A MODEL OF EDUCATION FOR THE XXI CENTURY

What every educator should know, to teach and evaluate students, according to key competencies for life

Liceo Javier
Guatemala C.A.

2nd. Edition
A MODEL OF EDUCATION FOR THE XXI CENTURY

What every educator should know, to teach and evaluate students, according to key competencies for life
2nd. Edition
LICEO JAVIER, 2016

Translated by: Paola Morales de Esquivel
Advisory Board Members

Rector: P. Miguel Francisco Estrada Lemus sJ.
Principal: Claudio Vinicio Solís Cortez
Administrative and Finantial Officer: Andrea de la Luz Quintana Ochoa
Academic Coordinator: Olga Irene León Miranda
Academic Advisor: P. Luis Achaerandio Zuazo sJ.
Pastoral Coordinator: Rosario Martínez de González
Pre-school and Elementary School Coordinator: Hilda Myrna Solís de Sagastuy
Middle School Coordinator: Jorge Mario García Salazar
General secretary: Nicté Selene Estrada Orozco

Publicaciones Escolares
www.liceojavier.edu.gt - liceojavier@liceojavier.edu.gt
LICEO JAVIER, Guatemala, C.A.
Society of Jesus’ Project
Calzada Aguilar Batres 38-51, Zona 12
PBX (502) 2324-5999

1st. Edition: April 2014
2nd. Edition: July 2015
Translated by: Paola Morales de Esquivel, August 2016
Printing: Talleres gráficos IGER

Partial and/or total reproduction of this publishing is permitted, provided the resources are cited. Reproduction is expressly prohibited, in case of commercial purposes.
PRESENTATION

In 1959, a Jesuit with the surname Achaerandio came to Guatemala; along with him, there came uncountable dreams, goals, and wishes of loyalty to the Society of Jesus’ Mission. His prompt inclusion to the fabric of society from Central America, enabled him to notice the educational needs of our countries.

Today, after a long sequence of fructiferous and ample contributions to education, Achaerandio, educator of educators, who presents the essence of a model that, on the basis of the current pedagogical movements, and of the long educational tradition of the Society of Jesus, demonstrates that it is possible to offer an education that empowers and develops a person in all dimensions: cognitive, affective, spiritual, social, ethical, physical, etc.

Some of his closest friends and disciples have participated with him in the elaboration of this publication, in which it is clearly and patiently detailed what every educator should know to develop the key competencies for life; furthermore, it is presented some kind of “guide” that is intended to orient the teachers’ job in the classroom, and whose content has been applied, and has inspired the daily practice at Liceo Javier.

While sharing the richness that Liceo Javier has found in the competency-based syllabus, it arouses the hope that the accumulated experience can serve other educational institutions, so the educational quality in our country can be improved, since “the more universal a good, the more divine it is”.

PRINCIPAL’S OFFICE
INTRODUCTION

Most Universities and Ministries of Education in Central America have undertaken the task of renovating their Educational Projects, responding to the big changes and exigencies of the new century. A theme that usually appears in this process is the education of students according to Key Competencies.

That is why it is normal that almost all educators have read or listened about this topic. But, on the other hand, there are only a few professionals in education who are proficient in this new approach of education based on Competencies; so it happens that most educators don’t even understand the deep meaning of the concept “Competencies”, or they don’t know how to develop them in the students or how to evaluate the achievements regarding such development; consequently, they continue applying the traditional syllabus with slight changes.

In fact, there are only a few Educational Institutions in Central America which have substantially moved forward in the application of the competency-based syllabus to the learning-teaching process; in the Planning of the teaching sequence as well as of the class tasks, there is a limited presence of the practice of such Competencies. According to some surveys, it gives the impression that this omission or scarcity is due, among other reasons, to two of them that are verifiable: First, to the “resistance to change” that seems to be a continuous characteristic in the Educational Institutions of America Latina; Escolet (1992), describing the Latin-American universities, which are supposed to be the most developed ones and open to change, wrote… “a considerable part of the current history of universities, has precisely been to go behind the political, social, scientific, technological, and even spiritual events “. The second cause, linked with the previous one, is the lack of knowledge on the topic; in general, educators have only a few or insufficient knowledge regarding these Competencies as well as their transcendental importance to improve people’s life, and consequently, to improve the welfare state, the peace, and the social coexistence. Since unfortunately, “unknown is unloved”, there is still an indifferent and not much committed attitude in some educators, to show talent and educating vocation to accompany their students in this noble mission of guiding them through the human adventure of developing their “Key Competencies for Life”, just as they were named, for the first time, by Dominique Richen and Laura Salganik. (2004).
Everything will change, the day when most of educators become convinced that these are really “key competencies for life”. So, the main objective of this book is to persuade you to agree with this big truth, so that, you decide to generously devote to this noble mission of educating your students on the basis of Competencies.

Every single doubt that the educators may have about this important topic is not going to be solved by reading these pages, but this undoubtedly will help to clarify and solve some of the following frequent questions:

• Is, indeed, that important to educate the students based on competencies?

• What is a “Competency” within the educational context?

• Why are they considered as “key competencies for life”?

• Which are the competencies considered as key ones; how is each one described?

• How to conciliate the development of these Competencies with a new description of the “School Profiles”?

• Which are the values that should be integrated in the construction of the selected Competencies?

• Which are the changes that should be done when creating the Lesson Plans, the Teaching Sequences, and the Methodologies, to achieve the required development of such Competencies?

• How to evaluate the development of the Competencies?

This book has seven parts or chapters, which are intended to answer the previous questions:

• The 1st. Chapter tries to explain why the topic of the development of Competencies in Education is given so much importance in our social juncture, and what implies to be “key competencies for life”; these reflections are concluded by defining the concept of “Competency”, and mentioning its components.

• The Chapter 2 is the most extensive; it takes most of this book; there, the 16 Competencies that seem to be “key for life” of all human beings in early XXI century, are mentioned; each one of them is detailed through a “description” of the Competency, and it is also included the “definition” to identify it, some “dimensions” that compose it, and a short list
of “indicators” that confirm its active presence. This chapter is, for the educator, a valuable instrument of reference, not only to understand better the definition of each selected Competency, but also to create their lesson plans and learning guides; and, specially, to evaluate the level of development that the student achieves in one or more Competencies.

• The Chapter 3 illustrates a selected values Decalogue; they are also described and defined, as well as their dimensions and indicators. When the educator starts to produce his Lesson Plan according to the teaching based on Competencies approach, he shall decide the values to develop; in this chapter valuable material to make a good and easy choice will be found.

• In the 4th. Chapter, the School Profiles of the student graduated from the Educational System, are presented. The main features of these Profiles must be in perfect harmony with the dimensions and indicators of the Competencies that are described in the 2nd. Chapter, taking into account their cognitive aspects, as well as their skills and values.

• The Chapter 5 refers to a chief topic; it is known that the traditional technologies of the “master class” leads quite little to education in Competencies; in this Chapter a methodology named “double period” is explained, which, as per it has been widely demonstrated, is very effective to achieve that objective.

• Chapters 6 and 7 focus on a theoretic-practical approach; chapter 6 presents reflections and a model of how the new Lesson Plans, addressed to the teaching of Competencies, should be. Through it, educators can be encouraged to prepare their Lesson Plans and learning guides intended to develop Competencies; they will find examples on how, taking a topic of the subject matter, the educator combines this academic topic with some achievement indicators of procedures and with other of attitudes and values. Chapter 7 also offers reflections and models about the processes of Competencies evaluation.

This book about Competencies is devoted mainly to educators who have the spirit of improving the educational practice.
The need of teaching\(^1\) COMPETENCIES to children and youngsters

- **Introduction to the topic of competencies:**

It is evident that the world is rapidly changing in many aspects: economic, social, political, etc. Along with globalization, and most of all, with the “informative revolution” of ICT (Information and Communication Technologies), a new culture is being generated; According to Pierre Lévy, (2007), “we live in one of these weird moments in which a new style of humanity is being invented”.

In Guatemala, as well as in many other countries, it is necessary to move from a culture of real analphabetism (and of “functional analphabetism) to a culture of interactive readers through digital platforms. The worst thing is that we get asphyxiated with so much information, and we are forgetting how to “Think”; also, we are ignoring the authentic interpersonal and inter-social communication. Our communication style is fragile and superficial, probably, because velocity of stimuli astonishes us.

According to Manuel Castells (2001) sociologist-researcher who worked at University of Barkly, young people today, enfolded all the time in numerous and attractive **stimuli**, need to develop a strong and, at the same time, flexible identity; **strong**, because nowadays there is a lack of autonomous and free personalities with a judgment to decide by themselves, with a solid support of

---

ideas and affections; the ideal thing is that young people today, acting like mature human beings, make plans toward reasonable objectives that happily lead them along their lives.

On the other hand, such personalities should be flexible, continuously adaptive, well-targeted, and should also manage really clear information. How to choose in digital network objective and pertinent information? And how to process such data? This implies that young people today should develop, among others, the intellectual competency to find relevant information in such a vast amount of messages that surrounds them.

Castells, as from his analysis about our informational society and about the social disagreements, in 2001 proposed an education that is devoted preferably to the development of competencies as the essential objective, without undervaluing the importance of learning the basic contents; summarizing the above mentioned, the cited author considered that the ideal education should attain that the students become skilled at three basic concepts:

Capacity to know (or to build knowledge), having previously selected the relevant information;

An identity that is well formed to decide with autonomy and adaptation flexibility;

Essential values leading to act correctly (“ethical competency”).

As an intelligent solution to this situation of the current society, many important international institutions devoted to improve the education quality, have emerged; they suggest that the Educational Systems focus their actions to reach students’ development in certain Competencies considered as key ones; for example:

During the 46 UNESCO International Conference (2001), two clue lines oriented to the XXI Century education, were discussed: teaching competencies to students and education for citizenship (that is to say, generating responsible citizenship). Years before (1996) the Delors Report UNESCO (“Learning: The Treasure Within”) was published, which established four pillars or educational principles constituting essential knowledge that should be developed.
In 1997, under auspices of OECD (Organization for Economic Cooperation and Development), the DeSeCo Project (Definition and Selection of Competencies: Theoretical and Conceptual Foundations"), was started. It suggests categorizing generic Competencies into three groups. See Rychen D.S. and Salganik, L.H. (2004).

The Program for International Student Assessment (PISA), developed in consecutive stages in 2000, 2003, 2006, 2009, 2013, made also important contributions for the Changing of Educational Paradigms. The objective of the PISA Program, when it started in 2000 with 17 countries, was and still is to evaluate the educational quality; in 2013, 70 more countries participated; the items or tests are not intended to evaluate the curricular contents, strictly speaking, which is what nowadays is taught in Educational Institutions following a rote learning approach, but skills or procedures that students develop for being part of the competencies, in addition to develop certain basic knowledge that young people need to continue with their studies, and to be able to integrate in their adult life, both as professionals or in their “chores” as workers.

Another significant project focused on the teaching of competencies in Universities, is the TUNING Educational Structures in Europe; in 2003, the universities around the 16 countries that back then formed the European Union (in 2013 they were 27
“Universities around the 16 countries that back then formed the European Union (in 2013 they were 27 countries), issued their report titled TUNING that is certainly outlined according to the new social-constructivist paradigm of education “for the formation of competencies, that include the relevant attitudes and values”. This report gathers the agreement of 101 European universities to create a “European Higher Education Area” or “Global University Campus”. 30 basic or generic competencies were chosen, which comprise the curricular base of all careers.

Some Ministries of Education, for instance the Guatemalan one, have created a National Curriculum based on Competencies, for Preschool, Elementary, and High school. According to this curriculum (2015:2016)… “leading education towards development of competencies, turns into a strategy to form people capable of exercising modern citizen’s civil and democratic rights, as well as of participating in a world of work that requires wide knowledge, everyday more”.

DIVISION OF COMPETENCIES

Authors widely discuss about competencies, and divide them into generic and specific ones. The generic competencies, which are exclusively explained in this book, are more universal than the specific ones. In accordance with the humanistic approach of competencies, all human beings have the right to be taught how to develop the generic competencies, also called “basic competencies” or “key competencies”; that is because, according to many authors, they are essential to reach a dignified life; consequently, they should be developed as a main objective, not only in university classrooms, but also in all the previous levels of education. Nowadays, quite a few experts and educators like Frade (2007), consider that the formation of those generic competencies, for instance, the comprehensive reading, should start to be developed since preschool education.

Specific Competencies are those which are connected with concrete areas of the professional knowledge, and meet the requirements of diverse professions and careers; thus, they are not to be studied in this document. All the contributions and considerations below are focused exclusively to generic competencies.
The projects and programs before mentioned, regarding the selection and development of competencies, constitute the outcomes of investigations, inquiries, dialogues and negotiations where experts and representatives of many countries and cultures have been involved with different viewpoints. Concretely, it can be said that in these projects, three main approaches have prevailed, which have found each other, little by little, because of the coincidence of interests.

The educational approach is mainly promoted by important international institutions devoted to education, and by innovative universities determined to form the new professionals of the XXI century; also by many Ministries of Education and Educational Research Centers, intended to form positive citizens, according to the sign of the times.

The business and economic approach that seeks to form workers, chiefs, etc. Initially, the fact that in the business world the education according to competencies had been strongly encouraged, aroused certain suspicion and mistrust that all this educational movement was exclusively a neo-liberal movement to get more profits in the labor market. Nowadays this prejudgment is not relevant any more, but it is indeed accepted, not surprisingly, that the workers who have developed the Key Competencies will be more efficacious and efficient for the companies and countries economy.

The humanistic-social approach of the generic Competencies is represented by philosophers and “followers” of areas like sociology, psychology, anthropology, educational philosophy, etc.; they were consulted by both the educational and business sectors. It is important to remember some criteria on this humanistic-social approach of the competencies; Dominique Rychen and Laura, L. Salganik, refer to the “Key competencies for life”, that have to do with the spirit of Delors report – UNESCO -afore cited, which comes up with four fundamental kinds of knowledge, to form responsible citizens; two of them are: “learn to be” and “learn to live together”. All this is synchronized with the researches on “Emotional Intelligence”, which are discussed by the psychologists Peter Salovey and John Mayer, and spread out in the past decade by Daniel Goleman. Said authors value specially those that, within the “generic” competencies are called “Interpersonal Competencies”, giving special importance to the formation of the human values.

It is important, before going on, to remember some basic criteria on the humanistic-social approach. When defining and selecting the competencies, the following considerations should be taken into account:

a. The education in Competencies is not only for university students; it is also for young people studying middle and high-school, and for kids in elementary school.”
is also for young people studying middle and high-school, and for kids in elementary school; see, for example, Frade (2007), who proposes to start to form Competencies since pre-school. It is convenient for the modern society, that all kids and youth are educated according to competencies, not only the professional university students, but also those who go for their insertion in the labor market in other options or occupations.

b. The formation of competencies is not only addressed to the professional or business elite; it is for all citizens in any country. According to Paulo Freire, the true education is the last hope of poor people to overcome poverty and social exclusion. Mandela wrote: “through education, the peasant’s daughter can become a doctor, and the farm laborer’s son, can become a President of a big nation”.

c. The formation of competencies is the alternative to leave behind a blurred, repetitive, and alienating education, consisting in the teacher’s transmission of concepts (hopefully relevant ones), and the student is limited to take notes of some items or to copy cites, and then, to memorize some contents that the teacher has “taught”. This educational process, in which the students receive contents culturally inherited and memorize them, was called by Paulo Freire “banking education”, contrary to the “liberating education”.

That is why, it is wisely said that the education is a strong but ambiguous power, according to how it is understood and applied; it can serve and serves to alienate the citizens, making them passive, indolent, repetitive, and only one more piece of the system mechanism; or, it can be a powerful and effective instrument to develop each human being’s huge potential by improving and forming his Key competencies, that is to say, his analytical, reflexive, critical, and independent thinking; his social values; his mature liberty, his productive creativity, etc.

What are Competencies and which are their components?

Among the multiple definitions offered by authors about the topic, there are a series of common elements that can be concreted through the following descriptive definition of competency: “It is a dense, complex, integrated and dynamic system of knowledge of concepts, procedures, and attitudes that a human being has
developed at certain levels of quality, and that makes him able to solve problems and to continue learning (meaningfully, functionally, and permanently); essentially, these concepts, procedures and attitudes make an individual competent to reach his full potential as human being, citizen, and professional worker, or in diverse occupations and tasks”.

These integrated knowledge of concepts, procedures, and attitudes, which constitute the competencies, tend to increase the levels of the four fundamental learnings, proposed by the report Delors-UNESCO: “Learn to learn” (or know”); “learn to do”; “learn to be”; “learn to live together”.

The competencies, consequently, are an integrated system of three elements: concepts, procedures, and attitudes (values). For example, the “mature writing competency” is integrated by the following elements: the information that is transmitted; the skill of expressing (correctly and clearly) the ideas and feelings; and the attitude and human value to dialogue with others or, at least, with oneself. The identity and reality of the competencies denote much more than the addition of the elements which integrate them. Having in mind these three essential elements when planning, developing, and evaluating competencies, is very important, since when there is a lack of one of them, a competency cannot be built; along with attitudes, values such as truth, authenticity, solidarity, respect, etc, emerge. For instance, the components of the “comprehensive reading” competency are mentioned below.
<table>
<thead>
<tr>
<th>Concepts</th>
<th>Procedures</th>
<th>Attitudes and values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREVIOUS KNOWLEDGE regarding the topic of the Text to be read.</td>
<td>Microprocesses: decoding, encoding, lineal.</td>
<td>Pleasure of reading.</td>
</tr>
<tr>
<td></td>
<td>Macroprocesses: inferences, metacognition, and self regulation.</td>
<td>Attention to the meaning of the text.</td>
</tr>
<tr>
<td></td>
<td>Applying reading strategies, before, during and after the process.</td>
<td>Responsibility.</td>
</tr>
<tr>
<td></td>
<td>Making INFERENCES regarding the text.</td>
<td>Tenacity to continue reading.</td>
</tr>
</tbody>
</table>
“While developing a Competency with these three elements, certain thinking skills, such as “solving”, “analyzing”, “inducing”, “inferring”, etc. are practiced and improved”

It is convenient not to forget that always, while developing a Competency with these three elements, certain thinking skills (such as analyzing, synthesizing, inducing, deducing, inferring, relating, solving, etc.) are practiced and improved. These “thinking skills”, as the name suggests, are abilities that constitute the “how-to-think knowledge”; and consequently, they integrate the Thinking Competency; but always, some of them are also present and active in the development of each of the 16 Key competencies.

A thinking skill differs from a “procedure” because the first one is an ability that precedes the action and is achieved in the person’s mental processes; it is not observable, since it is an internal process; and the procedure is, according to Coll (1,999), a group of ordered actions, oriented to the achievement of a goal that is observable, and therefore, evaluable.

Analyzing again the previous example of the “Comprehensive Reading” competency, a good reader, while integrating the three elements (concepts, procedures, and attitudes-values) without expressly going after that, will develop and improve his thinking skills, such as analyzing, synthesizing, relating, inferring, making meta-cognitions, inducting, deducting, solving, etc.

What has just been said about the Comprehensive Reading Competency and its relation with the “thinking skills”, happens somehow in each of the other Competencies. That is why, as will be observed hereinafter, in the charts that describe each Competency that should be developed, the thinking skills are not particularly pointed out, even though those are very important; the reason is that it is read between the lines and actually, they function as cross-cutting items along each Competency, because in all of them it is required to “know to think”; and consequently, it is not necessary to specify them as they are accomplished.

For the afore mentioned, it is concluded that it is a big strategic progress in the educational practice, to have assumed that the
Competencies imply, in addition to Concepts and Procedures, other elements that conform the deep core of mature personality, such as attitudes and values, which affect the self-concept, the intrinsic motivations, the personal features, etc. These elements, concerning the emotional intelligence, are the slowest and most difficult to develop; that is why they should begin to be developed since the first years of pre-school education, through the teacher’s modeling and the application of specific strategies.

Generic Competencies are classified into three groups: instrumental interpersonal, and systemic competencies:

a. The instrumental competencies function as internal resources that help the human being to optimize and multiply his success possibilities into his personal, social, and professional life; quite a few of those instrumental competencies are related to the “higher-order thinking skills” formulated by Vigotsky; without them, a person is diminished, atrophied, unable to get high achievements, just as a stunted ceiba tree that was not developed. Some examples of instrumental competencies are: “comprehensive reading”; “verbal and non verbal expression”; “mature writing”; “addressing to learning” (or “knowing to learn”); “analytical, logical, reflexive, creative thinking, etc.”; “problems solving”; “use of ICT”, etc.

b. The interpersonal competencies are those which are related to the Emotional Intelligence according to Goleman, and with the “transitive personality tendencies”, according to Lersch. Some examples of these competencies are: “self-motivation”; “interpersonal communication”; “appreciation and respect to diversity and development of the interculturality”, “ethical sense and compromise”, etc. This means that the values and attitudes are more emphasized and are especially important in these competencies.

c. The systemic competencies include abilities and skills to comprehend how the parts of a whole or a system are related and integrated; they require that a person previously develop the instrumental and interpersonal competencies. Examples of systemic competencies are “capacity of applying the knowledge to the practice”; “creativity”; “management by objectives”, “leadership”, etc.

“The generic competencies are multifunctional. They are trans-cultural, that is to say, they are applicable to all cultures.”
Characteristics of the generic competencies

For the selection of the competencies that are convenient to be developed in the educational system, it is important to take into account the following characteristics:

The competencies are **multifunctional**, in order to solve multiple problems in diverse contexts and to reach different important goals; that is to say, they are applied to a huge scope of personal, scholar, social, professional demands, etc.

The competencies, consequently, are **transversal**, because they pass through ample sectors of human life.

They are **trans-cultural** according to the “Piagetian” sense, that is to say, they are applicable to all cultures; all human beings have the right to education, understood as an effective instrument to increase their immense possibilities and to develop their Key competencies for life: “nobody is left behind”, as per the quotation of an anonymous author in the Fourth Part of the POPOL VUH, the sacred book of the Maya-Quiche culture.

However, **they should “get interculturalized”**, that is to say, they are received and interpreted in different social contexts and cultures. For example, the competency called “interpersonal communication” is trans-cultural for everyone, but it will be interpreted and applied in the Chinese culture, with different criteria and shades than in the Guatemalan culture.

They encourage the development of the **thinking skills** and impulse the increase and maturity of the higher **attitudes and values**. They are consistent with the human rights principles and the democratic values; consequently, they promote the respect and appreciation for the “mother earth”, and for the social diversity: gender, culture, ethnic groups, tongues, etc.

They favor the personal, social, labor, and professional autonomy of human beings.

The generic competencies are dynamic groups that are **self-developed**; once a certain level of the competency is reached by a human being, this is prepared and motivated to go to a higher level of such competency; the sociologist Robert K. Merton, cited by Bruer, J.T. (1995), calls “Matthew Effect” to this phenomenon, in memory of the evangelist Mattheu, who wrote: For whoever has, to him more
shall be given; but whoever does not have, even what he has shall be taken away from him” (Mt. 13, 12). It is, for example, a positive feedback relationship between what one knows and the easiness to learn more; this phenomenon is scientifically confirmed by the researches regarding the reading comprehension development and the richness of vocabulary; the one who truly begins to read comprehensively at a reflective and inferential level, will reach rapidly the highest levels of reading comprehension (such as metacognition and self-regulation); and the one who does not have achieved this level, will stay forever among the multitudes of millions of “functional analphabets“ that only read superficially without comprehending the deep sense of what they read; with this, they are abstaining from getting, along their lives, true meaningful learning. The statistics of teachers of Primary school who, in Guatemala and in other Central American countries are “functional analphabets”, are very worrisome.

The generic competencies develop the meaningful and functional learning in the sense given by Ausbel to these terms.

Finally, the generic competencies are not evidenced in isolation but in clusters, as parts of a living body; they are interrelated and support one another. For example: the “problems solving” competency is intimately related with “logical-reflexive thinking”; the one who has developed the “thinking” competencies will be more prepared for the “ICT competency” and vice versa.
Selection and description of the key competencies for life

• THE GROWTH OF A HUMAN BEING regarding his Key competencies, is given in a dynamic and continuous process that should begin since the first years of life; this is clearly noticed in the basic competency of “verbal communication”, whose essential development should be done in a “critical period”, according to Piaget; but the same thing happens in most of the competencies, that should be developed in students since Pre-school.

A small group of Key generic competencies, to create the profile of the graduate student from high-school, is proposed hereinafter. The institutions and experts that generated the proposals and projects about competencies, briefly described before, helped us depurate a great number of possible generic competencies, suggested by an ample range of different researchers in numerous contexts; in fact, they shorten the list and left a manageable group of them; for example, the DeSeCo Project proposes 9 competencies ordered into three Categories. The TUNING Project chooses 30 generic competencies.

Analyzing the diverse proposals from different authors and Projects, and their applicability to determine the profile of the graduate students from secondary education in our context, **16 generic competencies** are suggested (7 instrumental, 7 interpersonal, and 2 systemic). All and each of these competencies have a real reason and should be considered as essential features of the graduate students’ profile, (even though some of them don’t aspire to continue studying at university), because “16 generic competencies are suggested, as essential features of the profile of all graduate students, because they are Key Competencies for life, in the XXI century.”
they are “Key competencies for life, in the XXI century”; for those who study at university, these competencies will be, furthermore, an excellent base to progress to a higher level of education, as competent professionals, wherever they live or work.

Next, the names of the 16 selected competencies are detailed.
A Model of Education for the XXI Century

1. Thinking Competency
2. Problems Solving Competency
3. Creativity Competency
4. Use of ICT Competency
5. Mature Writing Competency
6. Reading Comprehension Competency
7. Verbal and Non Verbal Expression Competency
8. Self Motivation Competency
9. Communication Competency
10. Diversity and Interculturality Competency
11. Socio-Motor Competency
12. Ethical Sense Competency
13. Spirituality Competency
14. Team Work Competency
15. Constructive Leadership Competency
16. Management by Objectives Competency
Next, the names of the 16 selected competencies are described, as well as their corresponding thematic Introductions, their Definitions, Dimensions and Achievement Indicators:

1. **INSTRUMENTAL COMPETENCIES**

I. Thinking Competency

Even though, in any sense, the 16 chosen Competencies are "Key for life" the **Thinking Competency** or "knowing to think" is described here, first of all, because of the completeness of its meaning and because of its importance and influence in the development and application of almost all other Competencies; for example, it is clear that upon that depends the "problem solving Competency", the "comprehensive reading", the "mature writing", and the other instrumental Competencies, such as "team working", "ethical thinking"; as well as both of the systemic Competencies: "leadership" and "management by objectives".

The Thinking Competency, which should be a particular characteristic of the mature human being, includes many deep meanings that are not easy to be described in few words; as a matter of fact, it is integrated by several dimensions or manners that the authors describe as "types of thinking", among which the following five ones are selected for their density of meaning: **Analytical-synthetic, Reflexive; Logical; Critical-Constructive, and Systemic** ones.

These diverse "dimensions" of the Thinking macro-competency (as a whole), are dynamically interrelated and each one is influenced by every one another, when the "thinking" human being tries to comprehend and interpret the reality in its different aspects (personal, social, of the physical environment, etc.) Each of these dimensions or types of thinking has its own identity, among a group, and can be defined as follows:

**The analytical-synthetic Thinking** combines two thinking aspects; as it is **analytical**, it is used to identify and disarrange complex situations in their constitutive elements; it establishes relations among those elements or parts; it evaluates those elements along the mental processes; and all that, with the

---

2 Quite a few educators think that, in the present world, mastering English language as the universal tongue and Lingua Franca, should be considered also as one of the Key Competencies of communication.
objective of comprehending the realities, interpreting and explaining them. It is used to be combined with the synthetic Thinking, whose function is, as its name implies, creatively reintegrate in brief synthesis, the most meaningful aspects of those elements already identified. For example, a good reader, while analyzing and comprehending the meaningful elements from a text, and getting the main ideas as well as recreating them through new inferences, is used to finish those processes by a mental or written formulation of a brief personal text, which synthesizes what he has read. One of the synthetic thinking characteristics is to clearly and precisely organize and express complex ideas in few words. This functional complementation of the two Thinking dimensions, explains that some authors prefer the expression analytical-synthetic Thinking because it is useful to develop them together.

The reflexive Thinking is known because of the mind’s slow going back and forth, in order to deeply recognize, analyze and judge the truth and quality, both practical and ethical of the person’s diverse outer social realities, as well as, the personal experiences, situations and actions. The reflexive Thinking analyzes, reasons, questions, and judges the information of some importance received by the person through different media. The authors attribute multiple actions to the reflexive thinking, such as: identifying the key elements of problems and situations, analyzing, reasoning, and if it is necessary, questioning the authenticity and quality of the information. It acts in different contexts: a) in the rational person’s outer realities; and b) in the personal experiences or actions. The action carried out by a rational person when evaluating his mental activity, is called “metacognition”, that is to say, when he reflects upon his own thoughts. Nowadays, the term “discernment”, whose meaning is similar to the one of the reflexive Thinking, is used in some educational environments to indicate the analysis and self-evaluation that a person makes about his motions, ideas and spiritual feelings.

The logical Thinking endows a person with the ability to accomplish inductions, deductions, arguments, patterns and deep explanations about the facts that intervene in the reality’s events, situations, problems, etc.; it is also useful to evaluate, comprehend, and judge the veracity or the reason of ideas and arguments, in order to arrange them, and consequently, drawing conclusions and making decisions.

The critical-constructive Thinking is useful for the person’s questioning to others and to himself about something that in the present time is happening or happens, but that could be better of different; this way of thinking could not be called “critical” if this interrogation is not accompanied by alternative, responsible, and realistic proposals of change and improvement. The criteria that should guide the use of this Thinking are “truth”, “liberty” and “greater good”. Mastering the critical-constructive Thinking, assumes to have sufficiently developed the analytical, logical, reflexive, and systemic Thinking.
The systemic Thinking has an analytical and global vision of the problems and situations; it takes into account and comprehends the different viewpoints or perspectives within the globality and complexity of reality, dissembling the whole into its parts; and this is made in order to create and convey any integrated production from the elements (a synthesis, a plan, a project, a thesis, etc.).

On the other hand, it is supposed that the human being who “knows how to think”, has already developed (according to Vigotsky’s viewpoint), the different “higher-order thinking skills”, that usually are expressed with verbs such as analyzing, synthesizing, defining, relating, comparing, evaluating, inducing, deducting, etc.

So that is why, in the educational processes, “indicators” through which the students’ levels of achievement in the different “dimensions” or types or Thinking, are chosen. It is normal that some of these verbs are repeated in the expression or concrete formulation of these “dimensions”. As mentioned before, this prevent us from constantly explaining what the “thinking skills” developed in each competency are, because it is taken for granted and actually, they function as cross-cutting items along each Competency, because in all of them it is required to “know how to think”. Remember that thinking skills are all those that allow our brain to process the information, and then to materialize it into concrete actions and skills. In this sense, it is important to clarify again the difference between a thinking skill and an ability. According to Frade (2007), the skill is evident at a cognitive level, while an ability is manifested at a behavioral level and it is observable and evaluable. In the skill, the mind is processing the information; in the ability, the mind has already processed the information, and the human being makes it evident through concrete actions.

Development, organization and structure of the Human Thought

As it is known, when there are favorable conditions, the organization and structure of the human thought starts very soon in a person’s life; and they continue to develop in consecutive stages or conditions. Piaget proposed four “stages” to describe this evolutive process: 1\textsuperscript{st}. The “sensorimotor stage” (from the childbirth up to 2 years old approximately); 2\textsuperscript{nd}. The “preoperational” stage (from 2 years old up to 7 years old); 3\textsuperscript{rd}. The “concrete operational” stage (from 7 years old up to 12 years old); and 4\textsuperscript{th}. The “formal operational” stage (from 12 years old onwards). In the next charts of this chapter, appear the dimensions in which the Competencies have been divided, as well as three columns with the indicators of each; so, each column corresponds to one of the three stages that are considered in this document, to wit, 2\textsuperscript{nd}, 3\textsuperscript{rd}, and 4\textsuperscript{th}. That is to say, in academic terms, in this document it has been thought in three different groups of students: a) students from 12 to 18 years old, which are supposed to be in the Formal
Operational stage; b) students from 7 to 12 years old, who are in the Concrete Operational stage; and c) students from 5 to 7 years old, who are considered to be in the stage named “Preoperational”.

