A Facilitator’s Guide to the CGGE Modules

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I. INTRODUCTION

The AAG’s Center for Global Geography Education (CGGE) offers educational resources and professional development opportunities for higher education faculty seeking innovative and exciting ways to teach geography.

Funded since 2003 by the National Science Foundation’s Course, Curriculum, and Laboratory Improvement program, CGGE has produced a collection of online course modules for undergraduate geography classes: Population and Natural Resources, Global Economy, National Identity, Migration, Water Resources, and Global Climate Change. Each module’s website consists of three major components: (a) a **conceptual framework** providing an introduction to some of the key theories and concepts that geographers use to examine issues, (b) a set of regional **case studies** that draw on geographic research and which engage students in problem solving and spatial analysis, and (c) **collaborative projects** that engage undergraduate geography students in different countries in discussions and activities supported by Moodle e-learning technologies.

Students will find in the modules clear explanations of key disciplinary concepts and approaches. They will see how those geographic concepts and approaches can be applied to better understand real-world issues in locations around the globe. Exposure to international issues and perspectives is a central feature of the CGGE’s question-driven, data-based and collaborative approach to geography education. Through collaborative projects in the CGGE Moodle system, students can work cooperatively with their peers in another part of the world, using the analytical skills employed by geographers to address important contemporary issues and discussing their ideas with one another.

Over the past several years the CGGE project has engaged thousands of undergraduate students worldwide in geographic learning collaborations on the web. During this period the project has also developed faculty expertise in online collaborative pedagogy and supported geographers using CGGE modules for educational collaborations in the U.S., Europe, Southeast Asia, Australasia, and Latin America.

This Facilitator’s Guide (FG) was developed as a support tool for instructors using any of the components of a CGGE module. The insights and experiences of instructors from around the world who took part in classroom trials of earlier beta versions of modules are included here in order to highlight successful strategies and common obstacles. The FG will help you prepare to teach a CGGE module by:

- Describing the different components of the modules -- **conceptual framework** (CF), **case studies** (CS) and **collaborative projects** (CP) -- and how they are related to one another;
- Providing the necessary information for you to determine which module elements are best suited to your needs and circumstances; and
- Taking you through the international collaboration process from planning and preparation through implementation and assessment.
We hope you will find that the modules are rich in content, relevant and highly adaptable to a variety of course objectives, teaching styles, academic calendars and levels of instruction.

II. MODULE COMPONENTS

Each CGGE module is a stand-alone website consisting of interlocking components (content sections) that have different but complementary instructional purposes (Figure 1):

- The foundation of a CGGE module is a **conceptual framework** that presents some of the key theories and perspectives that geographers use to examine issues related to the module topic.
- Drawing on the conceptual framework are several **case studies** based on geographic research in different regions. The case studies feature a variety of activities and interactive animations for teaching spatial thinking, mapping, and analytical skills.
- Most case studies feature **collaborative projects** that are designed to connect geography classes taught in different countries for online discussions and opportunities for students to engage the perspectives of their peers. Student interactions are supported with Moodle e-learning technologies (e.g., discussion boards, blogs, wikis).

These elements taken together form a cohesive, mutually-reinforcing whole. Instructors can elect to use entire modules or, as is explained in detail below, choose to use only select elements.

![Figure 1. Major components of a CGGE module: conceptual framework (CF), case study (CS), collaborative project (CP). The “hub-and-spoke” design allows for future growth of the modules through the addition of new case studies and collaborative projects.](image)

The most innovative and exciting aspect of the modules is the opportunity for students to engage in collaborative learning with their peers in another country, perhaps even on the other side of the world! A recent study conducted by the Association of American Colleges and Universities listed collaborative work as one of the 10 “high-impact practices” that have measurable positive
effects not only on student learning, but also on retention and graduation rates as well (Conner, W. Robert and Cheryl Ching. 2010. Can Learning Be Improved When Budgets are in the Red? The Chronicle of Higher Education, 33:A56-A57).

The collaborative projects that are part of each CGGE module are designed to enhance the exchange of international perspectives and improve undergraduate students’ understanding of global connections and their ability to analyze problems spatially. There is a growing need for geography materials that support international collaboration and intercultural learning. Prompted by globalization, many academic institutions are exploring strategies for internationalization and the expansion of the intercultural content in the undergraduate curriculum. Each module’s collaborative projects provide undergraduates with an educational experience that extends the boundaries of learning beyond the campus. Although using the modules for international collaboration is not required, doing so offers many potential benefits and is a unique way to engage your students in the perspectives of their peers in different parts of the world.

All of the modules were written collaboratively by geographers from several countries. Each is designed to engage students in structured inquiry and analysis of geographic issues, using questions to guide them through the content, activities, and collaborative projects. This approach is rooted in social constructivism, a theory of learning that explains knowledge as an outcome of inquiry, dialogue, and interactions among individuals and their environments – including virtual environments (Bruffee 1993; Johnson, Johnson and Smith 1998; Springer, Stanne and Donovan 1998; Palloff and Pratt 2005).

