LINKS Scheduling Variations

The most-frequent LINKS event scheduling format is a mid-course start with LINKS initialization scheduled the week before the first scheduled decision round and, subsequently, with once-per-week decision rounds where most/all of the students’ LINKS work is outside of regular classroom hours. Such a LINKS event scheduling is straight-forward in a traditional semester-length (13+ weeks) course.

A mid-course LINKS start facilitates team formation (since the add-drop date will have passed and stable/enduring teams may be formed) and reflects the integrative nature of the LINKS Simulations.

In this Professor’s Column, four experienced LINKS instructors describe interesting aspects of their LINKS event scheduling strategies/tactics.

Benefits of LINKS Initialization 3-4 Weeks Before The First Game Run

There are several steps involved in setting up LINKS. It starts with team formation. After the number of students is fixed in each of the teams depending on class enrollment, LINKS teams are formed. Here, we try to balance out skills set amongst the teams. The subsequent detailed steps for LINKS initialization are fairly straightforward … but detailed requiring a few iterations in terms of getting the correct e-mail id’s for use in LINKS (registration) and personal credit card payment via PayPal versus other e-mail id’s (e.g., gmail.com or yahoo.com) that the students may use.

In our experience at the University of Houston, it has taken us about two weeks just to get all the students on a shared team e-mail list. After submission of the team list, it always seems that we have students who have payment issues related to mismatches of e-mail id’s and this takes a few days to clear up. Hence, starting three to four weeks after LINKS initialization is beneficial in terms of ironing out these administrative details.
While the set-up issues are being addressed at the start of the semester, we have found that walking the students through some of the core concepts and details of LINKS in a lecture setting is helpful to the students in terms of understanding the simulation, process, and expectations. These lectures juxtaposed with other supply chain strategy lectures have taken us four to five weeks before the actual start of the LINKS Supply Chain and Service Management Simulation. Hence, we believe an early start in the semester to prepare for the LINKS simulation results is a better learning experience for the students.

Starting LINKS With Whole-Class In-Class Working Sessions

I have been using LINKS in my Fundamentals of Supply Chain Management course for 12 years, and have always used a traditional scheduling approach using weekly rounds. This year, I am experimenting with in-class working sessions, including two successive in-class decision rounds at the beginning of LINKS. The primary reason for this change is that I’m now teaching in a “collaborative learning classroom” (CLC) instead of a traditional lecture-style room. In this format, students are seated in team pods with a monitor and each student has access to a laptop.

The most significant change in my LINKS scheduling is that I will be executing the first two LINKS rounds during class. Students will prepare their decisions before class, and they will then enter their inputs at the beginning of class. The results will be returned to the teams within 20 minutes, after which the teams will use the remaining class time to analyze results and strategize for the next round. I believe this change will be valuable in accelerating students’ general understanding of LINKS, and it will specifically enhance their understanding of the decisions, reports, and trade-offs. This experience will also create a more real-time environment with decision making and analysis.

I’ve worked with Randy to brainstorm about this new approach and appreciate his support on the back-end to provide the results in an accelerated time frame. By teaching in this environment and changing my LINKS approach, I hope to create a more active, team-based experience where students are engaged with the simulation in the classroom, and I can also be more engaged by providing more direct, real-time, and collaborative coaching to the teams.
5-Weeks LINKS

I teach an accelerated online course with the LINKS Services Management Simulation. We complete the entire services marketing curriculum in only five weeks. Because of this, the pace of LINKS is, by necessity, very fast. The students receive their initialization emails on a Thursday and their first decision is the following Wednesday. This gives them almost a week to read the manual and get familiarized with the nuts and bolts of the LINKS simulation. Once teams start making decisions, game runs are scheduled twice a week, on Wednesdays and Saturdays. I make sure to be available by e-mail on Saturdays in case there are any problems. Most of the time, it runs very smoothly.

The students make decisions through Q10, and I make Q10 a double-run to encourage the students to think long-term. After each decision, I publish team scores (which are based on the KPI’s provided by LINKS), along with team rankings. All teams compete against each other in industries of about 6 firms. Each industry also has a dummy (“inert”) firm, and I make it clear that teams REALLY want to outperform the dummy (“inert”) firm, since we want their decisions to be better than doing nothing.

For assessment, students have three grades associated with LINKS. First, early in the simulation, students complete a brief marketing plan to help direct their decision strategies. Second, they are graded on their actual LINKS performance. The best-performing teams receive 100%, and grades go down from there. Generally, the grades range between 80% and 100%. Third, at the end of LINKS, students make a small presentation discussing what went well, what didn’t, and what sorts of adjustments they needed to make along the way.
LINKS Week at the University of Tennessee

The University of Tennessee uses the LINKS Supply Chain Management Simulation in its undergraduate supply chain planning course as an integrative team-learning experience to reinforce the end-to-end decision making that is required for managing successful global supply chains. Historically, LINKS is incorporated as part of the “drumbeat” of the course with decisions due on the evening of the scheduled class period (e.g., Tuesday and Thursday nights at 9 pm for classes that meet at 11 am on the same days). This structure enabled me as the LINKS facilitator to incorporate targeted topics into the class discussion as the teams struggled with various aspects of the supply chain elements (e.g., forecasting or inventory turnover).

In this structure, while LINKS was one of the main focal points, the class continued to meet on the regularly scheduled days for lectures/discussions/exercises related to course topics. However, my experience with LINKS in a more concentrated time setting led me to consider a different rollout of LINKS for the undergraduate course during the fall semester. Instead of incorporating LINKS into the course schedule while continuing with other class activities, we are going to have LINKS Week at the end of the semester. Based on feedback from participants in our week-long supply chain executive program, LINKS immersion results in a more meaningful learning experience. My hope is that by making LINKS the only focus of the undergraduate class for a short, intensive time period, the students will also have the same experience.

How will LINKS Week work at the University of Tennessee? On Thursday before LINKS Week begins, I will use this last scheduled class meeting to introduce the simulation to the class. Friday of that same week, I will set aside a block of office time to answer any questions that the teams might have about the simulation. Inevitably the number one question is “Where do we start?” Despite emphasizing the SCOR framework – plan (forecast), source, make, and distribute – in the introductory presentation as a guide for how to approach the decision making, the sheer number of decisions tends to create panic in a fair number of teams! The following Monday marks the start of LINKS Week with 9 pm scheduled game runs each day through Thursday and the following Monday. On Tuesday before Thanksgiving, the teams will meet and begin the process of working on their final reports and presentations. These will begin Tuesday after the Thanksgiving break; this also marks the end of the semester. I am still planning a formal mid-cycle review on Thursday morning of LINKS Week. Because I use a phased-in decision making approach for LINKS, the teams need an additional decision period to make the mid-cycle review a more meaningful meeting.

At this point, LINKS Week is a just a carefully thought-out plan waiting to be executed. The students seem excited (and relieved) that they can just focus on the simulation rather than several other course activities. If the simulation immersion delivers the benefits as anticipated, we will move to LINKS Week as the future protocol for utilizing the simulation in our undergraduate supply chain program.