idea:

b) An inquiry into:

In stage two, the teacher will include all the resources that she will be using in the unit. These resources will even include people who will visit the school, or places the students will be visiting, the cassettes and CD's in the listening and computer center, the songs, and art materials will be listed as well. For this theme for example, the
teacher may bring real animals to the classroom and the outing can be a visit to the vet.

**Stage 2: What resources will we use?**

*People, places, audio-visual materials, related literature, music, art, computer software, etc.*

In stage three, the teacher develops two or more questions that are based on inquiries stated in stage one. These questions are listed under teacher questions and are then related to the types of questions in the key question form. For example, if question one is "How are the animals alike and different?" the teacher has to write number one in the box near the "Form" type. If question two is "How the animals grow and change?" the teacher has to write number two in the box near the "Change" type. Student questions are then added when the teacher introduces the unit.

**Stage 3: What do we want to learn?**

*The key questions which will drive the inquiry*

<table>
<thead>
<tr>
<th>Form (What is it like?)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Function (How does it work)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causation (Why is it the way it is?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change (How does it change?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connection (How is it connected to other things?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perspective (What are the points of view?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility (What is our responsibility?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection (How do we know?)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teacher questions:

Student questions:
In stage four, teachers plan language, math, science, art, music, and P.E activities for each question in stage three and these activities are integrated. A math integration activity, for example, is to ask students to choose a favorite animal and tell why he/she likes it. The teacher writes the reasons on a paper and then students paste his/her paper under the picture of the animal in the "Favorite Animal Graph" to see the most liked animal.

For a language integration activity, the teacher can prepare an address book with the beginning letter for each group of animals. Students will then paste pictures of animals that belong to the same group under the letter that the animals fit in.

Creating an animal by pasting body parts of different animals is an art integration activity.

During science activities, students discuss the different kinds and groups of animals and their characteristics as body covering, food, and body parts. Music activities shall include songs that are about animals and P.E. teacher can ask students to pretend and move like different animals.

**Stage 4: How best will we learn?**

*Teachers and or students designed activities which will address the key question*

In stage five, teachers present the formative assessment, summative assessment, and student self-assessment. A formative assessment, for example, can be "Animal Riddles". Teacher mentions different characteristics of an animal for the children to
guess. A summative assessment can be an "Animal Web". Each group of four students will choose one animal group and paste pictures for animal’s characteristics for that group. A student’s self assessment can be a rubric for the vet’s visit.

**Stage 5: How will we know what we have learned?**

*The strategies which will be used to assess learning*

This stage is filled at the end of the implementation of the unit plan to evaluate the significance of the whole unit. In this section teachers list what did and what did not work for their students and explain why. Teachers will use the analysis of this stage when they approach preparing the same unit in the following years.

**Stage 6: To what extent did we achieve our purpose?**

*To what extent were the purposes fulfilled; was the unit relevant, challenging and significant, were the resources adequate; were the concepts, skills and attitudes addressed?*
References


Appendix A

Interview Questions

I. Questions to the teachers

Preparing teachers (Broadhead, 1999; Conley & Goldman 1995; Conley & Goldman 1998; Jacob & Frid, 1997; Montgomery & Way 1995; Pollard, 1994)

1. What past or present curriculum changes are you aware of and what do you think about these changes?

2. Did you have an opportunity to understand the main features of the PYP?

3. What was your attitude towards the proposed change?

4. Was the change different from your personal beliefs, interests, roles and responsibilities?

5. Do you feel that the implementation of this program have given you the opportunity to do things you’ve always wanted to do?

6. What can you tell about your experience in adopting new concepts and new teaching processes?

7. Does this program cause teachers to increase number of instructional strategies they employ?

8. Does it lead to greater curriculum integration?

9. Does it lead to new and diverse ways to organize or group students for learning?

10. Have you received pre-service and in-service training on how to implement PYP? If yes...
11. How do you rate the effectiveness of your pre-service and in-service professional education, particularly in relation to preparation for curriculum change?

12. How well prepared did you perceive yourself at the beginning?

13. In what ways do you think your role as a teacher has changed after implementing PYP?

14. How do you evaluate the effectiveness of the previous system?

15. How will pupils benefit from PYP?

**Barriers** (Afferbach, 1996; Broadhead, 1999; Conley & Goldman 1995; Montgomery & Way 1995)

16. What problems have you faced while you were preparing for the change and how did you deal with them?

17. What barriers, if any, did you face trying to make these changes while you were implementing the new program? OR what facilitates or inhibits implementing PYP?

18. Do you think that too much change has happened too fast for the school?

19. Does this program lead to increased teacher collegiality and cooperation?

If yes, do you have time to sit and work together?

20. What were the biggest challenges arising for you and your school from PYP? (Resources, time/system for planning, time to work with other teachers, getting the required training, develop new ways of working)

**The role of the teacher in the change process** (Conley & Goldman, 1998)

21. Were you an active member in the preparation of the new curriculum?

22. Have you evaluated the effectiveness of implementing the new program?
23. Have you been an active participant in the formal discussions when PYP was planned to be implemented at the school?

II. Questions to the coordinators (Anderson, 1995; Jacob & Frid, 1997)

1. What preparatory work did you do before the onset of the new program?

2. What was the change process followed for implementing change at your school? (Steps to introduce the new program)

3. What were the change goals and priorities?

4. How did you prepare teachers and parents for this change?

5. Was there an adequate time interval between the decision to introduce PYP and the actual date of implementation?

6. Do you think that this duration was suitable to prepare teachers for this change and to provide the necessary opportunities to update knowledge and resources?

7. What were the factors and conditions that supported and promoted the change process?

8. What problems, if any, did you anticipate and what plans did you make to deal with them?

9. What were the biggest challenges arising for you and your school from PYP? (Resources, time for planning, getting the required training for teachers, develop new ways of working)

10. What barriers, if any, did you face trying to make these changes?

11. In what ways are outcomes monitored in order to evaluate the effects of change?
12. Were teachers involved in decision-making regarding the implementation of PYP? If yes, how have they been involved?
Appendix B

PYP Unit Planner (IBO, 2000)
### Stage 3: What do we want to learn?
The key questions which will drive the inquiry.

<table>
<thead>
<tr>
<th>Form</th>
<th>What is it like?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Function</td>
</tr>
<tr>
<td></td>
<td>How does it work?</td>
</tr>
<tr>
<td>Connection</td>
<td>How is it like it is?</td>
</tr>
<tr>
<td>Change</td>
<td>How is it changing?</td>
</tr>
<tr>
<td>Connection</td>
<td>How is it connected to other things?</td>
</tr>
<tr>
<td>Perspective</td>
<td>What are the points of view?</td>
</tr>
<tr>
<td>Responsibility</td>
<td>What is our responsibility?</td>
</tr>
<tr>
<td>Reflection</td>
<td>How do we know?</td>
</tr>
</tbody>
</table>

**Teacher questions**

| Student questions |

### Stage 4: How will we learn?
Teacher- and/or student-designed activities which will address the key questions.

### Stage 5: How will we know what we have learned?
The strategies which will be used to assess learning.

**Student self-assessment**

### How will we take action?
How the students will demonstrate their ability to choose, act, and reflect.