LINKS newsletter

December 2009

http://www.LINKS-simulations.com

In This Issue

Mary Holcomb is a second-time LINKS user in the MBA concentration course in logistics and supply chain management at the University of Tennessee.

Mary Holcomb

You tried an interesting approach this past semester. Will you explain what you did?

We had a lot of fun doing an "experiment" this semester and I have to give Randy (Chapman) credit for this. I did the Train the Trainer again this summer because I wanted to make sure that I was up-to-date on changes that were made to the simulation. I also decided to use the middle version of the simulation rather than the Extended Version that I used last year. During the Train-The-Trainer Seminar, Randy and I had an offline conversation about some of the things that concerned me about assessing individual participation and performance in a team environment. In a team not all the people are contributing equally. It's rare to have a team where that's the case. So Randy said "we might want to try something. Have you ever thought about at some point during the simulation of turning the firms which consist of four students into individual firms?" I really liked this idea, and we had to think through it rationally, because it does require more work for the instructor. After further consideration I decided that I really would like to try this experiment.

The simulation is set up for the students to begin in Month 4 after three rounds of computer-generated decisions. From this point, we completed nine decisions through month 12. Based on Randy's advice, I decided that at month eight the teams of four per firm would cease to exist, and the remaining four decision would be individual firms. We went from two industries and 11 firms to 42 individual firms for decision months 9 through 12.

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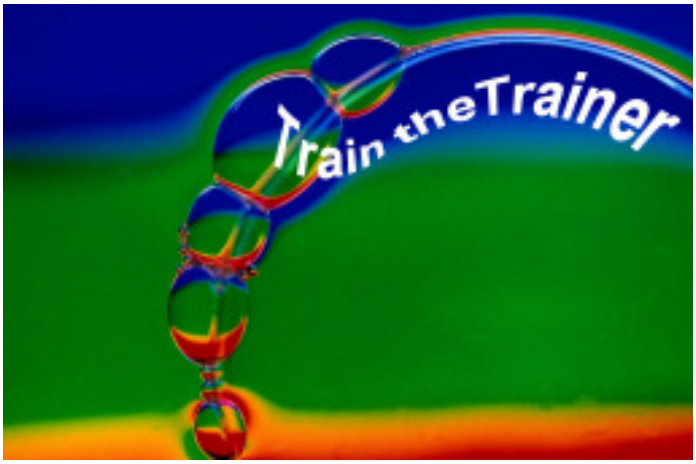

LINKS Train-The-Trainer Seminars

December 15-17, 2009 and January 5-7, 2010
LINKS Simulations Immersion Experience
Five Teleconferences and a Four-Round LINKS Simulation Event

Registration is available for the next three-day, intensive-mode Train-The-Trainer distance-learning seminars for the LINKS simulations. Randy Chapman, the LINKS author, leads these distance-learning events for academic faculty interested in learning more about teaching with LINKS. This intensive-mode seminar format includes 5-6 hours of work per day during the three days of the distance-learning seminar.

LINKS Train-The-Trainer Seminars are offered for the enterprise management, marketing, services, and supply chain management LINKS variants.

Current LINKS instructors are invited to pass along this announcement to faculty colleagues and advanced doctoral students who might be interested in learning more about teaching with LINKS.

Experienced LINKS instructors sometimes participate in a LINKS Train-The-Trainer Seminar to refresh their memories of LINKS details just prior to teaching with LINKS or to explore another LINKS simulation variant for a future teaching activity. Such experienced LINKS instructors may elect just to participate in the TTT's four-round simulation event, ignoring the public teleconferences included in the LINKS TTT program. (PowerPoint decks are e-mailed to all LINKS TTT participants before each teleconference, so such experienced LINKS instructors may freely choose to participate in all, some, or none of the teleconferences as per their availability and interest.)

