Teaching Agribusiness Export Plans via International Video Teleconference – Perceptions, Problems and Pointers¹

S. Kumarappan² and K. Hostetler³ Ohio State ATI Wooster, OH



S. Angles⁴ Tamil Nadu Agricultural University Coimbatore, TN, India

Abstract

The authors offered an international agribusiness course enrolling five students in Ohio State University ATI and nine students in Tamil Nadu Agricultural University (India). The students interacted synchronously via video teleconference to create export plans for agricultural products. This paper summarizes their feedback and suggestions. The implications of using video teleconferencing to help students derive their own export plans are discussed within the Technology, Pedagogy and Content Knowledge (TPACK) framework. The students rated the video teleconference interactions better than traditional methods of lecture based instruction. Their reasons included superior interaction, the ability to create more realistic business plans in consultation with foreign peers and the opportunity to learn non-content skills such as trust and cooperation in the international context. The difficulties for students arose from establishing the value proposition in an international context, the challenges in sifting through enormous international information, recognizing the cultural differences and the technical and connectivity issues in organizing teleconferencing sessions. The article also includes suggestions from the instructors' perspectives on effective use of video teleconferencing in international agribusiness courses.

Introduction

Globalization has created new business opportunities, diversified the consumer base and improved the supply chain prospects for novel and ethnic products (Malloy et al., 2012; Radhakrishna et al., 1994). Many U.S. colleges, including community colleges, have started to teach the global business concepts (Beamish and Calof, 1989; Cardon and Marshall, 2010; Coers et al., 2012).

A survey of community colleges offering international business courses found that the interest in offering international courses had tripled between 2010 and 2012 (Hult and Motz, 2012). The aim of these courses is to teach the business value propositions in an international context and help students customize those values for foreign customers. In the case of agricultural products, the focus expands to include the seasonality of farm supplies, perishability and sanitary and phyto-sanitary quarantine requirements.

Typically, the instructors design the course materials to teach international business aspects derived from textbooks, online resources and video supplementary materials (Cardon and Marshall, 2010; Coers et al., 2012; Sharon et al., 2012). The instructors often treat the student derived export plans as a classroom exercise rather than an integral activity of the course itself.

We developed an alternative approach to treating the role of student derived export plans in the course. This paper describes such a pedagogical strategy where five students from the Ohio State University ATI (ATI) interacted with nine students in Tamil Nadu Agricultural University (TNAU) via video teleconference. The students derived their plans in consultation with foreign peers and faculty giving it credibility and an opportunity to learn non-content skills such as trust, cooperation, cultural sensitivity and leadership skills. The video teleconferences played a critical role to help students consult, communicate, collaborate and create their international business content which fits well with the Technological, Pedagogical and Content Knowledge framework (TPACK, Koehler and Mishra, 2009).

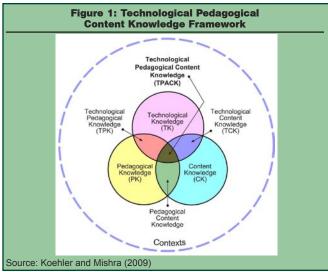
¹This study was deemed exempt by the Ohio State University Institutional Review Board. The authors thank The Ohio State University, Office of International Affairs and Ms. Ruth Sesco in OSU Libraries and Dr. Chinnadurai in Tamil Nadu Agricultural University for guidance and support.

²Division of Arts, Sciences and Business; +1-330-287-1261; kumarappan.1@osu.edu

³Division of Arts, Sciences and Business; +1-330-287-1256; hostetler.78@osu.edu

⁴Department of Agricultural Economics; +91- 98949-08458; sangles@rediffmail.com

TPACK Framework and Course Design: The TPACK framework evolved from the earlier version of the same framework known as Pedagogical and Content Knowledge (PCK, Magnusson et al., 1999). The TPACK framework suggests that students' overall understanding arise from three distinct domains: technological, pedagogical and underlying content. With the widespread use of technology in today's classroom teaching, the use of TPACK framework would be more relevant in the context of our international agribusiness course.



The confluence of technological, pedagogical and content domains in our course is as follow:

- **1. Content domain**: We differentiated the course content into three sub-components:
 - Content delivered by the instructors: the international business concepts, lesson plans and discussions led by the instructors;
 - Content derived by the students: the export plans developed through student peer interactions in the foreign country; and
 - Non-content content: the cultural awareness, sensitivity and the level of trust that students could establish through the video teleconferencing.
- 2. Pedagogical domain: We used students' export plans to introduce key international agribusiness concepts to the students. The classroom content and discussion focused on the issues for the products selected for exporting.
- Technological domain: The video teleconferencing modules and screen-share opportunities enabled students to interact with faculty and peers in the foreign country.

