

Critical Thinking: An Integral Thread in the Curricular Weave



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The Standards for Foreign Language Learning in the 21st Century (SFL) (ACTFL, 1996) identifies critical thinking as one of seven threads in the “weave of curricular elements” (p. 33). The weave, made up of the standards’ five goal areas (communication, cultures, connections, comparisons, and communities) interwoven with seven curricular elements (language system, cultural knowledge, communication strategies, critical thinking skills, learning strategies, other subject areas, and technology) suggests possibilities for a broad range of curricular experiences for contemporary foreign language study. Several of the threads and their integration in foreign language learning have been investigated (e.g., Lange, 1999, cultural knowledge; Liskin-Gasparro, 1996, communication strategies; Chamot, 1999, learning strategies; Walz, 1998, technology). However, the role of critical thinking in foreign language learning has received little attention.

According to SFL, critical thinking skills range from “the very basic level of identification and recall to the higher levels of analysis and problem-solving” (p. 35). Critical thinking has been defined as a metacognitive endeavor, “an active, purposeful, organized process we use to make sense of our world by carefully examining our thinking and the thinking of others in order to clarify and improve our understanding” (Chaffee, 1988, p. 27). Developing critical thinking skills and learning a foreign language can be complementary activities because communication and understanding others’ perspectives are important to both foreign language study and critical thinking. The Foundation for Critical Thinking (1999, p. vii) maintains that mastery of language contributes to critical thinking. Furthermore, individuals become better readers, writers, speakers, and listeners as they become more proficient in critical thinking, and they develop their skill in using language as they improve their ability to think and make sense of the world (Chaffee, 1988, p. 167). Critical thinkers seek other perspectives on the situations they are trying to understand and attempt to see all sides of an issue. They are willing to put themselves in the position of others and try to see things from their points of view (Chaffee, 1988, p. 43-4).

This paper provides suggestions for integrating critical thinking in foreign language instruction within the context of the standards’ curricular weave. The discussion is organized into four areas: content, process, product, and environment.

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Content

Chaffee (1992) proposes two contrasting approaches to teaching and learning: the coverage model and the critical thinking model. In the coverage model, content is perceived as information that students learn through reading and listening to teacher lectures. The Foundation for Critical Thinking (1999) maintains that the majority of teachers and students view content as a “sequence of stuff to be routinely ‘covered’ and committed to memory” (p. 2-8), and that, on average, 90% of the decisions made about instruction are a result of the textbook chosen (p. 4-5). Lange (1996) maintains that “with the acceptance of the text as *the* curriculum comes the concept of coverage” (p. 86). Both Chaffee and the Foundation for Critical Thinking caution that textbooks should not drive instruction because most textbooks are not structured to enhance critical thinking about their content. The seven threads in the weave of curricular elements suggest opportunities to break away from a textbook-bound program and from the tendency to feel obliged to cover a certain number of chapters.

In contrast to the coverage model, Chaffee (1992) proposes a critical thinking model in which students not only learn information but also develop a progressive understanding of the process used to generate and think about the information. Similarly, the Foundation for Critical Thinking (1999) suggests that

All content is nothing more nor less than a mode of thinking, a way of figuring something out, a way of understanding something through thought... To learn any body of content, therefore, is to figure out (i.e., reason or think through) the connections between the parts of that content (p. 2-8).

Critical thinking can be integrated in foreign language learning when content is

understood to be a mode of thinking in the target language and when students are challenged to figure out the target language speakers’ mode of thinking by interpreting (listening and reading) and producing (speaking and writing) the target language. When students listen, read, and/or view authentic texts (i.e., materials written or produced for target language speakers), and when they produce the target language orally or in writing, they can be guided to engage in higher order thinking skills that require critical thinking (e.g., analysis, synthesis, and evaluation).

