

**PROGRAM
PRODUCTIVITY AND QUALITY
CURRICULAR DESIGN BASED ON THE COMPETENCY STANDARDS
EDUCATIONAL MODEL**

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San José – Costa Rica
“Development through Education “

SECTOR: INDUSTRIAL

PROGRAM: PRODUCTIVITY AND QUALITY

GRADE: TWELFTH

**CURRICULAR DESIGN BASED ON THE COMPETENCY STANDARDS
EDUCATIONAL MODEL**



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“Development through Education “

CROSS CURRICULAR TOPICS IN STUDY PROGRAMS

Social, economic, cultural, scientific, environmental and technological changes in today's world have made it necessary for educational curricula to not only offer knowledge and information, but also to encourage the development of values, attitudes and skills aimed at improving the quality of life of individuals and societies (*Marco de Acción Regional de "Educación para todos en las Américas"*, Santo Domingo, 2000). Nonetheless, our educational system faces a real challenge as new subject areas or contents linked to emerging issues relevant to our society must be incorporated, and there is a risk of overloading and fragmenting the curriculum.

Cross curricular themes are an alternative to these limitations. They are understood as "an educational approach that benefits from the opportunities generated by the curriculum by incorporating meaningful life skills into the design, development, assessment and curriculum management so as to integrate and foster improvement in the life of individuals and society as a whole. Cross curricular themes are holistic, axiological, interdisciplinary and contextualized in nature." (*Comisión Nacional Ampliada de Transversalidad* 2002).

Pursuant to the guidelines set out by the *Consejo Superior de Educación* (SE 339-2003), the only cross curricular theme in the Costa Rican educational system is that of values. Hence, a systematic approach to values in our domestic curriculum aims to promote the learner's socio-emotional and ethical development from the humanistic focus set out in the educational policy and in the *Ley Fundamental de Educación* (Basic Education Act).

The following cross curricular topics have been defined based on the cross curricular area of values and the obligations assumed by government under existing legislation: Environmental Culture for Sustainable Development, Comprehensive Sex Education, Health Education and Living the Experience of Human Rights for Democracy and Peace.

A series of competencies has been established for every transversal topic for students to develop throughout their educational training. These competencies are conceptualized as: "An integrated combination of knowledge, procedures, attitudes and values enabling learners to successfully and autonomously handle individual and social situations." (*Comisión Nacional Ampliada de Transversalidad*, 2002). Such competencies are expected to guide educational processes and the development of cross curricular themes.

With the competency perspective as a guide, cross-curricular competencies have been defined as follows: "those that

span and penetrate all curricular subjects, horizontally and vertically, and require the integrated and coordinated support of all academic disciplines, as well as coordinated pedagogical action” (Beatriz Castellanos, 2002). In this fashion, these competencies appear in annual plans as well as in every other aspect of the educational system.

Following is a summary of each cross-curricular topic with its respective competencies:

Environmental Culture for Sustainable Development

Environmental education is considered to be the ideal instrument for building of an environmental culture of individuals and societies oriented toward sustainable human development. This is a function of the process that helps them understand their interdependence with the environment through critical analysis of and reflection on their immediate reality, whether biophysical, social, economic, political or cultural.

The objective of environmental education is that students take ownership of reality through activities based on values and respect, making them active participants in hence promoting the active involvement in problem identification and resolution at the local level, but with a global vision.

Competencies to be developed

- Creatively apply knowledge acquired through critical and reflexive processes of problem solving (environmental, economic, social, political, etc.), using attitudes, values and practical tools that contribute to sustainable development and improved quality of life.
- Actively participate, with commitment and responsibility, in projects that preserve, restore or protect the environment, identifying main needs and problems and generating alternative development solutions to contribute to your quality of life, that of others, and sustainable development.
- Strive for harmonious relationships with yourself, other people and other living beings through responsible attitudes and aptitudes, recognizing our interdependence with the environment.

Comprehensive Sex Education

According to the " Políticas de Educación Integral de la Expresión de la Sexualidad Humana", (2001), experiencing human sexuality in a mature way is dependent upon an integrated approach to sex education that includes all aspects,

such as physical, biological, psychological, socio-cultural, ethical and spiritual . Sexuality cannot be reduced to simply biological reproduction considered in a context devoid of values and ethical and moral principles regarding life, love, family and coexistence.

Sex education starts in early childhood and continues throughout life. At first, it is a right and a duty of parents. Later on, government, in a subsidiary action, is required to strengthen the involvement of families in the education and informing of their children, as expressed in the *Código de la Niñez y la Adolescencia* (Law on Childhood and Adolescence).

The educational system must ensure pedagogical experiences and strategies that respond to the students' potentialities in line with their development stage and the socio-cultural contexts in which they operate.

Competencies to be developed:

- Socializes with men and women alike; is supportive and respects diversity.
- Makes decisions regarding sexuality from a life plan based on critical self-knowledge and socio-cultural, ethical and moral values.
- Faces situations involving harassment, abuse and violence by identifying appropriate internal and external resources.
- Expresses his/her identity in an authentic, responsible and comprehensive manner by encouraging personal development in a context of interaction and permanent expression of feelings, attitudes, thoughts, opinions and rights.
- Promotes thoughtful and constructive processes within his/her family, and dignifies his/her condition of human being so as to identify and propose solutions according to the sociocultural context in which he/she operates.

Health Education

Health education is a fundamental right of children and adolescents. Overall health is closely related to school performance and general quality of life. So, by working on education to achieve health in schools, based on the needs of the student population at each development stage, we produce citizens with healthy lifestyles, as a result, people who build and seek to have quality of life for themselves and for those around them.

Health education should be a social, organized, dynamic and systematic process that motivates and guides individuals to develop, strengthen, modify or replace existing practices with healthier ones, whether on an individual, family, or collective basis, and taking into account their relationship with the environment.

Therefore, health education in the school context is not limited to the transmission of information, but also seeks to develop knowledge, skills and abilities that contribute to the social production of health, using teaching processes and dynamics that prioritize two-way communication, critical thinking and active student participation.

Competencies to be developed:

- Lifestyle that allows them to critically and thoughtfully maintain and improve their overall health and quality of life, and that of others
- Decisions that enhance their overall health and that of those around them through self-knowledge and understanding of those around them, as well as the environment in which he/she operates.
- Process of critical thinking, chooses the most adequate personal means to deal with situations of risk and identify corresponding elements of protection.
- Use of healthcare, education and community services in a responsible, critical and participative; personal commitment to improvement of these services.

Personal Experience of Human Rights as a way to foster Democracy and Peace

Costa Rica is a consolidated democracy, but it is always in a state of constant review and feedback; as a result, the relevance of human rights is part of our commitment to reinforce a culture of peace and democracy.

In educational settings, it is appropriate to manage mechanisms that foster promote the involvement of citizens at family, community, institutional and national levels. To do this, civil society must be informed and trained in regards to the legal framework provided by the country, so that the involvement of citizens is effective and not limited to periodic participation in elections.

A democratic system that helps turn citizenship into an appealing, interesting and civic activity is required, which entails rights and duties alike.

Competencies to be developed

- Practices his/her rights and responsibilities by living in a democratic, ethical, tolerant and peaceful way.
- Accepts his/her own reality, as an individual subject to rights and responsibilities.

- Makes personal, family and social choices that encourage tolerance, justice and gender equality according to the contexts in which he/she operates.
- Takes part in inclusive actions that promote equality in all sociocultural contexts.
- Exercises rights and responsibilities that foster democratic coexistence and a culture of peace.
- Is tolerant, accepts and understands cultural, religious and ethnic differences that encourage democratic coexistence and a culture of peace.
- Values the cultural differences found in different lifestyles.
- Engages in actions, attitudes and behaviors directed to nonviolence in school settings, in the relationship with the parents, the family and the community by solving conflicts in a peace way and by expressing affection, tenderness and love.
- Applies strategies for the peaceful resolution of conflicts in different contexts.
- Respects individual, cultural, ethical, social and generational differences.

Methodological Approach to Cross Curricular Themes through Study Programs and Educational Planning

As a process, cross curricular themes are meant to be part of the programmatic work of our national education system, from the current study programs to the educational planning that instructors carry out in the classroom.

In regards to the study program, some procedures and values might lend themselves to the incorporation of cross curricular themes. However, convergence options are not limited to those mentioned in the programs as instructors can identify other possibilities for the development of cross curricular processes.

In this case, the task is for instructors to identify which of the study programs' objectives represent opportunities to address cross cultural issues and develop competencies based on a thorough reading of the students' prior knowledge, the sociocultural context, and relevant and current social events.

As for educational planning, cross curricular topics should be listed in the "Mediation Activities" and "Values and Attitudes" columns once the identification in the study programs has taken place. In the classroom, the cross curricular process should take into account the characteristics of the student population, as well as characteristics of the immediate environment in order to create more meaningful learning experiences.

In addition to educational planning, cross curricular themes ought to be conceived and specified in the institutional plan, thus promoting the active, critical and thoughtful involvement of parents and legal guardians, community leaders, community action organizations, instructors, administrative personnel and the whole educational community.

In this sense, schools should make the corresponding decisions to ensure consistency between everyday institutional practice and cross curricular themes, and principles. Ultimately, this poses a major challenge for every school towards the development of humanistic, critical and ecological principles.

CROSS CURRICULAR THEMES COMMITTEE

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This program expands the array of training possibilities in vocational technical schools and job opportunities for graduating students.

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RATIONALE

The use of technology is one of the most important factors in organizational and personal performance; technology serves as the basis for strategy and realistic and accurate decision making in line with current environmental factors.

In this context, the use of technology takes on strategic importance for public and private organizations, leaving its impact in productivity as well as the quality of goods and services and the creation of competitive advantage.

As such, the effective use of technology can have an important effect on the productive, economic and social sectors, and on the country in general. For this reason, technology is promoted as an important element in the overall performance of countries and an important tool for national development.

Naturally, for technology to fulfill its potential, the personnel that will be entrusted with its use must be trained in line with the requirements of the labor market and productive sectors of the country.

It is important to note the significant growth in the installed technological base of this country's productive sector. Taking this into account, capable and efficient technicians in the area of Productivity and Quality are increasingly required to possess adequate skills in technology. As technology extends its reach into business and personal life, the need is ever greater for people to be trained in its use.

This is the point of departure for the Ministry of Public Education as it seeks to respond to these new needs with Vocational Technical Education, training technicians capable of meeting labor needs in terms of technology, starting from the basic premise that education is the fundamental instrument for individual and social development.

Therefore, given the results of research carried out with professionals, teachers and entrepreneurs, the Productivity and Quality study programs have been developed in accordance with labor market requirements.

The following program objectives arise from current educational policy:

- Strengthen fundamental values of Costa Rican society through integrated training of each student.
- Stimulate respect for cultural, social and ethnic diversity.
- Create consciousness in future citizens of the commitment we have with sustainable economic and social development, in harmony with nature and society in general.
- Train a labor force that will contribute to the competitive capacity of the country.

As a response to these objectives, this study program is structured into integrated subjects and organized to encourage students to gradually and permanently develop knowledge through active participation in the construction of their own knowledge.

In addition to specialization-related content, the following generic topics are also included:

- Understanding Business: promote the development of knowledge, abilities and skills that allow students to control their own destinies; students will be prepared not only to perform as employees, but also as entrepreneurs able to start their own companies.
- English for Communication: promote the development of technical English skills, with four hours per week and three levels of content.
- Information and Communication Technologies: develop abilities in the use of software commonly found in the specialization.

The start of a new millennium brings with it significant economic and social challenges, and education must be the motor for national development in a changing environment, strengthening the productive sector in a context of social equality. Science and technology have advanced and have forced Costa Rica as a nation to question its prevailing economic model.

Companies represent a significant source of foreign currency reserves for Costa Rica, especially considering the deterioration of traditional exports. The rapid growth of the service sector represents one of the structural changes that the Costa Rican economy has experienced in recent years. Among those activities favored by free trade and pro-export government policy, the service sector has shown the most dynamic growth.

The growing importance of services, rapid technological changes in industry, and innovations in the marketing of goods and services have all forced industry to pursue permanent control of quality and to aid in job creation, especially in main population centers and in areas that have experienced development.

To the extent that this sub-sector is associated with the growth of industry in general and has become a constantly growing business, it is capable of moving technical, financial and human resources. It is also capable of creating incentives for increased local productivity, reduced social inequality and better stewardship of natural resources, all of which contribute to improved competitive capacity in general.

JUSTIFICATION

PRODUCTIVITY AND QUALITY SPECIALIZATION

The Productivity and Quality specialization, as part of the educational offer of the Office of Technical Education and Entrepreneurial Skills of the Ministry of Public Education, is influenced by constant and accelerated technological developments and is presented to the Costa Rican society as a solution to labor market needs. As such, the specialization can help improve the performance of this activity in the country.

The country has seen recent radical changes in its productive base that have provoked development in new areas of knowledge related to quality management. These areas include product, process and procedure, as well as other existing areas of knowledge that have been developed further.

As companies continue to expand and increase production, it can be shown that economic data does not completely reflect business results; the balance can be attributed to statistical resources and efficiency efforts, resulting in increased productivity.

To respond to these new models of development and this specialization of activities, the Office of Technical Education has sought to satisfy labor market demand in the most direct and timely fashion possible. The chosen strategy has been the training of mid-level technicians that are able to perform well in companies that choose to improve compliance with quality standards through activities such as: quality studies, waste studies, process analyses, implementation of quality control and management measures, customer service, and team work, among others. The technician must be familiar with these concepts in order to adapt to the company and an environment where improvement is constant and necessary, and social responsibility is expected. The technician must also possess the values necessary in order to serve in roles of supervision and coordination, using information and communication technologies to improve company effectiveness and productivity.

