Some New Articles on Project-Based Learning

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Buck Institute for Education. What is Project-Based Learning?

Common Features of Project-Based Learning

- Students conduct multifaceted investigations extending over long periods of time.
- The projects deal with real-world questions that students care about.
- Students encounter obstacles, seek resources, and solve problems in response to an overall challenge.
- Students make their own connections among ideas and acquire new skills as they work on different tasks.
- Students use authentic tools (real-life resources and technologies).
- Students get feedback about the worth of their ideas from expert sources and realistic tests.
- Problems are presented in their full complexity.
- Students find interdisciplinary connections between ideas.
- Students struggle with ambiguity, complexity, and unpredictability.

The original: Buck Institute for Education. (1999). PBL Overview: What is Project-Based Learning? Adapted with permission of the publisher. [Online). Available: www. bie.org.

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Curtis, Diane. The power of projects / D. Curtis // Educational leadership. - 2002. - 60, N 1. - P. 50-53.

Teachers, principals, and parents have seen how project-based learning can spark student excitement. Here are some of the stories they have shared with the George Lucas Educational Foundation.

Twelve-year-old Ricky spent his elementary years at Newsome Park Elementary School, a Newport News, Virginia, magnet school that emphasizes project-based instruction. A year after he was promoted to middle school, Ricky can still recount in detail the projects he completed at Newsome Park, including one of his favorites-Red, White, and Blue Architecture. Under the guidance of 5th grade teacher Ruth Kavanaugh, Ricky and the other students in Kavanaugh's class completed a project combining social studies with architecture, a subject that had captured their interest when they saw a 1st grade class project on home construction. They conducted research on the Internet, read books, and consulted experts to learn about the memorials in Washington, D.C., and the American heroes for whom the memorials were built—Washington, Jefferson, Lincoln, and Roosevelt, among others. Using a software publishing program, the students then produced a book about their findings.

The students also drew computer models of the memorials and created a computerized timeline of building construction in the U.S. capital to learn about how cities grow. They researched the contributions of James Madison and other Virginians to the U.S. Constitution They made small-scale memorials for their own personal heroes. Ricky built a memorial to Dale Earnhardt, the stock car race driver who was killed in a crash in 2001.

Parents helped raise money for a field trip to Washington, and each student was

allowed to take one family member along; many of the families had never before made the two-and-a-half-hour trip to the U.S. capital. Finally, the students presented their work to community members at one of Newsome Park's biannual Project Days.

In the end, thanks to the meticulous planning and unobtrusive but eagle-eyed oversight of their teacher, Ricky and his classmates had fulfilled a range of state curriculum standards in math (computation, measurement, geometry, graphing, and patterns); social studies (knowledge of the different branches of government); technology (using electronic information to research and communicate); and English (writing for a variety of purposes). They had also gained poise and learned such skills as teamwork, problem solving, analyzing and interpreting data, and meeting deadlines.

Project-based learning is one of the approaches advocated by the George Lucas Educational Foundation (www.glef.org), a nonprofit organization based in San Rafael, California, and dedicated to disseminating information about exemplary school programs through video, newsletters, books, and other media. In its 11 years of existence, the Foundation has witnessed the power of project-based learning through visits to schools such as Newsome Park and through firsthand accounts from teachers such as Ruth Kavanaugh,

Project-Based Learning

University of Alberta Professor Sylvia Chard, a noted project expert, defines a project as "an in-depth investigation of a real-world topic worthy of children's attention and effort" (2001). Chard presents a flexible framework for project-based instruction:

■ First, the teacher selects a topic of study for the project on the basis of students' interests, curriculum standards, and the availability of local resources. The teacher discusses the topic with the students to find out what they already know about it and helps them develop questions that their investigation will answer.

■ Next, the teacher arranges opportunities for students to do field work and speak to experts. The teacher provides resources to help the students with their investigations and suggests ways for students to carry out a variety of investigations.

■ In the concluding phase, the teacher arranges a culminating event through which the students share with others (for example, other classes, their parents, or the principal) what they have learned. The teacher helps the students decide how to display their results and, in so doing, involves them purposefully in reviewing and evaluating the whole project (Chard, 2001). Chard stresses the need for students to work from their strengths, and she is not alone in viewing the display portion of the process as particularly important for students. In project work, they invest a lot of their own energy and interest. And they appreciate being able to share with others what they've done" (cited in George Lucas Educational Foundation, 2002).

Even teacher advocates of project-based learning tell the George Lucas Educational Foundation that it creates more work for them than the traditional textbook curriculum.

Students at Newsome Park Elementary visit a local supermarket to learn about food sources (left) and measure the cross-section of a trunk to learn about trees (below).

Eeva Keeder, a former math teacher at Mountlake Terrace High School in Wasliington, created a project in which students had to design a school for the year 2050 that was judged by local architects. 'Students cannot reasonably claim to understand what they cannot demonstrate,' says Reeder. "No one can become a world-class chef simply by attending lectures, however well delivered. At some point, the student chef must get into the kitchen and cook something." Reeder also says she has firsthand evidence that project-based learning has beneficial effects on standardized tests.

Once students have learned a skill by having to use it, it's theirs. You don't need to cram for it on the test. It's just a way of learning information that works.

Engaging Students Through Projects

Many teachers, administrators, parents, and students agree that project-based, hands-

on learning engages all .students— from special education to gifted—in a way that the traditional lecture/worksheet/textbook/written test cannot. Research has shown that when students are given the latitude to pursue topics that interest them by doing what real scientists, special-interest groups, or business people do to solve problems, they go far beyond the minimum effort (Buck Institute for Education, 1999; Chard, 1998; Katz & Chard, 1999; Thomas, 2000). They make connections among math, social studies, literature, and science to find answers to open-ended questions. They also retain what they have learned, are able to apply their learning to real-world problems, are absent less often, and have fewer discipline problems. In short, students get excited about learning.

Peter Bender, principal of Newsome Park Elementary, overhears students having animated discussions during recess and lunch about their projects. "In 30 years, I don't think I've ever heard kids talk like that,' he says.

Ingo Schiller, parent of two Newsome Park students, long ago said goodbye to the frustration of the familiar parent-child exchange: "What did you do at school today?" "Nothing." "There's a visible hunger to learn," says Schiller.

When we sit down to dinner, the kids talk nonstop for 20 minutes, telling us what they did and what they saw. This is literally every day.Motivating Hard-to-Reach Students

Jean Lovelace, former principal of an alternative high school in Cortez, New Mexico, and now a school designer for Expeditionary Learning Outward Bound, tells the story of Chris, who attended the alternative school because he had little success at a more traditional high school.

Chris had poor academic skills, especially in writing. "He could take in information, make it make sense in his head, demonstrate it, but he could not write it down," Lovelace recalls. Then he started doing construction math with the special education teacher. In this case, the construction was building sidewalks to connect the school buildings. Students calculated angles, figured out the volume of gravel and concrete needed, and determined how much water was required and how deep and wide the pit should be. Then they did the physical work: digging the holes, leveling the earth, and pouring the concrete. Each student kept a journal of progress. The 'audience" for this project was the student body, many of whom thanked their classmates for a convenient walkway and new skateboard route.

"Chris is totally involved in a day like this," Lovelace says.