Objectives

The objectives of this paper are to -

- Explain the scope, roles and limitations of interactive video teleconference modules in an international agribusiness course
- Evaluate the student interest and preferences in adopting video teleconferencing to create export plans

 Develop guidelines in using video teleconferencing for agribusiness courses

Effectiveness of Video Teleconferencing

The video teleconferencing, virtual classrooms and other web-based instruction methods have become more accessible, inexpensive and integral to today's classrooms (Herrington et al., 2004; Cook and Dupras, 2004; Andone and Frydenberg, 2011; Khan, 1997; Myers and Huegler, 2011; Bostock, 1997; Meyers and Jones, 1993; Johnson and Stucke, 2011). There is a growing body of evidence that web-based conferencing has similar pedagogical effectiveness of face-to-face interaction (Garrett, 2011). Ferry et al. (2012) and Munkvold et al. (2011) recognize even larger benefits of cross-cultural video conferencing as an opportunity to create 'global graduates for a global workplace'. Gloor et al. (2011) stressed the importance of inter-cultural interaction resulting from the efforts of instructors as a key non-content outcome of video teleconference sessions.

The extant literature also recognize some common problems in using video teleconferencing such as the time zone differences that affect synchronous teleconference sessions and inability to engage student with remote login (Munkvold et al., 2011). The institutional differences – where the same course is treated differently by various institutions – tend to deter the offering of global courses. Other factors that impact international delivery of courses include the software platform for video teleconferencing, the amount of flexibility in learning and doing work assignments and the efforts of instructors (Arbaugh, 2000).

Research Gap: The literature shows the growing opportunities and challenges with using teleconferences to teach international concepts. But the opportunity to create and use student-derived content in international agribusiness courses has not been fully explored. We focus on the extent and possibility of using student derived content (through video teleconferences) in the delivery of an international agribusiness course.

Methods

Course Structure and Video Teleconference: The Ohio State University ATI (ATI) piloted an international agribusiness course in spring 2012 (10-week quarter). To provide a realistic learning experience, five ATI (undergraduate) students were partnered in teams with nine graduate students in Tamil Nadu Agricultural University (TNAU), India. There were three teams of students each comprising one or two ATI students and two or three TNAU students. The number of students was purposefully capped at a lower number in this pilot offering. The course blended daily classroom lectures with weekly interactive video teleconference. In the U.S., the class met four times per week to discuss introductory international business concepts and to prepare for the international collaboration session. In India, the students

met once a week in preparation for the international collaboration session. The video teleconference session was held each week, for nine continuous weeks. The teams congregated in one room in each location and both classrooms were connected using Adobe Connect software. The instructors in both locations guided the students by providing an agenda for the teleconference. support materials and research assistance for export planning and customized templates and airtime for each team to interact via video teleconference. (The Export Business Planner for Your Small Business published by the U.S. Small Business Administration was provided to the students to guide their thinking through the creation of their own import/export plan. Additional materials such as product specific market reports, U.S. and India trade statistics and video links providing real life examples from those participating in international trade were also provided.) The teleconference sessions also included invited guest speakers from the U.S. who discussed the global marketing and international business law issues.

Student-Driven-Content: The students developed export plans for three agricultural products: (i) export of soybean oil from the U.S. to India, (ii) export of mangoes from India to the U.S. and (iii) export of a natural, health supplement (moringa powder) from India to the U.S. The student teams mimicked actual international business partnerships. For soybean oil exported from the U.S., the U.S. team focused on the export regulations in the U.S. while the Indian team focused on the import aspects in India. The students contacted international agribusiness companies in India and the U.S. to understand the supply chains and value propositions for their agricultural product. The students also focused on the sanitary and phyto-sanitary requirements, food labeling rules and regulations and tariff restrictions in the context of U.S. - India trade for their product. The 'non-content' materials such as the level of trust, extent of cooperation, international networking and negotiation skills were regularly highlighted during the classroom discussions.

Data: The data for this research was collected through exit surveys. The survey focused on the student perceptions on the video teleconferencing technology and how much they learned from deriving their own export plans. The unstructured qualitative interviews of students also contributed to the results discussed below.