Analysis, as defined in *Bloom’s Taxonomy of Educational Objectives* (1956), “emphasizes the breakdown of material into its constituent parts and detection of the relationships of the parts and the way they are organized” (p. 144). For example, students guess the meaning of new words from the context in which they appear. They detect the nature and function of particular statements or images and are able to read between the lines for information that may not be explicitly stated. Reading and listening critically involve not only identifying the main idea but also finding evidence and examples that support it.

Evaluation is defined as making judgments, for some purpose, about the value of ideas, works, solutions, methods, material, etc. It involves the use of criteria as well as standards for appraising the extent to which particulars are accurate, effective, economical, or satisfying” (Bloom, 1956, p. 185). Students can evaluate authentic materials based on predetermined standards or appraise the extent to which their own ideas are consistent with that which is presented in the material. They may compare the extent to which the cultural information in the material is consistent with their own culture’s mode of thinking.

Synthesis is putting together elements and parts so as to form a whole...working with elements, parts, etc., and combining

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them in such a way as to constitute a pattern or structure not clearly there before" (Bloom, 1956, p. 162). For example, students combine their knowledge of the language system (grammar, spelling, syntax, vocabulary) and their knowledge of a topic from another subject they are studying in school to produce an original written composition or an oral presentation in the target language.

Process

Selecting content around which activities that engage students in critical thinking may be planned is essential for foreign language programs that aim to move students beyond memorization and repetition. Providing students with strategies and tools to process content in an active, purposeful, and organized manner is equally important. This section of the paper describes three means of facilitating the development and use of critical thinking as students process content: the use of graphic organizers, a process approach to writing, and learning strategies.

Graphic Organizers

Wincour (1985) defines graphic organizers as, "visual constructs or diagrams as a communication aid for systematically mapping the organization of ideas and guiding internal dialogue" (p. 88). Graphic organizers are useful tools in facilitating critical thinking because they help students organize content, examine their prior knowledge for interrelationships, and identify gaps in their own thinking. Four sample graphic organizers, their purpose, the thinking skills targeted, and a description of how to use them, as suggested in *The Nebraska K-12 Foreign Language Frameworks* (1996), can be found in Appendix A. Teachers may create their own graphic organizers to correspond with their selected content and objectives. Two teacher-created examples of graphic organizers, which were used in the process approach described below, are presented in Appendix B.

A Process Approach to Writing

Students may be guided in developing critical thinking through a process approach to writing. The approach typically involves four phases — preparing, drafting, revising, and presenting — that provide opportunities for students to carefully examine their own thinking and evaluate their writing based on established criteria and feedback from other individuals. The phases can be completed recursively, moving back and forth among the phases, or in a strictly linear fashion. The four phases of the approach are illustrated below with a sample plan that was implemented in a second-year university French class. The

content selected for the plan was an authentic text about French universities (www.france-universite.net). Since students were directed to the Internet to find the text, the technology thread of the curricular weave was interwoven with critical thinking and the communication goal.

The purpose of the first phase, preparing, is to generate and organize ideas and elicit potentially useful language. It may be desirable to include more than one activity during the preparation phase. Some activities students may do on their own; others such as discussions, brainstorming, or completing a concept web (see Appendix A) may be done in small groups or with the class as a whole. For the first activity in the sample plan, students worked on their own outside of class to complete the graphic organizer "How to Choose a University" (see Appendix B). They were given the following directions:

First, imagine your ideal university. What are the characteristics? What criteria are important to you? Then, complete the activity, "How to Choose a University." In each of the four squares you should write one criterion that is important to you in choosing a university (for example: a good library, situated in an interesting city...). Then, in the rounded rectangles and trapezoids, explain your criteria a little more. For example, if one of your criteria is "situated in an interesting city," you should explain what you mean by "interesting."