To address the readers who are unspecialized in Evolutive Psychology, the characteristics of the students who are included into these three stages are briefly described below:

**Preoperational stage.** This stage, according to Piaget, extends through the 2 until the 7 years old, where the child develops basically a system of symbols to represent people, objects, places, realities that are familiar to him, etc. this is the stage of the “imitations”: of gestures, sounds, and partners and adults’ actions; this is the term where children take too much time having fun with original and creative games; the symbolic thought or “representational” thought, with which they are endowed, allows them to develop some mental activities such as: identifying elements of a whole, discovering differences and similarities, making simple evaluations; and, what is more important, if conditions are favorable, learning to read and to write; actually, in this stage, the fundamentals of what later will be “learning to think” maturely, are set. One characteristic of children in this stage is the “egocentrism”; they are not able to put themselves in others’ position; when they talk within a partners’ group, they do it through authentic “monologues”, without paying attention to what others say. Furthermore, children at that age are only able to retain simultaneously some items or data in their “working memory”, what limits them to do, with their minds, the activities called by Piaget both formal and concrete “operations”; this causes that these children’s Thinking Competency still has relatively novice and low quality, what restricts to educators the possibility of formulating “evaluating indicators” to measure such Competency in this group called “preoperational”.

The concrete operational stage (From 7 to 12 years old). Children in this stage have increased their “working memory” capacity; they are able to make “operations”, according to the “Piagetian” sense, that is to say, mental activities more complicated that in the previous stage; children make certain integrations of mental representations and schemata of things and facts, which permit them develop classifying abilities and numbers management, and also comprehend the “principle of conservation”, because they are able to “decentralize”, that is to say, they can take into account at the same time, the main aspects or the ways of looking at a situation, in order to draw conclusions; for example, they notice that there is the same amount of liquid while moving it to containers of different width and height, even if at a glance it seems the opposite. But, on the other hand, the
“In the concrete operational stage (from 7 to 12 years old), children are able to make “operations”, according to the “Piagetian” sense.

The formal operational stage (from 12 years old onwards). The adolescent in this stage can manage abstract ideas, since he got the hypothetical-deductive thought; his mental structures are developed and he thinks both in concrete and abstract terms; with his thought, he can develop different hypothesis, and mentally and experimentally, comes up with evidences about the truth of them. His systematic reasoning instructs him to solve problems in different areas, such as scientific, social, political, economic, etc. Piaget is cited in a short paragraph that clearly describes these adolescents’ thoughts: “First of all, the thought does not go from reality to theory any more, but it draws out from the theory in order to establish or to verify the real relations among things. Instead of only coordinating facts about the real word, the deductive-hypothetical reasoning implies possible definitions, and therefore, brings about a unique hypothesis of what is possible and necessary”. On the other hand, especially according to Vigotsky, and also to Piaget, adolescents will only reach this thinking stage, if the following three items or factors dynamically converge in them: A good development of their neuronal structure, that assumes a good nutrition; a healthy social environment (familiar, scholar, etc.); and opportunities to “experiment” (with objects and situations, etc.). Of course, those millions of children around the world that due to chronic malnutrition couldn’t develop their neurons normally, will neither have the privilege to reach this stage nor other previous ones. And neither will those who even though were correctly nourished, unfortunately faced the experience of an unhealthy familiar environment or a deficient education. Regardless of that, they can develop certain basic thinking skills, providing that somebody accompanies them during their learning.

In the following pages, the content and sense of each of the 16 Competencies considered as Key for a life, are explained, adapting the three levels of “achievement indicators” to the mentioned stages of the students’ intellectual development. In this Chapter 2, the reader will be able to observe that only a sample of the possible achievement indicators is presented; the purpose of this is that educators can select some of them while creating their Lesson Plan and Learning Guide for students, indicating to them the topic to be studied, the tasks to be completed, the problem or problems to be solved, etc. In Chapter 6 there are offered some models of Lesson Plans and of Personal work; but it is suggested something much better than this: that, being encouraged by those few items and models, teachers dare to create their own “indicators”, especially those who are intended for children in the preoperational stage (from 2 to 7 years old); to make this task easier, they can get inspired also through the book titled
“Competencias Fundamentales para la Vida”³, which offers many indicators for the different competencies. Notice that, at the moment of evaluating each indicator, teachers can check according to their criteria, for example from 1 to 5, through a rubric or with other type of instrument, as indicated in chapter 7 from this book.

I. THINKING COMPETENCY, OR “KNOWING HOW TO THINK”

DEFINITION: The Thinking Competency or “Knowing how to Think” is a complex feature that the human beings acquire through the development and integration (at a level according to his chronological age) of the higher-order thinking skills: identifying, analyzing, synthesizing, relating, evaluating, comparing, inducing, deducing, drawing conclusions, etc. And all this, in order to perform wisely and efficiently in problems solving and tasks of personal and social life.

“Knowing how to think” is a special characteristic of the human being, which should be developed through an ascending process, taking into account the stages of development, since the beginning up to the end of life. The authors indicate many descriptions, ways, perspectives, types or dimensions of this “knowing how to think” or Thinking competency; such dimensions are related, complemented and interrelated one another. The five dimensions that appear to be the more inclusive and that gather the main meanings of the Thinking Competency, or “knowing how to think” are: analytical-synthetic, reflexive, logical, critical-constructive, and systemic Thinking; some authors also include the creative Thinking, but in this document, it is preferred to take this dimension as one of the 14 Key Competencies, because of the singular importance of creativity in the present society. As it will be seen next, the best or worst attribute of the personal development of the Thinking Competency, will depend, in a great part, upon the genetic heritage, but also and mainly, upon the person’s family and scholar context.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formal operational stage (12 to 18 years old)</td>
</tr>
<tr>
<td>1. Analytical -Synthetic Thinking</td>
<td>Defines, using his own words, a complex concept.</td>
</tr>
<tr>
<td></td>
<td>Identifies, relates and integrates the characteristics and parts of the study of an object or concept.</td>
</tr>
<tr>
<td></td>
<td>Explains the differences between two elements, people or situations (two civilizations or two chemical substances, two writers), at an inferential, critical, and reflexive level.</td>
</tr>
</tbody>
</table>
I. THINKING COMPETENCY, OR “KNOWING HOW TO THINK”

“Thinking competencies” refers to the ability of an individual to think critically and productively, which is a special characteristic of the human being. This trait should be developed through an ascending process, taking into account the stages of development, from the beginning to the end of life. Authors indicate many descriptions, ways, perspectives, types, or dimensions of this “knowing how to think” or Thinking Competency; these dimensions are related, complemented, and interrelated. The five dimensions that appear to be the most inclusive and that gather the main meanings of the Thinking Competency, or “knowing how to think,” are: analytical-synthetic, reflexive, logical, critical-constructive, and systemic Thinking. Some authors also include the creative Thinking, but in this document, it is preferred to take this into account in future publications, considering the singular importance of creativity in the present society.

As it will be seen next, the best or worst attribute of the personal development of the Thinking Competency will depend, in a great part, upon the genetic heritage, but also and mainly, upon the person’s family and scholarly context.

<table>
<thead>
<tr>
<th>DIMENSIONS INDICATORS</th>
<th>Pre operational stage (7 to 12 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analytical-Synthetic</strong> Thinking</td>
<td>Selects the best choice to solve a problem after having observed the elements and discovered the connection between them.</td>
<td>Takes into account the different variables to select the best way of solution, after having observed the elements and discovered the connections between them.</td>
<td>Identifies important information in a problem-situation.</td>
</tr>
<tr>
<td><strong>Reflexive Thinking</strong></td>
<td>Summarizes, strategically, the ideas of a complex text. Draws conclusions after studying a situation.</td>
<td>Makes a guided summary, applying generalization and suppression rules. Draws conclusions about the situation under consideration. Expresses opinions about the situation under consideration, starting from main ideas.</td>
<td>Paraphrases important ideas from a paragraph. Expresses the most important idea of a situation.</td>
</tr>
<tr>
<td><strong>Logical Thinking</strong></td>
<td>Relates, according to several perspectives (academic, social, personal, Christian, etc...) the causes and consequences of his decisions.</td>
<td>Relates the causes and consequences of his actions and academic results.</td>
<td>Identifies the causes and consequences of his success and limitations.</td>
</tr>
<tr>
<td><strong>Critical-Thinking</strong></td>
<td>Formulates clear and concrete questions regarding different situations, topics, etc., making evident that different perspectives have been taken into account.</td>
<td>Formulates clear and concrete questions regarding different situations, topics, etc., after having thought in different factors.</td>
<td>Formulates clear and concrete questions regarding different situations, topics, etc.</td>
</tr>
<tr>
<td><strong>Constructive Thinking</strong></td>
<td>Defends with arguments, the main reasons to make decisions or to act according to Christian and universal values.</td>
<td>Justifies the reasons to make a decision or to act in a certain way.</td>
<td>Justifies the reasons to act in a certain way.</td>
</tr>
</tbody>
</table>

A Model of Education for the XXI Century
<table>
<thead>
<tr>
<th></th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Reflexive Thinking</td>
<td>Replaces previous conceptions by new more contextualized ones, and transforms them in solution proposals.</td>
<td>Modifies his previous conceptions (about: customs, habits, religion, social reality, history, etc.) and expresses possible changes in his way of acting.</td>
<td>Listens to points of view and ideas different from his.</td>
</tr>
<tr>
<td>3. Logical Thinking</td>
<td>Deduces sequences of the elements of a problem and its possible solutions.</td>
<td>Compares the elements that conform a sequence.</td>
<td>Identifies a sequence and the elements that constitute it.</td>
</tr>
<tr>
<td></td>
<td>Infers patterns of behavior from what is observed and known, considering elements, facts, data, causes and consequences.</td>
<td>Identifies causes and deduces consequences from what is observed and known.</td>
<td>Recognizes the relation between causes and effects of concrete phenomena or facts around him.</td>
</tr>
<tr>
<td></td>
<td>Orders ideas and concepts, according to his own criteria, categorizing them and creating something personal.</td>
<td>Orders ideas and concepts, according to suggested criteria, categorizing them and creating something of his own.</td>
<td>Orders data and objects according to suggested criteria and categories.</td>
</tr>
<tr>
<td></td>
<td>Deduces reasonable conclusions on the basis of data, facts and elements, holding out the criteria, relations or connections.</td>
<td>Deduces and holds out conclusions on the basis of data, facts and elements.</td>
<td>Deduces consequences of his acts, facts, or phenomena.</td>
</tr>
<tr>
<td>4. Critical-Constructive Thinking</td>
<td>Questions and idea, viewpoint or action with solid and reasonable arguments.</td>
<td>Questions viewpoints and actions.</td>
<td>Asks questions to solve doubts.</td>
</tr>
</tbody>
</table>
### I. THINKING COMPETENCY, OR “KNOWING HOW TO THINK”

The development and integration (at a level according to his chronological age) of the higher-order thinking skills: “identifying, analyzing, synthesizing, relating, evaluating, comparing, inducing, deducing, drawing conclusions, etc.” And all this, in order to perform wisely and efficiently in problems solving and tasks of personal and social life.

Taking into account the stages of development, since the beginning up to the end of life. The authors indicate many dimensions that appear to be the more inclusive and that gather the main aspects of systemic Thinking; some authors also include the creative Thinking, but in this document, it is preferred to take this dimension as one of the 14 Key Competencies, because of the singular importance of creativity in the present society. As it will be seen next, the best attribute or worst attribute of the personal development of the Thinking Competency, will depend, in a great part, upon the genetic heritage, or upon the person’s family and scholar context.

---

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicators</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4. Critical-Constructive Thinking</strong></td>
<td>Arguments the reasons why he disagrees or agrees with a viewpoint.</td>
<td>Gives reasons about what he agrees or disagrees.</td>
<td>Requires convincing questions or explanations about his questionings.</td>
<td>Requires answers about his concerns.</td>
</tr>
<tr>
<td></td>
<td>Requires convincing answers or explanations about his questionings, by reaching personal conclusions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognizes when his ideas are not viable, or if they are wrong or unreasonable.</td>
<td>Recognizes when he is not right.</td>
<td>Listens to partners’ or teachers’ reasons.</td>
<td></td>
</tr>
<tr>
<td><strong>5. Systemic Thinking</strong></td>
<td>Presents reasonable solutions regarding the questionings he makes.</td>
<td>Presents other solutions that are different from the ones proposed.</td>
<td>Contributes to ideas within the groups where he participates.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taking into account diverse approaches to reality, he establishes relations among the different elements of such reality and globally integrates them.</td>
<td>Taking into account different approaches to reality, he establishes relations trying to integrate them.</td>
<td>Establishes relations among people, objects, and situations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explains the connection of sequences, events, or situations in a system (historical, biological, artistic, etc.) creating a hierarchy of their components.</td>
<td>Explains the connection of sequences, events or situations in a system.</td>
<td>Creates sequences with concrete material.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Predicts the implications and effects, both positive and negative, of important actions or projects he wants to carry out.</td>
<td>Predicts effects, both positive and negative, of important actions or projects he wants to carry out.</td>
<td>Predicts effects of his acts and evident situations.</td>
<td></td>
</tr>
</tbody>
</table>

---

A Model of Education for the XXI Century
### Thinking Competency, or “Knowing how to Think”

**Definition:** The Thinking Competency or “Knowing how to think” is a complex feature that humans acquire through the ascending process. It is a special characteristic of the human being, which should be developed through an ascending process, identifying meanings of the Thinking Competency, or “knowing how to think” as: analytical-synthetic, reflexive, logical, ... some authors also include the creative Thinking, but in this document, it is preferred to take this dimension as one of the 14 Key Competencies, because of the singular importance of creativity in the present society. As it will be seen next, the best or worst attribute of the personal development of the Thinking Competency, will depend, in a great part, upon the genetic heritage, but also and mainly, upon the person's family and scholar context.

#### Stages of Thought Development

<table>
<thead>
<tr>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creates and holds out proposals of change, on the basis of a global and reasonable vision of reality.</td>
<td>Creates proposals of change, on the basis of reasonable arguments.</td>
<td>Gives opinions on possible improvements to his environment.</td>
</tr>
<tr>
<td>In his processes of analysis, integration, and generalization, he takes into account that the whole is greater than the sum of its parts.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The systemic thinking depends upon the development of other thoughts, therefore, the columns concerning concrete and preoperational abilities, only approximate to the development of this thinking, without being explicitly it.
Solution and Innovation Competencies

II. Problem Solving

Along our life, we continuously face the need to solve problems in different aspects: concerning family, school, and job. All human beings, no matter their age, profession, socioeconomic status, or gender, go through problems of diverse nature: economic, of interpersonal relationships, academic, physical, etc. That is why, it is necessary to be prepared to face them. However, where problems solving is learnt? How can problems solving be learnt? Who is the person in charge of problems solving teaching?

Trying to answer the previous interrogations, the current education recognizes that, due to the challenges that the new century is presenting us, it is necessary to form and prepare students to be able to use and apply the acquired knowledge, regarding problems solving in life and school.

In the National Curriculum 2,005, from the Ministry of Education of Guatemala (MINEDUC for its acronym in Spanish), it is established as one of the essential objectives of education: the formation of competent people, capable to face and give solution to problems of daily life and to generate new knowledge; as well as to know how to use and apply such knowledge in diverse situations, in a flexible and appropriate way.

When making reference to the educational area, it is important to clarify that the problems solving is not an exclusive task of mathematics, as it is usually thought in many educational institutions; it is a task applicable to any area or subject matter.

In particular, teachers and students face problems in different academic subject matters (science, social studies, computer science, mathematics, etc.) and also problems with coexistence and collaboration with partners or teachers. Therefore, it is responsibility of “all teachers” to orient and guide the students in the learning of problems solving. In this context, it is convenient to clarify that the teachers’ role should not exclusively be to present problems that already exist, but to help students discover and identify new problems, as well as to encourage them to apply the constructed knowledge in order to solve them.

On the other hand, it is important to have in mind that problems solving can be learnt and developed at an early age. Siegler (1978) has demonstrated that the basis of development regarding problems solving start to be established at 3

---

years old. However, it is necessary to take into account the process of maturity, since not all kind of problems can be solved at any age. Thus, it is important to clarify that the problems solving does not depend exclusively upon age or maturity, but it also depends on other factors or variables such as previous knowledge, experiences, thinking skills development, etc.

There are several ways to learn to solve problems: through experiences, formal learning at school, modeling, and trial and error. Hence, the importance of parents and teachers in students’ development, who should be leaders and role models regarding strategies and problems solving.

It is demonstrated that when children observe their parents or teachers analyzing and solving problems, they unavoidable starts to imitate this behavior. Taking into account Vygotsky’s ideas about the zone of proximal development, and that the students do not learn in isolation, but they learn from others and with others, it is crucial to set out problem-situations that are not too easy, not too hard to be solved. Thus, the parents’, teachers’ or partners’ mediation when solving problems is important. Finally, it is necessary that educational institutions encourage the cooperative work as a way of solving problems by collaborating with others.

According to Villa and Poblete (2007), the problems solving competency can be defined as: “Identifying, analyzing, and defining the meaningful elements that constitute a problem, in order to solve it effectively and with criteria”.

For his behalf, Shapiro (2000) affirms that problems solving is not only determined by the cognitive intelligence, but also by the emotional intelligence; hence, it is evident the importance of attitudes and values as one of the essential components for this competency, since when solving problems, diverse emotional and affective factors intervene. These factors are: motivation and interest for solving problems, the way how we feel in relation to problems, the confidence when facing the problem, the management of our emotions, etc.

Therefore, we could say that the problems solving competency implies, besides cognitive skills such as relating, analyzing, synthesizing, solving and evaluating, a series of skills, and affective and emotional abilities that allows a person to successfully face the problem-situation and to solve it effectively. Additionally, it should be recognized that the metacognitive skills are also important for the problems solving, since, as it is affirmed by Siegler (1978), “the explanation about the novices’ lack of ability to solve problems is due to the lack of metacognitive strategies”. In other words, the failure to solve problems, many times is due to the lack of metacognitive strategies, which allow us to be conscious of how we are facing a problem and what is needed to effectively solve it. In the same way, the self-regulation, that is closely related to the metacognition, is also important to solve problems, since it permits “to act when facing a problem” and to make decisions regarding the way of solving it effectively.
Some questions that help attain metacognition and self-regulation in a problem situation, could be:

<table>
<thead>
<tr>
<th>Metacognition</th>
<th>Self-Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the strategy that I am using, helpful to solve this particular problem? Do I have the necessary previous knowledge to solve that problem? Are there some other possible solutions for this same problem? How do I feel when facing this problem?</td>
<td>Decisions aroused from the metacognitive reflection. E.g. I will use the symbology technique, in order to classify a text, and so, meet my reading objective. I will read some brief information about the author to comprehend better his approach. I will suspend my reading during some minutes, stand up, drink a glass of water, and so, I will concentrate better.</td>
</tr>
</tbody>
</table>

Based on the premise that problems solving can be learnt and developed, some authors coincide that in order to learn to solve problems, a series of steps can be followed. Next, some problems solving skills are listed:

1. **Relating:** It consists in establishing logic associations between people, objects, ideas or facts.

2. **Analyzing-Synthesizing:** It consists in identifying a problem-situation and split it up into parts, to later unifying, and summarizing the analyzed ideas.

   In other words, it consists in realizing that there is a problem and focusing on it; analyzing thoroughly the components of the problem situation, and characterizing each one of them by establishing relations among them. For that purpose, the following questions can be used: What happens? Where does it happen? How does it happen? Why does it happen?

3. **Solving:** It consists in looking for different solution alternatives and strategies; selecting the best one and applying it.

4. **Evaluating:** It consists in valuing at what level the situation was solved or not, and the functionality of the used strategy. Furthermore, it permits to determine in which step of the process there has been any failure or
mistake. It is important to clarify that the evaluation should not be made only at the end, but it should be evident along the solving process.

The problems solving intimately relates to:

a. **Creativity:** To solve problems, it is needed an open mind that allows the smoothness of ideas; it is required to be able to look for and to generate “different solutions or answers to problems” before making the final decision; it is needed to perceive the problem from different angles or perspectives to understand it better.

b. **Analytical thinking:** To solve problems, it is required to value and to interpret the problem, to split its parts up and to organize them in order to understand such problem better; it is needed to establish the existing relation among elements or parts of the problem.

c. **Systemic thinking:** To solve problems, it is required to have a global vision of the problem and to identify how the parts of a “whole” are related; it implies to realize how a problem can affect a system.

It is also related to some interpersonal competencies, such as **team work** and **interpersonal communication**. It is related to teamwork because many times the problems solving is made more efficiently in teams, than in an individual way. Furthermore, when the problem influences or affects a group of people and not only a particular person, it is required a group effort to solve it. Last, but not least, it relates to **interpersonal communication**, because problems solving requires self knowledge, control of emotions, ability to listen and to take into account others’ opinions and viewpoints, tolerance when facing frustration, etc.

Next, some important elements that describe this competence are presented: **definition**, **dimensions**, and some **achievement indicators**.
### II. PROBLEMS SOLVING COMPETENCY

DEFINITION: It consists in identifying, facing and solving effectively a problem situation, by using knowledge and skills such as comprehension, analysis, and evaluation, and also positive attitudes such as self motivation, interest, and confidence to face such problem situation, as well as the emotions management in different situations.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Problem Identification and Setting out</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Formal operational stage</strong> <em>(12 to 18 years old)</em></td>
</tr>
<tr>
<td>Identifies the problem, by analyzing its components in an inferential way, and recognizing similar problems.</td>
<td>Identifies the problem, by analyzing its components, and recognizing similar problems.</td>
</tr>
<tr>
<td>Organizes the information he has, by relating and categorizing the components of the problem situation, in order to project solutions.</td>
<td>Organizes the information he has, and establishes relations among its components, by considering causes and consequences.</td>
</tr>
<tr>
<td>Clearly sets the problem out, by basing on different perspectives, suggesting a series of solution possibilities, and redefining it according to the context.</td>
<td>Explains the problem in his own words, by identifying at least two possible solutions according to his context.</td>
</tr>
<tr>
<td><strong>2. Problem solving</strong></td>
<td></td>
</tr>
<tr>
<td>Clearly determines the problem objective and the research question.</td>
<td>Identifies the problem objective and the research question.</td>
</tr>
</tbody>
</table>
### 1. Problem Identification and Setting out

- Identifies the problem, by analyzing its components in an inferential way, and recognizing similar problems.
- Organizes the information he has, by relating and categorizing the components of the problem situation, in order to project solutions.
- Clearly sets the problem out, by basing on different perspectives, suggesting a series of solution possibilities, and redefining it according to the context.

### 2. Problem solving

- Clearly determines the problem objective and the research question.
- Compare different strategies to solve a problem.
- Finds different solutions, choosing the best option, and solves the problem.

### 3. Evaluation during the process and the outcome

- Explains the strategy that is being used as evidence of his metacognition and self-regulation processes.
- Arguments the reliability and validity of his answer.
- On the basis of the problem solving, student explains the assimilation of new concepts, by reorganizing those ones previously learnt.
- Evaluates the outcomes.
- Expresses (tells) what has been learnt on the basis of the problems solving.

<table>
<thead>
<tr>
<th></th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Evaluation</td>
<td>Compare different strategies to solve a problem.</td>
<td>Explains the strategies to solve a problem.</td>
<td>Follows the strategy that is presented.</td>
</tr>
<tr>
<td>during the process and</td>
<td>Finds different solutions, choosing the best option, and solves the problem.</td>
<td>Finds the solutions and solves the problem.</td>
<td>Solves the problem.</td>
</tr>
<tr>
<td>the outcome</td>
<td>Explains the strategy that is being used as evidence of his metacognition and self-regulation processes.</td>
<td>Explains the mental processes used to solve a problem, and also self-evaluates.</td>
<td>Evaluates his actions.</td>
</tr>
<tr>
<td></td>
<td>Arguments the reliability and validity of his answer.</td>
<td>Proves that the outcomes are valid.</td>
<td>Evaluates the outcomes.</td>
</tr>
<tr>
<td></td>
<td>On the basis of the problem solving, student explains the assimilation of new concepts, by reorganizing those ones previously learnt.</td>
<td>Explains any new concept aroused from the problem solving.</td>
<td>Expresses (tells) what has been learnt on the basis of the problems solving.</td>
</tr>
</tbody>
</table>
III. Creativity Competency

What is understood by creativity?

Creativity is a competency that enables human beings to observe and interpret the reality in an innovative and original way, perceiving situations, problems, etc., according to different perspectives. It is a powerful tool to invent, renovate, transform, and also, if it is necessary, to break paradigms that deserve to be beat. The creativity enables the human being to discover new ideas and solutions regarding different areas and life problems, according to new approaches and perspectives. The creative mind follows smooth, flexible, original, and intuitive processes (sometimes stepping out of the strict logic); a characteristic of creativity is the “insight”.

REFLECTIONS:

The real contexts offered by the institution to form students’ creativity, should be specified:

• In a “double period” class, where different moments (dimensions) are evident: “personal work”, “cooperative work” in small groups, “plenary”.

• In projects (e.g. social service, sports week, magazine, radio).

It is important to adapt to the different phases of students’ personal and mental development:

• In children from 5 to 7 years old, who are in the “sensorimotor” stage, “learning to see” should be developed: seeing beyond the evident, the superficial or the routine events; perceiving differences while hearing, smelling, touching, tasting; guessing a partner’s emotions; interpreting emotions (in plays, inventing and ending a story, etc.).

• In children from 7 to 12 years old, encouraging creativity on the basis of the concrete operations management.

• In young people from 12 to 18 years old, there are many possibilities to encourage creativity, some of them are: literary clubs, generating service projects, carrying out health and support campaigns, etc.

In order to be able to “create”, it is necessary to observe and to know “what we have”, “what is given”, the raw material, the problem, the project, the environment. That is to say, the one who creates does not start from the scratch; only God creates out of the blue; that is why He is the Creator. At heart, creative actions are always reduced to the original and unusual or brilliant solution of a
problem; creativity goes beyond the obvious solution of the presented problem. Also, creativity is evident not only when solving a problem, but also when finding different solutions (e.g. a sociological topic), or diverse paths to solutions, (e.g. in a math of physics problem).

Creativity is accompanied by (or goes after) the analogical, analytical, critical-constructive, systemic thinking, etc.

In the Creativity Competency, three dimensions are evident:

• **Innovative observation and interpretation.** There are many ways to perceive and to interpret reality (people, landscapes, life problems, etc.) by making the exercise of eliciting the multiple aspects of reality. An interpretation exercise, among many others, is the “brainstorming”.

• **Searching and discovery of new approaches.** Student amplifies and intensifies the vision of reality (of ideas, events, texts, problems, situations, etc.) with new viewpoints, through questions that he asks himself, or that he asks to the teacher or his partners. Thus, new ideas and solutions emerge, that invite him to change.

• **Innovative and original proposals.** Student proposes actions, tasks, methodologies, paradigms, miniprojects, etc., with liberty and originality, within a classroom, in the different moments of the double period or out of the classroom in many projects or certain actions, such as “talent shows”, “camping, excursions, retreats, social service activities, journalistic articles, etc.

Next, see some elements that support this competency: the definition, the important dimensions and achievement indicators.
### III. CREATIVITY COMPETENCY

DEFINITION: The creativity enables the human being to discover new ideas and solutions regarding different areas and life problems, according to new approaches and perspectives. The creative mind follows smooth, flexible, original, and intuitive processes (sometimes stepping out of the strict logic); a characteristic of creativity is the insight. It is also a way of expression that implies liberty. It is a powerful tool to invent, renovate, transform, and also, if it is necessary, to break paradigms that deserve to be beat.

### DIMENSIONS | INDICATORS
--- | --- | ---

#### 1. Observation and interpretation

<table>
<thead>
<tr>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relates, integrates and explains essential characteristics of what is observed: artistic art, sportive activity, natural phenomena.</td>
<td>Describes the essential characteristics of what is observed.</td>
<td>Identifies different characteristics of what is observed, manipulated, tested, smelled (different senses).</td>
</tr>
<tr>
<td>Student is not limited to interpretations and solutions that others give to presented motions or problems; he proposes other interpretations that he considers the best ones. Gives, from different perspectives, meanings to proposed ideas or own ideas and others', in order to improve them and change them into something different.</td>
<td>Assigns meanings to proposed ideas or to his own solutions, in order to improve them.</td>
<td>Recognizes details and peculiarities of his environment, assigning to them, their own meaning.</td>
</tr>
</tbody>
</table>

#### 2. Searching and discovery of new approaches

<table>
<thead>
<tr>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asks himself and others, pertinent questions that go beyond what is established or evident, looking for the viability of ideas.</td>
<td>Asks himself and others, pertinent questions, looking for the applicability of ideas.</td>
<td>Asks himself and others, trying to find own interpretations.</td>
</tr>
<tr>
<td>3. Innovative and original proposes</td>
<td>Formal operational stage (12 to 18 years old)</td>
<td>Concrete operational stage (7 to 12 years old)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Finds and enriches different approaches, in order to solve problems (esthetic, of expression, kinesthetic, personal, of groups, social scientific, etc.).</td>
<td>Finds different ways to solve problems (esthetic, of expression, kinesthetic, personal, of groups, social scientific, etc.).</td>
</tr>
<tr>
<td></td>
<td>Integrates different elements to express ideas, feelings emotions that go beyond the common thinking.</td>
<td>Integrates different elements to express ideas, feelings and emotions.</td>
</tr>
<tr>
<td></td>
<td>Verifies that the ideas and feelings that he expresses are integrative, original, and meet their purpose.</td>
<td>Uses original ways, integrating different elements to express ideas, feelings and emotions that go beyond the common thinking.</td>
</tr>
<tr>
<td></td>
<td>Develops different areas with singularity (a mini project, an action plan, a piece of music, a social service activity).</td>
<td>Develops different areas with singularity (a mini project, an action plan, a piece of music, a social service activity).</td>
</tr>
<tr>
<td></td>
<td>Proposes and holds out original and realistic improvements that impact positively in his context (in a visual arts project, in industrial arts, in a practical approach of a game, in a writing process, in the environment conservation, etc.).</td>
<td>Proposes and uses the presented ideas in order to improve them and to transform them into something original, innovative and/or different.</td>
</tr>
<tr>
<td></td>
<td>He is able to give solutions, harmonizing all his partners’ contributions in the group activities (team work, plenary, projects preparation and evaluation, etc.).</td>
<td></td>
</tr>
</tbody>
</table>
IV. Competency of ICT

The Information and Communication Technologies are identified with the acronym ICT; it makes reference to the group of services, tools and technologic procedures that permit to process, store, analyze, systematize, protect, and present information in different, dynamic and creative ways. Villa and Poblete (2007), define them as essential tools for the expression, the communication, the learning and the researching. In the context of an interconnected information system, the purpose of all the ICT services and tools should be to contribute to improve the life quality of the people who use them.

The ICT are integrated by two dimensions: the IT or Information technologies that include the services relating to computers and webs (hardware, software, and intelligent tools), and the CT or Communication technologies, which mainly comprise the mass media (Internet, television, radio, and telephone) and all services that favor the rapid and effective communication. According to Cabero (1996), the basic characteristics of the ICT are: interactivity, instantaneously, innovation, digitalization, automation, interconnection, diversity and influence over products, more than over processes.

It is worth mentioning that ICT have contributed to the processes of globalization, understood as the tendency of the services and market tools to extend worldwide, and to get beyond the national boards.

The ICT prominence is transforming the whole world; the benefit they provide depends, to a great expense, on the ethical commitment and on the level of development regarding competencies (concepts, procedures, and attitudes), as well as on the importance given to them, to ease the processes of information and communication management. Among the benefits, we can mention that ICT:

• Speed up communication.

• Enable better access to information.

• Favor the easy and rapid data and services processing.

• Allows the storage and organization of big amounts of information.

• Eliminate the time and space barriers.

• Favor the cooperation and collaboration among different entities.

• Develop skills and abilities.
• Encourage new ways of knowledge building.

• Improve the productivity level.

• Impulse development.

• Favor the creative thinking and the use of resources.

The International Society for Technology in Education “ISTE” determined six standards regarding the students’ ICT management. In this case, we will take them as reference for the development of such competency. The mentioned standards are:

1. Creativity and innovation: it is the capacity to create, build knowledge and innovative products through ICT.

2. Communication and collaboration: to use ICT as a way of favoring communication and cooperative work.

3. Research and information management: to use ICT tools to seek, obtain, select, evaluate and use information.

4. Critical Thinking, problems solving and decisions making: to use ICT to evaluate, plan, create and get involved in projects, making decisions and solving problems effectively.

5. Digital citizenship: to comprehend the sociocultural, economic, political, and ecological environment through ICT, in order to practice ethical, legal, and of commonweal behavior.

6. Operations and concepts: to comprehend and explain correctly the concepts, systems and functioning regarding ICT, with the purpose of transferring knowledge.