A. Ways to Use the Modules

CGGE modules are specifically designed to be flexible and adaptable. Many different scenarios of use are possible. You can tailor the module to fit your teaching style, prior student familiarity with the material and to suit the goals, time frame and level of instruction for any course. Whether you are a geographer teaching a semester-long, upper-division course, or an instructor with little background in geography teaching the topic as part of an introductory course in a related discipline, it is likely that you will find module content that meets your needs and enriches your students’ learning experience.

As the CGGE project developed, it became clear that potential adopters of the modules wanted resources that could enhance or supplement instructional materials they already use. With this in mind, we designed the CGGE modules to allow instructors the freedom of choosing which parts of the module best suited their classes. Some professors are looking for material to provide students with a theoretical discussion about geographic problems (a need that can be satisfied by using a CGGE module’s conceptual framework as a reading assignment). Other professors seek material that can provide an international perspective on topics taught in introductory and upper-division geography courses (which can be done by assigning one or a combination of CGGE case studies). Still others are interested in developing their expertise in web technologies and international collaboration using one or more of the CGGE’s collaborative projects. Any or all of these practices can be accommodated by the six CGGE modules. The choice is yours.
1. Using the Modules without the Collaborative Projects

Many instructors will only want to use the conceptual framework and/or the case studies to provide students with geographic content on important global issues. The conceptual framework and the case studies are located on standard HTML web pages. Access is free, organization is intuitive, and there are numerous ways in which the material can be applied in a classroom setting. While all elements of each module are intended for college-level instruction, previewing the module components will allow you to determine whether the material is pitched at the appropriate level for your course.

Conceptual Frameworks: If your primary goal is to introduce or reinforce the theories and concepts related to the module topic, simply having your students read the conceptual framework (CF) may meet your needs. Each CF outlines some of the main ideas or key approaches within the discipline of geography related to the module topic. It raises critical questions, introduces relevant formulas and theories, and explains important terms. CFs include maps, photographs, charts, tables, diagrams, quotes and other features designed to enhanced comprehension. These additional features may include links to web-based sources for more detailed information and interactive learning activities such as “Pause and Reflect” questions and short quizzes. Some conceptual frameworks provide opportunities for students to discuss ideas or otherwise collaborate with their classmates. The CF can be used as the basis for a homework assignment or an in-class discussion or as primary or supplemental reading material. If, however, your students are already acquainted with the material contained in the CF, and you are more interested in illustrations of that material or collaborative engagement with the concepts, you might choose to forego the CF and utilize only the case studies and/or the collaborative projects.

Case Studies: Whether or not you assign the CF, you can choose to make use of any number of the available case studies and/or the collaborative projects associated with each of the case studies. Case studies provide specific examples from around the world that illustrate the concepts at the heart of the module. Case studies are more than just illustrations, however—they are interactive learning experiences aimed at actively engaging students in the process of geographic inquiry. Case studies include various interactive features such as discussion questions for groups working together and/or multiple choice quizzes (with immediate feedback) interspersed throughout to test and reinforce learning. Case studies may require students to access linked web pages in order to explore data which is then applied in the completion of a task. These tasks range from basic cartographic analysis, plotting of geographic data, answering questions and filling in charts or formula elements, to more complex applications involving numerous steps and iterations. Case studies provide a global perspective on the issues and help students to understand the module topic, but they go far beyond that. They give students an opportunity to do basic research, make predictions and calculations, and see how geographic tools, skills and concepts can be used to address real-world issues.

Collaborative Projects

“Tell me and I’ll listen. Show me and I’ll understand. Involve me and I’ll learn.”

Saying of the Teton Lakota
The CGGE collaborative projects are what set the CGGE modules apart from other online learning methods. The collaborative projects can be used to connect groups of undergraduate students in different countries (or even in different regions of one country) to share their perspectives on the module topics through online discussions, and to work together on tasks and geographic learning activities.

By engaging students from different countries in collaborative work the collaborative projects maximize the internationalization of learning and provides an outstanding opportunity for the cross-cultural communication of ideas. Students learn to formulate and carry out strategies for asking and answering geographic questions in a multinational team, an increasingly important set of skills in a rapidly globalizing world.

A collaboration is a partnership between two (or more) faculty members who agree to bring their students together to work on the module’s collaborative projects. All of the information necessary to initiate, plan and undertake an international collaboration is included below in “Setting Up and Managing an International Collaboration.”

Is a Collaboration Right for Me?

As with all elements of the CGGE, collaborations are flexible experiences, accommodating a variety of instructor goals, course objectives and other variables. Whether you are seeking to improve your students’ subject matter knowledge, geography proficiency, or internet collaboration skills, or simply have an interest in connecting students to a particular place and its people, you will find value in a CGGE international collaboration. When deciding whether to add a new component to a course, questions of educational value (justification), appropriateness (student/course demographics), and issues of feasibility and manageability (time, schedules, technology) are key considerations. Each of these issues is addressed in the Frequently Asked Questions (FAQs) section below to help you decide whether a collaborative project is a good choice for you and your students.