Results and Discussion

The results are arranged under three headings: (A) student perceptions of the course, (B) key problems that affected student learning and (C) pointers for designing similar international agribusiness courses with video teleconferencing.

A. Student Perceptions

The students expressed an increased level of interest in the international business concepts upon completing

the course and video teleconference modules. The ATI undergraduate students reported that their interest in the international business concepts rose from 6.8 to 8.3, on a scale of 1 to 10 (10 being the highest, table 1). The TNAU graduate students also reported an increase from a score of 6.4 at the beginning of the term to 7.6 by the end of the term. In spite of the small number of students enrolled in the course, the students were almost unanimous in approving the effectiveness of the course as evidenced in their comments for the open ended questions.

Table 1. Student interest in the international business concepts before and after the course (10 = high interest; n=12).

	Before the Course	After the Course	
Students from OSU-ATI (n=4)*	6.8	8.3	
Students from TNAU, India (n=8)	6.4	7.6	
*One of the student responses is not reported due to being an outlier within the dataset			

Almost the whole class (11 out of 13 students) reported high or very high interest in learning international business concepts upon completing the interactive teleconferencing modules. The students also expressed confidence in improved ability to research and establish international value proposition independently. The students gave an average score of 4.2 to 4.5 (out of 5) for the industry, product and country research reports that enabled them to collect market information in the foreign country. These scores were higher than that for traditional resources such as classroom lectures 3.9; textbook 3.7; in-class videos 3.8 (out of 5). The student responses showed higher satisfaction with the online interaction via video teleconferencing. The interactive collaboration was scored at 4.7, one of the highest scores among all the resources used in the class providing evidence that students preferred to learn through interactive collaboration.

Table 2. Student responses to video teleconferencing modules (n=12).		
Question	Average Score	
Challenged me to think on my own	4.0	
Improved my ability to research a topic and find information on my own	4.3	
Got me interested in international business issues	4.5	

Among the modes for international collaboration, the Adobe Connect video teleconferencing software ranked better at 4.3 out of 5 than the other modes of communication (Skype software scored at 3.0; telephone conversation at 3.4). The stability of the software platform, continued use of the software throughout the term and the ability to share student work synchronously resulted in a higher score. Many students emphasized the clarity of audio visuals as a key factor affecting their interest in the international business course.

The students also responded positively for the technology-content-pedagogical (TPACK) aspects built into the course. The average score for these three components was 4 or more on the Likert scale (table 3). The students specifically mentioned that they were more likely to adopt such video teleconferencing technologies

Table 3. Student responses to Technology, Pedagogy, and Content Knowledge (TPACK) built into the international agribusiness course (n=12).		
Question	Average Score	
Technology		
Benefited from the use of video teleconferencing in the course	4.7	
Will use technology in my future career	4.8	
Content		
Learned international business concepts	4.5	
Will be interested in creating my own international business idea and plan	4.3	
Pedagogy		
Benefited from interacting with faculty and students in the other country	4.6	
Will conduct research as part of my future career endeavors	4.4	

in their future careers. The open-ended responses showed satisfaction with the opportunity to interact with foreign peers and create their own content (export plans).

Learning from Student Derived Content: In the process of creating the export plans, the students learned how drastically different were the value propositions and profit potential between the domestic and foreign markets. The students acknowledged the importance of conducting market research at the end of the teleconference sessions. The graduate students from TNAU were able to conduct consumer surveys in India on short notice. Such an active involvement of Indian students taught ATI undergraduate students how to collect and interpret data in the context of international agribusiness.

For the question 'did this course fulfill your expectations?' seven students responded that they gained a better insight into the international business concepts; one student felt that there was not enough interaction (especially with the retail customers). The remaining students were neutral in the beginning of the course - not knowing what to expect - but felt that they had gained a better understanding of international businesses. Some students commented on the difficulty to learn and process a lot of business information within a short period of time. All student responses affirmed that the international business courses should include an interactive component such as video teleconferencing. The student comments also suggested that they gained certain key non-content skills: ways to sort through information on various websites, ability to interact with partners in a different country and having developed an entrepreneurial mindset.

B. Problems Encountered by Students

A few students felt that the amount of work needed to develop a business plan was substantially high. The process of sifting through a lot of information online before presenting it to foreign partners was perceived to be time consuming and overwhelming at times. The students expressed a need to have a specific business model that would work for their product such as the business model canvas (Osterwalder and Pigneur, 2010). The students learning the international agribusiness concepts for the

first time would be greatly benefited if the instructors helped them identify who their partners could be and what activities would have to be implemented.