He's not hummed out, not lying around, not causing trouble for other kids He's also willing to do the reading and writing part because he knows hell be using a shovel later.

Challenges for Teachers

According to a study of project-based learning by Marx, Blumenfeld, Krajcik, and Soloway (1997), some teachers find it difficult to choose study topics that incorporate the required curriculum while allowing students to follow their interests. These researchers also found that the in-depth investigations involved in projects often take longer than expected. Classroom management of projects may be complicated, although many teachers say that students' engagement in projects curbs disruptive behavior. Finally, some teachers have difficulty designing assessments that accurately measure student understanding. (A visiting arachnologist teaches Newsome Park Elementary students about the behavior of spiders.)

Even teacher advocates of project-based learning tell the George Lucas Educational Foundation that it creates more work for them than the traditional textbook curriculum in which they know what will happen during every class period. They need to be ready to encourage a student who wants to take off in an unexpected direction to pursue his or her interests, and also make sure that the sttident covers a required state or local curriculum. They often have to admit that they don't have the answer and direct students to outside resources. They must oversee students who are often working on 25 different aspects of a theme and who work at different paces and skill levels. And they must come up with a

grading system that reflects evidence of mastery in a product or portfolio, not a single test.

But many initially reluctant teachers find it worth the effort to overcome challenges when they experience the students' new enthusiasm for learning. Packaged project-based learning programs help many teachers overcome the barrier of time. For example, the JASON Project (www. jasonproject. org), Journey iNorth (www.learner org /jnorth), ThinkQuest (www.thinkqiiest.org), and Classroom Connects Quests (h ttp ://quest. classroom. com) offer full curriculums on the Internet, complete with professional development, assignments, resources, and experts whom the students may question.

Computers and other 21st century technology play a huge role in project-based learning. Students can ask scientists and other experts questions through e-mail, chat rooms, and videoconferencing. They have access to sophisticated, inexpensive, electronic telescopes and to scientific probes connected to portable, wallet-sized personal digital assistants. Students can acquire data and put that information in perspective by immediately graphing the data on a laptop or personal digital assistant.

Motivation Plus Achievement

Many students say that there's no comparison between project-based learning and the more traditional, lecture format. "For me, sitting in the classroom letting the teacher lecture you is not very fun," says 12-year-old Ramsay, another Newsome Park alumnus.

Doing projects teaches you more because you get to experiment and understand how things work. If you can experiment and see how things work, it will be stored in your brain longer. And if it's funner, you'll learn faster. ∎

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Russell, J. D. Strategies for teaching project-based courses / J. D. Russell, Reiser R.A., Hruskocy C. // Educational technology. - 1999. - 39, N 2. - P. 56-59.

In recent years, a variety of developments, such as increasing interest in project-based learning, portfolios, electronic performance support systems, cooperative learning, and constructivism, have had a major impact on the strategies used in teaching a variety of courses. Indeed, from early elementary to graduate studies and from aviation to zoology, more instructors are incorporating student projects into their courses in. addition to, or in place of, other methods.

Given the emphasis that employers are placing on hiring graduates with the ability to "perform" rather than just having "book learning," we believe it is valuable to start a dialogue regarding the use of project-based approaches and related instructional strategies. To begin that dialogue, we would like to describe the instructional strategies we have used in project-based introductory instructional design courses we teach at Purdue and at Florida State. We are doing so because we feel that these strategies can be very effective in teaching a variety of skills in many different subject areas, not simply for instructional design, though that is the focus of this article.

Overview of Current Instructional Strategies

Over the years, our courses have evolved from a more traditional lecture and assignment approach to ones which incorporate a project that students develop throughout the course. Moreover, additional instructional strategies, such as the use of reflective summaries, an in-class group project, and a mastery approach to grading, have been added so as to facilitate successful completion of the project that each student is required to undertake. In addition, as our courses have evolved, the role of the graduate teaching assistant has become more important and very necessary to the success of the

courses and, ultimately, the achievement of the students.

The project-based approach we employ in our courses also utilizes the "information, example, practice, feedback, and assessment" strategy described in many instructional design models (e.g., Dick & Carey, 1996; Gagne, Briggs, & Wager, 1992). Information about each skill is presented to the students and processed by them through the use of weekly reading assignments, reflection papers, in-class discussions, and small-group activities. Examples of how to apply each skill are then presented by one of the instructors, who shares sample projects with the students. This instructional event is followed by guided practice and feedback on an in-class group project. Finally, students are presented with a project-based "application assignment" that assesses their ability to perform the steps in the instructional design (ID) process.

Some of the instructional strategies we have outlined, such as the reading assignments and in-class discussions, are fairly traditional instructional practices. In contrast, we feel that some of the other strategies (i.e., the reflective summaries, sample projects, the in-class group project, the project-based application assignments, and the mastery approach to grading) are somewhat different from those typically used in introductory instructional design classes (or classes in most other areas as well), and contribute greatly to the success of our project-based approach. In the following sections of this article, we focus our attention on these instructional strategies.

Reflective Summaries

When quizzes were used in our courses, we noted that some, and often many, students did not read assigned materials until the day before the quiz. Usually our courses met two days per week, say Tuesday and Thursday. Each item was to be read before Tuesday and discussed both days, with the item quiz at the end of class on Thursday. However, on Tuesdays few questions were asked and most of those questions would not have arisen if the students had read the materials. Moreover, students made few contributions to the class discussion on Tuesday. However, on Thursday students had many questions and made many valuable contributions—leading the instructors to conclude that many students were not doing any reading until after Tuesday's class!

As a way of alleviating this concern, the instructors tried reflective summaries. Students are required to write a one- to two-page summary coupled with a one-to two-page reflection and bring it to class the first day the item is discussed. The summary is not intended to be a reiteration of the authors' words but, instead, a concise summation of key points. Reflections are to be personal accounts of how the material relates to the student's experiences, professional expectations, and/or the project the student is undertaking in the course. After making the change from quizzes to reflective summaries, we observed that class discussions and the questions asked by the students were markedly improved. More importantly, the quality of the students' projects also improved.

Sample Projects

The first addition to the traditional instructional approach we had employed in our classes was an in-class demonstration of a sample project similar to the projects on which the students would be working. The sample project is usually an exemplary student project from the previous semester and is often presented by the teaching assistant for the course. Frequently, the teaching assistant is a student from a previous semester who displays and discusses the project he or she designed when in the course.

Students are presented with components of the project as they progress through the instructional design model. For example, before working on their instructional analysis, students are presented with an example of a completed instructional analysis. The teaching assistant "walks through" the project with the class, offering insights into the various steps involved in completing the project. Common problems and possible solutions are discussed with the class.

The instructors explain the process involved in completing the project and display a final

version of the project. Class discussion follows with students asking specific questions on content, format, process, and output. Over the course of the semester, students are exposed to each separate piece of the model project. As the pieces come together, students are able to see how the entire project builds from start to finish.

This project demonstration serves as a key component in our project-based approach to this course. When provided with a model, students are able to ask direct questions regarding issues they may encounter while completing their own personal projects. This process helps alleviate anxiety as the students immerse themselves in their own design projects.

In-Class Group Project

Another of the important components of our project-based approach is the in-class group project we have all the students undertake. Each week, this activity provides students with an in-class opportunity to work with a small group of their fellow students, practicing and receiving feedback on the instructional design step that we are focusing upon that week.