Although the modules address different issues, they share the goals of improving knowledge of geographic concepts and skills, fostering awareness of contemporary issues and international perspectives, and engaging students in collaboration with their peers in other countries. The effectiveness of the modules at achieving these goals has been tested in a series of trials since the project’s inception and evaluation is on-going, both through additional test trials and associated quantitative and qualitative research.

III. SETTING UP AND MANAGING AN INTERNATIONAL COLLABORATION

A. Collaboration Timeline at a Glance

• Find an international collaborator
• Individual instructor preparation
• Contact your collaborator(s): Establish module schedule, determine number of international teams, discuss common concerns
• Request collaboration Moodle site and site enrollment key
• Set up Instructor Moodle account
• Send list of student email addresses to AAG
• Distribute enrollment key to students
• Form local groups
• Request local group accounts and passwords from AAG
• Students receive the electronic Student Guide and set up their individual accounts
• Collaboration Begins
• Icebreaker Activity
• Students read the cf (if assigned)  *Note: Facilitators may choose to assign the CF before the icebreaker
• Selected case studies and collaborative projects undertaken according to schedule established by collaborators
• Continue until complete
• Wrap-up and Assessment

The following section will guide you through the collaboration process by providing details for each of the steps outlined above.

1. Finding an International Collaborator

You can either find an international colleague on your own to collaborate with, or you can ask the AAG to help you find an appropriate collaborator.

If you already have a colleague with whom you would like to form a collaboration, simply contact Michael Solem at the AAG (msolem@aag.org) to begin the process. On the other hand, if you do not have an international colleague to collaborate with, the AAG will help you find one, but we will need some information to help us find an appropriate collaborator. Contact Michael Solem (msolem@aag.org) with the following information:

(a) your contact information
(b) which module(s) you are interested in using
(c) the approximate time frame you would like to begin (year/semester/month) a collaboration
(d) name of the course, level of instruction (introductory/mid-level/advanced; with/without geography prerequisites) and approximate student enrollment

The AAG will use this information to match you with another instructor and subsequently put you into contact with one another.

2. Individual Preparation

When preparing to do the module, you will want to include some time for each of the items in the list that follows. How much time is required to complete these tasks will vary based on personal style and experience/comfort with the material and the technology, but 3-6 hours overall is a rough estimate. Some of these will not be possible until you have formed a partnership and have been given access to Moodle.
• Determine your ideal schedule for doing the module. Be as specific as possible, including days and times of the week during class when you plan to have students work on the project, as well as any limiting factors such as national/school holidays when classes will be cancelled. You and your collaborator will benefit from knowing this information in advance in order to work out the scheduling details. Remember, however, that you will both need to remain flexible when it comes time to do the module as delays or surprisingly fast work by students can cause some alterations to the plan.

• Familiarize yourself with the CGGE website
• Read the material you will be using (the CF and/or case studies)
• Become familiar with the content and form of the module’s collaborative projects (you can view the collaborative projects in Moodle as a guest, but you will need a free account from the AAG to access the Moodle technologies)
• Explore the environment and technical functionality of Moodle
• Incorporate the module into your course outline and syllabus
  o Decide how much weight the module will have toward the final grade
  o Consider lesson plans to introduce, supplement, and conclude the module
  o Decide how students will be assessed (see the section on assessment below)
  o Make any necessary arrangements for computer lab access (if applicable)

3. Planning with Your Collaborator

As soon as you have found an international colleague for the collaboration, you should be in contact with one another to begin the planning process. Your tasks are few, but critical. You need to discuss which elements you will be using, establish a time line, determine how many international teams there will be, and share any other information that might be helpful, such as ideas for assessment.

4. Establishing a Timeline

Collaborating instructors work together to set a timeline for starting the module, working on and completing each lessons, and the conclusion date. Since university instruction schedules can vary considerably from country to country, and progress during the module may require altering the timing for the individual case studies or collaborative projects, early planning and flexibility are both important.

The time it will take to complete different elements will vary and will depend on which elements you and your collaborators choose to use. As a general rule, assume that you will need 1 week to complete the icebreaker activity and for the students to read the CF, and a minimum of 1 week to complete 1 case study and its associated collaborative project. In most cases, collaborators have chosen to have their students read the CF, do the icebreaker activity and complete 3 case studies/collaborative projects. If you choose the same course of action, you will want to plan at least 4 weeks during which students can work on the module in class some of the time.

When possible, try to arrange the day and time during the week that students in each class will be working on the module with the intention of minimizing the time lag between online
contributions to the collaboration. The collaborative projects generally have some “call-and-
response” elements where one local group does work on a problem, starts a conversation,
comments on material or asks questions, and then their international teammates respond. When
students wait a week or longer for responses to inquiries or their teammates’ input on a problem,
enthusiasm can wane. Additionally, make an effort to alternate who begins these interactions to
help maintain momentum and good feelings among team members.

