



College of Agriculture,
Food and Environment



Remotely Guided Study Abroad

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PROBLEM

- ***Too few US students study abroad***¹
- ***Students worry about studying abroad***²
 - Planning trip
 - Making reservations
 - Responding to emergencies
 - Navigating without getting lost
 - Avoiding cultural mishaps
- ***Trip organizers worry about trip planning***
 - Student recruitment
 - Average cost per student per trip
 - Minimum enrollments

¹ www.iie.org

² Larsen, Brun, and Øgaard (2009)

CONCEPTS

- ***Fully-guided study abroad***
 - Fixed itinerary
 - Full-service, in-country guide
 - Most expensive for small groups (e.g., 2 to 6 students)
 - Least student “worry”
- ***Unguided study abroad***
 - Flexible itinerary
 - No guide
 - Least expensive for small groups (e.g., 2 to 6 students)
 - Most student “worry”
- ***Remotely-guided study abroad***
 - Fixed itinerary
 - Full-service, remote guide
 - Moderately expensive for small groups (e.g., 2 to 6 students)
 - Moderate student “worry” (?)

HYPOTHESIS

Remotely-guided study abroad is an appropriate, feasible, and needed study abroad option.

APPROPRIATENESS

- ***Distance Learning***
 - “Formal educational process in which a majority of the instruction occurs when students and instructors are not in the same place.”¹
- ***Study Abroad***
 - “Education that occurs outside the participant’s home country.”²
- ***Remotely guided study abroad***
 - Packaged international travel having an educational purpose where participants and guides are not in the same place.

¹ Regional accreditation bodies (e.g., SACS)

² The Forum on Education Abroad

APPROPRIATENESS

- ***Distance Learning Best Practices***¹
 - Technologies in the course are readily available.
 - Students know how to access technical and other support.
 - Response time are clearly stated.
 - Opportunities for interaction that support active learning.
 - Course tools promote learner engagement / active learning.

- ***Study Abroad Best Practices***²
 - “Organization prioritizes health, safety, and security.”
 - “Safe, clean, and hospitable student housing.”
 - “Responsible health, safety, and security measures.”
 - Pre-departure orientation and on-site orientation.
 - “Measures are in place for ongoing monitoring of and advising on health, safety, and security issues.”

¹ Quality Matters (2014 edition)

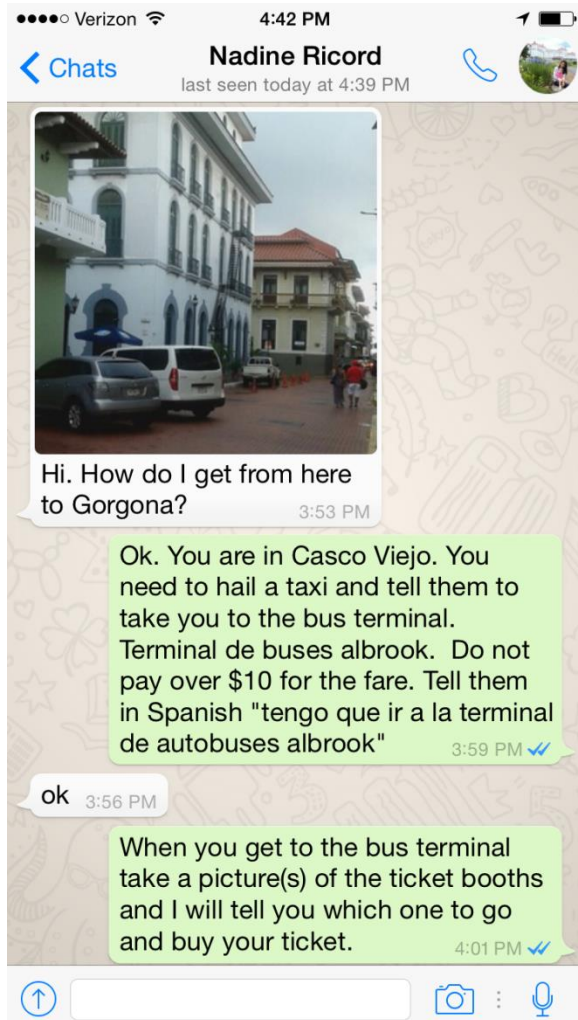
² The Forum on Education Abroad

FEASIBILITY

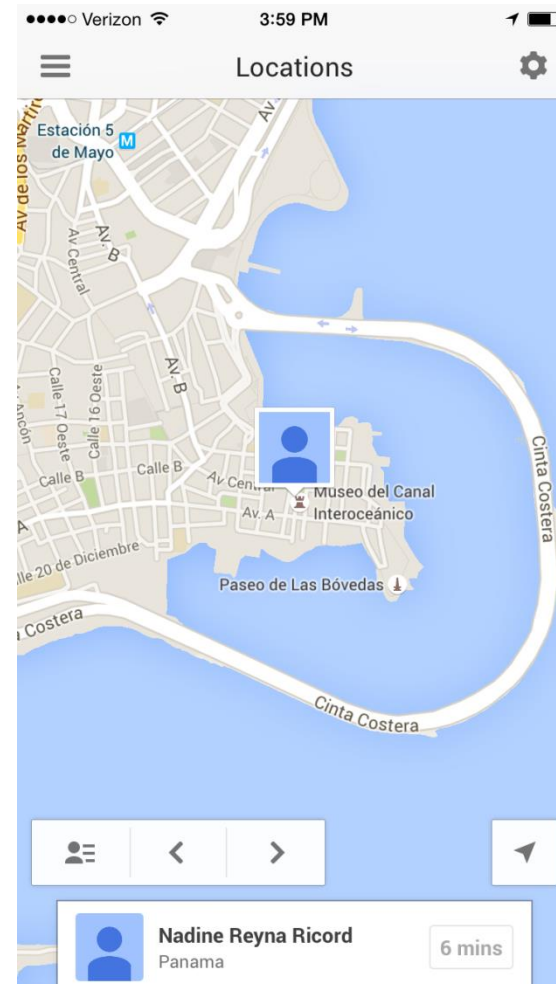
- ***Cell Phones with Pre-loaded Apps***
 - Remote tracking (Google+)
 - Scenario example (Navigate from the Old City to Gorgona Beach using WhatsApp and Google+)
 - Helps with student worries (e.g., navigation, language barrier, cultural differences, help when needed).
- ***Home-Country Guide***
 - Pre-departure orientation, checklist, and personalized custom guidebook for the trip.
 - Schedules reservations, airfare, technical visits
 - Helps with student worries (e.g., planning phase, how to prepare and pack, etc.)

