

# A Questionnaire Project: Integrating the Four Macro Skills with Critical Thinking

Communicative Language Teaching (CLT) emphasizes the teaching of listening, speaking, reading, and writing within content- and task-based activities (Richards and Schmidt 2002). Numerous task-based projects are available to teachers who wish to teach a second language (L2) by involving their students in real-world, interesting activities that will expose them to a large amount of authentic language. One example is a questionnaire project, which is an excellent way to integrate language and other skills within a task-based activity. With a questionnaire project, students advance through stages of creating questions, collecting data, and analyzing and reporting results while developing their L2 skills through brainstorming, research, writing, problem solving, and group work.

This article describes, from the viewpoint of both learners and instructors, the various linguistic and academic benefits to students as they learn to design and administer an effective

survey project. (For purposes of this article, *survey* and *questionnaire* are used interchangeably.) A central focus of the article is to illustrate how students can use the four skills as a vehicle for building critical thinking, including improving their metacognitive strategies, i.e., the ability to evaluate their own learning (Richards and Schmidt 2002). We therefore specifically address some ways to help students develop their critical thinking ability (gain a nonlinguistic benefit) as they use the four macro skills to develop and administer a questionnaire.

## **Background: Questionnaires as teaching tools**

Questionnaire writing as a teaching tool is often mentioned in ESL/EFL teaching methodology textbooks and is a commonly used activity in English-language textbooks. For example, in a chapter focusing on both content- and task-based language teaching, Stoller (2002) briefly discusses survey use as a technique to facilitate project-based work in the classroom.

Harmer's (1998) *How to Teach English* has a section on speaking methodology designed to help beginning students initiate conversation, and subsequently create written work, through the design of simple questionnaires. His example deals with the topic of sleep and incorporates present-perfect questions, such as "Have you ever talked in your sleep?" and "Have you ever had a nightmare?" as a way to elicit comments from classmates about their sleeping habits (90). The questionnaire responses are reported on a form designed by the students. Other topics Harmer (1998) suggests to generate conversational interactions include student preferences in TV viewing and music.

A textbook by Soars and Soars (1998) also uses class surveys to practice particular grammar points. The upper-intermediate level of the series has students design a questionnaire that investigates the shopping habits of class members. At this somewhat advanced language stage, questions are more open-ended and detailed than those suggested by Harmer (1998). Students report their findings by using expressions of quantity (e.g., "all of us," "hardly anybody").

The examples above demonstrate that questionnaire writing is a well-established technique for facilitating different forms of communication in the classroom. However, it is also important to consider how teachers can enhance the benefits associated with this project-based activity. Alan and Stoller (2005, 11) stress that, to best facilitate learning of language, content, and real-life skills, projects "require a combination of teacher guidance, teacher feedback, student engagement, and elaborated tasks with some degree of challenge."

### **Benefits of a task-based questionnaire project**

- **Integration of the four macro skills**

As indicated above, a major advantage of using a questionnaire project in the classroom lies in its use of the four macro skills as part of an integrated curriculum. While an equal amount of time might not be spent on each skill, by the end of the activity all four skills will have been utilized as the teacher and students transform a classroom assignment into a real-world communicative activity.

- **Questionnaires as teaching and learning tools**

In addition to integrating the four macro skills, project work has additional benefits that justify its use as a teaching and learning tool. Working on questionnaires that are based on a relevant local context brings a motivating dimension of reality to the classroom environment. Rather than relying on generic textbook activities, which learners might find contrived, such a project encourages students to put their heads together and work actively to accomplish a meaningful goal.

- **Improvement of critical thinking**

A questionnaire project presents an opportunity to combine focused language use with the development of critical thinking. According to Facione (1998), critical thinkers may have both necessary affective dispositions, such as honesty, open-mindedness, and flexibility, and a set of cognitive skills, comprised of "interpretation, analysis, evaluation, inference, explanation, and self-regulation" (4). While a questionnaire project has the potential to increase all of these cognitive strengths, in our case *interpretation* and *self-regulation* were the skills most utilized by the students, and so they are discussed in more detail below.

1. *Interpretation skill*. Facione (1998) defines interpretation as comprehending and expressing the meaning of a variety of input, such as experience, data, beliefs, and rules. Two sub-skills he proposes for successful interpretation are (a) *categorizing information*, which is especially relevant in the context of survey interpretation, since grouping similar ideas together is essential for formatting a questionnaire that will generate useful data, and (b) *clarifying meaning*, which also has a role to play in that it is vital for researchers to be able to analyze their questions for biased or leading language.
2. *Self-regulation skill* (sometimes referred to as *metacognition*). Self-regulation takes on a more global significance in the critical thinking process. Facione (1998, 7) defines it as the ability to monitor and evaluate one's own work and conclusions, adding that the

method can be as simple as asking, “How am I doing?” or “Have I missed anything important?” This process of self-examination and self-correction is “remarkable,” he continues, “because it allows good critical thinkers to improve their own thinking” (6). In our context, it is also an indispensable part of the learning process for students as they review and revise their questionnaires and results.