If your students will be working on the module in class, expect them to devote at least two hours
per week to the module for the duration of the collaboration. While even more time per week is
better, it is equally important that collaborating classes have equal time to devote to the module
as it is to have adequate time. If the students in class A are putting in three hours a week and
those in class B are devoting only one hour, the students in class A will end up dissatisfied and
frustrated by their teammates and the collaboration may break down. Similarly, it will be
important for you to work with your collaborator to establish equal weights of assessments.

Bear in mind that for the scenario presented above, which includes reading the CF and several
case studies and collaborative projects, four weeks of working on the module during some of the
course meeting time is adequate, but does not leave much room for taking advantage of teachable
moments or other deviations from the schedule. It is strongly recommended that you and your
collaborator “round up” when deciding how much time to plan for each module element. In
addition, previous users have often noted that the quality of the collaboration improves over the
course of the module with some of the best work occurring towards the end. By the same token,
students and instructors have sometimes stated that the module ended just when momentum was
at its peak. For these reasons, consider devoting part of class time for five or six weeks to the
collaboration if possible.

5. Icebreaker/Welcome Activity

Icebreakers help develop a rapport among local group members and their international
teammates. You will find an effective icebreaker entitled “A Virtual Tour” at the Moodle site
for your international collaboration. You and your collaborator also may decide to create an
activity of your own. If you choose the latter, the icebreaker should be geographic in nature,
light/non-stressful and geared towards helping the students become comfortable with one another
and the online learning environment.

6. Course Moodle Site and Instructor Accounts

CGGE collaborative projects are carried out on a Moodle site created specifically for your
classes’ collaboration. One of the collaborating instructors must contact the AAG by email and
request that the site be created.

Instructors will receive a user name, password and enrollment key to access the new site for their
collaboration. These are available on request by email once you have formed a partnership with
your international collaborator. The purpose of the enrollment key is to ensure that each
collaboration that is active in the CGGE project has its own secure Moodle site.
When you receive your user name and password, log on to Moodle and set up your individual account by clicking on “Profile.” The account allows you to use all the functionality of Moodle—communicating with students via posts and emails, grading, viewing student profiles and posts, accessing the collaborative project materials, drop box, etc. All participants (students and instructors) will have an account with their personal profile attached to it that allows them entrance to the collaboration site.

Profile setup is fairly quick and quite easy. You are free to include whatever you like in your profile, but in the past, instructors have most often written a short, 1-2 paragraph narrative. You might consider including information about the course you are teaching, your school, geographical information about your town or region, relevant biographical or professional information, and some inspiring comments or expectations for the collaboration. Try to set the tone for the students with your narrative as they will also be providing a short biographical sketch to accompany their account profiles. Also be sure to post a photo to your account as this will encourage the students to do the same and helps to create connections among the participants.

7. **Forming local groups and international teams**

As soon as you know the number of students that will be in each class, you and your collaborator can decide on the number and size of local groups and (international) teams.

When engaging in a collaboration, instructors organize their students into local groups. Each local group is then paired with a local group in the collaborating class to form (international) teams. These teams then work together to complete the collaborative projects. For example, if an instructor in the United States is collaborating with an instructor in Chile, their students will form local groups (A1, A2 and A3 in the United States, and B1, B2 and B3 in Chile). Each local group will be paired with a group of their peers in the other country such that A1 and B1 will work through the collaborative projects together, A2 and B2, and so on (Figure 2).

When forming local groups, instructors have the choice of student self-selection, random assignment, or designed assignment. Each of these approaches has its benefits and drawbacks. Self-selection may produce groups that are immediately cohesive since often it will be friends who choose to work together, but they may also discourage independent thinking within the group. Random assignment may resemble more closely how collaborative work situations will arise outside of the classroom, requiring that students face the challenge of integrating different personalities and abilities in a productive way. At the same time, this can result in groups that are unbalanced, being deficient or overly represented in some skill set or knowledge area. It may be especially problematic to allow student self-selection or random assignment when students will not be conducting the collaboration in their native language. In this case, designed assignment may be the best option as it allows the instructor to balance language proficiency (if necessary) among the groups. Similarly, groups can be assigned based on student personalities, relative academic or technological strengths and weaknesses, academic level, and so on. In a case where the instructor does not know very much about her/his students, appropriate group configurations can be determined by gathering self-assessment information regarding key traits for groups work. Key traits to focus on include interpersonal skills (e.g., leadership, keeping
others on task, encouraging, conflict resolution), academic skills (e.g., advanced standing or geography majors, computer skills, writing proficiency), and experiences with and feelings about group work. Regardless of which method is chosen for forming local groups, it is important that the instructor monitor group progress, stay alert for problems, and intervene when necessary.

If you decide to use random assignment, there is an “auto-enroll in groups” feature in Moodle that can generate the groups for you. One facilitator must contact the AAG to let the staff know how many groups there will be in order to use this feature.

