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Involving International Students in Designing and Implementing International Extension Tours

Abstract

International Extension experiences can provide valuable outcomes to clientele. Careful planning is necessary to maximize the benefits to participants and the potential impacts of the tour. International agricultural sciences students can benefit from participating in these tours and greatly add to their success. In this article, we describe the main organizational steps we used and lessons we learned while planning and executing a comprehensive tour program to Brazil involving substantial contribution by an international student.

Keywords: international learning experience, Extension tour, Brazil, soybean

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Introduction and Background

International tours can provide significant lifelong impacts for Extension clientele (Andrews, Place, & Crago, 2001). They can offer insights into alternative approaches and technologies, develop linkages with foreign collaborators, and provide cultural development. Treadwell, Lachapelle, and Howe (2013) reported that program participants improved their abilities in dealing with relevant technological issues after participating in an Extension tour to Nicaragua. International field tours also offer opportunities to exchange information with progressive growers (Hawkins & Southard, 2001).

Tours are becoming popular Extension activities at land-grant institutions as part of international Extension programs (Locket, Moore, & Wingenbach, 2014). At the same time, these institutions have a growing international agricultural and biological sciences graduate student population (National Science Foundation National Science Board, 2018). These students often have many potential contacts in their home countries and a desire to improve their extension programming skills. Consequently, there is an opportunity for Extension specialists to mentor these students as part of formal international tours while improving the tours via the knowledge of the students involved.

We took advantage of this kind of mentor/student relationship to organize a tour to Brazil. The tour objectives were closely related to Author Stefani-Faé's U.S. research on soil health and soybean production undertaken in his role as a Penn State University doctoral student. Additionally, Brazil has a rich history of effectively deploying various sustainable soil management tactics to expand soybean production.

Potential participants were identified during Extension soybean grower meetings where we shared our research results and discussed the production similarities between the United States and Brazil. The goal was to have 15 to 20 participants. In the end, a group of 14 Extension personnel, industry agronomists, and soybean growers from Pennsylvania traveled to Brazil from February 22 to March 2, 2018.

We conducted the tour in late February to coincide with the beginning of harvest in Brazil and precede the planting season in Pennsylvania. The group visited the major soybean production area in the Cerrado region and southern Brazil, where topography and farm size are similar to those of Pennsylvania. Most expenses were paid by the participants. Some financial support was obtained from the Pennsylvania Soybean Board checkoff program to be used to evaluate trade and production economics, develop a blog, and share the experience via posttour conferences and farm press interviews. The board viewed the trip as an opportunity to enlighten members about Brazilian soybean production.

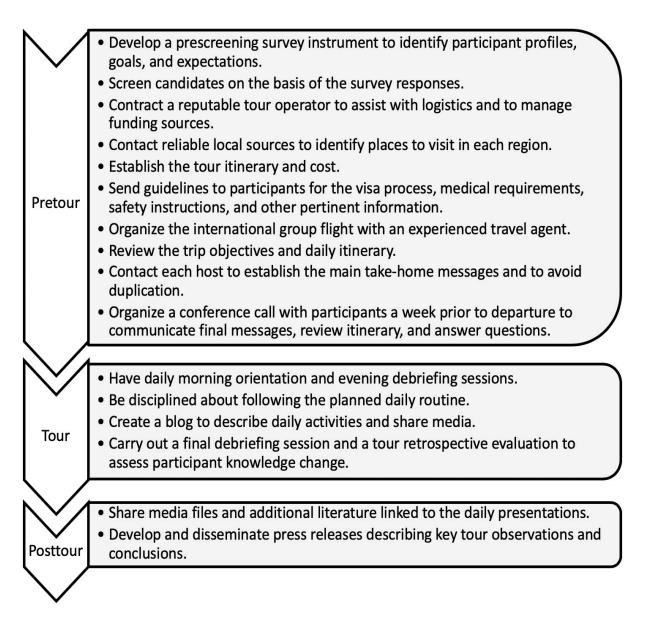
Because of the significant expense of and high participant expectations for an international tour, careful planning was necessary to maximize the potential impacts. The planning, execution, and evaluation of the trip were included as part of Author Stefani-Faé's graduate program. This circumstance led to a more formal and robust tour development than would have occurred otherwise as he was able to provide more focused attention to the tour development. Our objectives with this article are (a) to share the main tour planning steps, (b) to describe the lessons learned while organizing the trip, and (c) to encourage Extension educators and specialists to develop successful international Extension tours involving contributions from international students.

