

# A MODEL FOR THE DESIGN OF INSTRUCTIONAL MATERIALS FOR ENGLISH READING COMPREHENSION<sup>1</sup>

Xinia Chacón Araya

**Resumen.** Conforme la información en inglés que se obtiene a través de diferentes medios de comunicación se hace más accesible; los estudiantes, estudiosos y profesionales necesitan cada vez más del conocimiento de este idioma para propósitos específicos. Esta diversidad de necesidades dificulta encontrar materiales adecuados a los intereses de los estudiantes. De aquí que los profesores de inglés se vean comprometidos cada vez más a diseñar sus propios materiales. Esta ponencia propone un modelo que puede servir como base para el diseño de materiales de instrucción para la comprensión de lectura en inglés.

The objective of this paper is to provide a theoretical framework for the preparation of materials in the form of a model. This model can be applied as a guideline to prepare materials for designers interested in the development of reading comprehension materials. It is well known that students bring special and diverse needs to the courses, and that they have to read information in English if they want to keep updated in their fields of study. This is why it is so important for instructors to have tools for material preparation to face the diversity that ESP (English for Specific Purposes) courses entails.

The description of the model is one of an actual application of the model to students of the Veterinary Medicine School of the Universidad Nacional in Heredia, and considers ten steps: needs assessment, specification of the curriculum, selection of the syllabus type, specification of the thematic content of the materials, selection of appropriate reading passages, specification of tasks, development of instructional materials, piloting of instructional materials, evaluation of the material, and revision of the materials as needed.

## Step 1: Needs Assessment

Chacón (1992) administered a needs assessment to students of the School of Veterinary Medicine of the Universidad Nacional in Costa Rica. She used three different instruments: a questionnaire that was passed to the universe of students, and to the professors. An interview that was administered to the professors and some students, and observations done in the classrooms, laboratories, hospital, and administrative offices.

The purpose of these tools was to analyze the functions of the English language in the students' activities, and to know the context in which the language was going to be used. For example; one question dealt with the academic topics the professors most frequently asked them to read in the courses, another was about the most used information sources (Internet, journals, books, etc.), and so on. The results of the survey were taken as a foundation for the preparation of the material.

## Step 2: Specification of the curriculum

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The humanistic curriculum will provide the framework for this model. It considers three aspects: a cultural and educational philosophy, a theory of language, and a theory of language learning. *The cultural philosophy* has to do with the context or environment in which the material is going to be used. In this specific case the context would include the School of Veterinary Medicine, the university, the government , and the country. It is very difficult for universities, public and private institutions, and even the Costa Rican government to translate all the English material that comes to the country from all over the world through interlibrary loans, professors studying abroad, Internet, and others.

The School of Veterinary Medicine has a hospital that provides services to the community, to the country, and even to other countries in Central America. Chicken, cattle, horse, and pig raisers, environmentalists that protect tropical, non-conventional animals in danger of extinction like iguanas, tapirs, etc. as well as owners of small animals are users of the hospital. So, it is in the best interest of the School of Veterinary Medicine, the university, and the country in general to keep the students updated in their fields. The students must be able to read texts in English that their professors assign to them as their academic readings.

The curriculum will be based on a *humanistic philosophy of education*. For Mc Neill (1977) the goals of the humanistic curriculum pursue the growing and development of the learners according to their needs and interests. Each individual is unique with his/her own intellect, emotions and attitude, and as such he must be allowed to grow as a fully-functioning, responsible, self-actualized, active, independent, realistically oriented, and problem-centered human being. The main goals of this type of curriculum will be: great emphasis on meaningful communication from the learner's point of view, tests that are authentic, tasks that are communicative, outcomes that are negotiated and not predetermined. In this sense, perception is important because the students learn what they believe is important, necessary, or meaningful for them(in Dubin and Olshtain, 1994).