The objective of the Productivity and Quality specialization is to respond to a series of labor needs identified in the country's productive sectors and contribute to the conditions needed for efficient decision making in companies in a world of complex relationships and rapid change. It is designed in accordance with concepts defined in regional conversations with by business leaders facilitated by **CINDE** (*Coalición Costarricense de Iniciativas de Desarrollo*).

To achieve parallel productivity and quality objectives, business leaders must recognize that many leaders such as themselves are focused on products and sales, but are not focused on the market or the customer. A market-oriented approach with a focus on customers instead of products, informed by research-based knowledge, could greatly increase productivity.

The Productivity and Quality specialization will train mid-level technicians capable of managing, training, using TICs, directing and formulating technical task. These technicians will be ready to work in industry or the commercial or service sectors.

GENERAL GUIDELINES FOR TEACHERS

This study program reflects an intention to provide added value to the student's life, with a programmatic structure that explains in detail the content to be delivered in every subject and study unit. This enables the teacher to effectively lead the knowledge building process in the classroom and in the learning environment. Hence, teachers are able to expound on contents other than the ones exposed here but **must not replace them** in order to secure equal opportunities in all schools.

The **learning outcomes** included in the program are general enough for teachers to design their own outcomes in accordance with the ones established in the programs. In this way, learning outcomes must reflect behavioral changes that the student is expected to achieve in the short term, on a daily or weekly basis, in knowledge levels, values, attitudes, capabilities and skills.

The **teaching and learning strategies** established in this program allow the teacher to use his or her creativity and experience toward the achievement of desired learning outcomes. The teaching and learning strategies will serve as starting points for other considerations and the students must be allowed to construct their own learning experiences. Cognitive strategies must be employed to encourage analytical skills such as: comparison, classification, organization, interpretation, application, experimentation, analysis, identification, discussion, synthesis, evaluation, problem solving, among others.

On the other hand, the strategy as a means of transmitting content represents the link between what is intended to be taught and the student's own expectations of learning. Strategy also allows teachers to measure progress towards objectives. The teaching-learning strategy is a consequence of the methodology, its implementation and its application. As such, it is necessary to define method before strategies. The strategies must be complementary to each other, therefore the results of each must be congruent with the result of the methodology. This extends to the assessment rubrics that indicate basic outcomes and elements of each competency that each student must possess at the end of each unit of study.

The **performance criteria** refer to evidence that can be explicitly evaluated; these are observable and measurable products expected from the student. The measurement of these criteria allows the teacher to provide personal follow-up with each student during the learning process. The criteria are the competencies that will be assessed with both theoretical and practical instruments at the end of each unit.

At the beginning of the academic period, each study block is assigned an estimated time for its delivery. This time is estimated and flexible; the teacher may choose judiciously to expand or reduce the number of hours employed, justifying such changes and without detriment to the adequate development of the themes.

Values and attitudes assigned to each unit should be discussed at the beginning of each class day and serve as the basis of learning experiences subsequently developed, such as case studies, projects, etc.

According to the educational model based on competency standards, the goal of the teaching-learning process is to develop abilities and skills, as well as, to provoke changes in attitudes and aptitudes of students. To achieve this, the following stages in the teaching-learning process should be considered: ¹

- Detect and confirm student learning needs (diagnostic).
- Determine learning outcomes and assessment criteria
- Plan teaching-learning strategies based on student profiles and program contents
- Design and apply corresponding assessment instruments.
- Implement the pedagogical mediation process.
- Evaluate and provide feedback to students (formative and summative assessment).

¹ Ávila, Gerardo y López, Xinia. Educación basada en normas of competencia. SINETEC. 2000.

A **learning-teaching strategy** is a resource, a means, or an instrument by which the teacher may achieve learning outcomes and apply methodologies. Seen as a resource, the strategy implies a series of elements (material, technical, and human) that allow the articulation of content and promote its acquisition by students.

Seen as a means to an end, the strategy represents the link between what is to be taught by the teacher (content) and what is to be learned by the student (outcome). The strategy allows teachers to measure outcomes. Strategy is a consequence of the application of methodology, so it is of primary importance to define methodologies before strategies. Strategies are in turn complementary to each other, thus, the congruence of each strategy with the methodology.

The competency standard model redefines basic concepts of education, and these concepts must be redefined in light of this new methodological framework:

Teaching must start with the creation of a learning environment that:

- recognizes previous student knowledge
- is based on cognitive and metacognitive strategies
- promotes resolution of complete and complex tasks.

Learning is based on:

- the gradual construction of knowledge
- the relation of previous knowledge with new information
- organization of knowledge in ways that are significant for the student.

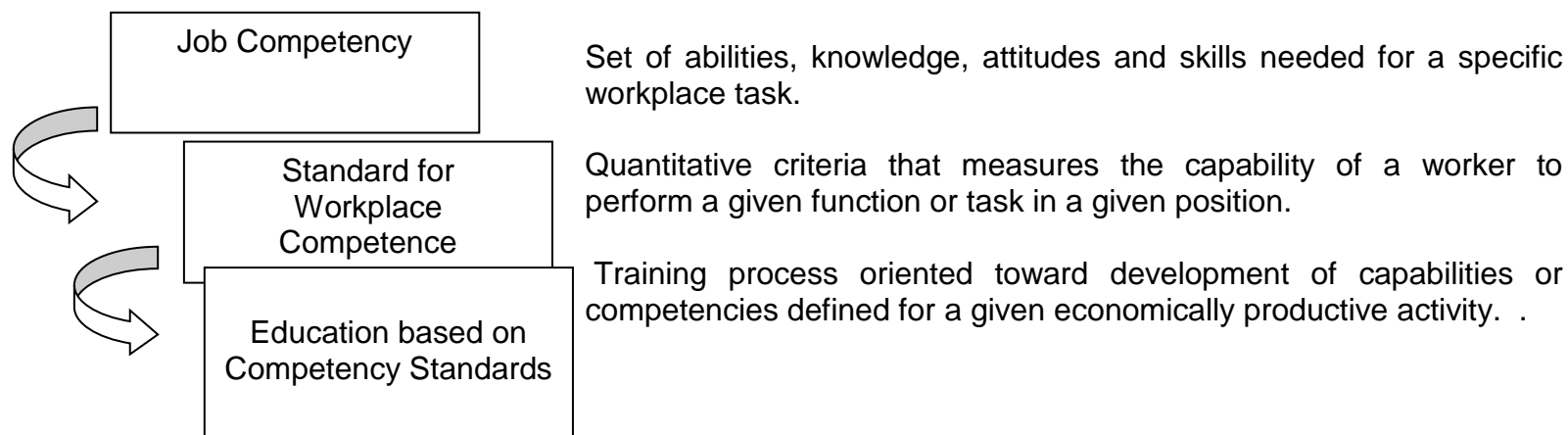
Following are **general recommendations** for the successful implementation of the specialization:

- The high school that delivers this specialization must have adequate equipment, infrastructure and materials.
- Teachers assigned to this program must be trained and possess interest in further training, to ensure performance.

- In order to correctly develop each study unit, the teacher should employ both inductive and deductive processes, with didactic techniques and interesting activities such as informal discussion, individual and group work, and planned research, so that the student learns to appreciate the value of established objectives.
- Motivate students to subscribe to magazines, bulletins, etc.; guide students towards an effective supplementary bibliography.
- Internships are fundamental elements in the eleventh and twelfth grades for the completion of the teaching - learning process, and as such should be planned in accordance with program contents and when the teacher deems necessary to foster links with the labor market and local companies.
- Field trips and didactic visits are necessary for tenth grade students, according to scheduled learning outcomes and teacher plans.
- The teacher must always promote efficient use of laboratory and other tools, as well as correct work habit in the lab, workshop and classroom.
- Technical bibliography based on each subject area, at each grade level.
- The teacher must always promote the use of problem solving tools, in order to educate creative and critical students, young people that are able to offer their own solutions and alternatives.
- Time must be balanced between theory and practice, according to relevant learning outcomes.
- Adequate workshops or labs for the specialization.
- A computer lab with software and hardware suited to current conditions in the labor market.
- Use of manuals, catalogues, and technical English bibliographic material, as a source of information, Interpretation and translation.
- It is imperative to use the latest technology, such as audiovisual equipment, services and Internet material.
- This program is intended to stimulate creativity through the implementation of specific projects related to program contents.
- The teacher must ensure that equipment and tools receive proper maintenance, in coordination with the appropriate authorities.

CONCEPT of EDUCATION BASED ON COMPETENCY STANDARDS

Competency-standards based education promotes the integral and harmonic development of the individual and trains the student in each of the competencies required in a given productive activity. In this manner, student needs are met on one end of the process, and the needs of the productive sectors are met on the other.



A competency refers to the capacity to carry out an activity that requires cognitive, motor and social-affective skills; these skills can be classified as personal, social or professional.

From the perspective of competency standards based education, workplace training must prepare the individual to perform in optimum fashion and permit the transfer of competencies to different contexts and situations.

Comparison between Traditional Technical Education and Competency Standards Based Education

Traditional Technical Education	Education Based on Competency Standards
Traditional learning model oriented toward the needs of highly specialized productive processes	Easily adaptable to varying forms of production, including those using the traditional model.
Highly academic program contents. Linked with needs of productive sector is not systematic or structured	The productive sector defines expected results from training, which are defined as standards of work competence.
Inflexible programs and courses	Programs and courses based on standards, permitting gradual progress of students as they move to higher levels of competence.

Source: Morfín, Antonio. *La nueva modalidad educativa: Education basada por normas de competencia.*

GENERAL ASSESSMENT GUIDELINES

In the context of education in general, and specifically the context of competency standards based education, assessment is a continuous and permanent process, an integral part of the teaching-learning process. As such, the following aspects should be considered:²

Performance assessment is a process in which evidence is compiled and criteria applied to student progress toward achievement of performance criteria previously established for a given standard or workplace competency. Performance assessment allows for the determination of completion of the standard or competency.

In the context of competency standards based education, assessment is a function of learning outcomes, and as such the assessment of a competency focuses on performance. Towards this end, teachers must gather all available evidence to determine if the student has achieved the learning objectives.

From this perspective, we can conclude that assessment is essentially the central factor of competency standards based education, in which weakness and strengths of the student are identified, as are the weaknesses and strengths of the teaching process itself, including strategies, materials, resources, contextualization, etc.

A competency is not observable in and of itself; therefore, it must be inferred from performance. As such, it is crucial to define the type of performance that will generate the evidence required to assess performance. The process of assessment involves observation followed by gathering and Interpretation of evidence that is subsequently compared with performance criteria of the corresponding workplace competency technical standard.

This comparison provides the basis of the teacher determination if the student has achieved competence in this area.

² Ávila, Gerardo y López, Xinia. Educación basada en normas of competencia. SINETEC. 2000.

Therefore, assessment based on competence standards is carried out in relation to the performance criteria established by the standards, which, in turn, define the quantity and quality of evidence required to judge the performance of a student.

The assessment process consists of the following activities:

- Define the requirements or objectives of evaluation:
- Gather evidence
- Compare evidence with requirements
- Make judgment based on this comparison.

This fosters a process of ongoing learning that requires a new model of development and evaluation. We are not interested in proving how much the student has learned (knowing), but rather the performance that the student achieves with what he or she has learned (knowing and doing).

Methodologies recommended for using in education based on standards of competence are the following:

- Observation of performance
- Simulations
- Execution of projects
- Written and oral assessments
- Practical assessments.

As further support of the assessment process, the teacher should use the evidence gathering technique known as “**Evidence Portfolio**”.

In the context of competence standards based educations, this assessment instrument is a folder in which evidence is collected in terms of knowledge, performance and product as this evidence is generated during the learning process. This portfolio allows the student to self-evaluate and monitor his or her own progress toward the acquisition of desired competencies.

This technique allows the teacher to gather evidence and compare it with requirements as a function of objectives, and form judgments based on this comparison.

It is the student's responsibility to create and maintain the portfolio, under the teachers supervision; guidelines for the portfolio are found in Attachment 1 of this document.

TEACHER PLANNING

1. ANNUAL PLAN PER SUBJECT:

Schedule of months and weeks of academic year, broken down into subject areas with corresponding learning outcomes. The following must be considered for the preparation of the annual plan:

- Indicate values and attitudes that will be developed during the plan period.
- Indicate hours that will be assigned to each unit within the subject, and the logical sequence of the units.
- Create the list of materials and/or equipment that the institution must supply for the scheduled activities and deliver this list to school authorities at the beginning of academic year.

“This plan must be delivered to school authorities at the beginning of the academic year.”

Annual Plan Template

ANNUAL PLAN

Technical High School: _____

Program:	Subject Area:	Level:
Teacher:	Grade:	
Values and attitudes:		

Study block and Learning Outcomes	February	March	April	May	June	July	August	September	October	November	December	Hours
Materials and Equipment needed:												

2. PEDAGOGICAL PRACTICE PLAN FOR THE EDUCATIONAL SUBJECT AREA:

This plan must be completed for each unit. It is a daily tool and **must** be delivered to school authorities to ensure that the course follows the annual plan. **The following template is to be used.**

Pedagogical Practice Plan

High School:			
Sector: Industrial		Program:	
Subject Area:		Grade:	Level:
Study block:		Time:	
Purpose:			

Learning Outcomes	Contents	Teaching-Learning Strategies	Values and attitudes	Performance Criteria	Time

The **learning outcomes** must be planned according to the annual plan, and must reflect horizontal concordance with the contents, teaching-learning strategies, and performance criteria.

Teaching strategies must be included, specifying methodologies and techniques to be employed, as well as practices to be carried out in line with **learning strategies** (broken down by student).

In addition to values and attitudes (**minimum one per unit**), actions that will be taken to strengthen these should be indicated in the teaching-learning strategies column.

Performance criteria will be established based on sufficient evidence defined in the study program.

**VOCATIONAL PROFILE
MID LEVEL TECHNICIAN
PRODUCTIVITY AND QUALITY**

Interpret technical information related to the specialization.

Clearly transmit technical instructions, using appropriate communication strategies.