The in-class group project is introduced to the class at the beginning of the semester and is carried out in class throughout the semester. The group project, like the personal project each students undertakes, involves using the Dick and Carey model in order to design an instructional module for a given instructional goal. Each semester the students in the course work with the instructors to select the goal for their in-class group project.

Each week in class, after we have discussed the reading assignment for that week and have shared the sample project with the students, we have the students work on the group project. To do so, the students form groups of three or four. The composition of the groups changes from week to week to give the students an opportunity to work with a wide variety of individuals. They apply the skills we have been discussing that week to the in-class project. For example, during the week that we discuss goal analysis, we have each group engage in that activity as it pertains to the instructional goal of our in-class project.

As each group practices a particular skill in class, the instructors circulate around the room, providing assistance when needed, but try not to provide too much help. As each group completes its task, a group member records the output of its efforts on poster paper. Each group places its work on the walls of the classroom and, after all the groups are done, the instructors lead a class discussion focusing on the similarities and differences between the work of the various groups. In so doing, all the students get an opportunity to see how different groups approach the same task. Invariably during this discussion, under the guidance of the instructors, the class members identify strengths and weaknesses of the work that has been done. Thus the in-class project not only provides students with an opportunity for guided practice, but also provides them with useful feedback about the quality of the work performed by each group.

Prior to the next class period, the instructors re-examine the work of each group and identify the version they will use as input for the subsequent in-class group project activity. For example, the instructors will select one of the goal analyses that the various groups produced and will use that analysis as the starting point that the groups will work from the following week, when their in-class group project activity focuses on conducting a subordinate skills analysis. We have found that by practicing each design step in class, in a small-group setting, students are better prepared to carry out each step on their own as part of the application assignment described next.

In order to demonstrate that they have attained the course goals, each student is required to complete a project outside of class. This project involves designing a unit of instruction. Each student accomplishes this task by completing a series of what we call application assignments. Each of the weekly assignments requires the student to employ one or more of the steps in the Dick and Carey model. By the end of the course, each student is expected to have completed the project he or she undertook. That is, each

student is expected to have designed and formatively evaluated an instructional module that focuses on an instructional goal he or she identified. Each week, as they learn about another step in the design process, the students employ that step as it applies to the module they are designing. Students submit this work on a weekly basis, and we use a detailed checklist (which the students receive beforehand) to judge the quality of their work. The students receive our feedback before the next assignment is due and are allowed to revise their work based on that feedback.

The first application assignment each student must complete involves identifying an instructional goal for the unit of instruction they will be designing. In addition to reading about how to do this and participating in the aforementioned types of in-class activities, we also provide students with a set of guidelines we strongly encourage them to adhere to as they select an instructional goal. These guidelines are designed to help each student select an instructional goal that is likely to require the creation of an instructional unit that will be challenging, but not overwhelming, to design. Two of the more crucial guidelines are described below.

One of the guidelines we specify is that students should select a goal that represents an intellectual skills outcome. We established this requirement because we have found through experience teaching this course that such outcomes provide the appropriate degree of challenge when students are asked to perform the various steps in the Dick and Carey model, such as conducting an instructional analysis, designing assessment measures, and planning an instructional strategy.

Another guideline we provide is that the instructional unit should be in print form, rather than involving the use of some other medium. We established this guideline because we have found that the difficulties novice designers encounter as they design their first instructional unit are greatly compounded if, at the same time, they must also be concerned about development issues associated with non-print media, such as computer- or video-based instruction. We do, however, point out to the students that the instructional design process they are learning applies to all delivery formats.

After identifying his or her instructional goal, in subsequent weeks throughout the semester, the student works on other application assignments, each involving the performance of one or more steps in the Dick and Carey model, and all leading up to the successful completion of the project the student has undertaken. Students are given a series of checklists which are designed to guide their work on these assignments and which are also used by the instructors to assign grades as well as to provide the students with detailed feedback about their work. At Purdue, the instructors employ a mastery approach that allows students to revise their work based upon the feedback they receive and to submit the revised work for re-grading. (See section on Mastery Approach below.)

At both institutions, the students are required to actually conduct a one-to-one formative evaluation as part of their project. At Florida State, small-group formative evaluations of the instructional units are also required. In all cases, the students are asked to revise their units based upon the feedback they receive from the formative evaluations. Students often indicate that they find this application assignment to be particularly useful. They often comment that the power of systematic design models, like Dick and Carey, becomes most apparent when formative evaluation activities clearly point to specific flaws in the instruction they designed, and when subsequent revision activities enable them to focus their attention on specific design features that seem to be in need of improvement

Mastery Approach

When it comes to grading the project-based application assignments, at Purdue we employ a mastery approach. That is, we allow students to revise and re-submit the application assignments for re-grading if they have not completed the assignment to their (and the instructor's) satisfaction based upon the feedback they receive. We feel this is important because each application assignment builds upon the previous one, and if the

student fails to do one assignment adequately, he or she may not be able to do the subsequent one properly.

Most students complete minor revisions based upon the written feedback from the instructor. For more serious problems, it is often necessary for the instructor and student to meet face-to-face. In most cases, the instructor can explain the problem and guide the student toward correcting \t The instructors must be careful not to do the application assignment for the student.

It is important that the student stay close to the course schedule if he or she is to complete his or her project on time. If a student has not finished all of the application assignments by the end of the course, he or she may be given in Incomplete for the semester and complete the project early in the next semester. For the very few students whose problems are serious and have "missed the boat/' they are encouraged to re-enroli in the course in a future semester and start the project again.

Students comment very positively about the mastery approach in the course evaluations. They feel that it relieves the pressure to "do it right the first time." As a result, they feel that they are better able to concentrate on producing a quality project and can worry less about the initial project grade.

The Role of the Teaching Assistant

The project-based courses described here involve a significant amount of time and effort to plan and manage throughout the semester. We encourage the use of teaching assistants (TAs). In addition to sharing the duties required of the instructor, this practice can provide valuable experiences for the TA. At Purdue, the TA may be a graduate or an undergraduate student. The teaching assistant is really a co-instructor—playing an active and important role in all aspects of this course. Duties such as planning, teaching, grading, and consulting are shared with the professor. Undergraduate TAs may have fewer responsibilities than more experienced graduate students.

The start of each new semester involves coordinating with the professor to review the overall instructional strategy, semester schedule, course content, assignments, and assessment guidelines. Early administrative details involve acquiring any special resources to place on reserve at a media center, entering student information onto a roster and grade spreadsheet, and securing paper, markers, etc., to use during in-class exercises. The TA might also arrange a class listserv with campus computing services.

In weekly planning sessions, the professor and the TA meet to discuss strategy, events, and sequence of the upcoming class period. Together they divide the teaching duties. They prepare any additional presentation materials or handouts and form groups for that week's in-class project activity. Prior to each class, the instructor and TA will meet again to discuss any remaining details about the upcoming class.

During class, the TA performs instructional duties and serves as a resource person. He or she presents course content and leads some of the class discussion. Each week, as the class discusses one of the steps in the design model, the TA describes the activities in performing that step. Using his or her own project as an example, the TA provides a first-hand account of how he or she worked through his or her design project when he or she was in the course. The TA also serves as a resource person to the small groups as they work on the in-class group project.