This philosophy finds rich ground in both general and adult education. Elias & Merriam(1980) state that motivation is intrinsic in adult learners. When working with adults, educators do not necessarily know everything, and they can not ignore the richness and variety of their adult students. For Elias & Merriam (1980) in Humanism other learners are viewed as a support group within which they interact, help, and evaluate themselves and each other, as well as the whole process. Growth is reached through a cooperative, supportive environment. For this reason, teachers must respect and utilize their students' experience and potentialities. One way of doing this is to encourage group work, discussions, small group projects, committees, and teams to promote learning by discovery and experimentation; the type of learning that according to humanists becomes part of the person. Rogers (1969) explains that meaningful learning is experiential and proposes some principles of learning: 'personal involvement' which involves the emotional and cognitive aspects of the individual, 'self-initiation' which conveys a sense of discovery that comes from within, 'pervasiveness' which implies that learning makes impact on the behavior, attitudes, and personality of the learner, and 'essence in meaning' which means that learning takes place when the meaning becomes incorporated into the learner's total experience (in Elias & Merriam, 1980). Frase (1972) also adds to this last principle saying that when the students put the pieces of information together in a new way after reading, they are using problem-solving processes, and these processes get into the memory more

strongly. S/he considers that a well organized text promotes higher learning outcomes (in Carroll & Freedle, 1972).

*The theory of language* will be communicative. The theory of language is very important because it plays a major role in determining what syllabus is adopted. This aspect of the humanistic philosophy is related to a sociolinguistic view that influences the nature of language content. Sociolinguistics provides the theoretical perspective on language for communicative curriculum designs, and It views any language as inseparable from its sociocultural context. Its central concern is on variations of language at all structural levels.

Canale (1983) (in Krahne, 1987) divides communicative competence (or language proficiency) into grammatical, sociolinguistic, discourse, and strategic competence. From this, the communicative or use-based theory of language assumes that discourse and strategic competence are primary, and reading is viewed as a top down process.

*The theory of language learning* will be cognitively based. Cognitive psychology or information processing has tried to explain how the mind processes information. The theory of language learning is important for curriculum planning and material development because it emphasizes the design of tasks that will allow learners to experience a variety of cognitive activities (Farham-Diggory, 1992).

According to Osgood and Sebeck (1954) (in Kess, 1976), psycholinguistics has had a great influence in applied problems like reading, and learning from texts among others. Reading has been analyzed by research and theory in psycholinguistics and areas of cognitive psychology such as perception, memory, problem-solving, and conceptual behavior (Rosenberg, 1982).

Psycholinguistics in reading aims to determine the more appropriate inquiry and reception processes, and to diagnose the procedures a reading student may employ in diverse circumstances. The teacher will help students to elicit inquiry procedures that are ahead of their level or to encourage them to use more and different procedures to solve the task (Aronson & Rieber, 1979). On this respect, instructors must also consider individual differences in learning styles.

In the past the reader was asked to decode the text word by word to obtain the information. Now psycholinguistics has two reasons to believe that this is not an accurate interpretation of reading. The first reason is that the human brain cannot receive more than a certain amount of information. Miller (1956) did several experiments in which the subjects did not show a systematic relationship between what went in and what came out. They remembered just about seven pieces of information (bits or chunks). Thus, the reader do not use all of the printed information. He selects the most meaningful, productive cues to understand the message the author wants to get across. The interpretation of all this is that reading is a rapid process that cannot be reached word by word.

The second reason is that the reader contributes with more information than the one on the printed page (Clarke and Silberstein, 1977). Goodman (1970) summarizes the psycholinguistic perspective of reading as follows: “reading is a selective process. It involves partial use of available minimal language cues selected from perceptual input on the basis of the readers’ expectations. As this partial information is processed, tentative decisions are made to be confirmed, rejected or refined as reading progresses” (in Clarke and Silbertein, 1977, p. 136).

Clarke & Silberstein (1977) propose four inferences that are related to these two reasons. The first one claims that the reader has to use his knowledge of vocabulary, syntax, discourse and the real world to engage in the sampling process. Instructors should teach the students ‘attack strategies’ as the focus of a reading course.