Demonstrate ability and skill through the tasks assigned in the specialization.

Direct production processes, following instructions from technical superiors.

Propose solutions to production problems.

Elaborate and evaluate projects related to the specialization.

Demonstrate quality in your work.

Use the computer as a tool in specialization tasks.

Apply standards of occupational health.

Demonstrate professional ethics in the completion of specialization tasks.

Protect the environment, eliminating the pollution originating from production processes.

Rationally, use the material, equipment, and instruments required in the specialization.

Use appropriate technology to contribute to competitive capacity, quality and development in the country.

Demonstrate love for your country, its traditions and customs.

Promote your community's most original traditions, creating consciousness of these traditions in others.

OCCUPATIONAL PROFILE MID LEVEL TECHNICIAN PRODUCTIVITY AND QUALITY

Apply computer skills as a basic tool in your work.

Apply elements of marketing, following the philosophy of the first Quality House.

Use cost accounting quality as part of the continuous improvement of companies.

Develop processes related to productivity and competitiveness.

Apply elements of productivity measurement, in order to obtain real data about companies.

Apply statistics as a tool for the continuous improvement of companies.

Use quality tool for the continuous improvement of companies

Effectively, communicate oral and written information in English and Spanish.

Obtain data from the study of processes in order to improve productivity indicators.

Establish the cost-quality relationship, in order to find point for action in the process of continuous improvement.

Apply the tools of quality control, in order to improve productive processes.

Utilize the concept of control matrix to control waste in companies.

Apply basic concepts of team work in order to improve internal processes in companies.

Apply customer service and customer win-back techniques in the resolution of daily problems in the company.

Apply management tools for quality control and continuous improvement in companies.

Apply current standards for the food and medical industry in local companies.

Apply labor and environmental standards, following international criteria.

Use measuring instruments for quality control in productive processes.

GENERAL OBJECTIVES OF THE PROGRAM

1. Train mid-level technicians according to the standards of the current and future workplace.
2. Promote specialization values and attitudes in students of this program.
3. Foster creative and critical thinking, to prepare students for constant economic and social change in the future in this country.
4. Promote awareness of the need for quality as a key element of productivity.
5. Facilitate integration of students into a society in constant process of change in technology, processes, aptitudes, etc.
6. Develop abilities and skills needed to permit students to use quality in the implementation of specialization concepts.
7. Develop control processes for economic activities, in order to improve competitive capacity and quality.
8. Promote quality through statistical control and national and international standards, studying waste and efficient use of raw materials with a focus on environmentally sustainable development.

PROGRAM: PRODUCTIVITY AND QUALITY
CURRICULAR FRAMEWORK

SUBJECT AREA	HOURS PER GRADE		
	X	XI	XII
Business Management	4	4	-
Process Fundamentals.	4	4	-
Quality Control.	12	8	12
Quality Companies.	-	4	8
English for Communication.	4	4	4
Total	24	24	24

NOTE: Technical-area classes last 60 minutes

COURSE CONTENT
PROGRAM: PRODUCTIVITY AND QUALITY

SUBJECT AREA	TENTH		ELEVENTH		TWELFTH	
Business Management.	Business Management (CODE). Quality House. Basics of Accounting.	80 h 40 h 40 h 160h	Information and Communication Technologies. Business skills Educational Unit. Total	80 h 80 h 160 h		
Process Fundamentals.	Productivity Processes Total	80 h 80 h 160h	Process Study. Quality Costs. Total	80 h 80 h 160 h		
Control de Calidad.	Fundamentos de estadística. Principios para el control de la calidad. Total	360h 120h 480h				
Quality Control.			Statistical Tools for Quality. Waste Studies. Total	224 h 96 h 320 h	Metrology. Administrative Tools for Quality. Total	96 204 h 300h

SUBJECT						
	TENTH		ELEVENTH		TWELFTH	
Quality Companies.					Food and Medical Standardization Labor and Environmental Standardization.	120 h 80 h Total 200h
Empresas de calidad.			Equipos de trabajo. Servicio al cliente.	40 h 120 h		
			Total	160 h		

SUB-AREA	UNITS IN EACH LEVEL					
	TENTH	HOURS	ELEVENTH	HOURS	TWELFTH	HOURS
English for communication.	Building personal interaction at the company.	20 h	Safe work.	20 h	Day to day.	20 h
	Daily life activities.	20 h	Introductions in the Business activities.	20 h	Customer service.	20 h
	Working conditions and success at work.	20 h	Complaints and solving problems.	20 h	Stand for Excellence.	20 h
	Describing a company, equipment and tools.	20 h	Regulations, rules and advice.	20 h	Travel.	20 h
	Talking about plans, personal and educational goals.	20 h	Following instructions from manuals and catalogs.	40 h	Astounding Future Career.	20 h
	Communicating effectively and giving presentations.	40 h	Making telephone arrangements.	20 h		
	Raising Economic Success.	160 h	Entertaining.	20 h		
	Total		Total	160 h	Total	100 h

CURRICULAR MAP PRODUCTIVITY AND QUALITY TENTH GRADE

SUBJECT AREA	STUDY BLOCK	LEARNING OUTCOMES
Business Management. 160 hours	Business Management. (CODE) 80 hours	<ul style="list-style-type: none"> •Apply principles of small business management and decision making in basic entrepreneurial situations. •Design business goals using specific steps and taking on risk. •Develop competencies for increased entrepreneurial capacity. •Explain how people decide to start their own business. •Select business opportunities using various techniques •Use the procedures needed to organize a business. •Operate a business from an accounting perspective •Designs plans for a business start-up. •Implement a successful business plan.

SUBJECT AREA

STUDY BLOCK

LEARNING OUTCOMES

**Business
Management.
160 hours**

**House of Quality.
40 hours**

**Basics of Accounting.
40 hours**

- Use the marketing system offered by the first Quality House.

- Use basic accounting for tasks related to the Program.

SUBJECT AREA	STUDY BLOCK	LEARNING OUTCOMES
Process Fundamentals. 160 hours	Processes. 80 hours	<ul style="list-style-type: none"> • Describe the concepts, fundamentals and importance of the process. • Diagram basic processes used in the domestic productive sector. • Use indexes for measurement and organization of improvement processes.
	Productivity. 80 hours	<ul style="list-style-type: none"> • Describe the concepts and fundamentals of productivity, designed in processes of continuous improvement in companies. • Explain the importance of process productivity to final product quality. • Elaborate practical exercises, for the improvement of productive processes.

SUB-ÁREA	UNIDAD DE ESTUDIO	RESULTADOS DE APRENDIZAJE
Control de la Calidad. 480 horas	Fundamentos de estadística. 360 horas	<ul style="list-style-type: none"> • Aplicar los elementos básicos de matemática, en la obtención de datos en las empresas. • Desarrollar la estadística descriptiva y el análisis de datos como herramienta del mejoramiento continuo, en los procesos productivos. • Emplear el concepto de probabilidad en el mejoramiento de los procesos productivos de las empresas. • Utilizar la estadística no paramétrica en los procesos de mejoramiento empresarial.
	Principios para el control de la calidad. 120 horas	<ul style="list-style-type: none"> • Utilizar los principios filosóficos de control de la calidad, para la mejora de la competitividad en las empresas.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication. 160 hours	Building personal interaction at the company. 20 hours	Cognitive Target: 1 Exchanging information about: Personal interaction at the company, ways of interacting, meeting people, ethics, personal skills, cultural aspects	<ul style="list-style-type: none"> • Understanding simple familiar phrases and short statements. • Asking and responding to questions in clearly defined situations. • Reading personal information forms. • Reading a personal letter. • Writing about occupations and writing the name and address on an envelope.
	Daily life activities. 20 hours	Cognitive Target: 2 Interprets and communicates information about: daily activities at home, school and job. Daily routines	<ul style="list-style-type: none"> • Making appointments for personal business. • Describing my personal schedules. • Talking about daily routines at home, at school and at work. • Predicting the content of a story from the title. • Writing about daily routine.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 160 hours	Working conditions and success at work. 20 hours	Cognitive Target: 3 Interprets and communicates information about: someone´s job, working tasks, job positions, and responsibilities.	<ul style="list-style-type: none"> • Asking and answering about job positions and respond to job interview questions. • Describing someone´s job and uncompleted work tasks. • Reading and interpreting a job application and reading magazine articles. • Writing a paragraph describing a job I would like to have. • Filling out a job application.
	Describing company furniture, equipment and tools. 20 hours	Cognitive Target: 4 Interprets and communicates information about: company furniture, equipment and tools.	<ul style="list-style-type: none"> • Asking for and give information on companies and products, furniture. • Communicating messages with little or no difficulty about equipment and tools. • Reading and interpreting companies' descriptions. • Writing lists of equipment and tools from different companies.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 160 hours	Talking about plans, personal and educational goals. 20 hours	Cognitive Target: 5 Exchanging information about: leisure activities, holidays and special occasions. Planning educational and personal goals.	<ul style="list-style-type: none"> • Talking about holiday celebrations. And leisure activities. • Describing the steps to fill out different types of forms by doing college enrolment. • Reading news and articles about people's plans. • Describing possible weekend activities.
	Communicating effectively and giving presentations. 20 hours	Cognitive Target: 6 Interprets and communicates information about: daily activities at home, school and job. Daily routines.	<ul style="list-style-type: none"> • Solving problems by phone and making telephone arrangements. • Describing what makes a good communicator. • Evaluating the effects of stress factors and gets advice on presenting. • Describing the facts that affect the success of a presentation.

SUB-ÁREA

UNITS

TARGET

LINGUISTIC ACHIEVEMENT

English for
communication
160 hours

Raising economic success.
40 hours

Cognitive Target: 7
Using appropriate language
for comparing goods,
discussing advertisements,
describing products and your
preferences.

- Discussing about advertisements from different means of communication.
- Comparing goods and services and explaining the reasons why I like a product.
- Describing product characteristics by contrasting and comparing different goods or services.
- Expanding reading skills by reading job ads from newspaper or magazines and reading formal letters of complaint.
- Writing a formal letter of complaint, completing a product comparison chart and writing an advertisement.

CURRICULAR MAP PRODUCTIVITY AND QUALITY ELEVENTH GRADE

SUBJECT AREA

**Business
Management.
160 hours**

STUDY BLOCK

**Information and
Communication
Technologies.
80 hours**

LEARNING OUTCOMES

- Use technological tools for the administration of diverse resources
- Use a word processor, presentation application, and electronic spreadsheet for program tasks.
- Use Internet-related applications and related services to search for and access information.

SUBJECT AREA

STUDY BLOCK

LEARNING OUTCOMES

**Business
Management.
160 hours**

**Business Skills
Educational Unit.
80 hours**

- Identify the organizational and functional structure of the Labor@ classroom.
- Foster work and educational experiences in a Labor@ practice company.
- Carry out tasks in practice companies through Labor@ classrooms.

SUBJECT AREA	STUDY BLOCK	LEARNING OUTCOMES
Process Fundamentals. 160 hours	Process Study. 80 hours	<ul style="list-style-type: none"> • Apply elements of process and measurement to improve the competitive capacity of companies. • Use productivity indicators in order to improve the competitive capacity of companies.
	Quality Costs. 80 hours	<ul style="list-style-type: none"> • Identify the cost of quality in the improvement process. • Develop quality cost methodology grounded in the reality of modern companies.

SUBJECT AREA

STUDY BLOCK

LEARNING OUTCOMES

**Quality Control.
320 hours**

**Quality Control.
224 hours**

- Apply quality control tools in processes of continuous improvement in companies.
- Use quality control tools in local companies' productive processes.

**Waste Studies.
96 hours**

- Carry out waste analyses in companies, as part of processes of continuing improvement.
- Implement matrices and tools for waste control in companies.

SUB-ÁREA	UNIDAD DE ESTUDIO	RESULTADOS DE APRENDIZAJE
Empresas de calidad. 160 horas	Equipos de trabajo. 40 horas	<ul style="list-style-type: none"> • Determinar la importancia de los equipos de trabajo en los procesos de la calidad, con relación al mejoramiento continuo. • Demostrar el funcionamiento correcto de los equipos de trabajo efectivo, en la empresa y sus acciones positivas en el proceso.
	Atención al cliente. 120 horas	<ul style="list-style-type: none"> • Desarrollar los elementos básicos del servicio al cliente, utilizadas por las empresas. • Aplicar aspectos relacionados con el manejo de casos y la recuperación de clientes, para empresas. • Utilizar protocolos en las relaciones públicas de las empresas, para el mejoramiento del servicio al cliente.

ENGLISH FOR COMMUNICATION

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 160 Hours	Safe work 20 hours	Cognitive Target: 1 Exchanging information about: safe and unsafe driving, accidents and job benefits	<ul style="list-style-type: none"> • Giving reasons for being late at work, school or meeting. • Identifying different signs and prevention procedures. • Describing consequences of accidents and prevention procedures at work. • Identifying special clothes and equipment used at work. • Scanning for specific information related to safety at work. • Reading stories about accidents at work and prevention measures. • Describing the advantages of working in a company.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication. 160 hours	<p>Introductions in the Business activities.</p> <p>20 hours</p>	<p>Cognitive Target: 2</p> <p>Interprets and communicates information about: Business activities.</p>	<ul style="list-style-type: none"> • Comparing the increasing profitability of department stores in our country. • Discussing conditions for starting a new business in public and private sector companies. • Making predictions about products or services of the future. • Reading about the development of industries. • Providing advice for people who are starting a new business by writing a letter.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 160 hours	<p>Regulations, rules and advice.</p> <p>20 hours</p>	<p>Cognitive Target: 3</p> <p>Interprets and communicates information about: workplace rules and following them.</p>	<ul style="list-style-type: none"> • Discussing situations when foreign business people make a “cultural mistake.” • Talking to a manager about not following rules by performing a conversation. • Comparing companies regulations and giving advice. • Learning about dress code in my country to put it into practice at school or work. • Writing employee dress-code rules to be applied in a company.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 160 hours	Complaints and solving problems. 20 hours	Cognitive Target: 4 Exchanging information about: making complaints, apologizing and solving problems.	<ul style="list-style-type: none"> • Learning how to deal with a complaint by voice mail and automated telephone information. • Apologizing when it is required. • Solving problems at the office. • Dealing with problems, clients complains and giving apologizes. • Comprehending the usage of items in a first-aid kit. • Writing about solutions to a problem at work or school.