During the next class, students worked in small groups to explain their completed graphic organizers. All discussions were conducted in French. Students were advised that they could add other criteria based on the ideas of the members of their group. Students were then assigned to complete a matrix as homework (see Appendix B). In the left column of the matrix, they wrote the criteria that they had already identified for their ideal university. Then they went to the Internet site and clicked on the map of France to find descriptions of all universities in France. They skimmed as many descriptions as needed in order to find two universities that offer their preferred criteria and then wrote the name of the universities in the first row on the matrix. In the second and third columns, students briefly described how the selected universities met their identified criteria. During the next class, in the same small groups as in the previous class period, students shared what they had found and justified their selections of universities.

Drafting, the second phase in a process approach to writing, also requires critical thinking. During this phase, students assemble their ideas into a whole. In the sample plan, students used the graphic

organizers they had prepared in the preparation phase to write a two-page composition in which they described the criteria they would use to choose a university, explained how the two universities they found met their established criteria, and, finally, justified which of the two universities they would choose. In producing a composition by combining information from different sources, students were thinking at the evaluation and synthesis levels. According to Wiggins (1998),

Performance or production requires the student to plan and execute a new work from scratch and to use good judgment in choosing apt content and shaping a quality product — a 'synthesis' leading to a 'unique' creation by the students in the words of Bloom's Taxonomy (p. 140).

The third phase in a process approach is revising. Students rethink, reorganize, and polish their compositions. In the sample plan, students had two opportunities to revise. First, the small groups from the preparation phase read each others' compositions to determine if their ideas were clearly stated. After revising their compositions based on the peer comments, students then submitted the compositions to the teacher who evaluated them based on predetermined criteria which had been shared with students before they began the writing task. Students were allowed to revise and resubmit their compositions after receiving the teachers' feedback. Students evaluated their group members' compositions based on predetermined criteria in carrying out peer editing; and since the authors re-examined their thinking and clarified their ideas in revising their compositions, they were engaged in critical thinking during the revising phase.

The final phase in a process approach to writing is presentation. In the sample plan students formed new groups made up of different individuals than the groups in the preparation and drafting phases. Each member in every small group read at least one composition of another member of their group.

Learning Strategies

As students process content, they use learning strategies, "task-specific tactics or techniques, observable or nonobservable, that an individual uses to comprehend, store, retrieve, and use information to plan, regulate, or assess learning" (Galloway & Labarca, 1990, p. 141). Critical thinking is interwoven with learning strategies in that their use facilitates reasonable, reflective thinking. Sample learning strategies used in each stage identified in the above definition (planning, regulating, and assessing) are provided

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below. An in-depth discussion of learning strategies can be found elsewhere (e.g., Oxford, 1990; Chamot, 1999).

Before beginning any assigned task, such as reading an authentic text, writing a composition, preparing an oral report or viewing a video, students use learning strategies to plan how they will accomplish the task. For example, students may identify what they already know about the topic or recall how they approached a similar assignment in the past. If they are reading, they might quickly skim the material to get a general idea or impression of the text or make predictions from the title and illustrations. Regulating describes the students’ awareness and attention as they work on the task. Strategies that students may use include keeping track of how they are doing and identifying problems they are having. They might also focus on specific aspects of the language such as cognates or concentrate primarily on verbs. Students use learning strategies in assessing their work by checking it to see if they have met all the predetermined criteria. They might also orally or mentally summarize what they have done or what they have learned from doing the task.

Teachers can facilitate students’ development and use of critical thinking by helping them make their own learning strategies explicit and teaching them other effective strategies. Chamot (1999) suggests that teachers should give each strategy a name, model it, and provide opportunities for students to practice the strategy with real learning tasks.

Product

Using graphic organizers, implementing a process approach to writing, and enhancing students’ awareness and use of learning strategies are three means by which critical thinking can be interwoven with foreign language learning as students process content. Developing products is another means. The tangible products students create for authentic assessments and the intangible product of a cross-cultural mind are discussed below.

Products for Authentic Assessments

Wiggins (1998) defines authentic assessment as a measure of student performance characterized by the following standards. Student performance...