Remote Guidance from the Old City to Gorgona Beach using WhatsApp and Google+

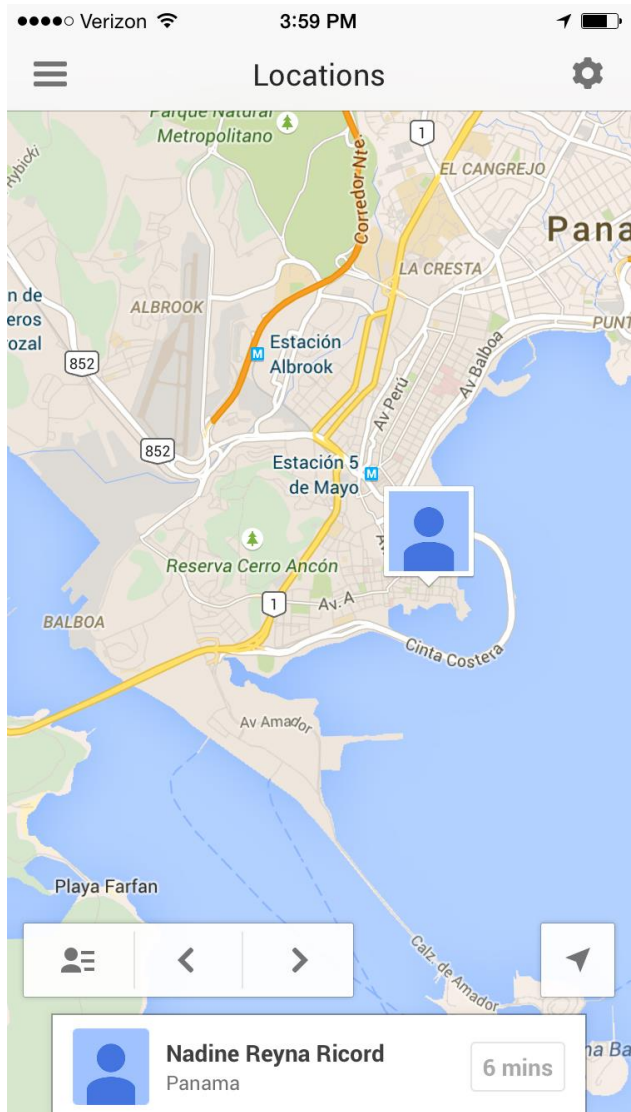
How do I get to Gorgona?