Tour Planning and Implementation

We initiated the planning approximately 1 year prior to the tour by meeting with Penn State international program staff and Extension educators who had led international tours. During the tour, we followed a disciplined daily routine that included morning orientations, evening debriefing sessions, and blog entries. These served to maximize the educational benefit to participants and to communicate to stakeholders at home. The planning and implementation steps we used, shown in Figure 1, can serve as a model for developing a successful international tour.

Figure 1.

Critical Steps in Developing a Successful International Tour



Participant Outcomes

The results of the end-of-tour evaluation showed that the educational objectives were reached (M = 4.8 of 5.0) (Table 1). Participants also rated the food, logistics, timing, and value of the trip as high (M = 4.7 out of 5.0) (Table 1). The tour success was likely due to the pretrip planning, guidance from author Stefani-Faé regarding selection of site visits, a disciplined daily approach that focused on the educational objectives, and communication with stakeholders during and after the trip.

Table 1.

Average End-of-Tour Retrospective Evaluation Scores

Горіс	Mean score ^a	SĽ
Educational objectives		
Improving your knowledge of Brazilian culture and customs	5.0	0.6
Knowledge of the economics of soybean production	4.8	0.6
Understanding Brazilian cropping systems in different regions	4.9	0.6
Understanding the role of cooperatives for producers in Brazil	4.8	0.
Understanding soybean quality issues in Brazil	4.7	0.
Understanding some of the key insect and disease issues in Brazil	4.8	0.
Understanding how Brazil is trying to improve sustainability of soybean production	on 4.9	0.
Education component	4.8	0.
_ogistical elements		
Food	5.2	0.
Organization and logistics of the trip	4.6	0.
Ratio of educational time to leisure time	4.0	1.
Timing of the trip	4.7	0.
Value of the trip considering cost, overall knowledge, and usefulness	4.9	0.
Logistics	4.7	0.
	4.8	0.

Other positive impacts that happened after the tour were documented, such as social media connections between participants and their peers in Brazil and linkages between potential Brazilian graduate students and professors. One participant was inspired to host a tour at his farm for growers he met while in Brazil. The tour also inspired new research ideas, such as testing new inoculant technologies and interseeding cover crops. Finally, it fostered social and professional relationships among the tour participants.

Lessons Learned

Each day a morning review of activities and an evening debriefing were conducted. These were critical for retaining consistent and accurate take-home messages and consequently avoiding any miscommunication following the tour. The final debriefing session was important for reviewing take-home messages and sharing different points of view among the participants. At this session, participants completed the aforementioned evaluation about the key learning objectives and engaged in an open discussion on topics such as

sustainability, economics, and technology.

Use of a tour company was important for managing participant payments, in-country logistics, liability issues, and acquisition of a tour guide and an interpreter. This approach allowed more time for focusing on the educational objectives. Defining the expectations before the trip with each participant was important to optimizing the daily visits. Author Stefani-Faé was able to work closely with the tour operator to identify the best researchers, producers, and cooperatives to include on the tour; assist in technical translation; and relate the visits to the background of the tour participants.

The daily blogging was a stimulating tool for expanding the outreach benefits to the local community in Pennsylvania. During the tour, the blog had more than 4,000 visitors. Articles developed from the posttrip interviews resulted in excellent tour visibility both in Brazil and the United States

(http://www.cotrijal.com.br/noticias/ver/4781/Cotrijal+recebe+produtores+da+Pensilv%C3%A2nia; https://www.embrapa.br/busca-de-noticias/-/noticia/32853234/producao-de-graos-no-brasil-atraiamericanos; https://www.lancasterfarming.com/farming/field_crops/tour-reveals-brazil-s-beanbounty/article_6e146f42-13d6-55b1-b344-55a77f7574d8.html;

<u>https://news.psu.edu/story/517074/2018/04/18/study-abroad/penn-state-extension-provides-clients-study-abroad</u>). Digital resources were provided to participants following the tour to assist them in developing presentations for their peer groups. The presentations were well received.

Adult learning can be challenging during full-day activities, especially when the message is being translated. Three participants felt that the tour was excessively intense and that the intensity affected the learning process (see Table 1). Consequently, depending on the group profile, increasing leisure time may be advised.

Recommendations

International Extension tours can be successful, and there is potential for increasing this type of Extension program. To be successful and maximize impact, Extension educators planning an international tour should carefully consider the planning and implementation steps described herein. Developing relationships with commodity groups can help defray some expenses and greatly increase the impacts of the tour. Consider involving international students in the design and implementation of international tours if possible as doing so can lead to more robust tours and effective extension experiences for the students.

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