The number of students per group will depend on class size in each location. Recommended group size is 3-5 people. Smaller groups provide less opportunity for uncooperative or unmotivated students to shirk their responsibilities (Walvoord, B.F. 1986. Helping Students Write Well: A Guide for Teachers in All Disciplines, 2nd Ed. New York: Modern Language

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Association). In our example, suppose the class in the United States has 40 students enrolled and the Chilean class has 30 (70 students total). Students could be organized into 10 international teams, with local groups of four students from the United States and three students from Chile comprising each team. When, as often happens, classes have odd numbers of students, it will be necessary for local groups to have uneven numbers of students (four students in most groups but five in one group, for example).

Students will only interact online with the members of their own team and will not see the work being done by other teams unless the collaborating instructors choose that as an option. While there are advantages to making each team’s work visible/available to the class as a whole, such as showcasing high-quality collaborative efforts, it can introduce an unwieldy amount of information to manage. Choose this option with care.

Some instructors may want groups to have designated leaders—either assigned or elected by the group members. Collaborations both with and without group leaders have been successful. The leader’s primary job is to keep the group on task and working together smoothly. More detail on the role of local group leaders can be found in the CGGE Student Guide.

When possible, get a jump on the module by giving the members of local groups a chance to interact and hopefully do some task together before they begin collaborating with the members of their (international) team. A basic level of interpersonal comfort will help the students to hit the ground running and make the most of the time spent on the module’s collaborative projects.

8. Creating Student Accounts

To access the newly-created collaboration site for your course on Moodle, you will need to distribute the enrollment key to your students. You will have already received this key from the AAG when you requested the establishment of a Moodle collaboration site. Send the AAG a list of all student names and email addresses. Once the students have created their accounts, they will receive an email message from the AAG asking them to confirm their email address. Be sure to alert students in advance that they will be receiving this message. Sometimes the message will go to a junk mail folder to avoid it being deleted from junk mail folder and deleted. Once they have received the enrollment key, students should be given a time frame in which to login to Moodle and set up their account, including the profile and photo. Be as specific as possible about what they should or should not include in their profile and try to coordinate with your collaborator on those instructions. In all cases where the entire participating set of students is completing an identical task, try to have instructions be as uniform as possible to create balance, symmetry and mutual intelligibility.

Most instructors require a specified amount of individual input to online discussions during the course of the module. Individual accounts allow students the freedom to login to the collaboration at any time, whether they are with their group or not. Group accounts are for use by local groups when they are working together. Having these two types of accounts allows instructors to assess individual effort as well as group work. Local group usernames and passwords will be sent by the AAG to each group member via email once the groups have been
Established. They will be distinguished by location and number (e.g., United States Team 1, Chile Team 1, United States Team 2, Chile Team 2, and so forth).

Each student will receive an electronic copy of the CGGE Student Guide, which is a short Word document that includes:

- Welcome and introduction to the CGGE—description of the modules; a bit about collaborative learning; broad goals and vision of the CGGE
- Tips for communicating successfully and getting the most out of the module addressing topics such as language concerns (ex. use of idioms), the importance of respect and open-mindedness, challenges in an online environment, etc.
- Creating a CGGE Account and Profile—a step-by-step, graphically-illustrated guide
- Introduction to Moodle buttons—what they allow you to do and their icons
- Welcome Activity/Icebreaker—Drafting a Group Charter

9. Conducting a Collaboration

Once planned and set in motion, a collaboration primarily requires monitoring of group activity by each instructor, presentation of supplemental content information as needed, and regular contact between you and your collaborator. Adjustments in timing often need to be made, but these are easy to execute if the channel of communication between collaborators is maintained.

There are a few strategies to be aware of that most sources agree are key to successful group work:

- Clarity is important. Define the goals of the collaboration at the outset. Explain to your students how their groups will operate and how they will be assessed. Discuss major ideas and concepts along the way.

- Help students to develop the skills necessary to succeed at collaborative work. Discuss, model and if possible, provide opportunities to practice active and tolerant listening, accepting constructive criticism helping others to understand content and managing disagreements (Davis, Barbara G. 1993. Tools for Teaching. San Francisco: Jossey-Bass)

- Check in with each group on a regular basis. As you proceed with the collaboration, there are periodic assignments and due dates that will need to be met by which you can assess group progress. It is also important, however, to speak with the groups in order to hear from them first hand how the work is going, to get a sense for what ideas might need more explanation and to provide support and assistance with any difficulties that may arise.

“Free-riders” and “slackers” can be one of the great fears and challenges of a collaborative endeavor, but they need not be. Establish mechanisms from the beginning for managing uncooperative group members. One of the best ways to do this is to keep the groups small. It is
difficult to be invisible in a group of only three or four students. Some suggest that groups should be responsible for finding their own way to deal with individuals or group behaviors that are unproductive. Others recommend taking a more proactive stance by planning for peer assessment. In this model (which has been successfully used in several CGGE trials), students anonymously assess the participation of each group member at the conclusion of the module. If several group members indicate that a particular person did not do their fair share of the work, that individual will receive a lower grade than the others. Assigning grades for individual effort in addition to the group grade also helps to prevent slacking (see the section below on Assessment)

- Stay alert for any signs of scheduling problems, stylistic and cultural differences, and technical problems:

  - Scheduling problems: If planned with care and with adequate time built in to devote to the various elements of the module, scheduling problems need not arise. If they do occur, address them immediately. The most common scheduling problems involve lag time between contributions to the collaborative projects. Keeping students on-task by means of clear direction and establishment of firm deadlines that impact each student’s grade can prevent these issues.