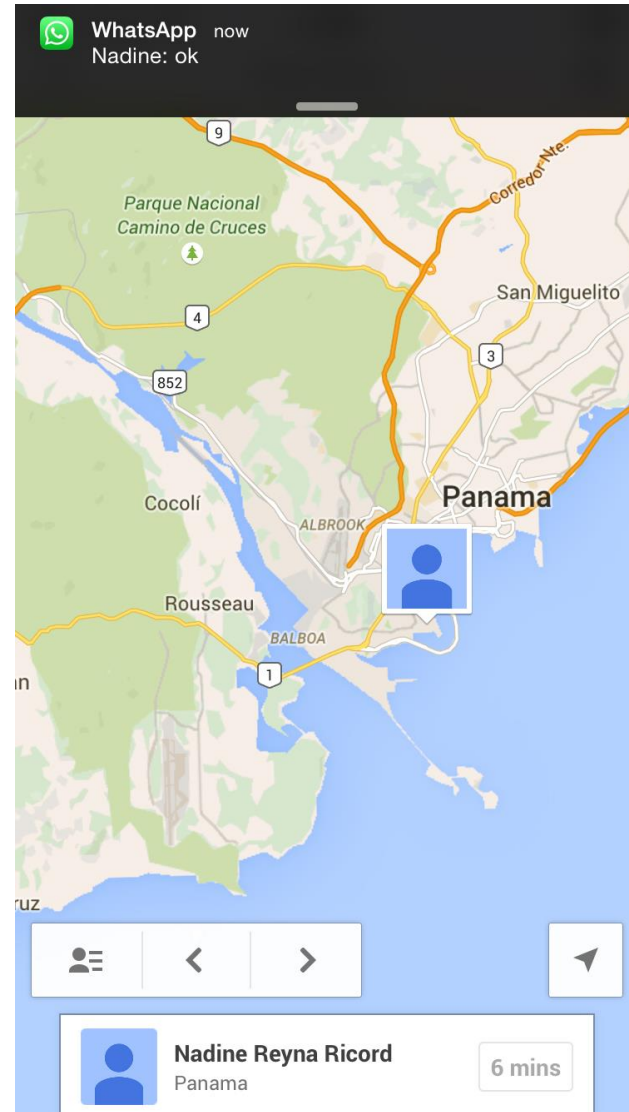
Location of traveler



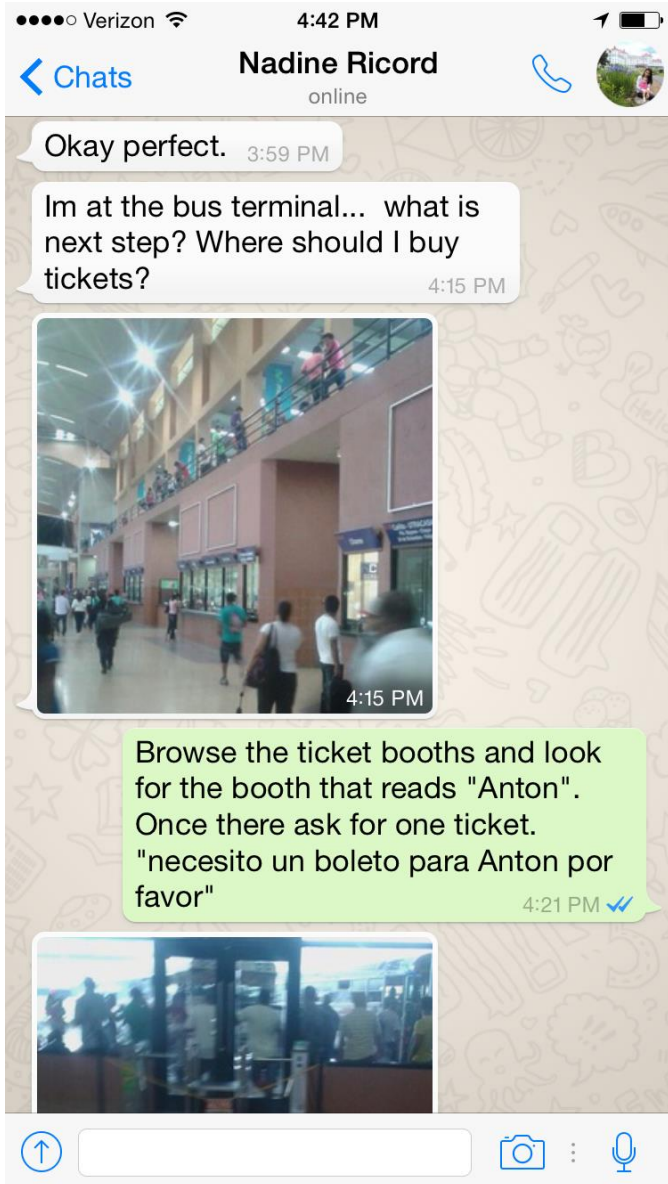
GPS location of student in relation to Albrook Bus Station



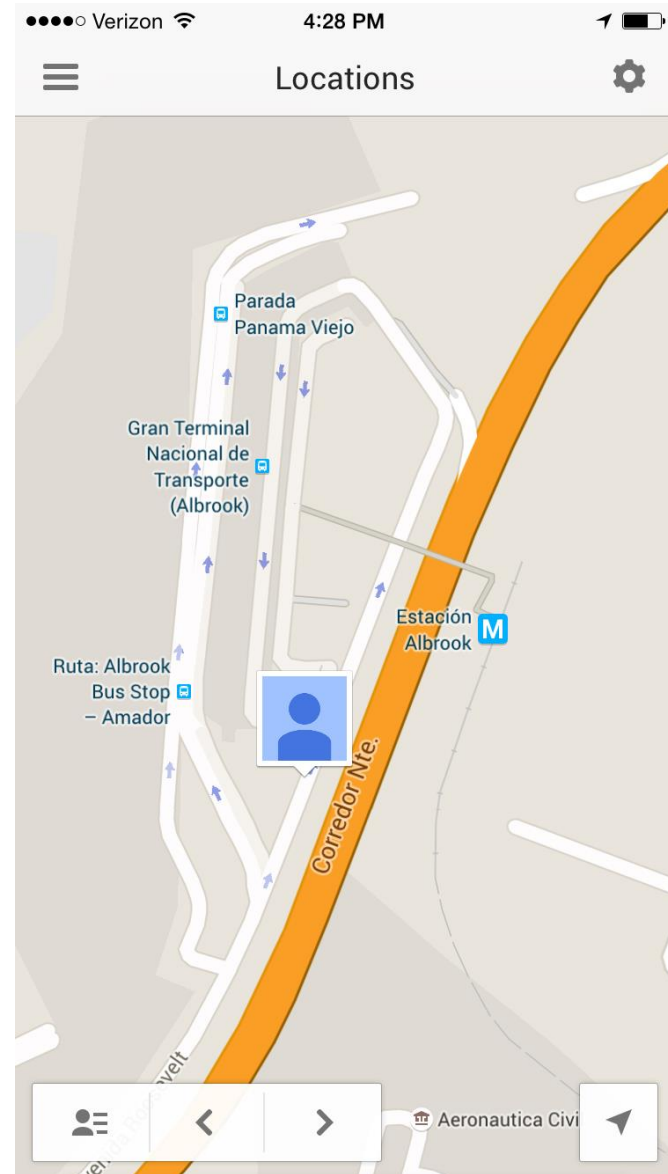
GPS location of student in relation to broader view of city