SUB-ÁREA

UNITS

TARGET

LINGUISTIC ACHIEVEMENT

English for
communication
160 hours

Following instructions from
manuals and catalogs.

40 hours

Cognitive Target: 5
Interprets and communicates
information about: technical
vocabulary related to manuals
and catalogues instructions.

- Understanding or using appropriate language for informational purposes.
- Comparing equipment used in a job taken from different catalogues.
- Identifying different equipment and components in catalogues used in a specific field of study.
- Interpreting written instructions from a technical manual in a specific field of study.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 160 hours	Making telephone arrangements. 20 hours	Cognitive Target: 6 Exchanging information about: telephone calls and arrangements.	<ul style="list-style-type: none"> • Exchanging information in telephone conversations. • Expressing fluently to leave and take a message. • Making an appointment by telephone. • Comparing the different ways of communication people use in one culture such as expressions or gestures that people from another culture might not understand. • Writing a paragraph about how culture affects business life.

SUB-ÁREA

UNITS

TARGET

LINGUISTIC ACHIEVEMENT

English for
communication
160 hours

Entertainment

20 hours

Cognitive Target: 7
Demonstrate ability to work
cooperatively with others.

- Entertaining guests and promotes leisure activities.
- Listening to information about TV schedule.
- Discussing about corporate entertaining.
- Reading a journal about a trip on magazine descriptions.
- Organizing a conference at another country including a variety of aspects.

CURRICULAR MAP PRODUCTIVITY AND QUALITY TWELFTH GRADE

SUBJECT AREA

STUDY BLOCK

LEARNING OUTCOMES

**Quality Control.
300 hours**

**Metrology
96 hours**

- Carry out measurements relevant to given processes, in order to guarantee data reliability.

**Quality Management Tools.
204 hours**

- Develop quality management tools, as instruments for company improvement.
- Exemplify each quality tool, applied to real situations in local and international companies. .

SUBJECT AREA	STUDY BLOCK	LEARNING OUTCOMES
Quality Companies. 200 hours	Food and Medical Standardization 120 hours	<ul style="list-style-type: none"> • Determine the importance of food and medical standardization for domestic and international companies. • Apply food and medical standards in a local company.
	Labor and Environmental Standardization. 80 hours	<ul style="list-style-type: none"> • Develop labor and environmental codes and standards in companies that prioritize social and environmental responsibility. • Implement required steps for compliance with environmental and labor codes and standards in local businesses.

CURRICULAR MAP ENGLISH FOR COMMUNICATION TWELFTH LEVEL

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 100 hours	Day to Day Work. 20 hours	Cognitive Target: 1 Exchanging information about: day to day work.	<ul style="list-style-type: none"> • Asking and giving information about working routines. • Describing times and conditions of my job and daily routines. • Expressing likes and dislikes in my daily life. • Reading an advertisement about a new product. • Writing a plan to improve safety in your home.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 100 hours	Customer service. 20 hours	Cognitive Target: 2 Interprets and communicates information about: customer service.	<ul style="list-style-type: none"> • Understanding specifications about the elements of effective telephone communications. • Applying techniques to improve effectiveness as a listener. • Defining the importance of proper telephone techniques in providing excellent service to customers • Understanding details from texts, passages and others. • Stating the importance of attitude and creativity in providing high quality customer service.

SUB-ÁREA

UNITS

TARGET

LINGUISTIC ACHIEVEMENT

English for
communication
100 hours

Stand for excellence.

20 hours

Cognitive Target: 3

Exchanging information about:
The ability to work
cooperatively with others as a
member of a team.

- Listening to a conversation between an employer and an employee and between coworkers.
- Expressing encouragement when talking about programs and courses.
- Reading and discussing about job skills.
- Organizing information regarding options between job benefits and personal qualities

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 100 hours	Travel. 20 hours	Cognitive Target: 4 Interprets and communicates information about travelling.	<ul style="list-style-type: none"> • Listening to statements about a map in order to get to any specific place. • Explaining leisure and entertainment possibilities to a visitor. • Discussing about weather concerns when travelling. • Reading maps from other countries to find out cities and places. • Reading about environmental issues to take into account when visiting a foreign country. • Revising a business plan to propose an international company. • Developing writing skills making, accepting or declining an offer.

SUB-ÁREA	UNITS	TARGET	LINGUISTIC ACHIEVEMENT
English for communication 100 hours	Astounding Future Career. 20 hours	Cognitive Target: 5 Interprets and communicates information about: applying or transferring skills learned in one job situation to another.	<ul style="list-style-type: none"> • Listening to a discussion between two managers. • Discussing community problems and solutions by interviewing classmates. • Talking about life in a city and contrasting it with life in the country side. • Comparing and contrasting the lives and goals of people regarding working conditions. • Developing consciousness about my skills, achievements and awards. • Organizing ideas to design an improvement plan to change in life.

**PROGRAM CONTENT
TWELFTH GRADE**

QUALITY CONTROL

The **Quality Control** subject Sector includes the following study blocks: Metrology, Quality Management Tools. Each has been designed to help students construct learning experiences from general aspects to specific, as they view their country from a macroeconomic perspective that allows them to interpret changes and relate these changes to daily work. The teaching and learning process is structured to allow subject knowledge to be conveyed through general information that is at the same time highly technical in nature. In addition, students will develop critical thinking skills, look for solutions, and be creative in their proposals.

Activities related to quality develop quickly in our country, and information is readily available. Ongoing research by the teacher is recommended, however, a real contact with the subject matter, and no content should be omitted.

The facilitative function of each teacher focus on the structuring of a process that takes into account student needs as well as available resources. The inclusion of values in the program content is key to lesson planning feedback, and quality as a concept must be presented as an integral element of society. A balance must be sought between theory and practice, so field practice is required, within the existing guidelines for the teacher

Therefore:

The **Quality Control subject** Sector, at 12 hours per week, is comprised of two study blocks:

Metrology: Includes the study, maintenance and use of the standard system of weights and measures. Learning acquired in this study block is relevant in any sector of society, such as science, industry, and law. The main objective of this unit is the understanding of the concept of sizes and the ability to express this concept in the work place, guaranteeing the traceability of processes and the achievement of required precision in all cases. The necessary instruments, methods and means will be employed.

Quality Management Tools: Students will apply quality management tools in the local context of domestic and international companies. In this way, students will understand improvement processes from the perspective of business reality, understanding processes and creating documentation for later use as a professional.

DISTRIBUTION OF STUDY BLOCKS

QUALITY CONTROL

Study Block	Name	Time in hours	Time in weeks
I.	Metrology.	96	8
II.	Quality Management Tools.	204	17
	TOTAL	300	25

METROLOGY

OBJECTIVE

1. Use measuring instruments as part of continuous improvement in productive processes.

TECHNICAL STANDARD FOR EDUCATIONAL INSTITUTION

Title: **Metrology.**

Objective: Use metrology instruments similar to those found in companies.

Competence Level: Basic.

JOB COMPETENCY UNITS THAT COMPRISE THE STANDARD

Title	Classification
Correctly, names the international system of weights and measures.	Specific
Clearly, recognizes concepts and best practices related to metrology.	Specific
Correctly, explains the design and use of instruments used in metrology.	Specific
Uses measuring instruments with precision.	Specific
Correctly, carries out conversions among various measurement systems.	Specific

ELEMENTS OF COMPETENCE

Reference	Element Title
1-1	Carry out measurements with various instruments following relevant standards.

PERFORMANCE CRITERIA

- Carries out measurements relevant to given processes, in order to guarantee data reliability.

FIELD OF APPLICATION

Category	Class
Services	Technical Education Teaching Services

KNOWLEDGE EVIDENCE

Names the international system of weights and measures.

PERFORMANCE EVIDENCE

Recognizes concepts and best practices related to metrology.
Explains the design and use of instruments used in metrology.

PRODUCT EVIDENCE

Uses measuring instruments with precision.
Carries out conversions among various measurement systems

Sector: **INDUSTRIAL.**

Program: Productivity and Quality.

Subject Sector: **Quality Control.**

Grade: Twelfth.

Study Block: **Metrology.**

Time: 96 hours.

Purpose: Use metrology instruments commonly encountered in companies.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Carry out measurements relevant to given processes, in order to guarantee data reliability.	<p>International system of weights and measures.</p> <p>Conversions.</p> <p>Definition of:</p> <ul style="list-style-type: none"> • Metrology. • Measurement. • Measure. • Verification. <p>Best practices in metrology.</p> <p>Instruments for measuring:</p> <ul style="list-style-type: none"> • Longitude. • Mass. • Temperature. • Pressure. • Density. 	<p><u>The Teacher</u></p> <ul style="list-style-type: none"> • Cites the international system of weights and measures. • Explains concepts and best practices related to metrology. • Describes the parts and functions of instruments used in metrology. • Shows how to Use measuring instruments with precision. 	<p>Honesty is required for the development of human relationships in an environment of trust and harmony, as it guarantees reliability, security and credibility in people.</p>	<ul style="list-style-type: none"> • Carries out measurements relevant to given processes, in order to guarantee data reliability.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	<ul style="list-style-type: none"> • Flow. • Sound. • Luminosity. 	<ul style="list-style-type: none"> • Carries out conversions among various measurement systems. <p><u>The Student:</u></p> <ul style="list-style-type: none"> • Names the international system of weights and measures. • Recognizes concepts and best practices related to metrology. • Explains the design and use of instruments used in metrology. • Uses measuring instruments with precision. • Carries out conversions among various measurement systems. 		

PRACTICES AND ASSESSMENT RUBRIC

PRACTICE REPORT

STUDY UNIT:	PRACTICE No. 1
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PURPOSE: Metrology.

SCENARIO:	TIME:
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MATERIALS	MACHINERY	EQUIPMENT	TOOLS

PROCEDURES

- Cites the international system of weights and measures.
- Explains concepts and best practices related to metrology.
- Describes the parts and functions of instruments used in metrology.
- Shows how to use measuring instruments with precision.
- Carries out conversions among various measurement systems

SUGGESTED ASSESSMENT RUBRIC	DATE:
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STUDENT NAME:

<p>Instructions:</p> <p>The following criteria will be verified in the performance of each student through observation.</p> <p>From the following list, mark with an 'X' in the column that corresponds to the performance of the student.</p>
--

PERFORMANCE	YES	NOT YET	DOES NOT APPLY
Correctly, names the international system of weights and measures.			
Clearly, recognizes concepts and best practices related to metrology.			
Correctly, explains the design and use of instruments used in metrology.			
Uses measuring instruments with precision.			
Correctly, carries out conversions among various measurement systems.			

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	INDICATORS	TYPE	SUFFICIENCY OF EVIDENCE
Carry out measurements relevant to given processes, in order to guarantee data reliability.	Carry out measurements relevant to given processes, in order to guarantee data reliability.	Names the international system of weights and measures.	Knowledge	Correctly, names the international system of weights and measures.
		Recognizes concepts and best practices related to metrology.	Performance	Clearly, recognizes concepts and best practices related to metrology.
		Correctly, explains the design and use of instruments used in metrology.	Performance	Correctly, explains the design and use of instruments used in metrology.
		Uses measuring instruments with precision.	Product	Uses measuring instruments with precision.
		Correctly, carries out conversions among various measurement systems.	Product	Correctly, carries out conversions among various measurement systems.

QUALITY MANAGEMENT TOOLS

OBJECTIVES

1. Use available administrative tools for quality control.
2. Use quality management tools for continuous improvement in companies.
3. Produce documents using quality management tools.

TECHNICAL STANDARD FOR EDUCATIONAL INSTITUTION

GENERAL INFORMATION.

TITLE: Quality Management Tools.

PURPOSE: Apply management tools for quality control and continuous improvement in companies.

Competence Level: Basic.

JOB COMPETENCY UNITS THAT COMPRISE THE STANDARD

TITLE	CLASSIFICATION
Correctly, cites the basic management tools used for quality control.	Specific
Accurately, differentiates among the basic elements that comprise the tools used for quality management.	Specific
Thoroughly, discusses quality control tools, using practical examples.	Specific
Correctly, cites examples of management tools applied to quality.	Specific
Clearly, describes processes related to the use of quality management tools.	Specific
Correctly, practices examples of the use of quality management tools.	Specific

ELEMENTS OF COMPETENCE

REFERENCE	ELEMENT TITLE:
1-2	Use quality management tools, following international standards.

PERFORMANCE CRITERIA:

- Discusses quality management tools, as instruments for company improvement.
- Exemplifies each quality tool, applied to real situations in local and international companies.

FIELD OF APPLICATION:

CATEGORY:	CLASS
SERVICES:	Technical Education Teaching Services

PERFORMANCE EVIDENCE:

Differentiates the basic elements that comprise the tools used for quality management.
Describes processes related to the use of quality management tools.

PRODUCT EVIDENCE:

Discusses quality control tools, using practical examples.
Practices examples of the use of quality management tools.

KNOWLEDGE EVIDENCE:

Cites the basic management tools used for quality control.
Cites examples of management tools applied to quality.

Sector: Industrial.

Program: Productivity and Quality.

Subject Area: **Statistical Quality Monitoring.**

Grade: Twelfth.

Study block: **Quality Management Tools.**

Time: 204 hours.