### **Preparing students for a questionnaire project**

- **Students should be able to handle conflicts both with their peers and respondents.**

A communicative approach to English learning, which emphasizes hands-on collaboration, can be a messy and complicated affair. Being able to resolve conflicts with others is essential, first, for working with classmates on questionnaire development and, later, for working with respondents to collect the data and then to interpret the results. To facilitate this work, teachers need to prepare their students in several ways. Learning to express differences of opinion in the L2 is crucial for succeeding in groups, and teachers can enable students to do this by helping them hone their clarification and negotiation skills ahead of time. Specifically, this involves reviewing how to ask for more specific information, restate questions, suggest, agree, and disagree. While these language functions might have been covered in earlier classes, it is important that they are taught and practiced before the group work begins.

- **Students need to be able to use critical thinking to solve problems.**

Managing projects based on real-world experience also requires teachers to guide students and act as a resource to help them consider innovative ways of thinking about problems and attempting to solve them. Brainstorming, a loosely structured discussion designed to generate ideas from students, is the most common method for achieving this goal. The aim is to first come up with many ideas about an issue, without being concerned about limitations, and then to look at the feasibility of the ideas. Encouragement and feedback from the teacher sends a positive

message about freely contributing ideas during brainstorming, as initially there are no “correct” ideas. Especially in learning environments where CLT is not the norm, this might require active facilitation by the teacher to get the process started.

Another way the teacher can facilitate brainstorming is by collaborating with students as they decide the composition of their groups. Students who demonstrate what Facione (1998, 8) refers to as a “critical spirit” are likely to connect well with brainstorming; they are the ones who ask questions such as “Why?” and “How?” and “What happens if?” These types of natural critical thinkers should be distributed among the groups because they have the potential to promote creative thinking among their classmates in a way that the teachers cannot.

### **The questionnaire project**

This questionnaire project began as a small end-of-semester requirement for our university’s applied linguistics course. We had been studying the role that age plays in acquiring language, which led us to explore the work of Lenneberg (1967) on the importance of *a critical period* for language acquisition, which is formally known as the *Critical Period Hypothesis* (Richards and Schmidt 2002). We also examined the comments of Lightbown and Spada (1999), which support beginning foreign language study before puberty in order to reach native-like fluency. In our study of the theoretical background, we considered the fact that teachers in Cambodia, as in other countries, control neither the ages of the students in their classes nor when English study is initiated in the schools. For example, the Cambodian Ministry of Education, Youth, and Sport begins English instruction at Grade 7, although the age of the students within a classroom may vary widely. While the class did not reach a consensus on the validity of the Critical Period Hypothesis, we did acknowledge the need for teachers to consider the age of students when devising teaching strategies.

One group in the class designed a survey based on this issue, and the foundation of their work centered on two questions: “What are some methods teachers can use to help older learners (post-puberty) who are just

beginning to study English succeed in the classroom?” and “What do these students believe teachers can do to help them learn English?”

### **Procedures for developing and administering the questionnaire**

Observing an actual questionnaire project in the classroom illuminates the many benefits of this task-based activity, including intensive L2 language use in an authentic context that demands the development of negotiation, collaboration, and critical thinking skills. The nine steps listed below are described by the two student authors of this article who worked with a group to develop, administer, and present the results of the questionnaire project.

#### **Step 1: Selecting a topic and forming a group**

To begin, the teacher gave the class a choice of three topics from which to implement a questionnaire. We chose the theme “Critical Period Hypothesis,” which refers to the importance of a learner’s age in achieving native-like proficiency in a foreign language. Six of our classmates also chose this topic. Other groups looked at the differences between general English and English for Specific Purposes and at the value of using CLT in the Cambodian school context. While class members had worked together before, this was our first experience with group work beyond the textbook. The members of our group had discussions and shared opinions, which sometimes turned into debates.

#### **Step 2: Choosing the questionnaire format and brainstorming about the data to be collected**

Before developing the questions that we would eventually ask the respondents, we first had to decide the method of collecting the data, either through (1) direct interviews, (2) independent completion of the questionnaire by the respondents, or (3) a combination of both methods. We chose to have our respondents answer their own surveys.

Next, we brainstormed about our topic to generate an initial list of possible questions. We then divided the questions into two categories—one for teachers and one for students—and decided that we would create a separate version of the questionnaire for each group. We determined that some questions

would be on both forms, while other questions would be specific to either teachers or students. Throughout this step we expressed our ideas, listened to those of others, and discussed the validity of the ideas that were presented.