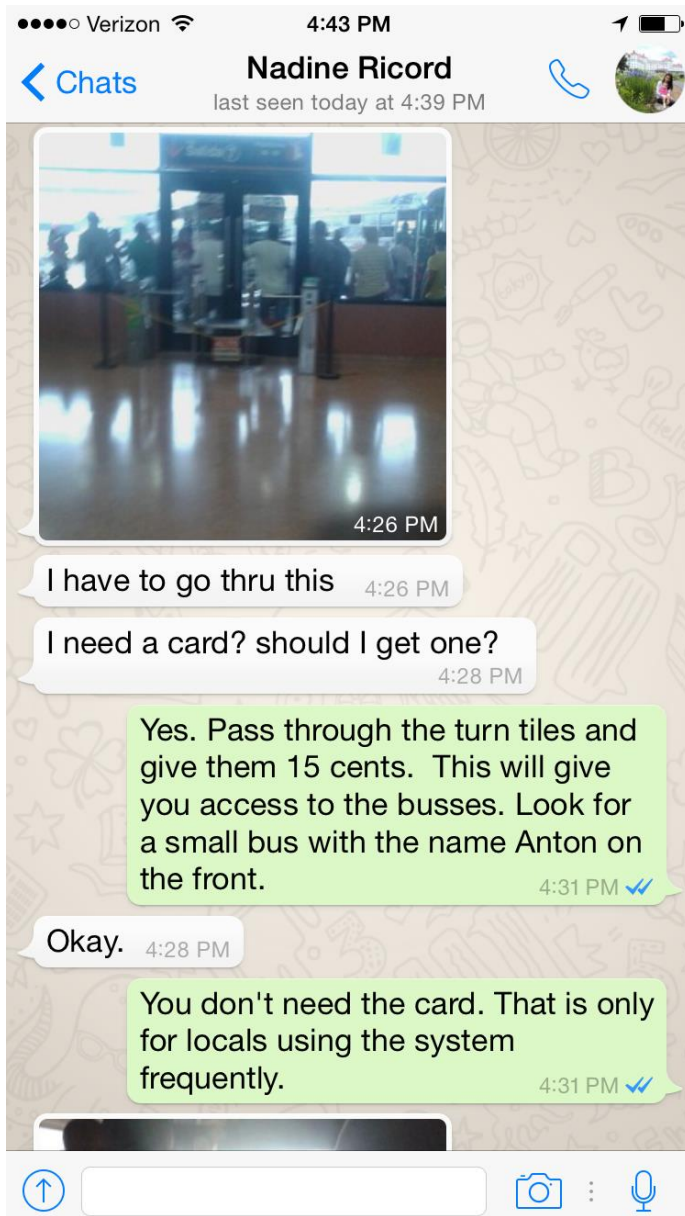
Buying bus tickets?



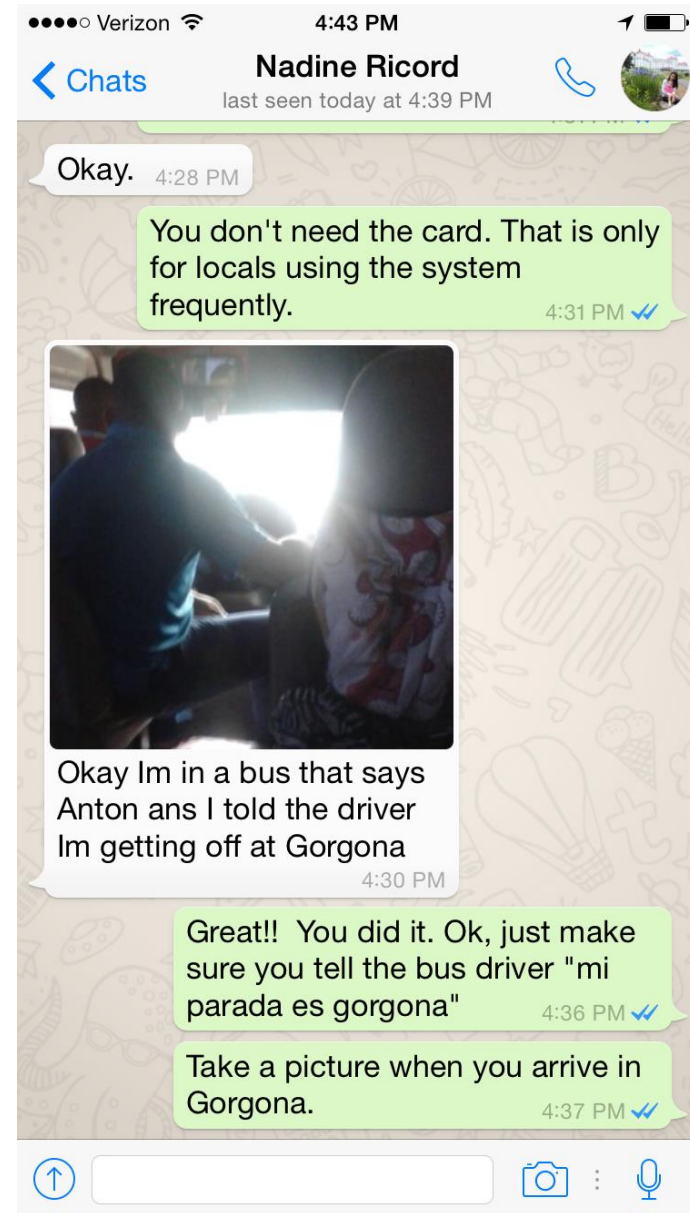
Yes, they are at the correct bus terminal