Purpose: Apply management tools for quality control and continuous improvement in companies.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Develop quality management tools, as instruments for company improvement.	<p>Basic elements of each tool.</p> <p>Functions of the tools used.</p> <ul style="list-style-type: none"> • Dispersion Diagram. • Cause and effect Diagram. • Affinity Diagram. • Tree diagram. • Relationship Diagram. • Brainstorm. • Verification List. • Others. 	<p><u>The Teacher:</u></p> <ul style="list-style-type: none"> • Enumerates the basic management tools used for quality control. • Offers details on the basic elements that comprise the tools used for quality management. • Utilizes quality control tools, using practical examples. 	<ul style="list-style-type: none"> • Possess a clear notion of the fundamental rights of people. 	Develop quality management tools, as instruments for company improvement.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
		<u>The Student:</u> <ul style="list-style-type: none"> • Cites the basic management tools used for quality control. • Differentiates the basic elements that comprise the tools used for quality management. • Discusses quality control tools, using practical examples. 		

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Exemplify each quality tool, applied to real situations in local and international companies.	<ul style="list-style-type: none"> Quality Management Tools. 	<p><u>The Teacher:</u></p> <ul style="list-style-type: none"> Names characteristics of quality management tools. Describes processes related to the use of quality management tools. Plans examples of the use of quality management tools. 		<ul style="list-style-type: none"> Exemplifies each quality tool, applied to real situations in local and international companies.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
		<p><u>The Student:</u></p> <ul style="list-style-type: none"> • Cites examples of management tools applied to quality. • Relates processes related to the use of quality management tools. • Practices examples of the use of quality management tools. 		

PRACTICES AND ASSESSMENT RUBRIC

PRACTICE REPORT

STUDY UNIT:	PRACTICE No. 1
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PURPOSE: Quality Management Tools.

SCENARIO:	TIME:
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MATERIALS	MACHINERY	EQUIPMENT	TOOLS

PROCEDURES

- Enumerates the basic management tools used for quality control.
- Offers details on the basic elements that comprise the tools used for quality management.
- Uses quality control tools, showing practical examples.
- Names characteristics of quality management tools.
- Describes processes related to the use of quality management tools.
- Plans examples of the use of quality management tools.

SUGGESTED ASSESSMENT RUBRIC	DATE:
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STUDENT NAME:

<p>Instructions:</p> <p>The following criteria will be verified in the performance of each student through observation.</p> <p>From the following list, mark with an 'X' in the column that corresponds to the performance of the student.</p>
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PERFORMANCE	YES	NOT YET	DOES NOT APPLY
Correctly, cites the basic management tools used for quality control.			
Accurately, differentiates among the basic elements that comprise the tools used for quality management.			
Thoroughly, discusses quality control tools, using practical examples.			
Correctly, cites examples of management tools applied to quality.			
Clearly, describes processes related to the use of quality management tools.			
Competently, demonstrates examples of the use of quality management tools.			

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	INDICATORS	TYPE	SUFFICIENCY OF EVIDENCE
Discuss quality management tools, as instruments for company improvement.	Discuss quality management tools, as instruments for company improvement.	Cites the basic management tools used for quality control.	Knowledge	Correctly, cites the basic management tools used for quality control.
		Differentiates the basic elements that comprise the tools used for quality management.	Performance	Accurately, differentiates among the basic elements that comprise the tools used for quality management.
		Discusses quality control tools, using practical examples.	Product	Thoroughly, discusses quality control tools, using practical examples.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	INDICATORS	TYPE	SUFFICIENCY OF EVIDENCE
Exemplify each quality tool, applied to real situations in local and international companies.	Exemplify each quality tool, applied to real situations in local and international companies.	Cites examples of management tools applied to quality.	Knowledge	Correctly, cites examples of management tools applied to quality.
		Describes processes related to the use of quality management tools.	Performance	Clearly, describes processes related to the use of quality management tools.
		Demonstrates examples of the use of quality management tools.	Product	Competently, demonstrates examples of the use of quality management tools.

DESCRIPTION

QUALITY COMPANIES

The **Quality Companies** subject includes the following study blocks: **Food and Medical Standardization, Labor and Environment Standardization**. Each has been designed to help students construct learning experiences from general aspects to specific, as they view their country from a macroeconomic perspective that allows them to interpret changes and relate these changes to daily work. The teaching and learning process is structured to allow subject knowledge to be conveyed through general information that is at the same time highly technical in nature. In addition, students will develop critical thinking skills, look for solutions, and be creative in their proposals.

Activities related to quality develop quickly in our country, and information is readily available. Ongoing research by the teacher is recommended direct contact with the subject matter, and no content should be omitted.

The facilitative function of each teacher focus on the structuring of a process that takes into account student needs as well as available resources. The inclusion of values in the program content is key to lesson planning feedback, and quality as a concept must be presented as an integral element of society. A balance must be sought between theory and practice, so field practice is required, within the existing guidelines for the teacher.

Therefore:

The **Quality Companies** subject, at 8 hours per week, is composed of the following study blocks:

Food and Medical Standardization: This study block, as others, encourages analysis of international and domestic standards, applicable to all companies within the food and medical industry supply chain, allowing the design and implementation of food safety management systems that are effective regardless of type, size or product. This will lead to satisfaction with the product, assuring that it fulfills the customers' expectations, market inspection requirements and certification standards.

Labor and Environmental Standardization: This study block fosters an adequate work environment, with fair working conditions, in which workers may work with dignity and, when possible, participate in the improvement of their own health and safety conditions. In addition, environmental responsibility is covered; for example, the ISO 14000 standards are cited as appropriate for any organization, of any size or sector that may wish to reduce environmental impacts and comply with environmental legislation.

DISTRIBUTION OF STUDY BLOCK PROCESS FUNDAMENTALS

Study Block	Name	Time in Hours	Time in Weeks
I	Food and Medical Standardization.	120	15
II	Labor and Environment Standardization.	80	10
	Total	200	25

TECHNICAL STANDARD FOR EDUCATIONAL INSTITUTION

Title: **Food and Medical Standardization**

Purpose: Apply current standards of the Sector food industry and production.

LEVEL OF COMPETENCY: Basic.

JOB COMPETENCY UNITS THAT COMPRISE THE STANDARD

Title	Classification
Correctly, enumerates the general concepts and importance of food and medical standardization in local and international markets.	Specific
Correctly, explains the main landmarks in a company's compliance with food and medical standards.	Specific
Correctly, uses domestic and international standards and the related approaches, requirements and processes.	Specific
Correctly, cites current domestic and international food and medical standards.	Specific
Correctly, interprets the procedures for implementation in companies of current food and medical standards.	Specific
Effectively, discusses current food and medical standards in local companies.	Specific

ELEMENTS OF COMPETENCE

Reference	Element Title
2-1	Recognize current international food and medical standards.

PERFORMANCE CRITERIA

- Determines the importance of food and medical standardization for companies in the local and international market.
- Applies food and medical standards in a local company.

FIELD OF APPLICATION

Category	Class
Services	Technical Education Teaching Services

KNOWLEDGE EVIDENCE

Enumerates the general concepts and importance of food and medical standardization in local and international markets.
Cites current domestic and international food and medical standards.

PERFORMANCE EVIDENCE

Explains the main landmarks in a company's compliance with food and medical standards.
Interprets the procedures for implementation in companies of current food and medical standards.

PRODUCT EVIDENCE

Uses domestic and international standards and the related approaches, requirements and processes.
Discusses current food and medical standards in local companies.

Sector: **INDUSTRIAL.**

Program: Productivity and Quality.

Subject Area: **Quality Companies.**

Grade: Twelfth.

Study Block: **Food and Medical Standardization.**

Time: 120 hours.

Purpose: Apply current standard of the Sector food industry and production.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
<ul style="list-style-type: none"> 1. Determine the importance of food and medical standardization for domestic and international companies. 	<p>General Concepts:</p> <ul style="list-style-type: none"> Standard. Origin. What good is a standard? Current International Medical and Food Standards. Standards for USA and Europe. 	<p><u>The Teacher:</u></p> <ul style="list-style-type: none"> Cites general concepts and determines importance of food and medical standardization in local /international markets. Describes the main landmarks in a company's compliance with food and medical standards. Determines domestic and international standards and the related approaches, requirements and processes. 	<ul style="list-style-type: none"> Understanding that the differences that exist among people are not a barrier to productive coexistence. 	<ul style="list-style-type: none"> Determines the importance of food and medical standardization for companies in the local and international market.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	<ul style="list-style-type: none"> • Main milestones in standards compliance. • The INTE- ISO 9001 standard. • Process focus. • Requisites. • Management Process. • Resource Assignment Process. • Production Process. • Processes of Measurement, Analysis, and Improvement. 	<p><u>The Student:</u></p> <ul style="list-style-type: none"> • Enumerates the general concepts and importance of food and medical standardization in local and international markets. • Explains the main landmarks in a company's compliance with food and medical standards. • Uses domestic and international standards and the related approaches, requirements and processes. 		

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Apply food and medical standards in a local company.	<ul style="list-style-type: none"> Current Domestic and International Standards. 	<p><u>The Teacher:</u></p> <ul style="list-style-type: none"> Recognizes current domestic and international food and medical standards. Describes the procedures for implementation in companies of current food and medical standards. Applies current food and medical standards in local companies. 		<ul style="list-style-type: none"> Applies food and medical standards in a local company.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
		<p><u>The Student:</u></p> <ul style="list-style-type: none"> • Cites current domestic and international food and medical standards. • Interprets the procedures for implementation in companies of current food and medical standards. • Discusses current food and medical standards in local companies. 		

PRACTICES AND ASSESSMENT RUBRIC

PRACTICE REPORT

STUDY UNIT: Food and Medical Standardization.	PRACTICE No. 1
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PURPOSE:

SCENARIO:	TIME:
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MATERIALS	MACHINERY	EQUIPMENT	TOOLS

PROCEDURES

- Cites the general concepts and importance of food and medical standardization in local and international markets.
- Describes the main landmarks in a company's compliance with food and medical standards.
- Determines domestic and international standards and the related approaches, requirements and processes.
Recognizes current domestic and international food and medical standards.
- Describes the procedures for implementation in companies of current food and medical standards.
- Applies current food and medical standards in local companies.

SUGGESTED ASSESSMENT RUBRIC	DATE:
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STUDENT NAME:

Instructions:
The following criteria will be verified in the performance of each student through observation.
From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

PERFORMANCE	YES	NOT YET	DOES NOT APPLY
Correctly, enumerates the general concepts and importance of food and medical standardization in local and international markets.			
Correctly, explains the main landmarks in a company's compliance with food and medical standards.			
Correctly, uses domestic and international standards and the related approaches, requirements and processes.			
Correctly, cites current domestic and international food and medical standards.			
Correctly, interprets the procedures for implementation in companies of current food and medical standards.			
Effectively, discusses current food and medical standards in local companies.			

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	INDICATORS	TYPE	SUFFICIENCY OF EVIDENCE
Determine the importance of food and medical standardization for companies in the local and international market.	Determine the importance of food and medical standardization for companies in the local and international market.	Enumerates the general concepts and importance of food and medical standardization in local and international markets.	Knowledge	Correctly, enumerates the general concepts and importance of food and medical standardization in local and international markets.
		Explains the main landmarks in a company's compliance with food and medical standards.	Performance	Correctly, explains the main landmarks in a company's compliance with food and medical standards.
		Uses domestic and international standards and the related approaches, requirements and processes.	Product	Correctly, uses domestic and international standards and the related approaches, requirements and processes.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	INDICATORS	TYPE	SUFFICIENCY OF EVIDENCE
Apply food and medical standards in a local company.	Apply food and medical standards in a local company.	Cites current domestic and international food and medical standards.	Knowledge	Correctly, cites current domestic and international food and medical standards.
		Interprets the procedures for implementation in companies of current food and medical standards.	Performance	Correctly, interprets the procedures for implementation in companies of current food and medical standards.
		Discusses current food and medical standards in local companies.	Product	Effectively, discusses current food and medical standards in local companies.

LABOR AND ENVIRONMENTAL STANDARDIZATION

OBJECTIVES

1. Discuss labor and environmental standards in companies that prioritize social and environmental responsibility.
2. Determine best practices in the Sectors of labor and the environment, following international standards.

TECHNICAL STANDARD FOR EDUCATIONAL INSTITUTION

Title: **Labor and Environmental Standardization.**

Purpose: Apply labor and environmental standards, following international standards.

LEVEL OF COMPETENCY: Basic.

JOB COMPETENCY UNITS THAT COMPRISE THE STANDARD

Title	Classification
Effectively, defines labor and environmental standards in companies that prioritize social and environmental responsibility.	Specific
Correctly, interprets the requirements and actions needed for compliance with labor and environmental standards in companies.	Specific
Correctly, applies labor and environmental standards in companies.	Specific
Correctly, enumerates the local companies that are in compliance with labor and environmental standards.	Specific
Correctly, interprets the main landmarks in compliance with food and medical standards of the local companies studied in this unit.	Specific
Effectively, elaborates control matrices for labor and environmental standards in local companies.	Specific

ELEMENTS OF COMPETENCE

Reference	Element Title
2-3	Recognize the best practices in the Sectors of labor and the environment, following international standards.

PERFORMANCE CRITERIA

- Discusses labor and environmental codes and standards in companies that prioritize social and environmental responsibility.
- Implements required steps for compliance with environmental and labor codes and standards in local businesses.

FIELD OF APPLICATION

Category	Class
Services	Technical Education Teaching Services

KNOWLEDGE EVIDENCE

Defines labor and environmental standards in companies that prioritize social and environmental responsibility.
Enumerates the local companies that are in compliance with labor and environmental standards.

PERFORMANCE EVIDENCE

Interprets the requirements and actions needed for compliance with labor and environmental standards in companies.
Interprets the main landmarks in compliance with food and medical standards for the local companies studied in this unit.

PRODUCT EVIDENCE

Applies labor and environmental standards in companies.
Elaborates control matrices for labor and environmental standards in local companies.

Sector: **INDUSTRIAL.**

Program: Productivity and Quality.