Grading responsibilities are shared. Student projects and weekly assignments are divided between the professor and the teaching assistant. After each student submits instructional goals for their personal project, the professor and TA determine who will assess that student's materials for the duration of the semester. Weekly summaries and reflections are divided.

At the completion of the semester, the TA and the professor compile the final semester grades and return the submissions to the students. They compile data from anonymous student surveys which track the time applied to class preparation and also personal project

preparation, and review the data. Later, results of the formal university student course evaluations and the course's own open-ended questionnaire are also reviewed. Following this, the TA and instructor discuss the events of the semester and consider any changes to implement before the next semester.

The role of the TA goes beyond planning, teaching, grading, and consulting; therefore, the TA's importance cannot be overstated. Besides assuming the traditional TA duties, the teaching assistant plays a key role in classroom dynamics. The TA serves as a bridge between student and professor, providing an additional line of communication. In many cases, students feel more comfortable approaching the TA, knowing that he or she, too, has "been there/'

Conclusion

Of all the instructional approaches we have used in our introductory design courses, we believe (and student performance and attitudes confirm) that the current project-based approach, including the various instructional strategies we have described, has been by far the most effective. We hope that by discussing these strategies, we will encourage others to describe other project-based strategies for teaching skills to students who are studying to become professionals in any particular field. Moreover, we hope (and expect!) that our discussion will lead others to continue to raise important questions about the value of project-based strategies. We anticipate that the result will be a healthy discussion, an improvement in the quality of our instruction and, most importantly, an improvement in the skills that our students acquire.

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Alan, B. Maximizing the benefits of project work in foreign language classrooms / B. Alan, F.L. Stoller // Forum: English teaching forum. - 2005. - Vol. 43, N 4. - P. 10-21.

THE IMPLEMENTATION OF PROJECT WORK DIFFERS GREATLY FROM ONE INSTRUCTIONAL setting to another. In some settings, fairly non-elaborated tasks, confined to a single class session, are labeled as projects. In other settings, elaborate sets of tasks establish the process for completing the project and span an entire instructional unit; in settings like these, the benefits of project work are maximized because students are actively engaged in information gathering, processing, and reporting over a period of time, and the outcome is increased content knowledge and language mastery. In addition, students experience increased motivation, autonomy, engagement, and a more positive attitude toward English. Although project-based learning presents challenges for teachers and students (Beckett 2002; Eyring 1997), most project-work proponents assert that the advantages outweigh the disadvantages.In this article, we focus on how English language teachers can capitalize on the content and language learning benefits of project work. To explore the topic, we examine the characteristics of under-exploited project work, outline the features that maximize the potential benefits of project work, and present a case study of project-based learning. We conclude with recommendations for English as a Foreign Language (EFL) teachers and materials writers who want to integrate project-based learning into their own curricula.

Under-exploited project work

Numerous language educators incorporate what they call "project work" into their

classrooms, even though the lessons do not maximize the full potential of project work. For example, in some settings, basic communicative activities used to help students get to know one another better and to promote conversation have been labeled as projects. What often occurs in such settings is that students, when given the chance, join groups with their friends. They complete their non-elaborated tasks in a superficial way without much collaboration. Students socialize, but rarely assist each other with the language and information-gathering demands of the task (if there are any demands).

In some settings, project work is merely a source of entertainment and a break from routine classroom activities. Though projects often focus on challenging, real-world subject matter, students are often solely concerned with the visual attractiveness of their projects, paying little attention to content and language learning. In these settings, teachers often reinforce this misdirected attention by assessing student projects according to their visual appeal, ignoring students' gains in language and content learning.

In other settings, students are constrained in their ability to grow from their projects, either because of excessive teacher control or because of the absence of teacher feedback and guidance during the process. In settings characterized by too much teacher control, we find instructors who dictate each step of the process without giving students any voice in defining the project. Generally, such excessive control inhibits students from taking responsibility for their own learning and developing a sense of ownership toward the project. In these settings, students are rarely asked to provide feedback on the project experience; thus, often the same project is incorporated into future instruction, with no modification, which usually results in the same lack of student engagement. Another problem occurs when repeating students influence new students with their negative attitudes toward the project, further undermining the potential of the project.

Project work can be more effective when teachers relax their control, when students regard the teacher as a guide (Sheppard and Stoller 1995), and when students provide feedback on the experience so that projects can be improved each year. A total relaxation of teacher control, however, is not the solution to a teacher-centered project. In some cases, students are left alone and receive no guidance on the language, content, or process demands of the project. Here, it seems, teachers have ignored both the process-based nature of project work and students' need for support at different stages in the project. Finding the proper balance between teacher guidance and student autonomy enhances the advantages of project work in the language classroom.

Project work that maximizes benefits

Projects that are structured to maximize language, content, and real-life skill learning require a combination of teacher guidance, teacher feedback, student engagement, and elaborated tasks with some degree of challenge. Generally, such projects are multidimensional. A review of numerous case-study reports (Allen 2004; Gardner 1995; Gu 2004; Ho 2003; Lee 2002; Levine 2004; Papandreou 1994; Tomei, Glick, and Hoist 1999) reveals that successful project-based learning;

• focuses on real-world subject matter that can sustain the interest of students

• requires student collaboration and, at the same time, some degree of student autonomy and independence

• can accommodate a purposeful and explicit focus on form and other aspects of language

• is process and product oriented, with an emphasis on integrated skills and end-of-project reflection.

The end result is often authenticity of experience, improved language and content knowledge, increased metacognitive awareness, enhanced critical thinking and decision-making abilities, intensity of motivation and engagement, improved social skills, and a familiarity with target language resources.

One way to maximize the potential benefits of project work is to follow the ten-step

process advocated by Stoller (1997) and Shep-pard and Stoller (1995). The ten steps are summarized below.

Step 1: Students and instructor agree on a theme for the project

The students and instructor come to an agreement on a project theme. Because projects range from structured, semi-structured, to unstructured in terms of the degree to which the teacher defines the project (Stoller 1997), instructors should identify ways (large or small) in which students can develop some sense of ownership toward the project.

Step 2: Students and instructor determine the final outcome of the project With the nature and objectives of the project in mind, the students and instructor determine the final outcome of the project (e.g., bulletin board display, written report, debate, brochure, letter, handbook, oral presentation, video, multimedia presentation, theatrical performance). At this point, the students and instructor negotiate the most appropriate audience for their projects (e.g., classmates, other students, parents, program director, city mayor, a local business).

Step 3: Students and instructor structure the project

After the theme and final outcome of the project are determined, the students and instructor work out project details that guide students from the opening activity, to the completion of the project. In this step, students consider their roles, responsibilities, and collaborative work groups. After negotiating a deadline for project completion, students reach a consensus on the timing for gathering, sharing, and compiling information, and then presenting their final project.

Step 4: Instructor prepares students for the demands of information gathering

At this stage, the instructor prepares students for the language, skill, and strategy demands associated with information gathering. With student ability levels in mind, the instructor prepares instructional activities for each of the information-gathering tasks. For instance, if students will be conducting interviews to gather information, the instructor may plan activities in which students have to form questions, ask follow-up questions, request clarification, and take notes. If students are expected to write letters, the instructor might review the format and language of formal letters. If they intend to conduct an Internet search, the instructor may review search procedures and introduce useful note-taking strategies.