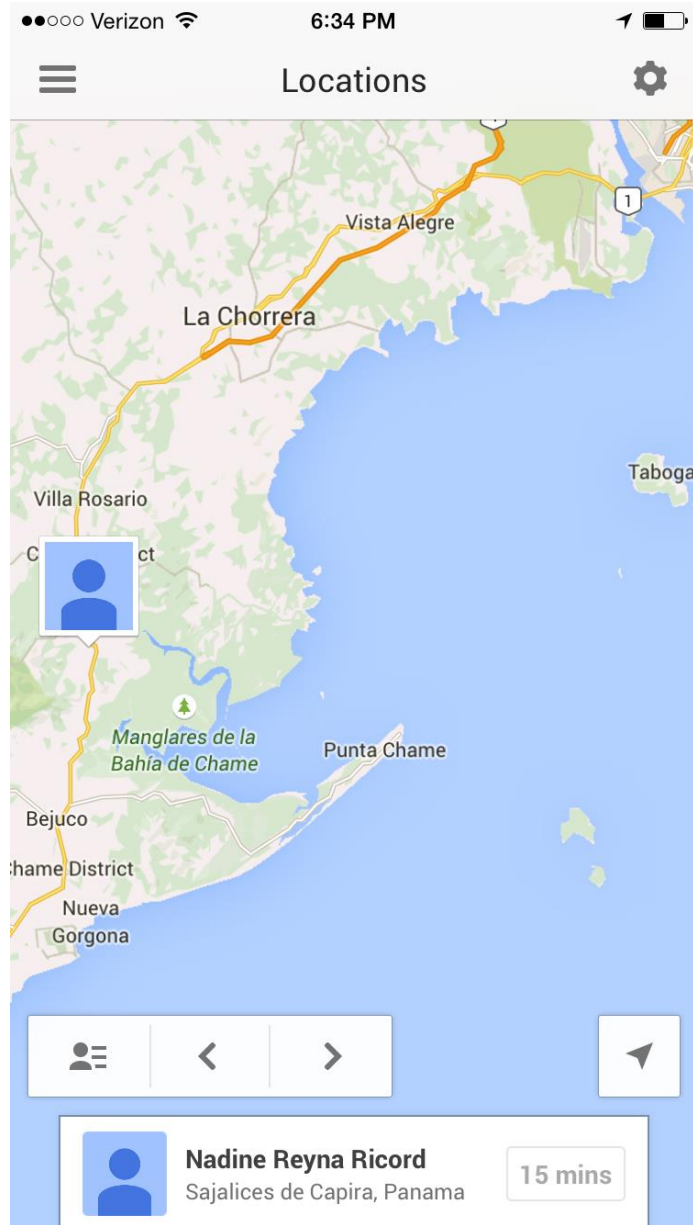
What are these and how do I get through?



On the bus at last!