Details about LINKS Train-The-Trainer seminars may be accessed via these URLs:

- http://www.LINKS-simulations.com/TTT/EMttt.pdf [Enterprise Management]
- http://www.LINKS-simulations.com/TTT/MSttt.pdf [Marketing]
- http://www.LINKS-simulations.com/TTT/SMttt.pdf [Services Marketing]
- http://www.LINKS-simulations.com/TTT/SCttt.pdf [Supply Chain Management]

Kevin Gwinner (Kansas State University) is a long-time LINKS user.

Thinking About A Simulation?

Tell me about using computer business simulations in a marketing course. I occasionally get this request from my colleagues as many of them know that I have been teaching with simulations since 1997. My first response to such a request is typically to ask why they want to use a simulation. I ask this because I think having a clear and realistic idea about what you want the simulation experience to bring to your students is key to its success. There are certainly things that simulations can do for students, but also objectives where it is not the most appropriate educational tool. As such, having a good handle on what one wants to accomplish with the simulation is important. For me, one of my primary purposes in using a marketing simulation is to demystify basic market and product analysis and to overcome the sometimes irrational fear of numbers and financial statements that many marketing students have. Aside from this basic question about knowing what your simulation goals are, I break my advice down into things to consider before, during, and after the simulation experience.

Before the Simulation Starts

Before the semester starts, you should plan to spend some time understanding how the simulation works. On one level I mean that it is important to understand how students will input decisions, access data, pay for the simulation, etc. But it is more critical to understand the relationships between the variables that the students will manipulate and the key outcomes, such as net income and market share, that they will be tracking (and perhaps evaluated on). During the semester, students will invariably want to know how a change to decision variable "A" will impact outcome "B". The instructor will have to decide how much to tell them and how much to let them figure out on their own (which gets back to the course goals of the simulation), but the instructor should always have a good idea of what is going on.

A second key to a successful simulation experience is to think about how the course content (perhaps embodied by lecture and readings) ties back to the students' simulation experience. This needs to be done before the course begins so that you can time the other experiences to correspond to what students are doing in the simulation. For example, in the simulation I most often use, students are first engaged in identifying customer needs, selecting target markets from this information, and launching new products. As such, I time my discussion on these topics to be at the beginning of the semester. This has two

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benefits; first, it can provide them insight and context into what to consider when making these decisions in the simulation, and second, it allows for the simulation to reinforce what we are discussing in the course.

A third thing to consider before the simulation starts is how you will count simulation performance in the overall course grade. I am a big fan of making it a substantial aspect of the students' grade (at least 20 to 35 percent) so that they will take the simulation seriously and devote sufficient time outside of class. I also find that making the simulation a competition between student teams does wonders for increasing students' motivation to perform. Currently, I am teaching a marketing management class where nearly two-thirds of students' grades are tied to the simulation in some fashion. About half of the students' simulation points come from their teams in-simulation performance (measured by net income) and the other half is based upon written assignments tied to their simulation experience. It has taken me awhile to evolve to this point, and I would advise new users to start off with a smaller, but still significant amount, of points attributable to the simulation and then to increase that amount over time as they deem appropriate.

During the Simulation Experience

There are several things a faculty member can do to facilitate a successful simulation experience for students during the simulation. Of course, all students will be expected to read the simulation's written instructions; however, I find that additional class time devoted to introducing students to the simulation variables, how they will be graded, how to access and understand research information and even where they input their variable changes is critical. My simulation introduction, which includes the simulation's variables, output, input screens, and initial financial analysis, takes about three to four hours of class time spread out over several class periods. I have taken Randy Chapman's advice and give a quiz on some of the aspects of the simulation. I make this an open note quiz and distribute the questions a week in advance. My goal is that the students will all know the answers to every question and in looking them up, will learn a lot more. This is my way of making sure they know the "rules of the game" before we start playing.

