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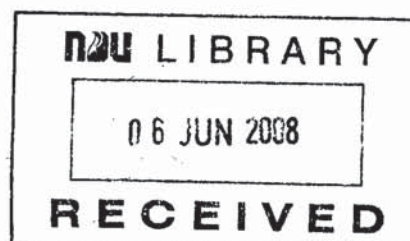
**Bordeaux Business School
Institute of International Business**

Comparative Study Between Lebanese Baccalaureate and International
Baccalaureate

**A Thesis Submitted in Partial Fulfillment of the
Requirements for the Joint Degree of the Master of Business
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Approval Certificate

Comparative Study Between Lebanese Bacculaureate and International
Bacculaureate

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DECLARATION

I hereby declare that this Thesis is entirely my own work and that it has not been submitted as an exercise for a degree at any other University.

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ABSTRACT

Abstract: Among the many schools in Lebanon, there has been a growing trend for some schools to adopt a new type of Baccalaureate in Lebanon-the International Baccalaureate. This phenomena warrants an investigation especially since the educational system in Lebanon already has a Baccalaureate program. In order to be able to better understand the reasons behind the implementation of a foreign Baccalaureate like the International Baccalaureate, we must first consider the qualifications of each Baccalaureate program. This study sought to detail both the International and Lebanese baccalaureates and then compare the two Baccalaureate programs. A survey study of the perceptions of students and teachers of the International and Lebanese Baccalaureates in Lebanon was undertaken. The purpose of the survey was to reflect the conceptual frameworks of the study and collect and evaluate the attitudes and reflections of the students and teachers about the International and Lebanese Baccalaureate programs. The main purpose of this study is to shed light on the disparities between the qualifications, structure and implementation of the International and Lebanese Baccalaureates. Finally, the aim of this study is to formulate recommendations for improvements within the Lebanese Baccalaureate. It is my hope that this study will expose the urgent need for the reform of the educational system in Lebanon. This will be exposed in terms of uniformity of curriculum, uniformity of assessment tools, guidelines and tools for internal assessment, the decrease of bias during official exam writing, the decrease of bias while students are taking the official exams, the decrease of bias during official exam grading, the integration of technology within the classroom and last but not least, the availability of teacher training workshops so that teachers are aware of the latest teaching tools and materials, strategies, and technology.

LIST OF TABLES

Table 1: Lebanese Data.....	(74)
Table 2: International Baccalaureate Data.....	(77)
Table 3: Lebanese Baccalaureate Curriculum Components.....	(82)
Table 4: International Baccalaureate Curriculum Components.....	(84)

LIST OF FIGURES

Figure 1: The Diploma Program Hexagon Curriculum Structure.....(24)

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CONTENTS

Abstract.....	IV
LIST OF FIGURES	VI
ACKNOWLEDGMENTS	VII
Chapter 1.....	1
AN OVERVIEW OF THE LEBANESE EDUCATIONAL SYSTEM.....	1
1.1 Development of Ministries.....	1
1.1.1 Educational Reform and the Lebanese War.....	2
1.1.2 Schooling in Lebanon.....	3
1.1.3 Review of Curriculum.....	5
1.1.4 Higher Education.....	7
1.1.5 Vocational Education.....	8
1.1.6 Roots of the Lebanese BaccaLaureate.....	9
Chapter 2.....	11
REVIEW OF LITERATURE	11
2.1 Rationale	11
2.1.1 Philosophy of the International BaccaLaureate:	11
2.1.2 Philosophy of the Lebanese BaccaLaureate.....	11
2.2 The International BaccaLaureate	12
2.2.1 Important Terminology:.....	12
2.2.2 Assessment Components in the International BaccaLaureate:	14
2.2.3 Bias in the International BaccaLaureate:	17
2.2.4 Cultural Issues in the International BaccaLaureate:.....	22
2.2.5 Curriculum Structure of the International BaccaLaureate:	24
2.2.6 Examination Process:.....	29
2.2.7 Internal Assessment in the International BaccaLaureate:	32
2.2.8 Grading and Marker Reliability in the International BaccaLaureate:	33
2.3 The Lebanese BaccaLaureate.....	37
2.3.1 Assessment in the Lebanese BaccaLaureate:	37
2.3.2 Bias in the Lebanese BaccaLaureate:.....	38
2.3.3 Teacher Perceptions in the Lebanese BaccaLaureate:	39
2.3.4 Cultural Issues in the Lebanese BaccaLaureate:.....	40
2.3.5 Internal Assessment in the Lebanese BaccaLaureate:	42
2.3.6 Curriculum in the Lebanese BaccaLaureate:	42
2.3.7 Examination content and Production in the Lebanese BaccaLaureate:	44
2.3.8 Language in the Lebanese BaccaLaureate:	45
2.4 Findings	46
Chapter 3.....	50
Procedures and Methodology	50
3.1 Introduction.....	50
3.2 Rationale of methods	50
Chapter 4.....	53
Survey Findings	53
4.1 Lebanese BaccaLaureate Students:	53
4.2 International BaccaLaureate Students:.....	54
4.3 International BaccaLaureate Teachers Results:	55

4.4 Lebanese Baccalaureate Teachers Results:.....	56
4.5 Discussion of the findings of student surveys (Lebanese and International Baccalaureates):	57
4.6 Discussion of the findings of teacher surveys (Lebanese and International Baccalaureates):	59
Chapter 5.....	61
Conclusions and Recommendations	61
5.1 Formal Assessment in the Lebanese Baccalaureate:	62
5.2 Consistent Application of Lebanese Baccalaureate Program Requirements:....	62
5.3 Curriculum structure of the Lebanese Baccalaureate:	63
5.4 Bias in the Lebanese Baccalaureate:.....	64
5.5 Grading in the Lebanese Baccalaureate:.....	64
5.6 Impact of the Lebanese War on the Lebanese Baccalaureate:.....	65
5.7 Recommendations.....	65
5.7.1 Program Reform and the Need for Assessment of the Current Status of the Lebanese Baccalaureate:.....	65
References:.....	69
APPENDIX A.....	71
Student Survey For L.B. Students	71
APPENDIX B.....	73
Student Survey For I.B. Students	73
APPENDIX C.....	74
Lebanese Data.....	74
APPENDIX D.....	77
International Baccalaureate Data.....	77
APPENDIX E.....	80
Teacher Survey (L.B and I.B. Teachers)	80
APPENDIX F.....	82
Lebanese Baccalaureate Curriculum Components	82
APPENDIX G.....	84
International Baccalaureate Curriculum Components.....	84

CHAPTER 1

AN OVERVIEW OF THE LEBANESE EDUCATIONAL SYSTEM

1.1 Development of Ministries

The twenty first century is quickly developing into the age of knowledge whereby learned people and their ideas, opinions and views are the incentives of the industrialized nations. A small developing country in the Middle East, Lebanon is a nation with high aspirations at the brink of rejuvenation after a civil strife (1975-1990) that was ensued by a notable decrease in the educational and vocational training levels. In addition, there has been a vast immigration of this country's skills. Currently Lebanon must work hard on restructuring the educational system because it is only through education that the youth of Lebanon can become productive members of society and compete effectively in the market. In an increasingly integrated global market, education and skill development are critical in empowering nations to be internationally competitive.

Gaining its independence in 1943 was a monumental time for Lebanon. In order to properly coordinate the charge of educating the masses, the Ministry of National Education and Fine Arts was in charge of managing the educational system. Restructuring and reorganizing was indispensable on the part of the ministry and were undertaken since 1943 so as to expand on this sector. The ministry instituted the Educational Centre for Research and Development, in 1971, given the responsibility of training teachers, preparing school books, and undertaking educational research. In 1989, the duty of public education was partitioned for some time to three ministries. The Ministry of National Education, Youth and Sports was allocated responsibility for general school education. The Ministry of Vocational and Technical Education was granted the function of managing public vocational education. Last but not least, the Ministry of Culture and Higher Education was solicited to consult cultural affairs and tertiary level education.

In 1998, the Lebanese populace was approximated at 3,505,794. “Of these, 86.4% were literate, leaving 476,788 people (13.6%) who could neither read nor write. The general budget the government puts into education makes up 12.96% of the total budget involved in developing Lebanon.” [2] With the assistance of such a budget, the country can reconstruct the private and public educational and vocational systems, therefore increasing possibilities for employment of school and university graduates. In the year 2004 the Lebanese government allocated only two or three percent of its GDP on public spending on education.

Of the countries of the Middle East, Lebanon has retained its status as a major contributor to the enhancement of the quality of education in this region of the world. From the alphabet to implementing modern teaching methods and progressive learning, Lebanon is one of the countries that set the example to the rest.

The Ministry of Education and Higher Education, and the Ministry of Vocational and Technical Trainings were the first two ministries to be founded solely for the purpose of better serving the needs of the education system.

1.1.1 Educational Reform and the Lebanese War

After the Lebanese independence (November 22nd, 1941), the government instigated changes in the Lebanese Educational system. It, in 1964, substituted the old curriculum that had been used since the days of the French mandate, for new ideas and methodologies. The Arabic language became the primary language in all schools and throughout the different phases of education. The government granted students the ability to opt for a second language (English or French, among others). This phenomenon of second language acquisition had been observed in the previous years but in 1964 became more apparent. In 1968 and 1971, the curriculum underwent further transformation. Goals and milestones were set for each level of the educational system. [2]

A whopping 80% of the Lebanese could read and write before the Lebanese war, in 1975. Of all the countries in the Arab world, Lebanon maintained one of the premier literacy rates. To a great extent, the years of pandemonium and unrest that have frenzied the Lebanese have been a result the decades of war and foreign intervention. It was only until a cease fire was declared and order was restored that Lebanon was able to focus great effort on transforming the cultural turmoil that emerged and restructuring the damaged that had consumed the educational sector.

1.1.2 Schooling in Lebanon

The Lebanese schooling system offers three venues for education: private, public and mid-private. Of these three categories, private schools are owned and run by non governmental personnel. At the other end of the spectrum, the public schooling system is controlled by governmental authority (The Ministry of Education) and, unlike the private school sector, free of charge. This is made possible through the use of indirect taxes for funding. The Ministry of Education procures all necessary books and materials for all stages of the schooling process. All materials provided are offered to the student for at insignificant prices and often at no cost. Parochial schools- such as the “Ecoles des Saint Coeurs”, function as private schools however charge fees similar to those of public schools. They are known as mid-private schools. Since these schools do not receive sufficient funding through the collection of tuition fees, the rest of the cost is supported financially by governmental sources.

"Public schools altogether amount to a total of 192 high schools and 1,125 schools with elementary education. Of the high schools, 16 are boy schools, 12 are girl schools, and 164 are mixed." [2] In all the schools, the concept of a homeroom teacher does not exist. Scholars are visited by several teachers, each of a specific subject. Each classroom can typically host 25 students yet due to the shortage of teachers; the classroom capacity may be forced up to as much as 40 students per class. The material taught falls under the categories of mathematics, sciences, history, civics, geography,

Arabic, and French/English/both. Among the less frequent subjects taught are physical education, drawing, and others.

The curriculum set by the Ministry of Education is compulsory, yet private schools may incorporate supplementary material, as long as what is being taught is approved by the Ministry of Education. For example, computer literacy is currently being taught in many schools, and at some levels of the educational ladder this subject may even be equated with a high coefficient. In the case of this example, students at a loss are those whose school cannot procure the proper facilities for such a subject matter.

In addition to adding subject matters, private and mid-private schools may take account of certain aspects of another system such as the American-program (freshman instead of the baccalaureate level), or adopt it all together, on condition that the Ministry supervises these curriculums.

The main curriculum program in schools builds on four phases of education:

- The Kindergarten stage is a preparatory stage prior the elementary classes. It is optional and children aged three embark on their educational journey here. In a little while, it will be obligatory and a 2 year program.
- The Elementary/Primary years compile five years of education and are soon to become six years. The average child enters this stage at six years old and proceeds to the next level at age eleven.
- Junior high school/ Intermediate school is a four year program during which the student sits for an official exam at the end of the fourth year to receive the “Intermediate Certificate”.
- High school/secondary school is the next 'schooling' phase. This two year curriculum ends with the student sitting for an official exam to get the “baccalaureate part 1 certificate”.

Once the baccalaureate part 1 certificate is obtained, seniors proceed to the baccalaureate part 2 class (equivalent to the freshman year in American colleges). At this stage, students are to major in one particular subject choosing from a list of Philosophy, Experimental Sciences, or Mathematics. Students are often counseled and advised in order to make the more appropriate choice for their capabilities. Ascription to one of the previously mentioned streams is in essence determined by academic performance in the senior year (government examination results). Nevertheless, the choice often reflects the personal preference of the student. [2] Not all of the students who pass the Baccalaureate part 2 exam go on to pursue University level education. There are many choices available to students who have attained their Baccalaureate degree, including University, technical and vocational schools and immediately joining the workforce.

Successful completion on the part of students majoring in Philosophy may later concentrate in the Humanities, Law or Social Studies. Students who major in Experimental Sciences may then specialize in the Natural Sciences, Health Sciences or Medicine. Interest in the fields of Mathematics, Engineering or Economics is open to students majoring in Mathematics. Business Administration and Agriculture are open to all students. [2]

1.1.3 Review of Curriculum

The most recent review of the educational curriculum in Lebanon took place in September 1998 for the Secondary level and the intermediate level. The government commissioned the Center for Education Research and Development to supervise educational specialists recruited to revise and restructure the existing syllabi at the pre-university level. Considering that the reformation of the educational system touched on the greater part of the formal schooling structure, it is noteworthy to mention that the vocational institutes and technical schools were not included in the overhaul.

The important points can be highlighted out of the improvements made through the program restructurings:

1. The first point holds that new subjects of study be added to the curriculum, with some of the older, now inappropriate subjects removed in order to better equip students in the stages of pre-university formal education for the present day necessities of jobs and good citizenship. This step was implemented by introducing topics more usually known to be university level subjects: economics, sociology and administration. The introduction of crafts, handiwork, and shop classes allows for the easier transition into technical schools. [2] Through creating these associations, school education would better train students to have the ability to distinguish between career options and choose what would best suit their preferences and the labor market equally.

2. The second point holds that a fundamental adjustment in assessment from a quantitative method of exams and grades to a more inclusive and qualitative system of appraisal of the students' capabilities and competence to ensure that with promotion from one grade to another the students have achieved a mastery of the notions and internalized the skills needed. "The new curriculum also makes schooling compulsory for six years which means till the age of twelve, to be prolonged to fifteen years later on." [2]

Similarly, a change can be noted at the secondary level. As opposed to the former three subject divisions, the new curriculum encompasses a fourth division presenting students with wider options in terms of selecting a direction in which to set their university years on. The baccalaureate certificate part two is now divided into four separate fields: General Science, Humanities, Sociology and Economics, or Life Science.