  - Stylistic and cultural differences: The Student Guide briefly addresses the issue of cultural and stylistic differences that can affect the collaboration. It is recommended that instructors discuss with their students the need for openness, understanding and clear communication in the collaborative process as well as the inherent pitfalls of internet communication. This is especially true if your students are doing the module in their native language and their international teammates are not. Also, sense of humor may vary greatly between cultures; alert students to be careful when sharing jokes or “humorous” websites, because the humor may not transfer well into other cultures.

  - Technical Problems: The CGGE website and the Moodle e-learning platform are both solid and function smoothly in most cases. Occasionally, new issues arise with Moodle or with local computer configurations. For the former (and sometimes the latter), AAG staff often can facilitate solving whatever difficulties you might encounter. If the problem lies with your local computer system, your campus technical support should be able to address the issue. There are no special computer configurations required to use the modules or Moodle, but it may be of benefit to inform technical support staff at your institution of your plans in advance so that they will be prepared to assist you if necessary.

10. **Wrap Up and Assessment**

There are many ways to approach assessment of collaborative learning. The modules have students produce numerous types of “deliverables”— responses to forum questions, contributions to wikis, gathering and inputting data into tables, graphs and maps, interpreting
results, etc. Each of these can be worth credit based on rubric that includes a range of point values for content quality, timeliness and other assessment criteria. Alternatively, each completed element within the collaboration can be graded comprehensively following the same type of scheme.

Beyond grading the group deliverables, deciding what to include in assessing overall student performance may differ based on class size, the weight of the module grade relative to other course requirements, and so on. There are several key questions to consider when deciding what to include and how to structure assessment of student work on the module.

- **Group Grade, Individual Grade, or Both?** Assigning only an individual grade for group work tends to create competition and negates the goals of collaborative learning. Assigning a group grade only may discourage students who are prone to slacking from doing their fair share and can make more motivated students trepidacious of the process. Combining a group grade (the larger share, most commonly) with a grade for individual effort seems to provide the best of both worlds. The group grade can be based on work done on the module deliverables that groups are responsible for completing. Individual grades can be based on solo written assignments (including pre- and post-module assessment of learning on the module topic, reflection papers, and responses to specific teacher-generated questions), peer assessment (see Conducting a Collaboration), quizzes or test questions on module content, individual on-line posts or some combination of these.

- **Grading Individual Posts—yes or no?** Group posts to online discussion forums are an element of all of the modules, though they are much more central to some than to others. Most modules/instructors require students to post individually to discussion forums, usually outside of class time, in addition to doing their work with the group. Whether and how to grade individual posts is a matter of some debate. One of the primary considerations in making this decision for yourself must be whether you have the time and energy to devote to the task. In a small class setting, it is very manageable, but in larger classes, the amount of reading involved and the need to consistently keep track of many on-going conversations can be overwhelming. If you choose to assign and grade individual posts to a discussion forum, be sure to establish and clearly communicate grading criteria.
FAQs
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17. What if the students in my class are very diverse in terms of previous geography education, college level, skills and interests, and so on? Will a collaboration work in this case?
18. Can I collaborate with a class of students who speak another language?
19. What level of computer proficiency is required?
20. Can 2 instructors that have never used the modules collaborate successfully?
21. How much time will it take to prepare to use a module in my course?

1. When will I know if I have been matched up with another instructor for a collaboration?
As soon as a match has been found, you will be notified. One of the questions on the registration form is the latest date by which you would be willing to consider a partnership. Generally speaking, 1 week before the commence ment of a semester/quarter is the cut-off date most instructors specify due to the need to finalize the relevant course syllabus.

2. How many students is too few/too many to do the collaboration?
Experience has shown that the modules work best when each participating class has between approximately 15 and 50 students. Both smaller and larger classes have had success with the modules. Larger classes can be unwieldy for the instructor especially if it is her/his first time using the modules. A class with fewer than 15 students will make the size of local groups too small.

3. How can I fit the module into the existing curriculum?
Questions of feasibility and manageability—the nitty-gritty of fitting a collaboration into your existing curriculum or building it into a new course—are often of the utmost concern to instructors and rightly so. Trying out a new project of this kind entails a commitment of both effort and time. We believe that you will find that the CGGE modules are well worth it.
The modules can be used in many ways as explained elsewhere in this Facilitator’s Guide. Each instructor will adapt the module as best fits their needs. If you are considering a collaboration, there are some issues to consider that may help you determine how to proceed.