Step 5: Students gather information

After practicing the skills, strategies, and language needed for gathering information, students are ready to collect information using methods such as interviewing, letter writing, and library searches. Whenever possible, the instructor brings in relevant content resources to get students started on their information quests.

Step 6: Instructor prepares students to compile and analyze data

At this stage, students need to master the language, skills, and strategies needed to compile, analyze, and synthesize the information that they have collected from different sources. The instructor prepares students to do much of this on their own through tasks that involve, for example, categorizing, making comparisons, and using graphic organizers such as charts and time lines. Numerous training sessions might need to be planned, depending on the types of information collected and the ways in which it was collected (e.g., taped interviews, brochures received in response to solicitation letters, library research, and note-taking).

Step 7: Students compile and analyze information

After engaging in teacher-guided preparatory activities, students are ready to tackle the demands of compiling and analyzing the gathered information. Working in groups, students organize information and then discuss the value of the data that they have collected, keeping some and discarding others. The goal is to identify information that is critical for the completion of. their projects.

Step 8: Instructor prepares students for the language demands of the final activity

As in Steps 4 and 6, the instructor designs language-improvement activities to help students successfully present the final outcome of the project. Those activities may focus on skills for successful oral presentations, effective written revisions and editing, persuasive debates, and so forth. Some focus on form might be greatly appreciated by students at this point.

Step 9: Students present the final product

Students present the final outcome of their projects, as planned in Step 2.

Step 10: Students evaluate the project In this last, often neglected stage of project work, students reflect on the language mastered and the subject matter acquired during the project. In addition, students are asked to make recommendations that can be used to enhance similar projects in the future. It is during this stage that teachers provide students with feedback on their language and content learning.

Project work options

The details of project work are largely dependent on contextual factors, language program objectives, and available resources. For instance, in Turkey, at higher education levels, students of agriculture can engage in project work about soil erosion, which is a serious contemporary issue, with the goal of generating possible solutions for deforestation in Turkey. Engineering students can prepare written reports after investigating the advantages and disadvantages of a third bridge over the Bosphorus in Istanbul; they might even send their reports to interested officials. Students enrolled in a vocational school on the southern coast of Turkey might design a website that introduces their town, with an eye toward attracting and building tourism in the area (Hiiseyin Yiicel, personal communication, May 2004). Academic English-preparation students in their first year of university studies can explore a self-selected topic related to their majors (reported orally to classmates and in writing for their teacher) to prepare them for future studies (Semra Sadik, personal communication, June 2004). Students majoring in physical education may investigate reasons for the limited numbers of Turkish athletes in recent Olympic games. EFL students in the eastern part of Turkey might conduct a survey aimed at determining the causes for low female-student school enrollments, concluding with suggestions, submitted to local officials, for turning around the trend.

Students studying EFL in other countries are known to focus their projects on issues specific to their own countries, regions, and studies. Italian vocational high schools, for example, have structured their curricula around topics of relevance to students in various vocational areas, resulting in brochures for tourists, travel itineraries submitted to travel agencies, school banquet manuals, and many other real-world items. EFL students in Tunisian high schools have explored topics as diverse as mining and traditional marriage practices as part of their project work, culminating in video presentations of their findings. EFL students in Japan are surveying visitors at major tourist destinations—with note pad, tape recorder, and camera in hand—about topics of contemporary interest. In line with such practices, Brazilian, Costa Rican, or Malaysian students could conduct projects with an environmental slant that are aimed at convincing local or national governments to take necessary precautions to protect local rain forests. (See Lee 2002, for a description of a project involving the creation of a booklet that describes an environmentally sound home, with suggestions for environmentally sensitive lifestyles.) These examples, like those in Appendices 1 and 2, represent just a sampling of possible projects and outcomes that can be integrated into EFL classrooms.

Project work: A case study

Here we showcase a real-world project designed for intermediate and high-intermediate EFL students enrolled in the English Preparatory Program, in the School of Foreign Languages at Anadolu University, Eski§ehir, Turkey. As part of this semi-structured project, defined and organized by both the teacher and students, students evaluate the effectiveness of the local tramcar system. As part of their data collection, they interview

experts from the university, authorities from the city government, and residents of Eski§ehir. They also write formal letters to the city to request information and conduct library and Web research. At the conclusion of the project, students present results to students in the School of Foreign Languages as well as to guests from the university and city government by means of a public forum, reinforced by a bulletin board display with findings and recommendations. The principal goal of the month-long project is to give students a voice in reshaping their town and its tramcar system. By the conclusion of the project, students are able to do the following:

• Gather pertinent information through various data-collection techniques, such as interviews, surveys, and library and Web research
• Engage in critical thinking activities, partially through synthesis activities
• See improvement in their language skills
• Use English with more self-confidence

The project, structured following Stollers (1997) ten steps, is described below.

Step 1: Students and instructor agree on a project

The instructor conducts a lesson designed to raise students' awareness of a local tramcar issue. This opening lesson, meant to encourage students to participate in shaping public opinion, elicits students' attitudes toward public transportation, specifically tramcars, and provides them with the vocabulary and language needed to participate in the project.

The instructor asks students where they live and how they travel to school. To facilitate this interaction, the instructor creates an overhead transparency with a grid that lists different forms of transportation, including tramcars. The instructor fills in the grid with students initials or tally marks to indicate who uses which forms of transportation. After filling in the grid, the instructor asks students to work in small groups, ideally with at least one student whose hometown has tramcar transportation, Students are asked to discuss the effectiveness of their hometown public transportation. A handout providing relevant vocabulary and a list of possible questions guides students in group discussions.

Follow-up activities are useful to guide students in comparing the advantages and disadvantages of the Eski§ehir tramcar system with the systems of other cities. At the conclusion of group discussions, each group reports itsmost important finding, most worrisome discovery, and any similarities discovered about tramcar systems in other cities.

The instructor then asks students to take a few minutes to fill in a semantic feature analysis grid that juxtaposes different features of the local tramcar and bus systems. Then students are asked to brainstorm the advantages and disadvantages of the Eskis,ehir tramcar, considering factors such as the locations of their homes, routes, and tramcar stations.

After students complete these activities, the instructor elicits suggestions for improving the quality of Eskisehir public transport. The instructor asks students to judge whether it is possible to implement the solutions that they have put forward. Next, the instructor tells students about a project that will help them improve their English and might also improve the local tramcar system. Finally, the instructor introduces the essentials of the project, giving students the opportunity to fine-tune the project so that they develop a sense of ownership.

Step 2: Students and instructor determine the final outcome of the project The teacher proposes that students report the results of their investigation, with suggestions for improved public transportation: (1) in a. letter to the local government, (2) at an open public forum with invited guests, and (3) on a bulletin board in Anadolu University's School of Foreign languages. Students are encouraged to include the following in their bulletin board display: a copy of a letter sent to the Eski§ehir municipality requesting a modified tramcar system that caters to the needs of university students, written reports, photographs, and transcripts of interviews withstudents, community members, and university experts.

Feedback on this preliminary plan is solicited from students. At this stage, students are also given the opportunity to define their varied audiences for the letter, public forum, and bulletin board display. For instance, besides the Foreign Languages School director, teachers, and students, they decide who else to invite from the university governing council and the Eskisehir municipality.