By the end of Step 2 we had learned how to examine the strengths and weaknesses of our peers’ work and how to engage in constructive criticism. In addition to enhancing our critical thinking, this process also helped us work on speaking and listening skills.

#### **Step 3: Writing the first draft**

In this step we completed the first draft of our questionnaire by editing the questions and putting them in a logical order. While editing, we needed to pay particular attention to specific details, including the syntax and vocabulary used in each sentence. This helped us develop our eye for detail, while improving our writing skills, in particular, using simple and clear language and correct syntax. We were guided in this questionnaire-writing process by the following five general suggestions from Babbie (1997):

1. Write questions that:
  - are clear, simple, and easy to answer;
  - contain only one idea;
  - are relevant to the respondents;
  - do not show your bias, and;
  - are positive in structure.
2. Use both open-ended and closed questions.
3. Start with simple and interesting questions.
4. Make sure that the format of your questionnaire is easy to follow.
5. Select respondents who are capable of answering the questions.

(See the Appendix for samples of the types of questions that were used in this project.)

#### **Step 4: Proofreading of the first draft by the group and the teacher**

Next, the draft of the questionnaire was proofread by the group members. Each individual received an identical copy of the questionnaire and read it at home for later discussion by the group. All group members were responsible for scanning for errors, and we revised the draft based on everyone’s comments. To further improve quality, two

members of the group with outstanding writing skills skimmed, scanned, and revised the draft again.

Then, to check for potential problems with our questions, we read them to the whole class. This allowed members of other groups and our teacher to offer suggestions for refining the content and wording. Afterwards, we gave the questionnaire to our teacher for another proofreading. The core benefits for students in this process were practicing skimming and scanning and creating precise written revisions.

#### **Step 5: Pilot testing the questionnaire**

The next step was to test the validity of our questionnaire draft through a pilot test. This is a critical step in the development of a questionnaire as it reveals any problems with the instructions, questions, or administration process and allows for a final revision before the general administration. Since we had designed two forms of the questionnaire—one for teachers and one for students—each group member gave a questionnaire to two teachers and to two students.

As the pilot respondents were completing the questionnaires, we observed their reactions, noted their feedback, and then edited our work based on the problems that had emerged. For example, there were a few questions that some respondents did not understand, which indicated that we needed to explain them in simpler terms. In one question we found that some students did not understand the phrase “to improve your English,” so we changed it to read “to make your English better.” This experience gave us even more practice in clarifying our language.

#### **Step 6: Revising the final draft**

After making revisions based on the pilot testing, the teacher also offered some suggestions, which we considered, even though we did not agree with all of them. We also had additional suggestions of our own. By making some adjustments based on these sources of input, we created our final questionnaire. In completing this step, we developed our problem-solving skills by reasoning with one another and our writing skills by continuing to refine the survey.

#### **Step 7: Administering the questionnaire**

At this point, members of our group handed out 100 questionnaires to teachers working in different private language institutes and 100 questionnaires to students in the same institutions. Some of the respondents, mostly students, had problems with some of the questions because they misunderstood them. An even more serious problem was that they did not follow the instructions, especially on the question type that required them to skip some questions based on their previous response. Furthermore, they usually did not fill out the open-ended questions, which required more than just checking a box. We put forth our best effort in dealing with the situation by explaining difficult or confusing questions to them and by giving them compliments and encouragement as they filled out their surveys. Through these efforts, we could see that our clarification and negotiation skills also improved.

#### **Step 8: Summarizing the data and interpreting the results**

After collecting the information from the teachers and students, we tallied the data and made some assumptions about what the results might indicate. We put important data into graphs and then added our comments. Because of time constraints, our analysis was not as formally complete as we wished. If there had been more time, we would have subjected our data collection and preliminary conclusions to the following questions, based on the work of McMillan and Schumacher (1997):

- Is the analysis that we made actually supported by the data? If it does not accurately reflect the data, then we need to go back and look again at the results.
- Do our findings provide implications useful to other educators? We need to include how teachers can use our results to be more effective in the classroom.
- Is the presentation of our analysis clear and complete? We need to be sure our vocabulary and syntax are not ambiguous. We also need to make sure that we have included all important points that can be drawn from our data.

Even though our analysis was not as comprehensive as it could have been, we still learned to create and interpret graphs, which strengthened our analytical skills.

### Step 9: Writing a final report

As the final step, we wrote up the results in a final report, which included a literature review. Ideally, we then would have presented our results to the class, but time did not permit this. Making this kind of classroom presentation would be valuable in developing public speaking skills. The final written report did offer two other main benefits, however. We improved our reading through using different sources for our literature review and increased our organizational skills during the composition of the report.