It is worth mentioning that in the present time, the Ethics in Technology exists, which is a science that emerged to establish regulations toward attitudes of abuse and illegal practices regarding the information and communication management. Richard Mason (1986) in his article “Four Ethical Issues of the Information Era”, identifies four key topics to orient the information technology ethics and the legal regulations regarding the use of ICT:

• Privacy (respect to privacy)

• Accuracy (reliability of information)
• Intellectual property (appropriate references to others’ quotes and ideas)

• Accessibility (equal right to get informed)

For the above mentioned items, it is important to insist in the fact that the ICT should be considered as a way of optimizing the information that is managed; that is to say, they should be useful to acquire the needed skills and abilities to look for, analyze, and select in a critical way, the different information and communication tools that are accessed. Furthermore, they should be used for the personal and professional development, through ethic values. For that reason, Villa and Poblete 2,007, consider them as an instrumental competency, since they imply the development of skills, abilities and attitudes that allow people to know how to manage, to take advantage of, and to protect all this technology and information that is accessed. In other words, this competency is supposed to use ICT as an instrument to learning, research, communication, social development, etc.

Based on the afore mentioned, the competency of use of ICT, could be defined as the knowledge, selection, and ethical and effective management of a series of technological tools and services, with the purpose of communicating, learning, researching, and solving problems. All this, with clear intentions of personal and social improvement and development.

As all competencies, the use of ITC requires a series of thinking abilities that allow our brain to process the information first, and materialize it into concrete actions or abilities. Finally, it is important to mention that the use of ICT is related to other basic cognitive competencies, such as reflexive, creative, logic, analytical, systemic, and critical-constructive thinking. Also, it is connected to the verbal expression, the mature thinking, and the innovation and solution competencies, among others.

Next, the three elements that characterize the use of ICT competency are described: the definition, the four dimensions, and the achievement indicators.
### IV. USE OF ICT COMPETENCY

**DEFINITION:** Ethical and effective management of the Information and Communication Technologies, which implies the knowledge, selection, management, and a series of technological services with the purpose of communicating, researching, problems solving and learning. All this, with clear intentions of personal and social improvement and development.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Concept and functioning of ICT</strong></td>
<td><strong>Formal operational stage (12 to 18 years old)</strong></td>
</tr>
<tr>
<td></td>
<td>Analyzes the capabilities and limitations regarding present and emerging ICT resources, by evaluating their potency to attend personal, social, professional and learning needs.</td>
</tr>
<tr>
<td></td>
<td>Solves hardware, software, and web systems problems, in order to optimize their use for learning and productivity.</td>
</tr>
<tr>
<td></td>
<td>Designs a web site that meets the access requirements.</td>
</tr>
<tr>
<td></td>
<td>Critically evaluates digital resources to determine the author’s credibility, as well as pertinence and exactitude of the content.</td>
</tr>
</tbody>
</table>

---

5. This competency has been formulated according to the proposal of the National Education Technology Standards for Students, Second Edition, ©2007, ISTE ® (International Society for Technology in Education), http://www.iste.org. Some adjustments considering the context at Liceo Javier have been made.
### A Model of Education for the XXI Century

#### 1. Concept and functioning of ICT

Analyzes the capabilities and limitations regarding present and emerging ICT resources, by evaluating their potency to attend personal, social, professional and learning needs.

Solves hardware, software, and web systems problems, in order to optimize their use for learning and productivity.

Designs a web site that meets the access requirements.

Critically evaluates digital resources to determine the author’s credibility, as well as pertinence and exactitude of the content.

#### 2. Information, research and learning management

- **Formal operational stage (12 to 18 years old)**: Designs, develops and tests a learning digital program, related to a specific content.
- **Concrete operational stage (7 to 12 years old)**: Describes a concept or process related to a specific content, using a software of modeling, simulation or construction of conceptual maps.
- **Pre operational stage (5 to 7 years old)**: Uses simulations and graphic organizers to explore and represent patterns.

Employ specific simulations based on curricular contents.

Uses technologies of data gathering (hand held computers, geographic mapping system) to collect, observe, analyze, and inform outcomes of a situation.

Gathers information to solve a problem, through digital resources.

#### 3. Communication and collaboration

- **Uses, collaboratively, digital authoring tools (PowerPoint; exelearning, flash, etc.) to contrast common contents from multicultural perspectives.**
- **Carries out group learning projects, using planning digital tools, with the educator’s help.**
- **Uses several technologies to get a product or to achieve a common objective, in a cooperative group.**

Participates in a cooperative learning project, within an online learners’ community.

Gets involved in learning attitudes with multiple culture students, via Email, chat, and video conference.

Illustrates and communicates ideas and original tales, using multimedia digital tools and resources.

#### 4. Digital citizenship

- **Evidences legal and ethic behavior, when using information and technology, selecting, acquiring, and quoting the resources in an appropriate way.**
- **Incorporates the use of cites of the used resources, in his educational practice (pictures, software, charts, documents).**
- **Expects the effect of existent or emergent ICT, in people, society, and the global community.**

Creates media presentations, regarding the appropriate and ethic use of digital tools and resources.

Explains the effect of existent or emergent ICT, in people, society, and the global community.

Demonstrates the safe and cooperative use of ICT.

### DEFINITION: Ethical and effective management of the Information and Communication Technologies, which implies the...
Communication Competencies

V. Mature Writing Competency

There are different ways to name this competency: written communication, written composition and written expression. In this book, it will be referred as “mature writing”, which is the term created by Achaerandio (2010) to define this competency. To understand better its meaning, we will refer to Scardamalia and Bereiter (1992), who studied specifically the cognitive process that the students follow when constructing texts, and they make a distinction between immature and mature writers. According to this research, immature writers write as if they were speaking, taking care only of expressing what they have in mind, as a final product. Rather, mature writers make a more reflective final composition process, with the purpose of getting an effective communication. Thus, a mature writer is who plans what to write, how to write it and for whom to write it. Also, he cares about detecting mistakes in his texts and correcting them; mistakes that transcend orthographic and grammatical aspects, to reach deeper ideas.

According to Achaerandio (2010), mature writing is one of the Key Competencies to get a frequent and deep learning and through it, being able to increase intelligence. Therefore, it should be developed in the different levels of formal education, starting from the basis in pre-school, and following in primary and secondary school, as well as in university. It is essential to improve writing in the different educational levels, using the contents of each one of the areas as tools for the development of knowledge, of writing, and also, of the writer’s potential as a person. This will permit to get new abilities in each stage or level, as well as improving the ones that have been already acquired, until getting to be mature writers. It is so, responsibility of all educators to have their students’ develop this instrumental competency, as an effective tool to the intellectual improvement.

On the other hand, in the academic area this competency is essential, since most of the students daily face the need to present written tasks, such as summaries, researches, essays, etc.; a high percentage of evaluations requires expressing written ideas. In order to develop the mature writing competency, a series of essential steps should be followed, without which, to be a mature writer is impossible; such steps are:

a. Planning: This is the most important process of writing. A good plan eases enormously the process of composition of a text, and its further revision. It includes the objectives definition, the theme, the target group and the type of text; additionally, it includes the generation of ideas and its organization. It is supposed to establish the bases to generate a text, and to have time to think what to say, what for, and why to say it, to whom and how to say it. In other words, it implies to take into account the topic, the possible reader, and what is the purpose of the text.
b. **Translating:** It is what some call “text composition”, that is to say, to express and create a written discourse, using the permanent processes and mechanisms on the basis of the previous plan. This is the moment to apply the “rhetorical knowledge”; for example, how to start the introduction, how to convince the reader, how and when to add examples and to take advantage of authors’ quotations, when to summarize, when to make an inference, etc.; as well as to analyze the question: would the audience to whom my writing is addressed, need more explanations or a better argumentation? etc.

c. **Revising:** The revision is similar to “metacognition” and “self regulation” which are made by readers who already acquired high levels of reading comprehension. A good revision of the processes and the text results that is being written, depends a lot, as said before, on a previous and effective planning. Mature writers are accustomed to revise their text along all the process and to apply helping strategies to solve problems that usually are presented during the elaboration of a written text.

Before including the definition of mature writing competency, it is important to mention that most of the authors coincide that the ability to write, or “to transmit ideas and feelings through writing”, is not innate. It is developed with practice, following instructions, by means of a dialogued discussion of the writings, and imitating models to which we have access through the reading. For that reason, this competency is closely related to the comprehensive reading competency, since through reading, it is possible to acquire different models of mature writing.

Also, mature writers are in the highest level of reading comprehension, which is to reach metacognition and self regulation, for they revise once and again their text in order to improve it and to correct it, by adding new paragraphs, taking others out, redefining ideas, etc. According to Fradek L. (2007) the written composition consists in translating ideas, thoughts, and feelings, in a coherent written discourse. Villa and Poblete (2007) define the competency as “efficiently relating with other people through a clear expression of what is thought and/or felt, by means of writing and graphic organizers. Based on the before mentioned, it is important to clarify that the mature writing competency does not simply imply to express in a written way what is thought or felt, but it also includes to plan, to generate knowledge, to change it into words, and to materialize them in paper or in a computer, and also, to revise what has been written. All this, with the purpose of efficiently communicating and relating with others.
In general terms, it is a complex competency that is related to other competencies, such as analytical thinking, creativity, comprehensive reading, and interpersonal communication. And also, it entails a series of skills, as well as certain attitudes and values.

The skills involved in this competency are:

- **Planning skills**: They refer to the first step of mature writing, which is to “plan”. They include the definition of objectives, theme, target group and type of text; additionally, it includes the generation of ideas and its organization. It is supposed to establish the bases to generate a text.

- **Linguistic skills**: They are those that are practiced as a result of technically knowing or intuiting knowledge relating to grammar (the semantic and the syntactic), which establishes the rules to write correctly.
  
  a. The *semantic*, refers to the meaning of words, phrases and sentences, and to the deep sense given to statements.
  
  b. The *syntactic* is referred to the structure of sentences and their parts; it is the construction and the order given to words, phrases and sentences.

- **Motor skills**: They are all those that imply the use of fingers, hands, arms to write precisely and smoothly. Their purpose is to present a legible and ordered writing.

- **Evaluation skills**: They are the ones that imply the detection of mistakes in a text, and their correction, according to a group of established criteria.

- This competency can be deepened through three elements that are mentioned next: the **definition**, three **dimensions**, and some important **achievement indicators**.
**V. MATURE WRITING COMPETENCY**

**DEFINITION:** It is the efficient personal building of knowledge that implies planning, interpretation, and evaluation, in order to get an effective communication through written texts.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Formal operational stage</strong> (12 to 18 years old)</td>
</tr>
<tr>
<td>1. Planning</td>
<td>Structures the writing, finely planning and delimiting the topic, the target group, the available time, and the possible information resources, extension, and taking into account the context.</td>
</tr>
<tr>
<td></td>
<td>Defines rhetorical, stylistic, and semantic writing objectives.</td>
</tr>
<tr>
<td></td>
<td>Organizes the macrostructure and superstructure of his text.</td>
</tr>
<tr>
<td>2. Interpretation</td>
<td>Writes each paragraph, clearly delimiting the topic.</td>
</tr>
<tr>
<td></td>
<td>Uses skillfully, connectors or discourse markers (coordinating and subordinating), and punctuation marks.</td>
</tr>
<tr>
<td>3. Revision</td>
<td><strong>Formal operational stage</strong> (12 to 18 years old)</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>His complement statements are dependent on the topic.</td>
</tr>
<tr>
<td></td>
<td>Shows lexical and conceptual density in his writing, with a rich and precise vocabulary.</td>
</tr>
<tr>
<td></td>
<td>Detects mistakes along the writing process and makes the relevant modifications.</td>
</tr>
<tr>
<td></td>
<td>Contrasts the final text with his writing plan, in order to readjust the text and to verify objectives.</td>
</tr>
<tr>
<td></td>
<td>In an automatized way, he makes metacognition and self-regulation processes, in all the writing process.</td>
</tr>
</tbody>
</table>

VI. Comprehensive Reading Competency

The comprehensive reading is one of the Key Competencies for life; therefore, it should be developed in all levels of education, since pre-school up to 12th. The ideal thing, is that students of the year of university have already developed this competency with excellence, when finishing high-school. For that reason, reading comprehension should be the neuralgic center, the concern, and the main action in education.

The Comprehensive Reading belongs to the group of generic competencies, for it can be developed and worked since almost all subject matters or areas of knowledge, and it can be used and applied in different environments of life. Also, it belongs to the group of instrumental competencies, since its purpose is to serve as a way or instrument to reach meaningful learning.

In this sense, it is important to be conscious that in order to “really learn”, it is not enough an education based on transmission, acquisition, and gathering of information any more. With globalization and the emergence of Information and Communication Technologies (ICT), human beings are exposed to a great amount of information, which is impossible to be totally assimilated. For that reason, the new century demands an education based on the acquisition and development of competencies, which help people select, comprehend, use, and apply all that information in different situations and contexts to successfully face life.

The comprehensive reading is a tool that encourages acquisition and development of skills, abilities and attitudes. On the one hand, it favors the development of higher-order thinking skills, such as analysis, synthesis, abstraction, etc. On the other hand, it encourages the acquisition of attitudes and values needed to improve as person, for example: the interest of learning and the critical attitude when facing reality, among others. Furthermore, it promotes the personal, professional and labor autonomy, and the acquisition of meaningful and functional learning.

Now then, what does reading comprehensively mean? To understand better its meaning, Diaz and Hernandez (2004) define it as a constructive, interactive and strategic activity.

- It is considered as a constructive activity because during this process, the reader carries out a personal construction on the basis of the information proposed by the text and his personal experiences, interpretations, inferences, context, etc.

- It is considered an interactive activity because the personal interpretation given to the text will depend upon the interactions occurred among the
reader characteristics (previous knowledge, interests, attitudes, emotions, etc.), the text (the intentions presented by the author), and the context (the social situation, the period, etc.).

- Finally, it is considered a strategic activity because a good reader recognizes his accomplishments and limitations, and he knows that he should use and organize his cognitive resources intelligently, otherwise, the reading comprehension level may not be achieved or it could be diminished.

To understand better the comprehensive reading, Achaerandio (2010) distinguishes four levels or reading quality.

1. The first level is the decoding, which consists in deciphering letters, words, and some short and simple phrases. In other words, it is the level in which the reader interprets the signs and gives a lexical meaning to them. People who don’t reach this level are called analphabet.

2. The second level is the literal comprehension, where it is read in a lineal or superficial way. The reader understands only what is explicit in a text, and so, a genuine comprehension does not occur, neither relations nor inferences are made, since the deep meaning of the text is not reached. People who are in this level are called “functional analphabet”, for they read without understanding sufficiently the sense, and therefore, they do not get real meaningful learning.

3. The third level is the inferential comprehension, and happens when the reader understands and deeply gets the meaning of the text; that is to say, he interprets what the author wants to express, and goes discovering and actively constructing meanings. In this level, the reader analyzes, questions, synthesizes, infers, evaluates, reconstructs, and integrates the global meaning of the text; is in here where the meaningful learning is achieved.

4. The fourth level is the metacognition and self regulation; in this level the reader supervises and regulates his reading process. To clarify this idea, let’s remember that metacognition is exercised in the analysis, knowledge and consciousness of “how to learn”, it is to know how the own process is going, it is to think about the own thought when carrying out the task; also it consist in being conscious of the cognitive and affective resources at disposal. The self regulation refers to the actions carried out after metacognition, with the purpose of improving and/or correcting the learning, or specifically, the comprehension process,
and it consists in the control of the own thinking processes; it implies the use of diverse strategies that allow to control the learning and the comprehension.

For didactic purposes, the metacognitive and self regulator skills are divided into planning, supervision, and evaluation activities: the Planning activities answer to the questions: What am I going to do? How am I going to do it? They are those that are carried out before starting the reading process, and they have to do with the establishment of an action plan to reach the objective.

The Supervision activities answer to the questions: What am I doing? How am I doing it? They are those which are done during the reading process. They allow the detection of lacks or failures in the comprehension.

The Evaluation activities answer to the question: How good or bad I did it? Generally, they are done at the end of the process; they permit to determine the efficiency of the used strategies and to what extent the objectives were achieved.

The comprehensive reading is related to other competencies such as verbal and non verbal expression, the mature writing, and the different types of thinking (critical, analytical, logical…), as well as to the innovation and problem solving competencies.

Next, the three important elements of this competency are described: the definition, the three dimensions, and the achievement indicators.
DEFINITION: It is an instrumental competency that is characterized for being: a constructive, an interactive and a strategic activity. The first of them refers to the personal construction that readers carry out from a text reading; the second one alludes to the interaction among the reader, the text, and the context, generating an interesting relation. Finally, it is strategic because a good reader recognizes his accomplishments and limitations, and he knows that he should use and organize his cognitive resources through the application of reading strategies, otherwise, his objectives will not be reached.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Starting organization of the reading</td>
<td></td>
</tr>
<tr>
<td>Applies strategies before reading, depending on his previous knowledge and objectives toward the text (macroprocesses).</td>
<td>Establishes a reading objective, demonstrates his previous knowledge on the topic, and establishes predictions in guided processes during the first years.</td>
</tr>
<tr>
<td>Identifies the type of text that he is going to read, in order to choose adequately the relevant strategy.</td>
<td>Differentiates the types of texts: continuous (literary, expositive, informative, and argumentative) and noncontinuous (iconic, maps, posters, among others).</td>
</tr>
<tr>
<td>He is conscious that the purpose of reading is comprehension (macroprocesses).</td>
<td>Values the reading as a way of learning and recreation.</td>
</tr>
<tr>
<td>2. Comprehension</td>
<td></td>
</tr>
<tr>
<td>Through contextualization, he infers the meanings of unknown vocabulary.</td>
<td>Associates, relates, and researches the meaning of new words.</td>
</tr>
<tr>
<td>Makes coding and decoding processes (microprocesses) enriching his vocabulary thought sensorial stimuli.</td>
<td></td>
</tr>
<tr>
<td>3. Metacognition and self-regulation</td>
<td><strong>Formal operational stage (12 to 18 years old)</strong></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Identifies main ideas and infers own meanings from the text.</td>
</tr>
<tr>
<td></td>
<td>Applies reading strategies, according to objectives that have been set.</td>
</tr>
<tr>
<td></td>
<td>Explains his mental process on what he has understood from the text.</td>
</tr>
<tr>
<td></td>
<td>Uses different resources to regulate his process of comprehension.</td>
</tr>
<tr>
<td></td>
<td>Evaluates the achievement of his objective and the selection of the used strategies for the comprehension of the reading.</td>
</tr>
</tbody>
</table>
VII. Verbal and Non Verbal Expression Competency

Many times, people believe that they have made themselves understood and that the interlocutor has comprehended them, but in the daily practice the opposite is evident. In different areas of life, there are occasions where people expresses in a confusing and unorganized way, and this prevents other people from understanding the message that is intended to be communicated. Furthermore, most of the times, a logic structure in the expression is nonexistent, even if it is verbal or non verbal.

In the educational area, it is very common that students, at the moment of expressing, they block, which is evident in many ways: omissions, rigidity, confusing speeches, among others. Thus, the development of skills that eases and makes this competency effective, becomes necessary.

Achaerandio (2010) defines the verbal communication competency as “expressing in a clear and structured way, with correction and opportunity, the own ideas, knowledge, and feelings through the spoken word; adapting to the characteristics of the context and audience, in order to get their understanding and acceptance”. Villa and Poblete (2007), define this competency as the ability to clearly and efficiently transmit ideas, knowledge, feelings, thoughts, etc. through the word. All these, with the purpose of getting the audience’s attention and understanding in formal and informal conversations, group activities, and performances in groups. To this competency should be added the non verbal component of the expression, which can favor or limit the communication.

The mastery of this competency suggests, besides the structured organization of the discourse, clarity and efficiency in the communication, adaptation to the audience, complementarity between the verbal and non verbal language, ability to really transmit what is wanted to, adequate use of voice tone and the supporting tools in general.

This competency also implies self confidence, and self-esteem, reflexive thinking, clarity in what is wanted to communicate, and to have acquired vocabulary and structure. Furthermore, the use of analytical and synthetic thinking, and mental organization in order to convey a precise and well structured expression.

Next, the three following elements are presented: the definition of this competency, its three important dimensions, and some key achievement indicators to be able to evaluate it.

INTERPERSONAL COMPETENCIES
## VII. VERBAL AND NON VERBAL EXPRESSION COMPETENCY

**DEFINITION:** To clearly express, in a structured way, own ideas, knowledge, and feelings, through the spoken word, as well as the coherent use of positions, movements, and body gestures; it implies the use adequate discursive and corporal strategies and intuiting the opportune moments, adapting to the context and audience's characteristics; all this, with the purpose of getting the other person's understanding and reaction to the message.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal operational stage</strong> <em>(12 to 18 years old)</em></td>
<td><strong>Concrete operational stage</strong> <em>(7 to 12 years old)</em></td>
</tr>
<tr>
<td><strong>1. Discourse planning</strong></td>
<td>Takes into account the context in which he is going to develop.</td>
</tr>
<tr>
<td></td>
<td>Researches (characteristics, context, interests, and levels of language) on the audience in order to adjust to needs.</td>
</tr>
<tr>
<td></td>
<td>Organizes the topic and structure in a logical and coherent way, as well as the main ideas that he wants to transmit.</td>
</tr>
<tr>
<td><strong>2. Clear and structured expression</strong></td>
<td>Uses discursive strategies (semantic, stylistic, syntactic, and pragmatic ones) through supporting tools, in order to present his discourse and meet his objective.</td>
</tr>
<tr>
<td></td>
<td>Uses body expressions (kinesthetic and proxemics) which support his discourse, according to the circumstances.</td>
</tr>
</tbody>
</table>
### A Model of Education for the XXI Century

#### Table: Communication Competencies

<table>
<thead>
<tr>
<th>2. Clear and structured expression</th>
<th>3. Analysis of the situation during and after the discourse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal operational stage</strong> (12 to 18 years old)</td>
<td><strong>Concrete operational stage</strong> (7 to 12 years old)</td>
</tr>
<tr>
<td>Expresses the message with fluency, adequate voice tone, volume, articulation, both in public events, and personal relationships. Shows security and mastery at the moment of his discourse.</td>
<td>Adjusts fluency, rhythm, volume and intonation in prepared expositions and discourses. Transmits his ideas and feelings with coherence, clarity and logic order.</td>
</tr>
<tr>
<td>Uses wide and varied vocabulary to achieve his communication objective. Makes body reading of the audience and adapt to the observed needs. He constantly self-regulates in order to improve and modify his discursive abilities. He is assertive in his communication style, and respectful in the management of times. Self evaluates and co-evaluates the communicative processes in order to improve them.</td>
<td>Uses an adequate and rich vocabulary, according to his age, without making repetitions (use of synonyms and antonyms). Identifies the audience’s attitude through the non verbal expression. Takes practical decisions to correct his weaknesses in communication. Listens respectfully, arguments to defend his ideas, takes advantage of the given time.</td>
</tr>
</tbody>
</table>

**Different authors coincide that among the communication competencies should be included: the communication in foreign languages. The Common European Framework of Reference (CEFR) is a guide that is used to describe the achievements of students in foreign languages. Because of its international value, in this book it is not included an additional chart, since the CEFR has already established the achievement indicators for the basic, independent and expert levels. According to them, this competency refers to the ability to use the language for purposes of communication, and having the possibility of interacting interculturally.**
VIII. Self-Motivation

According to Goleman, D. (2001), “success in life depends upon an 80% of emotional factors and only a 20% of purely cognitive factors”. This competency has a close relationship with the emotional intelligence, since also according to Goleman, D. (2001) North American psychologist who has written a series of books about the topic, the self-motivation is connected to the 5 essential abilities of the emotional intelligence which are: recognizing the own emotions, knowing how to manage them, keeping the own motivation, recognizing emotions in others, and creating healthy social relationships. This author affirms that the self-motivation is one of the components of the intrapersonal intelligence, (which is part of the emotional intelligence), and defines it as the skill to be in a condition of continuous pursuit and persistence regarding the achievement of personal objectives, facing problems, and finding solutions; he affirms that this competency is evident in people who show a big enthusiasm for their work, their studies or the task that they fulfill, and for the achievement of their goals above a simple material reward. Furthermore, people with self-motivation have a high level of initiative and commitment, and a great optimistic capacity in the consecution of their objectives.

Salovey, P. and Mayer, J. D. (1990), in their researches about the emotional intelligence, define the self-motivation as the capacity to order emotions in the pursuit of an essential objective. Therefore, in order to keep the own motivation, it is necessary to have clear objectives, for without them, it would be impossible to be motivated. In this sense, the self-motivation implies a deep knowledge of oneself, so it entails to recognize the own skills and limitations and to recognize the own emotions.

At being conscious of his strengths and weaknesses, in an objective and realistic way, a person will be able to carry out any task, establishing reachable objectives, which should be adaptable to his own possibilities. This will allow him to persevere and to be constant in the consecution of such objectives, and also, to overcome his limitations. The self-motivation is a way of knowing a person’s own emotions, in order to favor a best control on them, and putting them at service of his ideals.

So as to be a self-motivated person, it is needed, beside the knowledge of oneself, to have developed the self-esteem, for only a person with a healthy self-esteem will be able to know himself in an objective way, and thus, to know what he wants, despite the influence that other people or his environment could have in his decisions. Regarding the self-esteem, Achaerandio (2010) defines it as: “recognizing honestly as one is, concerning qualities and positive potential, and defects and limitations; it suggests maturity and well-balanced emotional intelligence, which is developed with the objective and realistic self-analysis, that is to say, with the personal discernment...”. Finally, Villa and Poblete (2007), consider the self-motivation as one of the individual interpersonal competencies,
and define it as “facing the own capacities and limitations, striving for developing and overcoming them, in order to carry out the tasks with interest and care”. In short, a person who has the self-motivation competency is a person with a deep knowledge of himself and with a healthy self-esteem; with clear goals, persistent, enthusiastic and positive; able to solve problems, with initiative, optimism, and commitment; a person with the desire of improvement and development.

As every generic competency, it is useful and applicable in different situations and contexts. Thus, in the educational context, students will undoubtedly experiment, along their school stage, difficult situations or failures that they should face and overcome in a positive way. In the same way, in other contexts, such as familiar, job related or social, the self-motivation competency is also needed, since we always face moments of crisis, discouragement, or difficulties, which we should face to be happy and successful people.

A healthy self-motivation allows a person to project toward others...for being an interpersonal competency, the emphasis will be given to the attitudinal dimension, for this is the way of verifying the big value that rules each human being.

Next, the important elements of the self-motivation competency are described: the definition, the dimensions, and some achievement indicators.
### VIII. SELF-MOTIVATION COMPETENCY

**DEFINITION:** It is to recognize oneself deeply, and accept one’s qualities and potential, as well as the deibilities and limitations, striving for developing and overcoming them; it predicts the success as a self-accomplishment in the pursuit of happiness.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Formal operational stage</strong> <em>(12 to 18 years old)</em></td>
</tr>
<tr>
<td>1. Personal Knowledge</td>
<td>Manifests to be conscious on his qualities and limitations and uses adequately, strategies of personal knowledge to improve them.</td>
</tr>
<tr>
<td></td>
<td>Recognizes and name his emotions and feelings, and strive to manage them and to manifest them adequately.</td>
</tr>
<tr>
<td>2. Management of emotions</td>
<td>Controls the emotions that make him lose his interior peace.</td>
</tr>
<tr>
<td></td>
<td>Is tolerant when facing frustrations.</td>
</tr>
<tr>
<td></td>
<td>Is able to receive critics with serenity, and compliments with glad naturalness.</td>
</tr>
<tr>
<td></td>
<td>Shows his emotions in a mature and assertive way.</td>
</tr>
<tr>
<td>3. Desire of improvement</td>
<td>Formal operational stage (12 to 18 years old)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Faces positively the challenges and frustrations, recognizing them as valuable experiences to learn.</td>
<td>Takes advantage of mistakes to improve. Analyzes the reasons why he hasn’t achieve an objective.</td>
</tr>
<tr>
<td>Reflects upon and makes with realism his life project.</td>
<td>Sets targets and concrete actions in different aspects of life.</td>
</tr>
<tr>
<td>Carries out concrete actions that show his desire to improve his weaknesses and develop his strengths.</td>
<td>Identifies the actions that can develop his strengths.</td>
</tr>
<tr>
<td>Carries out concrete actions that show his desire to improve his weaknesses and develop his strengths.</td>
<td>Identifies the actions that can develop his strengths.</td>
</tr>
<tr>
<td>Strives for personal excellence to serve others better (Magis).</td>
<td>Strives for excellence.</td>
</tr>
</tbody>
</table>
IX. Interpersonal Communication

In order to understand better the interpersonal communication competency, it is necessary to define two important terms: “communication” and “interpersonal”. Etymologically, the word communication derives from de Latin word “comunicare”, which can be translated as “to put in common or to share something”; therefore, it could be defined as the process through which human beings share information. Some authors define the term, as the process through which an interrelation between two or more people is given, with the purpose of transmitting information from the emitter so the receiver can interpret said information. The term interpersonal varies and deepens the term of communication, making explicit that this “communication” is done through interaction relationships among people. 

Based on the aforementioned, we could say the Interpersonal Communication Competency consists in efficiently interacting with others, with the purpose of sharing information. Villa and Poblete (2007) describe it as the dialogue and the positive and constructive interaction among people. 

Paraphrasing to several authors, the interpersonal communication can be defined as the positive and constructive relationship among people through dialogue, and in a context of mutual empathic listening; this implies certain skills not only to detect, analyze, and synthesize others’ information within the communicative process, but also to express the own information through healthy interpersonal relationships.

This competency is closely related to the Emotional Intelligence (EI). According to the psychologist Daniel Goleman, the EI is subdivided into intrapersonal and interpersonal intelligence. The intrapersonal intelligence is directly related to the interpersonal communication competency, because said intelligence is understood as the person’s ability to understand his own emotions and feelings, as well as others’. As a matter of fact, with the purpose of maturely communicate with others, a person needs certain personal development regarding his self-confidence, self-esteem, and self-efficacy; the last one, understood as the consciousness of one’s value.

In the educational context, the interpersonal communication competency is important because this area demands a series of relationships among students and teachers that will determine the good or not so good coexistence, and many times, their success or failure. Also, it is important in the diverse areas of familiar and social life, since all the time we need to establish healthy relationships with other people.
Finally, it is important to mention that, as all competencies, it is related to others, for example, with the competencies of: verbal and non verbal expression, teamwork, leadership, problems solving, and self-motivation, etc. Since it is an interpersonal competency, the emphasis is the attitudinal component, so this is the way of evidencing the value that rules every human being.

Next, the **definition**, the **dimensions**, and some **achievement indicators** of this competency, are described.
### IX. INTERPERSONAL COMMUNICATION COMPETENCY

**DEFINITION:** It refers to positive and constructive relationships among people, through dialogue and the stable body expression; it implies the assertive management of emotional and social skills, generating an adequate emotional contact.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Positive communication</td>
<td></td>
</tr>
<tr>
<td><strong>Formal operational stage</strong></td>
<td></td>
</tr>
<tr>
<td>(12 to 18 years old)</td>
<td></td>
</tr>
<tr>
<td>Listens emphatically, respecting others’ ideas, and in his actions he demonstrates that understands others’ emotions and ideas.</td>
<td></td>
</tr>
<tr>
<td>Listens when others talk.</td>
<td></td>
</tr>
<tr>
<td>Gets along with his partners.</td>
<td></td>
</tr>
</tbody>
</table>

| **Concrete operational stage**|                                                                                                                                              |
| (7 to 12 years old)          |                                                                                                                                              |
| Listens emphatically, respecting others’ ideas. |                                                                                                                                              |
| Shows disposition to comprehend others’ feelings and emotions. |                                                                                                                                              |
| Respects rules of coexistence.|

| **Pre operational stage**    |                                                                                                                                              |
| (5 to 7 years old)           |                                                                                                                                              |
| Listens emphatically, respecting others’ ideas, and in his actions he demonstrates that understands others’ emotions and ideas. |                                                                                                                                              |
| Listens when others talk.   |                                                                                                                                              |
| Gets along with his partners.|

Expresses himself clearly, assertively, and respectfully, achieving his communication objective.

Expresses himself clearly and respectfully, making himself understood.

Makes himself understood.

---

7. Assertive means: conscious, congruent, equilibrated, direct, with no intention of hurting or damaging, acting with self-confidence.
<table>
<thead>
<tr>
<th>2. Constructive Relationships</th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With his way of being and acting, creates a positive environment wherever he goes.</td>
<td>With his way of being and acting, creates a positive environment wherever he goes.</td>
<td>In his games, he evidences happiness and good relationships.</td>
</tr>
<tr>
<td></td>
<td>Uses the dialogue as a way of solving conflicts.</td>
<td>Uses the dialogue as a way of solving a concrete conflict.</td>
<td>Describes what happened in a conflictive situation.</td>
</tr>
<tr>
<td></td>
<td>Promotes an emphatic and constructive communication between pairs or among a group.</td>
<td>Provokes a friendly communication between pairs or among a group.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helps others to control their feelings and emotions.</td>
<td>Helps others to control their emotions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Uses strategies consciously which help him overcome his weaknesses regarding his relationships with others.</td>
<td>Identifies his weaknesses regarding relationships with others and try to correct them.</td>
<td>Tells about his difficulties in his relationships with others.</td>
</tr>
<tr>
<td></td>
<td>Expresses with liberty when he disagrees with malicious rumors.</td>
<td>Avoids to participate in malicious rumors.</td>
<td></td>
</tr>
</tbody>
</table>
X. Diversity and Interculturality

In our society, we are facing old and new coexistence problems in the diversity and interculturality which are evidenced in many ways: in poverty, social discriminations, lack of values, lack of equity, ethnic conflicts, ecological unsteadiness, etc. On the other hand, new challenges have aroused, which can relieve or increase such coexistence problems: the globalization, the new technologies, and concretely, the ICT or information and communication technologies.