The ATI undergraduate students relied largely on the secondary data collection through industry reports; but the focus of TNAU students was on conducting primary research through consumer surveys – such differences created some frustration for the students. Another problem was the English accent of the foreign students. The instructors had to repeat and rephrase sentences to ensure that all students understood the discussion. The inconvenient timing of video interaction, early mornings in the U.S. and evenings in India and the significant set up time of teleconferencing equipment seemed to bother some students.

C. Problems Encountered by Instructors

1. Unexpected Divergence in Course Instruction: The course was intended to be offered with the same focus in both U.S. and Indian locations. But as the course evolved and students took responsibility for their export plans, the focus of the courses in the two locations diverged to accommodate the local student needs. ATI instructors focused more on teaching the global opportunities, challenges and identifying the entrepreneurial opportunities behind the global supply chains. The TNAU participants focused more on researching the customers, developing and collecting primary data through survey questionnaires. These approaches also turned out to be complementary to some extent.

- 2. Lack of Discussion Templates: A single standard template was given to the students to record the details pertaining to their product during the teleconference sessions. Each product (soybean oil, mangoes and moringa health supplement) had its own regulations and requirements causing difficulties for the students in recording information. One possible solution could be to provide those templates in the format of Guided Notes with modifications for each team (Haydon et al., 2011; Musti-Rao et al., 2008). But creation of such customized templates for each team would require significant time commitment from the instructors.
- **3. Importing a Novel Product**: Many students were not familiar with the chosen products. This led to some anxiety among student teams in establishing the value propositions at the global versus domestic level.
- **4. Technology Issues**: Student comments showed that technology and equipment problems affected their ability to focus and participate during the teleconference sessions. Allowing ample time to set up the equipment before the start of class can help avoid this problem.
- **5. Time Commitment**: The instructors (both in the U.S. and India) had to commit significant amounts of time to develop the discussion material for each video teleconference session. As the course evolved, we had to constantly revise our teaching plans and technology use to suit the student needs.

- **6. Assumptions vs. Actual Data**: The students were forced to assume certain international transport cost data and other product characteristics. The simplification of data and the lack of actual information forced us to shift the focus from the export plans to the planning process.
- **7. Too Many Teams**: The two hours of teleconference per week was not sufficient to discuss three different export plans. On a couple of occasions, one team used most of the airtime during the teleconference session leaving other teams frustrated. By the end of the term, we realized that just two teams would have been sufficient: one team exporting from India to the U.S. and the other team exporting from the U.S. to India.
- **8. Complexities and Repetition**: If the materials are very different between lectures and teleconference sessions, some students dissociated lectures from teleconference sessions and treated them as independent of each other. If the materials are similar, some students complained about repetition. The instructors need to develop a judicious mix of topics and how that content is paced within the course to retain student interest.

D. Pointers for Future Video Teleconference Modules

- 1. Additional Interaction between Foreign Faculty and Domestic Students: The emphasis was on student interaction in our teleconference modules. All students were present during all teleconference sessions. Instead, it would have been useful to have exclusive interaction of the instructors with the students in the foreign location prior to having all students present. This would give the instructors an opportunity to build rapport with students in the foreign country.
- 2. Need for Leaders (faculty and students): The success of the teleconference modules heavily depend on the faculty or students who can guide the plan development and control the teleconference sessions. Given the highly intensive nature of video teleconferencing modules, faculty leaders need to lead and motivate the student teams. The number of students in each team has to be carefully decided upon; in the pilot offering of this course, we had limited the enrollment to a smaller number to ensure that sufficient attention for each student. Even though, the results discussed here come from a single class of students, the authors strongly believe that similar positive responses can be repeated in larger classes as well. The larger classes can provide the students with more opportunities to interact, lead and learn from each other.
- **3. Active Guidance for Student Teams**: The faculty members need to take an active role in helping students establish the value propositions at domestic vs. global level. Students needed clear instructions on what pieces of business information to record and share via video teleconference. The lecture sessions proved vital to the planning and preparation for teleconference sessions. The resources such as Export Business Plans (supplied