Even with the improvements made as compared to the old system, educational critics still feel the need to voice several major concerns in an aim to make further improvements:

- The swift overture of the new system allowed for very little time to study the flaws and initiate any further changes, if deemed necessary.
- Though the new system was put into action, the teachers in most of the schools were not equipped with the necessary skills to implement the system properly.
- Schools also were at a shortage of equipment such as computers and other teaching materials essential for the proper delivery of the new curriculum.

Even with the serious consideration that the system should have been implemented more smoothly and after some time, it has become apparent that what needs to be corrected can be achieved gradually and without aborting the system.

1.1.4 Higher Education

In Lebanon a student has several choices of what to do after completing the baccalaureate. These choices include university, college, institutes, or high technical schools.

Lebanon has 43 universities of which only two, the American University of Beirut (AUB) and the Lebanese American University (LAU), are internationally accredited. The first university to be established was the Université Sainte-Joseph (USJ), a French university. Universities in Lebanon provide instruction in Arabic, French or English. The official languages in Lebanon are Arabic and French. English and Armenian are also widely used and equally popular. Four out of forty three universities are French, seven are English and one is Armenian. Almost all these institutes teach in Arabic as well, but the second chosen language (English, French and Armenian) is used as a basis for instruction. A specific number of years are to be completed, depending on the choice of program, for example: Civil Engineering takes five years of studying whereas Business Management takes only four years. [2]

Each university has particular criteria and teaching practices. Some universities allow for promotion on a yearly basis, as opposed to a quarterly or semester foundation.

At the university level, students must get their baccalaureate degree or its equivalent from the Lebanese Ministry of Higher Education, thereby certifying its authenticity.

In addition to the private universities available, the Lebanese University (LU) allows for thousands of graduates to have the opportunity for a better future through providing lower income groups access to higher education. In any other university, these same students may have been deprived of this opportunity in any other establishment due to the inability to procure funds. “The Lebanese University was established by decree 6267 of October 20, 1951. In 1959, three faculties were created: Faculty of Arts, Faculty of Sciences and Faculty of Law. This public university has, at present, some 135 programs of study and some 14 faculties (88 programs are at the undergraduate level), compared with 92 at AUB and 80 at St. Joseph University.” [2]

Several private organizations in Lebanon offer students the opportunity to sit for foreign exams like the SAT I, SAT II, TOEFL, GCSE, or even ‘A’-levels. The English universities require these exams for students graduating from an American-system high school program who wish to enter as freshman students. The completion of these exams allows for high school graduates to obtain their baccalaureate equivalence from the Lebanese Ministry of Higher Education.

1.1.5 Vocational Education

For students who opt not to enroll in a university, there are three main types of schools for vocational education in Lebanon: technical schools, vocational high schools, and technical institutes. Many public high schools have vocational education to train students and youths and unemployed persons for jobs and assist employees bring up to date or broaden their job skill. Colleges may also provide vocational programs in addition to some business firms creating divisions for vocational training. Even some rehabilitation centers (public and private) conduct vocational training for needy persons. Vocational centers put forward work-study programs as part-time employment in the high school or university itself or cooperating businesses or industries. Their times of

instruction are usually flexible and allow for those attending the institutes to get training while working elsewhere.

1.1.6 Roots of the Lebanese Baccaureate

The Baccaureate is an exam that Lebanese, French and International students sit for at the end of the lycee, secondary school or high school (depending on the country). The aim of the Baccaureate is to provide students with standardized qualifications that will later allow them to work in certain sectors or gain higher education. There are different kinds of Baccaureates all over the world, some countries have their own baccaureates and other countries follow the International Baccaureate. The Lebanese Baccaureate has the spirit of the French Baccaureate. The French Baccaureate has three types: the general baccaureate, the professional baccaureate, the technological baccaureate. For purposes of this introduction it is only relevant to discuss the general Baccaureate. Within the general Baccaureate there are three streams: Sciences, Economics and Social Sciences, and Literature. Each stream assigns different coefficients to different subject matters. From this springboard, the Lebanese Baccaureate stems in many respects from the French Baccaureate, this makes both baccaureates similar. For those International students at International schools, the International Baccaureate offers a different sort of challenge to the students following this program. For this reason, comparing the Lebanese Baccaureate with the International Baccaureate could provide room for more comparison and possible venues for discussion and improvement of one or both Baccaureates.

The following study takes a closer look at the International Baccaureate and the Lebanese Baccaureate, comparing both baccaureates from the aspects of language, academia, grading, examinations, cultural issues, curriculum, and philosophy. The study also details a survey study undertaken to collect the views and opinions of teachers and students in Lebanon of both the Lebanese and International Baccaureates. Finally, the study presents suggestions for reform and improvements within the Lebanese

Baccalaureate. These reform measures are suggested to be implemented by the Ministry of Education in Lebanon.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Rationale

To be able to adequately compare and contrast two baccalaureate systems, I believe it is necessary to be aware of the goals and outcomes that are to be achieved by students enrolled in each program. It is essential that one is conscious of the rationale behind the creation of either the Lebanese or International baccalaureate and what is expected of students in terms of learning outcomes in order to be able to even consider if student needs are being met via each program.

2.1.1 Philosophy of the International Baccalaureate:

The International baccalaureate presents a very clear statement outlining the kind of individuals the program hopes to set out into the real world:

“The International Baccalaureate Organization aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect...These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.” [6]

2.1.2 Philosophy of the Lebanese Baccalaureate

The objectives of the Lebanese baccalaureate are not as clearly defined but their essence exists through the objectives set by the Ministry of Education under the new educational programs. There are two basic objectives to be highlighted here. Primarily the new curriculum aims to eradicate illiteracy in Lebanon. To attain this goal, the school board has made schooling obligatory up until age twelve. The rationale behind this is due to the results of a report issued by UNESCO that state that children who leave school before the age of twelve have a higher tendency of falling into illiteracy. The second main objective set by the Ministry of Education is to create a link between the

pre-University and University level education. That is to say, the Ministry decided to introduce several topics from the University level to the high school level. Apart from Sociology and Economics that were introduced as a result of the sociology-economics track being added as a program option in grades twelve and thirteen, technology and manual crafts were introduced.

Riad Tabbarah, Director of the Center for Department Studies and Projects (MADMA) in Lebanon, has written a book entitled *The Educational System in Lebanon 2000*. Through his writings, we witness a huge difference in envisioned learning outcomes on behalf of both Baccalaureate programs. [2] This paper aims at discussing the reasons for these differences and the impending consequences. In addition to this, the purpose of this study is to compare and contrast two baccalaureate systems: the Lebanese Baccalaureate and the International Baccalaureate. As many schools in many countries around the world, including Lebanon, begin to adopt the International Baccalaureate program in one or more of its stages (the primary years program, the middle years program or the Baccalaureate program) one may wonder why this is. This phenomenon begs the question of the superiority of the International Baccalaureate to the Lebanese Baccalaureate, if any level of superiority exists. If in fact both Baccalaureates are identical in both curriculum content, quality of instruction and pre-university preparation, then what is the purpose behind adopting a ‘foreign’ Baccalaureate to replace the Lebanese Baccalaureate? Such a question is too complex to be answered in this study, let alone one study. One may have to consider the different facets to such a question and realize that the answer is not a straight forward answer. Because the scope of such a question is too wide, I have narrowed my study to the following: a literature review of the available material detailing both the International Baccalaureate and the Lebanese Baccalaureate and a survey of teachers and students in Lebanon with the aim of collecting opinions and perspectives.

2.2 The International Baccalaureate

2.2.1 Important Terminology:

Before delving into the comparative study of the IB and Lebanese Baccalaureate, I would like to begin with a clarification of three very important terms: tests,

examination and assessment. The understanding of these terms and their proper usage is crucial to the validity of this study. People outside of the Education sector may assume that these terms are interchangeable or even share the same meaning. This assumption for people in the field of education is slanderous because there are differences that impact the education and development of students when these terms are used interchangeably. The clarification of these terms is essential to the full comprehension of the International Baccalaureate and Lebanese Baccalaureate alike.

Tests are defined as a collection of many short-answer questions (either selected-response/multiple-choice questions or questions requiring only a few words in response) that students must answer under controlled, isolated conditions in a set time. Often marked (or graded) automatically.

Examinations are a collection of one or more tasks of various types (short-answer, extended-answer, problem-solving or analytical questions; sometimes practical or oral tasks) that students must respond to under controlled, isolated conditions in a set time. This is generally marked/ graded by examiner or teacher.

Assessment is a term used to cover all the various methods by which student achievement can be evaluated. Assessment instruments may include tests, examinations, extended practical work, projects, portfolios and oral work, some carried out over a prolonged period and sometimes marked by the student's teacher.

A distinction is also often made between *summative* assessment, aimed at determining the level of achievement of a student generally at the end of a course of study, and *formative* assessment, aimed at identifying the learning needs of students and forming part of the learning process itself. Although these two functions are apparently quite distinct, the same assessment instruments can often be used for either purpose, the difference lying in the way the outcomes of the assessment are interpreted and applied. Biggs (1998) has also made it clear that it is not helpful to regard formative and summative assessment as being mutually exclusive. The two approaches should interact and be mutually supportive. [6]

The clear differences that have been outlined with the definition of these terms will help us to compare and contrast the educational goals set and the likely expectations of students in both programs the International Baccalaureate and the Lebanese Baccalaureate.

The term *assessment* is favored to detail all sorts of assessment instruments used by teachers and evaluators to have a say to the overall evaluation of a students. Proponents of the International Baccalaureate Some of these instruments can be used formatively during the course of study as well as in a summative manner towards the end of it. Creators of the IB program make certain distinctions within the larger scope of *assessment* that relate specifically to the Diploma program of the International Baccalaureate. The first of such distinctions is *formal assessment* and this includes some multiple-choice tests for a few subjects and examination papers for most subjects, intended to be taken at the end of the two-year course, and a variety of other tasks (essays, research essays, written assignments, oral interviews, scientific and mathematical investigations, fieldwork projects and artistic performances) spread over different subjects and completed by students at various times under various conditions during their course.

2.2.2 Assessment Components in the International Baccalaureate:

Assessment can be used for a variety of purposes. The intended purpose for a given system of assessment will have a major impact on its style and format. For formative assessment, the main purpose is to provide detailed feedback to teachers and their students on the nature of students' strengths and weaknesses, and to help develop students' capabilities. Methods of assessment involving direct interaction between teacher and student are particularly helpful here. The teacher is seen as a supporter rather than a director of learning [9] & [10], and should make use of assessment tasks and instruments that help the student work in what Vygotsky refers to as the "zone of proximal development". This is the range of achievement between what the student can

do on his/her own, and what the student can do with the support of the teacher. This is a similar concept to the notion of “scaffolding” formed by Wood *et al* (1976) [8], where the teacher provides the scaffold for the construction of learning but only the student can do the constructing. The intention of the teacher must be to set formative assessments that are at just the right level of challenge for the student, and to keep adjusting that level as the student progresses. It is more important that formative assessment correctly identifies the knowledge, skills and understanding that students should develop, rather than accurately measuring the level of each student’s achievement. *Reliability* is therefore a much lower consideration for formative assessment than *validity*. Summative assessment is used for quite different purposes, including the provision of information about student achievement, the certification and selection of students, an accountability mechanism to evaluate teachers and schools, and a driving force for reform of curriculum.

According to the standard definition, the *validity* of an assessment is the extent to which it actually measures what it is stated to measure. The term *reliability* is used to define the accuracy of measurement resulting from an assessment, and how likely it is that the same result would be produced in slightly different circumstances. An assessment is reliable if a student would gain the same result were he/she to repeat the assessment on different occasions, and also give the same result if the assessment were marked by different markers. Validity and reliability are widely regarded as essential characteristics of any assessment system, particularly a high-stakes one where the outcome is of great importance to the student or the teacher. The terms validity and reliability, and the approaches to their measurement, were derived very much from a psychometric background. The construct, or aptitude, being measured is defined by the test itself and uniformity is ensured by weeding out questions that produce erratic responses by test takers. It is accepted that high levels of technical reliability are not achievable in an examination system (for example, Wood, 1991 [7]; Satterley, 1994 [11]). However, given the broad and complex educational skills and achievements a performance assessment is usually attempting to address, particularly in relation to students at the end of their secondary education, there is considerable doubt as to the

worth of a concept such as a “true score” for each student, that assessment processes should be trying to identify.

Student variability is a major factor in making high reliability impossible. Student variability refers to the different abilities of students that make it difficult to find a level of uniformity. A degree of approximation must be accepted, although this should not be taken to mean that assessment organizations can afford to ignore a strong requirement to make results as dependable as possible, at the level at which they are reported. Gipps (1994) [14] states that “Assessment is not an exact science, and we must stop presenting it as such. This is of course part of the post-modern condition—a suspension of belief in the absolute status of ‘scientific’ knowledge. The modernist stance suggests that it is possible to be a disinterested observer, while the post-modernist stance indicates that such detachment is not possible...The constructivist paradigm does not accept that reality is fixed and independent of the observer; rather reality is constructed by the observer, thus there are multiple constructions of reality. This paradigm would then deny the existence of such a thing as a ‘true score’.” [6]

Bias can be defined as a difference in outcome of an assessment process that is not related to a genuine difference in the aptitude or achievement being measured. Bias can arise from the test items/ assessment tasks themselves, or from the marking of a performance assessment. In the latter case bias becomes an issue of marking reliability. Bias arising from the assessment tasks themselves is the more significant problem of principle. The student sub-groups may be defined by gender, ethnicity, social class or language competence, in fact by any defining characteristic that could be argued to be irrelevant to the construct being tested. However, claims of bias towards or against particular student sub-groups are not always self-evidently justifiable. In the early years of the development of intelligence tests, those items that gave rise to a significant difference in response between the genders came to be excluded. This was based on the understanding that there should be no difference in the construct of intelligence between males and females, and so any item that revealed such a difference must be measuring something irrelevant. Such a view is at least open to debate, and various authors have offered explanations for differences in measured intelligence between different

groupings of people, relating to biological, environmental or socio-economic factors, as well as the nature of the tests themselves.

2.2.3 Bias in the International Baccalaureate:

The suggestions of such disparities for the teaching and learning process alike are numerous and versatile in nature. A more favorable notion sees tests to include a similar portion of matter that allows for a degree of difference in performance by diverse sub-groups of the population. In such, no one sub-group is seen to be at a disadvantage in the overall scheme of things. Nevertheless, designing tests in an equitable and unbiased manner will inevitably place a strain on the blueprint of a test. Decisions regarding specific test items are at times partial or justifiable and ought to be set so that each article can be overtly associated to the fundamental build of the test and its goals and take into account the possibly numerous reasons for bringing in bias as opposed to relying solely on statistical grounds in relation to the relative difficulty or challenge posed. With respect to systems, the Lebanese Baccalaureate and the International Baccalaureate bias appears at a variety of levels.