The second inference is that false starts and mistakes while in the process of understanding are as important as answering comprehension questions correctly at the end of a reading activity. The role of the teacher is not just that of preparing comprehension questions, but also that of preparing reading tasks that reward the student for trying as much as for getting the correct answers.

The third one is that readers bring a lot of information, value, attitudes, beliefs, perspectives to the reading task. They influence their expectations as they read. The teacher should bring texts that are at the level of the student’s view of the world (conceptual readiness) or close the gap before the reading task begins.

The fourth inference claims that the reader builds on previous information as he reads the text. So, a successful reading lesson depends not only on the strategies and knowledge the reader brings to the task, but on the content of the text. It has to be a conceptually complete text.

In short, our responsibility as reading teachers is to prepare our students to define their expectations and goals before reading, to train them to apply appropriate strategies in accordance with the reading task, and to encourage them to use the minimum syntactic/semantic cues to understand the text (Clarke & Silberstein, 1977).

Another theory that adds to the humanistic curriculum is Constructivism. It is an instructional theory that finds rich ground in learning theories that come from Cognitivism, Ausubel, Schema Theory, Bruner, and Vygotsky. For constructivists, “learning is a continuous, life-long process resulting from acting in situations” (Driscoll, 1994, p.362). They emphasize learning in context. Needless to say that in a course of reading comprehension, authenticity and the using of the context for comprehension are basic principles. In reading learners interpret the context according to their intention, and according to their own experience and reality, and the teacher develops higher order processes like problem-solving, reasoning, critical thinking, and the active use of knowledge.

On the same line, Driscoll (1994) mentions some constructivist’s ideas such as: *the social negotiation* or group work that in reading comprehension is very important for the students as a way of developing conceptual and mental models by themselves which in turn add new insights into the learning process; *the juxtaposition of instructional content* that recognizes the idea of rearranging the context for different purposes and needs, and analyzing it from different conceptual perspectives; *the nurturance of reflexivity* that also applies to reading comprehension and occurs when the students make assumptions, compare or contrast the content with another information, reject information and explore a new theory of their own, or apply metacognitive strategies (e.g. They know when to stop and reread if they are not understanding, know when to stop and write main ideas, know if the text is worthwhile to be read or not, and choose the adequate speed rate for reading).

For Ausubel, prior knowledge is the main determinant for new knowledge to occur. He proposes a cognitive structure which is the learners’ overall memorial structure or all the integrated body of knowledge they have. This structure is at the same time organized hierarchically by sets of ideas and themes. Ausubel’s idea is that the

most inclusive ideas would be the strongest and most stable ones; meanwhile, the more specific linkages would be anchoring ideas. So, it is easier for the student to remember a single inclusive concept rather than a large number of specific details. What happens is that meaningful learning is easier to retrieve than rote learning. This is why Ausubel suggests teachers to use ‘discovery learning’ to make learning meaningful. ‘Discovery learning’ is then understood as the rearrangement or organization of the information already existing in the cognitive structure to obtain an end product or discover a new relationship to get better results. For ‘discovery learning’ to be developed the teacher needs to use the knowledge the student has already acquired, provide the students with meaningful materials and tasks, and follow a hierarchy in teaching that goes from the simplest to the most complex (Driscoll, 1994).

Because Ausubel states that the activation of relevant prior knowledge is critical to meaningful learning, it is important to point out that his work is very relevant to the development of schema theory. Acquiring knowledge through experience is known as empiricism, and schema which is in our long-term memory is part of this experience. What has been learned or experienced previously will have some impact on what is perceived in later situations. This will affect the interpretation of the readings and the recall of information. Schema Theory claims that authentic texts and tasks must be used to situate the student as close as possible to reality.

Bruner; on the other hand, presents an important contribution to learning and instruction. He also claims that adult’s intellect formation can not be understood without reference to the social and cultural context in which it is embedded. Bruner mentions that problem-solving must be taught according to the cultural and social needs of the learner. He calls this the inside-out / outside-in process of development. The students learn better when they devise strategies for searching and finding regularities and relationships in the environment.