Secondly, I feel it is important that faculty be open to meeting with teams outside of class. Indeed I think this is where a lot of the real learning takes place as it allows you to challenge your students' thinking and the rationale for the decisions that they are making in the simulation. I often meet with teams and individuals after class and during office hours to quickly help them with a particular question. You don't want them frustrated or misinterpreting information when a short conversation can often point them in the right direction. I find that even if a team is doing poorly relative to the competing teams, they will feel OK with this if they can make the connection between their actions and their results (and start thinking about a path to improvement). One of the worst things that can happen is for a student team to start believing, and then convincing the rest of the class, that the simulation is random and lacks real world correspondence. By meeting with teams often during the semester, any issues like these can be sorted through and successfully resolved. That said, there is a fine balance that must be learned through experience regarding how much to tell students and how much to let them discover on their own.

I make it a point to talk about some aspect of the simulation in every class period. Once a week, I review results by showing graphs in class that illustrate team progress on key results such as market share, net income, and revenue. This gets students excited about the simulation and they are anxious to

see these results in class. The leading teams get some recognition and those lagging behind become motivated to improve. Other times I will take 5 minutes to introduce a research report I feel is being underutilized or might be useful in the near future. I also like to spend some time talking about things in the news that relate to the simulation as this can help give the students' experience some additional context. For example, a company that is thinking about launching a flanking brand into an existing market might illustrate a real world issue that a simulation team is also wrestling with at the time. The key point here is that making the simulation a part of each class period, even if only 5 minutes, will keep the students engaged and thinking about their company.

Finally, and this is very important to a meaningful simulation experience, you must encourage fact based decision making. In most simulations, teams are responsible for making decisions, but not for justifying those decisions. The real learning in simulations comes from an iterative analysis – decision – results cycle. When done right, students learn from their mistakes and from their successes and are able to gain valuable insight into marketing phenomenon. When done wrong, students guess about what they should be doing in the simulation, they do poorly (or every once in a while guess correctly and do well), and don't learn much. Encouraging students through your advice, assignments, or even "threats" to make decisions based upon feedback from the simulation will enhance their experience.

After the Simulation Ends

Simulations can be played individually, but I feel that more learning takes place in a team setting where students can bounce ideas off of each other and practice using their persuasion skills to convince their teammates that their approach is superior to other alternatives. Of course, this means that students must be held accountable to each other and the professor. I am an advocate for end of semester team member evaluations that are structured in such a way that the individual student can ultimately earn more points than the team score (or fewer) based upon his or her actions over the course of the semester. I also believe in Randy's firing memo approach at the start of the course to get teams started thinking about what it means to be a team member and to set the expectations for team membership from the start.

Because decision rounds come quickly and there are typically other elements in the course, I find that an end-of-semester presentation is important to allow student teams some time to reflect upon what they have done or perhaps to think about what they would do now that they know what they know. I have used retrospective types of end-of-semester assignments where students reflect on their decisions. But I have also used more forward looking marketing plan assignments where they assume the role of a new company entering the existing industry. Both types offer the students an opportunity to reflect on what they have learned over the course of the semester. This is important in simulations as there is not a "list" of subjects covered as one might find in a textbook. As a result, students may need some guidance to help them understand what they have learned through their simulation experience. I find that end-of-semester presentations/reports are helpful in this regard.

All in all, I have enjoyed working with simulations in my marketing courses. I have used them in three different courses so far, and my students always report that they enjoy the experience. However, there are many factors for faculty to consider in their decision to adopt a simulation in their own course. I hope the information I have presented above will be useful in your deliberations.

Instructor Hall of Fame

The 2009 class of the new LINKS Instructor Hall of Fame includes nine long-time LINKS users/ supporters:

Joe Blackburn, Vanderbilt University
Joe Hanna, Auburn University
Kevin Gwinner, Kansas State University
Tom Kinnear, University of Michigan
Bob Mackoy, Butler University
Chris Puto, University of St. Thomas
Victor Quinones, University of Puerto Rico
Al Quinton, The College of New Jersey
Jeff Thieme, University of Memphis

Instructor Hall of Fame membership reflects recognition, respect, and thanks accorded long-time (5+ years) LINKS instructors for their interest in, support of, and commitment to the LINKS Simulations. Along with LINKS Hall of Fame enshrinement, the title “LINKS Fellow” is bestowed on these distinguished LINKS supporters.