It has been suggested by Humphreys (1986) [13] that it is necessary to differentiate between “difference” and “bias”; an objectively determined fact and a judgment about the relevance of the difference, respectively. The International Baccalaureate Organization (2004) publication identifies six possibilities by which questions might be unfairly impact student responses.

- The context in which the question is set (for example, mechanical toys and certain sports favor boys, dolls and domestic work favor girls).
- Essay questions on impersonal topics favor boys, while those involving human relations favor girls.
- Multiple-choice questions favor boys.

- Coursework/project work components of assessment favor girls.
- Some questions may be intelligible only within certain cultures, for example a question about elderly people living on their own might be quite alien to some cultures, or a question involving a typical male or female role from one culture may appear very out of place in another.
- A question using language or conventions of one social class would favor students from that class. [6]

These question types, though found in the literature pertaining to the International Baccalaureate do not necessarily prove relevant only with regards to the Diploma Program. It is more than likely that the same types of questions, in addition to others as well create unequal opportunities for responses in terms of student response in the Lebanese Baccalaureate program.

The approach that creators of such forms of assessment should maintain is debatable. Assessment tools ought to be created in a manner that allows for, by virtue of a multiplicity of question types, the brunt of bias, taken as a whole to be abridged.

The components of the various questions when taken and examined one at a time should be meticulously checked so as to keep away from the flagrant categories both historically and socially known to create an atmosphere of inequality. Such unwanted outcomes may be circumvented via the pre-testing of questions. One way to achieve the desired result would be to use a sample group containing members of the various sub-groups in question. Methods of pre-testing help to relieve and expose bias that is known to testers and other unexpected forms of bias that may arise. It is noteworthy to mention here that one may never remove all bias from the testing scenario. In the event of such an occurrence it would be likely that there would be little room for creativity and a poor selection of question content. The inevitable chance of unintentional bias aside, a middle ground perspective of assessment design, employing an assortment of types of assessment task and a variety of formats, may very well present a likely solution to the

problem of bias. As can be seen further on, the International Baccalaureate Organization is meticulous when it comes to creating test questions that are challenging, containing minimal bias and provide room for creativity.

Assessment designers must take into account that the goals they set reflect equality of opportunity and of access to assessment as opposed to the traditional equality of outcome that can be accomplished by maneuvering the directions of test items according to a set of pre-determined response statistics. The evident deficiency in the fairness of the assessment process is by and large, not the only contributor to bias in education, and in comparison with other more serious and detrimental factors, fairness in the assessment process may seem very trivial.

“This kind of consideration formed the rationale behind testing for aptitude rather than achievement, but it has come to be understood that assessment of pure aptitude, ability or potential, separated from social background and educational experience, is not possible. It is also not possible to regard educational achievement in an objective fashion that is independent of social context and culture. The concept of educational success is defined and measured according to the standards of a restricted section of any given society.” [6]

The marking process may also be a venue for bias to occur. This may be due to a variety of factors ranging from the personal attitude of a student to neatness of handwriting and presentation, and excessive consideration for aspects such as formatting, punctuation and spelling, which although extremely relevant in some case, may have little or no impact in other assessment contexts. Controlling for these types of bias exists within the realm of marker training and surveillance. This matter will later be discussed in greater detail.

Assessment of the International Baccalaureate is high-stakes, criterion-related performance assessment. It is based on the following aims:

- International Baccalaureate assessment should support the curricular and philosophical goals of the program, through the encouragement of good classroom practice and appropriate student learning.
- The published results of International Baccalaureate assessment (that is, subject grades) must have a sufficiently high level of reliability, appropriate to a high-stakes university entrance qualification.
- International Baccalaureate assessment must reflect the international-mindedness of the program wherever possible, must avoid cultural bias, and must make appropriate allowance for students working in their second language.
- International Baccalaureate assessment must pay appropriate attention to the higher-order cognitive skills (synthesis, reflection, evaluation, critical thinking) as well as the more fundamental cognitive skills (knowledge, understanding and application).
- Assessment for each subject must include a suitable range of tasks and instruments.
- Components that ensure all objectives for the subject are assessed.
- The principal means of assessing student achievement and determining subject grades should be the professional judgment of experienced senior examiners, supported by statistical information.[6]

This list is not designed to reflect any hierarchy in the goals of assessment because many of the points highlighted are interrelated, and because the International Baccalaureate program is based on integration and coordination, assessment is first and foremost to sustain and encourage high levels of student learning. Complete dependability on assessment results, though indicative, cannot take precedence over student learning.

Alec Peterson (1971) [12], depicted the early development of International Baccalaureate assessment by stating that:

“What is needed is a process of assessment which is as valid as possible, in the sense that it really assesses the whole endowment and personality of the pupil in relation to the next stage of his life, but at the same time [is] sufficiently reliable to assure pupils, parents and teachers, and receiving institutions that justice is being done. Yet such a process must not, by its backwash effect, distort good teaching, nor be too slow, nor absorb too much of our scarce educational resources.” The aim of the International Baccalaureate is to help students become “inquiring, knowledgeable and caring” and “active, compassionate and lifelong learners” (IBO mission statement). Therefore, these characteristics must be embodied in the assessment structure. The ambitions that guide the International Baccalaureate as articulated in the mission statement must be sustained through the assessment techniques and the goals of assessment. It can be seen that the constructive perspective of the learner is reflected in the characteristics of students, explicitly stated in the IBO mission statement. Students enthusiastically participate in the learning process, take accountability for their own learning, expand the horizons of their knowledge, comprehension and interpretation, and skills through inquiry units. Qualities such as caring and compassion are trickier to be integrated in the formal assessment; even so they should have a place in the overall assessment system. This is mostly attained through the creativity, action, service (CAS) requirement, although there are several references to ethical working practices elsewhere in the assessment system.

As for evaluation principles, International Baccalaureate evaluation places a strong weight on legitimacy, keeping in mind that the manner in which the evaluation is conducted will have a key effect on how the International Baccalaureate is taught within schools. In the past few years this key effect has been purposely boosted by growing amounts of feedback to schools and teachers regarding performance of students and ways to improve this performance.

The Diploma Program Assessment Principles and Practices publication of the International Baccalaureate Organization, 2004, states that Comprehensive research

studies on the predictive validity of Diploma Program results have yet to be conducted, but the small number of informal studies carried out and the substantial amount of anecdotal evidence suggests that the predictive validity of diploma results is high. The assessment model (collection of assessment instruments) applied to each subject is designed to be broadly based, including a variety of types of evidence, both to ensure construct validity and to improve the ability to generalize the results as much as possible.” [6]

2.2.4 Cultural Issues in the International Baccalaureate:

The International Baccalaureate is extremely widespread: it is studied by students in over 100 countries. Besides the academic aims set by the program, the IBO also pursues the development of “caring young people who help to create a better and more peaceful world through intercultural understanding and respect”, and “who understand that other people, with their differences, can also be right” (IBO mission statement). So not only is there an international context, but also an intercultural purpose to teaching, which should both be reflected in the evaluation. Language plays a significant role here. Diploma Program evaluations are done in English, French, and Spanish. Usually examinations are prepared in English and then translated to the required language. Comparability of demand across languages is facilitated by sensitive translations, which in some necessary cases leads to modifications of the original English version. In case it is noticed that a slight advantage/disadvantage is given to students of one language due to translation, this change is compensated for with a corresponding change in grading. For this reason many senior examiners are bilingual or even trilingual. Among the wide range of courses the International Baccalaureate offers, there are various second language courses available in different levels of proficiency, as well as literature courses in the students' best language (as long as there are enough literary works to constitute a curriculum.

Moreover, there is a substantial cross-cultural dimension comprised in many International Baccalaureate subjects and their evaluation. For example:

- In the literature course (language A1), students are required to study a piece of literature originally written in a language different from that of the course being followed. Assignments, including a cross-cultural perspective, on these works are asked from the students.
- In second-language courses (for example, language B), the language must be studied in a compelling cultural and practical setting. Awareness of the cultural setting is taken into account during evaluation of language use.
- A mandatory section on world history is included in the history courses in order to develop an international perspective on historical explanation.
- The economics course includes a sizeable amount of material on international economics and development economics for students to understand economic theory and application from different national and cultural perspectives.
- Students are required to carry out an investigation into the relationship between two musical genres from different cultures in their music course.

Other subjects deal with the topic of cultural diversity in a more thorough and integrated manner with special attention to the diverse cultural emphasis actualized as a result of a catered subject syllabus structure. “The Diploma Program courses of study are thus understanding of cultural variant as well as promoting cultural tolerance. This poses evaluation difficulties such as preserving comparability among the optional approaches that are permitted for part of many subjects.” [6]

The International Baccalaureate has created a system of assessment that allows for bits of both extremes. “There are some highly formalized assessment tasks, including multiple-choice tests, but there are also many more substantial open-ended tasks, and a focus on process through teacher marking of student projects and practical work. This range of student performances is reduced to a final subject grade (on a scale of 1 to 7) according to grade descriptors, which represent the standards for each subject. Such

standards may exist on paper in generic form, and be reinforced by written exemplar material, but in the final analysis the complexity and variety of information that must be synthesized in order to arrive at a judgment requires an interpretation of standards resident in the minds of the experienced senior examining team.” [6]

It is noteworthy to mention that regardless of who is in charge of marking test papers, the pass or fail decision is based solely on the assessment of student performance against set standards. The International Baccalaureate program is an extensive and well laid out program of study, which allows for conciliation and cooperation between the pre-university specialties preferred in some national systems in certain countries and the extensive range of subjects found in other countries. The hexagon model is representative of the core of the International Baccalaureate program. Six academic areas encircle the core. “Subjects are studied concurrently and students are required to follow a range of subjects representing all the major disciplines.” [6]

2.2.5 Curriculum Structure of the International Baccalaureate:

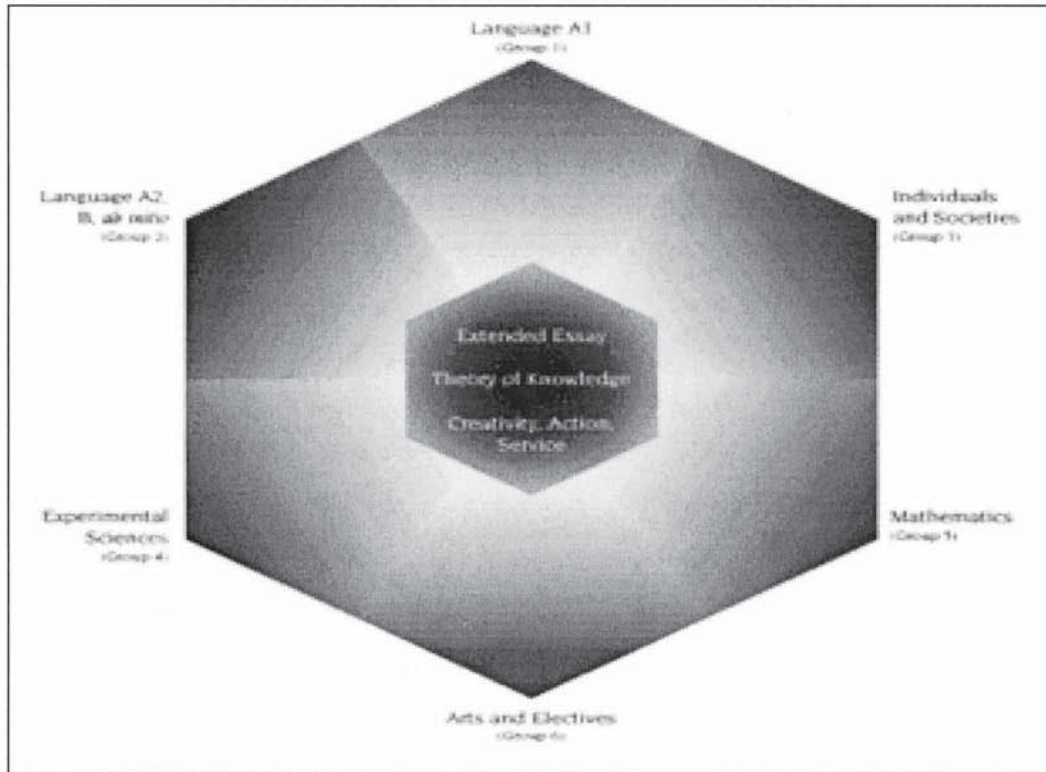


Figure 1: *The Diploma Program hexagon curriculum structure*

The following section is taken as is from the Diploma Program Assessment Principles and Practices publication of the International Baccalaureate Organization, 2004, and relates to the figure above.

Group 1: language A1

Group 1 consists of literature courses in a student's first language. The courses introduce students to literature from a variety of periods, genres and styles. Students refine their skills in writing, speaking and analysis, and learn techniques of literary criticism. The courses help students maintain strong ties to their own culture while giving them an international perspective through the study of literature from around the world.

Group 2: second language (language *ab initio*, language B, language A2, classical languages)

The acquisition of a second language carries great importance in the Diploma Program. Students learn to understand and use the language, and gain insights into the cultures of the countries where the language is spoken. This subject group includes courses for beginners (language *ab initio*, classical languages), second-language learners with previous experience with the language (language B), and bilingual students with a high level of fluency (language A2).

Group 3: individuals and societies

This group includes nine subjects: economics, geography, history, philosophy, psychology, social and cultural anthropology, business and management, Islamic history, and information technology in a global society. By studying human experience and behavior, as well as economic and social environments and institutions, students gain an appreciation of diverse perspectives and values. They learn to analyze concepts and theories, and to use quantitative and qualitative methods of data collection and analysis.

Group 4: experimental sciences

The sciences offered in this group are biology, chemistry, physics, environmental systems and design technology. Students become familiar with the body of knowledge, methods and techniques that characterize science and technology, and learn practical laboratory skills.

Group 5: mathematics and computer science

This group includes courses designed for a range of abilities and interests. Some are aimed at students who wish to study mathematics in depth, while others are for those who need mathematics to enhance their understanding of other subjects. The courses seek to provide students with mathematical knowledge and principles. They help students develop logical and creative thinking in mathematics and use abstraction and generalization to reach conclusions.

*All students must follow a course in mathematics, and may also elect to study computer science.