If you tend to prefer lots of structure and predictability in the classroom, you may find a collaboration challenging. By its very nature, a collaboration introduces a degree of uncertainty and loss of control that some find unsettling. There are the challenges of managing personalities, depending on others to do their part in a timely fashion, and so on. As with any cooperative endeavor, the collaborative projects definitely require flexibility, understanding and cooperation among instructors as well as among student participants. Then again, if we believe these are important traits for our students to develop, we would do well to model the behaviors for them. Not surprisingly, your first experience collaborating on a module will require a more significant investment of time and effort than subsequent collaborations. That said, it is absolutely feasible and manageable for most faculty—new and seasoned teachers alike—to engage successfully in a CGGE project. Breaking out of our familiar patterns and trying something new can be difficult, but as more instructors (and students!) are finding, the benefits tend to justify taking on the challenge.

Working on the module online during class is the ideal, recommended form. Students may be required to do some work on their own, and possibly in their local groups as well, outside of class even in this scenario, but the bulk of the work should be done in the classroom. Under these conditions, the instructor is available to answer questions and deal with any problems that might arise.

It is possible to assign a collaborative project as “homework” to be completely or mostly done outside of class, but this is not recommended. This format tends to present problems including those related to synchronizing local student schedules, dealing with technical or content-based difficulties, and ensuring consistent and timely progress on the module.

4. Do I have the required equipment?
Each class participating in a collaboration needs to have access to computers and the internet. The modules are best viewed in Internet Explorer or Mozilla Firefox with the free Shockwave plug-in. No additional specialized hardware or software is required. Access to a computer lab, especially one with facilities that allow several students to share a computer in order to foster greater cooperation on all aspects of the project, is ideal, but not necessary. Successful collaborations have been carried out using students’ personal laptops in classrooms with wireless internet connections.

5. How do I manage time differences with collaborators? Do students in my class need to be online at the same time as their international team members?
There are some challenges that arise in dealing with time differences, but they have been successfully navigated in many cases. The keys to managing time differences are planning, communication and the commitment to stay on-schedule to the best of one’s ability. It is not necessary for collaborating students to be online at the same time and in fact, that has rarely been the case thus far. Most often, international teams will take turns initiating activity on
a given collaborative projects as per a pre-determined schedule set by the collaborators. Responses to queries, contributions to data-gathering or data-manipulation exercises, assessment of project findings and the like happen in a back-and-forth fashion accordingly. Before beginning the collaboration, you should determine the days and times that students will work on the collaborative projects. It is very important that one classroom not always start conversations or activities because this pattern can create a feeling of one-sided effort. Even more crucial in this regard is that responses, contributions and acknowledgement of postings occur within a reasonable time frame. Generally speaking, no more than a couple of days should be allowed to elapse without some communication between international team members to avoid feelings of resentment or loss of motivation. If posting/contributing to the collaborative project must happen less frequently for reasons related to school calendars or holidays, making sure that all students are aware of this fact will help to reduce any negative feelings, but motivation and energy for the project will need to be maintained by the instructors.

6. How do I manage a collaboration for a large versus a small class?
Large and small classes can successfully complete a collaboration. Since the majority of work related to the collaboration will be done in small groups online, larger class size is not generally a problem for the students. Where large class can be problematic, however, is in monitoring and assessment. If you are an instructor in a large class without a teaching assistant, it will be important to devise a manageable assessment plan, especially one that takes into consideration the time commitment that reading the online contributions and evaluating other requirements can entail.

There is no reason that small class size should constitute a deterrent to a positive collaboration experience. If both classes have a small number of students (as few as 6), a collaboration is still possible. It is only if one of the collaborating classes is too small to support large enough local group size (3-5 students per local group is ideal) that small class size becomes an issue.

7. What if the collaborating class is of a different size?
Class sizes can vary to a certain extent. Classes of vastly different sizes are not recommended for collaboration. As long as there are enough students in each collaborating class to have an equal number of groups, it is fine for group size to be different. For example, your collaborator in Class X may have 33 students and you may have 25 in Class Z. In this case, you will work together to decide how many local groups to have and how many students will be in each local group. Class X may have seven groups of four students and one group of five students while Class Z has seven groups of three students and one group of four students. Keep in mind, however, that group size should generally not be fewer than three and groups of more than five students can be problematic. From experience, the ideal size is between three and five students per local group.

8. Will my collaborator’s students have the same educational background as mine? What happens if they don’t?
A collaboration should be between sets of students who are at a similar level in terms of skills and preparation. There can be some limited imbalance, but do not form a collaboration between a class of mostly freshman in an introductory course with a class of junior and senior geography majors in an advanced course. In some cases, however, students at one school can have a much
different degree of preparation from students at another even though they are at the same level. If you have concerns, be sure to speak about them with your collaborator before committing to the module. Likewise, if you find a collaborator on your own, be sure to address this concern by inquiring about class prerequisites, the likely number of geography majors in the class, and so on.

9. **How do I log on to the website?**
Access to the CGGE website is open to anyone. Each module is linked to the CGGE homepage: http://globalgeography.aag.org

10. **How do I log on to Moodle?**
Once you have formed a collaboration, you will request a username and password to log on at Moodle. Remember you can view the collaborative projects without an account as a guest, but an account is required to access the Moodle e-learning technologies.