1. *Is realistic.* The task or tasks replicate the ways in which a person’s knowledge and abilities are “tested” in real-world situations.
2. *Requires judgment and innovation.* The student has to use knowledge and skills wisely and effectively to solve unstructured problems, such as when a plan must be designed, and the solution involves more than following a set routine or plugging in knowledge.
3. *Asks the student to “do” the subject.* Instead of reciting, restating, or replicating through demonstration what he or she was taught or what is already known, the student has to carry out exploration and work within the discipline of science, history, or any other subject.
4. *Replicates or simulates the contexts in which adults are “tested” in the workplace, in civic life, and in personal life.* Contexts involve specific situations that have particular constraints, purposes, and audiences.
5. *Represents the students’ ability to efficiently and effectively use a repertoire of knowledge and skill to negotiate a complex task.* Good judgment is required here, too.
6. *Allows appropriate opportunities to rehearse, practice, consult resources, and get feedback on and refine performances and products* (pp. 22-24).

The following four samples illustrate authentic assessments in foreign language learning. (1) Imagine that you are working for an advertising agency. Your boss, who knows you speak German, has asked you to work for a client who wants to sell his American product in Germany. Create an ad that would entice the Germans to buy the product. (2) Tourism is a major source of revenue in many European cities. Imagine that you and a group of your classmates are on the council of a city in Spain and you are concerned about promoting tourism. Your group has been delegated the responsibility of preparing a brochure to attract tourists to your city. (3) You have an apprenticeship in an American branch of a French business. Your boss has to take a trip to France. He has an appointment with clients in Paris, Strasbourg, Lyon, and Marseille. Since he prefers taking the train, and, if possible the TGV, you must prepare a detailed itinerary for him which lists the train schedules and available amenities. Your boss has given you the following information: He arrives in Paris on March 20 and must be in Strasbourg by noon since he has a meeting at 3:00. His next meeting is in Lyon on March 23 at 6:00 p.m., and he plans on spending at least one night there.

He has another meeting in Marseille on March 26 at 9:00 and must return to Paris on March 28 for his last meeting at 9:00. His return flight is March 29 at 10:40. Make up his itinerary for his travel in France by consulting the Internet site www.sncf.com.¹ (4) Imagine that you are on the Student Union Board at the university. The members of the board must decide on two or three activities to sponsor during the semester. The problem is that everyone on the board has a different idea. It has been decided that at the next meeting any board member who so desires may have three minutes to talk about an activity they want the board to sponsor and why. Choose an activity which you enjoy and which you would like the board to sponsor.

Authentic assessments in foreign language learning require students to demonstrate their knowledge of the language system by using the language to create an oral or written product that a person might be asked to create in a real-world context. The products in the above samples are an advertisement, a brochure, an itinerary, and a speech about an enjoyable activity. Other products include a campaign speech, an interview, a movie script, a radio commercial, or a simulation. In creating products for authentic assessments, students engage in critical thinking as they analyze the task as stipulated by the requirements of the assessment; synthesize their repertoire of skills, learning, and understanding to create the original product; and evaluate in choosing appropriate content and measuring the extent to which their product meets the established assessment criteria.

Cross-Cultural Mind as Product

The purpose of critical thinking, according to Chaffee (1988), is to clarify and improve our understanding of the world (p. 66). As illustrated below, foreign language study has a similar objective.

American students need to develop an awareness of other people’s views, of their unique way of life, and of the pat-

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terms of behavior which order their world, as well as learn about contributions of other cultures to the world at large and the solutions they offer to the common problems of humankind. Such awareness will help combat the ethnocentrism that often dominates the thinking of our young people (SFL, 1996, p. 42).

Individuals who have a cross-cultural mind realize that no one culture's interpretations of the world are necessarily more correct than those of any other culture. Instead each interpretation simply reveals the "spectacles" through which a person views the world (Chaffee, 1988, p. 108). One of the goals of interweaving critical thinking with foreign language learning is to make students aware of their own culturally influenced spectacles in order to help them recognize and eliminate any bias or distortion they may experience when encountering new information about target language speakers and their cultures.