How should education face these challenges and problems? In the Delors report, presented by UNESCO (1996), and mentioned before, there were exposed 4 pillars that education of XXI century should have to be able to meet the requirements of the current society with its big diversity of people, social groups, ethnic groups, cultures, and its corresponding coexistence problems. These 4 pillars are: to learn to know, to learn to do, to learn to be, and to learn to live together. At reading the definition and description of each one of these pillars, it is evident that all of them are related with competencies for life. Concretely, when making a description of what learning how to live together means, it is made a reference of the competency of appreciation and respect to diversity and interculturality.

In the Delors report, it is affirmed that education should have a double mission: “to teach the diversity of human species, and to contribute to the consciousness of the similarities and the interdependence among all human beings”, all this, with the purpose of getting human beings to be able to live and coexist pacifically, without caring about different aspects: gender, ethnos, nationality, socioeconomic status, etc. furthermore, the importance of carrying out common projects with other people, in order to promote others’ knowledge and acceptance, the empathy, and the mutual cooperation, have stood out, always looking for the common good in addition to the individual benefit.

In Guatemala, it is recognized the importance of the development of this competency, to be able to interact with people “different from us”, regarding beliefs, customs, cultures, etc., without stereotypes or prejudices that cause discrimination, inequality, and violence. As it is established in one of the objectives of the educational reform: “it must be taught for a pluralist, inclusive, supportive, fair, participative, intercultural, pluricultural, multi ethnic, and multilingual society. A society where all people participate consciously and actively in the construction of the common good, and the improvement of each human being’s life quality, and as a consequence, of the towns, without discrimination for political, ethical, social, cultural, linguistic, and of gender reasons”. (Ministry of Education [MINEDUC for its acronym in Spanish]National Curriculum 2005). The lack of this competency has generated and generates in many societies and nations, phenomena and
destructive actions such as genocides, wars, murders, violations, etc.; our history has demonstrated so.

In order to make an introduction to the topic, it is necessary to distinguish between “interculturality” and “multiculturality”; according to Argibay, (2003) this last is given when different cultures coexist in a same geographic and social space, but there is not much influence among them. They stay in a kind of ghetto, living parallel lives. The dominant society is used to establish social and legal hierarchies, and to place the other groups and people in inferior conditions, what can lead to conflicts, to the creation of stereotypes, and prejudices, and also to scorn, making difficult the social coexistence, always in detriment of the weakest groups and people.

The ideal thing is the existence of equity and mutual respect, going from the static and misunderstood multiculturality toward interculturality, which is “the ideology or model of social organization that affirms the possibility of an harmonious coexistence in society of those groups and ethnical communities, which are culturally, religiously, or linguistically different. So, the cultural diversity is positively valued and it is considered that no group should lose its own culture or identity. (Argibay 2003).

Achaerandio (2010), states that who has developed this competency, assumes that the cultural and sometimes personal differences are complementary, and that it is good for everybody to discover what is common to people and to the diverse cultures or groups, learning to coexist in the diversity. In the educational institutions, the development of this competency should be a cross-cutting item, that promotes not only the respect to differences, but also that develops the habit of service and support to others, especially to the ones socially weak.

On the other hand, Villa A. and Poblete M. (2007), who classify this competency within the group of interpersonal generic competencies, describe it as “to understand and to accept the social and cultural diversity as an enriching personal and collective component to develop the coexistence among people, without incurring in discrimination regarding sex, age, religion, social, political and/or ethnical condition. “These different types of discrimination can be solved through learning, so remember competencies are learnt.

As a matter of fact, the School is a favorable environment to educate in the coexistence and in the supportive justice, without caring about the socioeconomic condition, the gender, and other types of diversity. The supportive justice is based on three big pillars: the respect to oneself, the respect to others, and the respect to the natural.

In summary, the diversity and interculturality competency develops attitudes such as: to respect and appreciate other people and groups, to communicate openly, to know how to listen, to dialogue, to negotiate and to conciliate, giving solutions
in benefit of individuals and groups, meeting with the rules of coexistence, promoting the cooperative work, etc.

Next, some chief elements of the diversity and interculturality competence are described: the definition, the dimensions, and some models of achievement indicators that allow evaluating the levels of quality of competency.
### X. DIVERSITY AND INTERCULTURALITY COMPETENCY

**DEFINITION:** To understand, to respect and to accept pluriculturality and social multiplicity as a personal and collective way to develop the pacific coexistence between people without incurring in any type of discrimination.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. To understand</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Formal operational stage</strong> (12 to 18 years old)</td>
<td>Identifies the existence of other realities, different from his (economic, cultural, social, familiar, sexual orientation).</td>
</tr>
<tr>
<td><strong>Concrete operational stage</strong> (7 to 12 years old)</td>
<td>Identifies social and cultural differences.</td>
</tr>
<tr>
<td><strong>Pre operational stage</strong> (5 to 7 years old)</td>
<td>Identifies the existence of other realities, different from his, mainly regarding gender.</td>
</tr>
<tr>
<td></td>
<td>Establishes and explains diverse types of relations among gender, situation of poverty, culture, socio economic status, historical antecedents, etc.</td>
</tr>
<tr>
<td></td>
<td>Explains the difference and similarities between him and others, as well as among people, groups or cultures.</td>
</tr>
<tr>
<td></td>
<td>Explains the similarities between him and others.</td>
</tr>
<tr>
<td></td>
<td>Gives solid arguments about the importance of the human dignity and the richness of different cultures.</td>
</tr>
<tr>
<td></td>
<td>Gives opinions about the rights and responsibilities of the citizens, taking into account the human dignity.</td>
</tr>
<tr>
<td></td>
<td>Gives examples about how to try others with dignity.</td>
</tr>
</tbody>
</table>
## 2. To Accept

<table>
<thead>
<tr>
<th></th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arguments the value given to the richness of gender, culture, socio-economic, and gender differences, etc.</td>
<td></td>
<td>Admits the differences of personality, gender, culture, socio-economic status, etc.</td>
<td>Integrates himself, with no difficult, with other children and groups.</td>
</tr>
<tr>
<td>Includes in his judgments and actions, other people and groups’ positive contributions different from his, rejecting generalities and prejudices.</td>
<td></td>
<td>Takes advantage of contributions of others, in order to improve his.</td>
<td>Listens to different people and group’s contributions.</td>
</tr>
</tbody>
</table>

## 3. To coexist pacifically

<table>
<thead>
<tr>
<th></th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes that a pacific coexistence implies the respect to differences.</td>
<td></td>
<td>Recognizes that a pacific coexistence implies the respect to differences.</td>
<td>Explains the importance of the respect toward his partners, and the rules of coexistence.</td>
</tr>
<tr>
<td>Proposes ways of personal and group integration, in the pursuit of the common good.</td>
<td></td>
<td>Joins to people and groups different from him.</td>
<td>Joins to groups and people.</td>
</tr>
<tr>
<td>Contributes with possible solutions than could solve diversity and interculturality conflicts.</td>
<td></td>
<td>Promotes and practice ways of inclusive participation.</td>
<td>Participates in class.</td>
</tr>
</tbody>
</table>
XI. Socio-motor Competency

Since the beginning of human life, the learning is generated as from our body reality; our first contact with the world is made through our sensations and perceptions. A body correctly developed and stimulated will have better opportunities to adapt to the environment, which will cause a better life quality.

There are different conceptions about socio-motor skills; some of them conceive the development of the socio-motor skills as the possibility to form healthy and strong bodies; others, are based on the pedagogic approach, and the last ones, find in the education of the body, the way to educate integrally to the human being (mind, body, and spirit). In this last conception, we have the challenge to form students able to put all their abilities at other’s service.

Damian Ossorio Lozano, (2005) affirms: “The person expresses himself through the body; he is part of such body. The human being has a body, but it is not a body considered exclusively as physical object, it is a body that is alive, it is expression, its existence is corporeality, and that corporeality of the existence implies to act, to know, to reason, to feel, to transmit, to make-make, etc.”

Teaching not only the body, but through the body, it is intended to take advantage of potentials offered by the body experience to the integral formation of human beings: physically, mentally, and spiritually healthy, with a strong willingness, at others’ service, and with appreciation and respect for the natural and cultural environment. Therefore, in order to be a plenum and integral human being, the Socio-motor competency should be developed at a certain level.

Castañer and Camerino (1991) define the man’s motor activity with three dimensions: introjective, which makes it possible to recognize oneself through the motor skills; extensive, which permits people to interact with the environment; and projective, which enables the relationship with the social environment.

Pierre Parlebas (2001) describes that the motor behavior enables the analysis of the cognitive, affective, and relational aspects, providing the human being with the ability to solve effective and opportune different kinesthetic problems, interacting with the physical and social environment. At Liceo Javier, this competency is defined as: a system of cognitive, affective, motor, and physical skills that allow the human being to solve efficiently and opportunely, kinesthetic problems, by interacting with the physical and social environment.

---

8 Ossorio Lozano is a Doctor in Physical Education and Master in Sports Psychology.
9 Pierre Parlebas is a Professor in Physical Education, Sociologist, Psychologist, and Linguist.
10 Kinesthesia: According to the Spanish Real Academy dictionary, it is a secondary sensation that is produced in a part of the body, provoked by a stimuli applied to another part of such body. The Kinesthesia, in other words, can be linked to the orientation ability, which enables a person to act coordinate and with spatial orientation.
For this type of competency, the procedures mainly consist of those motor abilities and skills of the students, which are efficiently, creatively and opportunely used by them, in different situations; and these procedures help them develop themselves in the physical and social context. These contents will meet the objective needs and interests of the students; essentially, students find that this competency is applicable to their daily occupations.

There are two types of motor skills: the **conditional** and the **coordinative** skills. The first ones are referred to the quantitative characteristics of the motor aspects; and the second ones, to its qualitative characteristics.
A Model of Education for the XXI Century

Motor skills

- Quantitative
  - Resistance
  - Speed
  - Strength
  - Flexibility

- Conditional abilities
  - Jumps
  - Displacements

- Coordinative abilities
  - Spins
  - Pitchings, receptions and hits

Qualitative

- Dynamic coordination
- Balance
The motor skills are elements that give quality to the human beings' movement. The **basic skills** of the coordinative abilities are the following:

- Jumps
- Displacements
- Spins
- Pinching, receptions, and hits
- General and segmented dynamic coordination
- Balance

**The specific skills** are those which imply the higher development of the executions started inside a person; besides being more varied than the basic ones, they are carried out in a more elaborated way and with a more effective control.

In conclusion, the motor skills demonstrate that the human being is able to solve problems through the use of his body. Renowned dancers, exceptional surgeons, actors able to create a scene with only gestures and movements; all of them have developed the socio-motor competency, since they have a very precise idea of the balance, the eye-hand coordination, and can execute the movements with flexibility, speed, and harmony; but also, the situations that they solve, help the relate with the physical and social environment, in a correct way.

Next, the following elements are included: the **definition** of this competence, three of its important **dimensions**, and some important **achievement indicators** to evaluate it.
## XI. SOCIO-MOTOR COMPETENCY

**DEFINITION:** It is a system of cognitive, affective, motor and physical skills, which allows the human being to solve different kinesthetic problems, in an effective and opportune way, interacting with the physical and social environment.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
</table>
|            | **Formal operational stage**  
(12 to 18 years old) | **Concrete operational stage**  
(7 to 12 years old) | **Pre operational stage**  
(5 to 7 years old) |
| 1. Image and perception  
(introjective: with oneself) | Executes a motor action with emphasis in the basic and specific qualities. | Develops the motor action with emphasis in the basic qualities. | Develops the motor action through basic qualities. |
| 2. Motor qualities and skills  
(Extensive: with the environment) | Adapts the basic motor skills to the specific skills. | Adapts the basic motor skills to the specific skills. | Executes percept-motor actions correctly. |
<p>| | Executes motor responses, considering the speed, frequency, duration, intensity, and volume, as well as the combination among them. | Executes motor responses, considering the speed, frequency, duration, intensity, and volume, as well as the combination among them. | Responds effectively to motor stimuli: temporary, spatial, and of coordination. |</p>
<table>
<thead>
<tr>
<th></th>
<th><strong>Formal operational stage</strong> (12 to 18 years old)</th>
<th><strong>Concrete operational stage</strong> (7 to 12 years old)</th>
<th><strong>Pre operational stage</strong> (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Motor qualities</strong></td>
<td>Uses the fine motor skills, solving situations that require precision and ability.</td>
<td>Uses the fine motor skills, solving situations that require precision.</td>
<td>Uses the fine motor skills in spontaneous and mediated problems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Uses in a controlled way, the expressive resources of the body and the movement, conveying sensations, ideas, moods, according to the needs and faced problems.</td>
<td>Uses the expressive resources of the body and the movement, conveying sensations, ideas, moods.</td>
<td>Uses the expressive resources of the body and the movement, conveying sensations, and moods.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interprets and responds to messages expressed by others through the expressive resources of the body.</td>
<td>Responds to messages expressed by others through the expressive resources of the body.</td>
<td>Responds to messages expressed by others through the expressive resources of the body.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Controls motor behaviors with expressive, communicative, and esthetic purposes, considering the body, the movement, and the feeling as basic elements.</td>
<td>Controls motor behaviors with expressive, communicative, and esthetic purposes, considering the body, the movement, and the feeling as basic elements.</td>
<td>Expresses motor behaviors in an expressive and communicative way.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
XII. Ethical Sense Competency

Before defining this competency, we will describe what is understood by Ethics. Some authors define it as the science of people’s moral behavior, or as the philosophic discipline that studies the moral rules and foundation. In order to understand better its definition, it is important to distinguish between moral and ethics. The moral can be defined by the group of comportments and rules that we use to accept as valid, and the ethics on the other hand, is the reflection about the reason why we consider them as valid. Therefore, ethics implies the reflection of the human beings’ behavior.

Important Christian authors of different ages understand by “ethical sense” as the ability to think, live, and act according to the universal principles that are based on the human being’s value, and that are aimed to the full and mature development, according to the Gospel. The “ethical sense” of the educational institutions is based on the education in values that help students to internalize them and to actively respond, opposing to the ideologies and approaches that dehumanize, and exclude the majorities in the poverty, and alienate quite a few through strategies of excessive consumer behavior.

A person has developed the “ethical sense” competency, when he proceeds because of a deep intrinsic motivation, based on the reflection and in the respect to others, in the solidarity, and in what some authors call the internal Law of love, in the sense that a person truly “loves” another one, only when his aspiration is to make such person happy. In an ethical sense, it is a personal construction that is assumed day after day, with the help of his close family and of society; this influences the human beings, especially through formal education.

For example, the Pedagogical Paradigm of the Jesuit educational institutions (“context, experience, reflection, action, and evaluation”), feeds such ethical sense, and transforms it into a particular way of seeing and living the experience of God, of others, of nature, and of people and groups’ relationships. For this reason, the transversal character of this competency is essential in the educational exercise.

The ethical sense competency has three essential components that are referred to the three levels of the personality: cognitive, emotional, and behavioral; the cognitive level consists in having mature judgments about what is correct or incorrect for a person, taking into account his integrality and the social criteria where he is developed; the emotional level consists in having a balanced moral sensibility, in favor of the ethical values that are proposed by his mature judgment; the behavioral level consists in acting congruously with such ethical values of dignity, justice, tolerance, respect, and solidarity, mainly with those who suffer unfairly.
In the Delors report (1996), as mentioned before, the 4 pillars that education of the XXI century should have, are exposed: **to know, to know how to do, to know how to be, and to know how to live together.** The objective is to be able to face the society demands, and the new problems and needs that are emerging. In order to know how to do, to be, and to live together need, the ethical sense is needed to reach an optimum development. In the **Universal Declaration of Ethical Principles** (Paris, 1995), presented by UNESCO, it is confirmed the existence of some universal ethical principles, which arise from the recognition of the human dignity and from the need to fully develop his coexistence skills, in harmony and peace. They are values that, respecting the diversity, the interculturality, the beliefs, and the religions, transcend the own cultural values, and converge in common principles, inherent to every human being: social justice, cultural respect, love to the truth, honesty and integrity, goodness and love, respect to the environment, sense of life and spirituality, tolerance, fraternity, and social commitment. Therefore, the **ethical sense competency** and the development of universal principles, should be considered in a curriculum for an integral education.

Next, the following elements are included: the **definition** of such competency, three of its important **dimensions**, and some **achievement indicators** to be able to evaluate it.
# XII. ETHICAL SENSE COMPETENCY

**DEFINITION:** It is a reflection about the human dignity and the disposition to commit and act in his support. It is to behave according to the universal principles, which are based on the human being’s value, living the Christianity coherently.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal operational stage (12 to 18 years old)</strong></td>
<td><strong>Concrete operational stage (7 to 12 years old)</strong></td>
</tr>
<tr>
<td>1. Cognitive</td>
<td>Explains the concepts and offers arguments about the importance of human dignity, integrity, tolerance, and those included in the values Decalogue.</td>
</tr>
<tr>
<td></td>
<td>Analyzes and reflects about moral and ethical conflicts, in different scenarios, determining causes and consequences.</td>
</tr>
<tr>
<td></td>
<td>Arguments with reasons in favor or against ethical situations, taking into account the Christian criteria.</td>
</tr>
<tr>
<td>2. Discernment</td>
<td>Contrasts his ethical and moral principles, with the conflict that he is analyzing.</td>
</tr>
<tr>
<td></td>
<td>Differentiates the moral standards from his beliefs and feelings, in order to be able to take a better ethical decision.</td>
</tr>
</tbody>
</table>
3. Commitment

<table>
<thead>
<tr>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applies Ignatian development criteria, in order to make decisions that imply the human beings’ dignification.</td>
<td>Uses moments of reflection to evaluate his daily actions, which leads him to do good.</td>
<td>Counts the good actions that he has done.</td>
</tr>
<tr>
<td>His actions contribute to improve the environment where he develops himself.</td>
<td>His actions contribute to improve the environment where he develops himself.</td>
<td>His actions contribute to improve the environment where he develops himself.</td>
</tr>
<tr>
<td>Acts firmly and decisively, responding to his own and others’ initiatives, which look for the human’s being dignification.</td>
<td>Acts responding to his own initiatives, which look for his partners and relative’s dignification.</td>
<td>Acts with respect with his partners.</td>
</tr>
<tr>
<td>Defends people who are in disadvantage (school harassment, defenselessness, poverty, etc.)</td>
<td>Defends people who are in disadvantage (school harassment, defenselessness, poverty, etc.)</td>
<td>Helps his partners.</td>
</tr>
</tbody>
</table>

DIMENSIONS INDICATORS

1. Cognitive
2. Discernment
3. Commitment

DEFINITION: It is a reflection about the human dignity and the disposition to commit and act in his support. It is to behave according to the universal principles, which are based on the human being’s value, living the Christianity coherently.
XIII. Spiritual Competency

The integral education is considered as the new paradigm of the XXI century education, so much so that most of the educational institutions offer a type of education oriented to the formation of all the person’s aspects. The essential question that arouses is: which are the aspects that constitute the human being? Among others, these aspects can be mentioned: the body, affective, social, ethical, and cognitive aspects; however, there is a dimension which is taken into account by only a few educational systems: the spiritual aspects, despite most of the theorists (philosophers, anthropologists, sociologists, humanists) agree that the sense of transcendence is in the human beings’ essence itself. The previous information implies that when talking about integral education, the dimension of the human being’s transcendental aspects, should be approached and developed; even more, if one of the objectives of the XXI century education is to develop in people the “Key Competencies for life”, the increase of spirituality cannot be put aside in the education of a person who wants to face successfully, the contemporary world.

The former outstanding philosophers already knew this dimension of the human being; Aristotle said that “there is no philosophy, if there is no spirituality; there is no culture without spirituality”. Recently, in the XX century some philosophers are found, who retrieve this dimension as essential in the human being. Among others, we can mention Abraham Maslow (1943), who in his hierarchy of needs, he mentions the “peak experiences”, that is to say, the fulfillment that a human being achieves an authentic level as a person; to Maslow, these are the peak experiences what make a person feels more integrated. Victor Frankl, author of the logotherapy, understands the human being as an existential and dynamic creature, who is able to transcend himself; for that reason, to Frankl the transcendence is what allows a human being to overcome the biological, psychical, and social conditionings.

In search of the understanding of the human intelligence, Howard Gadner (1983) proposes the model of multiple intelligences, constituted by seven different intelligences, enhancing the traditional concept of intelligence and focusing on the cognitive aspect. Later on, he adds an existential or transcendent competency, and even though he did not go deep into it, he defined this competency as “the ability to place oneself with regard to the cosmos; the ability to place oneself with regard to such existential features of the human condition, like the meaning of life, the meaning of death, and the final destiny of the physical and psychological world, in deep experiences such as the love to others or the immersion in an art work”. In the same way, in 1995, Daniel Goleman made it popular the term “emotional intelligence”, understood as the ability to recognize the own and others’ feelings, and the skill to manage them. To Goleman, this type of intelligence has an intrapersonal component, and an interpersonal one.
These components constitute the intra and interpersonal competencies (self-motivation and interpersonal communication).

In the educational area, the Delors report (1996) states that in the education area, it can be given responses to vertiginous changes of the present world; as mentioned before, Jacques Delores says that the XXI century education should be based on four pillars: learning how to know, do, live together, and be. On the basis of this perspective, the spiritual competency directly affects, though not exclusively, the learning how to be, and the learning how to live together.

Also, the humanist philosopher, Antonio Marina (2004), in his book “Learning to Live Together” states that the school should be a teacher of life; to the author, a good way to make this world to be better, is striving to get children to have a “successful, noble, and happy life”, and he understands happiness as the “harmonious achievement of two big human motivations: the welfare, and the enhancement of possibilities”, that is to say, the search of the achievement and transcendence. Finally, Francesc Torralba (2010) can be cited, who in his book “Spiritual Intelligence” explains that this type of intelligence is “superior”, since it enables the human being to ask for the sense of existence, in order to take distance from reality, to make life projects, to transcend the materiality, to interpret symbols, and to understand wisdoms of life. In this framework of the Catholic Schools in Spain (2008)\textsuperscript{11}, one more competency has been added to the eight key competencies in education that the OECD and European Commission have established as those competencies which are needed to graduate from the compulsory education: the “Spiritual Competency”; the objective is to enrich the project and the legislation of the basic competencies.

Clarifying concepts

The term “spirituality” can be easily mistaken for religiosity; therefore, it is important to distinguish the aspects where both terms are different and at what point they can match.

Spirituality refers to the “human being’s deep dimension, which transcends the most superficial dimensions, and it constitutes the heart of a human life with sense, with passion, with veneration to reality”\textsuperscript{12}. Spirituality has something of mysticism, that is to say, to feel things deeply, getting into the mystery that resides in it.

\textsuperscript{11} http://www.archiburgos.org/dde/materiales/bibliasem/compespiritual.pdf
\textsuperscript{12} ibid
When talking about religion, in the broadest sense of the term, it is referred to a link (religion comes from the Latin *religare* that means relationship) between human beings and the absolute or transcendent aspects that give sense and totality to their existence. More concretely, it is understood by religion, the confessionalism, which suggests the entailment to a determined creed, with its respective cultural and ritual practices.

Therefore, when speaking about the “spiritual competency”, it refers as of the transcendent dimension of every human being, without caring about his religious confessionalism, even though it also can be included. This means, that the spiritual competency can be catalogued as a *generic competency*, since it meets the characteristics of such competencies; thus, a non-confessional institution will be able to develop it. However, in the institutions where the spirituality is not neutral, a spiritual competency that develops the established dimensions can be reached, on the basis of a particular approach, for example, a Christian or and Ignatian approach.

For all the afore mentioned, and taking into account that we are living in a world increasingly globalized and pluralized, both in the cultural and religious aspects, and in a sociological context of postmodernism with its multiple advantages and risks, it becomes indispensable to form people who develop the spiritual dimension, which allows them to: find themselves and others; to find the sense of their existence; and to strength their deepest convictions.

The spiritual competency consists in discovering the human beings’ deepest dimensions, and the mystery that transcends him, through experiences of silence, contemplation, searching inside him, encountering with himself, with others, and with nature; it implies to ask deep questions about the sense of life, to understand and commit with reality.

Next, the following elements are included: the *definition* of this competency, three of its important dimensions, and some chief *achievement indicators* to evaluate it.
DEFINITION: The spiritual competency consists in discovering the human beings’ deepest dimension, as well as the mystery of what is transcendent, through experiences of silence, contemplation, searching inside him, encountering with himself, with others, and with nature; it implies to ask deep questions about the sense of life, to understand and commit with reality.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Contemplation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Formal operational stage</strong> <em>(12 to 18 years old)</em></td>
<td><strong>Concrete operational stage</strong> <em>(7 to 12 years old)</em></td>
</tr>
<tr>
<td>Chooses different ways of mediation and contemplation that lead him to an interior silence.</td>
<td>In moments of contemplation, keeps silent.</td>
</tr>
<tr>
<td>Uses different ways of conscious relaxation, in order to practice the mindfulness.</td>
<td>Uses different ways of conscious relaxation, in order to practice the mindfulness.</td>
</tr>
<tr>
<td>Shows his admiration and amazement for the creation.</td>
<td>Shows his admiration and amazement for the creation.</td>
</tr>
<tr>
<td>Expresses with creative imagination, his internal experience (feelings, emotions, ideas, and sensations).</td>
<td>Shows with creative imagination, his internal experience.</td>
</tr>
</tbody>
</table>

<p>| <strong>2. Dialogue with oneself</strong> |  |
| <strong>Formal operational stage</strong> <em>(12 to 18 years old)</em> | <strong>Concrete operational stage</strong> <em>(7 to 12 years old)</em> | <strong>Pre operational stage</strong> <em>(5 to 7 years old)</em> |
| Reflects upon the sense of life, the creation, the good, the bad, and the injustice. | Questions about the creation, the good, the bad, the injustice. | Asks questions about the creation, God, the good the bad. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Dialogue with oneself</td>
<td>Brings up deep questions about the sense of life.</td>
<td>Asks himself questions about the reason of life.</td>
<td>Asks questions about his feelings and emotions.</td>
</tr>
<tr>
<td></td>
<td>Formulates his own answers about the big interrogations of life.</td>
<td>Expresses his own responses about some interrogations of life.</td>
<td>Says what he feels about some questions of life.</td>
</tr>
<tr>
<td>3. Commitment</td>
<td>Understands and gets involved with others, on the basis of a compassionate view.</td>
<td>Sympathizes with others’ needs and sufferings.</td>
<td>Realizes about the others’ needs.</td>
</tr>
<tr>
<td></td>
<td>Commits with reality: of nature and society.</td>
<td>Commits with the reality: of the nature and the social groups in his environment.</td>
<td>Commits with the carefulness nature resources and environment.</td>
</tr>
<tr>
<td></td>
<td>Shows affective and effective solidarity with others, on the basis of the assumed values.</td>
<td>Shows affective solidarity with others, on the basis of the proposed values.</td>
<td>Show affective solidarity with people around him.</td>
</tr>
</tbody>
</table>
XIV. Team Working Competency

The Team working competency belongs to the group of interpersonal competencies, since it supposes the interaction and communication with a group of people and the establishment of positive relationships among them.

According to Achaerandio (2010) this competency implies the development of interpersonal skills, such as communication, according to the achievement objectives, to certain orientation toward the common tasks, and to a climate or proper social environment that sticks together with the team work, regarding what is important to achieve the common objectives.

Villa and Poblete (2007), define the team working competency as: “integrating and collaborating in an active way, in the consecution of common objectives with other people”. Therefore, it has repercussions in the improvement of the interpersonal communication, helps to the management of conflicts and to the leadership exercise. Also, it supposes the use of other competencies like the reflexive, critical-constructive, analytical, systemic, ethical sense, the management by objectives, and problems solving competencies.

In summary, it could be said that the team working competency encourages the development of the communication and interaction with others, the acquisition of values and attitudes, the planning and organization of tasks with other people, the exercising of leadership, and the problems solving. All this, with the purpose of achieving common goals, where the responsibility and the commitment with tasks are shared.

According to Villa and Poblete (2007), one of the most popular methodologies for the development of the team working competency, is the cooperative learning. According to these authors, the different techniques and activities that this methodology incorporates help to develop the team working competency.

As per Nicolás Uríz Bidegain, the cooperative learning means to carry out a task or a job, which cannot be made individually, but it requires the contributions and participation of a team of people. Cooperating in order to learn, means that the teacher is a mediator, the student is the protagonist of learning, the school is the scenario, and the group is the cooperation element. Insofar as the teacher delegates the learning responsibility to his students, he will be encouraging a true autonomy to learn to work together within a team. It should be remembered that Vygotsky established the foundations of the cooperative working, by affirming that we learn with and from others.

13 Coordinator of the design technical unity and curricular development of the University of Navarra, España.
There are characteristics that establish the cooperative learning methodology. According to Johnson, Johnson and Holubec (1999), these are:

- **Positive interdependence**: Each member is responsible of the team’s success, and should be conscious that his individual success depends on the others’ success.

- **Face to Face interaction**: the dynamics of the task implies constant and direct interactions among members; they share resources, help each other, make efforts, and mutually reward.

- **Individual responsibility**: each member is co-responsible of the group’s success or achievements, assuming the consensual conclusions or procedures as their own.

- **Skills inherent to small groups**: Each member should acquire, develop, and employ basic skills of team working, such as the planning and the organization of tasks, in order to achieve common objectives.

- **Evaluation of the process outcomes**: The group should develop activities of reflection and evaluation of the team work.

According to the same authors, the roles that each member assumes within the group are:

- **Abstractor**: He is in charge of summarizing the main conclusions or answers generated by the group.

- **Inspector**: He makes sure that all members can explicitly say how they reached the conclusions or answers.

- **Trainer**: He corrects the mistakes of the other members’ explanations and summaries.

- **Narrator**: Asks the members of the group to relate the new concepts and strategies with the previously learnt material.

- **Researcher-Messenger**: Gets the materials that the group needs. Communicates with the other groups and with the teacher.

- **Recorder**: Writes the group’s decisions and edits the work report.
• **Animator**: Encourages the members’ contributions.

• **Observer**: Cares for the adequate group’s collaboration, in order to be able to later offer resources in an evolutive process of the own work carried out.

It is important to recognize that this competency is very valuable in the educational context because it promotes the active and meaningful learning; it prioritizes the cooperation and collaboration before the individualism and the competition; the students learn to relate and communicate with others; and it helps to improve the students’ school performance. The teacher plays a role of mediator and facilitator, and is the student who builds his own knowledge. It has been demonstrated that students learn more, like the school more, establish better relationships with others, increase the self-esteem, and learn more effective social skills when they learn to work in teams.

As every competency, the team working considers the development of a series of skills, abilities and attitudes. According to De Miguel (2007), the skills of this competency can be divided into **thinking skills, communication skills, social skills, and organization skills**.

The **thinking skills** are those mental skills that allow our brain to process the received information through the senses, in order to be able to know and to interpret to world. Because they are of a high cognitive level, they cannot be seen; therefore, to be able to observe and evaluate them, it is necessary to materialize them in concrete actions and abilities. In this chapter they don’t appear to avoid repetition, but we encourage you to revise the competencies of the different types of thinking.

By **communication skill** it is understood the capacity to express clearly and effectively the ideas, knowledge, feelings, thoughts, through the word. With the purpose of knowing the abilities, you are invited to revise the document of “Communication Competencies”.

The **organization skills** are those which allow us to plan, order, assume, and distribute tasks, using efficiently the available time and resources for the good functioning of the team. Among some of their abilities we can mention the planning of the work based on objectives, the expression of disagreements without fear, the mediation of conflicts, etc. **Learning by modeling** is the way how the social skills are learnt, according to Bandura.

Some aspects that should be taken into account to develop the team working competency in an educational context, are:
• It should be carried out in and out the classroom, with or without the teacher’s presence.

• It is recommended to divide the big group in small ones of 2, 4 or 6 students. When forming the groups, it is advisable the diversity more than the homogeneity or affinity.

• The groups should receive the written guide or document with the instructions of what should be carried out. On that basis, they should plan and organize his work. Each member of the group should assume a particular role, and therefore, they will be responsible of specific tasks.

• At the end of the work, it is a good idea to share and contrast it in full meetings of the big group.

Because this is an interpersonal competency, the emphasis should be given to the attitudinal component, since this is the way to prove the huge value that rules to each human being.