Group 6: the arts

The arts group includes visual arts, music and theatre arts. The emphasis is on making art. That is, students gain an understanding of the arts and learn to express themselves artistically by creating, producing or performing works of art. In addition, they explore art forms from different cultures throughout the world.

Core requirements:

At the heart of the Diploma Program are three requirements that students must fulfill in addition to their work in six subjects.

- Theory of knowledge

One of the most important elements of the Diploma Program is the theory of knowledge course, which challenges students to question the bases of knowledge—to reflect critically on how they know what they believe to be facts or the truth. It consists almost entirely of exploring questions about different sources of knowledge (perception, language, emotion, reason) and different kinds of knowledge (scientific, artistic, mathematical, and historical), such as:

- Do we construct reality or do we recognize it?
- Does knowledge always require some kind of rational basis? Is there any kind of knowledge that can be attained solely through emotion?
- Is scientific knowledge progressive; has it always grown? Can we reach a point where everything important in a scientific sense is known?
- Creativity, action, service (CAS)

Another important element of the Diploma Program is creativity, action, service (CAS). To fulfill this requirement, students must take part in artistic activities (creative); sports, expeditions or local or international projects (action); and community or social service projects (service).

Participation in CAS raises students' awareness of community needs and gives them an opportunity to apply what they have learned in the classroom to address these needs. It also gives them confidence in their ability to bring about change. The projects must have tangible results and offer real benefits to others. Reflection on their experience is also an important part of student involvement in CAS.

- The extended essay

An extended essay, of at most 4,000 words, offers students an opportunity to conduct an in-depth study of a topic of special interest. The experience and skills gained

in carrying out independent research and producing a structured, substantial piece of writing provide excellent preparation for independent study at university level. The Diploma program's curricular structure defines the framework in which assessment must operate.

Assessment models:

Individual assessment models are constructed for each subject at both HL and SL, for theory of knowledge (TOK) and for the extended essay. Two examination sessions are held each year, in May and November, with results being released in early July and early January respectively. The published results are made up of subject grades, which equate to diploma points, in the range from 1 (lowest) to 7 (highest) at HL and at SL, and grades from E (lowest) to A (highest) for TOK and the extended essay. A matrix table converts the combined letter grades for TOK and the extended essay into a points score from 0 to 3. CAS does not contribute to the point's total, but authenticated participation in CAS is a requirement without which the diploma cannot be awarded. Thus, the maximum possible points total for a DP student is 45 (6 x 7, plus 3). A student gaining 24 points or more, subject to certain conditions relating to the distribution of points across subjects will be awarded the diploma. The policy of making the same number of points available for both HL and SL courses, despite the difference in workload and achievement at the two levels, is a deliberate one, encouraging students to regard their SL courses as equally important to their HL courses. Students are encouraged to achieve their best across all disciplines and are appropriately rewarded for doing so. [6]

To qualify as a candidate having completed the entire International Baccalaureate program, students must successfully complete programs from all groups, one to five. As an elective course students may select from the sixth group or a sixth course from one of the previous five. Higher level courses that serve as a 'specialty courses' are taken and range from three to four with two to three being at the standard level. Extensive teaching hours are required to achieve the goals set by the International

Baccalaureate program, rigorous training allows for more in depth hands on investigation in the fields of preference subject areas, without alienating other areas.

In class assessment formats are assessed in themselves and tweaked. This revision assists in the curriculum evaluation procedure for each subject matter. Regular revision assists in the improvement of the quality of the program as each year goes by. Proposals and suggestions from 'curriculum review' groups designed to collect data and research areas in need of improvement are also presented to a higher review committee for further deliberation. "This committee has responsibility for the overall academic quality of the courses that make up the Diploma Program and approves proposed syllabuses and assessment models. The committee is particularly concerned with:

- Academic standard and comparability of different courses
- reducing overlap of subject content or objectives to a minimum, and encouraging instead courses that complement each other
- monitoring the overall assessment burden on students, teachers and the IBO, to ensure its manageability
- eliminating unnecessary duplication of assessment." [6]

2.2.6 Examination Process:

Each International Baccalaureate examination session is heavily reliant upon the hard work many people of various tasks. Thousands of teachers are assigned to preparing the students at the emotional, psychological and educational level and contribute to student evaluation via internal assessment.

The delegated senior examiners share the responsibility of preparing the examination papers and marking schemes and to head and survey marking teams and process. Chief examiners are usually very well experienced and also practicing

International Baccalaureate teachers. They contribute to the richness of the program by bringing in practical expertise to the assessment process.

Deputy Chief Examiners are not permitted to assist with put in order examination papers if their schools enter candidates during that session. Seeing as there are two sessions during the academic year, there is a strenuous process of comparison between the first and second exam to ensure that the level of difficulty is comparable. The visual arts, theatre arts and theory of knowledge are not offered as a pencil and paper examination but in the form of projects.

Creating examinations that are challenging, that have a high level of internal validity and that are at a suitable level of intellectual challenge, and rid as much as possible from bias, is both time consuming and strenuous. In order to insure that every examination session is fair and of same level of difficulty, chief examiners are responsible for creating new questions that have not been used before. Usually, the examinations are written a year and a half to two years ahead of time. The reason for this is so that the questions could be subjected to different stages of scrutiny and revision.

To ensure construct validity, regulations have been drafted by a group of chief examiners and approved by the International Baccalaureate Organization that detail design and requirements for each examination. Even the smallest of details such as the number and type of questions are pre-decided.

The importance of such a detailed and step by step procedure is to ensure that the sets of questions are at a suitable level of cognitive difficulty and most importantly they are not too predictable. The production stage of the International Baccalaureate examinations goes on for about sixty eight weeks and can be divided into the following stages of production. In the beginning, the papers are commissioned and initial drafts are prepared within fourteen weeks. Then, pre-meeting drafts submitted to the Examination Paper Production Department and formatted properly. This stage takes about five weeks. Paper editing meetings are then held and necessary revisions are made

during the following four weeks. Post-meeting drafts are then submitted to the Examination Paper Production Department so that the needed amendments can be carried out and further revised. Again, four weeks are allocated to this process alone. Post-meeting drafts are then sent to the external advisor in order to be revised and checked for appropriate cognitive difficulty levels within the following five weeks. The subject area manager and the curriculum area manager then make their additional comment. This takes another three weeks. Final drafts are then written by the examiners and sent the Examination Paper Production Department, a process that takes nine weeks, followed by another seven weeks of review and amendments on the part of the subject area manager and the curriculum area manager. The Examination Paper Production Department then conducts the first proofreading followed by a second proofreading by the examiners and a final proofreading by the subject area manager and the curriculum area manager. The proofreading process alone has the duration of eighteen weeks. Final house style and consistency checks are performed during one week and the exam are sent to the subject area manager and the curriculum area manager to be signed off and sent to printing. This process also takes three weeks. Once the printers conduct a final proofreading (one additional week), the papers are the printed, bagged, sealed and sent off to schools; this process takes twelve weeks to be completed. [6]

This extremely detailed process is advantageous because it allows for at the many stages in the process, a careful contemplation, deliberation and reflection of the examination papers being produced. Second, at many crucial stages in the writing process, it is essential for all of the papers to be grouped together before moving on to the next stage. This, although creating a chance for delay in the production process, also allows for consistency throughout the process. The production schedule is cleverly devised and intended to make certain that the examination papers reach their destinations in schools and test centers at least three weeks the first day of the examination process. This decision was made in light of the inevitable occurrence of delays in delivery around the world, it ensures that all centers are ready and able to administer examinations on time and resourcefully.

2.2.7 Internal Assessment in the International Baccalaureate:

Internal assessment is a central aspect of the evaluation of students in the International Baccalaureate Diploma program. Internal assessment can materialize in many different structures varying from oral presentations and student abilities to hold meaningful discussions in second language courses, to a student created portfolio in the visual arts program that serves as evidence of the artistic development and creativity of each student. Students are also assessed on the basis of portfolios and projects for all of the major subjects. Such portfolios may highlight the investigative work that a student has undertaken or the experiments conducted as research in the experimental sciences. The nature of the internal assessment is crucial in itself. Projects and portfolios not only demonstrate individual creativity, but center on a specific set of skills that are to be attained at the end of the course for each of the major subjects.

Each school, in accordance with the International Baccalaureate Organization guidelines drafts a checklist or rubric that allows for teachers to assess their students as objectively as possible. In relation to the earlier detailed specifics of the International Baccalaureate Diploma program, this type of internal assessment relates in particular to the case of group four and group six (the experimental sciences and the arts, respectively). In these cases, careful selection of items of practical student work is important so that the work can reflect the student's ability to meet specified criteria. Nonetheless, internal assessment is not entirely the product of each school independent from the other. There are several practical aspects that are widespread among all internal assessment. Primarily, and possibly most importantly, internal assessment should be embedded into the classroom routine and be as authentic as possible. Seeing as internal assessment capitalizes on the acquisition skills as opposed to straight forward knowledge of the course material internal assessment activities can be either the product of teacher or student selection or a collaboration of both. Activities may serve a dual purpose of both internal assessment and the development of required skills. In this way, internal assessment can be a tool in the formation of student knowledge and part of the final assessment. As the nature of a portfolio suggests, a working portfolio that keeps record of all the work of students may then be a tool for summative assessment, both

through teacher selected items and student selected items from the working portfolio. Internal assessment should not be viewed as a separate “bolt-on” activity to be conducted after a course has been taught.

Often times, group activities also provide a fairly accurate basis for the internal assessment of student work. It is necessary to keep in mind that written work cannot be used as an internal assessment tool unless each student in the group submits a written report that is entirely the product of their own work, without the collaboration of team mates. To ensure that all the students are familiarized with the expectations and criteria of the internal assessment, it is crucial that the teacher takes the time to discuss this assessment with the students and provide them, along with each activity a rubric that outlines what the students will be assessed on and the expectations of the teacher with regards to each assignment.

2.2.8 Grading and Marker Reliability in the International Baccalaureate:

We will now explore the issue of marker reliability and the capability of multiple assessments of the same examination to provide nearly the same grade to an examination regardless of which examiner marked it within the framework of the International Baccalaureate. The International Baccalaureate outlines three processes to guaranteeing marker reliability. Initially, only those examiners who have proven it to be in their range of abilities to mark consistently and objectively are able to partake in the marking process. This first criterion can be ensured by selecting markers that are also International Baccalaureate Diploma Program teachers, thus they are familiar with the process and the requirements of the task and expectations upon them. Next, all examiners are subjected to a quality control check of their marking with every examination session. This procedure is called moderation and represents a hierarchical process. Each assessor, with the exception of the senior examiner who is responsible for setting the marking standards sends a sample of their marking to a steadfast examiner, who assumes the role of a team leader. The job of this examiner is to assess by statistical comparison the effectiveness of each examiner and the reliability of their marking skills. Finally, no examination process could be complete without providing

markers with training in the skills needed to properly perform the task required of them. “This is an area of activity that is planned for much greater development by the IBO in the near future, through electronic means. Diploma Program examiners receive detailed instruction about the administrative procedures to be followed that will allow successful moderation to take place, and also substantial information about how to allocate marks. The IBO uses two principal methods of guiding examiners in the allocation of marks: analytic Mark schemes and assessment criteria.” [6]

Analytic mark schemes are designed for examination matter that requires a response and/or a given final answer, in other words, the final response to the question is preceded by subcomponent answers that may or may not be required of students to write down but necessary for the completion of the question successfully. Mark schemes are geared to provide examiners with detailed coaching concerning how to split the mark allocated to a certain question in order to provide an adequate number of marks for each subcomponent. This marking technique is primarily geared towards technical subjects (science and mathematics). It allows for students to earn partial or full credit depending on how many steps of the question they complete correctly.

Assessment papers will inevitably have a few questions in which markers may need to employ some professional judgment in the case of alternative that may be valid. Marking schemes do not provide all the guidance necessary but they do give markers a sense of direction in terms of possible acceptable answers. “At the time of writing an examination paper and its accompanying mark scheme, the senior examining team may not always be able to anticipate all the common kinds of response that candidates will provide. Although every effort is made to predict the likely range of responses, this is particularly difficult on a global basis given the variety of educational cultures and teaching styles that exist around the world. To address this problem and reduce as much as possible the dependence on possibly variable examiner judgment, the senior markers for each examination paper in large entry subjects will meet soon after that examination has been taken and they review the scripts of a selection of candidates. This is called a standardization meeting, its purpose being to make a small number of final additions and amendments to the mark scheme in the light of actual responses written by a number of

candidates, and to ensure that the senior markers have an agreed interpretation as to how the mark scheme should be applied.” [6]

A second aspect of assessment involves open-ended questions that may also encompass a variety of possible valid answers. Though, both types of questions provide some space for variation in student responses, open-ended questions have too many variations for senior markers to draft mark schemes. As an alternative, assessment criteria are set. “Assessment criteria do not refer to the specific content of a candidate’s answer, although some may refer to the need for candidates to show specific kinds of content knowledge. The criteria concentrate more on the generic skills that candidates are expected to demonstrate, regardless of the specific individuality of the response.” [6]

Due to the inconsistent characteristics of responses, non-examination assignments, assessed both internally and externally, also depend on assessment criteria. It would be valuable to note that there is a correlation between assessment criteria and course objectives supporting high construct validity. Assessment criteria is not as clear cut as mark schemes in terms of allocated the deserved credit to each student but the set of assessment criteria provides a list of the elements that must be present in order to earn full credit. In addition, lower level assessment criteria are not dedicated solely to lower level cognitive skills by the same token; higher level descriptors are not kept back for higher-order cognitive skills. This is because there is a varying rank of achievement contained inside each of the cognitive skills. To provide a concrete example of assessment criteria and the achievement levels within them, the following section presents how the assessment criteria applies practically to the Language Arts.

0 The candidate has not reached level 1.

1 Little interpretation of the text

- The candidate’s ideas are mainly insignificant and/or irrelevant or

- The commentary consists mainly of narration and/or repetition of content.

2 Some interpretation of the text

- The candidate's ideas are sometimes irrelevant
- The commentary consists mainly of unsubstantiated generalizations or
- The commentary is mainly a paraphrase of the text.

3 Adequate interpretation of the text

- The candidate's ideas are generally relevant
- The analysis is adequate and appropriately illustrated by some relevant examples.

4 Good interpretation of the text

- The candidate's ideas are clearly relevant and include an appropriate personal response
- The analysis is generally detailed and well illustrated by relevant examples.

5 Excellent interpretation of the text

- The candidate's ideas are convincing and include an appropriate and considered personal response
- The analysis is consistently detailed and persuasively illustrated by carefully chosen examples. [6]

It is also necessary to highlight that moderation exists within internal assessment as well. True that the marking is carried out in the case of internal assessment by the

classroom teacher but marking is guided by a construction that depicts passing or failing moderation.