In fact, Bruner is also talking about learning by discovery which he defines as “all forms of obtaining knowledge for oneself by the use of one’s own mind” (Driscoll, 1994, p. 214). Other factors for discovery learning, besides prior knowledge and conceptual models, are inquiry (ask certain questions or hypotheses), contrast (explore contrasts to get insights), and reflection (explain yourself what you learned). All these are very motivating tools for adult learners.

Similarly, Vygotsky also believed that higher mental processes can occur only in social processes. Another idea of his theory is ‘the zone of proximal development’ which is the gap separating actual from potential development. This assumes that students can learn tasks or knowledge that go beyond their capabilities. He says that for this to happen it is important to have social interaction, so that one learner tries to reach the level of the more advanced peer. Vygotsky calls this interaction ‘intersubjectivity’ that implies that both partners share power and authority. The only difference between the two, lies in their respective levels of understanding. The function of the teacher must be that of a scaffold. He should provide the guidance for the students to close the gap between their current level and the desired level of cognitive development (Driscoll, 1994).

This same idea of the ‘zone of proximal development’ is a strong point in the Natural Approach by Krashen and Terrell (1983) that applies well to reading comprehension. It assumes a linguistic hierarchy of structural complexity that the learner masters with encounters with ‘input’ containing structures at the ‘I+1’ (one step ahead)

level. They also claim that language consists of messages (which are considered of primary importance in the Natural Approach), of lexical items, and structures. Nevertheless, no explicit attention is given to the structures. This approach has five hypotheses: the acquisition/learning hypothesis which proposes two ways of developing competence in a second or foreign language: acquisition that is an unconscious process (the natural development of language proficiency through understanding language and through using language for meaningful communication); and learning that is the process in which conscious rules about a language are developed. Formal teaching is necessary for ‘learning’ to occur; the monitor hypothesis which alleges that the students monitor (checks) language through learning; the natural order hypothesis which tells that there is a natural hierarchical, and structural order the learners follow to acquire the language anyway; so it does not matter then in which order it is taught; the input hypothesis which states that the texts should always be authentic and one step ahead ( $I+1$ ); and the affective filter hypothesis which mentions that the teacher should provide a low anxiety atmosphere for better results (in Richards and Rogers, 1993).

*Evaluation* is another important aspect to consider in a humanistic curriculum and a very important part of the learning process. Self-evaluation is the only meaningful test for students to see if they learned or not, and if their needs and interests were met. Knowles’ (1977) andragogy proposes that because adult learners are self-directed, they should self-diagnose their learning needs and self-evaluate their learning process. Teachers should experiment with several types of evaluation. Examples of those are self-evaluation including student reporting, learning by student designed objectives, pass-fail grading, concept mastery learning, and ‘portfolios.’

### **Step 3: Selection of syllabus type**

The syllabus refers to what should be taught and in what order, and guides teachers and learners in everyday concerns. In an ESP program which is functionally oriented, the syllabi will be sequenced according to the students’ needs. This syllabus will have a content-based syllabus as the main framework. It will also have a skills-based syllabus that will order the skills the students have to learn in order to understand the texts; and finally a structure-based syllabus that will provide the necessary structures as they appear in the context.

The content-based syllabus gives more importance to language use than language form (in a use/form continuum). This is particularly important in an ESP course. In a content-based language teaching the primary purpose of instruction is to teach some content or information using the language that the students are also learning. The subject matter is primary, and language learning occurs incidentally to the content learning. The content teaching is not organized around the language teaching but viceversa (Kranhke, 1987). The sequencing of this syllabus will be done according to the following criteria: from short to long, and from less technical to more technical.

The skill-based syllabus organizes the content of the language teaching with specific abilities or skills. Skills are things that people must be able to do to be competent in a language, independently of the situation or setting in which the language use can occur. A skill-based syllabus groups linguistic competencies together into generalized types of behaviors, such as reading texts for main ideas or supporting details, applying skimming and scanning, and so on (Kranhke, 1987).