Further details, including a photo gallery of the class of 2009, may be accessed via the Instructor Hall of Game link on the LINKS website.

Did You Know?

You Can Add an "Inert" Firm As a Comparative Benchmark

There are no technical problems associated with adding an extra "inert" firm to a LINKS industry. Reminder: LINKS industries consist of a maximum of eight firms; simultaneous, parallel LINKS industries accommodate larger-sized classes.

The use of an extra "inert" firm in a LINKS industry can provide an interesting comparative benchmark. Such an "inert" firm never changes any decisions from those established at initialization. The "inert" firm option is most useful in shorter LINKS events with deactivated configuration decisions (for some or all of the event).

Introducing the LINKS Marketing Simulation

The LINKS Marketing Simulation is a medium-sized marketing simulation targeted at the 1st marketing course in MBA and EMBA programs, where a competitive marketing simulation experience is desired as part a larger set of course activities.LINKS marketing simulations now span the "small-medium-large" within-course simulation "footprint"-spectrum for courses at all degree-program levels.

Target Courses and Typical Usage

Large	LINKS Marketing Strategy Simulation	Marketing strategy and marketing management electives where a "substantial" simulation emphasis is desired. Includes extensive marketing research study resources. Typical course usage: 8-9 rounds.
Medium	LINKS Marketing Simulation	1st marketing course in MBA and EMBA programs. Typical course usage: 6-8 rounds.
Small	LINKS Marketing Principles Simulation	1st marketing course in undergraduate programs. Typical course usage: 5-6 rounds.

In addition, the specialized LINKS marketing simulations

- LINKS Multi-Channel Marketing Simulation
- LINKS Positioning Strategy Simulation
- xLINKS Marketing Strategy Simulation [Extreme Edition]

provide instructors with customized simulations for a wide range of optional/elective marketing courses in undergraduate, MBA, and EMBA programs.

Full details about the LINKS Marketing Simulation are accessible via the LINKS website.

Randy Chapman (Chapman@LINKS-simulations.com), the LINKS author, welcomes the opportunity to converse with LINKS instructors to provide assistance in selecting the most appropriate LINKS simulations variant for courses of all types, lengths, and levels.

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The students didn't know this was going to happen, right?

No they didn't. There was a whole range of emotions I could see and some of which were expressed. Some of the students that felt they were carrying more than their fair share of the work load thought that it was a good thing to do. For those students who hadn't adequately prepared the change was one of those "Oh, No!" kinds of moments and you could see it on their faces. There were also some students in between that said , "OK, I can do this. It's going to be a bit more work, but I've been through several rounds and I've been involved with most of the decisions so I can carry on from here."

Was this mainly to simulate what happens in the real world?"

I wanted to be able to do individual assessments relative to their learning. The simulation is a great representation of the real world and the complexity of processes and activities in a supply chain. The students have to consider multiple and related decisions at various levels in the supply chain. We don't have many ways of getting that type of experience for our students if we don't do a simulation like LINKS. In a team an individual's participation varies as you have people who are willing to do more and some that are willing to do less. I wanted to make sure that everybody was motivated and required to get to a deep level of understanding and learning.

How do you feel that it worked out?

I think it was fabulous. It created a lot more work on the administrative side for Randy and the pricing will need to change if we use this approach. I would love to do this again. When I compared the team results to the individual results at the end it was quite interesting. Many of the students said that if forced them to reach a deeper level of understanding about the interactions and trade offs in decisions in a supply chain. I didn't get that same feedback last year when I did the simulation. This year I thought the individual insights regarding the simulation that were presented in their final reports were much more meaningful and reflected the difficult nature of managing a supply chain.