Next, the **definition**, the **dimensions**, and the **achievement indicators** of this competency, are described.
### XIV. TEAM WORKING COMPETENCY

**DEFINITION:** It consists in the positive interaction of a group of people who, creating synergies, are committed to putting their own skills at service of a common objective. In its practice, the effective communication is encouraged and promoted, as well as the development of values such as solidarity and tolerance, planning and execution of tasks, leadership exercise, and common problems solving.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Communication</strong></td>
<td><strong>Formal operational stage (12 to 18 years old)</strong></td>
</tr>
<tr>
<td></td>
<td>Shares the goals and objectives that guide the work, introducing possible ways to achieving it.</td>
</tr>
<tr>
<td></td>
<td>Attends to different ideas and opinions, considering maturely the offered arguments.</td>
</tr>
<tr>
<td></td>
<td>Expresses assertively, according to his own qualities, ideas, disagreements, feelings, and emotions.</td>
</tr>
<tr>
<td><strong>2. Interaction</strong></td>
<td>Accepts and fulfills work regulations, proactively integrating himself within the group; if it is needed, he postpones and negotiates them.</td>
</tr>
<tr>
<td></td>
<td>Contributes to the team cohesion, with his way of being and relating, respecting the peoples’ dignity and making himself respected.</td>
</tr>
</tbody>
</table>
### 3. Commitment in the common task

<table>
<thead>
<tr>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributes to constructive solutions, assuming the conflict when it is presented, trying to solve it.</td>
<td>Contributes to constructive solutions.</td>
<td>Makes contributions in the group.</td>
</tr>
<tr>
<td>Participates and collaborates in the team tasks, attending to the objective (positive interdependence).</td>
<td>Participates and collaborates in a useful way, in the team tasks (positive interdependence).</td>
<td>Participates and collaborates in the team tasks.</td>
</tr>
<tr>
<td>Uses the time efficiently and effectively, establishing and hierarchizing the tasks following a logic order, with the purpose to contribute to the achievement of the team work.</td>
<td>Uses the time effectively, with the purpose of contributing to the achievement of common tasks.</td>
<td>Fulfills common tasks, in the assigned time.</td>
</tr>
<tr>
<td>Evaluates the contribution of the team members, for the achievement of the objectives, both in the process and at the end of the task.</td>
<td>Evaluates the contribution of the team members, for the achievement of the objectives.</td>
<td>Makes opinions about the interaction of the team members.</td>
</tr>
</tbody>
</table>

**DIMENSIONS INDICATORS**

1. Communication
2. Interaction
3. Commitment in the common task

**DEFINITION:** It consists in the positive interaction of a group of people who, creating synergies, are committed to put their own skills at service of a common objective. In its practice, the effective communication is encouraged and promoted, as well as the development of values such as solidarity and tolerance, planning and execution of tasks, leadership exercise, and common problems solving.

**XIV. TEAM WORKING COMPETENCY**

<table>
<thead>
<tr>
<th>Developmental Stage</th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete operational stage (7 to 12 years old)</td>
<td>Participates and collaborates in a useful way, in the team tasks (positive interdependence).</td>
<td>Makes contributions in the group.</td>
<td></td>
</tr>
<tr>
<td>Pre operational stage (5 to 7 years old)</td>
<td>Participates and collaborates in the team tasks.</td>
<td>Fulfills common tasks, in the assigned time.</td>
<td></td>
</tr>
<tr>
<td>Evaluates the contribution of the team members, for the achievement of the objectives.</td>
<td>Makes opinions about the interaction of the team members.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SYSTEMIC COMPETENCIES

XV. Constructive Leadership Competency

The constructive leader is a model of identification, a planter and multiplier of human values, to change the earth that receives them. A person starts becoming a leader since he is a child, through social experiences “with others” (Vygotsky), by means of learning, reflections, experiences; it is convenient, thus, to lead and encourage children since Pre-school to develop the skills, abilities, attitudes and values that integrate their personalities as constructive leaders.

THREE DIMENSIONS:

1. The knowledge of oneself

The self-esteem is concreted and expressed through one’s self-efficacy. The self-esteem is supposed to recognize oneself honestly, in the qualities, potentials, etc., as well as in the failures and limitations; said it in other words, a leader should have an equilibrated emotional intelligence which is expressed in a personal discernment or an objective self-analysis.

The mature self-esteem is a self-motivation that help to develop the leader creativity and his willingness to give, inspire, and commit; this self-motivation equals to a kind of experience of the “Pygmalion Effect” (orienting, reinforcing, and approving the correct conducts of oneself and of others).

The self-efficacy of a leader usually is the outcome of a personal development of the self-esteem, and it is concreted in the famous phrase of the Virgilio’s classic philosophy: “Possunt quia posse videntur” (“they can because they believe they can”).

2. Vision of the future

“The big realities arise from the dreams fluttering”, said the Jesuit Karl Rahner, a German theologian who was one of the main encourager of the Vatican Council. The real leader has a rich imagination to dream and to foresee the good and fair things that will emerge if pertinent projects and actions are created and executed, and if it is communicated to others, the enjoyment to go from darkness to light.
A good leader is looking for the borders. This means, to be on the edge, and not to fall down.

3. **Positive influence over others**

The leader is like a prophet that cannot remain silent; he feels as a “fire that fires up other fires”. An authentic leader doesn’t look for himself, but he lives to achieve the dream to devote to serve others, in big or small projects and actions.

Next, the **definition**, the **dimensions**, and the **achievement indicators** of this competency, are described.
### XV. CONSTRUCTIVE LEADERSHIP COMPETENCY

**DEFINITION:** It is a way of being, living and coexisting in a continuous process of improving oneself and others; it implies the positive influence in others, to make them develop as people, in the search of a more fair and human society.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>VERTICAL ASPECTS</th>
<th>HORIZONTAL ASPECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Self-knowledge, self-esteem, self-efficacy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formal operational stage (12 to 18 years old)</td>
<td>Concrete operational stage (7 to 12 years old)</td>
</tr>
<tr>
<td></td>
<td>Maturely manifests his strengths and limitations.</td>
<td>Recognizes his strengths and limitations.</td>
</tr>
<tr>
<td></td>
<td>Expresses his willingness to be evaluated and to self-evaluate his qualities and weaknesses as a leader.</td>
<td>Expresses his willingness to be evaluated and self-evaluate his way of being and of coexisting.</td>
</tr>
<tr>
<td></td>
<td>Supports his partners when they need him.</td>
<td>Recognizes the good actions of his partners.</td>
</tr>
<tr>
<td></td>
<td>Expresses his willingness to be evaluated and self-evaluated his qualities and weaknesses as a leader.</td>
<td>Recognizes, praises and potentiates the good ideas and initiatives of others.</td>
</tr>
<tr>
<td></td>
<td>Expresses his willingness to be evaluated and self-evaluate his way of being and of coexisting.</td>
<td>Expresses his willingness to be evaluated in his way of being.</td>
</tr>
<tr>
<td></td>
<td>Expresses his willingness to be evaluated in his way of being.</td>
<td>Expresses his willingness to be evaluated in his way of being.</td>
</tr>
<tr>
<td><strong>2. Knowledge of reality to innovate, to create, and to transform</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expresses with conviction, the possible improvements of his context (in his partners, in his class, in his School, in his country, in the world).</td>
<td>Communicates his initiatives of change clearly.</td>
</tr>
<tr>
<td></td>
<td>Encourages changes that improve reality, showing opening and a positive attitude to achieve them.</td>
<td>Encourages changes in his context, with a positive attitude.</td>
</tr>
<tr>
<td></td>
<td>Suggests processes of change and actively participate in them.</td>
<td>Participates in processes of change.</td>
</tr>
</tbody>
</table>
**A Model of Education for the XXI Century**

<table>
<thead>
<tr>
<th><strong>DIMENSIONS INDICATORS</strong></th>
<th><strong>Formal operational stage</strong> (12 to 18 years old)</th>
<th><strong>Concrete operational stage</strong> (7 to 12 years old)</th>
<th><strong>Pre operational stage</strong> (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Knowledge of reality to innovate, to create, and to transform</strong></td>
<td>Communicates a clear objective and the steps to achieve it, differentiating the aims from the means.</td>
<td>Communicates a clear objective and the steps to achieve it.</td>
<td>Communicates his short-term purposes.</td>
</tr>
<tr>
<td><strong>3. Positive influence above others and their care</strong></td>
<td>Convincingly communicate his ideas over possible challenges that affect his context.</td>
<td>Convincingly communicates his ideas over possible challenges and improvements.</td>
<td>The ideas that he communicates, evidence certain challenges.</td>
</tr>
<tr>
<td></td>
<td>Shows decision, respect, and conviction when opposing to unethical behaviors or customs (harassment of any type, excessive celebrations, exaggerated gestures, academic frauds, etc.)</td>
<td>Shows decision and respect when opposing to dangerous behaviors or customs (harassment of any type, excessive celebrations, exaggerated gestures, academic frauds, etc).</td>
<td>Denounces when he observes a behavior that he considers incorrect.</td>
</tr>
<tr>
<td></td>
<td>Gives example of solidarity in the classroom, in the course, in the sports, in the social service</td>
<td>Supports his partners when they need him.</td>
<td>Supports his partners when they need him.</td>
</tr>
<tr>
<td></td>
<td>Recognizes, praises and potentiates the good ideas and initiatives of others.</td>
<td>Recognizes, praises and potentiates the good ideas and initiatives of others.</td>
<td>Recognizes the good actions of his partners.</td>
</tr>
</tbody>
</table>
XVI. Management by Objectives Competency

The management by objectives MBO is a global vision of how to run projects, enterprises and/or activities that lead to implement solutions. Peter F. Drucker, who created and conceptualized this term, established the main characteristics of this type of actions. As time goes by, this vision has been enriched by other authors, but the main essence of the MBO is that it is a process that involves all the group of action, in order to identify together, common objectives as guides to bring into action and operation to their enterprise of group.

According to Claudio Soriano, in his book: Gestión por Objetivos 2006, in a wider way, the management by objectives could be defined as a process through which leaders and groups define clearly their goals and priorities, they identify together the results that they want to achieve, they determine the achievement or success indicators, they come up with strategies to reach such outcomes; they work in a team to achieve them, and follow up the efforts and achievements.

The main principle of MBO is to assure that all members of the organization or team have a clear understanding of the objectives that they want to reach, and they should be well aware of their role and responsibility within the group dynamics. Furthermore, the personal objectives should be coherent with the ones of the group, so the consecution of such objectives will be given more strength. Said objectives should be specific, measurable, feasible and realistic.

The MBO has four subsystems that allow its efficient functioning:

- **A planning system**: to delimit the objectives at all levels, as well as the strategies to be used. The development of individual strategies leads the organization to know all the activities that should be carried out, who should accomplish them, how should be made and the resources to be used.

- **A flexible direction system**: to keep an assertive and direct system of ascending and descending communication and information. This directive system, open to a double-way communication, favor the implementation of corrective means, at the moment of any inconvenient.

- **A motivation-participation system**: the MBO system is a way of motivation, since it is essentially participative. Furthermore, it favor the formation of work teams and the emerging of new leaders and opportunities of development.

- **An evaluation system** with the purpose of analyzing the processes, the planned activities, and the level of achievement of the foreseen outcomes.
According to Villa and Poblete, the indicators of this competency are: a) establishment of goals and objectives, b) control, c) difficulties overcoming, d) use of resources. These authors support that this competency is deeply linked to the time management, and they value the agreement that should be among the planning, the goals and the time.

Therefore, we could define the competency as a **systematic process to learn altogether to establish objectives that lead to action, to identify strategies that favor their achievement, to delimit responsibilities and roles, and to follow up the outcomes and mistakes that are indicated in the procedures carried out by the group**. The final objective of this competency is that students turn into the protagonists of the process of transformation and improvement of the problems around them, but, through the implementation of GBO, which allow them to reach more and better goals for their personal life, and that by means of their service, they can improve others’ life.

Some authors think that the management by objectives is achieved through processes such as diagnostic, information gathering, analysis, actions proposals, and reflection. However, the Ignatian philosophy provides with guidelines to get the MBO, through the Ignatian Pedagogical Project (PPI for its acronym in Spanish). The Ignatian Pedagogical Project is a pedagogical model of Management, according to the Spirituality and Jesuitical Pedagogy Principles, and with the present cultural context. The dimensions or activities of this paradigm are five, which can be used as guidelines for the MBO: **context, experience, reflection, action, and evaluation.** *Contextualizing reality* is to place the topic, the fact, and the protagonists in the reality, in the circumstances; *the experience* is the opening of a person to all realities; *the reflection process* distinguishes two essential operations: a) to understand (discovering the significance of the experience) b) to judge (to give a judgment, that is to say, to verify the adequacy between what is understood and what is experimented). *The action* is the operative expression of a decision. Finally, *the evaluation* leads to the revision of the whole process, and to the outcomes pondering. It is a responsibility of the educational community to create the conditions for students to be able to live this five dimensions in an interactive and constant process.
As every competency, this one is related to most of the cognitive competencies, such as the analytical, critical, reflexive, creative, and systemic thinking, etc. also, it is related to the problems solving, which is the final purpose of the action-research.
DEFINITION: It is a systematic process through which a person establishes goals and priorities, identifies strategies, delimits responsibilities and roles, carries out what has been planned, and constantly follows up the process and the outcomes that are being achieved, with the purpose of transforming the problems around him.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Planning</strong></td>
<td><strong>Formal operational stage</strong> (12 to 18 years old)</td>
</tr>
<tr>
<td></td>
<td>Makes a diagnosis of the problem and of the context where the project planning, the activity and the service should be carried out.</td>
</tr>
<tr>
<td></td>
<td>Defines clear, realistic, and measurable objectives.</td>
</tr>
<tr>
<td></td>
<td>Establishes strategies to follow, methodologies, resources, times, responsibilities and roles of the members of the group, taking into account the proposed objectives.</td>
</tr>
<tr>
<td><strong>2. Execution</strong></td>
<td>Develops strategies (communication, implementation, following up) that make it easy the execution of what has been planned.</td>
</tr>
</tbody>
</table>
## A Model of Education for the XXI Century

### Defining Management by Objectives Competency

Management by Objectives is a systematic process through which a person establishes goals and priorities, identifies strategies, delimits responsibilities and roles, carries out what has been planned, and constantly follows up the process and the outcomes being achieved, with the purpose of transforming the problems around him.

### Dimensions Indicators

<table>
<thead>
<tr>
<th></th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Execution</td>
<td>Procures the achievement of the objectives, prioritizing the needed actions to reach them.</td>
<td>Procures actions that lead to the accomplishment of the objectives.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identifies and corrects mistakes on time.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Evaluation</td>
<td>Revises, during the process and at the end, the level of achievement of the objectives.</td>
<td>Revises, during the process and at the end, the level of achievement of the objectives.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Determines causes and consequences of the success or failure of the process and its outcomes.</td>
<td>Determines causes and consequences of the success or failure of the process and its outcomes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applies, opportunely, corrective measures to emerging problems.</td>
<td>Realizes that something is not going right and looks for help.</td>
<td></td>
</tr>
</tbody>
</table>

**DEFINITION:** It is a systematic process through which a person establishes goals and priorities, identifies strategies, delimits responsibilities and roles, carries out what has been planned, and constantly follows up the process and the outcomes being achieved, with the purpose of transforming the problems around him.

**Formal operational stage** (12 to 18 years old)

**Concrete operational stage** (7 to 12 years old)

**Pre operational stage** (5 to 7 years old)

- In this column there are no items to show because children at this psychological age are not able to develop this competency.
The values that the students should develop, as part of the competencies

- In the previous pages, the ATTITUDES AND VALUES have been mentioned as the third component of each one of the Key Competencies for life. And that is why, the main objective of education, in these times more than ever, is the integral education of a person.

“A person’s development is measured not only by his intellectual level, but also, by his ethical and emotional quality.

A person’s development is measured not only by his intellectual level, but also, by his ethical and emotional quality. Without this, an excellent intellectual education can become dangerous in a person. Even though an attitude is not the same than a value, in education they are almost synonyms; the authors say that to value something is the same than having a positive attitude toward such thing; furthermore, both concepts have a close relation with the “emotional intelligence”. The values, which have a more abstract nature, have the stability of attitudes, and also they include a motivational sense or a tendency to behave in certain way.

In the every-day language, the concept of attitude is more general and applicable to many elements, and it has, consequently, less “psychological density”; hundreds of attitudes toward different things, people, or events can be mentioned, but the number of values that we use to take into account is very restricted; it is talked, for example, of 10 values or a “values Decalogue” essential human beings.

Both attitudes and values have three basic components: the cognitive component of ideas, beliefs, images, etc.; the emotional component of feelings; and the behavioral component or of practical action. For example, the student, Juanita, of 9th grade have already developed the value of solidarity because:
“Both attitudes and values have three basic components: the cognitive component of ideas, beliefs, images, etc.; the emotional component of feelings; and the behavioral component of practical action.”

a) she knows very well what is a true solidarity; b) she appreciates and likes when she sees or executes actions of solidarity; and c) when is supportive, for example, helping to his partners by explaining them what they don’t understand in the math course.

For practical reasons, when recommend to the teacher who, on the basis of a competency-based curriculum has to create Lesson Plans and Learning guides, to take one or two indicators of the value that he has chosen to develop in the work period, being understood that in the evaluation processes of these indictors, what the educator really evaluates are measurable behaviors.

Furthermore, it is important to have in mind that the interpersonal Competencies, in general, and due to their essence, are focused on the values formation; this is obvious in the “ethical sense competency”, but also in the “interpersonal communication competency”, in the “appreciation and respect for diversity competency”, and in the “team work competency”. It is sufficient to review the “dimensions” and the “indicators” of these competencies, to confirm that this is so. This does not prevent the interpersonal Competencies from being also constituted by the values and the others two components of every competency: the “conceptual contents” and the “procedures”.

Next, there are proposed and described 10 values that, in some educational institutions, are considered as essential in the social contexts of the new XXI century, which as we know, is suffering of a serious crisis of values. Actually, every Educational Institution, if it wants to maintain this name of “educational”, and if its purpose is to really develop a Curriculum based on Competencies, it should clearly define the values that it promotes in its students, and these will constitute the “hallmark” of the excellent values-based Educational Project that the School has been able to develop in its graduate students. Chapters 6th and 7th of this book approach to the planning of teaching sequences for the formation of competencies, taking into account the three components (concepts, procedures, and values-attitudes) and how to evaluate them along the educational processes.

“Every Educational Institution, if it wants to maintain this name of “educational”, and if its purpose is to really develop a Curriculum based on Competencies, it should clearly define the values that it promotes in its students.”

14 For example, these are textually the values promoted by Liceo Javier Guatemala, which is directed by Jesuits. The laic educational institutions will use their liberty to choose their own values, with their corresponding definitions, dimensions and indicators.
### SOLIDARITY in contrast with individualism

**DEFINITION:** It is to understand and feel for others (“compassion”), recognizing their dignity as people, and placing in a same level, his interests with his fellows; solidarity implies autonomy, searching for the common good, and an equilibrated inclination toward the people in need.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Formal operational stage</strong> <em>(12 to 18 years old)</em></td>
</tr>
<tr>
<td>1. Feeling for others</td>
<td>Knows his dignity and the one of all human beings, as humans and as sons of God.</td>
</tr>
<tr>
<td></td>
<td>Recognizes the social realities that threaten the human dignity.</td>
</tr>
<tr>
<td></td>
<td>Feels affection and compassion for the one that suffers. ¹⁵</td>
</tr>
<tr>
<td>2. Searching for the common good ¹⁶</td>
<td>Proposes possible solutions that relieve the suffering, particularly of ones in need.</td>
</tr>
<tr>
<td></td>
<td>Commits with the proposed solutions.</td>
</tr>
</tbody>
</table>

¹⁵ From the Greek word “sin-pazos” that means to suffer with others.

¹⁶ According to the Social Doctrine of the Church (DSI-164, 177), it is understood by common good “The sum total of social conditions which allow people, either as groups or as individuals, to reach their fulfillment more fully and more easily… The common good, in fact, can be understood as the social and community dimension of the moral good… The demands of the common good are dependent on the social conditions of each historical period and are strictly connected to respect for and the integral promotion of the person and his fundamental rights.”
<table>
<thead>
<tr>
<th>Dimension Indicators</th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Searching for the common good</td>
<td>Is partial in favor of the ones who need to be dignified as human beings.</td>
<td>Sides with the ones who suffer unfairness.</td>
<td>Sides with the people in need.</td>
</tr>
<tr>
<td>3. Inclination for the ones who suffer in their dignity as human beings</td>
<td>Carries out actions that give sense to his life, when it favors the human being's dignification.</td>
<td>Is enthusiastic to carry out actions to help others.</td>
<td>Participates happily in activities that favor others.</td>
</tr>
<tr>
<td></td>
<td>Defends with conviction, the fair interests of those who have not been dignified as human beings.</td>
<td>Tends to defend the interests of those who unfairly suffer.</td>
<td>Tends to defend the interests of those who suffer.</td>
</tr>
</tbody>
</table>
### Ignatian DISCERNMENT to choose better

**DEFINITION:** To perceive where Jesus’ Spirit touches people and groups, to decide on the best option and put it into practice. This is the essential characteristic of the Ignatian spirituality.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th><strong>Formal operational stage</strong> (12 to 18 years old)</th>
<th><strong>Concrete operational stage</strong> (7 to 12 years old)</th>
<th><strong>Pre operational stage</strong> (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To distinguish the ethical-social quality in different options</td>
<td>Considers different options to “choose the one that leads more to the universal good”.</td>
<td>Considers options based on values, than contributes to the common good.</td>
<td>Distinguishes actions that either benefit or damage himself and others.</td>
</tr>
<tr>
<td></td>
<td>Gives opinions in favor of the human dignity.</td>
<td>Explains either what destroys or dignifies the human dignity.</td>
<td>Recognizes himself and others as valuable human beings.</td>
</tr>
<tr>
<td>2. To decide on the best option</td>
<td>Chooses with Ignatian criteria, the option that leads to the common good.</td>
<td>Chooses, with some Ignatian criteria, the option that leads to the common good.</td>
<td>Takes decisions of respect to others.</td>
</tr>
<tr>
<td>3. To put it into practice</td>
<td>As a result of his discernment, he proposes action plans that give sense to his life.</td>
<td>Envisions his life project, based on the values that he has developed.</td>
<td>Proposes immediate goals that make him be better.</td>
</tr>
<tr>
<td></td>
<td>As a result of his discernment, he puts into practice concrete actions that are coherent with his life plan.</td>
<td>Uses to put into practice some actions that are coherent with what is starting to be his life plan.</td>
<td>Carries out actions that make him feel good.</td>
</tr>
<tr>
<td></td>
<td>Acts with commitment, in the promotion and defense of the human dignity.</td>
<td>Acts in defense of his and others’ value as human beings.</td>
<td>Recognizes himself as a valuable human being.</td>
</tr>
</tbody>
</table>

---

17 Constitutions of the Society of Jesus: 611, 622, 774.
### CONTEMPLATION AND GRATUITOUSNESS in contrast with pragmatism and utilitarianism

**DEFINITION:** Contemplation is the deep sensorial and spiritual condition that allows perceiving the world’s transcendental dimension, getting impacted by it in order to act in the history; the contemplation leads to gratuitousness: to give without expecting anything in return.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal operational stage</strong> (12 to 18 years old)</td>
<td>Concrete operational stage (7 to 12 years old)</td>
</tr>
<tr>
<td>1. To feel the Jesus’ God</td>
<td>Feels the presence of God in the world and in the history.</td>
</tr>
<tr>
<td></td>
<td>Reflects peace in his moments of prayer.</td>
</tr>
<tr>
<td>2. To get impacted by the God’s spirit</td>
<td>Expresses the serenity and joy which are only provided by God.</td>
</tr>
<tr>
<td></td>
<td>Expresses what he has understood and felt in his relationship with God.</td>
</tr>
<tr>
<td></td>
<td>Evidences to be grateful because of the God’s gifts in his life, such as his existence and the possibility to act and to transform history.</td>
</tr>
<tr>
<td>3. To share</td>
<td>Helps to others, without expecting anything in return, particularly to people who have been hurt in their human dignity.</td>
</tr>
</tbody>
</table>

---

19 Jesus’ God is the Father. Of whom Jesus talks constantly. He is the good Father. And He is good to all people. The Father who sends the sun over either fair people or sinners; and the rain over either good or bad people. The Father who accepts to the lost son, without reproaching him a thing, without ... That is to say, because of Jesus, we know God. For that reason, it is an essential thesis of the New Testament theology, that Jesus constitutes the God’s revelation. In order to amplify this topic, check: Mardones, J. (2006). Matar a nuestros Dioses. Un Dios para un creyente adulto. Madrid: PPC; Torres, A. (1999). Creer de otra manera. Servicios Koinonia (Internet) available at: http://servicioskoinonia.org/biblioteca/biblotitulos1.html?titulo1; Torres, A. (1999). Del terror de Isaac al Abba de Jesus. Hacia una nueva imagen de Jesus. España: Verbo Divino;
### SOBRIETY in a society based on consumerism behaviors

**DEFINITION:** it is a way of being that is manifested in the moderated use of resources “as much as” they permit the dignification of human beings, and prevent them from the superficiality and consumerism.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To be conscious of the pertinent use of resources</td>
<td><strong>Formal Operations</strong> (12 to 18 years old)</td>
</tr>
<tr>
<td>Cares for the correct use of resources and denounces abuses.</td>
<td>Cares for the correct use of resources.</td>
</tr>
<tr>
<td>Becomes aware of the importance of being austere, and encourages others to be, too.</td>
<td>Becomes aware of the importance of being austere.</td>
</tr>
<tr>
<td>2. To use resources “as much as” they permit a person to be dignified.</td>
<td>Protects the resources, according to the purposes and needs, so they always can lead to the common good.</td>
</tr>
</tbody>
</table>

---

20 Spiritual Exercises of St. Ignatius (EE-23) Principle and Foundation: “Man is created to praise, reverence, and serve God our Lord, and by this means to save his soul; and the other things on the face of the earth are created for man, and that they may help him in prosecuting the end for which he is created. From this it follows that man is to use them as much as they help him on to his end, and ought to rid himself of them so far as they hinder him as to it...”
**Responsible and creator LIBERTY**

**DEFINITION:** It is the determination to make oneself independent from any excessive affection: dogmas, power, people, richness, among others, including life. It implies a true self-knowledge, and a knowledge of reality and of the consequences for the own actions. According to the Ignatian spirituality, liberty is “making oneself different” in order to reach happiness.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. To make oneself independent from excessive affections</strong>&lt;sup&gt;21&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Accepts viewpoints that are different from his.</td>
<td>Attends viewpoints that are different from his.</td>
</tr>
<tr>
<td>Shares, selflessly, his time, knowledge, goods, etc.</td>
<td>Shares his time, knowledge and goods.</td>
</tr>
<tr>
<td>Renounces to his disordered bonds: criteria, feelings, positions, and possessions, looking for the greater good.</td>
<td>Gives in, prudently, to his point of view and possessions, for coexistence purposes.</td>
</tr>
<tr>
<td></td>
<td>Shows certain flexibility for the group’s benefit.</td>
</tr>
<tr>
<td><strong>2. Deep knowledge of the areas where liberty is enjoyed</strong></td>
<td></td>
</tr>
<tr>
<td>Recognizes his limitations and potentials to be free.</td>
<td>Recognizes his limitations and possibilities, regarding the use of his liberty.</td>
</tr>
<tr>
<td>Strives for critically interpret the reality and its limitations (human, social, ecological, etc.).</td>
<td>Cares for recognizing his reality.</td>
</tr>
<tr>
<td></td>
<td>Shows interest for recognizing his environment.</td>
</tr>
</tbody>
</table>

21 EE 1 “by this name of Spiritual Exercises is meant every way of examining one’s conscience, of meditating, of contemplating, of praying vocally and mentally, and of performing other spiritual actions. For as strolling, walking and running are bodily exercises, so every way of preparing and disposing the soul to rid itself of all the disordered tendencies, and, after it is rid, to seek and find the Divine Will as to the management of one’s life for the salvation of the soul, is called a Spiritual Exercise.” That is to say, the disordered tendencies are those tendencies, difficulties, “disordered affections” that are present in people’s lives: selfishness, resentment, envy, desires to feign, convenience, to consider themselves better than others, to live “self-centered”, that is, thinking only in themselves and their own problems, without supporting others, and living their lives disorderly, without sense, without knowing why and what for to live..., and when a person gets to know very well all the resistances and disordered affections, which are the ones that prevent one from living in full, life can be “ordered” and so plenitude can be reached.
<table>
<thead>
<tr>
<th></th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. To be “indifferent” to</td>
<td>Free of bonds, renounces to those things that he values, in order to get the greater good.</td>
<td>In pursuit of a greater good, he tries to get rid of those things that he values.</td>
<td>Shares the things that he values.</td>
</tr>
<tr>
<td>make oneself and others, happy</td>
<td>Shows his happiness when serving to others.</td>
<td>Expresses satisfaction for serving to others.</td>
<td>Shows happiness helping others.</td>
</tr>
</tbody>
</table>

22 Looking for the purpose why we were created. EE 23. Principle and Foundation. “…For this it is necessary to make ourselves indifferent to all created things in all that is allowed to the choice of our free will and is not prohibited to it; so that, on our part, we want not health rather than sickness, riches rather than poverty, honor rather than dishonor, long rather than short life, and so in all the rest; desiring and choosing only what is most conducive for us to the end for which we are created.” The Ignatian indifference is not apathy or insensibility; it is a way to live with balance and harmony.
A Model of Education for the XXI Century

**EXCELLENCE for a better service according to Jesus’ way (Magis)**

DEFINITION: It is the most complete development of each person’s individual competencies along his life, and the motivation to put them at others’ service. The Ignatian Magis means the more, the best, but regarding love and service to others, according to Jesus’ way; it is the peak of the Ignatian charisma.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Personal desire to potential one’s life to serve better</strong></td>
<td><strong>Formal operational stage (12 to 18 years old)</strong></td>
</tr>
<tr>
<td></td>
<td>Proposes himself life objectives to develop his competencies.</td>
</tr>
<tr>
<td></td>
<td>Strives for achieving the proposed objectives.</td>
</tr>
<tr>
<td><strong>2. Motivation to serve others</strong></td>
<td>Empathizes with others’ problems.</td>
</tr>
<tr>
<td></td>
<td>Puts his competencies at others’ services.</td>
</tr>
<tr>
<td><strong>3. Constant searching for the Ignatian Magis</strong></td>
<td>Strives for getting the best quality in everything he does, trying to obtain positive outcomes.</td>
</tr>
<tr>
<td></td>
<td>Shows satisfaction when giving his best to make others improve.</td>
</tr>
<tr>
<td></td>
<td>Shows satisfaction when giving his best.</td>
</tr>
</tbody>
</table>
### JUSTICE that emerges from faith, when facing personal and social exclusion and injustices

**DEFINITION:** It is an absolute exigency, which grants each person what he needs in the searching for the “common good”, and whose purpose is the love and service to fellow beings; it is part of the human beings’ reconciliation, which is required by their own reconciliation with God. In the Jesuitical education, which emerges from faith, Justice is the central orientation, and it does not come out from an ideological principle, but from the gospel, and it is evident in actions.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
</table>
| **1. Christian Faith that brighten and encourages the action** | **Formal operational stage (12 to 18 years old)**
  - Gives account of his faith, based on arguments.
  - Testifies his faith though actions. | **Concrete operational stage (7 to 12 years old)**
  - Is tolerant and respects others’ opinions, in searching for the common good.
  - Testifies his faith, through concrete actions, according to his age. | **Pre operational stage (5 to 7 years old)**
  - Recognizes his peers’ opinions, through mediation. |
| **2. Searching and promotion of equity** | **Formal operational stage (12 to 18 years old)**
  - In his actions, he strives for encouraging and achieving the common good.
  - Usually, he proceeds considering people’s dignification through the satisfaction of their basic needs. | **Concrete operational stage (7 to 12 years old)**
  - Recognizes the common good; but his actions still need some mediation and guidance.
  - His actions show respect to others. | **Pre operational stage (5 to 7 years old)**
  - Recognizes that his actions encourage respect to others. |
| **3. Searching for reconciliation** | **Formal operational stage (12 to 18 years old)**
  - Demands his own and others’ excellence.
  - Shows compassion when facing his own weaknesses, striving for overcoming them. | **Concrete operational stage (7 to 12 years old)**
  - Strives to make his attitudes reflect his best.
  - Shows compassion with others’ weaknesses, striving for helping them. | **Pre operational stage (5 to 7 years old)**
  - Learns to give his best.
  - Shows compassion with others’ weaknesses, striving for helping them. |
**TRUTH in contrast with corruption and lack of honesty**

**DEFINITION:** Coherence and honesty in his feelings, thoughts, and actions. It implies fidelity toward personal beliefs and values, respecting others’ rights and obligations. Education, in the Society of Jesus, recognizes God as the Author of every truth.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Coherence</strong></td>
<td><strong>Formal operational stage (12 to 18 years old)</strong></td>
</tr>
<tr>
<td></td>
<td>Is open to consider viewpoints different from his, while being loyal to his beliefs.</td>
</tr>
<tr>
<td></td>
<td>Listens to arguments that make him reflect, about his actions and criteria.</td>
</tr>
<tr>
<td></td>
<td>Listen to others.</td>
</tr>
</tbody>
</table>

| **2. Fidelity toward beliefs and values** | **Concrete operational stage (7 to 12 years old)** |
| | Gives opinions and acts frankly and honesty, according to what he thinks and feels, respecting others’ dignity. |
| | Acts according to what he thinks or feels, respecting other’s dignity. |
| | Has a tendency for defending truth, in spite of the consequences. |
| | Recognizes causes and effects of his acts. |
**LOVE in a selfish and indifferent world**

DEFINITION: It implies an absolute submission to service, which emerges from a deep communion with God, with oneself, with the creation, and with others. It is the highest human value and foundation of the Christianity. God is love.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>INDICATORS</th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communion with God and with oneself</td>
<td>Shares with others, the feeling that he experiments because of his relationship with God.</td>
<td>Expresses in different ways, what he feels in moments of communication with God.</td>
<td>Expresses in different ways, what he feels in moments of communication with God.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In a balanced way, he accepts his own talents and qualities given by God.</td>
<td>Happily accepts his qualities.</td>
<td>Shows happiness when recognizing his qualities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Since he feels loved by God, he recognizes his limitations and strives for overcoming his weaknesses.</td>
<td>Since he feels loved by God, he strives for overcoming his weaknesses.</td>
<td>He feels loved by God and shows effort in his actions.</td>
<td></td>
</tr>
<tr>
<td>2. Submission to service</td>
<td>Shows compassion (mercy) with human suffering and weakness.</td>
<td>Shows compassion (mercy) with others' pain.</td>
<td>Shows compassion with the sadness of people around him.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is generous in giving and giving himself to others.</td>
<td>Is generous in giving and giving himself to others.</td>
<td>Is generous in giving himself to others.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Makes actions in favor of the caring and protection of nature.</td>
<td>Makes actions in favor of the caring and protection of nature.</td>
<td>Makes daily actions in favor of the caring of nature.</td>
<td></td>
</tr>
</tbody>
</table>
**DIMENSIONS**

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>Formal operational stage (12 to 18 years old)</th>
<th>Concrete operational stage (7 to 12 years old)</th>
<th>Pre operational stage (5 to 7 years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consciousness and perception of the presence of God</td>
<td>Calmly expresses the way in which he perceives God’s kind presence in his life.</td>
<td>Happily expresses the way in which he perceives God’s kind presence in his life.</td>
<td>Shows happiness when talking and listening about God’s kindness.</td>
</tr>
<tr>
<td>2. Personal Serenity</td>
<td>Expresses the harmony and calm that he feels within.</td>
<td>Shows calm and inner well-being.</td>
<td>Shows inner calm.</td>
</tr>
<tr>
<td></td>
<td>Moderately, shows positivism and happiness.</td>
<td>Moderately, shows positivism and happiness.</td>
<td>Shows a calm happiness.</td>
</tr>
<tr>
<td>3. Social harmony and union</td>
<td>Shows tolerance, respect, and comprehension toward others.</td>
<td>Shows tolerance, respect, and comprehension toward others.</td>
<td>Respects and appreciates others.</td>
</tr>
<tr>
<td></td>
<td>Promotes agreements that lead to peace among people and groups.</td>
<td>Supports agreements that lead to peace.</td>
<td></td>
</tr>
</tbody>
</table>
Examples of school profiles based on competencies

- THE PROFILE OF THE GRADUATED STUDENT has the basic characteristics of the students that the Educational System or a concrete Educational Institution is intended to form. Nowadays, it is defined as “the harmonic group of characteristics that establish what the identity of graduated students should be, as a final objective.”