The structural syllabus; on the other hand, organizes the content of language teaching with forms and structures, usually grammatical, of the language being taught (Kranhke, 1987). So, a syllabus can be sequenced according to contrastive difficulty (emphasizing those structures that cause problems due to native language interference), and regularity (first the ones that have more generalizability and productivity). It must be kept in mind that the teaching of structures is bound to content.

The objectives of the course would be skill-based. Microskills are commonly used to express objectives. These microskills describe competencies of functional ability in reading. Nuttal (1983) presents some objectives. The students will: use skimming to understand the main ideas, use other visual information like pictures, graphs, tables, etc. to increase comprehension, decide how to read the text according to his/her purpose, differentiate the use of different vocabulary by the author, skip words if accuracy is not necessary, use discourse knowledge to understand the text, notice the differences in meaning of a word according to the context in which it appears, make inferences, know that his previous knowledge may interfere with the information he is grasping from the text, and be aware when he is not understanding the text and solve the problem (in Kranhke, 1987).

The role of the teacher will be to provide a low affective filter for learning, interesting activities, and authentic material (because input is crucial). The teacher will also be an evaluator. S/he will monitor the student's learning, but will consider errors as a natural part of the learning process. S/he will make sure that the majority of the class time will be spent in appropriate production of the language (in this case reading) involving as many students as possible (Pennington, 1991).

The students will have a high degree of control over their own learning and their role will be very active. They will initiate activities, express opinions about needs and preferences, and make their own decisions (Dubin & Olshtain, 1994). In ESP reading courses, there is a symmetrical relationship between the learner and the teacher. A "symbiosis" takes place since the teacher will help the students with the language, and the students will help the teacher with the content.

In regards to evaluation, if the teacher takes a holistic view in her/his classes in which s/he emphasizes use, an integrative approach of evaluation must be proposed where a primary concern is with evaluating reading competence (Dubin & Olshtain, 1994). To measure this, the educator will use subjective and objective scoring from the available options along the discrete point/integrative continuum. It is believed that a balance of integrative and discrete point is felt to be the most satisfactory approach for maximizing reliability and validity in a reading comprehension test. The teacher can use any other type of test or alternative assessment. For example, the instructor could use student-made tests or a portfolio as an activity to develop self-assessment (McNamara & Deane, 1995), or use criterion tasks which are tasks that the learner finds interesting and useful for his/her purposes (Shih, 1992). The students will be evaluated on the contents of the syllabus and the results will be taken as representative of the whole reading ability. In general the tasks and tests will evaluate knowledge and ability.

#### **Step 4: Specification of the thematic content of the materials**

The needs assessment reflects the topics the students are interested on. The needs assessment applied to a group of students of veterinary medicine provided several topics of study necessary in their discipline. The following are the main topics mentioned by

the students: biology, medical pathology, production, anatomy, nutrition, health, immunology, bacteriology, reproduction, virology. The topics mentioned by the students are still general, but at least provide a guidance for the material designer to look for the adequate texts. Once the designer decides which topic s/he will develop in a unit, s/he starts the process of looking for different materials from different sources on the same topic until s/he finds the most adequate ones. Here again the emphasis is on content.

The reading *toxoplasmosis* was chosen for the study of this model because it relates to several of the above mentioned fields of study, and because cats make common pets, and patients for veterinary practitioners.

### **Step 5: Selection of appropriate reading passages**

Materials must be based on theoretically sound learning principles. What unites the texts is the feature of authenticity here understood as a text that has not been generated specifically for language purposes (Dubin and Olshtain, 1994). The material must have an appropriate difficulty and interest level to hold the reader's attention (Sheldon, 1988). Stoller (1994) believes it should be useful, and add to the learner's knowledge. It should provide a source for critical thinking and be exploitable (Brinton, Snow & Wesche, 1989). It should provide examples of how language is used. It must be appropriate to the learners' needs and background. This is why the content must be chosen according to the results of the needs assessment. The material should also enhance retention of skills. The length of the text is taken into account as well as the appearance of it. But even though sometimes a text with more tables and pictures is the favorite, it may be discarded because of its length. The main criteria in the application of this model was resolved in this way: First, authenticity; second, relevancy; third, level of difficulty (structure and vocabulary); fourth, length; fifth, exploitability (enough content to be able to design challenging tasks), and sixth appearance.