11. **Who can I ask for assistance if required?**
AAG staff members are available to provide assistance. Moodle also has support features to assist you with any difficulties you may encounter.

12. **How long will the module take to complete?**
The length of time spent to complete the module will depend on which elements you and your collaborator choose to use. As a general rule, assume that you will need 1 week to complete the icebreaker activity and for the students to read the CF, and a minimum of 1 week to complete 1 case study and its associated collaborative project. In most cases, collaborators have chosen to have their students read the cf, do the icebreaker activity and complete 3 case studies/collaborative projects. If you choose the same course of action, you will want to plan at least 4 weeks during which students can work on the module in class some of the time.

If your students will be working on the module in class, expect to devote at least 2 hours per week of class time to the module for the duration of the collaboration. While even more time per week is better, it is equally important that collaborating classes have equal time to devote to the module as it is to have adequate time. If the students in class A are putting in 3 hours a week and those in class B are devoting only 1 hour, the students in class A will end up dissatisfied and frustrated by their teammates and the collaboration will break down.

Bear in mind that for the scenario presented above, which includes reading the CF and several case studies and/or collaborative projects, four weeks of working on the module during some of the course meeting time is adequate, but does not leave much room for taking advantage of teachable moments or other deviations from the schedule. It is strongly recommended that you and your collaborator “round up” when deciding how much time to plan for each module element. In addition, previous users have often noted that the quality of the collaboration improves over the course of the module with some of the best work occurring towards the end. By the same token, students and instructors have sometimes stated that the module ended just when momentum was at its peak. For these reasons, consider devoting part of class time for 5 or 6 weeks to the collaboration if possible.
13. What academic level is most appropriate for undertaking the modules? Experience and research have shown that the modules tend to work best when implemented between classes having similar levels of geography background. Unevenness in prior geographic knowledge can be somewhat rectified by assigning the conceptual framework, which presents the foundational concepts needed to understand the case studies.

14. Do my students have to complete the entire module, and if not how will this affect the collaboration? Students do not have to complete the entire module. Collaborators will decide together which elements will be included in the collaboration. If you and your collaborator choose to only do one case study and its associated collaborative project, that is fine. Using only part of the module will not affect the collaboration in this case.

15. Is it important to set up the online work for easy transitioning between the website and Moodle? Depending on what part of the module your students are working on, it can be useful to have your students login at Moodle and to have the CGGE module website that supports the CF and the case studies open another window. This will allow them to refer back to material in the CF or the relevant case study when working on the collaborative projects.

16. Do my students have sufficient background knowledge to successfully complete the module? Each instructor ultimately will need to determine this for herself or himself based on knowledge of their students’ preparation, course content leading up to the collaboration and assessment of the materials at the CGGE website. All modules are intended for college-level geography courses. The conceptual framework for each module provides significant introductory material that can be supplemented by the instructor as necessary.

17. What if the students in my class are very diverse in terms of previous geography education, college level, skills and interests, and so on? Will a collaboration work in this case? Generally speaking, diversity within a class regarding previous geography education, college level, skills and interests, and so on, does not present problems and may actually be a plus. It mimics “real-world” conditions, allows more senior students and geography majors to develop leadership skills and learn the material more thoroughly by instructing others, and provides less experienced students the chance to benefit from their peers. In this case, however, attention to balancing this heterogeneity when forming local groups will be necessary.

18. Can I collaborate with a class of students who speak another language? A common language, such as English, Chinese or Spanish, must be shared by instructors and students in the collaborating countries. It need not be the first language of both classes and it can be a great way to practice second-language skills. When one group of students is using their first-language and their partners are not, understanding and tolerance of language difficulties may need to be fostered by the instructors.
19. What level of computer proficiency is required?
Students and instructors should have basic computer skills, (word processing; internet use for email/research). It is helpful if the instructor and/or the students are familiar with a course management system (CMS) such as Blackboard, Desire2Learn or WebCT since these are similar to the Moodle web platform used for the collaboration. This is not required, however, especially given the technological capability possessed by many students and instructors. Once everyone has become familiar with the platform, it is easy to use.

20. Can two instructors that have never used the modules collaborate successfully?
Sure, why not? While it may make some aspects of pre-planning easier if one is working with a facilitator experienced with CGGE, all experienced users each had to try this style of teaching a first time too. The modules are designed to be flexible, so the way one uses them can vary according to each situation. As long as the collaborating facilitators remain in contact and agree to the plans – and to any eventual changes to plans that may arise – the process is very workable. Two new collaborators can work their way through any glitches that arise; conversely, even experienced users may face something new in their 5th collaboration together. Part of the CGGE Project’s goal is to encourage international collaborative teaching, which in itself is a continual and rewarding learning experience. And the AAG will be able to provide advice from experienced users if necessary.

21. How much time will it take to prepare to use a module in my course?
The amount of time required will vary, but expect to spend 10-20 hours preparing materials, communicating with collaborators, and otherwise setting up the experience before it begins. This figure will vary considerably, of course, between first-time users and experienced instructors.