View of students in transit

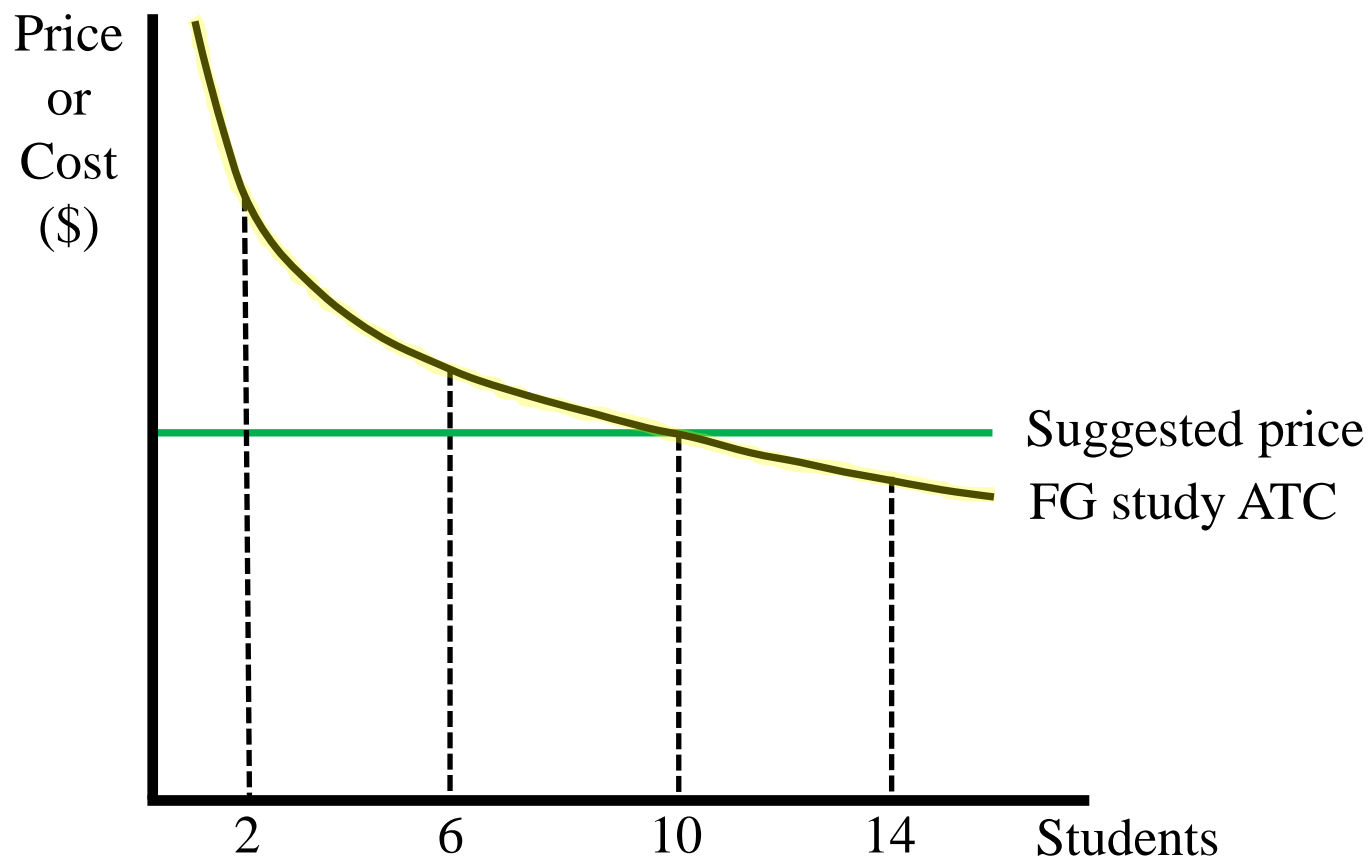


Arrival at Gorgona Beach



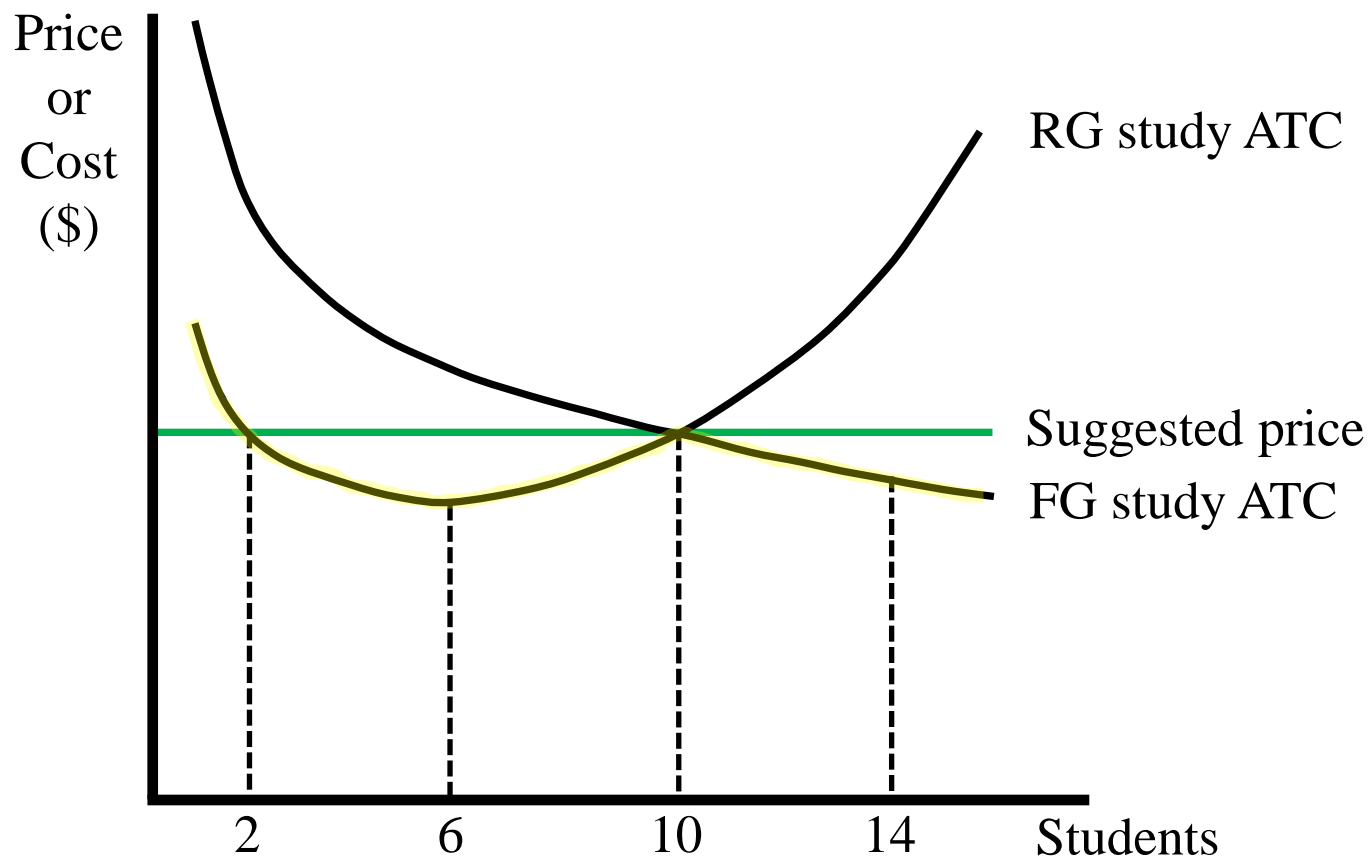
NEED

Figure 1. Average total costs (ATC) for fully-guided (FG) study option only.



NEED

Figure 2. Average total costs (ATC) for fully-guided (FG) study with remotely-guided (RG) option.



NEED

- ***Student benefits***
 - Participation possible for smaller groups (e.g., 2 to 9 students)
 - Same cost as larger groups (e.g., 10+ students)
 - Earlier confirmation of requests to participate
- ***Trip organizer benefits***
 - Easier to build momentum for student recruitment
 - Program is more adaptable to student demand
- **Other benefits**
 - Earlier and cheaper reservations (air, hotel, and activities)
 - More student responsibility / active learning
 - Better learning outcomes (e.g., travel confidence)
- **Shortcomings**
 - Substitutability of fully-guided and remotely-guided study?
 - More study is needed (e.g., field trials)

FUTURE PLANS

- ***Student preferences***
 - Assess how much more students are willing to pay for remotely-and fully-guided travel versus unguided travel
- ***Field trials***
 - Recruit undergraduate students to test and refine remotely-guided technologies and strategies in Panama
- **Online course**
 - Develop 9-day remotely-guided field trip to Panama as part of an online Rural and Ag-Based Tourism course
- **Learning outcomes**
 - Assess how student learning outcomes (e.g., cultural awareness, language improvement, and travel confidence) differ for remotely- versus fully-guided study abroad

Questions



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PROBLEM

Too few students study abroad. According to the Institute for International Education (www.iie.org), fewer than 10% of US undergraduate students currently study abroad. This organization aims to increase study abroad by 100% by 2019. Their 5-year initiative is called “Generation Study Abroad.”

Students worry about studying abroad. According to Larsen, Brun, and Øgaard (2009), students worry most about (1) trip planning, (2) making reservations, (3) responding to emergencies, (4) navigating without getting lost, and (5) avoiding cultural mishaps. Cost is also a major concern for students.

Trip organizers worry about recruitment. Short-term international “study tours” (e.g., 1 to 3 weeks) typically require students to pay for leaders’ travel expenses (fixed costs). In general, these programs require a minimum of about 10 students to participate; otherwise, average fixed costs per student become too high. Student recruitment and trip planning are difficult when travel confirmations require that minimum enrollments be met first.

CONCEPTS

Fully-guided study abroad. A guide (e.g., faculty member) makes all travel and hotel reservations and orients students before the trip (e.g., with packing, vaccination, and other advice). Students and the guide travel together and follow a fixed itinerary. The guide makes all contingency plans and deals directly with any delays or emergencies. The guide facilitates post-travel reflections.