### **Step 6: Specification of tasks.**

The material should provide meaningful activities for learners and opportunities for communicative and authentic language use (Richards, 1994). They are a description of how a method realizes its approach and design in classroom behavior (Richards & Rodgers, 1993). They relate to the philosophy of the program, to the view of language and language learning that the program embodies, and to the roles of teachers, learners and instructional materials (Richards, 1994).

The material should include pre-reading, during reading and post-reading tasks to help the students to better understand the text. *Pre-reading tasks* include scanning, skimming, vocabulary preparation, comprehension of the title, observation of boldfaced words, numbers, pictures, graphs, charts, etc., ways of developing or bringing back background knowledge, recognizing key words, topic and main ideas. The *during-reading tasks* include the observation of signal words, and patterns of organization, review of vocabulary, and structures, a purpose for reading, prediction of the information coming ahead, ways of taking notes by underlining or writing on the margin, drawing a semantic map, noticing words that represent a sound (cough, thunder, etc.), a picture (the whale was greenish), derivations (careful, carefully), word families (water wheel, steering wheel, potter's wheel, wheelbarrow), inferring, highlighting key words, contextualization of vocabulary. The *post reading tasks* include tasks such as writing a formal or informal outline, reviewing vocabulary and structures, summarizing,

but most importantly is to promote students' reactions to the content of the passage (critical reading). Some tasks may require of individual work mainly those that develop cognitive and metacognitive knowledge. Other tasks require of collaborative work which is the type of work mainly advised in this model.

### **Step 7: Development of instructional materials**

The material was developed according to the objectives proposed in the syllabus. So, the main goal of the material was reading comprehension. It included two readings on *Toxoplasmosis*, one short to develop background knowledge, and one long as well as tasks on vocabulary development, skimming, scanning, information transfer, paraphrasing, summary, outlining, and critical reading. The appearance of the material was also taken into account (See table 1).

### **Step 8: Piloting of instructional materials**

The material was piloted at the Universidad Nacional. It was administered to students of 'Inglés Instrumental II' which is the second course the students take to fulfill the English reading comprehension requirement. Three groups of students participated in the study. The whole universe of 64 students was taken into account.

### **Step 9: Evaluation of the material**

To evaluate the material three instruments were used. A questionnaire administered to the students, a questionnaire answered by the professors, and an interview to some students chosen at random. The evaluation instruments directed to the students were written in Spanish since the goal of the course was the development of only the reading comprehension skill, and misunderstandings that could lead to false data wanted to be avoided by all means. The data was then analyzed to decide what parts of the material had to be improved or changed. Due to space limitations in this paper only the questionnaire for the students was included here (see 'Cuestionario para los Estudiantes')

### **Step 10: Revision of the material.**

The material had to be revised in aspects related to content, tasks, and appearance. The information provided by the teacher who administered the reading in class, and the students was very valuable on this respect.

#### **Table 1: appearance**

- Use a numbering system if necessary (Salwa, 1993).
- Write conclusions, summaries, or rules at the end of the unit (Salwa, 1993).
- Propose a layout like the writing of main ideas in the right margin of the page (Salwa, 1993).
- Use boxed information to enclose theories and definitions (Salwa, 1993).
- Use different colors to highlight examples (Salwa, 1993).
- Use italics, capital letters, and bold type letters to introduce concepts (Salwa, 1993).
- Use different colors to highlight different language areas or levels (Lin & Brown, 1994).