Each Educational Institution, by reason of his own Educational Project, will have to formulate its own School Profiles. In this chapter, as an example purpose, it is offered the students profile of a concrete school, when they finish secondary school. The features of items of this profile are expressed through short descriptors of the 16 Key Competencies for life that are presented in chapter 2.

There is no unanimity among authors or educational institutions, regarding the main characteristics or features that should integrate the profile of a student who graduates from secondary school. Some traditional educators propose, in first place, as key characteristics of a graduated student: “that he masters the basic knowledge” from different areas of formation (Communication and Language, Mathematics, Science, Social Studies, etc.); that is to say, having achieved good grades in the different “subject matters” of the syllabus at the end of the secondary school.

Of course, these characteristics are necessary in the profile of graduated students, but they are not sufficient; as a matter of fact, in the present sociological

23 It is the Liceo Javier Guatemala. The School Profiles charts that are presented next, were taken from the book: Liceo Javier (2011, 2a. Ed.). Competencias Fundamentales para la Vida, Guatemala: Liceo Javier.
context, and having into account the criteria and actions of nations with the best educational quality of the world, it is required to intend that in the thirteen years of school (pre, primary and secondary school), these students have developed (among what is permitted by their psychological-evolutive processes), the main characteristics of about 16 Key Competencies for life.

Some authors could add some others competencies, but it seems not to be that necessary to do it. What wouldn’t be prudent, is to put aside some of the 16 chosen competencies; without all of these, the profile would be incomplete. These young students that have developed such 16 Key Competencies will already have an excellent preparation for life, even though the ideal thing is to continue improving and deepening them in the successive phases at university, or in daily tasks at a work or social level, etc.

With that fundamental base, it will not be difficult for them, during his university careers or work development, to continue to also develop the Specific Competencies required later on, because of the profession or occupation that they have chosen as a way of life.

Even though it may seem repetitive, here it is important to return to the 16 Competencies mentioned before, interpreting and describing them briefly as features of the graduated students’ profile; and, on the other hand, the contents and knowledge of the graduated student will be discussed in a general and brief way, for being considered as other important features of the profile.

a. Having developed the Key Competencies for life as an important part of the Profile of the Graduated Student from secondary school.

There are specialized publications, that formulate specific “dimensions” or “indicators”\textsuperscript{24} for each one of these competencies, thus, they can serve as instruments to evaluate and self-evaluate their level of development of such competencies; the chapter 2 from this book is mainly devoted to achieve this objective.

\textsuperscript{24} They are called “descriptors” in order to differentiate them from the “achievement indicators”; descriptors are limited to describe the competency.
INSTRUMENTAL COMPETENCIES AND DESCRIPTORS TO MEASURE THE STUDENTS’ LEVEL OF ASSIMILATION:

1. According to his age, the student has a developed thinking, that is to say, he “knows how to think”, he “thinks well”. This essential competency is divided into another 6 sub-competencies or dimensions:

The Student:

1.1. Has an analytical thinking, in other words:

Distinguishes and separates the parts of a whole (situation, problem, presentation of a problem or system, etc.).

Identifies the most meaningful elements of a whole, as well as the relations among them.

1.2. Has a systemic thinking, that is to say:

Expresses the implicit relations of cause-effect among elements of a whole.

Finds connections among elements or sequences within a: story, tale, fact, experiment, etc.

Makes synthesis, organizing or integrating the elements, viewpoints or components of a whole (situations, descriptions, and events).

1.3. Has a creative thinking, that is to say:

Looks for and finds new solutions to the problems of reality.

Openly awakens his imagination to clarity and give sense to the things that were dark or not too clear.

1.4. Has a logical thinking, that is manifested when the student:

Explains with reasonable arguments, the bottom of simple problems (of science, math, of the daily life, etc.). Makes decisions, explaining the logic of his arguments (“why do I say it?” “Why do I propose it as a coherent solution?”, etc.).

Manifests coherence in his discourse, talking among partners.
1.5. **Has a reflexive thinking**, which is evident if the student:

Expresses his reflections about the pros and cons when making decisions relatively important.

2. **Is formed and trained to solve problems**; it is understood by a problem, a situation that does not have an apparent solution. The descriptors may be:

Identifies the problem situation (the student uses to say: “here there is a problem”)

Overcomes prejudices which prevent him from reaching the truth.

Analyzes the main elements of a complex situation or a problem.

Finds one or more solutions.

Chooses the best solution to the problem, and solves it.

Makes mind exams about what he did and about the consequences (metacognition).

3. **Has developed a rich creativity**, which is evidenced when the student:

Makes observations and innovative interpretations about the different realities: people, problems of life, etc.

Looks for and discovers new approaches or viewpoints about ideas, events, texts, problems, situations, etc.

4. **Knows how to make a correct use of ICT** as powerful instrument to get information and to communicate and learn; this is evident when the student:

Shows good criteria to look for, to choose and to use the virtual information that he needs to know.

Reads comprehensively in the computer, the chosen texts and interprets them as well as images and sounds.

Knows and uses correctly the different virtual resources to communicate positively, to create, and to solve problems.

Uses general and specific software in his daily work.
5. **Expresses ideas clearly and correctly, in a written way**:  

Plans the structure of his writing: what is he going to say? To whom is he going to say it? And how is he going to say it?

Previously orders the main ideas in his mind.

Writes the paragraphs with clarity and correction.

Uses the punctuation marks and linking words correctly.

Links or integrates the paragraphs with each other.

As he writes the text, he evaluates it and improves it in form and substance.

6. **Reads comprehensively**:

Applies effective reading strategies.

Identifies the main ideas of each paragraph.

Infers his own meanings on the basis of a text.

As he writes, self-evaluates in order to determine if he understands the text well.

Re-reads when he does not understand well.

7. **Expresses ideas clearly and respectfully** both with words and with gestures:

When he talks, he shows security and self-confidence.

Contributes with clear and pertinent ideas, in a cooperative work.

Vocalizes and modules correctly.

His gestures are appropriate.

---

25 This competence called “mature writing” is also, according to Paula Carlino (2006) and other specialists, as much or more powerful than the reading comprehension, to develop the students’ mind structures.
Note that these seven Key Competencies are called “instrumental competencies” because they are, as a matter of fact, powerful instruments of learn deeply, that is to say, to get meaningful and functional learning, which contributes to the intelligence development in the student, to place the student in the reality, and to positively solve problems of life.

INTERPERSONAL COMPETENCIES AND THEIR DESCRIPTORS TO MEASURE THE STUDENTS’ LEVEL OF ASSIMILATION:

The student:

8. As a previous condition to be able to interrelate with others, he has developed a personal “identity” (according to his age), and a positive self-motivation that is expressed as follows:

   • Trought his self-evaluation (helped by educators), recognizes his positive potentials, his qualities, and his limitations; he self-esteems for what he values and is able to do.

   • In his daily academic tasks, he shows an equilibrated self-efficacy, which is a word recently created, that describes the sense of the ancient Latin expression: “they can because they believe they can”).

9. Shows a good relationship and communication with his partners, teachers, and with all the personnel at the educational institution; this is manifested as follows:

   • Expresses clearly and assertively, what he thinks and feels.

   • Listens to, and is willing to respectfully dialogue with others, without caring about the interlocutors’ age, gender, tongue or culture.

10. Manifests appreciation and respect for the diversity, the interculturality, and the nature; it is understood by “interculturality”, the appreciation, communication and communication and positive interaction among different culture, social groups, ethnical groups, genders, etc. Concretely:
• Expresses normally against any “discrimination for political, ideological, ethnical, social, cultural, linguistic and of genre reasons.”

• Understands and appreciates the social and cultural diversity, as enriching both personal and collective components, in order to improve the coexistence.

• Is respectful with the creation, and in general, with human beings of any ethnic group, genre, age, religion, culture, etc.

• Expresses his “ecological consciousness” respecting and taking care of the natural environment, and trying to have others do the same.

11. Has developed his socio-motor skills. In the integral progressive improvement, he has healthily and harmoniously developed his body, along the individual and group natural processes of the physical exercises and sports.

• With the motor skills that he has developed, he is not only able to solve movement and body problems with quality and satisfaction, but also he has learned to positively relate with different human beings and with the natural world.

12. By “saying” and “making”, he manifests an ethical sense (among the characteristics of his age); the evidences are:

• At a “cognitive” level, it is clear that he has a good moral judgment and certain common sense.

• At an “emotional” level, he feels certain sensibility and empathy in his treatment with others.

• At a “behavioral” level, he is honest; and he is supportive with people in need, sacrificing for them, if needed, his own comfort.

• Manifests, in general, to be a person endowed with fundamental values: honesty in contrast with corruption and threat; responsibility by carrying out his tasks as a student; reflects peace and fellowship in contrast to violence.

26 Taken from Mineduc (2005), National Curriculum, Guatemala: Mineduc.
• Is respectful with creation, and in general, with human being of any ethnical group, gender, age, religion, culture, etc.

The spiritual competency: the spiritual dimension, besides the body, affective, social, cognitive, and ethical ones, constitutes an integral part of the human being. For outstanding philosophers, like Aristotle: “there is no culture without spirituality”. Viktor Frankl proposes, as the main objective of his “logotherapy”, something as spiritual as it is to look for and give sense to life in a symbiosis of deep and positive convictions, emotions, and actions. The term “spirituality” should not be mistaken for religiosity; the first one exceeds the second one, for that has to do with the transcendental and universal dimension of the human being.

• Is capable of relaxing and admiring the things around him.
• Reflects about the sense of life.
• Understands and commits with others.

13. Demonstrates his preparation and disposition to work in teams, which is evidenced by normally acting with generosity and easy communication, in the cooperative work tasks; he helps to the cohesion of the group, and to achieve the proposed common objectives.

SYSTEMIC COMPETENCIES AND SOME OF ITS DESCRIPTORS

14. Constructive Leadership, which is demonstrated when the student:

• Shows to have a healthy personal identity which combines with an equilibrated self-esteem and with a realistic self-efficacy which is expressed in the well known Latin saying “they can because they believe they can”.

• Transmits confidence and influences positively in other people and groups’ ideas, feelings, and actions.

• Openly analyzes the cases and alternatives of solution and action in his team work.

• Is a model of human values identification, like solidarity, laboriousness, and honesty.
15. **Management by objectives**, in combination with the team work, is evident when the student:

- Plans, starting from the delimitation of the objectives that are intended to achieve (to solve a problem, to make a program, to undertake a project, to carry out a task, etc.)
- Delimits the actors’ roles and responsibilities.
- Defines the strategies that will lead to the achievement of the outcomes.
- Evaluates the outcomes, correcting the mistakes on time.

b. **The knowledge, as part of the profile of the graduated student from secondary school**

What should the student that finishes studying the secondary school? This question is usually answered through the description of the syllabus or “curriculum”, or by a series of “formative areas” and their corresponding subject matters.

Some authors consider that distributing the learning concepts into subjects just as watertight compartments, like mathematics, social studies, science, etc., is not pedagogical, but this is not a problem if such contents are given the right and corresponding function. Suppose that these groups of contents of the different areas or of the syllabus are considered as “subject matters”, it will be necessary to choose the contents of each subject matter very well, so the following criteria can be complied:

- That such contents constitute the needed and useful pre-knowledge, in order to continue successfully the studies in a technical career or at university, or in his working life; this is very important, mainly for topics that are usually concatenated, like mathematics, English, etc.
- That such contents constitute a good occasion, platform or way to develop any or some competencies; for example, the philosophy and mathematics help to the formation of the logical and reflexive thinking.

There is necessary to remember that, besides the particular value that the chosen concepts have, they should also be the starting, the reason, and the “raw material” or main component of the 16 Key Competencies for life, which is convenient to develop **permanently** since primary school. Making a comparison with a simile
of architecture, the concepts would be, along with other elements, like the worked flints to build a cathedral, which would be the symbol of an essential competency.

As a matter of fact, a student should understand and apply the learning contents of these topics and areas, so they can be turned into **knowledge** that is not only assimilated, but also applied to situations, tasks, and problems of reality. As the Latin saying says: “non multa sed multum” (not quantity but quality). Some authors are right when they give a special importance to the mathematics area (understanding and applying it to the solution of the problem, without giving significance to the operative area itself, as usual), for being it dynamic and effective, as said before, to develop the logical thinking competency, which is usually accompanied by the rest of thinking competencies (analytical, creative, etc.)

The comprehension and application of the mathematics to the problem solving, as well as to the personal development of reading comprehension and mature writing at a high level, should be three of the basic objectives since primary school. A subteen that reads a lot at a comprehensive and inferential level, who expresses himself correctly in a written way, and who has developed the thinking competency, will be very well prepared to understand, learn, and apply the learning contents of the Secondary school and of the next stages of his permanent education.

Even if he couldn’t continue with his studies in the Secondary school, these Competencies would make him be a “competent” person, and able to face and solve many of the problems of life; also, they will enable him to develop by himself, valuable knowledge regarding history, science, art, etc., according to his interests and preferences.

Some readers will miss in the previous list, some profile features related to values and attitudes. In previous pages, it was clarified that the development of each one of the 16 Competencies implies the formation of essential attitudes and values for life.

There are another ways to present the School Profile, besides the one previously proposed. Next, there are examples for Sixth Grade, and for 12th Grade, which among other items, they have indicators to measure the three elements that integrate each one of the Competencies: **TO KNOW, TO KNOW HOW TO DO, AND TO KNOW HOW TO BE AND LIVE TOGETHER**, according to the wise proposal of the Delors-UNESCO report, which establishes these four pillars or principles of all education.
### SCHOOL PROFILES – Sixth Grade of Primary

<table>
<thead>
<tr>
<th>TO KNOW</th>
<th>TO KNOW HOW TO DO</th>
<th>TO KNOW HOW TO BE AND LIVE TOGETHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>To understand the basic contents of each academic area, of the Competencies and of the values established by the School, according to the cognitive level.</td>
<td>To organize correctly and without accompaniment, the time, resources and activities to achieve short and middle-term goals.</td>
<td>To coexist respecting the differences: ethnical, social, cultural, and of genre, age, and opinion.</td>
</tr>
<tr>
<td></td>
<td>Analyzing causes and effects of the physical, human, social, politic, and religious reality.</td>
<td>To be sensitive when facing unfairness, evidencing certain supportive action, according to Jesus’ way.</td>
</tr>
<tr>
<td></td>
<td>To follow accurate instruction to carry out different projects (social and natural), considering diverse perspectives.</td>
<td>To establish relationships of respect and tolerance with others.</td>
</tr>
<tr>
<td></td>
<td>To express ideas both in an oral and in a written way, with order and clarity, and consciously applying discursive and writing strategies.</td>
<td>To develop strengths and to strive to overcome limitations.</td>
</tr>
<tr>
<td></td>
<td>To use ICT tools in order to look for, to obtain, and to select and use the information.</td>
<td>To be conscious of the importance of the actions that aid the physical and emotional health, for the benefit of dignity.</td>
</tr>
<tr>
<td></td>
<td>To read fluently and comprehensively in an oral way.</td>
<td>To be interested in the application of some characteristics of the Ignatian discernment.</td>
</tr>
<tr>
<td></td>
<td>To read comprehensively, applying with autonomy, pre, and while reading strategies.</td>
<td>To gladly assume responsibilities, for a common benefit and to help others.</td>
</tr>
<tr>
<td>TO KNOW</td>
<td>TO KNOW HOW TO DO</td>
<td>TO KNOW HOW TO BE AND LIVE TOGETHER</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>To understand the basic contents of each academic area, of the Competencies and of the values established by the School, according to the cognitive level.</td>
<td>To read comprehensively, applying in a guided way, after reading strategies.</td>
<td>To be perseverant to get goals, demonstrating constant desires for improvement to love and serve.</td>
</tr>
<tr>
<td></td>
<td>To read at an inferential level, in a guided way.</td>
<td>To demonstrate initiative to propose ideas and solutions that contribute in benefit of the environment.</td>
</tr>
<tr>
<td></td>
<td>To recognize the own qualities and weaknesses, proposing concrete goals.</td>
<td>To use moderately the resources in contrast with the influence of consumerism.</td>
</tr>
<tr>
<td></td>
<td>To use metacognitive and self-regulatory processes in the learning processes, be means of questions and guided instructions.</td>
<td>To make an effort to relate with others, given more importance to “how to be” than to “what to have”.</td>
</tr>
<tr>
<td></td>
<td>To use correctly the time, with an adult’s mediation.</td>
<td>To respect and appreciate the Guatemalan pluricultural manifestations.</td>
</tr>
<tr>
<td></td>
<td>To execute with some guide, basic biomechanical movements, to have an adequate interrelation with the natural, cultural, and social environment</td>
<td>To act honestly, in spite of consequences.</td>
</tr>
<tr>
<td></td>
<td>To apply the logical and analytical thinking to relate concepts on the basis of causality and comparison between two or three choices.</td>
<td>To assume points of view oriented to the caring and conservation of the environment, as an expression of the God’s love.</td>
</tr>
<tr>
<td></td>
<td>To use reversible thinking to comprehend the conservation and constancy of facts and situations.</td>
<td>To meditate before the presence of God, in moment of prayer and inner silence.</td>
</tr>
<tr>
<td></td>
<td>To dialogue using English language.</td>
<td>To recognize the gifts and good received, and share them with others.</td>
</tr>
</tbody>
</table>
## A Model of Education for the XXI Century

<table>
<thead>
<tr>
<th>TO KNOW</th>
<th>TO KNOW HOW TO DO</th>
<th>TO KNOW HOW TO BE AND LIVE TOGETHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>To understand the basic contents of each academic area, of the Competencies and of the values established by the School, according to the cognitive level.</td>
<td>To write and to read short texts in English, to use them as a way of communication and expression.</td>
<td>To empathize with others, tuning the own interests with the others', to behave accordingly and with some help.</td>
</tr>
<tr>
<td></td>
<td>To organize and to assume different roles in a team work, to reach a common goal.</td>
<td>To behave respectfully according to regulations, and assuming consequences by dialoguing.</td>
</tr>
<tr>
<td></td>
<td>To manage different resources of information, with some help, developing researches to know and/or to propose solutions.</td>
<td>To make responsible decisions, using the liberty.</td>
</tr>
<tr>
<td></td>
<td>To use a respectful dialogue as a way of solving personal and academic problems, with the help of a teacher or a tutor.</td>
<td>To start knowing the own emotions in order to regulate behaviors.</td>
</tr>
<tr>
<td></td>
<td>To argument in a critical and constructive way, causes and consequences, advantages and disadvantages of phenomena, events, and circumstances.</td>
<td>To develop the own strengths and to strive for overcome difficulties.</td>
</tr>
<tr>
<td></td>
<td>To reflect about the own actions, thoughts, and feelings, and to propose actions of improving, using the Ignatian pause.</td>
<td>To show inner happiness when finding tolerance environments.</td>
</tr>
<tr>
<td></td>
<td>To establish relationships with partners, in which the own development and others' are intended.</td>
<td></td>
</tr>
<tr>
<td>TO KNOW</td>
<td>TO KNOW HOW TO DO</td>
<td>TO KNOW HOW TO BE AND LIVE TOGETHER</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>To understand the basic contents of each academic area, of the Competencies and of the values established by the School, according to the cognitive level.</td>
<td>To manage adequately the time, resources, and activities, taking into account priorities and evaluating processes and results.</td>
<td>To value and to respect the diversity: ethnical, social, ideological, cultural, and of genre and age.</td>
</tr>
<tr>
<td></td>
<td>To carry out creative and innovative actions to solve complex problems to get common benefits.</td>
<td>To assume a personal commitment to defend the justice that emerges from faith, showing solidarity with the weakest people.</td>
</tr>
<tr>
<td></td>
<td>To support ideas both orally and in a written way, with order, clarity, accuracy, objectiveness, and richness of vocabulary, carrying out metacognitive and self-regulatory processes.</td>
<td>To defend a respectful and tolerant environment, based on the human dignity.</td>
</tr>
<tr>
<td></td>
<td>To create and to build knowledge through ICT.</td>
<td>To manifest behaviors in defense of the own dignity and self-esteem.</td>
</tr>
<tr>
<td></td>
<td>To read eloquently in an oral way.</td>
<td>To carry out actions in favor of the caring and value of the physical and emotional health, in benefit of the own dignity.</td>
</tr>
<tr>
<td></td>
<td>With autonomy, to read comprehensively using strategies at a metacognitive and self-regulatory level.</td>
<td>To appeal to the Ignatian discernment as a method to make the best decisions.</td>
</tr>
<tr>
<td></td>
<td>To read comprehensively diverse types of texts, in order to acquire meaningful and functional learning.</td>
<td>To value the own responsibility and to contribute to the group responsibility, being conscious of the implications of actions.</td>
</tr>
<tr>
<td><strong>To Know</strong></td>
<td><strong>To Know How To Do</strong></td>
<td><strong>To Know How To Be And Live Together</strong></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>To understand the basic contents of each academic area, of the Competencies and of the values established by the School, according to the cognitive level.</td>
<td>To formulate proposals and to reflect about the own life project, basing it on the Ignatian leadership.</td>
<td>To be perseverant in the research for the excellence to love and serve better.</td>
</tr>
<tr>
<td></td>
<td>To apply with autonomy, metacognitive and self-regulatory processes in the learning.</td>
<td>To practice the Ignatian leadership, encouraging this same leadership in others, with a multiplier effect.</td>
</tr>
<tr>
<td></td>
<td>To use time responsibly as a result of a process of discernment.</td>
<td>To use consciously the resources “as much as” they allow the dignification of the human being, in contrast with the influence of consumerism.</td>
</tr>
<tr>
<td></td>
<td>To dominate the biomechanical movements and the conditional qualities (strength, velocity and resistance) which allow a correct interrelation among the natural, cultural, and social environment.</td>
<td>To value the human being in his dignity, for what he is instead of for what he does.</td>
</tr>
<tr>
<td></td>
<td>To integrate different thinking skills, to solve problems in a metacognitive and a self-regulatory way.</td>
<td>To be proud of the own cultural identity as a Guatemalan person.</td>
</tr>
<tr>
<td></td>
<td>To master English as a Foreign Language.</td>
<td>To have a coherent behavior on the basis of the expressed values, daring to denounce lies, fakeness, and unfairness.</td>
</tr>
<tr>
<td></td>
<td>To reach common goals, strengthening each team member’s personal qualities.</td>
<td>Commit with the sustainable development, filling the nature as a God’s expression.</td>
</tr>
<tr>
<td></td>
<td>To use the team work in the research of common solutions to problems around.</td>
<td>To enjoy moments or prayer, meditation, and inner silence, which allow to become conscious of oneself, of God, and of the world.</td>
</tr>
<tr>
<td>TO KNOW</td>
<td>TO KNOW HOW TO DO</td>
<td>TO KNOW HOW TO BE AND LIVE TOGETHER</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>To understand the basic contents of each academic area, of the Competencies and of the values established by the School, according to the cognitive level.</td>
<td>To carry out researches, with autonomy, to know and/or to propose solutions, using the metacognition and self-regulation.</td>
<td>To be generous when giving and giving oneself to others, without expecting anything in return.</td>
</tr>
<tr>
<td></td>
<td>To use an honest and respectful dialogue to solve conflicts.</td>
<td>To empathize with others, tuning the own interests with the others’ and acting by inner motivations.</td>
</tr>
<tr>
<td></td>
<td>To express agreements and disagreements in an assertive way, and supporting the own opinion.</td>
<td>To consciously act and require the respect regarding different personal, familiar, school, environment, and social situations.</td>
</tr>
<tr>
<td></td>
<td>To express reasonable and innovative conclusions, after observing, listening to o reading about some phenomenon, situation or circumstance.</td>
<td>To use responsibly and consciously the own liberty, to develop as a person, and to serve others.</td>
</tr>
<tr>
<td></td>
<td>To use the criteria of the Ignatian discernment to orient the life sense.</td>
<td>To know and self-control emotions and impulses, as evidence of a healthy emotional intelligence.</td>
</tr>
<tr>
<td></td>
<td>To practice characteristics of the Ignatian leadership, on the basis of the own potential and knowledge of reality, in order to transform it.</td>
<td>To manifest behaviors in defense of the own dignity and self-esteem.</td>
</tr>
<tr>
<td></td>
<td>To reflect serenity and inner happiness, promoting concord and tolerance environments.</td>
<td></td>
</tr>
</tbody>
</table>
An effective methodology to teach and evaluate competencies

- Today it is talked about LEARNING-TEACHING PROCESSES, putting learning in first place, because the education key is the student’ learning.

“The teacher it is not conceived as protagonist of the educational processes in class any more, but as mediator, motivator, facilitator, model, and encourager.”

In this way, the teacher stops being the core of education: the teacher is not conceived as protagonist of the educational processes in class any more, but as mediator, motivator, facilitator, model, and encourager. It is not the teacher who “should give the class”, but the one who plans and prepares the learning moments, including the teaching guides. It is not the “teacher” who teaches, explains and exposes the contents along the period, but the one who in a few minutes introduces and exposes, clearly and briefly, the topic or topics of study and reflection and how to discuss them; the one who starts by presenting the problems; the one who monitors the learning processes; he is also (when needed) the one who clarify doubts, and who synthesizes opportune, etc.

“And, what does the student do? He is the main character who builds meanings through his “meaningful” learnings and the corresponding “functional” learnings, applying several procedures. The student is the one who actively practices, in different ways, and with diverse academic tasks; he is the one who carries out, on the basis of his own school and social context, the functions and dimensions of “experience-reflection-action-self-evaluation”; he is also in charge of reading comprehensively the texts offered in the “Learning Guides”, and

the one who analyzes and solve the problems that have been proposed or the ones that he finds in his way to learning; the student faces plenty of occasions to express himself maturely, and to share with his partners in the cooperative work; besides, he writes up his “parallel texts” where (as in a “portfolio”) he gathers his ideas, experiences, discovering, impressions, and creations…all these is synthesized in the main objective of his role as a student: he is who, little by little, develops his instrumental, interpersonal and systemic competencies, as examples of instrumental competencies: “reading comprehension”; “verbal communication”; “written communication”; “analytical”; “systemic and creative thinking”; “logical, reflexive and analogical thinking”; “problems solving”; as well as the interpersonal competencies: “self-esteem and self-motivation”; “interpersonal communication”; “ethical commitment” with the values of solidarity, industriousness, democratic values, etc.; “team work”; and also, progressively, the systemic competencies: “investigation-action” and “constructive leadership”.

These ambitious objectives, which the student should achieve nowadays, cannot be reached in short periods and scarce 45 minutes; for that reason, it was decided to carry out a project called “double period” of 70 to 90 minutes, whose characteristics are presented next.

1. Characteristics of the “Double Period”

In advance, each area coordinator, or the person in charge of the Lesson Plans revisions, along with his team of teachers, have chosen the best option among the texts offered by the market, those with an excellent “mediation”; those texts, either printed or virtual (books, articles, essays, etc.) are privileged tools to get the needed “meaningful learning”, through the comprehensive reading.

Also ahead, the Educational Institution has decided which competency or competencies are going to be developed; the educator is clear about the learning contents, skills, and values to be worked; moreover, a lesson plan with the corresponding achievement indicators has been prepared, as well as the working guide with the “roadmap” that the students should follow in the different activities; in the Lesson Plan, the achievement indicators of each one of the three elements of the competency intended to be achieved, should be included; all the Guides present tasks, questionings or presentation of a problem.

The class is started by a brief motivating introduction where students’ previous knowledge, interest, attention and motivation are aroused; and a “working guide” is presented to students.

An ample time should be assigned to the personal work, to silently read comprehensively and to take notes, in order to work on the topic to later on dedicate to the problem solving or problem approaching.
An ample time is also given to the **cooperative work** (in pairs or groups of four) where the knowledge is rebuilt, the doubts are clarified between peers, the contributions of each member are integrated, and the interpersonal competencies are being developed.

The **personal and group self-evaluation** is developed, following flexibly the indications given in the “working guide”. The period is closed with a plenary.

The formative evaluation is practiced permanently, without forgetting the “cura personalis” or caring for people, mainly with the people in need (such as “defenseless ones”, “immature ones”, or “those with learning problems”, etc.).

The dynamics of the working times, in the long period of class, can be different depending on the academic areas, the students’ ages, etc.; for that reason, it is convenient to adapt it with flexibility, according to the different circumstances, without understanding it as “rigid steps” to be followed, but as “dimensions” or “procedures” managed with certain creativity. However, the experience advises to start with a brief “motivating introduction”; to follow with the personal work or research; then, to continue with the “cooperative work” in small teams; and to finish with the “plenary” of the entire class group.

“The experience advises to start with a brief “motivating introduction”; to follow with the personal work; then, to continue with the “cooperative work”; and finish with the “plenary”.

Of course, the teacher who attentively and closely observes all the process, can interrupt it or make the prudent changes that he considers necessary; for example, when he sees that several students are blocked up because of some doubts or difficulties, it is convenient to halt in order to make brief clarifications and explanations.