- by U.S. Small Business Administration) can be useful for export planning purposes.
- 4. Meeting the Expectations: Since we had placed significant emphasis on student derived content (export plans), it became necessary to provide detailed and concrete steps on what components need to be included in a valid export plan. For instance, we required the students to prepare a cost-benefit analysis of sourcing the product locally vs. internationally and the opportunities to market it to the consumers in the other country. Some activities were easier for the teams to adhere to while some were considered to be difficult due to the lack of reliable information or information overload. Having an alternative plan would help to guide students through the planning process.
- **5. Synchronous Collaboration**: We found that the students learned more when they were able to share, discuss and edit MS-Word, MS-Excel documents and view websites simultaneously. The cloud or internet based resources (for example, Google Docs) or a learning management system that is accessible for all students (for example, Moodle) can be useful for such collaborative interaction. It would be beneficial to provide a summary (by the instructor) or view a short video at the start of each teleconference session to ensure that all students have the necessary background information.
- **6. Data Sources**: Whenever the data derived from student peers was more realistic, the teams' interest and participation improved due to the additional confidence that they are dealing with real world information. Hence, reliable secondary databases or primary survey research can be added to improve the student interest.
- 7. Pre- and Post-teleconference Activity: Some students expressed their desire to finish the sessions with a summary quiz to review and summarize the teleconference discussion. The problem with quizzes after teleconference sessions is that much of the content derived during the teleconference does not exist prior to the student interaction. In such cases, the instructors have to be creative with some open-ended summary questions to help students summarize their learning from the teleconference sessions.

Summary

There is a growing need for agribusiness students to learn the emerging global opportunities in agriculture and obtain practice in international business planning using a hands-on approach. To meet this objective, the authors used video teleconference modules in an international agribusiness course. The students in the U.S. (Ohio State ATI) and India (TNAU) interacted via video teleconference to develop export plans for three products: mangoes, moringa health supplement and soybean oil. At the conclusion of the course, student feedback was gathered through exit surveys. The course and exit surveys were designed according to the Technological, Pedagogical and Content Knowledge (TPACK) framework. The primary focus of this study is to focus on the student derived content (export plans).

Perceptions: The students showed increased interest in international agribusiness concepts with the use of video teleconferencing technology. The student ranked video teleconferencing technologies highly among all the resources, followed by market research databases. The student comments suggested that collaborative export plans enabled them to appreciate the differences and difficulties in the context of a foreign market. The interactivity of video teleconferencing was preferred to watching videos about international business planning. The students frequently mentioned that they recognized the importance of non-content aspects (cultural, language and trust issues) in the international business context.

Problems: Some issues stemmed from the institutional differences in terms of focus and scope of the course. In our case, the U.S. students were interested in entrepreneurial aspects while the Indian students were more interested in primary data collection to validate the business opportunity. Establishing value propositions for a foreign consumer market and identifying reliable information sources proved to be challenging for almost all student teams. In our course, much of the course content was derived by the students through video teleconferencing. It was harder to anticipate and control the quality of student output and interaction; this eventually led to a shift in pedagogical focus from the export 'plans' to the 'planning process.' Even though the class size was small, it was difficult at times to cover all importexport aspects for three different products. The smaller class size hindered us to draw much broader conclusions about the use of video teleconferencing.

Pointers: Some suggestions to incorporate video teleconference modules include: (i) promoting active interaction of foreign faculty and domestic students before enabling student team interactions, (ii) identifying student leaders to lead teleconference discussions, (iii) guiding student teams actively by helping them differentiate domestic vs. foreign value propositions, (iv) promoting interaction among student teams through cloud based resources, (v) providing reliable secondary data sources to create valid export plans and (vi) ensuring student learning with assessments before and after each teleconference session. Overall, we feel that the use of video teleconference was rewarding for both the students and instructors in discussing the international agribusiness concepts.

Literature Cited:

- Andone, D. and M. Frydenberg. 2011. Across Continents: Using Web Based Collaboration Tools for Learning. 11th IEEE International Conference on Advanced Learning Technologies, IEEE pp. 100-102.
- Arbaugh, J.B. 2000. Virtual classroom characteristics and student satisfaction with internet-based MBA courses. Jour. of Management Education 24(1):32-54.
- Beamish, P. and J. Calof. 1989. International business education: A corporate view. Jour. of International Business Studies 20(3):553-564.