The International Baccalaureate Organization does not have a system that ensures that teachers are fully accredited and capable of applying internal assessment. The reason for this is that it would be inconceivably difficult and more than time consuming to supervise and organize teacher conduct in terms of the application of internal assessment. In comparison with monitoring assessors in charge of marking examination, the process of monitoring teachers assessing within their classrooms, all over the world is not feasible.

2.3 The Lebanese Baccalaureate

2.3.1 Assessment in the Lebanese Baccalaureate:

The Lebanese Baccalaureate does not continuously make distinctions in terms of the various types of assessment when it comes to assessing students' performance throughout the academic year. Because public and private schools operate similarly in terms of examinations, there is no need to make a distinction here. Schools in Lebanon generally divide the scholastic year into three parts. At the end of every part students sit for an exam, generally one exam for every subject matter. The result is a grade that contributes significantly toward the calculation of the final average, and that determines whether or not the student will be promoted. Every school and every teacher has their own way of preparing the exam that students will sit for. Some exams consist of multiple choice questions in which the answer is objective and little or no writing is required on the part of the student. Other exams have subjective questions in which a correct answer is pre-determined and students are expected to write anywhere from two to three sentences to a paragraph or page. A full score is given to students who are able to detail what has been presented during teaching hours of that subject matter. It is no stereotype to say that some level of memorization and regurgitation is needed for students to get a passing grade. In terms of the official baccalaureate exams, the process is similar but under controlled conditions. The students are assigned to examination centers by alphabetical order and this process is also designed to ensure that students of

the same class and from the same school do not end up sitting for the official exam in the same room. This is a security measure to lessen the chance of information being exchanged among students.

According to the 1999 report of the Ministry of Education, Sports, and Youth “paper setting and printing take place during the twenty four hours preceding the actual sitting of the examination.” The members of the committee are also held within the Ministry until the papers are distributed. [1] According to this same report, no method of school based assessment has yet been created to assist in determining whether or not the students will progress to the University level. Therefore, it appears that, unless by way of policy in a private school, student assessment is solely based on their cumulative scores from tests and examinations. This is very different from what the International Baccalaureate preaches.

The different skill areas and wide range of possible contextual frameworks in which skill and knowledge could be demonstrated are so diverse that precise, comprehensive measurement is not possible. This being said, there is a lot to question within the scope of the Lebanese Baccalaureate with respect to the reliability and validity of examinations. Furthermore, the lack of multiple forms of assessments may lead to the inaccurate diagnosis of a student’s competence or lack of. When this information is balanced against the International Baccalaureate and the multiple forms of assessment one may then be led to assume that the validity of the judgment of a student’s competency may be taken into greater consideration. This is due to the varied assessment and more importantly; this variety can, to some extent, demonstrate competence at different times and in different settings.

2.3.2 Bias in the Lebanese Baccalaureate:

For the Lebanese Baccalaureate bias arises in the examination rooms. Apart from the claim that there have been strict security measures taken to avoid the leakage of test questions and material there is bias within the actual examination rooms. No official research can claim the following but it is of importance to note student opinions after

completing their examinations. As I am a Baccalaureate level teacher, I can put in some of my own personal experience. It has come to my knowledge, as to the knowledge of many that there is some so called 'cheating' within the examination rooms. Some students have reported that answer sheets have been passed around or even the exchange of test papers between students. It would be fraudulent to imply that this happens in all examination rooms. Thus appears the bias. Who is to decide which students receive 'assistance'? Teachers usually proctor the official examinations, usually two teachers at a time. The occurrence mentioned above usually results when both proctors mutually decide to help the students. There are head proctors that circulate attempting to protect the reliability and reduce the bias in the examinations but this is sometimes hampered by the collaboration of room proctors. There are rumors about direct or indirect interference of certain senior officials in exams. Lists of names of certain students who are to receive "special" treatment are given to certain proctors and controllers during official exams. However, no written documents or evidence are notified in this respect. There is minimal, bias during the correction of examination papers in terms of helping out a certain student or overlooking certain mistakes. This is minimal because the names on the examination papers are covered and the examinations are corrected twice over by two separate teachers. A different form of bias arises in correction though. The correctors are paid by examination sheet. The pay is not top rate either. Therefore there is a competition for more papers and faster correction in order to be able to earn more money out of the process. There is also much frustration during the correction process because of the large number of teachers grouped in the same room together. It may seem that the bias has been minimized in terms of printing and distributing the exams, but the bias within the examination room and during correction may remain as a factor towards impeding able students or aiding inadequate students in proceeding to the University level. [1]

2.3.3 Teacher Perceptions in the Lebanese Baccalaureate:

In the 2000 report written by Riad Tabbarah, *The Educational System in Lebanon*, there is mention of the status of teachers that is relevant here to provide some reference to the feelings of under appreciation among teachers. Teacher complaints as

compiled by Tabbarah include the deficiency in the outlining of a clear national educational policy, the poor conditions of public schools, the sluggish and derisory progression of teacher training on the new curriculum, incongruous directives originating from government offices, among others. Teachers also feel that with the increased number of teaching days per scholastic year, their salaries are less in comparison to one unit of work. It is important to note that the vast majority of private schools offer government set salaries to their teachers, making the issue of underpaid and overworked teachers one that spreads across both the public and private sectors. There is also the issue of private school teachers being members of the labor market and subject to free forces of the market, as opposed to public school teachers. To add to this, private school teachers receive only health insurance from Social Security and in turn receive a lump sum as opposed to a monthly pension plan. The relevance of this information is to suggest that the economical burdens faced by teachers in Lebanon, in both the private and public sector, may be tied into the quality of teaching. It would be too idealistic to think that financial rewards ought not to surmount the intrinsic pleasure of teaching. Having said this, teachers may feel that they are not being properly compensated for their efforts, both within the classroom and during the marking process for the Lebanese Baccalaureate examinations. [2]

2.3.4 Cultural Issues in the Lebanese Baccalaureate:

Examiners must not forget to take into account the many different sub-groups that make up the diversity of a given population. Thus, the question that arises here asks if it would be biased or not to take into account those students with different kinds of learning style, each student has a particular and unique learning style. With the same question in mind, would bias occur if we were to consider the different types of student nature that would put them at a disadvantage during formal tests or examinations? In this case, is it necessary, or even feasible to take into account the different topics of interest to students when it comes to creative writing or essay writing tasks? Finally, and very relevant to Lebanon in light of the current political turmoil, should concern be given to the bias that may arise in different questions, knowing that these questions can be classified into matters of socio-politics? Equity in assessment, which includes the

avoidance of bias, has been discussed above with respect to the Lebanese Baccalaureate. However, the proof of bias, as opposed to difference in performance, is often a matter of fine judgment, linked strongly to the particular social context in which the assessment is conducted.

In Lebanon, the years of the Lebanese war contributed in a direct manner to the sharp reduction in teaching hours during the year, the reining in of the curriculum ensued accordingly. In terms of the Lebanese Baccalaureate, many private Universities began to become apprehensive of the quality of students that were awarded the Lebanese Baccalaureate degree and aimed at pursuing higher learning. Due to this apprehension, many Universities developed challenging entrance exams to sift through the academic quality of prospective students. Also, the education at private schools became a leading source of education as compared to public school education. Nevertheless, the educational sector statistics reports of the years 1970 to 1996 proved an increased level of enrollment for the post-primary levels from 37% to 43% as a net enrollment rate. Steady increases over the years indicated the decline of students leaving the educational system at different stages of the process. [2]

Many other foundations for the unequal opportunities in education may, in terms of contributing factors to bias, have a major impact on student achievement. Relevant to both the Lebanese Baccalaureate and the International Baccalaureate, differences in the quality of teaching within a school and between school districts, cities and the rural and urban settings, the availability of school resources and the discrepancies in the social conditions and level of family support given to individual students, both in terms of educational and emotional support in the home setting may have a great impact. Such factors that are very likely to impact student academic achievement have no way of being circumvented through assessment. Primarily there can be no set of criteria for which evidence for can be tested and secondly, the impact of such factors may not appear immediately but may surface some time down the line and in a variety of ways.

2.3.5 Internal Assessment in the Lebanese Bacculaureate:

The Lebanese Bacculaureate has yet not put into practice in a uniform manner a method of evaluation and assessments that allows for all schools to assess student performance in a way that can be understood and translated at the level of different schools. Yet, the Ministry of National Education, Youth and Sports with the collaboration of the Center for Educational Research and Development have drafted an Evaluation Unit in the December 1998 report as part of the project document. This report depicts the objectives and sub components of the plan. A central component revolves around the training of staff members in schools and educational centers. Training is focused on quality control of examinations and social research techniques. Part of the planning also involves overseas training for certain school personnel at different levels of the educational communities. Much of the project is composed of the different types advanced technology that will be used in the presentation of the project and the training of personnel. The project also recommends annual comparing and contrasting of examinations in different schools to test for efficiency and equity and taking the necessary steps to reform and amend the examination layout, quality and efficacy. This part of the program will also involve an international and national committee for evaluation. Self evaluation, with a committee of Lebanese educators the report depicts the different hardware, software and costs of the implementation of the program of reform. The complete implementation of the program was set to be for the year 2004. It is only necessary to give credit to the well detailed layout of the plan and the specific depiction of the necessary staff and personnel for the implementation. There is also a layout for the likely sustainability of the program of reform. The steps include an institutionalization of the Evaluation Unit within the Ministry with a permanent staff, an adequate budget for activities and the development of a mission statement, strategic plan and job descriptions for the Unit, agreed upon by the Board of Directors. [15]

2.3.6 Curriculum in the Lebanese Bacculaureate:

The general framework of the new Lebanese curricula was revised in the year 1999 in order to identify its strengths and weaknesses and target the efficiency of the

program. Much unlike the International Baccalaureate program, the students of the Lebanese Baccalaureate are in their Baccalaureate years separated into different sections of the Baccalaureate program. Each section: the language arts, the experimental sciences, the life sciences and economics and social studies, all have specific percentages associated with the different subjects matters taught to all the Baccalaureate students. Depending on the track followed, more or less weight is allocated to each subject. Life sciences track students will have then more weight on subject matters such as Biology and Chemistry than other track students. The reason for this is that the more the weight, the more the hours of lecture and study. The idea behind this system is to allow students to specialize in certain fields of study in order to increase their chances of performing well on the official examination.

Each track has an exam specially designed to cater to the expertise of the students. In other words, a typical examination for a Language Arts track student would require a longer and more comprehensive examination of English/French, Arabic, History and Geography. As a Baccalaureate teacher for the Economy and Sociology track, I can provide some of my own background and first hand experience. It has been my experience that during the last year of high school in Lebanon, students are drilled repeatedly. They are prepped with countless in school tests that resemble the actual official exam and a multitude of sample questions. Many teachers, if not all teachers, use previous official exams to train their students. It has often been a strategy to focus on exams dated two to three years before due to the increased likelihood of the repetition of several questions or at least a close approximation of what was studied, revised and rehearsed at school before sitting for the official examination.

Also, unlike the International Baccalaureate, students do not have to learn such concepts as the Theory of Knowledge, nor are they allowed to select two out of three sciences. There is also no official examination for a sport of the students' choice (which is also the case in the I.B.) or a third or fourth elective language, music or art.

In the Lebanese Baccalaureate, there is not one subject that is evaluated outside the 'paper and pencil' venue. It is necessary to bring up the issue of bias again. Allow

me briefly to analyze the two sides of the coin: on the one hand, the benefit of having project based evaluation, on the other hand, the relative setbacks. Project based evaluation can at some level be highly subjective. True enough, evaluators have a checklist or rubric that has in it all the different elements and markers that must be located within any project, so where is there room for subjectivity? It is possible for evaluators to prefer a certain layout, style, manner of presentation, argument, or other and be partial to one of two projects that have the same credentials with respect to the rubric. When one is partial to certain aspects of the project, bias occurs and deserving yet not very artistic or creative students may be discredited.

2.3.7 Examination content and Production in the Lebanese Baccalaureate:

In terms of the Lebanese Baccalaureate, it has been my experience that the exams are predictable, not only in the layout, but in the questions and content. The layout of the examinations are almost all similar, this certain 'predictability' helps teachers prepare their students for the exams and give pre-official examinations that will enable students to perform better on the actual exam. It has also been my experience, with students sitting for the Economics/Sociology track official exam that training them to read the newspaper regularly also improves their chances of success. My rationale behind this is as follows: the official exam for the Economics/Sociology track contains a question on an important event most often from that year in particular. During the entire year, a regular assignment I give to my students requires them to watch the news or read the newspaper almost daily, select one significant story, and discuss it in class. This way, I know that my students are up to date on current events in Lebanon and can discuss and analyze important contemporary issues with ease. I have noticed over the years that this skill helps students to write more coherently and express their thoughts effectively while citing evidence and supporting their claims. In addition, as I mentioned briefly above, it has also proven useful in my experience to prep my students by giving them questions from previous official examination session. There has been a trend of repetition of some of the questions every second or third year or so. The repetition occurs in several forms: sometimes the questions is taken word for word, other

times, it is rephrased or the numbers for calculation purposes have changed but the question requires the same skills as in its previous format.

In terms of the Lebanese Baccalaureate the production of examinations and the steps involved are not well documented nor are they available to the public. This lack of transparency in the construction of the examinations makes it difficult to discuss the elements involved and the time allocated to ensuring the reliability and adequacy of the examination content. As compared to the International Baccalaureate there is an evident lack of information.

It is noteworthy to mention that pre-testing in both the Lebanese Baccalaureate and the International Baccalaureate does not occur. The reason for this is fairly self explanatory: it is almost impossible to group together a reasonably representative test group for either Baccalaureate Programs. In addition, to perform such pre-testing, one would have to set questions in such a way that limits bias and provides questions that are challenging but at the same time not out of range of the students' cognitive abilities.

It is also relevant to discuss the issue of the language and terminology used in both the Lebanese Baccalaureate and the International Baccalaureate examinations. Seeing as the International Baccalaureate examination papers are, like the Lebanese Baccalaureate examination papers unrelated in terms of content and the language and terminology used is fairly familiar to the candidates, it is considered that the division of papers will have a lessened effect than in other subjects.