The “Learning Guides” as it is known, indicate in detail, the tasks that the student should carry out during the class period; and also, they specify the “competency” or “competencies” (with the corresponding “skills”, “abilities”, and “values”) to be developed through the group of processes and activities of the “double period”.

Something very important, besides the certain flexibility indicated, is that in the lesson plan as well as in the practice of these long periods, teachers have to have in mind that the main objective that is intended to achieve with this methodology, is the development of competencies with their corresponding values, as said before. According to experience, this methodology can be applied with excellent results, since First Grade to Twelfth Grade.

---

29 This concept of “cura personalis” (or “caring for people” by accompanying them), is taken from several documents which describe the Characteristics of the Society of Jesus Education.
**DOUBLE PERIOD METHODOLOGY**

The objectives of the methodology in general, and The specific objectives of each one of its four dimensions

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>OBJECTIVES OF THE METHODOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The methodology in general</td>
<td>• To overcome the limitations of the master class methodology, regarding the formation of Key Competencies for life.</td>
</tr>
<tr>
<td></td>
<td>• To have the student be the main character of the processes of learning-teaching.</td>
</tr>
<tr>
<td></td>
<td>• To give a boost to the achievement of frequent and deep meaningful and functional learning.</td>
</tr>
<tr>
<td></td>
<td>• To motivate the students with a more active and attractive methodology.</td>
</tr>
<tr>
<td>b. Motivational introduction</td>
<td>• To provoke, since the very first moment, the students' attention and interest.</td>
</tr>
<tr>
<td></td>
<td>• To have student start activating their previous knowledge, in order to connect it with the topics of this new period and thus, to guarantee a meaningful learning.</td>
</tr>
<tr>
<td></td>
<td>• To stimulate the student through the presentation of a problem which he will be solving along the class period.</td>
</tr>
<tr>
<td>c. Personal work</td>
<td>• To encourage the comprehensive reading competency at high levels, as an effective way of getting meaningful learning.</td>
</tr>
<tr>
<td></td>
<td>• To encourage systematically the mature writing competency.</td>
</tr>
<tr>
<td></td>
<td>• To develop the students' autonomy and their self-evaluation habits.</td>
</tr>
<tr>
<td></td>
<td>• To take advantage of the huge efficacy of the personal work, which usually surpasses the master class methodology.</td>
</tr>
<tr>
<td>d. Team work</td>
<td>• To learn to work in teams, and develop the habit to do it so.</td>
</tr>
<tr>
<td></td>
<td>• To take advantage of the efficacy that, according to authors, the cooperative work has for learning.</td>
</tr>
<tr>
<td></td>
<td>• To develop the oral expression competency.</td>
</tr>
<tr>
<td></td>
<td>• To have constant opportunities to develop the interpersonal competencies.</td>
</tr>
<tr>
<td>e. Plenary</td>
<td>• To develop the constructive leadership competency.</td>
</tr>
<tr>
<td></td>
<td>• To strengthen the development of the interpersonal and oral expression competencies.</td>
</tr>
<tr>
<td></td>
<td>• To deepen and amplify the meaningful and functional learning.</td>
</tr>
</tbody>
</table>
### DOUBLE PERIOD METHODOLOGY
**What the educator and the students do**

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>WHAT THE EDUCATOR DOES</th>
<th>WHAT THE STUDENTS DO</th>
</tr>
</thead>
</table>
| **1st. Motivating introduction** | • Catches the group attention, presenting the working guide, with the competency, the topic, the problems, the tasks, etc.  
• By means of questions, graphic organizers, use of ICT, etc., activates the students’ previous knowledge that is connected with the topic, with the problem, etc., of the class that is just to start.  
• Induces in several ways, the comprehensive reading of texts; sometimes “modeling” how to do it. | • Follow attentively the educator’s presentation about the topic, task or problem.  
• Collaborate with the teacher trying to remember their own previous knowledge.  
• If they have doubt about a Learning Guide, they ask questions with respect and liberty. |
| **2nd. Personal work** | • He moves around the classroom, between the individual tables of students, revising and evaluating the brief written texts where students summarize their achievements (main ideas, problems solving, and comments).  
• Observes and analyzes the students’ mature writing of their brief texts.  
• Takes notes in his notebook or tablet, about each student’s observations and evaluations.  
• Accompanies and help discreetly to students who need it.  
• If he observes that several students are blocked up because of a same doubt or problem, the teacher intervenes inviting one or two students to explain how they have solved such doubt or problem, until all students overcome the situation.  
• Procures a respect mutual respect and silence environment. | • Start by making a deep comprehensive reading of the Learning Guide.  
• Study the texts proposed in the Learning Guide, understanding them and making a written synthesis of the main ideas.  
• Take care of their mature written expression, in these brief texts that are about:  
• The knowledge that they have assimilated.  
• Operativeness and solutions of a problem, etc.  
• Self-evaluate their personal work and their silence, responsibility, diligence values, etc.  
• If they perceive that have made a mistake, they correct it immediately. |

30. In advance the educator should have prepared the Lesson Plan and the Learning Guide for students: both in the Plan and in the Guide, the elements that integrate the competency or competencies to be developed in that period, should clearly appear, with their achievement indicators (in concepts, procedures, and attitudes-values).
<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>WHAT THE EDUCATOR DOES</th>
<th>WHAT THE STUDENTS DO</th>
</tr>
</thead>
</table>
| 3rd. Cooperative work                          | • Goes around the small groups, listening to, observing, evaluating, and accompanying.  
• Develops a working environment, respect, and assertive dialogue.  
• Takes notes in his book or tablet about what he observes:   
  - Each group’s participations and advances.   
  - The quality of the written text where the group gathers the best given contributions:  
• Procures that the students self-evaluate and co-evaluate their achievements, and correct their mistakes.  
• Procures an oral expression with quality. | • Following the sections of the Learning Guide, they share their written texts with their peers.  
• They move on, enhancing the solutions to the proposed problems, and deepening in the acquired knowledge.  
• The one who has doubts, expresses them with liberty to their partners, who will help him solve them.  
• One or some of them write brief phrases that collect the outcomes of the common work.  
• They make a brief final evaluation:   
  - About results.   
  - About self-efficacy and efficacy of the common work.   
  - About the values and attitudes programmed in the guide. |
| 4th. Plenary                                   | • Develops a healthy environment where the respect, collaboration, and liberty values are encouraged.  
• Procures that two groups, with different ideas or solutions, publically dialogue with each other and enrich the discourse.  
• Gets an oral expression with quality regarding ideas, ways, and values.  
• Encourages the group’s final evaluation of their learning and processes. | • A group expresses their achievements; the other groups, complete.  
• Or also, two groups of different approaches or opinions, publically debate trying to come up with common solutions. |

30. In advance the educator should have prepared the Lesson Plan and the Learning Guide for students: both in the Plan and in the Guide, the elements that integrate the competency or competencies to be developed in that period, should clearly appear, with their achievement indicators (in concepts, procedures, and attitudes-values).
2. The Four Dimensions or Procedures of the “Double Period”

Next, the description of the four dimensions of this methodology is amplified:

**FIRST DIMENSION:** *Motivational Introduction* (5 to 10 minutes). The teacher uses different resources to present the “topic to we worked” in the class, and to arouse students’ interest for such topic; activates in students some previous knowledge related to the “topic of the day”; be presents some questionings (one or more problem situations should be presented at the beginning, always), and introducing the comprehensive reading of the text or texts to be worked; if the students have to look for information in the computer or tablet for their work, some links should be offered. In certain subjects and cases, the teacher in this first dimension, can use the “modeling” technique, presenting the problem (of Math, Science, Social Studies, etc.), and, as if he were a student, going through the process of analyzing it and of investigating about it, of deeply understanding it, and of moving on to its solution. As it is known, this technique of “learning by imitation” is based on the Bandura’s Social Cognitive Learning Theory; and, in some occasions, it is very effective with difficult students’ behavioral learning.

**SECOND DIMENSION:** *Personal Work* (about 30 minutes). This silent and intense activity in the class, is made in part, because out of the school there are many students who find difficulty to concentrate in the study; here they get to practice the comprehensive reading (analytical, critical, inferential, etc.) of the pages from the texts previously assigned in the learning guide; the reader gets used to rebuild the sense of the text and to get to the bottom of it, to mentally dialogue with the authors and to answers himself the questions suggested in teacher’s Learning Guide, and his own questions). It is very important that the student carefully takes his notes, developing and maturating his written expression; these provisional or brief notes “parallel texts” will be shared with his team partners in the next phase, since they are an excellent material for the teacher to evaluate the level of quality that each student has reached in his “personal work”.

**THIRD DIMENSION:** *Cooperative Work* (about 25 minutes). From the numerous researches and information about the powerful tool that constitutes the “cooperative work”, the best techniques to have the groups to consciously contribute interactively, have been learnt and applied; each and every student has to cooperate, so that when going to the next dimension “plenary”, all of them are well prepared to express orally in front of the class, the contributions of the group (and not to read them). It is important that, in this dimension, each student, with the help of one or more partners, improve the good “parallel text” elaborated in his personal work; and that, with the contributions of other u others, he redacts a good “parallel text” of the group; for all these activities, it is recommended to have students get used to the use of the portfolio techniques, of “conceptual maps”, “semantic webs”, and “V diagrams”. In the cooperative work, the acquired knowledge is applied, the problems are solved together, the situations are re-
created, the tasks are carried out, and social learning is promoted.

**FOURT DIMENSION:** *Plenary* with the class group (about 20 minutes). There are many and important variants in the activities in these final minutes; but the important thing is to contrast the “presentations of the processes outcomes” of two or three groups which support different arguments; and it is better, if they present different viewpoints, to generate a mature and ordered discussion; it is important that the chosen groups evaluate and express how they did the processes of interrelation at work.

3. **Factors that positively influence the success of the “Double Period”**

There are many factors that positively influence the success of the “plenary”, but the two more important ones are **the teacher and the quality of the Lesson Plans with the corresponding Learning Guides** for the student who, lastly, also depends upon the teacher. In general, as explained in this document the teachers should be “formed” to take advantage of the benefits of this methodology: it is supposed that they know and have reflected on the characteristics of a quality education; they manage and know how to persuade students to use strategies to get comprehensive reading, and oral and written expression; teachers are able to form and to motivate the small cooperative work groups; they master the theory and practice of the permanent formative evaluation; they are persuaded that their main function is not to “inform” students, but to **accompany** them, giving adjusted support to each student, according to his “proximal development zone”, in order to get everyone’s development of Key Competencies, which include values.

“The two more important factors of the double period success, are the teacher, and the quality of the lesson Plans with their corresponding Learning Guides.”

The key for all this, is that teachers are well selected for their human qualities and vocation of educators; that they know their academic area very well; and (what is sometimes forgotten), that they are solidly “formed” in the nowadays Educational Psychology advances.

The other key factor of success is a good **Lesson Plan** with its corresponding **Learning Guide** for the student. In the chapters 6 and 7 of this book, some models of such Plans and Guides are offered. The Plan should be well elaborated with its achievement indicators and focused in the students’ development of one or two competencies along the educational Unit, so all the competencies can be developed during the school year.

The Learning Guide should be brief, pertinent, clear, and challenging; it should lead the student and motivate him in his personal and cooperative work; it is convenient that the Guide includes well defined objectives; it should have, also, the “topic” to be worked on; the interrogations and questions to be answered or
the problems to be solved; furthermore, it should include the cites of the pages or information resources that are going to be used for the work; which “competencies” (or “competency”) are going to be developed, with their corresponding indicators about the “contents”, “skills”, “attitudes” and values. In the last chapters of this book, these topics are amplified.

4. Some risks of the “Double Period”

The main risks of the double period are two: that the teacher goes back to past by “teaching” and “informing” his students during a big part of the period, forgetting his main functions as educator, which were mentioned above; another big risk is to get into the “routine” or to fail to attend the good quality of the Lesson Plans and the “Learning Guides”, either in their previous preparation or in their application in class.

And, what happens in a long period of 70 to 90 minutes, if, occasionally, the teacher didn’t come to class? The experience indicates that, in such cases, another “formed” teacher of the same area can manage, with no difficulty, the four dimensions of work, following creatively the Plan and the Guide well prepared by the teacher in charge.

5. Advantages of the “double period” methodology

The advantages of the “double period” are a lot, and strongly effective to develop the students’ intellectual potentials, according to the teachers that apply it correctly; the most important are:

- It is possible to calmly approach the topics, and to finish them adequately, avoiding the abrupt cutoffs that, frequently, are done when the 45-minute period is finished.

- There is enough time to carry out, at the beginning of the period, the “motivational introduction”, which is an effective and recommendable resource to start the process of meaningful learning.

- The comprehensive reading is systematically practiced, by means of strategies; also, the formulation of a good parallel text is worked, which helps to create meaningful learning habits, in contrast with the learning by memorization.

- The cooperative and interactive learning, as a chief resource, is developed and exploited. Once experimented by students the advantages of this team work, the groups of study out of School are easily formed, which continue at university.
In this system, all students, every day, have the opportunity to orally express within a small group, and to receive the support and reinforcement of their partners in their successes and mistakes, as well as to listen to pertinent clarifications to their doubts; this dynamics keeps the students in a constant inter-evaluation and self-evaluation of their ideas and cognitive and social procedures.

Also, in this pedagogical model, every day all the students have to prepare their summaries, questionnaires, exemplifications, etc., in a written way, creating a brief “parallel text”, easy to review and to assimilate, which release them in the tests, from the tedious reviews by memorization, and helps them develop the “mature writing” competency, promptly.

In the “plenary” or fourth dimension of the double period, not only the most intelligent students, but most of the students, have the opportunity to orally express what they have learned in the previous hour, when working in the 2nd. And 3rd. dimensions. Students who get used to this strategy of “expressing what they know” to their partners, explaining the own or the group’ summaries, improve not only intellectually through meaningful assimilations, but also they develop as persons.

The interactive dynamics of both the cooperative work and of the plenary provide students with situations for the formation of their interpersonal competencies; this is very important because these competencies are responsible of developing the individual and social values, which have been defined in Chapter 3 of this document. This is a meaningful bonus of this double period methodology, in contrast with the master class methodology: Mainly in the “team work” and in the “plenary”, there is presented a bunch of occasions to systematically develop and evaluate the individual and social values such as discernment, solidarity and mutual respect, justice, liberty, truth, excellence, etc. which were cited in the Values Decalogue.

This methodology makes it easier to the teacher, the task of “evaluating formatively” during the process of learning-teaching. It is good for teachers and students to give more importance to this almost continuous evaluation, than to the other evaluation called “summative”, or traditional, consisting of written texts or final tests at the end of the academic unit, where the students compromise their “grades”.

As it could be deducted from the aforementioned, there are three very powerful activities which are key elements in the “Double Period” methodology: the comprehensive reading and the mature writing which are practiced in the 2nd. Dimension (Personal Work), and the Cooperative Work that is the essence of the 3rd. and 4th. dimensions. But, also, as explained in Chapter 2, the “Comprehensive Reading”, the “Written Expression”, and the “Cooperative Work”, are three out of the 14 Key Competencies that all human beings should develop.
In summary, the core message of this chapter is that this methodology called “Double Period” notoriously favors the formation and development of the Key Competencies for Life described before, both the Instrumental ones, and the Interpersonal and Systemic ones.

The activities carried out in the four mentioned dimensions of the “double period” methodology, are very important; notwithstanding, because of the special formative potential of the Key Competencies, afterward, a brief explanation of the meaning of both the comprehensive reading in the Personal Work dimension, and the cooperative work which is systematically practiced in the dimension called the same way, is included.

It is convenient to clarify that, when using this methodology in each one of the Academic Areas, these two Key Competencies for Life: the “Comprehensive Reading” and the “Cooperative Work”, are systematically and effectively developed. Nevertheless, it is clear that the areas whose main interest is the development of the “Comprehensive Reading” competency are Language Arts (in the mother tongue or in a foreign language); and also, at their own level or pace, the Areas where the meaningful learning is gotten through comprehensive reading are Social Studies, Science, etc. Something similar occurs with the “Mature Writing” competency.

6. The Comprehensive Reading, as a key activity of the “double period” methodology

The written texts, in books, in scientific magazines, in computer data bases, etc., continue being the powerful and versatile material to permanently form teachers and disciples: but always, the exploitation of the written texts implies in the learners, an adequate level of comprehensive reading. Unfortunately, most of graduated students from secondary school don’t have this level, in almost any of the Central American cities. The authors talk about four levels of reading comprehension, on the basis of a functional view:

1st. Decoding level, where the reader interprets the signs recognizing words, and granting them a lexical meaning. This is a fundamental and necessary level when reading, and it starts when the child or analphabet adult begins to learn to read. A precise and rapid “decoding” is the base of all comprehensive reading.

2nd Literal Comprehension Level, that is to say, a superficial and linear understanding of what is explained in the text; the reader at this level, goes slightly through the text, as done by people who smells an exquisite plate of food, without tasting it. In this level, a true comprehension of the meaning does not occur, nor is it possible to get a “meaningful learning”.
People called “functional analphabets” are placed in this low level of comprehension; in United States, almost the 45% of citizens is in this level. According to reliable researches, in the Federal District of Mexico, the 64% of students of High-School and of the first year of university are also in this level of “functional analphabets”. In Central America, these percentages are much greater.

3rd. Inferential Comprehension Level. It is given when the reader deeply understands the meaning of the text; that is to say, he interprets what the author is intended to express and actively discovers and rebuilds the meanings. At this level, the reader activates and develops the “mental skills”: analyzes, calls into questions, synthesizes, relates ideas, infers, coherently rebuilds and integrates the global meaning of the text. The good reader consciously makes all these processes, while moving on the text. In these and in the fourth level, the “meaningful learning” is achieved, which prevents education from being unfruitful and unsuccessful.

4th. Metacomprehension or metacognition level. The reader, besides reading at a 3rd. level of comprehension, supervises and regulates his reading process (how is my process doing? What comprehension problems am I having and how can I solve them? What are my failures, and how am I going to regulate and self-correct my reading processes?). “At this level, the reader activates and develops the “mental skills”: analyzes, calls into questions, synthesizes, relates ideas, infers, coherently rebuilds and integrates the global meaning of the text.

“The “double period” methodology develops systematically the 3rd. and 4th. high reading levels, where the successive “meaningful learning” is achieved”

The “double period” methodology develops systematically the 3rd. and 4th. high reading levels, where the successive “meaningful learning”, which is the base and the sense of all the “higher-order thinking skills”, and which was described by Vygotsky, is achieved; consequently, in these reading processes, the constitutive elements of most of the Key Competencies for life, are developed, mainly, the ones of the “Thinking Competencies”.

A Model of Education for the XXI Century
7. The cooperative work of small groups in the “double period” methodology

Mainly, on the basis of the important contributions of Vygotsky to the Educational Psychology, it has been better understood the fact that the learning occurs, first and mostly in an interpsychological level, that is to say, by intermediation of others: we learn mainly, because of the communicative and interactive interchanges with our “educators” (family, teachers) and with our “peers” (study, amusement, and work partners); and, secondly, at an intrapsychological or personal level.

According to some authors, quite a few educational institutions have not taken advantage of the enormous formative potential of the cooperative learning, yet; and they continue, in many occasions, with the traditional and rigid methodology of the teacher who exposes or explains to students, all the time, learning contents.

On the other hand, in this third millennium, there is an increasing consciousness, among educators, on the necessity to develop the big values implied by a respectful, active, and supportive coexistence; well then, the cooperative work in small groups, is the perfect environment to develop these values of coexistence, which are the raw material of the interpersonal competencies.

From another viewpoint, in the labor market of the most developed cities, the enterprises procure to select and to hire at all levels, those people who demonstrate to have developed the team working competency, in a healthy and creative environment of collaboration, respect, maturity, positive attitude and solidarity. This is not acquired spontaneously, but it is developed through a prolonged experience of learning and cooperative work in small groups.

Maureen Priestly (1999) exposes that the cooperative learning is oriented toward important constructive and motivating activities, such as:

- Interchanging information and opinions,
- Organizing the tasks toward a common objective,
- Listening to others’ viewpoints,
- Analyzing and valuing the contents of others’ affirmations,
- Listening respectfully to others,
- Cooperating in the joint task of learning or the resolution of problems.

According to this same author, the researches confirm that the powerful way of working in small groups, produces positive outcomes, such as:

- Academic progress, mainly in low performance students,
• Better environment in the classroom,

• Higher self-esteem level,

• Stronger motivation to keep concentration in the task for a long time,

• Better interpersonal relationships.

According to Díaz B. F. and Hernández G. (2002), the academic relationships and friendship among partners, favor not only the comprehension and assimilation of the contents of study, but also, the healthy socialization among youths in the acquisition and development of social values, as the control of aggressive impulses and the selfishness, as well as the mutual respect and the mature relativization of the own points of view.

An equipment of investigators directed by David and Roger Johnson (1999) analyzed and synthesized the outcomes of more than 1000 researches, where the cooperative learning was compared with the individual and competitive learning; and they conclude that the learning in small groups is the one that has more beneficial effects, in the following aspects:

• The results of learning and academic achievement are better with the cooperative learning, mainly in the acquisition of concepts, principles, and proceedings, most of all, in the areas of math, language, social studies, and science.

• Big improvements are evidenced in the socio-affective and interpersonal relationships of the students who learned together; concretely, the level of their coexistence and collaboration attitudes increased, showing improvement in their personal and social values like solidarity, mutual respect, support to others, opening to perceive and understand their partners’ viewpoints. It is important to observe that, according to the cited researchers, this psycho-educative way of learning, also notably helps the increase of students’ self-esteem; it is, without a doubt, because in a small cooperative group they all feel taken into account, and solve their doubt, improving their comprehension levels. In summary, the cooperative work as well as the “plenary” which is carried out with the whole class group, are powerful tools to develop the interpersonal competencies in students.

• In the small cooperative group, all the students have constant opportunities
to express themselves to their partners, using the oral expression elements that are being developed, which are so important in their lives; this uses to affect also in the development of a clear and precise written expression of their ideas and feelings.

In summary, the conclusion about all this description of the “Double Period” methodology, could be that it is an excellent methodological instrument that effectively help nowadays
Presentation of some models of lesson plans and personal work

The previous chapters were intended to expose some principles about the importance and richness of the COMPETENCIES topic; four of these principles are specially transcendental:

- The main objective of education in this early century is to have students develop, at a level according to their age, the Key Competencies for life. Consequently, such competencies should be elected and described.

- With the traditional educational methodologies, it is not possible to develop these competencies at the levels needed nowadays; therefore, it is necessary to recur to new methodologies, more focused on the students’ learning and in their personal and cooperative work, and less on the traditional function of the teacher who “teaches”. In this book it has been presented a model of methodology that is producing optimal results in the Educational Centers where it is applied.

- It is important to form and to update to educators from today and tomorrow, in these new approaches of education, and in how to accompany the students in their psycho-educational processes, so they can develop their Key Competencies for life.

- In order to get internal coherence in the methodology, and in each educational sequence or formation period, the educators should have previously prepared for each one of the periods, a pertinent Lesson Plan and its corresponding learning Guide for students.
In this chapter, in first place, some reflections are offered, about how to design and create the Lesson Plans and the Learning Guides, which are key documents for the success of a good methodology, with the purpose of having the students develop their **Key Competencies for life**. And, after that, a model of such documents will be presented, which can be used as inspiration by educators to prepare their own Plans and Guides.

In order to create a Lesson Plan and its corresponding Learning Guide, the following actions are suggested:

Once the Educational Institution has prepared its annual Plan, on the basis of the Competencies development, and it has chosen the Competencies the students should develop, each academic area should be assigned, due to its particular identity, those Competencies that it has to develop specifically; for example, in the Communication and Language area the following competencies will be mainly worked: “Reading Comprehension”; “Mature Writing”; “Verbal and Nonverbal Expression”; the Mathematics area will focus on the formation of the “Thinking” and “Problems Solving” Competencies, etc.; but, without forgetting that all the areas are responsible, in some way, of the formation of any and all of the Competencies, according to the requirements on the Educational Institution Profile that are intended to be developed in the students.

The Lesson Plan will be based on the students’ real context: their level of development according to the educational psychology, their previous knowledge, etc.

To create the Lesson Plan, (as the first component of the Competency to be developed), the teacher should choose, from the annual plan, the **disciplinary contents** or learning topics that are going to be developed in each class period. As said before, the traditional school based on “master classes”, mainly “filed in the memory” many conceptual contents which not always became “knowledge”; now, however, it is emphasized the ancient Latin saying “non multa sed multum” (not quantity but quality); as we know, today is time to choose fewer conceptual concepts, and to focus on going deeper in their profound meaning, that is to say, to develop the meaningful and functional learning.

“To create the Lesson Plan, today it is preferable to choose fewer contents, and to focus on going deeper in their profound meaning, that is to say, to develop the meaningful and functional learning.”

It is necessary to also decide what proceeding (or “to know how to do”) are going to be developed to complete the chosen competency or competencies. The creators of the Active School insisted two years ago, in this “knowing how to do”, but

“Finally, the educator will choose some indicators of one or more values or attitudes, that always must be present in the lesson Plans and Learning Guides.”

“A Model of Education for the XXI Century
only a few educators gave ear. In Chapter 2 of this document, a rich sample of items is offered, which pretend to be examples of some proceedings of each one of the Key Competencies. The educator can incorporate to his Plan some of these items; in this way, when he has to evaluate his students’ progress, they will be useful as “achievement indicators” of the level of development of the “procedures. But, maybe better than that, it would be a good idea that the educator himself, inspired in such items, decided to create his own “indicators” on the basis of his real context.

The important thing is to be clear on what the characteristics implied by the competency to be developed are, how the development of that competency is going to be evidenced, both in the learning of the conceptual content, and through activities that match with the proposed achievement indicators. And also, being inspired by the examples offered in Chapter 3 of this book or being guided by his own creativity, the teacher will chose some indicators of one or more values or attitudes, like respect, solidarity, responsible liberty, truth, etc. that always must be present in the lesson plans and in the Learning Guides, because they constitute one of the three necessary components of each one of the Key Competencies for life.

In the Lesson Plan, it should also be briefly explained, how the educator is going to actively manage the time of each one of the dimensions of the teaching sequence: in the Motivating Introduction, activating “previous knowledge”, hooking the students’ attention, motivating, questioning, presenting problems, etc.; also, in the time of the students’ personal work, closely observing what each student does, reading the brief “parallel texts” or annotations that they are writing, etc. During the cooperative work and in the “plenary”, the teacher will accompany the students, and evaluate, etc.

It is very important that the Lesson Plan specifies in detail, the ways and strategies of formative evaluation that the teacher is intended to apply during the learning-teaching processes of each working period. Chapter 7 is about the evaluation of competencies.

In everything that has previously written about the preparation of the Lesson Plan, it is being supposed that the educators are already familiarized with the Curriculum based on Competencies Approach, and with the “Double Period” methodology, or similar.

With the Lesson Plan already elaborated, the educator has all the elements to design the corresponding learning Guide which will be given to students at the beginning of the working period; it may be presented in oral, written or virtual ways. The only thing that the teacher has to do is to prepare it, present it to the students and to motivate them to react to the successive requirements of the Guide.
After expressing the aforementioned reflections, next it is offered an example of a Lesson Plan and of a learning Guide in its different contexts. The objective of the presentation of this model is that the educators who already know the important theory about competencies, and want to introduce them in their educational tasks, can create their own Lesson Plans and the corresponding Guides.

The next lesson plan is designed for the student to build, modify, and enrich his own schemata. He is the protagonist of education; therefore, the teacher prepares and proposes, but encouraging the students to assume the responsibility of their education. Therefore, a “master class” methodology for the development of a curriculum based on competencies, does not achieve the students’ ideal formation.
LICEO JAVIER
AREA: SOCIAL STUDIES
GRADE: 6TH.

LESSON PLAN
Competency: Thinking Competency

<table>
<thead>
<tr>
<th>Topic: Primitive community, the first human beings.</th>
<th>Dimensión: analysis</th>
<th>Value: Truth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Dimension: Loyalty toward beliefs and values</td>
</tr>
</tbody>
</table>

Achievement Indicators of the learning unit

1. Expresses respectfully what he thinks and feels, even though sometimes he disagrees.
2. Identifies evident and not too evident characteristics from the first human beings.
3. Explains differences and similarities of the first human beings’ characteristics, reaching inferential levels (what is not explicit).

Evaluation technique and instrument

Technique: Observation of students’ working process in their learning guide.
With the instrument of Assessment Scale.

Motivating Introduction

1. Show a poster with Homer Simpson’s evolution (famous cartoons where it is this character’s change) and ask students to interpret what is illustrated there. * It is expected that the students to describe how said character evolved (from a “simple” way to a more “complex” one).
2. Next, ask the students if they know who Charles Darwin was. * He is the author of the theory of evolution; ask them if they know what this theory explains. Guide the discussion to get to the conclusion that every organism evolved from a simpler one.

Final Question: If the topic today is THE FIRST HUMAN BEINGS, what is the relation of this with the evolution and Darwin…? * That the followers of this Evolutionist Theory hold out that human beings evolved from animal species.
A Model of Education for the XXI Century

Personal Work

Comprehensive Reading:

Before Reading strategies:
1. Establish the reading objective: answer the following question: What is my Reading purpose today? Write the answer at the bottom of the page.

While Reading strategies:
1. Read page 104 from the text book.
2. Identify important information using symbology.

After Reading strategies:
1. Write a synthesis paragraph where the following concepts are paraphrased: HOMINID, EVOLVE, and others related to the topic. (With this activity, evaluate indicator 2)
2. Create a graphic organizer: A comparative chart about hominids. (With this activity, evaluate indicator 3).
3. Answer the following questions: Is it valid to continue using the term Prehistory? Why? (With this activity, evaluate indicator 2)

With his evaluation instrument, the teacher will observe and mediate (accompanying) each student to determine the level of development of the competency.

Cooperative Work

1. Share if each member of the group achieved the personal objective, set before starting the Reading. (With this activity, evaluate indicator 1.)
2. Discuss about the question: Is the human being a God's creation or a product of evolution? (With this exercise, evaluate indicator 1. This is a “Key” activity).
3. Students discuss and graph creatively the differences among evident and not too evident characteristics of human beings of the primitive community and their own characteristics. (With this exercise, the three indicators are being evaluated).

The teacher will go from group to group making mediations and checking in his assessment scale, how students' ideas are exposed.

Plenary

1. Students will expose the outcomes of the cooperative work. The free and respectful participation will be encouraged. Self-evaluation on the achievement indicators, using the same evaluation instrument: assessment scale.
COMMENTS ON IMPORTANT ASPECTS FROM THIS LESSON PLAN

A. The competency heads and illuminates the entire plan. It is the purpose, what is intended to get from the students.

B. Notice that the first dimension of the thinking competency is the analysis. See page __26_____.

C. The student should know conceptually, the definition of the value; furthermore, formation activities should be included. The indicators of this value can be consulted in the page __119_____.

D. Notice that the value of the truth has two dimensions. See page __119_____.

E. It is convenient, for more clarity, to include indicators for the three types of contents: conceptual, procedural, attitudinal.

F. Observe that the indicators from the value of the Truth have been textually taken. However, this can and should be adjusted according to the needs of the academic discipline and developmental age.

G. Notice that this indicator has been taken from page __32_____, but it has been integrated according to the conceptual contents of the subject matter, stressing the procedural knowledge. Remember that the conceptual contents are powerful means for the development of the thinking skills.

H. The Learning guide should have the three knowledge contents: conceptual, procedural, attitudinal, with the purpose of developing the established indicators. Read the last chapter that explains the difference between evaluation techniques and instruments.

I. Observe that the Motivating Introduction should: activate previous knowledge, motivate the student, and set a problem situation.

J. In order to learn and deepen in the comprehensive Reading strategies, the Liceo Javier’s web page can be consulted. The Comprehensive Reading besides being a key competency is a cross-cutting item in the double period methodology.
K. If it is the first time using a strategy, it is very important that the teacher models the process.

L. It is necessary that the student have written evidence of what he has understood, solved, or created. This will allow the teacher, his partners and himself, to evaluate his work.

M. Observe that it is encouraged the self-evaluation through metacognitive reflection.

N. This question is intended to orient the value of the Truth; it forms and evaluates the attitudinal achievement indicator.

O. Notice that in the Cooperative Work a conjunct creation should be done, and ideally, a written evidence of the learning achieved by the group, should be left.
**Assessment scale from the previous chart**

The teacher can assign a pondering to each one of the skill levels. Also, he can vary the nomination of each level, or he can write them out by adjusting them to his indicators.