Unguided study abroad. Students make their own travel and hotel reservations and travel orientation is usually informal and not required. Students travel independently or in small groups (e.g., 2 to 6) without the benefit of a guide, depending instead on advice from written guide books (e.g., from Lonely Planet series) and/or fellow travelers. Students typically plan as they go and do not follow fixed itineraries. Students make all contingency plans and have full personal responsibility for any delays or emergencies. Post-travel reflection is often minimal, consisting typically of a final report describing the experience.

Remotely-guided study abroad. Using best practices from study abroad and distance learning, remote guides assist small groups of students (e.g., 2 to 6) as they plan their trip, complete a fixed itinerary, and reflect on their experience. Remote guides make all travel and hotel reservations and orient students before the trip. Pre-trip orientation is critical as students are taught specific ways to use the resources provided (e.g., cell phones and apps), contingent resources (e.g., a phone card and landline), and the services of the remote guide. During travel, remote guides provide student groups with pre-programmed cell phones with geo-location apps for remote tracking and apps for language translation, currency conversion, class lessons, and communication. Remote guides make all contingency plans and deal remotely with any delays or emergencies, including coordination with in-country contacts as needed.

HYPOTHESIS

Remotely-guided study abroad is an appropriate, feasible, and needed study abroad option. Remotely-guided study abroad, as envisioned, offers students a practical, high-quality substitute for fully-guided study abroad. It's less expensive for small groups (versus fully-guided study) and less worrisome (versus unguided study). Also, remotely-guided study abroad options make trip planning and student recruitment easier for trip leaders.

APPROPRIATENESS

Remotely-guided study abroad emphasizes best practices. We define remotely-guided study abroad purposefully to emphasize best practices in the areas of distance learning and study abroad. If these best practices are satisfied, we believe that remotely-guided study abroad can offer appropriate, high quality learning opportunities similar to fully-guided study abroad.

Definitions. Distance learning is defined as a “formal educational process in which a majority of the instruction occurs when students and instructors are not in the same place” (US Regional Accreditation agencies). Study abroad is defined as “education that occurs outside the participant’s home country” (Forum on Education Abroad). We define remotely-guided study abroad as packaged international travel having an educational purpose where participants and guides are not in the same place.

Distance learning best practices. According to Quality Matters (2014 edition), distance learning best practices require in relevant part that: (1) technologies used in the course to be readily available, (2) students be able to use these technologies and access related support, (3) instructors state response times clearly, (4) opportunities exist for interaction that support active learning, and (5) course tools be used that promote active learning.

Study abroad best practices. According to the Forum on Education Abroad, study abroad best practices require in relevant part that programs: (1) prioritize health, safety, and security, (2) provide safe, clean, and hospitable student housing, (3) have responsible health, safety, and security measures, (4) include pre-departure and on-site orientations, and (5) have measures in place for ongoing monitoring of and advising on health, safety, and security issues.

Is remotely-guided study abroad appropriate? The appropriateness of any study abroad experience depends on the particular program learning objectives and on the emotional readiness of individual students. Remotely-guided study abroad programs require substantially more advanced preparation and contingency planning versus traditional, fully-guided study abroad programs. Content delivery via distance learning methods, if included, also requires more advanced preparation and increased organization typically. Groups with very inexperienced students may require remote guides to have near-native cultural, geographic, and language fluency to approximate face-to-face support levels. In nearly all cases, remote guides should have reliable in-country contacts ready to respond if needed. We suggest offering trial versions of programs in-country first using experienced travelers as surrogates to test all primary and contingent technologies and to identify logistical weaknesses.

FEASIBILITY

Remote guidance. Remote guidance is already widely used and accepted. Call center employees guide technical novices how to fix their computers remotely via phone from India. People rely on their smart phones every day to provide accurate, automated, instantaneous, turn-by-turn guidance when traveling to unfamiliar destinations.

Remote guidance for international travelers. Remote guidance is increasingly used to guide international travelers. In 2013, India set up a 24-hour, toll-free, multi-lingual helpline to provide general information and assistance to independent tourists (www.ndtv.com). HX Global and International SOS are two companies that provide email, text, and phone access to call center staff trained to assist travelers worldwide with medical, security, and logistical concerns (e.g., lost passports, cash advance, and emergency hotel bookings).

Better cell phones and cell phone services. Remote guidance is made increasingly more practical as reliable, low cost cellular voice and data services become more widespread and as mobile computing devices and applications become more powerful. We recommend that remote guides supply students with portable backup battery chargers. These small, low-cost devices provide backup power when a cell phone's battery is running low or phone batteries need to be recharged.

Phone and non-phone tracking. Cell and GPS tracking make remotely-guided study abroad more feasible. There are many apps for tracking cell phones remotely. Any phone that is linked to a Google account can be located remotely online using the Google account's *Device Manager*. Other real-time remote cell phone tracking apps include *Find My Phone!* and *Life360*. Non-phone GPS/cell trackers are also available. These small, dedicated, battery-powered tracking devices can be used instead of or as a backup to cell-phone tracking. For instance, ElectroFlip's *iTrack 2.0* location finder (\$199, Amazon, beeper size) has on-demand tracking with up to 4 months of use on single charge. The device reports its location (viewable via any online mapping website) when prompted by a text message from the remote guide. The device also has an SOS button for emergencies. Use of a SIM card (e.g., prepaid, 15 day, 1.5GB, \$10, Panama) is required and provides cell-based location within 10 feet. For more local, in-country, student-to-student tracking, we suggest the *Glympse* or *Find Me!* apps.