2.3.8 Language in the Lebanese Baccalaureate:

Here, I would like to mention briefly the varying levels in Language competency among students in the Lebanese school system. It is of popular belief in Lebanon that Language proficiency depends on the school from which the student has received formal academic instruction. Although not explicitly stated in any literature, the general population has pre-conceived ideas about the skills and credentials of not only Language teachers, but all teachers in Governmental schools in Lebanon. This

relates in a major way to the salaries of teachers in Governmental schools and the inconsistency in teacher training and workshops, if any, depending on the allocated budgets. Also, it is of common belief that teacher credentials vary depending on whether or not the schools are located in a rural or urban setting. The same can be said of private schools though. It is important to point out that all private schools select teachers based on criteria set by the schools themselves. Never the less, teacher selection is most often tied in with salaries and wages, also according to the allocated budget for staff recruitment. Also, within the realm of private schools there is some sort of hierarchy the minds of the general public pertaining to which schools parents see as 'better' to send their children to. Based on the above assumptions, language proficiency among examination takers depends on the quality of the language they have been exposed to during their years of formal schooling and the extent to which students have been trained to read interpretively and reflect critically on the material.

The Lebanese Baccalaureate program provides no evidence in the literature for authentic internal assessment. From my knowledge as a teacher for almost thirty years, I have observed that in the recent years, some schools have begun to assess students through portfolios, but this is not a predominant trend. The majority of schools still rely heavily or almost entirely on pencil and paper test, with projects making up only a meager part of student evaluation. This clearly puts some students at a disadvantage, especially if they are geared towards the application of fine motor skills to create models and multidimensional projects. In accordance with educational theories on the different learning styles (visual, auditory and kinesthetic) of different students, pencil and paper test do not truly reflect the full capabilities of the learner.

2.4 Findings

The literature review above shows clear discrepancies at many different levels between the International Baccalaureate and the Lebanese Baccalaureate. Initially one can easily see the lack of information about the Lebanese Baccalaureate in comparison to the International Baccalaureate. The International Baccalaureate Organization provides a yearly publication that details the changes made to the curriculum, if any, and

the various items that have been added or changed for one reason or another. When it comes to the Lebanese Baccalaureate the last governmental publication was made in 1999. In addition, many documents are not readily available to the public. Why is this? There really is no clear cut answer. Speculations suggest that simply such documentation has not yet been performed. Another speculation is the increasing discrepancy between what is preached and what is practiced. The Ministry of Education details plans to implement the use of technology in classrooms, and the use of alternative assessment more freely and with many different subjects. This publication is also a reform plan for the educational system in Lebanon spanning up till the year 2004. This is a matter that needs to be looked into in and of itself. The reason for this is that no follow up publication has been made in relation to this well planned out reform. So according to the lay person, no reform has been made and according to education officials, the reform to be implemented has proven to be a string of false hopes. A third point that requires attention is the lack of a core curriculum that all schools in Lebanon can build around. Some schools use government publications and books as teaching materials while other schools use basal readers and trade books as teaching materials. Although the curriculum set by the government outlines general instructional objectives, specific learning outcomes, and scope and sequence of subject matter, nowhere in the structure of the curriculum is the move away from traditional teaching taken into consideration. Alternative assessment has no room here and even formal assessment is not structured in a uniform manner that allows student progress to be examined across different schools.

In no way is this study intended to suggest that the International Baccalaureate is superior to the Lebanese Baccalaureate, nor do I aim to suggest that the International Baccalaureate should be uniformly adopted across Lebanon. By means of the literature review I aim only to shed light on the inconsistent structure of the Lebanese Baccalaureate in the hope of raising awareness of the importance of speedy reform. In order for our students to be equipped with the skills and concepts necessary for post secondary education and the demands of the job market, education officials need to realise that the curriculum is no longer adequate in the twenty first century. The

requirements of today's world require students to be able to analyse, make inferences, use the available information to create pro-active solutions and so much more. The encouraging of rote memorization and straight forward questions and answers is no longer sufficient to teach students to be thoughtful and active citizens of today's society. In addition, tests need to be structured according to certain guidelines. It is not fair or ethical to serve students a test that does not meet their intellectual abilities, either below or above. Tests and other types of formal assessment are meant to challenge students within their zone of proximal development, not stump their ability to be challenged intellectually or be so lenient that they are not even stimulated. Alternative assessment should also be first on the agenda in terms of reform. Not all students learn alike, or as quickly, or use the same learning styles. Individuals are unique and so are their cognitive processes. So many students in Lebanon suffer from varying levels of test anxiety depending on the pressure they may be subjected to, to perform well. Alternative assessment can help an educator distinguish between students who have not yet grasped the concepts and skills being tested and students who fear failure but have mastered the required skills and concepts. Alternative assessment also teaches students to be self confident, express themselves freely, artistically and in a variety of venues using varied materials. Such expression creates tomorrow's artists, public speakers, educators and leaders.

One approach that has been under study at the Centre for Research and Development, under the patronage of the Ministry of Education is similar to the Competency Based Curriculum. In the recent Lebanese Curriculum, each skill has a set of competencies in and of itself. In the new Situational Approach, there are two basic competencies, one for writing and one for speaking. This is compatible with the idea of Terminal Integration of Objectives. Two skills are taught, receptive skills and productive skills. The receptive skills are all that is taken in by the students including grammar, vocabulary, spelling and reading. The productive skills are the student output, specifically speaking and writing. The receptive skills are considered the pillars that will help students to achieve the productive skills. Stated in general terms: "By the end of cycle one, students will be able to express themselves orally about a certain idea/topic

in one to three minutes.” Usually, assessment for all four cycles would take the form of students reading a text, about a certain situation, and then expressing their thoughts and ideas, through speaking and writing about most often, another situation.

What can be taken from this literature review is the urgent need for further publications from the Ministry of Education in terms of providing more detailed information about curriculum content, educational needs to be attained, the different resources required by schools and teachers to use to meet at the very least minimal requisites. Teachers and schools cannot hope to attain a certain level of uniformity unless the Ministry of Education steps in to design guidelines and milestones for the curriculum and assessment. These conclusions can be drawn purely from the literature review. Yet, the International Baccalaureate and the Lebanese Baccalaureate are taught by real teachers to real students, all of whom have their own opinions on the matter. In order to better understand the views and perceptions of today’s educators and students, I have designed a self administered questionnaire aimed at collecting these views and perceptions. Also, I would like to stress that the survey is not intended to support or negate the above stated conclusions of the literature review, nor are the survey results meant to show the superiority of one Baccalaureate program over the other. Again, the survey results are intended only to reflect the views and opinions of educators and students in both the International and Lebanese Baccalaureates in order to better understand the reality of the matter.

CHAPTER 3

PROCEDURES AND METHODOLOGY

3.1 Introduction

Using self administered questionnaires designed from the conceptual frameworks of the literature review, I attempted to collect the views and opinions of students and teachers in both the Lebanese Baccalaureate and the International Baccalaureate. The importance of this survey is at an experiential level. The questions are intended to get students and teachers thinking about the quality of their respective programs in terms of education, room for various means of assessment, what the program offers to students and pre-university preparation. It is not enough to read the literature and draw conclusions from the available material. Often times, what one program intends to do or implement is not always possible, for a variety of reasons: budget issues, practicality, student readiness, teacher training, and more. Thus, reading the literature allows us to understand the knowledge available in a certain area of interest. What remains is the opinion of those who apply this knowledge and these practice. Is what is stated in the literature actually occurring in classrooms? Are the students being prepared, and do they feel prepared, for the University experience and the job market? Is there room for alternative assessment and creativity? What sorts of teaching practices are being employed; is the teaching student centred or traditional and teacher centred? Questions like these cannot be solely through reading the literature because what is preached is not always practiced. Therefore, it is essential to gather the views of the public; more specifically those involved first hand in the teaching practices of both the Lebanese Baccalaureate and the International Baccalaureate, before drawing findings, conclusions and suggestions.

3.2 Rationale of methods

I conducted a structured questionnaire with four hundred third secondary students (divided into two hundred I.B. students and two hundred Lebanese Baccalaureate students), a hundred Lebanese Baccalaureate teachers and fifty I.B. teachers. It was a self-administered questionnaire which took approximately 10 to 15

minutes to complete. The aim of this survey is not to support the aforementioned data, but to reflect the views of both types of students who have enrolled in their choice of curriculum, and their respective teachers who work with the curriculum and its respective contents.

The students' questionnaire was composed of 13 questions for the Lebanese Baccalaureate and 11 questions for the International Baccalaureate. Questions ranged from basic demographics (sex and age), to who chose the program the student followed, educational needs met by the program, pre-university counselling offered, choice of material offered, languages studied, preparation of program for pre-university experience, counselling throughout program, qualification of teachers, overall satisfaction of program and preparation of program for market needs of Lebanon. The questionnaire also asked if students would have preferred a different program to follow, and if students felt that if they did not continue higher education beyond the program they chose, would the program itself be enough to meet market demand. Separate questionnaires were given to IB and LB students although the content of the questions very similar, only adapted to each type of Baccalaureate.

The I.B. teachers' questionnaire was a more comprehensive, qualitative questionnaire. Questions were asked about the I.B. program in terms of what students are encouraged to, teaches students, what is included in the curriculum, how it assesses students, what it offers students, and how it prepares students, with multiple choice answers.

These themes were developed from the conceptual frameworks in the previous chapter. The design of the questions intended to collect attitudes and reflections of the students and teachers about the I.B. and Lebanese Baccalaureates accordingly.

The selection of the students and teachers was an opportunity sample. The students represented four schools that teach a variety of subject matters; three out of the four schools offer the Lebanese Baccalaureate program, two out of the four schools offer the I.B program. The teachers surveyed also represented the same four schools.

The participants were orally briefed about the purpose of the questionnaire, the confidentiality of their answers, and their right to withdraw from the questionnaire at any time, after which verbal consent was granted. The recorded data was then entered into Excel and analysed through SPSS. Data analysis explored patterns of student and teacher opinion concerning the I.B. and Lebanese Baccalaureate.

CHAPTER 4

SURVEY FINDINGS

After conducting the surveys, collecting the data and analysing the data, the results showed several patterns found across the surveys.

4.1 Lebanese Bacculaureate Students:

The sample taken of 200 students contained 130 males and 70 females. The ages ranged between 17 and 19, with an average age of 17.68.

The majority of those queried (86%) said they did choose this particular curriculum.

More than three quarters (79%) of the students asked said that the program met their educational needs.

Nearly one third (28 %) of the students surveyed said they got proper pre-university counseling, while the other two thirds said they did not.

Almost all surveyed (98%) said they chose their specific track.

Almost two thirds (65%) of the students surveyed said their academic history affected their acceptance.

Three quarters of the students said they did not study the 3 languages (Arabic, English and French) while only the remaining quarter said they did.

Only two fifths (41%) of the students said they felt sufficiently prepared for their university experience.

Only a quarter of students (24%) questioned said they received proper counseling throughout the program.

Nearly all students surveyed (97%) felt that they had qualified teachers teaching them.

More than half (59%) of the students said they felt satisfied with the program they are in; however the remaining two fifths of the students said another program would have been better.

Only half the students surveyed felt that their program prepared them for the markets' needs.

And a mere 10% felt comfortable not continuing higher education.

(Appendix C)

4.2 International Baccalaureate Students:

The sample of 200 students contained 80 males and 120 females. The ages ranged between 17 and 19, with an average age of 17.92.

Nearly three quarters (72%) of the students asked said they did choose this particular curriculum.

Every four out of five (81%) students asked, said that the program met their educational needs.

Almost three quarters of those surveyed (70%) said they got proper pre-university counseling, while the remaining said they did not.

More than two thirds of those surveyed (69%) said they got to choose the material they take.

Only one out of every four of students (25%) said they did not study the 3languages (Arabic, English and French)

Four fifths (80%) of the students said they felt sufficiently prepared for their university experience.

More than three quarters (78%) of the students questioned said they received proper counseling throughout the program.

More than half of the students surveyed (61%) felt that they had qualified teachers teaching them.

Two thirds (67%) of the students queried said they felt satisfied with the program they are in.

Half (50%) of the students surveyed felt that their program prepared them for the markets' needs.

Only 3% felt comfortable not continuing higher education.

(Appendix D)

4.3 International Baccalaureate Teachers Results:

100 % of participants believe that the I.B. program at their school encourages the students to ask challenging questions, learn how to learn, have a strong sense of identity and culture, and have the ability to communicate.

Two thirds (66%) of participants responded that the I.B. program at their school allowed students to learn English and French and a third language of choice, meanwhile the remaining third (34%) of the participants said English, French and Arabic.

More than half (54%) of the teachers questioned said the I.B. program at their school includes 6 subjects, oral exercises, projects, lab work, essays and standard examinations while the remaining (46%) answered only the 6 subjects.

When asked how the I.B. program assesses students a substantial amount of teachers (64%) said through Oral exercises, Projects, Student portfolios, Class presentations, Lab work, Math investigations, Artistic performances, World literature Assignments, Essays, Extended essays, Standard examinations, while the remaining (36%) of the teachers said through oral exercises, projects, lab work, essays and standard examinations only.

More than half (60%) of the teachers said that they received training through teacher training workshops while the other part (40%) said teacher training workshops, regional conferences and reviewing support materials.

All of the participants queried said the I.B. program prepares students for University through Career counseling and University representatives.

4.4 Lebanese Baccalaureate Teachers Results:

When asked, half (50%) of teachers said the L.B. program encourages students to ask challenging questions, have the ability to communicate and use traditional learning techniques to acquire new information while one third (34%) of the teachers said ask challenging questions and use traditional learning techniques to acquire new information and only 16% of the teachers said just use traditional learning techniques to acquire new information.

A large part (78%) of the teachers said that the L.B. program allows students to learn English and Arabic, while only 22% said English and French and Arabic.

When asked, the majority (84%) of L.B. teachers said that the program at their school includes as part of the curriculum 6 subjects, oral exercises, projects, lab work, standard examinations, while only 16% said 6 subjects, oral exercises, projects, lab work,

standard examinations, essays and class presentations.

When asked how the L.B. program assesses students, four fifths (82%) of the teachers asked said through oral exercises, projects, lab work, and standard examinations, while the remaining one fifth (18%) said oral exercises, projects, lab work, standard examinations, essays and class presentations.

All of the L.B. teachers asked said that they received training through teacher training workshops only.

More than half (54%) of the teachers asked said that the L.B. program prepares students for University through career counseling, university representatives and visits to local campuses while the rest (46%) said university representatives and visits to local campuses.

4.5 Discussion of the findings of student surveys (Lebanese and International Baccalaureates):

When first planning these surveys, there was no agenda to prove the literature review. However, the results of the survey were not only surprising, but also supportive of the available literature on the Lebanese and International Baccalaureates respectively. The results obtained cannot be used as evidence, per say, for this thesis, yet they are an indicator for a more positive attitude towards the International Baccalaureate in general. Therefore, these results can be used as a stepping stone for other similar researches, in a way to guide the hypothesis in the right direction.