1. Apprentice: Starts to develop the indicator of the competency.

2. Novice: Already masters some elements of the indicator.

3. Advanced: Is getting to master precisely, the elements of the indicator.

4. Expert: Has gotten the optimal mastery of the indicator.

<table>
<thead>
<tr>
<th>Achievement Indicators</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses respectfully what he thinks and feels, even though sometimes he has to disagree.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies evident and not so evident characteristics of the first human beings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explains the differences and similarities of the first human beings’ characteristics, reaching inferential levels (what is not implied).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LEARNING GUIDE, CORRESPONDING TO THE PREVIOUS LESSON PLAN

LICEO JAVIER
SOCIAL STUDIES
6TH. GRADE

LEARNING GUIDE FOR THE STUDENT
Competency: Thinking Competency
Dimension: Analysis
Value: Truth

ACHIEVEMENT INDICATORS
1. Expresses respectfully what he thinks and feels, even though sometimes he disagrees.
2. Identifies evident and not so evident characteristics from the first human beings.
3. Explains differences and similarities of the first human beings’ characteristics, reaching inferential levels (what is not explicit).

PERSONAL WORK
1. We will carry out a good comprehensive Reading of page 104 from the text book. Before starting to read, observe the title, the pictures and any Word that calls your attention. Now, you can establish your own reading objective; you can use the question, What is my reading purpose today? Write your answer at the bottom of the page.

2. Read, identifying important information through the use of symbology.

3. Write a synthesis paragraph, paraphrasing the concepts: HOMINID, EVOLVE, and others related to the topic.

4. Create a graphic organizer including:

5. Answer the following question: Is it valid to continue using the term prehistory? why?

COOPERATIVE WORK
1. Share if each member of the group achieved the personal objective, set before starting to read.
2. Discuss about the question: Is the human being a God's creation or a product of evolution?
3. Discuss and graph creatively the differences among evident and not too evident characteristics of human beings of the primitive community and your own characteristics.
## THE FIRST HUMAN BEINGS

<table>
<thead>
<tr>
<th>HUMAN TYPE</th>
<th>CHARACTERISTICS</th>
<th>ADDITIONAL INFORMATION</th>
<th>ILLUSTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALOPITHECUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOMO HABILIS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCANTRÓPIDO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOMO SAPIENS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How to evaluate competences

The theory and practice of the scholar evaluation is being renewed and improved as Education Science advances: Mainly the constructivist and socio-constructivist paradigms have been inspiring new and richer approaches about students’, teachers’ and educational institutions’ evaluations.

In this chapter 7, in first place, some ideas and general principles are mentioned about the evaluation in an Educational Institution; afterwards, it is reflected about the concrete topic of the evaluation of the Key Competencies for Life; lastly, on the basis of some Lesson Plans and their corresponding Personal work, some examples of how to evaluate the grades or mastery levels of the three elements that integrate the Key Competencies, are presented.

1. Some ideas and principles about scholar evaluation

During many years, the evaluation of the scholar learning was mainly understood, and still continues to be understood by quite a few educators, as some tests presented to students, known as “final texts” and other brief and occasional “partial tests”, and to grade them; and on the other hand, the evaluation was interpreted as an activity of minor academic rank, in comparison with the “teaching” and “learning” activities.

“Instead of the ancient binomial “teaching-learning”, it has emerged the innovative trinomial “learning-evaluation-teaching”. Now, evaluation is considered by some people, as the neuralgic center of education.

The evaluation is being constituted as one of the most important”

Little by little, the things are being changed and improved: Nowadays, the “learning-teaching” expression has gotten its way paved, in contrast with the traditional expression “teaching-learning”. The
consciousness, each time more extended, that the student and his learning are
the most important aspects of education, goes together with a more original
and explicit consciousness that evaluation of student’s achievements is also
an important element that integrates the educational process: For that reason,
instead of the ancient binomial “teaching-learning”, it has emerged the innovative
trinomial “learning-evaluation-teaching”.

Now, evaluation is considered by some people, as the neuralgic center of
education. Next, some reflections about education, according to the new
educational psychology tendencies, are presented: The evaluation is being
constituted as one of the most important “formative” activities (to regulate
teaching) and “forming” activities (to regulate learning); today it is widely accepted
that “depending on how teacher and students conceive the function of evaluation,
the way how teaching and learning, and the quantity and quality of the learning
will be”; the learning will become: memory-based or meaningful; superficial or
deep; accumulative and disperse of constructive and integrated; merely linear or
with functional inferences: “Tell me what and how you do assess, and I’ll tell you
what type of educator you are”.

So, there are two “evaluation cultures”. The first one still persist in many
educational institutions, influenced by the association-based and behaviorist
learning theories; in this evaluation, the purpose is to measure quantitatively,
the outcomes about the acquisition of knowledge through memory; here, the
evaluative practice is managed through formal controlled activities, carried out
in punctual moments, different from the ones employed in the other teaching
and learning activities; mainly, it is concreted in some tasks done at home and
in the previously mentioned partial and final tests, through tests frequently of
multiple choice or of answers easily quantifiable. With this, it is not suggested that
the teacher forgets about the quantitative evaluation, because this is also very
important and required in most of the Educational Institutions, as a criteria of the
student’s improvement.

“In this evaluation approach, the idea is to analize what is
happening in the personality of each student, in his processes
of Competencies development, including all the elements that
integrate them: the disciplinary knowledge, the procedures and
the attitudes and values.”

In the second “culture” of evaluation, the meaningful learning is mainly
and permanently valued along the processes, with all the elements that it
implies: comprehension, “progressive differentiation”, schemata discrimination,
assimilation, and “integration, etc; in this, it is essentially conceived the evaluative activity
as a continuous reflection and formation tool for students and teachers, and as a
prudent discernment to develop the learning and teaching processes; in this evaluation
approach, more qualitative than quantitative assessments are made; in other words, the idea here is to analyze in a pluridimensional way what is happening in the personality of each student, in his processes of Competencies development including all the elements that integrate them: the disciplinary knowledge, the procedures, and the attitudes and values.

The new approach of evaluation demands the adoption of new integrator methodologies like the Double Period methodology previously explained; there, the educator starts by presenting the personal work which indicate the students the tasks to be carried out; remember that in the time devoted to the personal work, the student has to comprehensively read the Guide and the proposed texts, to focus on the diagnosis and problems and cases solution, and to get a “mature writing” through a brief “parallel text” where they gather their mental constructions, their synthesis and solutions, etc.; remember also that in the cooperative work in small groups, what is important is to share the results of the personal work, and to keep going in the learning processes, and in the multidisciplinary and investigation-action work projects; finally, in the presentations of the plenary, it is gather in groups, the product of the previous work, and it is practiced the mature academic and social dialogue.

Still today, the classical distinctions among initial, formative and summative evaluation, as three moments of evaluation, continue making sense depending if it is made at the beginning, during all the processes, or in the moment of special controls, and at the end of the period. But, being it understood that since the beginning until de end of these phases, the educator should be making permanent formative evaluations. Thus, many present authors insist that the “evaluation should be formative and permanent”.

“The new approach of evaluation demands the adoption of new integrator methodologies like the Double Period methodology” previously explained”.

A Model of Education for the XXI Century
### THREE TYPES OF EVALUATION

<table>
<thead>
<tr>
<th>MOMENT OF EVALUATION</th>
<th>WHEN IS IT EVALUATED?</th>
<th>WHAT IS THE PURPOSE OF EVALUATION?</th>
</tr>
</thead>
</table>
| 1. Initial and diagnostic evaluation. | At the beginning of the course, or of a unit, or of a class period. | • To evidence the previous knowledge that the students’ has and what is their level of comprehension, in order to get an “adjusted” subsequent teaching (Vygotsky).  
• To know since the beginning, the students’ achievement’ levels, in their procedures, values and attitudes…  
• ... and so, to adapt reality to the Learning Guides. |
| 2. Formative and permanent evaluation. | Along all the learning-teaching process. | • To integrally know how the students function during the learning process: their ways of thinking and of doing; their meaningful and functional learning; the quality of their self-evaluations; their concrete progresses, attitudes and values; their “mistakes”, to correct them on time.  
• To adapt the levels of exigency, on the basis of what happens in the processes. |
| 3. Summative or final evaluation. | At the end of a period, or of an academic unit, or of a course. | • Mainly, to comply with a social function, or as a numerable procedure, for accreditation purposes with the Ministry of education (and sometimes, at the request of Parents).  
• Its name “summative” implies the quantitative grade formed by all the addends to get the “total sum”. |
Initial or diagnostic evaluation, is interpreted nowadays, as a previous and necessary activity to get an “adjusted” teaching (Vygotsky). Said evaluation is useful, among other things, to detect the students’ “previous knowledge”; thus, educators and learners can positioned in the real students’ “Proximal Development Zone” (Vygotsky), on the basis of their true levels of knowledge and understanding; in this way, it is easier for students to connect with the topic, to understand it, and to start with their meaningful learning (Ausbel). It does not make any sense that the teacher starts every day with the course, making an initial evaluation, since, in a few weeks he will know the scopes, knowledge and limitations of each one of his students; but it is convenient that the teacher applies this initial evaluation at the beginning of a new educational unit, or when a new and important topic is going to be introduced.

Also, it is recommendable that in this phase, by means of questions, the educator has his students connect the topic of the day with the topics of the previous classes; in this activity, the initial formative evaluation is also done. It is very important to procure that this type of evaluation is applied not only to assess the cognitive aspects, but also to systematically inquire at what level of quality each student has developed the values and attitudes that integrate the Key Competencies for life.

The evaluation during the learning process should be formative, so it makes it easier to the teacher the regulation of the way and quality of the accompaniment that he must carry out toward his students; also, this evaluation should help the student to improve and self-regulate his learning processes (“forming evaluation”); the Double Period Methodology constitutes a perfect environment to get a permanent evaluation, which is supposed to “detect mistakes on time” to correct them on the way, both in students and in the educator, who should always be self-evaluating his attitude to improve the educational practice.

“The evaluation during the learning process should be formative, so it makes it easier to the teacher the regulation of the way and quality of the accompaniment that he must carry out toward his students; also, this evaluation should help the student to improve and self-regulate his learning processes (“forming evaluation”)

The summative or final evaluation is interpreted as an activity to control the learning results, since it complies with the social function; it is something like an accounting procedure for the purposes of grading, accreditation, certification, and social control; it is like taking a snapshot of a landscape or artwork. It is clear that the summative evaluation is important, but in no way, it is sufficient.
2. The evaluation of the Essential Competencies for Life

The Evaluation, on the basis of the constructivist and socio-constructivist paradigms, is a especially valuable tool, not only to adjust the achievement levels regarding the acquisition and mastering of the Competency being worked, but also to get such Competency developed. Singularly, the reflexive evaluation of the mistakes made by the students in their school activities, is an effective strategy to improve the quality of their learning. The teachers have to adjust their help or educational mediation, so students approach to three types of learning (of “declarative contents”, of “procedures”, and of “attitudes an values”: consequently, they should design some different ways and tasks to evaluate the quality of those three types of knowledge that integrate the Competency, and present them in their Lesson Plans.

Also, it is important that educators encourage students to self-evaluate, guiding them toward the objective of being the true protagonists of their own language.

Educators have to evaluate not only the quality of the meaningful learning disciplinary or conceptual contents, but also functional learning, that is to say, to understand at what level the learner develops the generalization habit, and the use or application of what he learns to get new learning and to solve practical problems in different contexts; remember that the Competencies to be developed by the students are “for life” and for multiple situations and contexts.

“And last, the educator has to evaluate the values and attitudes; and, to be sure to do so, such educator should previously indicate in his Lesson Plans, which value or values (or attitudes) are going to be developed during the class period and how they are going to be evaluated”

And last, the educator has to evaluate the values and attitudes; and, to be sure to do so, such educator should previously indicate in his Lesson Plans, which value or values (or attitudes) are going to be developed during the class period and how they are going to be evaluated; a reliable evidence to measure if a student is improving his attitudes and values, and if he is developing his Reflexive Thinking Competency, as well as his frequent or “metacognition and “self-regulation”, that leads him to act guided by intrinsic motivations, instead of being conducted by superficial motivations of awards and punishment.
For the above mentioned, it can be inferred that evaluation of Competencies is a hard task; remember there are 16 Competencies that students have to develop; and each is integrated by three well differentiated and evaluable elements, as it has been repeated, along this document: conceptual, procedural, and values (attitudes); evaluating competencies constitutes a difficult challenge and objective, but is it possible to achieve it, and some educators are attaining it with excellent results; these fortunate educators are characterized by having a special profile were, among others, can be evidenced two important risks:

1° They comprehended the formative value of Competencies within the difficult current world, understanding the meaning of the executive value of each one of the three elements that integrate them; that is, they deeply understood “what to evaluate”; and,

2° They learnt to measure the achievement levels of each of these elements in the context of this effective methodology to form and to evaluate these Competencies, that is to say, they mastered “how to evaluate”.

Next, some considerations on how to evaluate each one of these three elements during the practice, are presented:

To evaluate the declarative or disciplinary contents of the subject matter, if they are factual (data, facts, etc.) it is sufficient to use memory; this evaluation will be quantitative “all of nothing”; and the evidences are used to be “objective”, with “true-false” questions, with “multiple choice” items, etc.

If the disciplinary contents are conceptual ones (concepts, problems requiring reasoning, etc.), what should essentially be evaluated is if students have turned these contents into “knowledge”, that is to say, if they have been understood and assimilated and at what level. It is very important to note that this “knowledge” has to be evaluated operatively, in other words, analyzing the students’ external actions that answer to procedural items, like “explain”, “expose”, “define in your own words”, etc. so, with these actions, the student evidences to have achieved meaningful learning, and at the same time, practices his Thinking Competency.

Besides the above mentioned, the following techniques can be used to evaluate this conceptual contents: “to summarize”, “to indicate the problems solving processes” (social, philosophical, mathematical,
familiar, etc.), “to compare concepts”, “to categorize a group of concepts through conceptual maps or semantic webs”, etc.

Also, note that besides the declarative contents of the subject matter, the conceptual contents belonging the Competency that is to be developed, should be taken into account; there are some Competencies that require relatively few contents of information, such as the “Creativity” and “Team Work” Competencies, etc. and others, which demand more contents, for example the Thinking Competencies; but, in general, the subject matters are the ones that demand almost all the learning conceptual contents to be mastered in the class period or activity. Therefore, in the Lesson Plans and in the Guides, the educator should mention both types of contents, the ones of the subject matter, and the ones of the Competency to be developed.

The procedures, according to Zabala (2008) are the core referents of each competency. It is important that the students assimilate the pertinent declarative knowledge of the syllabus, but it is not too useful if such knowledge doesn’t help students to do well during life, in the diverse problems and tasks of the different areas: personal, familiar, professional, social, etc. What the real educators try to do is to make students competent to positively and creatively transfer to nowadays and tomorrow realities, the learning that is being acquired. In other words, it is very important that educators who intend that their students develop Competencies, help them develop, not only meaningful learning, but also functional learning, that is to say, that besides learning, they get use to apply the contents to the practice, that is, “knowing how to do”.

From the procedures, it should be evaluated first, if the students recognize them, and then, if they know how to apply them.

How to evaluate if students recognize them? Well then, if for example, the student names correctly and orderly the steps to be followed in order to solve a problem; if he clearly explains the rules, resources, and conditions of place and time, etc.; if he explains precisely to the group, what is he going to do, etc.

How to evaluate if a student knows how to apply the knowledge? By observing directly his actions processes and the outcomes of his actions; if he executes all the steps with the required order, precision and ability; if he demonstrates certain level of automation and readiness;
if it is evident that he can do well in diverse contexts. Naturally both the Proceedings develop and evaluation, imply that the educator has previously programmed the corresponding Lesson Plan and Personal work, so the questions or “problem-situations” presented to students are prospectively close to the complex realities which they will face in their adult and professional lives. In other words, when evaluating competencies, the educator is inferring that “if students are able to solve now these “problem-situations”, they are also able to do so along their lives, which in general, is full of similar “problem-situations”, although frequently more complex ones.

Here, it is supposed that educators nowadays are getting acquainted of the most important techniques and tests to evaluate the students’ performance of execution; besides managing the traditional evaluations of pencil and paper, it is important to be familiarized with the use of “rubrics”, checklists, assessment scales, etc. This is not the place to describe these techniques which are clearly explained in good educational texts.

And how and when to evaluate values and attitudes? some authors think that this is more difficult to evaluate than disciplinary contents and procedures; maybe, the difficulty is because most of the teachers are used to evaluate the mastery of these two integrator elements of Competencies, and they are not accustomed to formally evaluate values and attitudes.

There are plenty of publications about the different instruments and techniques that help to measure knowledge as well as procedures and attitudes and values. Some techniques are based on how students respond to teacher’s stimuli; other ones are founded upon observations that teachers do, during the learning-teaching processes; next, some techniques or instruments are briefly presented:

Self-evaluations that students make, reacting to questionnaires or instruments; in fact, the written answers (and oral ones) that they give, are an excellent source of information so educators can adjust values and attitudes of their students.

---

Of course, the instruments should be well chosen and prepared, and they should be proposed in an adequate time and environment. Among them the following can be mentioned:

- Attitudes scales (Likert, Thurston, etc.)
- Semantic differential scales
- Values scales

b. Observations that the educator make about the three types of knowledge that students develop, regarding what they do, say, write, etc., in their ordinary and special tasks; they are direct and planned observations. Below, see some “observation” environments, where any evaluation instrument can be used:

<table>
<thead>
<tr>
<th>OBSERVATION ENVIRONMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recess times</td>
</tr>
<tr>
<td>Social service activities</td>
</tr>
<tr>
<td>Sports events</td>
</tr>
<tr>
<td>Excursions</td>
</tr>
<tr>
<td>Spiritual retreats</td>
</tr>
<tr>
<td>Discussions of a film or play</td>
</tr>
<tr>
<td>The classroom</td>
</tr>
</tbody>
</table>
Before presenting some models of evaluation of competencies, on the basis of the Lesson Plans and of the Personal work, various ideas and considerations mentioned before, about the formation and evaluation of competencies, and about how a teaching sequence followed in the Methodology called “Double Period”, is a valuable instrument to get this double objective, are presented.

First of all, it would be imprudent that a University, Institute or School implemented the “Curriculum based on Competencies” without having formed before to its educators in theory and practice of this new way of focusing educations and how to evaluate both processes and outcomes.

Before continuing, it is convenient to clarify some doubts about the adequate sense and use of the evaluation techniques and of the instruments related to these techniques. As written by Olga Leon (2013), “both evaluation techniques and instruments are useful tools for the teachers to get information about their students”31 learning process. The techniques are defined as the procedures used to procure information, and the instruments, as means to collect data systematically and objectively. The selection of the technique and the instrument of evaluation is made according to the competency to be worked; it should related to the area and the needs and preferences of the educator. With the purpose to clarify the relationships between techniques and instruments, see the following semantic network:

31 Taken from the unpublished article from Olga Leon (2013).
A Model of Education for the XXI Century

**Evaluation**
- Observation
  - Tests
- Written tests
- Oral tests
- Revision of assigned work
- Anecdotal record
- Checklist
- Rubric
- Class daily record
- Assessment scale
- Multiple choice items
  - Essay
  - True or false items
  - Questions and answers items
  - Interviews
  - Expositions
- Parallel tests
- Portfolio
- Notebook
“Each technique is not directly related with an exclusive instrument, so, the observation technique can be used along with the instrument of checklist or with the class daily record; also, a same instrument can be used with two different techniques, that is to say, a checklist can be used both with the technique of revision of assigned work, or with the observation technique”.

For example, a teacher of the social studies, communication, or Christian education, who is developing the critical-constructive thinking competency, decides to use a written test as a technique, concretely, an essay. Also, he creates a rubric that enables him to gather the data of each essay that his students carry out. On the other hand, a Chemistry teacher, who is developing the problem solving competency in laboratory practices, decides to use the observations as an evaluation technique; and as well as other teachers, he makes use of the rubric to systematize the gathering of information. Both rubrics are different, because their indicators are based upon two different competencies, in two different areas, but they are still rubrics”.

“In conclusion, a same instrument can be used with different techniques, and a same technique is related to different instruments; in fact, the teacher evaluates through technique using different instruments to measure, differentiate, and identify characteristics of the learning levels. Finally, it is important to recognize that any technique maybe does not need an instrument (the few, though), such is the case of a multiple choice written test”.

“The techniques and instruments are not exclusive of any of the three types of knowledge, either; for example, it would be a mistake to think that a checklist is only used in the attitudes evaluation; as a matter of fact, it can be used to evaluate the knowledge of procedures and also of concepts; for example, I can use the technique of revision of the students’ assigned work, concretely, their class notebook; and to gather the information, I use the instrument of assessment scale, where the three types of knowledge can be included”.

The Educational Institution that has responsibly chosen to introduce a Syllabus based on Competencies, will start from the thesis that all educators of the Academic Areas should contribute to forma and to evaluate the 16 Key Competencies of the students. Notwithstanding, as indicated before, the Institution will distribute certain specific responsibilities among the different areas. For example, the Comprehensive Reading Competency, will specially be developed in the “Communication and Language”, “English language learning”, and Social Studies; even though, the reading comprehension should be developed in all the Academic Areas, because it is a very powerful and multifaceted educational instrument. The use of ICT competency will be more related to the “Computer Skills Area”; The Diversity and Interculturality Competency will bean especial objective of formation and evaluation of the Social Studies Area; The Problems Solving Competencies will be mainly developed in the “Mathematics” and “Science” Areas, and so on the different areas
will develop other competencies.

Furthermore, it would be a good idea that the Institutions propose to the Educational Community, which value from the Decalogue should be periodically developed and evaluated, for example, each month, in the learning-teaching processes of all Courses and Grades, within the classrooms and out of them, through billboards, panels, etc. Consequently, all educators will include in their Lesson Plans and Guides, kind of a reflection, action, or allusion regarding the contextualized formation and evaluation of such value; for example, the value of solidarity, as an integral part of the 16 Key Competences that are being promoted in the School, will be echoed during that month in the minds and hearts of all members of the Educational Community. This way of acting is very effective and makes it easier for teachers to deal with the complex task of evaluating values, as an essential part of the Key Competencies. This doesn’t mean that the rest of values should be put aside, but, that during that month or period all educators simultaneously, are devoted to develop a particular value.

It is convenient to remember one more time what was previously said in Chapter 5, that the traditional methodologies of “master classes” (where almost all the time the educator “teaches” and the students listen and take notes), are not the favorable context to form the Key Competencies; therefore, neither are they the adequate environment to evaluate them. For that reason, it was suggested there that the educators try the powerful efficacy of the “Double Period” method or a similar one.

Next, some reflections on how to evaluate the different activities or dimensions of this method, are suggested, as well as the students’ achievements in the development of Competencies:

• As mentioned before, before having students start their work, the educators has prepared his Lesson Plan and Learning Guide, focused on the formation and evaluation of the three components that integrate the Competency or Competencies to be formed in a period of time.

• In the Motivating Introduction, the good teacher starts to evaluate to his students by observing their reactions in those first minutes of the class period.

• During the time devoted to the personal work, the educator, “accompanies, observes, evaluates”; in other words, he goes around the classroom, among his students’ tables observing how each one works and silently reads the Learning Guide, reacting to the given instructions and concentrating in the task; as well as how the student writes on his notebook or in his digital portfolio, his synthesized ideas or what he answers, or creates, or solve, etc.; this observation contributes with the teacher, providing him information about
the group and every single student’s values and attitudes, in aspects such as their compliance of regulations, their focusing on the task, and their respect toward others, etc.; but the mere observation does not help the educator discover the what the students are thinking, what they understand, what they assimilate, and what they learn, solve, and create, etc., and at what levels of quality they achieve them. Remember what was told in Chapter 5 about the “Double Period” Methodology about the students’ activities during the personal work: they have to read comprehensively and to study the texts assigned in the Learning Guide; they also have to carefully take notes, developing and improving their written expression; these “compositions” or provisional notes, or “parallel texts”, about what they understood, synthesized, solved, created, etc., are an excellent material for the teacher who is going around their students’ working tables, reading such brief “parallel texts” and evaluating the level of quality of the discipline contents that each student learns, as well as the procedures that he applies. Each week, the teacher can recollect such “compositions” or “mini parallel texts”, on the notebooks or portfolios, and evaluate them on the basis of the competencies approach, and their three components.

• During the cooperative work: this activity is given in a quiet environment, in order to confirm and confront the observations and evaluations made by the educator, as well as the previously mentioned activities. The teacher goes around the working groups, watching, listening, accompanying, evaluating, while taking notes on his notebook or digital portfolio, about what he observes and listens to; it is convenient that the teacher applies some of the techniques and instruments before mentioned, and documents the conclusions drawn.

• In the plenary, which is an appropriate scenario to evaluate the group’s levels of achievement, as well as the particular oral interventions; there, the “ecology” or environment within a group, the assimilation levels of “conceptual” concepts, the quality of procedures in the tasks implementation and in the problem or problems resolution, the assimilation of values and attitudes, etc. can be evaluated, among others. Concretely, in the plenary, the educator will set the evaluation as one of the main objectives and elements previously stipulated in the Lesson Plan, which leaded all the process of the class sequence.

Next, three evaluation instruments are presented, measuring the same achievement indicators.
EXAMPLES OF THREE INSTRUMENTS OF EVALUATION
MEASURING THE SAME ACHIEVEMENT INDICATORS
BASED ON THE LESSON PLAN INCLUDED IN PAGE 158

Competency: Thinking Competency
Dimension: Analysis
Value: Truth (Loyalty toward beliefs and values)
Theme: Primitive Community, the first human beings

A. CHECKLIST: It is designed to consider the presence or absence of the relevant characteristics or attributes in the execution and/or the product. Normally it indicates if the student is or not able to carry out the proposed action.

<table>
<thead>
<tr>
<th>ACHIEVEMENT INDICATORS</th>
<th>DOES</th>
<th>DOESN’T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses respectfully what he thinks and feels, even though sometimes he has to disagree.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies evident and not so evident characteristics of the first human beings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explains the differences and similarities of the first human beings’ characteristics, reaching inferential levels (what is not implied).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. ASSESSMENT SCALE: It permits to establish qualitative estimations in a continuum, about executions or products carried out by the students. It can be useful for the teacher to determine the level of execution achieved by the students, since it gives values ranges.

<table>
<thead>
<tr>
<th>ACHIEVEMENT INDICATORS</th>
<th>1 LEARNER</th>
<th>2 NOVICE</th>
<th>3 ADVANCED</th>
<th>4 EXPERT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses respectfully what he thinks and feels, even though sometimes he has to disagree.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies evident and not so evident characteristics of the first human beings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explains the differences and similarities of the first human beings’ characteristics, reaching inferential levels (what is not implied).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Model of Education for the XXI Century
C. RUBRIC: It is an assessment guide that permits to describe the level in which the student is executing a process or a product. Some of the more important characteristics of the rubrics are:

a. They are based on criteria of clear and coherent performance.
b. They are used to evaluate both the students’ processes and products.
c. They describe what is learnt, instead of what is taught.
d. They are descriptive.
e. They help students to regulate their learning.

<table>
<thead>
<tr>
<th>ACHIEVEMENT INDICATORS</th>
<th>1 LEARNER</th>
<th>2 NOVICE</th>
<th>3 ADVANCED</th>
<th>4 EXPERT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses respectfully what he thinks and feels, even though sometimes he has to disagree.</td>
<td>The respect toward others when expressing his ideas and thoughts is difficult for him. He startles, stops communicating, and does not allow others to talk, etc.</td>
<td>Occasionally, he gets to express respectfully his ideas and thoughts, even though he does not defend his ideas when most of the students think different from him.</td>
<td>Frequently, he expresses his ideas and thoughts with liberty and respect, supporting occasionally his ideas. He keeps an adequate voice tone; he knows how to listen and to express what he thinks.</td>
<td>He always expresses respectfully what he thinks, and disagrees with others when necessary, on the basis of his coherent and honest attitude.</td>
</tr>
<tr>
<td>Identifies evident and not so evident characteristics of the first human beings.</td>
<td>Presents difficulties in the identification of explicit characteristics.</td>
<td>Gets the identification of the most relevant evident characteristics, without getting to identify the ones that are not implied.</td>
<td>Identifies evident characteristics and highlight some others not evident.</td>
<td>Clearly identifies evident characteristics, and finds the ones that are not implied in the text.</td>
</tr>
<tr>
<td>Explains the differences and similarities of the first human beings’ characteristics, reaching inferential levels (what is not implied).</td>
<td>Explains only the most evident differences.</td>
<td>Gets to explain precise differences and some similarities.</td>
<td>Explains in detail, differences and similarities, making some inferences with difficulty.</td>
<td>Explains in detail and widely, the differences and similarities, making valuable and deep inferences.</td>
</tr>
</tbody>
</table>
D. Because of the level of difficulty that represents the formation and evaluation of attitudes, it is presented a model of how they can be specially evaluated, as one of the elements that integrate the Key Competencies for life:

Value: Solidarity (See page 110)
Dimension: inclination for the ones who suffer in their dignity as human beings.
Indicator: Carries out actions that give sense to his life, when it favors the human being’s dignification.

Note: It has been taken from the dimension number three from the value of solidarity, and the second indicator from the column of formal operations (from 12 to 18 years old) has been chosen. The selected indicator is continuously developed in different learning environments, along the year.

Technique: Observation
Instrument: Class Daily Record
Grade: 9th.

<table>
<thead>
<tr>
<th>DATE AND ENVIRONMENT</th>
<th>GENERAL EVENTS</th>
<th>PARTICULAR EVENTS</th>
<th>ACCOMPANIMENT ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.20.2013 Classroom</td>
<td>Most of the students have welcomed the three new ones.</td>
<td>Juan Perez has given an offensive nickname to one of the new students.</td>
<td>There is going to be a dialogue with Juan, regarding this situation.</td>
</tr>
<tr>
<td>2.2.2013 Classroom</td>
<td>There is a group with adaptation difficulties, what makes these students feel uncomfortable in the school.</td>
<td>Claudia Gonzalez Pedro Martinez Luis Maza</td>
<td>Three of the leaders from the class will be asked to integrate into their working groups, the students who are not adapted.</td>
</tr>
<tr>
<td>2.25.2013 Recess Time</td>
<td>The leaders are doing their work correctly; the students look happier and more integrated, mainly Claudia and Pedro.</td>
<td>Irene and Adelina have assumed their role of helpers, very good.</td>
<td>Vinicio will be asked to integrate Luis into his game group.</td>
</tr>
</tbody>
</table>
### DATE AND ENVIRONMENT

<table>
<thead>
<tr>
<th>DATE AND ENVIRONMENT</th>
<th>GENERAL EVENTS</th>
<th>PARTICULAR EVENTS</th>
<th>ACCOMPANIMENT ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.12.2013&lt;br&gt;Sports Event</td>
<td>Juan insists to speak to one of the new students, using the offensive nickname. Some features of harassment are found in this action.</td>
<td>Juan Perez verbally annoys Laura.</td>
<td>I have asked the counselor’s help, and I am considering making an appointment with Juan’s family.</td>
</tr>
<tr>
<td>3.14.2013&lt;br&gt;Classroom, cooperative work</td>
<td>I was surprised to notice that a small group defended Laura from Juan’s harassments. The group activity that I developed along with the Counselor seems to be fruitful. The students are achieving the indicator. I have learned that Juan is having inter-family violence situations.</td>
<td>Supportive Group: Sofia, Celeste, Belen, Rodrigo, Rafael and Carlos</td>
<td>I will dialogue with the supportive group to reinforce their positive attitude.</td>
</tr>
</tbody>
</table>

Both the evaluation techniques and instruments are useful resources for the teachers to get information about their students’ learning process; the learning environment refers to the spaces or activities where such information can be obtained. The techniques encourage the student to execute activities that have them improve, and the instruments are used to gather information systematically. The selection of the evaluation technique and instrument is made, taking into account the competency that is being developed, and the teacher’s area, needs and preferences. Also, the techniques and instruments are not exclusive of a type of knowledge (conceptual, procedural or attitudinal).

For sure, thinking about evaluation means to plan how, what, when, where, and why to intervene in the students’ development process. Beyond having students take bunches of tests, it is important to take advantages of all circumstances, in order to get the students’ integral formation.
REFERENCES

Achaerandio, L. (2010). *Competencias fundamentales para la vida.* Guatemala: Universidad Rafael Landívar, URL.


Liceo Javier (2011) **Competencias fundamentales para la vida. Propuesta para desarrollar competencias en el proyecto curricular de la educación formal en primaria y secundaria.** Guatemala: Liceo Javier.


Ministerio de Educación (2005). **Currículum Nacional Base de Educación para Preparatoria, Primaria y Secundaria:** Guatemala: MINEDUC.

Organización para la Cooperación y el Desarrollo Económico, (2013). **Proyecto PISA.** París. OCDE.


Yañiz, C. y Villardón, L. **Planificar desde competencias para promover el aprendizaje.** Bilbao: Universidad de Deusto.

Zabala, A. y Arnau, L. **11 ideas clave. Cómo aprender y enseñar competencias.** Barcelona: GRAÖ.

De la socio motriz