Subject Area: **Quality Culture.**

Grade: Twelfth.

Study Block: **Labor and Environmental Standardization.** Time: 40 hours.

Purpose: Apply labor and environmental standards, following international standards.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
1. Develop labor and environmental codes and standards in companies that prioritize social and environmental responsibility.	<p>General Concepts:</p> <p>INTECO 18001 standard:</p> <ul style="list-style-type: none"> • Requirements. • Interpreting the requisites. • Standards de SGRL. • Current International SGRL Standards. 	<p><u>The Teacher:</u></p> <ul style="list-style-type: none"> • Enumerates labor and environmental standards in companies that prioritize social and environmental responsibility. • Describes the requirements and actions needed for compliance with labor and environmental standards in companies. • Demonstrates the application of labor and environmental standards in 	<ul style="list-style-type: none"> • Support others in humanitarian situations. 	<ul style="list-style-type: none"> • Develops labor and environmental codes and standards in companies that prioritize social and environmental responsibility.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
	<p>General Concepts:</p> <ul style="list-style-type: none"> • Environmental Concepts. • ISO – 14001. • Environmental Audit. • Auditor Competencies. • Audits – step by step. • Beginning of the Audit. • Preparation and execution of the Audit. 	<p>companies.</p> <p><u>The Student:</u></p> <ul style="list-style-type: none"> • Defines labor and environmental standards in companies that prioritize social and environmental responsibility. • Interprets the requirements and actions needed for compliance with labor and environmental standards in companies. • Applies labor and environmental standards in companies. 		

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
2. Implement required steps for compliance with environmental and labor codes and standards in local businesses.	<ul style="list-style-type: none"> Current environmental and labor codes and standards. 	<p><u>The Teacher:</u></p> <ul style="list-style-type: none"> Cites the local companies that are in compliance with labor and environmental standards. Relates the main landmarks in compliance with food and medical standards for the local companies studied in this unit. Elaborates control matrices for labor and environmental standards in local companies. 		<ul style="list-style-type: none"> Implements required steps for compliance with environmental and labor codes and standards in local businesses.

LEARNING OUTCOMES	CONTENTS	LEARNING / TEACHING STRATEGIES	VALUES AND ATTITUDES	PERFORMANCE CRITERIA
		<p><u>The Student:</u></p> <ul style="list-style-type: none"> • Enumerates the local companies that are in compliance with labor and environmental standards. • Interprets the main landmarks in compliance with food and medical standards for the local companies studied in this unit. • Elaborates control matrices for labor and environmental standards in local companies. 		

PRACTICES AND ASSESSMENT RUBRIC

PRACTICE REPORT

STUDY UNIT: Labor and Environment Standardization.
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PRACTICE No. 1

PURPOSE:

SCENARIO:

TIME:

MATERIALS	MACHINERY	EQUIPMENT	TOOLS

PROCEDURES

- Enumerates labor and environmental standards in companies that prioritize social and environmental responsibility.
- Describes the requirements and actions needed for compliance with labor and environmental standards in companies.
- Demonstrates the application of labor and environmental standards in companies.
- Cites the local companies that are in compliance with labor and environmental standards.
- Relates the main landmarks in compliance with food and medical standards for the local companies studied in this unit.
- Elaborates control matrices for labor and environmental standards in local companies.

SUGGESTED ASSESSMENT RUBRIC	DATE:
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NAME OF THE STUDENT

Instructions:
The following criteria will be verified in the performance of each student through observation.
From the following list, mark with an 'X' in the column that corresponds to the performance of the student.

PERFORMANCE	YES	NOT YET	DOES NOT APPLY
Effectively, defines labor and environmental standards in companies that prioritize social and environmental responsibility.			
Correctly, interprets the requirements and actions needed for compliance with labor and environmental standards in companies.			
Correctly, applies labor and environmental standards in companies.			
Correctly, enumerates the local companies that are in compliance with labor and environmental standards.			
Correctly, interprets the main landmarks in compliance with food and medical standards for the local companies studied in this unit.			
Effectively, elaborates control matrices for labor and environmental standards in local companies.			

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	INDICATORS	TYPE	SUFFICIENCY OF EVIDENCE
Discuss labor and environmental codes and standards in companies that prioritize social and environmental responsibility.	Discuss labor and environmental codes and standards in companies that prioritize social and environmental responsibility.	Defines labor and environmental standards in companies that prioritize social and environmental responsibility.	Knowledge	Effectively, defines labor and environmental standards in companies that prioritize social and environmental responsibility.
		Interprets the requirements and actions needed for compliance with labor and environmental standards in companies.	Performance	Correctly, interprets the requirements and actions needed for compliance with labor and environmental standards in companies.
		Applies labor and environmental standards in companies.	Product	Correctly, applies labor and environmental standards in companies.

CRITERIA FOR ASSESSMENT OF COMPETENCIES

LEARNING OUTCOMES	PERFORMANCE CRITERIA	INDICATORS	TYPE	SUFFICIENCY OF EVIDENCE
Implement required steps for compliance with environmental and labor codes and standards in local businesses.	Implement required steps for compliance with environmental and labor codes and standards in local businesses.	Enumerates the local companies that are in compliance with labor and environmental standards.	Knowledge	Correctly, enumerates the local companies that are in compliance with labor and environmental standards.
		Interprets the main landmarks in compliance with food and medical standards for the local companies studied in this unit.	Performance	Correctly, interprets the main landmarks in compliance with food and medical standards for the local companies studied in this unit.
		Elaborates control matrices for labor and environmental standards in local companies.	Product	Effectively, elaborates control matrices for labor and environmental standards in local companies.

SUB – ÁREA: ENGLISH FOR COMMUNICATION

TWELFTH LEVEL



English classes have given me confidence in the four skills, no matter what profession I choose!

DISTRIBUTION OF UNITS ENGLISH FOR COMMUNICATION

Twelfth Level

Unit	Name of the unit	Estimated time in hours	Amount of weeks per unit
1	Day to day	20 hrs	5 weeks
2	Customer service	20 hrs	5 weeks
3	Stand for excellence	20 hrs	5 weeks
4	Travel	20 hrs	5 weeks
5	Astounding Future Career	20 hrs	5 weeks
	TOTAL	100 hrs	25 weeks

Subject area: English for Communication	Level: Twelfth
Unit 1 : Day to Day Work	
Hours per unit: 20 hours	
Cognitive target: Exchanging information about: day to day work.	

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING <ul style="list-style-type: none"> Talking about my work by describing daily activities. Asking and giving information about working routines. Describing times and conditions of my job. SPEAKING <ul style="list-style-type: none"> Expressing likes and dislikes in my daily life. Interviewing a classmate about safety devices. 	Functions <ul style="list-style-type: none"> Asking questions regarding working routines. Talking about your daily working schedule. Describing likes and dislikes. Examining job skills and qualifications. Making wise choices. 	The students: <ul style="list-style-type: none"> Talk about which hours your prefer to work based on the business hours around the world. Role play people saying what they like about their jobs. Classify a list of items connected with work which are important and not important to you. 	<ul style="list-style-type: none"> Observe critically. Exercises leadership 	The students: <ul style="list-style-type: none"> Talk about my work by describing daily activities. Ask and give information about working routines. Describe times and conditions of my job. Express likes and dislikes in my daily life. Interview a classmate about safety devices.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
<p>READING</p> <ul style="list-style-type: none"> • Reading about home and safety. • Reading an advertisement about a new product <p>WRITING</p> <ul style="list-style-type: none"> • Writing reported speech using quotes. • Writing a plan to improve safety in your home. 	<p>Language</p> <ul style="list-style-type: none"> • Prepositions. • Adverbs of frequency. • Phrasal Verbs. • Verbs followed by – ing. • Reported speech • Reported speech with say and tell. • Used to, be used. 	<p>The students:</p> <ul style="list-style-type: none"> • Read an online advertisement. • Read with understanding. • Plan for a safe environment. • Write a short letter describing the working conditions in a company you work. • Convey ideas in writing. 	<ul style="list-style-type: none"> • Guide others. • Planning ahead of time. 	<p>The students:</p> <ul style="list-style-type: none"> • Read about home and safety. • Read an advertisement about a new product. • Write reported speech using quotes. • Write a plan to improve safety in your home.

Subject area: English for Communication	Level: Twelfth
Unit 2 : Customer service	Hours per unit: 20 hours
Cognitive target: Interprets and communicates information about: customer service	

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING <ul style="list-style-type: none"> Understanding specifications about the elements of effective telephone communications. Identifying specific details from conversations about customers. Applying techniques to improve effectiveness as a listener. 	Functions <ul style="list-style-type: none"> Identifying elements of effective telephone communication. Managing to ensure courtesy in business telephone contacts. Smiling before you pick up the phone. Leaving a good last impression. Letting customers know you want to help. 	The students: <ul style="list-style-type: none"> Listen to oral techniques about courtesy Comprehend how to determine the customer needs Role play how to treat every caller as a welcome guest activity Development of skills to become a good clerk in customer service by attending the telephone 	<ul style="list-style-type: none"> Respect for different styles, methods and procedures. Understand and be understood by others 	The students: <ul style="list-style-type: none"> Understand specifications about the elements of effective telephone communications. Identify specific details from conversations about customers. Apply techniques to improve effectiveness as a listener. Speak appropriately while taking part in short conversations.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
<p>SPEAKING</p> <ul style="list-style-type: none"> Speaking appropriately while taking part in short conversations. Defining the importance of proper telephone techniques in providing excellent service to customers <p>READING</p> <ul style="list-style-type: none"> Understanding details from text, passages and others . 	<p>Asking the customer to repeat if the message is not clear</p> <p>Language</p> <ul style="list-style-type: none"> Define service mentality? What is a customer? How many customers do you think you can attend by day? Which is the most important key in the service mentality? Callers can hear your smile even when they can't see it Give every caller the same courteous, friendly, professional treatment. 	<p><u>The students:</u></p> <ul style="list-style-type: none"> Development of skills to become a better clerk in customer service. Completion of charts by listening to people speaking about the service attitude to provide high quality customer service. 	<ul style="list-style-type: none"> Learn from experience Empathy Enthusiasm Ownership Responsibility Adaptability 	<p><u>The students:</u></p> <ul style="list-style-type: none"> Define the importance of proper telephone techniques in providing excellent service to customers. Understand details from text, passages and others. State the importance of attitude and creativity in providing high quality customer service.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
WRITING <ul style="list-style-type: none"> Stating the importance of attitude and creativity in providing high quality customer service. Taking notes about specifications. 	<ul style="list-style-type: none"> Take the initiative. Greet the caller with a pleasant buffer. Ask don't demand. Politeness is never out of style. Don't make or take calls anonymously 			<ul style="list-style-type: none"> Take notes about specifications.

Subject area: English for Communication	Level: Twelfth
Unit 3 : Stand for excellence	Hours per unit: 20 hours
Cognitive target: Exchanging information about: the ability to work cooperatively with others as a member of a team.	

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING <ul style="list-style-type: none"> Listening to information about schools. Listening to a conversation between an employer and an employee. Listening to a conversation between coworkers. 	Functions <ul style="list-style-type: none"> Discussing about adult education. Describing types of coursework. Identifying job skills. Defining feelings. Stating work communication. Defining job training. 	<u>The students:</u> <ul style="list-style-type: none"> Acquire and evaluate information. Listen actively to conversations among different people in order to take notes. Role play a conversation between a parent and a child. Interpret and communicate information. 	<ul style="list-style-type: none"> Plan for the future. Take responsibility for learning. Cooperate with others. 	<u>The students:</u> <ul style="list-style-type: none"> Listen to information about schools. Listen to a conversation between an employer and an employee. Listen to a conversation between coworkers. Talk about programs and courses. Express encouragement when having a conversation.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
<p>SPEAKING</p> <ul style="list-style-type: none"> Talking about programs and courses. Expressing encouragement when having a conversation. <p>READING</p> <ul style="list-style-type: none"> Understanding details from school text or passages. Reading and discussing about job skills. <p>WRITING</p>	<p>Language</p> <ul style="list-style-type: none"> Simple present and present continuous. Correlative conjunctions. Expressing future time with will, be going to, and the present continuous. Part time clauses with after, when, as soon as, before, and until. Simple past and present perfect. Express similarities with so, too, either and neither. Reductions with n' t. 	<p><u>The students:</u></p> <ul style="list-style-type: none"> Reading a career school advertisement. Reading an email from a teacher. Reading a job evaluation form. Reading notes from an interview. Reading a letter requesting a raise. Write statements about yourself. Make a list of programs and courses of interest to you. Write a letter to a professor. Fill out a work schedule. 	<ul style="list-style-type: none"> Solve problems. Make decisions. 	<p><u>The students:</u></p> <ul style="list-style-type: none"> Understand details from school text or passages. Read and discuss about job skills. Organize information regarding options between job benefits. Organize information regarding personal qualities

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
<ul style="list-style-type: none"> Organizing information regarding options between job benefits. Organizing information regarding personal qualities 		<ul style="list-style-type: none"> List personal qualities on a chart. Write a persuasive letter. 		

Subject area: English for Communication	Level: Twelfth
Unit 4 : Travel	Hours per unit: 20 hours
Cognitive target: Interprets and communicates information about travelling.	