### Some points for teachers to consider

Below are some insights for teachers that were gained from using this classroom task-based questionnaire project.

- *Managing time constraints.* Questionnaire writing takes a long time. We were surprised how quickly the project started to grow and how occasionally it felt like it was becoming unmanageable. The teacher and students became so involved in the development and testing of the questionnaire that we could not complete our final product. To remedy this problem, it makes sense to prepare the class earlier in the term to use the functional skills necessary for doing projects. It would also help to have students practice more group work, including brainstorming, before beginning the project so that they can progress to the later steps of the project more quickly. In addition, setting clear deadlines for completion of each part of the project will help all of us manage our time more efficiently.
- *The importance of evaluation.* In any future project, students will be informed that evaluation of the data is ongoing; it does not just take place at the end of the activity. Students need to make note of possible patterns, categories, and relationships emerging from the information that they are collecting, as well as unexpected responses to

questions. They must also start interpreting early on what they believe is the significance of the data. Finally, students should have an opportunity to present their findings in class as the culmination of the evaluation process.

- *Participation of group members.* As with many cooperative activities, all students will not work equally hard as part of a group. It is therefore necessary to monitor the students to guarantee that all members participate to some degree. Doing a research project was a new experience for these Cambodian students, and some of them understood the concept better and were more willing to participate than others. However, it is fair to say that all the students, even those less inclined to get involved, gained added ability in using the four macro skills in a real-world context. Some also strengthened their critical thinking capabilities.
- *Selecting relevant topics.* While our project's content was specialized, the steps used in our questionnaire project can be generalized to any classroom. What is important is to offer students a choice of topics that stimulate their interest and also to solicit their ideas. This will increase the benefits that students gain from the activity. Depending on the age, level, and location of students, the following topics might be appropriate: career interests, computer use, English use, entertainment choices, hobbies, study habits, and work experience.

### Conclusion

While there is no doubt that questionnaire writing is a labor-intensive activity, it is worthwhile regardless of how many steps a class has time to accomplish. From a teacher's point of view, nothing is more satisfying than seeing his or her students gain the skills necessary to solve problems and evaluate their own learning. This accomplishment is also one in which students can take pride. Being able to integrate critical thinking with the four macro skills is an important step in students' development, not only as English language learners, but as scholars in whatever field they choose to pursue.

## References

- Alan, B., and F. L. Stoller. 2005. Maximizing the benefits of project work in foreign language classrooms. *English Teaching Forum* 43 (4): 10–21.
- Babbie, E. R. 1995. The practice of social research. 7th ed. Belmont, CA: Wadsworth. Quoted in McMillan and Schumacher, 1997, 253–54.
- Facione, P.A. 1998. *Critical thinking: What it is and why it counts*. Millbrae, CA: California Academic Press. <http://www.insightassessment.com/articles.html>
- Harmer, J. 1998. *How to teach English: An introduction to the practice of English language teaching*. New York: Longman.
- Lenneberg, E. H. 1967. *Biological foundations of language*. New York: John Wiley.
- Lightbown, P. M., and N. Spada. 1999. *How languages are learned*. rev. ed. Oxford: Oxford University Press.
- Richards, J. C., and R. Schmidt, 2002. *Longman dictionary of language teaching and applied linguistics*. 3rd ed. London: Longman.
- McMillan, J. H., and S. Schumacher. 1997. *Research in education: A conceptual framework*. 4th ed. New York: Longman.
- Soars, L., and J. Soars. 1998. *New headway English course: Upper-intermediate teacher's book*. Oxford: Oxford University Press.
- Stoller, F. L. 2002. Project work: A means to promote language and content. In *Methodology in language teaching: An anthology of current practice*, ed. J. C. Richards and W. A. Renandya, 107–120. Cambridge: Cambridge University Press.

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# Appendix Four Types of Survey Questions

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The collection of valid and complete data from respondents is dependent on the types of questions that make up a survey instrument. Below are four major types of questions that were used in this project.

## 1. Structured questions

How long have you been teaching English?

- Less than 1 year
- 1 year to 3 years
- 4 years to 7 years
- 8 years or more

Have you ever experienced teaching older students (those past puberty)?

- Yes
- No

## 2. Scaled questions

How often do you introduce your students to the grammar rules and examples before getting them to practice?

- Always
- Very often
- Often
- Sometimes
- Never

## 3. Open-ended questions

Do you have any comments on how to improve your students' English?

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## 4. Mixed questions

How do you teach older students to speak English well?

(Choose one or more answers from the options provided.)

- I ask them to repeat after me in class.
- I ask them to practice at home.
- I ask them to memorize the grammar forms.
- Other\_\_\_\_\_