Other phone applications. Noteworthy mobile phone apps include *WhatsApp* (internet-based instant text messaging with location mapping), *Google Translate* (instant language translation from text, voice, or camera inputs), and *XE Currency* app (live exchange rate conversions). *Google Maps* is useful for creating custom maps with specific routes or itineraries. Remote guides can also attach geotagged multimedia files (images, videos, or audio) to these custom *Google Maps* to create location-based walking or driving tours. Custom *Google Forms* can also be integrated with *Google Maps* to allow traveling students to complete text or other location-specific assignments (see <https://youtu.be/i6pWfoktUd8>). *Google Maps* and associated YouTube lecture videos can be downloaded and stored offline in advance (late 2015), thus greatly reducing demand for mobile data. Other related location-aware apps include *Aurasma*, *Detour*, and *Google Field Trip*.

NEED

Scalability. The concept of *scalability* is key to understanding the need for remotely-guided study abroad. Scalability is simply the ability of a system to vary output quantity while holding average total costs constant (e.g., change the number of students per trip without changing the price per student).

Scalability of fully-guided study abroad. In theory, fully-guided study abroad programs that include remotely-guided options are more scalable than those that exclude this option. This is because fully-guided study abroad trips typically require students to share the cost trip leaders' travel expenses. If there are only a few students (e.g., <10), the average cost per student becomes prohibitively high (Figure 1).

(See Figure 1 in above presentation.)

In the hypothetical example above (Figure 1), average total cost (ATC) is higher than the suggested price when there are fewer than 10 students. As the number of students increases, the ATC per student falls as the fixed costs of the trip leader's expenses are shared among more and more students. Scalability is relatively difficult for programs that only offer fully-guided travel since ATC (highlighted line) varies significantly from the suggested price (green line) across the range of potential group sizes.

Scalability of fully-guided study abroad with remotely-guided option. If a remotely-guided option is added, the ATC curve flattens out, particularly when group size is smaller (Figure 2).

(See Figure 2 in above presentation.)

With remote guidance (Figure 2), the ATC for two students is the same price as a fully-guided trip with 10 students. The ATC for remote guidance declines as more students share the cost of the remote, on-call guide with the minimum ATC occurring at 6 students. With more than 6 students, the ATC for remote guidance rises as crowding occurs (e.g., backup guides are engaged more frequently to answer questions when multiple calls occur at once). At 10 students, it is just as cost effective (ATC per student) to convert the trip to a traditional, fully-guided experience. Beyond 10 students, the ATC continues to decline as more students share the trip leader's expenses, reaching a minimum once again at 14 students. For programs that offer the option of remote guidance, scalability is relatively easy; the joint ATC (highlighted line) varies relatively little from the suggested price (green line) across the range of potential group sizes (Figure 2) compared with fully-guided trip alone (Figure 1).

NEED (con't)

Remotely-guided study abroad helps students. In addition to being price sensitive, students also have strong preferences (e.g., about location and course content) when it comes to study abroad programs. Students don't want to be told to choose a different program or pay more because the minimum enrollment for the fully-guided trip of their choice wasn't met. We expect that remote guidance will allow smaller groups of students (e.g., 2 to 9) to travel less expensively than fully-guided travel with the same small group size (e.g., compare ATC for 2 or 6 students in Figure 1 and Figure 2). We also expect that the cost of remotely-guided travel for these smaller groups to compare favorably to fully-guided travel with its minimum enrollment (e.g., compare ATC for 2 students and ATC for 10 students in Figure 2).

Easier scalability helps trip organizers. Improved scalability should make student recruitment and trip planning much easier for trip organizers. Minimum enrollments are higher for programs that only offer fully-guided travel (e.g., 10 students) versus those that offer a remotely-guided option (e.g., 2 to 4 students). It is much easier to recruit 2 students than 10 students. Remotely-guided programs should also be better able to build and maintain student interest. If two students commit to participate in a program, their interest and early commitment will likely attract others and momentum will build. This is much more challenging for traditional, fully-guided trips that don't offer a remote guidance option. Suppose two students show interest and are ready to pay for the program, but the trip organizer asks them to wait (i.e., to not spend their money) until the organizer can find 8 other students who also want to participate. Situations like these diminish student interest and block momentum.

Other potential benefits. There are several other potential advantages of remotely-guided study abroad. The ability to confirm a student's participation and accept payment earlier (e.g., after only two students enroll) may allow airfare and hotel reservations to be purchased more cheaply. Remotely-guided students may value and benefit from their experiences more since they have more personal responsibility (i.e., there won't be parent-like, full-time, in-country guides). This additional personal responsibility may better prepare and motivate these students to attempt independent travel in the future.

Potential shortcomings. There are certainly potential shortcomings and problems with remotely-guided study abroad. Remote guidance is not appropriate for all types of study abroad programming or for all types of students. We believe remote guidance is best viewed as an additional set of tools that can enhance and diversify existing international study options. More study is needed to understand potential weaknesses. For example, students may not see remotely-guided and fully-guided travel as near enough substitutes. Some students may view remote guidance as significantly more worrisome. If so, these students may resist signing up for a trip until they know clearly which kind of differentiated experience they will have.

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Remotely Guided Study Abroad

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FUTURE STUDY

Student Preferences. We plan to conduct an online survey of student preferences for unguided, remotely-guided, and full-guided study abroad in fall 2015. We want to evaluate students' willingness to make trades between the different study abroad options (including unguided study) at various prices.

Field Trials. We plan to recruit a small group of undergraduate students with varying levels of foreign travel experience to test and refine remotely-guided technologies and strategies domestically and later in Panama. Student analysis, testing, and feedback will be structured as part of a class on emerging markets.

Online Course. We are developing an online undergraduate course in rural and ag-based tourism that will include a required remotely-guided field trip to Panama. Students will navigate to and observe 10+ related tourism businesses in 5 different Panamanian locations over about 10 days.

Learning Outcomes. We plan to assess how the learning outcomes (e.g., cultural awareness, language improvement, and travel confidence) differ for students that participated in remotely-guided versus fully-guided study abroad programs.

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