Despite the fact that results of the survey show that most (86%) of the Lebanese Baccalaureate students chose their own program, perhaps not enough research was done on behalf of the students as a massive 72% said that they did not receive any pre-

university counseling. These alarming numbers may be cause to raise awareness in the schools about the importance of pre-university counseling and the positive effects that it may have on the students' professional development. One may even suggest that some sort of pre-university counseling session occurs before the students enter their final year in order to decide which track to enter and their possible future job opportunities accordingly. It is important to note that in the Lebanese Bacculaureate survey, only 25% of the students study three languages (French, Arabic and English), meanwhile in the International Bacculaureate, a substantial 75% study the three languages.

The implications of these numbers may be that the International Bacculaureate offers a wider range of language instruction, which in turn is more beneficial to the students' development. Students who receive instruction in more than two languages are better suited for a wider variety of jobs in many different countries around the world and this may increase their ability to meet market demands, and in turn increase their salary. When asked if they felt the program they were in prepared them for their university experience, only two out of five Lebanese Bacculaureate students were able to answer yes. Meanwhile for every five International Bacculaureate students asked, four were able to say they felt prepared. Preparation for university can be measured in terms of material studied, knowledge of student, pre-university counseling, counseling in general... among these factors this survey zoomed in on pre-university counseling and counseling in general. As for counseling in general, only a quarter of the Lebanese Bacculaureate sample said they received proper counseling throughout the program in general; on the other hand nearly four fifths of the International Bacculaureate answered positively. As previously stated, nearly four fifths of the Lebanese Bacculaureate sample said they did not receive proper pre-university counseling, while more than two thirds of the International Bacculaureate students surveyed said they did receive proper pre-university counseling. So here we see a positive correlation between pre-university counseling and personal preparedness for the university experience.

It is important to reiterate here that these conclusions are not decisive of the actual conditions, yet only give a certain orientation to future studies. When asked if they would have preferred another program, two fifths of the Lebanese Bacculaureate

students surveyed said they would have, while only one third of the International Baccalaureate students said so. An interesting and similar opinion was observed among both Lebanese and International Baccalaureate students when asked if they felt capable to meet market demands. In both cases, only half the students queried said they felt capable to meet market demands. This answer was further backed up by the following question which asked if students felt comfortable not continuing higher education and only minimal percentages of Lebanese and International Baccalaureate students (10% and 3% respectively) were able to answer yes.

4.6 Discussion of the findings of teacher surveys (Lebanese and International Baccalaureates):

It was comforting to find that a lot of the results found in the teachers' survey corresponded positively with the literature available and also with the students' survey results. For example, when asked how many languages the International Baccalaureate curriculum offers, all teachers replied 3 languages; English, French and Arabic (34%) or English, French and a third language of choice (66%). This corresponds with the students, of whom three quarters responded that they did study three languages. As for the Lebanese Baccalaureate, the majority of teachers (78%) said their students only learned English and Arabic, and this is also similar to the students who three quarters of which said they only studied English and Arabic. This further backs the previous point that studying more languages offers more opportunities, and the Lebanese Baccalaureate is clearly not catering for this need.

The teachers of the I.B. program reported that their program included more comprehensive activities in the curriculum than in the L.B. in which most of the teachers (84%) reported that their students engaged in only oral exercises, projects, lab work and standard examinations. These results were further enhanced through the results collected from the survey question on assessment where (64%) of the IB teachers said that they assessed their students through Oral exercises, Projects, Student portfolios,

Class presentations, Lab work, Math investigations, Artistic performances, World literature Assignments, Essays, Extended essays, Standard examinations. On the other hand only (19%) of the L.B. teachers surveyed said that they assessed their students through oral exercises, projects, lab work, standard examinations, essays and class presentations. This 19% represents the amount of teachers that assess their students using more creative, informal and authentic ways of assessment in the Lebanese Baccalaureate program.

It is also important to note that when it comes to teacher training and professional development in the Lebanese Baccalaureate program, all of the teachers noted that they received only workshop training. This is a step in the right direction towards raising teachers' credentials but is not sufficient in and of itself. It would be ideal for those in charge of setting the standards for Lebanese Baccalaureate teachers to aim for what (40%) of the I.B. teachers are receiving: training workshops, regional conferences and reviewing support materials. Finally, all of the participants queried said the I.B. program prepares students for University through Career counseling and University representatives. This is not as much in terms of actual visits to campuses as (46%) of L.B. teachers said their students were receiving: university representatives and visits to local campuses.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Seeing as this is a knowledge void research there was no specific hypothesis to begin with. A knowledge void study is meant to argue simply that not enough is known in some area of concern and the cogency of the interaction is ordinarily the surprise or disquiet of the inquirer about the incomplete knowledge.

This research and the results of the survey are meant only to be contributions to the field of educational research and to act as a stepping stone for further research. In addition, the results of the survey and literature review are also meant to raise much needed awareness on the necessity of further publications on the part of the Ministry of Education and those responsible for writing the curriculum and making amendments.

As a teacher, and more particularly a teacher in the Lebanese Baccalaureate program (Mathematics and Economics), it is appalling to me that not enough awareness is being raised on the issue of the urgent need for research and reform within the Lebanese Baccalaureate. The lack of some level of uniformity, or at least some general guidelines that schools, as institutions, and teachers can follow, leaves too much room for 'creativity' (that may not be so constructive) within each school system. For the most part, the survey results of the International Baccalaureate reflected the literature review to a great extent. Both teachers and students surveyed agreed with most of the survey items and for the most part, the results of the survey were fairly representative of the literature.

I would like to shed some light on the Lebanese Baccalaureate program though. Some points need to be highlighted in order to bring them to the attention of those responsible for curriculum review and educational program reform.

5.1 Formal Assessment in the Lebanese Baccalaureate:

Initially, I would like to start with formal assessment. Within the context of the literature review, formal assessment exists within the framework of tests and examinations. Tests are taken by students at the end of every chapter, or group of chapters and at the end of every unit, an examination is administered. Since the scholastic year is divided into trimesters, three major examinations are administered as well for every subject matter. Some schools choose to have midterm and final exams, which also are restricted to paper and pencil evaluations. The Lebanese Baccalaureate teacher survey shows that 4/5 (81%) of teachers said that student assessment occurs through oral exercises, projects, lab work, and standard examinations, while the remaining 1/5 (19%) said oral exercises, projects, lab work, standard examinations, essays and class presentations. This, compared to the International Baccalaureate seems very limited because assessment in the International Baccalaureate also occurs through oral exercises, projects, student portfolios, class presentations, lab work, math investigations, artistic performances, world literature assignments, essays, extended essays, as well as standard examinations.

5.2 Consistent Application of Lebanese Baccalaureate Program Requirements:

Secondly, the International Baccalaureate program presents an extremely detailed outline of the production process of formal assessment and the actual Baccalaureate exams. The availability of such information allows school officials to fully understand the production process and in turn possibly reproduce parts of it within the school context. Consistency between the students' school experience and the official examinations exists and may even possibly enhance their chances of success (this is merely a speculation). In the case of the Lebanese Baccalaureate, nowhere in the literature review is there evidence of such elaborate planning and coherency within the framework of official exam production process. The result of this lack of information is the independent creation of examinations and tests by each school, and often by teachers individually. This then creates a high level of disparity between the kinds of examinations students are exposed to at schools and what they face during the official

examinations. Many schools, though, do prepare their students for the Lebanese Baccalaureate, but this only happens during the last year of formal schooling. Is this amount of time sufficient to fully prepare students for what they are to experience during the official examinations? Is this time sufficient to reverse or amend the skills previous examinations have developed within students if these skills are not those necessary to achieve success during official examinations? These particular questions warrant further research and may very well contribute to the plight for revision of the Lebanese Baccalaureate program.

5.3 Curriculum structure of the Lebanese Baccalaureate:

The structure of the International Baccalaureate program is built on the notion of scaffolding and transferring instruction from the teacher to the students. The teacher acts as a facilitator as opposed to a lecturer. This notion of scaffolding does not exist in a solid and structured manner within the Lebanese Baccalaureate program. It may be practiced by some teachers within the context of their individual classrooms but there is no documentation of this. Scaffolding is an important tool within the classroom because it allows the teacher to be a model and gives way for the students to take control of their learning and become independent inquirers. What is alarming is that in the survey of the Lebanese Baccalaureate teachers, all of them circled the option of traditional teaching methods, among other options. It is really thought provoking, why would all of the teachers feel the need to use traditional teaching methods while the whole world is on a trend that is encouraging students and teachers to move away from lecturing and traditional teaching. Is it a matter of school budget? Is it a matter of the lack of necessary materials and manipulatives? In the end, the reasons for the lack of scaffolding are not what is to be dwelt upon, there needs to be more awareness raised on the educational benefits of scaffolding and on how scaffolding techniques can enhance student learning.

5.4 Bias in the Lebanese Baccalaureate:

Another important issue is bias. In terms of the International Baccalaureate, the creators outline in detail how bias is avoided during the writing of examinations. They note as well how difficult it is to avoid all forms of bias. True that no examination can be free of bias, but it is the duty of examination officials to minimize the bias as much as possible. This can be done through paying careful attention to terminology, proficiency of language, question structure and multiple revisions of questions. This is well documented in the literature of the International Baccalaureate. In the literature review of the Lebanese Baccalaureate, there is no clear documentation of how bias is avoided. Yet there is no clear documentation of bias at all. Bias in the Lebanese Baccalaureate exists within the framework of everyday experiences of the teachers. Since the information available travels 'on the grape vine' the need for true and rigorous documentation arises. In order to be able to take reconstructive measures and work towards eliminating bias, the severity of the issue needs to be exposed. More research on bias in the Lebanese Baccalaureate will facilitate proactive measures and make any reform more efficient.

5.5 Grading in the Lebanese Baccalaureate:

Finally, I would like to shed light on the marking process in the Lebanese Baccalaureate. Again, as is the general trend, the marking process in the International Baccalaureate is well documented. The marking is meticulous and takes place over several stages and is a well structured process. The marking process of the Lebanese Baccalaureate is not documented but is well known to the community of teachers because many of the teachers in the Lebanese school system voluntarily participate in official examination marking. Since this issue has been previously discussed, I will not attempt to repeat what has already been stated. Suffice it to say that the marking process needs to be better supervised; the situation in which marking occurs needs to be less competitive and the marking process needs to be better structured.

5.6 Impact of the Lebanese War on the Lebanese Baccalaureate:

The state that the Lebanese Baccalaureate is in is not entirely the result of the incompetence of Baccalaureate officials. The years of the Lebanese war were detrimental to the educational system. Any country that faces war inevitably ends up inviting corruption into the different levels of its structure, including its educational system. During the war, more concern was given to relieving the country of its suffering and educational reform fell behind. When the war ended, educational officials literally had to start from scratch. With the rest of the world one step ahead in terms of teaching techniques and technology, reform was difficult. So, plans were drawn up, some budget was allocated, studies were carried out and some reform ensued. But the truth is that the studies devised and the plans made were never followed up, at least follow up information is not available to the public. This is the problem that the Lebanese Baccalaureate system, as well as the rest of the Lebanese educational system, faces. Reform is needed, but documentation is essential. Without documentation of research, amendments and evaluation, other educational officials cannot begin to build on what has already been done. This will result in the waste of financial resources and time, researching what has already been researched but not documented.

5.7 Recommendations

5.7.1 Program Reform and the Need for Assessment of the Current Status of the Lebanese Baccalaureate:

Initially, in order to begin to think of reform, an assessment of the current educational status of the Lebanese Baccalaureate needs to be drafted. How would one know where to instigate reform if an assessment of the current state of education has not been carried out? Next, a certain level of uniformity needs to be attained. Certain teaching practices need to be found across all schools, possibly separate teaching practices as students get older or certain practices specific for the Lebanese Baccalaureate students. In addition, assessment needs to be also conducted in a uniform manner. Students need to be aware of how they are being assessed, what criteria are being evaluated and what is expected of them. Maybe the Ministry of Education could

draft some guidelines that can be amended to meet individual school needs. At any rate there needs to be some guidelines for assessment so that students are assessed in a similar manner and the criteria of assessment is similar. Transparency is the key here. Educators, students, parents and the public need to have access to the curriculum both as set by the government and as amended to meet individual school needs. Everybody has a right to be aware of how they are being evaluated and on what basis. Our students have a right to be sufficiently prepared for the Baccalaureate exam, hence the need for increased uniformity of curriculum and assessment design. Informal assessment also needs to be outlined. The International Baccalaureate aims at promoting well rounded individuals that have been exposed to different types of assessment and are able to perform well in different situations. The Lebanese Baccalaureate program needs to move away from traditional paper and pencil evaluation and teach their students to have a creative eye and to be competent and competitive in all sorts of different venues and situations. Finally, amendments to the Baccalaureate program need to take into consideration the technological progress of the twenty first century and our ever changing times. Lebanese Baccalaureate students need to be equipped with a critical eye towards today's pressing issues and an ability to engage in debate and the equitable exchange of opinions in a civilized, productive and proactive manner.

To improve the quality of education in Lebanon and more specifically the quality of the Lebanese Baccalaureate Program, the Ministry of Education must implement strict reform measures. Primarily the qualifications of teachers of the Lebanese Baccalaureate need to be assessed and improved. The Ministry of Education should set clear standards for hiring and implement them with the strictest of measures. Also, it is not enough to ensure that qualified teachers are being hired, but to institute a system of continuous training and workshops to ensure that the teachers are aware of the latest developments and educational trends. Moreover, the teachers need to be aware of the current technology available to them as teaching resources and be trained to use them appropriately within the classroom context. In addition, effective teaching can not occur without the use of appropriate teaching tools and manipulatives. For this to occur the Ministry should assess the different facilities in schools available to teachers and

students and set criteria for the necessary tools and manipulative that are to be present. Follow up is required here to ensure that the students have access to equipped laboratories, computers, audio-visual equipment and extensive library materials. The Ministry should also arrange nation-wide conferences and seminars with trained professionals in the field, teachers and pedagogic experts to enrich in-service teachers' knowledge of the new Lebanese Curriculum and of the areas in which reform is well needed. Again, the Ministry should enlighten school officials on the issue of reducing the waste of resources within individual schools. This can be attained by the curtailing of the employment of under qualified teachers and the allocation of the excess financial resources that result from this to the improvement of facilities and teaching tools. Finally, the nature of the status of teachers within schools should be revised, ensuring that teacher salaries reflect their efforts and qualifications and that an appropriate balance is attained between the conditions of employment and hours of service. It is my firm belief that a satisfied teacher, who feels appreciated by the institution for which the teacher is employed, will give greater returns to the institution and be more enthusiastic about providing rich learning experiences for the students. In turn, the students who will graduate from the Lebanese Baccalaureate will have a greater opportunity of becoming well rounded and well informed members of society.