Step 3: Students and instructor structure the project

At this stage, students help to structure the project. To do so, they consider questions such as:

1. What information is needed to conduct an examination of the local tramcar system?
2. Where and how might pertinent information be found?
a. Who will be interviewed to determine public opinion? To identify the views of experts on public transportation? To ascertain the views of the local government?
b. What information might be found at the library? On the Web? At the City Hall? At public transportation stations?
3. How will information be gathered, compiled, and analyzed?

During these deliberations, students decide on their primary roles and responsibilities. For instance, students determine who will conduct interviews; take photos; do library and Web searches; draw graphs, pictures, and charts; finalize the bulletin board display; and make opening remarks, present data, and entertain questions at the open forum. While determining roles, the students' majors are taken into account so they can be assigned roles most closely aligned with their interests and abilities. For instance, students from the fine arts department might be responsible for the layout of the bulletin board display, journalism students can conduct oral interviews, aspiring English majors can write letters soliciting information, and math majors can compile statistics. To balance the workload, students can pair up with others to offer assistance at different points in the project. With the deadline for the final outcome in mind, students reach a consensus about the sequencing of project tasks.

Step 4: Instructor prepares students for information gathering

At this stage, the instructor prepares students for the upcoming language and skill demands of the information-gathering stage of the project. These lessons train students to conduct interviews (e.g., forming a question, posing follow-up questions, requesting clarification and/or elaboration) and introduce them to the standard parts of an interview: polite opening, body, and thank you (see Lee, Li, and Lee 1999, for more details on the various stages of an interview). The instructor might help students determine the level of language formality and content of the questions to be asked of different interviewees. Mock interviews can be conducted with classmates, family members, teachers, or other language students on campus. Audiotaped mock interviews can be reviewed in class for appropriateness, politeness, pronunciation, stress, and grammar.

For students who are responsible for writing formal letters, the instructor introduces writing conventions associated with formal letter writing by means of model letters. Students write several drafts of their letters, followed by editing and revision activities that examine levels of formality, formatting, and linguistic accuracy. Guided peer-feedback sessions represent effective ways to encourage student collaboration and writing practice.

For students who are going to use the Web and library to gather relevant information, the instructor initiates brainstorming sessions in which students consider the best ways to search for information in these venues. As part of this preparation, the instructor may introduce students to relevant search engines or websites on mass transit.

Step 5: Students gather information

After practicing the skills, strategies, and language they need for gathering information, students are ready to conduct informal interviews with students and local residents of Eski§ehir. Students who are to conduct formal interviews make appointments and conduct interviews with experts. (The instructor may need to help students find equipment needed

for interviews, such as tape recorders.) Students gathering information by means of letters of inquiry draft their letters, solicit feed-back from classmates and the instructor, and then send out their letters. Students who are to conduct library and Web searches move ahead. Throughout this stage, the instructor monitors students' progress, making sure that they are on the right track, giving them feedback on their language use throughout.

Step 6: Instructor prepares students for compiling and analyzing data

After data have been gathered, students need to compile, evaluate, and synthesize the relevant information. The instructor prepares students for this vital stage of the project by using model transcripts, letters, lists, and grids to illustrate different categorization, evaluation, and interpretation techniques. This is a good time to introduce students to conversational gambits that they can use with each other to negotiate the meaning and relevance of gathered data, such as "I see your point, but..." and "Don't you think that...?"

Step 7: Students compile and analyze information

After students have been introduced to techniques for compiling and analyzing data, they are ready to organize and synthesize their own data. Groups of students discuss the value of their data, discarding that which seems inappropriate and organizing and then evaluating that which seems particularly valuable. Students discuss the best ways to present relevant data to their varied audiences.

Step 8: Instructor prepares students for the final activity

At this stage, the instructor prepares students for the language, skill, and content demands presented by the final written display and oral presentation. A simulation of the open forum provides opportunities to work on fluency, pronunciation, intonation, and conversational gambits that will contribute to the flow of the event. (See Mach, Stoller, and Iardy 1997 for a related discussion.) Students who are not actually involved in the public forum might be assigned different roles for the simulation, such as a representative from the municipality of Eskisehir, representatives of the university governing council, or the director and teachers of the School of Foreign Languages. These students could be directed to anticipate' what kinds of questions the actual audience might ask about the bulletin board display. At the conclusion of the simulation, the class can brainstorm about challenges that might be encountered during the actual open forum, such as irrelevant questions, hard-to-understand questions, and public resistance to findings and suggestions. In addition, possible solutions to these challenges can be discussed, including a list of possible questions and responses, back-up visual displays, and conversational gambits to ask for clarification. A discussion of open-forum logistics (e.g., room set-up, invitations to audience members, videotaping) would be appropriate as well.

Discussions of the bulletin board, with an emphasis on presentation of information, layout, visual appeal, clarity, and peer editing (that focuses on mechanics, grammar, level of formality, cohesion) are appropriate at this point.

Step 9: Students present final product

Students are now ready to mount the bulletin board display and participate in the open forum, representing the final outcomes of the class project. (Videotaping the open forum facilitates meaningful feedback in the final stage of the project.)

Step 10: Students evaluate the project

This last stage of the project serves multiple purposes. On the more traditional side, teachers provide students with feedback on their language, content, strategy, and skill use, using the videotape of the open forum as one means of interactive evaluation. Less traditional, but equally valuable, are the opportunities students will have to: (1) reflect on the language, skills, and strategies that they have mastered to conduct the project; (2) consider the content that they have learned to complete the project;

(3) contemplate the impact of the project; and

(4) offer suggestions for improved project-work assignments for future classes.
Conclusion

We have showcased the details of one project designed for an EFL setting. Although the tramcar theme itself may not be transferable to other settings, because of its very local relevance, basic features of the project could easily be transferred to other EFL classrooms. These transferable features, in the form of recommendations for EFL teachers and materials writers who attempt to integrate project-based learning into their own curricula, appear below.

• Devise projects with students' immediate and future language needs and content interests in mind, while at the same time remaining vigilant of institutional expectations and available resources,

• Specify language, content, task, skill, and strategy learning objectives in line with students' needs and institutional expectations to maximize the benefits of the project.

• Strive to engage students in all stages of the project. Begin by giving students the chance to structure parts of the project, even if those contributions are small, with the aim of building a sense of student ownership and pride in project engagement.

• Design and sequence tasks with great care. Make sure that (1) skills are integrated to achieve real communicative purposes, (2) students are obliged to use various strategies for meaningful aims, (3) critical thinking is required for successful task completion, and (4) students are held accountable for content learning.

• Integrate tasks that require both independent and collaborative work. Help students reach agreement about different team member responsibilities. Students should view each other as single links in a chain that unite, through exchanges of information and negotiation of meaning, to produce a successful project outcome.

• Be sure to plan an opening activity that promotes students' interests, taps background knowledge, introduces important vocabulary, and builds up expectations for the final activity.

• Take advantage of Steps 4, 6, and 8 to provide explicit instruction so that students not only improve their language abilities but also excel in the information gathering, processing, and reporting stages of the project.

• Allow time for feedback at the conclusion of the project and at other critical junctures as well.

We close by directing readers to Appendix 3 for a list of questions for teachers to consider as they assess the viability of projects for their classrooms and develop actual projects for and with their students.