- Bostock, S.J. 1997. Designing Web-based instruction for active learning. In: Khan. B.H. (eds). Web-based instruction. Englewood Cliffs, NJ: Educational Technology Pub. Inc.
- Cardon, P.W. and B. Marshall. 2010. International opportunities for business students. National Business Education Yearbook. http://bryanmarshall.com/research/2010_Cardon_Marshall_International_Opportunities_NBEA.pdf
- Coers, N., M.T. Rodriguez, T.G. Roberts, H.C. Emerson and R.K. Barrick. 2012. Examining the student impacts of three international capstone experiences. NACTA Jour. 56(2):55-62.
- Cook, D.A. and D.M. Dupras. 2004. A practical guide to developing effective web-based learning. Jour. of General Internal Medicine 19(6):698-707.
- Ferry, D.L., C.T. Kydd and C. Boyles. 2012. Creating the global graduate: A cross-cultural videoconferencing case study. Decision Sciences Jour. of Innovative Education 10(2):139-164.
- Garrett, N.A. 2011. A preliminary comparison of synchronous venues for distance learning: traditional videoconferencing vs. web-based conferencing. International Jour. of Mobile Learning and Organisation 5(2):159-174.
- Gloor, P., M. Paasivaara, C. Lassenius, D. Schoder, K. Fischbach and C. Miller. 2011. Teaching a global project course: experiences and lessons learned. In: Proceedings of the 2011 Community Building Workshop on Collaborative Teaching of Globally Distributed Software Development. Honolulu, HI. 23 May.
- Haydon, T., G.R. Mancil, S.D. Kroeger, J. McLeskey and W.J. Lin. 2011. A review of the effectiveness of guided notes for students who struggle learning academic content. Preventing School Failure: Alternative Education for Children and Youth 55(4):226-231.
- Herrington, J., T.C. Reeves, R. Oliver and Y. Woo. 2004. Designing authentic activities in web-based courses. Jour. of Computing in Higher Education 16(1):3-29.
- Hult, T. and W. Motz. 2012. Benchmarking Study on International Business Education at Community Colleges. MSU Broad School of Business -International Business Center (CIBER): http:// global.broad.msu.edu/ibc/publications/research/ pdfs/ibex2012.pdf
- Johnson, R.D. and C.H. Stucke. 2011. Developing And Delivering The Virtual MBA Course. International Business & Economics Research Jour. 4(3):63-68.
- Khan, B.H.(ed.). 1997. Web-based instruction. Englewood Cliffs, NJ: Educational Technology Pub. Inc.
- Koehler, M. and P. Mishra. 2009. What is technological pedagogical content knowledge (TPACK)? Contemporary Issues in Technology and Teacher Education. 9(1):60-70.
- Magnusson, S., J. Krajcik and H. Borko. 1999. Nature, sources and development of pedagogical content knowledge for science teaching. In: Gess-New-

- some, J. and N.G. Lederman (eds.). Examining pedagogical content knowledge: The construct and its implications for science education. Dordrecht, The Netherlands: Kluwe Academic Pub.
- Malloy, M.N. and A.J. Davis. 2012. The University of Georgia Avian Biology Study Abroad Program in Costa Rica. NACTA Jour. 56(3):24-29.
- Meyers, C. and T.B. Jones. 1993. Promoting Active Learning. Strategies for the College Classroom. San Francisco, CA: Jossey-Bass Inc. Pub.
- Munkvold, B.E., D. Khazanchi and I. Zigurs. 2011. Augmenting Online Learning with Real-Time Conferencing: Experiences from an International Course. In: NOKOBIT 2011. Universitetet i Tromso, Norway: 21-23 Nov.
- Musti-Rao, S., S.D. Kroeger and K. Schumacher-Dyke. 2008. Using guided notes and response cards at the postsecondary level. Teacher Education and Special Education: The Jour. of the Teacher Education Division of the Council for Exceptional Children 31(3):149-163.

- Myers, C.J. and P.A. Huegler. 2011. The Effects of Virtual Groups on Learning Outcomes in an ITV Delivered International Business Course. In: Van den Bossche, P., W.H. Gijselaers, R.G. Milter (eds.). Building learning experiences in a changing world. 3(1):165-193.
- Osterwalder, A. and Y. Pigneur. 2010. Business model generation—a handbook for visionaires, game changers and challengers. Hoboken, NJ: John Wiley & Sons Inc.
- Radhakrishna, R.B. and T.H. Bruening. 1994. Pennsylvania study: Employee and student perceptions of skills and experiences needed for careers in agribusiness. NACTA Jour. 38(1):15-18.
- Sharon, W. and P. Susan, 2012, Open Doors 2012: International Student Enrollment Increased by 6 Percent. Institute of International Education. http://www.iie.org/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2012/11-13-2012-Open-Doors-International-Students.

To submit a manuscript to the NACTA Journal, go to this website: nacta.expressacademic.org