With respect to the Terminal Integration of Objectives, although this idea that has been under study seems like a very good venue for reform in the Lebanese Educational system, across all four cycles, there are still some practical issues that need to be considered before application. The Terminal Integration of Objectives would be difficult to apply in the Official Exams for logistic reasons, how are we to get say five thousand recorders, at least to record students' oral responses during the examination period? Does the Lebanese Government have enough money in the budget for this sort of recording? How much time would it take to get all the recording finished? In addition, the Terminal Integration of Objectives is not compatible with the set up of the official exams, as it is today, in terms of the goals for the Official Exams and the structure of the examinations.

I would like to conclude by stressing that overlooking the much needed educational reform is not in the best interest of Lebanon. Most pressing are the generations of Lebanese Baccalaureate students that are sent off into the world of higher education and the job market, unprepared for life's challenges. Those responsible for creating the Lebanese Baccalaureate program now need to realize that there is so much more that can be done to really equip our students with the skills and cognitive strategies needed for their survival in today's world. So much research is lacking and more information is needed on the Lebanese baccalaureate if one is to aim for productive reform in the Lebanese Baccalaureate. The duty of the Ministry of Education and other education officials is to provide the best learning opportunities for all students, and in this case, the Lebanese Baccalaureate students. There has never been a better time to take affirmative action.

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APPENDIX A

STUDENT SURVEY FOR L.B. STUDENTS

Demographics:

Sex:

Age:

1. Who chose the program you are currently in?
 - a. Parents
 - b. Yourself
 - c. This is the only available program at your school
2. Do you think this program meets your educational needs?
 - a. Yes
 - b. No
3. Did your academic history affect your acceptance into this program?
 - a. Yes
 - b. No
4. Did you choose the specific track you are following?
 - a. Yes
 - b. No
5. Do you receive pre-university counseling with the program you follow?
 - a. Yes
 - b. No
6. Do you currently study three languages?
 - a. Yes
 - b. No
7. Do you feel the program is preparing you for your university experience?
 - a. Yes
 - b. No
8. Are you properly counseled throughout the program?
 - a. Yes
 - b. No
9. Do you feel that your teachers are qualified/have received proper training in order to provide you with the best possible education?
 - a. Yes
 - b. No
10. Are you satisfied with the program you are in?
 - a. Yes
 - b. No
11. Do you think you would have had a better educational experience had you chose another program?
 - a. Yes
 - b. No
12. Do you think this program prepares you for the market needs in Lebanon?
 - a. Yes

- b. No
13. Do you think this program is sufficient to meet market demands if you decide not to continue higher education?
- a. Yes
 - b. No

APPENDIX B

STUDENT SURVEY FOR I.B. STUDENTS

Demographics:

Sex:

Age:

1. Who chose the program you are currently in?
 - a. Parents
 - b. Yourself
 - c. This is the only available program at your school
2. Do you think this program meets your educational needs?
 - a. Yes
 - b. No
3. Do you receive pre-university counseling with the program you follow?
 - a. Yes
 - b. No
4. Do you get to choose the material you take?
 - a. Yes
 - b. No
5. Do you currently study three languages?
 - a. Yes
 - b. No
6. Do you feel the program is preparing you for your university experience?
 - a. Yes
 - b. No
7. Are you properly counseled throughout the program?
 - a. Yes
 - b. No
8. Do you feel that your teachers are qualified/have received proper training in order to provide you with the best possible education?
 - a. Yes
 - b. No
9. Are you satisfied with the program you are in?
 - a. Yes
 - b. No
10. Do you think this program prepares you for the market needs in Lebanon?
 - a. Yes
 - b. No
11. Do you think this program is sufficient to meet market demands if you decide not to continue higher education?
 - a. Yes
 - b. No

APPENDIX C

Table 1 LEBANESE DATA

Sex

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Female	70	35.0	35.0	35.0
Male	130	65.0	65.0	100.0
Total	200	100.0	100.0	

Age

N	Valid	100
	Missing	0
Mean		17.68
Median		18.00
Mode		18

Who Chose Program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Parents	28	14.0	14.0	14.0
Yourself	172	86.0	86.0	100.0
Total	200	100.0	100.0	

Educational Needs Met

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	42	21.0	21.0	21.0
Yes	158	79.0	79.0	100.0
Total	200	100.0	100.0	

Academic History Affected Acceptance

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	70	35.0	35.0	35.0
Yes	130	65.0	65.0	100.0
Total	200	100.0	100.0	

Who Chose Specific Track

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	4	2.0	2.0	2.0
Yes	196	98.0	98.0	100.0
Total	200	100.0	100.0	

Pre-University Counseling

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	144	72.0	72.0	72.0
Yes	56	28.0	28.0	100.0
Total	200	100.0	100.0	

Study 3 Languages

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	150	75.0	75.0	75.0
Yes	50	25.0	25.0	100.0
Total	200	100.0	100.0	

Prepared for University Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	118	59.0	59.0	59.0
Yes	82	41.0	41.0	100.0
Total	200	100.0	100.0	

Counseling throughout program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	152	76.0	76.0	76.0
Yes	48	24.0	24.0	100.0
Total	200	100.0	100.0	

Qualification of Teachers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	6	3.0	3.0	3.0
Yes	194	97.0	97.0	100.0
Total	200	100.0	100.0	

Satisfaction of Program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	82	41.0	41.0	41.0
Yes	118	59.0	59.0	100.0
Total	200	100.0	100.0	

Chosen Another Program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	118	59.0	59.0	59.0
Yes	82	41.0	41.0	100.0
Total	200	100.0	100.0	

Preparation for Market Needs

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	100	50.0	50.0	50.0
Yes	100	50.0	50.0	100.0
Total	200	100.0	100.0	

Continuing Higher Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	180	90.0	90.0	90.0
Yes	20	10.0	10.0	100.0
Total	200	100.0	100.0	

APPENDIX D

Table 2 INTERNATIONAL BACCALAUREATE DATA

Sex

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Female	120	60.0	60.0	60.0
Male	80	40.0	40.0	100.0
Total	200	100.0	100.0	

Age

N	Valid	100
	Missing	0
Mean		17.92
Median		18.00
Mode		18

Who Chose Program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Parents	56	28.0	28.0	28.0
Yourself	144	72.0	72.0	100.0
Total	200	100.0	100.0	

Educational Needs Met

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	38	19.0	19.0	19.0
Yes	162	81.0	81.0	100.0
Total	200	100.0	100.0	

Pre-University Counseling

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	60	30.0	30.0	30.0
Yes	140	70.0	70.0	100.0
Total	200	100.0	100.0	

Choose Material

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	62	31.0	31.0	31.0
Yes	138	69.0	69.0	100.0
Total	200	100.0	100.0	

Study 3 Languages

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	50	25.0	25.0	25.0
Yes	150	75.0	75.0	100.0
Total	200	100.0	100.0	

Prepared for University Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	40	20.0	20.0	20.0
Yes	160	80.0	80.0	100.0
Total	200	100.0	100.0	

Counseling throughout program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	44	22.0	22.0	22.0
Yes	156	78.0	78.0	100.0
Total	200	100.0	100.0	

Qualification of Teachers

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	78	39.0	39.0	39.0
Yes	122	61.0	61.0	100.0
Total	200	100.0	100.0	

Satisfaction of Program

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	66	33.0	33.0	33.0
Yes	134	67.0	67.0	100.0
Total	200	100.0	100.0	

Preparation for Market Needs

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	100	50.0	50.0	50.0
Yes	100	50.0	50.0	100.0
Total	200	100.0	100.0	

Continuing Higher Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	194	97.0	97.0	97.0
Yes	6	3.0	3.0	100.0
Total	200	100.0	100.0	

APPENDIX E

TEACHER SURVEY (L.B AND I.B. TEACHERS)

Please circle as many options as you feel apply:

The program at the school in which I teach encourages students to:

- Ask challenging questions
- Learn how to learn
- Develop a strong sense of their own identity and culture
- Develop the ability to communicate and understand people from other countries and cultures
- None of the above

The program at the school in which I teach allows students to learn:

- English
- French
- Arabic
- Spanish
- English and French as the two main languages and a third language of their choice
- None of the above

The program at the school in which I teach includes as part of the curriculum:

- Six subjects including the three languages, individuals and societies, mathematics and computer science, the arts, and experimental sciences
- Three of the above subject matters are studied at a higher level (i.e., a total of 240 hours)
- All three parts of the core-extended essay, theory of knowledge and creativity, action, service-are compulsory and are central to the philosophy of the Diploma Program
- None of the above

The program at the school in which I teach assesses students through:

- Oral exercises in language subjects
- Projects
- Student portfolios
- Class presentations
- Practical Laboratory work
- Math investigations

- Artistic performances
- World literature Assignments
- Essays for theory of knowledge
- Extended essays
- Standard examinations
- None of the above

The program at the school in which I teach offers training for teachers through:

- Participating in teacher training workshops
- Attending regional conferences
- Participating in online discussions and special events
- Reviewing relevant support materials
- Responding to appeals to participate in other curriculum related activities
- Applying to become an IB examiner for the purpose of moderating internally assessed student work, marking examination papers or marking work submitted by students
- Applying to become an IB workshop leader
- None of the above

The program at the school in which I teach prepares students for the University experience by:

- Providing career counseling
- Having university representatives come into the school to talk to students
- None of the above

APPENDIX F

Table 1 LEBANESE BACCALAUREATE CURRICULUM COMPONENTS

1. Assessment	<ul style="list-style-type: none"> ✳ Does not continuously make distinctions in terms of the various types of assessment
2. Bias	<ul style="list-style-type: none"> ✳ Arises in the examination rooms ✳ Arises in correction process
3. Teacher perceptions	<ul style="list-style-type: none"> ✳ The status of teachers that is relevant provides some relevance to the feelings of under appreciation among teachers ✳ Deficiency in the outlining of a clear national educational policy ✳ Poor conditions of public schools ✳ Sluggish progression of teacher training ✳ Salaries are less in comparison to one unit of work
4. Cultural issues	<ul style="list-style-type: none"> ✳ Does not take into account students with different kinds of learning styles ✳ Does not take into consideration the different topics of interest to students when it comes to creative writing ✳ Bias that may arise in different questions due to matters of socio-politics ✳ Availability of school resources and the discrepancies in the social conditions and levels of family support given to individual students
5. Internal Assessment	<ul style="list-style-type: none"> ✳ No practice of methods of evaluation and assessment in a uniform manner
6. Curriculum	<ul style="list-style-type: none"> ✳ Language arts ✳ Experimental sciences ✳ Life sciences ✳ Economics ✳ Social Studies ✳ Depending on the track followed, more or less weight is allocated to each subject ✳ Countless in school test prepare

	<p>students for the official examinations</p> <ul style="list-style-type: none"> ✿ All evaluations are paper and pencil
7. Examination Content and Production	<ul style="list-style-type: none"> ✿ Exams are predictable, not only in the layout but in the questions and content ✿ A trend of repetition of some questions every few years ✿ Production of examinations is not well documented ✿ Pre-testing does not occur
8. Language	<ul style="list-style-type: none"> ✿ Language proficiency depends on the school from which the student has received formal academic instruction ✿ Teacher credentials vary depending on whether or not the schools are located in rural or urban settings

APPENDIX G

Table 2 INTERNATIONAL BACCALAUREATE CURRICULUM COMPONENTS

<p>1. Philosophy</p>	<p><i>“The International Baccalaureate Organization aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect...These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.”</i></p>
<p>2. Assessment Components</p>	<p>Formative Assessment:</p> <ul style="list-style-type: none"> ✿ Provide detailed feedback to teachers and their students on the nature of students’ strengths and weaknesses. ✿ Help develop students’ capabilities. <p>Summative Assessment:</p> <ul style="list-style-type: none"> ✿ Provision of information about student achievement. ✿ The certification and selection of students. ✿ An accountability mechanism to evaluate teachers and schools ✿ A driving force for reform of curriculum.
<p>3. Bias</p>	<ul style="list-style-type: none"> ✿ The context in which the question is set (for example, mechanical toys and certain sports favor boys, dolls

	<p>and domestic work favor girls).</p> <ul style="list-style-type: none"> ✿ Essay questions on impersonal topics favor boys, while those involving human relations favor girls. ✿ Multiple-choice questions favor boys. ✿ Coursework/project work components of assessment favor girls. ✿ Some questions may be intelligible only within certain cultures, for example a question about elderly people living on their own might be quite alien to some cultures, or a question involving a typical male or female role from one culture may appear very out of place in another. ✿ A question using language or conventions of one social class would favor students from that class.
4. Cultural Issues	<ul style="list-style-type: none"> ✿ International context ✿ Intercultural purpose to teaching ✿ Comparability of demand across languages facilitated by sensitive translations

<p>5. Curriculum Structure</p>	<ul style="list-style-type: none"> ✿ Language A1: literature from a variety of periods, genres and styles ✿ Second language: students learn to understand and use the language, and gain insights into the cultures of the countries where the language is spoken ✿ Individuals and societies: economics, geography, history, philosophy, psychology, social and cultural anthropology, business and management, Islamic history and information technology, in a global society ✿ Experimental sciences: students become familiar with the body of knowledge, methods and techniques that characterize science and technology, and learn practical laboratory skills ✿ Mathematics and computer science: the course develop logical and creative thinking in mathematics and use abstraction and generalization to reach conclusions ✿ Arts: includes visual arts, music and theater arts. Students explore art forms from different cultures throughout the world. ✿ Theory of knowledge: questions about different sources of knowledge: perception, language, emotion, reason, and different kinds of knowledge (scientific, artistic, mathematical and historical) ✿ Creativity, action, service: artistic activities, sports, expeditions or local or international projects, community or social service projects. ✿ Extended essay: an opportunity to conduct an in-depth study of a topic of special interest
<p>6. Examination Process</p>	<ul style="list-style-type: none"> ✿ Delegated senior examiners share the responsibility of preparing the examination papers and marking

	<p>schemes</p> <ul style="list-style-type: none"> ✿ Examinations are checked for internal validity, intellectual challenge and bias
7. Internal Assessment	<ul style="list-style-type: none"> ✿ Varying from oral presentations and student abilities to hold meaningful discussions in second language courses to a student created portfolio in the visual arts program ✿ Each schools creates an IBO approved set of checklists and rubrics that allow for internal assessment to occur as objectively as possible
8. Grading and Marker Reliability	<ul style="list-style-type: none"> ✿ Examiners who are able to mark consistently and objectively ✿ Examiners are subjected to a quality control check of their marking with every examination session ✿ Markers are provided with training in the skills needed to properly perform the task required of them