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING <ul style="list-style-type: none"> Listening about what do you do in Costa Rica to thank people. Listening to statements about a map in order to get to any specific place. SPEAKING <ul style="list-style-type: none"> Explaining leisure and entertainment possibilities to a visitor. 	Functions <ul style="list-style-type: none"> Finding out about a city. Making offers. Thanking Making recommendations. Travelling for business and pleasure. Copying with difficult travel situations. Doing flight reservation. Renting a car. 	The students: <ul style="list-style-type: none"> Listen to statements about what people are doing in a business travel. Role play about a visitor that is coming from abroad to your international marketing company and you are going to help organize her/his visit. 	<ul style="list-style-type: none"> Social and cultural background of people from different countries. 	The students: <ul style="list-style-type: none"> Listen to what do you do in Costa Rica to thank people. Listen to statements about a map in order to get to any specific place. Explain leisure and entertainment possibilities to a visitor. Discuss about weather concerns when travelling.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
<ul style="list-style-type: none"> Discussing about weather concerns when travelling. <p>READING</p> <ul style="list-style-type: none"> Reading a map from another country to find out cities and places. Reading about national agencies. Reading about environmental issues to take into account to visit a foreign country. 	<ul style="list-style-type: none"> Giving and asking for directions. <p>Attending business events.</p> <p>Language</p> <ul style="list-style-type: none"> You 're interested in...you should... If you like.... You should... Types of transportation. Learning about culture. Types of restaurants Talk about weather. Sightseeing. Day trips. Tipping Prices in dollars and cents. I ' d like... I ' d prefer. 	<ul style="list-style-type: none"> Discuss with a partner about entertainment and leisure activities for a visitor in a foreign country. Pretend your work for a broadcast company and you are giving the weather report. <p><u>The students:</u></p> <ul style="list-style-type: none"> Develop different reading skills interpreting information related to travelling 	<ul style="list-style-type: none"> Cultural aspects presented on each country while you are in a business travel. 	<p><u>The students:</u></p> <ul style="list-style-type: none"> Read a map from another country to find out cities and places. Read about national agencies. Read about environmental issues to take into account when visiting a foreign country. Revise a business plan to propose to an international company.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
WRITING <ul style="list-style-type: none"> Revising a business plan to propose to an international company. Developing writing skills in making, accepting or declining an offer. 	<ul style="list-style-type: none"> I´ d like a single room. I´ d prefer a nonsmoking room. Questions: How long How do I get to there? How will you be paying? How long will you be staying? 	<ul style="list-style-type: none"> Write a short note suggesting what someone might enjoy in Costa Rica and offering your help while in a business travel. Writing about severe weather conditions 		Develop writing skills in making, accepting or declining an offer.

Subject area: English for Communication	Level: Twelfth
Unit 5: Astounding Future Career	
Hours per unit: 20 hours	
Cognitive target: Interprets and communicates information about: applying or transferring skills learned in one job situation to another.	

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
LISTENING <ul style="list-style-type: none"> Listening to job interviews with a candidate for a major. Listening to a discussion between two managers. SPEAKING <ul style="list-style-type: none"> Discussing community problems solutions and by interviewing classmates. 	Functions <ul style="list-style-type: none"> Identifying career skills. Attending a job fair. Participating in a job interview. Defining the strengths and weaknesses. Describing future plans. Recognizing work standards. Expressing emotions. 	The students: <ul style="list-style-type: none"> Identify how to interview appropriately. Use sources of information about job opportunities such as job descriptions, job ads, and online searches about job market. Respond appropriately to common personal information questions. 	<ul style="list-style-type: none"> Doing field work. State goals for the immediate future. Find problems in your community. 	The students: <ul style="list-style-type: none"> Listen to job interviews with a candidate for a major. Listen to a discussion between two managers. Discuss community problems and solutions by interviewing classmates. Practice intonation when giving emotions.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
<ul style="list-style-type: none"> Practicing intonation when giving emotions. Talking about life in a city and contrasting it with life in the country side. <p>READING</p> <ul style="list-style-type: none"> Reading to improve skills to have a successful career advancement. Comparing and contrasting the lives and goals of people regarding working conditions. 	<p>Language</p> <ul style="list-style-type: none"> Real conditionals present and future. Present unreal conditional. Future continuous. Infinitives of purpose. Infinitives that follow adjectives. 	<p>Role plays a conversation on how to relax before a job interview.</p> <p><u>The students:</u></p> <ul style="list-style-type: none"> Demonstrate the ability to apply or transfer skills learned in one job situation to another. Read about careers and skills. Read about how to have successful interviews. 	<ul style="list-style-type: none"> Exercise leadership. Allocate time 	<ul style="list-style-type: none"> Talk about life in a city and contrasting it with life in the country side. <p><u>The students:</u></p> <ul style="list-style-type: none"> Read to improve skills to have a successful career advancement. Compare and contrast the lives and goals of people regarding working conditions.

LINGUISTIC ACHIEVEMENTS	CONTENT (FUNCTIONS AND LANGUAGE)	PROCEDURES	VALUES AND ATTITUDES	LEARNING OUTCOMES
WRITING <ul style="list-style-type: none"> Developing consciousness about my skills, achievements and awards. Organizing ideas to design an improvement plan to change in life. 		<ul style="list-style-type: none"> Read a resume from a job seeker. Read an employer 's campaign to improve work conditions. Make notes about your skills, achievements and awards. Write a resume for themselves. Write about how employees feel at work based on field work. Write a paragraph with your goals for the next five years. 		<ul style="list-style-type: none"> Develop consciousness about my skills, achievements and awards. Organize ideas to design an improvement plan to change in life.

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Communicative Activities

SPEAKING ACTIVITIES

Activity 1

- Name: A day in the life.
Topic: Asking about events.
Materials: A piece of paper for each group.
Objectives: To practice asking questions in the past tense.

Process: The class is divided into groups. One member of each group leaves the room. The remaining group members decide on how the person who is outside spent the previous day. They draw up an exact time schedule from 8am to 8pm and describe where the person was, what he did, who he talked to. The people who were outside are called back in. There, they try to find out, how the group thinks they spent the previous day. Then, he gives the correct responses.

Taken from Cambridge University Press.

Activity 2

Name: Chit Chat

Topic: Personal information

Materials: Design a questionnaire sheet and one information sheet with name of people, age, country, marital status, job, hobbies

Objectives: The objective of the game is to practice questions to find all people described in the questionnaire.

Process: The game may be played with any number. If there are more than 16 students in the class, the activity must be practiced in two groups. Copy one role card and one questionnaire for each student in the class. Distribute one role card to each student and allow a little time for them to become familiar with the information, then give each student the questionnaire. Each student must move around the room asking each other questions until they find all the people described on the questionnaire.

Example:

QUESTIONNAIRE	ROLE CARD
A technician with two children. A grandmother who lives in ... A 24 year old nurse An electrician who plays the guitar	John Peter Age:26 Lives in London Married Two children:Tim and Andy Job: technician Hobbies: tennis, football

Taken from Oxford University Press.

Activity 3

Name: Looking for a job

Topic: Talking about abilities

Language: Use of can to express ability.

Materials: A set of cards for each student in the class.

Objectives: To practice the use of can + abilities.

Vocabulary: Abilities.

Process: The game may be played with any number of students. Copy enough cards for everyone in the class, make sure that for every employee's card there is a corresponding employer's card. Give out one card to everyone in the class. The objective of the game is for every employee to find a job, and for every employer to find a suitable person for the job. To do this, employers will have to move around the class, interviewing candidates for the jobs. They should only take candidates who fulfill all the requirements listed on the advertisement. The game is finished when everyone has a job. If you have an add number of students in the class, either one student will be left without a job, or, if you think this is too cruel, you should alter one of the advertisements to read.

Example:

<p>You can:</p> <p>swim draw and paint speak French play the piano type sing</p>	<p>WANTED: KINDER GARDEN TEACHER</p> <p><i>Must be able to:</i></p> <p><i>Swim, sing</i> <i>Speak French, play the piano</i></p>
<p>You can:</p> <p>Take shorthand type Play the piano drive Speak French and German swim</p>	<p>WANTED: SECRETARY</p> <p><i>Must be able to</i></p> <p>Type Take shorthand Speak French and German</p>

Taken from Oxford University Press.

Activity 4

Name: Job Prestige

Topic: Occupations

Materials: Prepare a list with 15 different occupations, give a list to every student.

Objectives: To practice speaking about occupations.

Process: Outline the task. Give a list of occupation to each students and tell them to rank them according to two criteria. First, arrange them in the order in which these jobs are regarded and paid for in our society. Secondly, make a list according to the importance of the job. Divide the class in pairs, let students compare their lists and priorities, ask them why do they agree or disagree with their classmate list. Write the differences on the board to discuss with the rest of the class.

Taken from Cambridge University Press.

Activity 5

Name: Secret Topic

Topic: Arguing, Expressing one's opinions

Materials: A piece of paper with a topic on it.

Objectives: To discuss and express one's opinions about a specific topic.

Process: Two students agree on a topic they want to talk about without telling the others what it is. The students start discussing their topic without mentioning it. The others listen. Anyone in the rest of the group who thinks he knows what they are talking about, joins in their conversation. When about a third or half of the class have joined in the game is stopped.

Taken from Cambridge University Press.

LISTENNING ACTIVITIES

Activity 1

Name: Debate the Issue
Topic: Discussion
Materials: Select a sequence which features a controversial issue.
Objectives: To promote communicative competence.

Process: Write a motion on the board related to the topic of the video. for example: everyone should have the right to possess a gun for self protection. Tell the students that you are going to play a sequence related to that motion. As they watch the video, they are to decide how they feel about the motion, play the sequence, tell the students that they are now going to participate in a debate, ask for volunteers to argue 'pro' and 'con'. Select an equal number of students between 2 and 4, to form two debating teams. Appoint one student from each team to act as captain. Captains will give their presentations first and summarize their team's argument at the end. If there is time, play the sequence again.

Taken from Prentice Hall Regents.

Activity 2

Name: Assemble the script/video
Topic: Listening comprehension
Materials: Select a sequence in which the dialogue provides several clues to the action, the picture frequently suggest what is being said. You will need two rooms and an audiocassette recorder. Before class, record the sound track of the sequence onto an audiocassette.
Objectives: To practice listening, speaking and writing.

Process: Divide the students into two teams and possibly into subgroups. Tell the students that you are going to play a short sequence. Explain that one team will have the soundtrack only. They must imagine the pictures. The other team will have the video without the sound, they must write the dialogue script. If necessary, give a very brief hint about the subject-matter of the sequence, the names of characters, etc. Team 1 takes the audiocassette recorder to the other room, they play the soundtrack and write down what they think the situation is, who the characters are, what happens during the sequence. Stay with team 2, play the complete sequence with the sound turned down, they play it shot by shot without sound, pausing to allow the team to write the dialogue. Bring team 1 back into the classroom. Divide the students into pairs with one member from team1 working with one member from team 2. Each pair takes a piece of paper with a line down the middle. They must now write the script (short description on the left of the line, dialogue on the right).

Taken from Prentice Hall Regents.

Activity 3

Name: Analyzing Commercials/video

Topic: Discussion, Listening, Note-taking

Materials: Select one or more commercials which provide enough relevant information and discussion points for this activity. Duplicate the handout, make one copy for each student.

Objectives: To discuss, to listen and take notes about a tv commercial.

Process: In class: Distribute the handout. Go over it with the students to make sure they understand the kind of information required. Tell the students that you are going to play a TV commercial. Their task is to complete the chart with information from the commercial. Play the commercial, several times if necessary. The students work individually to complete the chart, as they finish, ask the students to compare their answers with those of another student. Play the commercial again. The students confirm or modify their answers.

Taken from Prentice Hall Regents.

READING ACTIVITIES

Activity 1

Name: Ten things to Do Before Reading

Topic: Practice previewing

Material: Reading passages from students' books

Objective: To preview a reading to see what students already know in terms of content and vocabulary.

Process: Ask students to brainstorm for answers to the following questions, then, write ideas on the board.

1. Look at the title and the heading for each section. What do you think this passage is going to be about?
2. Look at the pictures. What do you think this passage is going to be about?
3. Read the first and last paragraphs and the first sentence of each paragraph. What do you think this passage is going to be about?
4. Read the title. Now quickly scan the passage and circle all the words that have a connection to the title.
5. Scan the passage and cross out all the words you don't know. After you read the passage again carefully, look up the words in a dictionary.
6. After looking at the title, pictures, and so on, brainstorm the specific words you expect to see in the passage.
7. After looking at the title and pictures, make up some questions you think this passage might answer.
8. What kind of passage is this? (fiction?-nonfiction?-what kind?) Why would somebody read this? For information? Pleasure?
9. Choose words from the passage and write them on the board. Ask students to scan the passage and circle them.
10. Tell a story about the background of the reading passage, or summarize the passage itself. Ask students to take notes or draw a picture of the story as you speak.

HAVE EVERYONE READ THE PASSAGE.

Taken from New Ways in Teaching Reading.

Activity 2

Name: Newspaper Posters

Topic: Encourage students to read different sections of a newspaper.

Material: Articles from newspapers. Large poster boards, scissors, glue and markers.

Objective: Understanding the content of the sections in a newspaper is essential to give students access to more of the English-speaking world around them.

Process: Clip an assortment of articles and other items from newspapers. Be sure to include enough items from all parts of the papers for all the groups to have plenty to choose from.

Provide a list of all categories to be included in the posters. For example: Front page, metro, business, sports, lifestyles, entertainment, classified ads.

Put the students into groups. Each group uses a poster board and creates a poster that represents the various items found in the different sections, choosing from the articles and items you provide. Ask the students to label the categories.

Taken from New Ways in Teaching Reading.

Activity 3

Name: Monitoring Comprehension

Topic: Monitor students comprehension while reading

Material: Article with long, descriptive paragraphs.

- Objective:** Allow students to reflect on their understanding of the article at different stages, to predict what may come next and to evaluate how well they are reading while they are engaged in doing it.
- Process:** Using the article you have selected, prepare questions for each paragraph that the students have to answer: Ask readers to reflect on what may come next, and draw on previous cultural and personal experience. Include some questions specifically about monitoring, in addition to the questions about comprehension, for example: *When you ran into a difficult word or meaning, what did you do? Did you reread the word? Read ahead hoping to find the answer? Look it up in a dictionary? Ask someone else?* Cut the reading passage into paragraph pieces that you can paste in different places around the classroom in random order. Group the students and send them around the classroom together, with each group starting at a different location. Encourage students to work together and answer the questions as a group. They should discuss how they understood the text in order to answer the questions about comprehension and monitoring. Have each group piece together the reading text in the correct order. A general discussion at the end may focus on the main ideas, how students felt as they read each paragraph, and what strategies they used to figure out the paragraph order. After each paragraph, insert a clue, rather than a question, to find the next paragraph. Clues could include pieces from the next or last paragraph.