- Use boldface and different types of fonts (Lin & Brown, 1994).
- Use an attractive and clear font. (Day, 1994)
- Use a careful layout and designs made by hand for emphasis (Lin & Brown, 1994).
- Underline or print in boldface vocabulary or constructions that may present a problem for the learners (Milne, 1989).
- Explain the highlighted vocabulary in English or translate it into the students' first language as footnotes (Milne, 1989).
- State on top of the page what the objectives of the material will be, so the learners can decide if they are interested or not in the material (Lin & Brown, 1994).
- Give the learners the answers at the back of the material as feedback (Lin & Brown, 1994).
- Give students checklists for open-ended questions (e.g. essay questions) to make them reflect on tasks, and develop metacognition (Lin & Brown, 1994).
- Leave enough space in the exercises to write the answers by hand (Sheldon, 1988).
- Match the objectives of the lesson with the length and amount of material (Day, 1994).
- Choose materials with pictures, graphs, tables or any other non-textual information that may help the students understand the text (Day, 1994).
- Number lines and paragraphs of texts to make the lesson work easier (Day, 1994).
- Use a readable size of letter (Day, 1994).
- Prepare visually interesting materials with nice illustrations that amuse and inspire the reader (Smetana and Whitacre, 1991).
- Draw conceptual maps using a 'star' to show facts (lines radiate out of the main concept, and the facts are written on these lines); 'charts' to list or compare characteristics or features of concepts; 'chains' to show a sequence or process using arrows; 'trees' to show hierarchies or organizations; and 'sketches' or pictures to put a concept in graphic (Shih, 1992).
- Maintain an adequate equilibrium between the text and the graphical material (Sheldon, 1988).

### **Cuestionario para los estudiantes**

Estimado estudiante: este cuestionario es parte de un estudio sobre diseño de materiales. Con anterioridad se le agradece su colaboración en un intento por mejorar los materiales para los cursos de manejo instrumental de la Universidad Nacional. Marque las casillas correspondientes y anote cualquier sugerencia o comentario en el espacio que se le da.

Está usted en carrera actualmente? Yes // No //

Nivel: \_\_\_\_\_

1. El tema toxoplasmosis me era familiar.

firmemente de acuerdo //      de acuerdo //      neutral //  
en desacuerdo //      firmemente en desacuerdo //

## Comentarios

2. Entendí las ideas principales de los textos.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

3. Los ejercicios de vocabulario presentados al principio de la unidad me ayudaron a entender ambos textos.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

4. El material me mantuvo concentrado.

firmemente de acuerdo // de acuerdo // neutral // en desacuerdo // firmemente en desacuerdo //

## Comentarios

5. Estas lecturas sobre toxoplasmosis me resultaron académicamente interesantes.

firmemente de acuerdo // de acuerdo // neutral // en desacuerdo //

firmemente en desacuerdo //

## Comentarios

6. Las lecturas estuvieron apropiadas para mi nivel de lectura en inglés.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

7. Las lecturas me dieron nueva información.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

8. El material tenía un balance entre texto y ejercicios.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

9. Las instrucciones de los ejercicios estaban claras y comprensibles.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

10. Los ejercicios (sobre vocabulario y análisis/síntesis) fueron variados.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

11. Los ejercicios del texto corto me ayudaron a entender el texto largo.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

## Comentarios

12. Los ejercicios al final del texto largo (resumen, paráfrasis, análisis de ideas tomadas de diferentes fuentes de información, lectura crítica) son los mismos que utilicé en los cursos de carrera.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //  
Comentarios

13. Los ejercicios (e.g. resumen, organizadores visuales, análisis y síntesis de ideas de diferentes fuentes de información, paráfrasis) me ayudaron a considerar el contenido del texto más críticamente.

firmemente de acuerdo // de acuerdo // neutral //  
en desacuerdo // firmemente en desacuerdo //

Comentarios

14. Las estrategias (subrayar las ideas principales, encerrar en un cuadro el vocabulario desconocido, encerrar en un círculo el vocabulario que pueda usar en el diccionario personal, tomar notas en el margen, utilizar un organizador visual para entender mejor el texto) que se presentaron en la unidad fueron útiles para la comprensión del texto.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