One technique toward reaching the goal stated above, is to ask students to write a metaphor describing culture. (A few sample student-written metaphors include: "Culture is a patchwork quilt." "Culture is a tossed salad." "Culture is a rainbow." "Culture is an umbrella." "Culture is a bowl of M&Ms.") In explaining their own comparisons and listening to others, students not only gain an awareness of their own culture but also begin to realize the multifaceted nature of culture. Another way to help students become aware of their own culture is to read and discuss "Body Rituals Among the Nacirema" (Miner, 1979). The article, told from the point of view of a visitor to the Nacirema (American spelled backwards), recounts the natives' obsession with health and beauty. Students generally find the description to be quite humorous and are able to laugh at themselves as they recognize their own habits in Miner's portrayal. Yet another technique is to examine proverbs and bumper stickers and the underlying values they reveal. For example, our society's litigious nature is illustrated in the bumper sticker, "Please tailgate. I need the money." Our pay later, charge account ethic and the Disney phenomenon are revealed in, "I owe. I owe. It's off to work I go."

Environment

Interweaving critical thinking with foreign language learning, as in any other academic area, necessitates creating and maintaining a certain classroom environment. Chuska (1995, pp. 17-20) proposes four motivation strategies for creating a classroom environment conducive to critical thinking. The first is to ask fewer questions. Because research indicates an inverse relationship between the number of questions asked during a single class session

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and the level of thinking required to answer them, Chuska recommends asking only four or five well planned, open-ended questions per class session. In foreign language instruction, less time spent on display questions — asked so that students can demonstrate their knowledge of the language system — allows more time for questions that require students to apply, react to, or reflect on the content that has been selected for the class.

Chuska's (1995) second recommendation is to provide more time for answers. He cites research that has found the average amount of time teachers allow for students to answer a question before moving on to someone else is only one second. Waiting three or four seconds after asking a well planned, open-ended question not only provides time for students to think through their answers but also allows more students to respond. Additionally, teachers should provide time after a student responds to elaborate and support the response. Shrum and Glisan (2000, Appendix 10.2) suggest ways for providing more think time for answers such as the "think-pair-share" technique where students take several sentences to think about an answer, share it with a partner, and then follow up with a discussion of the answers with the whole class. Other techniques include asking follow-up questions, surveying the class to see how many people agree with the answer, asking students to describe how they arrived at their answer, and playing the devil's advocate by requiring students to defend their reasoning against different points of view.

The third recommendation Chuska (1995) proposes is that the teacher and students pay attention to the student who is responding. Nonverbal behaviors such as smiling and establishing eye contact as well as verbal behaviors such as making requests for explanation, elaboration, and/or clarification of responses imply that students' ideas are worthwhile, relevant, and worthy of examination. The teacher may encourage other students to pay attention to their classmates' responses by

asking for comments on, critiques, or analyzes of another student's responses.

Chuska's (1995) fourth suggestion is that teachers talk less. If students are to think critically, they cannot be passive receivers of information. In foreign language instruction, lecture should be kept to an absolute minimum. Emphasis should be on students' interpretation and production of the target language and the demonstration of their language proficiency through authentic assessment.

Conclusion

Prior to *The Standards for Foreign Language Learning in the 21st Century (SFL)* (ACTFL, 1996), critical thinking had not been identified explicitly as a curricular element in foreign language instruction. That is not to imply that pre-standards foreign language instruction never challenged students to think critically. Programs that require students to read analytically and to apply the language, as Bloom (1956) defines application, "in situations new to the student or situations containing new elements as compared to the situation in which the abstraction is learned" (p. 125), do engage students implicitly in critical thinking. However, in order to offer students the rich curricular experiences suggested by the standards' weave of curricular elements, critical thinking must be planned for and taught in an active manner. Interweaving critical thinking in the content, process, product, and environment of foreign language learning, as presented in this paper, facilitates the identification of objectives for developing and using critical thinking at all levels of foreign language instruction.