Taken from New Ways in Teaching Reading.

WRITING ACTIVITIES

Activity 1

- Name:** Letters to complaint
Topic: Learn to complain in writing

Material: Chalkboard or overhead projector (OHP).

Objective: Sensitizes students to the differences in register between written and spoken forms, focusing on different language functions, for example, apologizing, giving invitations, offering congratulations, and offering condolences.

Process:

1. Ask students if they have ever written a letter of complaint. Elicit from students what kind of things people complain about in writing, for example, faults in new consumer products, poor services, incorrect bills. Write these up on the board.
2. Using some of the examples on the board, establish who the students would write to if they were to write a letter of complaint. For example, about a faulty CD player, they would write to the shop manager.
3. In pairs ask students to simulate
 - (a) a conversation with a friend about a CD player they have just bought, but which doesn't work properly.
 - (b) a phone call between a consumer with a complaint and the official person they are complaining to, for example, someone who has just bought a CD player that doesn't work properly and the manager of the shop they bought it from.
4. Ask students to write a letter of complaint to the manager of the shop.
5. In pairs ask students to discuss the differences between complaining: orally to a friend, orally to an official person and in a written form to an official person.
6. Elicit differences from students and write them on the board in three columns: oral/friend, oral/official, written/official. The differences should include examples of language used.
7. Highlight the differences that have emerged among the three columns and focus on forms that would be appropriate for the letter. Then, ask students to write another letter of complaint.

Taken from New Ways in Teaching Writing.

Activity 2

Name: Practical Business Writing

Topic: Inform some or request information

Material: Paper, appropriate addresses and references. Three standard business letters.

Objective: Give students a formula or a template for business letters, you foster confidence and facility with the language in a realistic situation while teaching both the process and the product

Process:

1. Present the following 10 principles to summarize the basics of business letter writing:
 - Write concisely, eliminating stock phrases that serve no purpose, and using reasonably short sentences. Avoid jargon in favor of common words and phrases.
 - Consider the reader's background and expected attitude toward the message, tailoring the words to the reader's situation and level of understanding.
 - Write positively, eliminating negative words from the message.
 - Strive for clarity, using familiar words and ensuring that grammar, punctuation, and spelling are correct.
 - Check that the information in the message is accurate.
 - Look for omissions and inconsistencies to ensure completeness.
 - Strive for concreteness with specific amounts and figures, rather than abstract concepts.
 - Use active, rather than passive, constructions to foster clarity as well as brevity.
 - Ensure fairness-avoid evidence of stereotyping and prejudice.
 - Finally, practice ethicality, ensuring that no impossible promises are made, no matter how much goodwill they might create.
2. Present a business letter format and guidelines for one of these three basic business letters: Inquiry letter, Order letter, Request for Assistance
3. Ask students to write a letter.
4. Have students evaluate their own or a peer's paper using the guidelines for the type of letter and also the 10 principles.

Activity 3

Name: Authentic Texts for Writing

Topic: Organize an effective memorandum

Material: Sample office memoranda. An editing checklist

Objective: Produce writing that reflects the conventions of professional communication.

Process:

1. Collect examples of effective office memoranda of the type you want your students to practice writing themselves (About six examples are sufficient). Collect poorly written or weakly organized ones as well for text-revising practice. In addition, find an example of a checklist for writing effective memorandum that you feel will be useful to your students (see Appendix)
2. Distribute copies of the memorandum to pairs or groups of students.
3. Ask students to examine and compare the memoranda and to answer questions such as the following:
 - Where can you find information about the sender and receiver of the message?
 - What function does the subject heading serve?
 - How many paragraphs are there in the example? Are the paragraphs long and short?
 - Reading only the first paragraph, can you tell the main subject of concern in each example?
 - Do the sentences vary in the length and type?
 - Do the writers use different tenses in their writing?
 - Can you spot any grammatical or spelling errors?
 - Compare the examples, how do the writers end the memo?
4. As the students work through the memoranda and the questions, ask them to develop the checklist that they think captures the essence of an effective memorandum. The check list should consider issues of content, grammar, clarity, conciseness and style.
5. Allow students up to 45 minutes for this activity and ,then, have groups presents their information.
6. Now distribute copies of your own editing checklist or writing guide.
7. Review the checklist and compare what each element includes with the information students have produced.
8. Summarize the main points of writing an effective memorandum and prepare students for the writing task.
9. Distribute copies of poorly written memorandum for the groups to analyze, using the checklist to guide them.
- !0. Each group should suggest how the memorandum can be improved.

11. After discussion, students should rewrite the weak examples on group or individual basis.

SAMPLE EDITING CHECKLIST

Content

- Use informative and specific headings
- Paragraph by idea.
- Retain first choice words.
- Eliminate unnecessary details.
- Proportion should match emphasis.
- Check accuracy and completeness of factual information.

Grammar

- Do not write fragments for sentences.
- Avoid run-on or fused sentences.
- Do not dangle verbal.
- Use parallel structure.
- Make pronouns agree with their antecedents.
- Make verbs agree with their subjects.
- Do not change tenses or words unnecessarily.
- Punctuate correctly.
- Choose appropriate words and phrases.
- Spell correctly.

Style

- Vary sentences patterns and length.
- Substitute stronger verbs for weak ones.
- Prefer a personal, conversational tone.
- Adjust the tone and formality to suit the purpose and audience.

- Clarity
- Prefer short sentences and simple words.
- Use concrete words and phrases over vague general ones.
- Sequence ideas to indicate emphasis.
- Link properly to show relationship.
- Show clear transitions between ideas.
- Use clear references.
- Place modifiers correctly.
- Conciseness
- Prefer active-voice verbs and action verbs.
- Be emphatic and to the point.
- Highlight the main verbs of sentences.
- Cut clichés, redundancies and little-word padding.
- Eliminate needless repetition.

Taken from New Ways in Teaching Writing.

LISTENING TASKS

1. Outstanding researchers have referred to the development of this skill as the most important when babies start learning their native language. Non- native speakers of any language, need to follow the same process when learning that language.

(Source: D. Nunan 1998 *Second Language Teaching and Learning* . Boston: Heinle & Heinle.)

WHY SPEAKING DELAY?

- Some people believe that learning a language is building a *map of meaning in the mind*. However, talking is not the best way to build up this cognitive map in the mind. To do this, the best method is to practice meaningful listening.
- *The listening-only period* is a time of observation and learning which provides the basis for the other language skills. It builds up the necessary knowledge for using the language.
- When this knowledge is clear and complete, the *learner can begin to speak*.

FIVE CONDITIONS FOR LANGUAGE LEARNING TO OCCUR:

- **The Message:**

The learners' attention is focused on the message (function), not on grammatical rules because language acquisition is considered to be an unconscious process. The form of the message requires:

1. The application of conscious language rules,
2. Lots of time to analyze the process of the rules and exceptions, consciously or by heart.

- **Understanding:**

The learner must infer the meaning of most of the message through techniques of simplification of grammar and vocabulary and by using organizational and contextual aids to understanding.

- **Quantity:**

It is necessary a great deal of listening activity before learners feel ready to speak.

- **Interest:**

The learners would like to listen to a relevant message related to their interests.

- **Low Anxiety:**

Listening is a receptive skill. The learners see the learning experiences very easy and relaxed. There is no reason for fears to arise.

Adapted from Nord, J. R. *Developing Listening Fluency before Speaking*, 1980: p.17

MULTIPLE INTELLIGENCES THEORY

Verbal/linguistic	Logical/ mathematical	Visual spatial	Bodily/ kinesthetic	Musical/ rhythmic	Interpersonal	Intrapersonal
<ul style="list-style-type: none"> • Reading • Vocabulary • Formal Speech • Journal/Diary Keeping • Creative Writing • Poetry • Verbal Debate • Impromptu Speaking • Humor/Jokes • Storytelling 	<ul style="list-style-type: none"> • Abstract Symbols/Formulas • Outlining • Graphic Organizers • Number Sequences • Calculation • Deciphering Codes • Forcing Relationships • Syllogisms • Problem Solving • Pattern 	<ul style="list-style-type: none"> • Guided Imagery • Active Imagination • Color Schemes • Patterns/ Designs • Painting • Drawing • Mind-Mapping • Pretending • Sculpture • Pictures 	<ul style="list-style-type: none"> • Folk/Creative Dance • Role Playing • Physical Gestures • Drama • Martial Arts • Body Language • Physical Exercise • Mime • Inventing • Sports Games 	<ul style="list-style-type: none"> • Rhythmic Patterns • Vocal Sounds/Tones • Music Composition/Creation • Percussion Vibrations • Humming • Environmental Sounds • Instrumental Sounds • Singing • Tonal Patterns • Music Performance 	<ul style="list-style-type: none"> • Giving Feedback • Intuiting Others' Feelings • Cooperative Learning Strategies • Person-to-Person Communication • Empathy Practices • Division of Labor • Collaboration Skills • Receiving Feedback • Sensing Others' Motives • Group Projects 	<ul style="list-style-type: none"> • Silent Reflection Methods • Met cognition Techniques • Thinking Strategies • Emotional Processing • "Know Thyself" Procedures • Mindfulness Practices • Focusing/Concentration Skills • Higher-Order Reasoning • Complex Guided Imagery • "Centering" Practices

GLOSSARY

Some terms have been used in this Syllabus, which may be unfamiliar to you. Simple definitions are included for this purpose.

Activity	Situation in which a lot of things are being done, usually in order to achieve a particular purpose.
Assessment	The learner's ability to reflect on the results of his/her learning process.
Attitudes	Expressions of positive or negative feelings towards the learning of a foreign language.
Awareness	Acquaintance, consciousness with knowledge.
Communication	Activity or process of giving information to other people or other living things, using signals such as speech, body movements or radio signals.
Communicative Competence	The ability not only to apply the grammatical rules of a language in order to form grammatically correct sentences, but also to know when and where to use these sentences and to whom. It includes knowledge of the grammar and vocabulary of the language. Knowledge of rules of speaking, (knowing how to begin and end conversations, what topics may be talked about in different times of speech events, knowing which address forms should be used with different people.) Knowing how to use language appropriately.
Curriculum	Knowledge, skills, materials, learning activities and terminal behavior required in teaching of any subject.
Cultural Component	The part of the language which includes the total set of beliefs, attitudes, customs, behavior, social habits, etc. of the members of a particular society.

Evaluation	The whole process of determining the effectiveness of teaching and learning.
Feedback	Monitoring and adapting one's actions on the basis of the perceived effect on the environment. In Language activities, it is a response to the reactions of listeners and readers.
Formal Component	The part of the language which includes the linguistic patterns (structures).
Formative Evaluation	A learning activity through which the students learn from their own mistakes.
Function	A Communicative purpose of a piece of language.
Functional Component	A part of the language which refers to it as an instrument of social interaction rather than a system that is viewed in isolation. Language is often expressive and social. Language is often described as having three main functions: descriptive, expressive and social.
Global Development	The insertion of individual and national working forces into the world development.
Group work	Work in which the class is broken into small groups of few students. They may work simultaneously on the same topic, but with different material on each table.
Input	Oral or visual stimuli from the formal or informal learning setting.
Integration of Skills	The teaching of the language skills in conjunction with each other, as when a lesson involves activities that relate listening and speaking.
Interaction	Communication between two people.
Learner	A person who is learning a subject or a skill.

Learning Strategy	A way in which a learner attempts to work out the meanings and uses of words, grammatical rules, and other aspects of language.
Learning Styles	The particular way in which the learner tries learning new things. There are four different learning styles.
Mediation	Action of changing events, experiences or sets of circumstances.
Methodology	The study of the whole process of language teaching with the aim of improving its efficiency.
Monitoring	Learners try to correct any error that they have just said. The teacher may help them to do it by imitating her/him.
Pair-work	Work in which two students perform a task or different tasks simultaneously.
Principle	General rule you follow to achieve something.
Procedure	Action or series of actions to be completed in order to carry out a process.
Process	A series of actions that are carried out in order to achieve a particular result.
Profile	Amount of language learned at the end of the process.
Role –Play	Drama-like classroom activities in which the students take the roles of different participants in the situations. They may act out which might typically happen in that situation.
Skill	Knowledge and ability that enables you to do something well. Linguistic skills enable you to fulfill the communication needs.

Student/Learner	In a communicative approach, a student/learner is the person on whom the learning process is centered. The student learns by doing. She/he becomes an independent and interdependent learner.
Sub-Skills	A division of the skills, such as discriminating sounds in connected speech, understanding relations within a sentence identifying the purpose and scope of a presentation.
Syllabus	An educational program which states: a.) The educational purpose of the program (the ends). b.) The content, teaching procedures and learning experiences which will be necessary to achieve this purpose. c.) Some means for assessing whether or not the educational ends have been achieved.
Tasks	Steps or actions, which are carried out during an activity.
Warm-up	To stimulate the interest and the participation of the learner in an activity.

EVIDENCE PORTFOLIO

MINISTRY OF PUBLIC EDUCATION
DEPARTMENT OF TECHNICAL SPECIALTIES
TECHNICAL HIGH SCHOOL

Portfolio of Evidence

Student:
Place and Date:

EVIDENCE PORTFOLIO

Technical High School:	
Program:	
Level:	TENTH GRADE____ ELEVENTH GRADE____ TWELFTH GRADE____
Student's Name	
Date of Birth	
Address	
Telephone	
Email	
Full Names - Parents or Guardians	
Telephone - Parents or Guardians	

ACADEMIC HISTORY

- Primary School:
- High School:
- Courses Completed:

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