Comentarios

15. La apariencia del material me motivó.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

Comentarios

16. El tamaño de las letras era el adecuado.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

Comentarios

17. Había suficiente espacio para escribir las respuestas.

firmemente de acuerdo // de acuerdo // neutral //

en desacuerdo // firmemente en desacuerdo //

Comentarios

Por favor, comente sobre cualquier aspecto que usted considere importante para mejorar esta unidad (textos y ejercicios) de acuerdo con sus necesidades.

### Bibliography

- Aronson, D. & Rieber, R. (eds.) (1979). *Psycholinguistic research: implications and applications*. New Jersey: Lawrence Erlbaum Associates Publishers.
- Brinton, D. Snow, M., and Wesche, M. (1989). *Content based second language instruction*. New York: Newbury House Publishers.
- Carroll, S. & Freedle, R. (eds.). (1972). *Language comprehension and the acquisition of knowledge*. Washington DC: V.H. Winston & Sons.
- Chacón, X. (1993) [*A needs assessment for the Veterinary School at the Universidad Nacional*]. Unpublished raw data.
- Clarke, M.A., & Silberstein, S. (1977). *Toward a realization of psycholinguistics principles in the ESL reading class*. Language Learning, 27(1), 135-154.
- Day, R. (1994). *Selecting a passage for the EFL reading class*. English Teaching Forum, 32 (1), 20-23.
- Driscoll, M. (1994). *Psychology of learning for instruction*. Boston: Allyn and Bacon.
- Dubin, F. & Olshtain, E. (1994) *Course Design*. New York: Cambridge University Press.

- Elias, F., & Merriam, S. (1980). *Philosophical foundations of adult education*. Florida : Krieger Publishing Company.
- Farham-Diggory, M. (ed.) (1992). *Cognitive processes in education*. New York: Harper Collins Publishers.
- Knowles, M. (1977). *A history of the adult education movement in the United States*. New York: Robert Krieger Publishing Company.
- Krahnke, K. (1987). *Approaches to syllabus design for foreign language teaching*. New Jersey: Prentice Hall, Inc.
- Lin, L.Y., & Brown, R. (1994). *Guidelines for the production of in-house self-access materials*. ELT Journal, 48(2), 150-156.
- McNamara, M.J., & Deane, D. (1995). *Self assessment activities: Toward autonomy in language learning*. Tesol Journal, 5(1), 17-21.
- Milne, D.R. (1989). *Reading-comprehension material for science students*. English Teaching Forum, 37-38.
- Miller, G. (1956). *The magical number seven, plus or minus two: some limits on our capacity for processing information*. The Psychological Review, 63, (2), 81-87.
- Pennington, M. (1991). *Building better English language programs*. Washington: NAFSA.
- Richards, J., & Rogers, T. (1993). *Approaches and methods in language teaching*. (pp. 128-142). New York: Cambridge University Press.
- Richards, J. (1994). *The language matrix*. Cambridge: Cambridge University Press.
- Rosenberg, Sh. (ed.) (1982). *Handbook of applied psycholinguistics: major thrusts of research and theory*. New Jersey: Lawrence Erlbaum Associates Publishers.
- Salwa, G. (1993). *ESP reading: some implications for the design of materials*. English Teaching Forum, 31(4), 42-44.
- Sheldon, L. (1988). *Evaluating ELT textbooks and materials*. ELT Journal, 42(4), 237-246.
- Shih, M. (1992). *Beyond comprehension exercises in the ESL academic reading class*. Tesol Quarterly, 26(2), 289-311.
- Smetana, S. & Whitacre, W. (1991) *ESL materials design: engaging the learner*. Journal of Intensive English Studies, 5 , 81-89.
- Stoller, F. L. (1994). *Making the most of a news magazine passage for reading-skills development*. English Teaching Forum, 32(1), 2-7.