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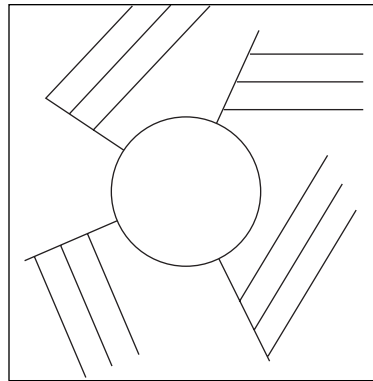
Appendix A: Sample Graphic Organizers from The Nebraska K-12 Foreign Language Frameworks (1996)

Concept Web

Purpose: To identify characteristics or attributes of a topic and group them in a visual pattern to show a concept.

Thinking skills: Listing, gathering, summarizing

How to use: Choose a category or topic and identify its characteristics or attributes. Create subcategories to describe the characteristics or attributes.



Comparison Chart

Purpose: To show similarities and between two or more topics (people, places, events, or ideas)

Thinking skills: Comparing, contrasting, analyzing

How to use: Write the topics in the top row of the grid; write the elements for comparison in the left column; write the appropriate data in the remaining columns.

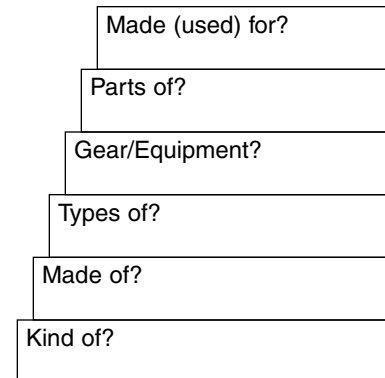
	Topic 1	Topic 2
Element 1		
Element 2		
Element 3		
Element 4		

Concept Ladder

Purpose: To arrange information about a person, item, or topic into an organized framework.

Thinking skills: Listing, characterizing, brainstorming

How to use: Label each "rung" with a characteristic of the person, thing, or idea. Fill in the frames with appropriate information.



KWPL

Purpose: To use prior knowledge about something as a bridge to a new concept or lesson

Thinking skills: Recalling, analyzing, evaluating

How to use:

K = Know — brainstorm and list what you already know about a topic.

W = Want to know — write questions about what you want to learn.

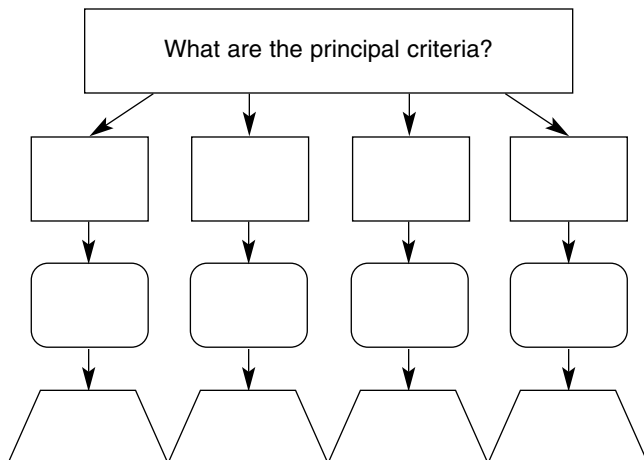
P = Predict — predict what you will learn.

L = Learned — review the topic after studying it and write what you learned.

K	W	P	L

Appendix B: Two teacher-created graphic organizers used in the sample process approach to writing.

How to Choose a University



Matrix

First, in the left column, write the criteria that you have already identified for your ideal university. Skim the websites for French universities and find two universities that meet your established criteria. Write their names in the first row of the matrix. In the second and third columns, explain how the selected universities meet your criteria.

criteria	university	university

¹ This item is based on a web-based activity in St. Onge, St. Onge, Kulick (1999) *Interaction* (5th edition): <http://interaction.heinle.com/chap7.html>.