Has your perception, goals or approach changed following the simulation?

In addition to Randy's survey, I do a short one regarding the overall administration and effectiveness of the simulation. Last year, the feedback on a scale of 1-7 the average was five. (Scale – 1 = The LINKS Simulation did not really add to my knowledge of supply chain activities/operations; 7 = The LINKS Simulation added significantly to my knowledge of supply chain activities/operations). With an average of 5, I had confirmation that the simulation added value. My expectation going into the simulation this year was that the students would dislike it because of the added work load it would create. This is only one of about four major tasks/

projects that we do throughout the semester. That's in addition to numerous medium to small ones that are assigned as a part of the course objective. When we switched to the individual teams, I heard some grumbling and complaining. Surprisingly when I got the results of my short survey back the average was a bit higher than 6 in terms of value and what they thought they learned from the simulation.

Were you surprised by anything along the way?

What surprised me is that in a group of students you tend to assume that this student or that student will be more engaged by the simulation and spend more time on it than some of their peers. I was pleasantly surprised by the number of students that I considered to be in the "highly engaged" group.

At the end you had all these individual firms, did that make it difficult to do the individual reports?

I had them do a final report that was individual and then we had them come back together with their original teams for the final presentation where they were asked to review what changed and what stayed the same from their original team strategy. That was an interesting exercise, particularly for the team where all four individuals had very strong performance . For this group, they were all excited that they had stuck to their original strategy and that it was so successful. In fact, they saw the value of the team in creating that original successful strategy as it represented input from all the members.

They began as teams and then they were competing against their own team members?

No they weren't competing against their own team members. Randy took each team and spread them across different industries. After the split to individual firms we ended up with eight industries in total. I think that part made it work well.

Do you plan to do this again and will you make any changes for next time?

As I mentioned earlier, we did the extended version of the simulation last year. In addition to everything else we were doing during the semester there was a sense that it was too much. So this year I decided to do the middle version of the simulation and to phase in the different decision areas. We started with procurement, manufacturing and forecasting, added distribution and transportation the next month, and then activated service and generate demand in Month 7. With the middle version you don't have any of the product development aspects. The students indicated in my survey that they would like a much more compressed time cycle for activating the various components. I am also planning on going back to the extended version to add the product development decisions.

I am also planning to do the individual firms again. It was so successful. Randy said, “Students will talk, and even though they are graduating they will talk to the lower-level classmates and say ‘be ready, Dr. Holcomb is going to do individual firms.’” And I said “the way I look at it, this is still a win, because they will go into the simulation thinking ‘I need to know how this supply chain works because sooner or later I am going to be running this on my own.” It’s just a matter of when it’s going to happen.

Describe your typical student for this course? Are they all majoring in Supply Chain Management?

All of the students in the logistics and supply chain concentration course are either majoring in this area or it is a collateral. Our typical MBA student has 3-5 years work experience. We have a globally diverse class and they have different professional backgrounds from engineering to business. In between the first year and the final Fall Semester, the students are required to do an internship. During the a first year of the MBA program the students complete the typical MBA business curriculum and the equivalent of approximately four and a half semester credit hours in logistics and supply chain. This is a required concentration course for majors.

What are your class sizes?

We have been growing every year for about the past five years. This year’s class had 42 students.

The simulation would be very difficult to do if it weren’t for the support system that Randy provides. This is the best that I have ever experienced. I don’t think it’s been a matter of minutes before I get a phone call or an email back from Randy when I have a question or concern. That’s just superb. I feel very comfortable asking him the mechanics of the simulation and for further explanation of why things happen the way they do inside the simulation. Sometimes Randy will say, “that’s something that the students should figure out on their own.” The instructional support doesn’t end with the Train the Trainer session.