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Tessema, K. A. Stimulating writing through project-based tasks / K. A. Tessema // Forum: English teaching forum. - 2005. - Vol. 43, N 4. - P. 22-27.

LEARNING TO WRITE IN A FOREIGN LANGUAGE IS AN UPHILL STRUGGLE FOR MOST students. Even with simple writing exercises, students often lose interest and do not complete them. Research on this issue indicates that creating a good piece of writing is considered an extremely difficult skill, even in one's own native language (Nunan 1999). One reason that writing is so difficult relates to the fact that, in addition to knowing the appropriate grammar and vocabulary, a writer's ideas must be presented clearly and in an organized fashion. This is an obstacle for second language learners and a dilemma for language instructors, who must look for successful ways to teach the skill.

Because writing is such a difficult skill to master, students often experience a lack of motivation, which is a notable characteristic of some second language learners. Motivation is a complex construct, and there are many factors that might inspire students to master a foreign language. For example, students might want to learn English for their careers, to study abroad, or for self-fulfillment, factors that teachers can use to motivate students. In addition, all students have particular needs and interests, which teachers also can take advantage of to create motivating writing lessons and activities. In fact, research from practicing teachers shows the benefit of focusing on students' needs and interests when developing language lessons because students then respond positively to meaningful learning that engages their interests and feelings (Nunan 1999; Ur 1996). According to Brooks and Grundy (1990, 45), "when feelings are touched learners are totally involved in the writing and appear at times to be writing above their capability."

A classroom project, when well-planned, is a good way to motivate students to write because it offers the opportunity to match tasks with interesting topics that are relevant to the students. This article will discuss some specific ways that project work can help students become active, involved participants in writing tasks. In addition, I will describe a successful writing task I implemented as a project for a group of advanced students.

Principles of project work

Project work contains many features that are inherently motivating for the teaching of writing. Arends (1998) describes the following project-work criteria that are essential to create motivation among students:

1. Tasks are organized around socially important problems and questions that are personally important for students. As this relates to writing, students should select topics that resonate with what is important in their lives. Students will then be motivated to produce writing that is, according to Brown (1994, 324-25), "real, meaningful, and communicative in the best sense of the term/'

2. Students should conduct authentic investigations that find real solutions to real problems. When students feel that they are engaged in a task that actually contributes to solving a problem, they will become more involved in the composition process.

3. Students should investigate many subjects, such as politics, history, and science, among others. The nature of much writing is multidisciplinary, as a theme can be approached from a variety of perspectives represented by various fields of knowledge. As students use different subjects to analyze problems, their motivation and interest will increase.

4. Tasks should require students to create artifacts and exhibits that represent or explain solutions to a problem. A piece of writing that seeks real solutions to real problems is an artifact in the sense that it is something people can touch, hold, and apply in a useful way. Such writing is naturally motivating, as it is applicable to real issues with importance beyond the classroom.

5. Tasks are characterized by students collaborating with each other in pairs and small groups. While writing is a skill that people often do individually, peer collaboration and group work can be extremely stimulating for students, especially when they have a chance to freely express themselves.

Another principle of project work is the inclusion of all four skills, and a writing project easily offers opportunities for students to engage in reading, speaking, and listening. For example, reading is closely related to writing, and especially the type of writing that requires library or Internet research. Also, the collaboration that occurs in a project requires students to discuss issues, analyze problems, and provide feedback about other students' work, which involves much speaking and listening in English.

This is desirable because, according to Brown (1994, 218), integrating the four skills within language instruction while maintaining a main focus on the unique characteristics of a single skill will add richness to a lesson and give "students greater motivation that converts to better retention of effective speaking, listening, reading, and writing."

With these principles of project work in mind, teachers can implement a successful writing project; however, they should first make sure they are familiar with the process approach to writing instruction.

The process approach
The process approach focuses on the stages a writer goes through to create a text, instead of focusing on the final product. In other words, the process approach recognizes that "most people progress through a number of untidy drafts before reaching a final version," as they develop their thoughts and add new ideas (Ur 1996, 168), The process approach recognizes that students often discover what they want to say as they think and write about a topic. That is why Ur (1996, 169) recommends that teachers "accept messy drafts as a positive, eveh essential, stage in writing," and urges teachers "to treat early drafts as transition stages."

In the process approach, content and organization are more important than correction of grammar, spelling, vocabulary, and punctuation, which occurs gradually and thoughtfully throughout the writing process. As Ur (1996, 171) states, the correcting of these types of mistakes "is part of the language instruction, but too much of it can be discouraging and demoralizing."

Some of the basic writing processes students go through include those described below.

1. Idea generation entails discussing a topic in class and in pairs and groups, and also

includes brainstorming about 'the topic, or noting down the various elements that come to mind as students reflect on the topic.

2. Freewriting (or fastwriting) is "an initial exploration of the ideas that you have about a topic" (Brown 1994, 334). At this point students begin to develop their ideas and establish a viewpoint about an issue. According to Brown (1994), students should freewrite by writing whatever comes to mind about a topic for ten minutes without stopping, judging ideas, or worrying about spelling and grammar,

3. Drafting requires students to begin structuring their writing and 'making it coherent.

4. Peer editing and peer evaluation allow students to share their drafts with each other to invite discussion and receive helpful feedback for revision.

5. A final draft Is produced after successive stages of drafting, editing, and revising.

It is important to note that this process is nonlinear, and students may revisit stages 1 to 4 several times before a text is complete.

The project: Writing a problem/solution essay

The following project was developed for a class of forty-five advanced English learners and was implemented in six class hours over a two-week period. The objective was to enhance student motivation through project-based learning to compose a short problem/solution essay of three or more pages. Activities took place both in and out of the classroom, and students worked independently, in large and small groups, and in pairs.

In this project, students develop a prob lem/solution essay in three steps that match the three-part logical organization of the essay: the first step describes the problem; the second step identifies the causes of the problem; and the third step proposes a solution to the problem. The students develop a draft of each part and at the end have a chance to revise and polish the complete essay. Students at the advanced level should be familiar with the basic conventions of composition, including the development of a thesis statement, the logical sequence of ideas, topic sentences, transitions, and paragraph unity. The teacher, of course, must be familiar with these conventions in order to serve as a guide and to explain procedures and clarify questions if they arise.

Introduction to the project

An initial class discussion introduces the topic so that students can reflect on what they know about it. For this project poverty was chosen as the topic because in Ethiopia poverty has real social and cultural implications for the students, and exploring how it affects their community is a meaningful activity that should motivate them to become involved in the writing task.

The teacher introduces the topic with the following statement: "Poverty is a critical issue in Ethiopia, where 60 percent of the population languishes below the poverty level. But do we really know what poverty is, the causes, or solutions to the problem?"

Step I: Describing the problem (2 hours)

A. To begin, students brainstorm to commit their initial ideas to paper, which requires them to make a list about how they would describe poverty. Some questions to help them begin the process are:

• What is your definition of poverty?
• What do you think about the way poverty is measured?
• What is a life of poverty like?
• How many countries in the word are poor?
• How many people in the world live in poverty?
• What characteristics do poverty-stricken countries have in common?
• Why do we categorize Ethiopia as one of the poorest countries in the world?

Students can begin freewriting at this point to develop some of their ideas about the nature of poverty.