I like the learning experience that comes from using simulations. In this concentration course, we use optimization tools and we do quite a bit with data visualization tools. This simulation pulls all of the theory and concept together in practice. It helps me successfully accomplish the objectives for the course.

Reminders

LINKS Passcode Retrieval:

Convenient LINKS passcode retrieval for a LINKS participant (student or instructor) is possible via the "Retrieve LINKS Passcode" link on the main LINKS webpage (http://www.LINKS-simulations.com). Executing the "Retrieve LINKS Passcode" operation e-mails the firm's passcode to the participant's official e-mail address as currently recorded in the LINKS Simulation Database.

E-Mail Address Management:

LINKS instructors submit their students' e-mail addresses (grouped into teams) as part of the information-set provided to initialize a LINKS industry. Often, these are institutional rather than personal e-mail addresses. Since some participants prefer to use a personal e-mail address rather than an institutional e-mail address for LINKS, it's possible for participants to update their official e-mail address as recorded in the LINKS Simulation Database.

Participant updates of official e-mail addresses as recorded in the LINKS Simulation Database are possible only after initialization and publication (via e-mail to all team members) of each LINKS firm's passcode. Using their LINKS firm's passcode, LINKS participants may change their official LINKS e-mail address after LINKS initialization via the "E-Mail Address Management" button in the LINKS Simulation Database. Confirmations of e-mail address changes are e-mailed to the old and new e-mail addresses.

Student Payment Timing:

The published LINKS price (the discounted price) is in effect until the first round of LINKS is complete. Then, the price is increased 25%. This means that we can initialize your LINKS simulation event (and advance LINKS through to its normal starting point) and students can continue to pay at the discounted price until the first scheduled round is run. Before initialization can occur, we do need to receive your game-run schedule and the students' e-mail addresses (grouped into teams).

It is not necessary for your students to pay before LINKS begins to have access to the discounted LINKS price. Students must only pay before the first official game run on your game-run schedule to receive the discounted price. Thus, student payments can occur simultaneously with the beginning of your LINKS simulation event.

Student payment with a personal credit card is via the "Pay For LINKS" link on the LINKS webpage.

As a practical matter, a final warning/reminder will be e-mailed to those students who haven't paid by the first game run, before implementing the non-discounted price.

LINKS Website Resources:

LINKS website (http://www.LINKS-simulations.com) links provide convenient access to all LINKS simulation variants, to the LINKS Simulation Database, to passcode-protected instructor resources, and to user interaction contact points such as “Pay For LINKS”, ”Payment Questions?”, and ”Retrieve LINKS Passcode”.

Some LINKS Resources:

· **Printed Manuals**: All LINKS manuals are freely available for download via the LINKS website. However, some LINKS instructors prefer to have publication-quality printed manuals provided for all of their students, rather than relying on their students to individually download/print the participant’s manual from the LINKS website. We’re happy to provide this service for LINKS instructors. The all-inclusive additional cost for participant manuals varies from $18/student to $28/student depending on the LINKS simulations variant. We normally need three weeks advance notice to arrange for production and shipping (to the instructor) from our on-demand printer.

· **What’s New Document**: Please access the following document at the case-sensitive URL http://www.LINKS-simulations.com/WhatsNew.pdf to obtain a detailed listing of new updates/enhancements to LINKS. Experienced LINKS instructors should access this document several months before their next usage occasion, to review the updates/enhancements to LINKS since their last usage occasion.

· **LINKS Instructor Resources Access**: You may access the evolving LINKS Instructor Resources via the LINKS webpage. Contact Randy Chapman (Chapman@LINKS-simulations.com), the LINKS author, to obtain the relevant access parameters (username and passcode).

LINKS simulations®

The LINKS-Simulations Newsletter is a monthly newsletter for current and prospective LINKS instructors and for LINKS friends. Please e-mail questions, comments, suggestions, and other contributions (e.g., LINKS teaching tips) to Winkler@LINKS-simulations.com.

Editor: Cyndy Winkler

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