B. Students divide into small groups (three to five students in each group) and work together over three to five days, both in and out of class, to research the topic of poverty

and join in collaborative discussions to enhance their knowledge of the issue. Information can be collected from popular journals, newspapers, library books, and from the Internet. Students can also interview classmates, roommates, and ordinary citizens. Some of the information that might be useful to gather are common indices that reflect a nation's standard of living, including:

• average income of citizens
• mortality rates, including infant mortality
• expenditures on health care, food, and housing
• educational statistics, including literacy rate
• access to government services
• percentage of the population in rural and urban environments

Group work at this stage includes the development of interview and questionnaire instruments, which are prepared by using the questions students have discussed and researched while thinking about the causes and solutions to the problem. Students consider possible subjects for the instruments, such as economists, well-read academics, friends, and persons living in poverty. The teacher can assist by introducing or reviewing the methods of developing questionnaires and interview instruments (see Bell [1993] for a guide on how to develop, administer, and analyze questionnaires and interviews). These instruments will be useful when students conduct field research by contacting a variety of people, such as classmates, roommates, male and female workers and professionals, and especially persons living in poverty, who represent 80 percent of Ethiopians.

C. At the end of Step 1, students use the results of their notes, brainstorm ing, research, and discussions to write two or three paragraphs in which they first introduce the issue of poverty, and then they relate it to the degree of poverty in their country.

Step 2: Determining the causes of the problem (2 hours)

A. Students brainstorm individually about the causes of poverty. Building on their research, they think critically about why Ethiopia is unable to break the chain of poverty, and they consider: What is the main cause of poverty? Students begin freewriting at this point to develop their ideas about the causes of poverty.

B. Students work in pairs and exchange their first drafts from Step 1 to do peer editing and revision. At this point they also review the questionnaire or interview instrument they are developing. They then compare their notes on the causes of poverty with each other, and arrange the causes in order of importance.

C. Each pair of students joins another pair, and each one of the four students takes a turn discussing his or her thoughts on the causes of poverty. Students add to their notes and arrange all the causes in order of importance.

D. Based on the research, brainstorming, and discussions in group work, students begin drafting three to four paragraphs that explain the causes of poverty.

E. Students pair up again and exchange their drafts on the causes of poverty to do peer editing and revision.

F. Students work individually again, considering the feedback they have received and using it to revise the draft on the causes of poverty.

Step 3: Proposing a solution to the problem (2 hours)

A. Students have now described, discussed, and researched the problem and the causes of poverty. In Step 3 they research possible solutions that could improve living standards and reduce poverty. To begin, students brainstorm about the solutions to poverty. They build on the research they have done so far and think critically about how Ethiopia can break the cycle of poverty Some of the questions that might help them begin the process are:

• How do developing countries become developed countries?
• What is the role of international organizations in reducing poverty?
• What are some obstacles that countries face in getting out of poverty?

- What are some things that citizens can do to help?

At this point, students use their notes to begin freewriting and developing their ideas regarding the solutions to poverty.

B. Students use their questionnaires or interviews to collect data from different sources. Once the data is collected, they compile it in an organized fashion for use in their papers.

C. Students once again work collaboratively in pairs to discuss the solutions they have thought about and researched. They list possible solutions in order of importance.

D. Students work individually to draft two to three paragraphs in which they suggest solutions that could help Ethiopia get out of poverty. They use the results from the research, discussions, and the data from the questionnaires and interviews to present evidence and reasons for the solutions.

E. Students pair up again and exchange their drafts to do peer editing and revision.

E Students combine all three drafts together (description of problem, cause of problem, solution to problem) and revise the complete text. They then take time to sit in groups and exchange papers as well as opinions about the texts. Finally, students will do a final revision and submit their papers.

Outcome of the writing project

The aim of this project was to motivate students to write using project work, which included establishing a relevant topic, working collaboratively, and engaging in four-skill language practice. A central focus of the writing task was to offer students the opportunity to write about something authentic and relevant to their lives. In the course of completing the project work, students were able to grapple with the issue of poverty through individual and group activities and to get involved in real situations, including learning directly about the living conditions of Ethiopians. They also conducted individual research and developed and administered questionnaires and interviews to other members of the community, including persons from the most poverty-stricken part of Ethiopian society. As a result, students produced insightful analyses depicting the roots of the problem as historical (war), cultural (extravagant expenditures during weddings), political (absence of democracy), and climatic (drought).

The students also came up with the following ways to alleviate poverty:
- "The government should encourage investment."
- "Educating the society will be helpful to overcome cultural and religious obstacles."
- "As Ethiopia has a number of rivers, they can be utilized to reduce famine."
- "The present wasteful culture must be replaced by economical uses of resources."
- "Let consultations between old and new generations begin right now."
- "We need to make use of indigenous knowledge for certain local problems."

The majority of feedback I obtained from students both during and after the project was very positive. During all steps of the project, students performed purposefully and were emotionally involved. They asked for more time when whole-class discussions were scheduled to begin and sometimes would not leave when class was over because they did not want to disrupt the momentum of their work. Even students who were ordinarily reticent became actively engaged in the project and were highly motivated. During the project, students required a high level of teacher intervention, which is another indication of the high level of motivation. Although I planned to let students complete the writing tasks on their own, they frequently requested my help, I did not decline any requested interventions because (1) the number of requests was higher than I had ever witnessed, and (2) I believe that students must be encouraged gradually to be independent and self-reliant.

Students succeeded in this writing project because they were motivated by the relevant topic and the opportunities for collaboration and interaction with others. The students' ability to learn was reflected in their essays. The success students had with this project has ramifications for future learning and makes it probable that the skills the students

acquired will help them with their next writing project and in their independent efforts to write. According to O'Malley and Chamot (1990), learners who are motivated become successful and confident learners, with positive attitudes about their ability to learn.

As Arends (1998) suggests, it is clearly important to have a real audience for the final written product. However, in this case, students completed their essays for a grade, and the instructor and classmates were the main audience for the final written product. Student motivation would have been even greater if a real-life purpose for the writing had been specified at the start of the project. For example, I could have suggested that students send copies of their finished essays to the experts they interviewed, a newspaper, or to an appropriate organization or government entity.

In addition to my own observations, I used a short questionnaire to obtain data about how students felt about the writing project. I asked them to indicate agreement or disagreement with ten statements that focused on the relevance of the project, the clarity of the tasks and activities, and their satisfaction with the types of tasks included. The students' responses on the questionnaire (see Appendix) indicated that they were satisfied with all aspects of project.

Conclusion

Learning to write in a foreign language is a demanding task that can easily leave students unmotivated. To combat this problem, teachers can apply their knowledge of current theories and methods to make writing instruction more successful. For example, familiarity with the process approach to writing allows a teacher to help students recognize the steps they go through to create a written text, which should lead to less stressful and more motivated writing. Additionally, an understanding of how to apply the principles of project work to a writing task lets the teacher incorporate elements that are sure to stimulate students to express themselves on paper: a relevant topic and an authentic purpose for writing; collaboration with their peers; use of all four skills; and a variety of activities to gather information, such as researching different disciplines and interviewing different people. The-end result is motivated students who are pleased that they have created something that is useful and has meaning. Therefore, those instructors who apply project-based learning will certainly experience increased student motivation and the success it brings to teaching writing in a second language.

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