Teaching Statement

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Summary of Teaching Activities
Aligned with my research interests, my teaching to date has focused on courses on operations and supply chain management. Below is a summary of the courses I have taught at the Poole College of Management and Kenan-Flagler Business School prior to joining Poole.

<table>
<thead>
<tr>
<th>Course</th>
<th>Level</th>
<th>When taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 540 Operations and Supply Chain Management (Poole College)</td>
<td>MBA Core Course</td>
<td>Fall 2013, Spring 2014, Fall 2014, Spring 2015</td>
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<tr>
<td>MBA 703 Operations Management (Kenan-Flagler)</td>
<td>MBA Core Course</td>
<td>Fall 2009, Fall 2010, Summer 2012</td>
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<tr>
<td>MBA 711 Supply Chain Management (Kenan-Flagler)</td>
<td>MBA Elective Course</td>
<td>Fall 2005-2010, Fall 2012, Spring 2013</td>
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<tr>
<td>BUSI 403 Operations Management (Kenan-Flagler)</td>
<td>Undergraduate Core Course</td>
<td>Fall 2004-Fall 2008, Spring 2012, Fall 2012, Spring 2013</td>
</tr>
<tr>
<td>BUSI 533 Supply Chain Management (Kenan-Flagler)</td>
<td>Undergraduate Elective Course</td>
<td>Spring 2005, Fall 2005-2007</td>
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MBA 540 is the core operations management course at the Poole College that all MBA students take. This course has always been well-received by students, but I made a few changes to reflect my expertise and some recent trends in supply chain management. By reducing the manufacturing-related content a little bit, I created room to discuss topics such as sustainable and ethical supply chain management and managing supply disruptions. These new topics have been very well received by the students. Throughout my teaching career at Kenan-Flagler, I had the opportunity to teach both core and elective courses at the MBA and undergraduate levels. Especially in MBA electives, I believe there is a lot of opportunity to share knowledge...
created though one’s research. Hence, I almost completely redesigned MBA 711 Supply Chain Management when I started teaching it and the newly-redesigned course clearly reflected my areas of expertise. I included a module on supply chain coordination, a session on how retailers deal with the effects of imperfect inventory level information, and a session on environmentally-sustainable supply chain management. Finally, I designed BUSI 533 from scratch as this course was not being offered at Kenan-Flagler when I joined.

**Teaching Philosophy**

I strongly believe that for a course to be successful, the first requirement is that it is designed right. Every time I offer a new course, I start by spending a good deal of time choosing the right reading materials, cases, and examples so that the course covers the basic concepts, how they are used in practice as well as new developments in the field and technologies that help companies implement these basic concepts better. A good example is how I approach teaching inventory management in my Operations Management class. I start by teaching basic ideas such as the continuous review inventory management model and safety stock level calculations, then we discuss how companies like Hewlett-Packard use the same tools to optimize their inventory levels, and finally talk about how RFID technology can be used to increase inventory-level accuracy. Then, in the last third of the course, the students get hands-on experience with implementation when they play the Littlefield simulation. In doing so, they not only plug the numbers into an equation to get the right answer but also make assumptions and estimations regarding the cost parameters to plug into the equation. Once they submit their reports, we discuss their approach in detail and identify why some strategies worked better than others.

Regardless of how well-designed it is, a course is not going to be successful if it is not delivered well. I believe that one of the first steps in good delivery is to state the objectives of the course and my expectations from the students clearly. While each course I teach has its specific objectives, the following four themes are built into all the classes I teach:

1. **Understanding and managing the trade-offs that are inherent in many operational decisions:** Throughout a semester of taking operations management with me, one thing the students hear over and over is that operations management is about matching demand and supply. In trying to match demand and supply, companies face trade-offs and there is no universal way of achieving this goal. For example, in the context of inventory management, one company may want to offer high level of customer service and meet demand with high probability but this requires higher inventory levels and implies paying more for supply. Another company may be competing on cost and the right level of product availability for them might be lower. It is important that students understand that both strategies may be equally successful as long as they are aligned with the overall business strategy of the firm. I find that mathematical models are great tools in teaching the
most important trade-offs in operations management. I emphasize the fact that they can always look up a
c formula, so I am not interested in whether they can memorize it, but the important thing is they understand
the intuition behind it.

2. Recognizing the sources and consequences of uncertainty and how to manage them: Another thing
the students hear from me a lot is that operations management would be a lot easier but much less exciting if
there were no uncertainty. I find that most students do not have a good grasp of the negative effects of
variability on operational performance. A good example of this is the nonlinear relationship between
utilization and throughput time. Throughout my courses, I try to improve their intuition by illustrating the
impact of uncertainty on performance by using mathematical models, having them work through examples,
and make decisions under uncertainty in simulations.

3. Making operational decisions that increasingly cut across different functions within the company
and borders around the world: First part of this goal refers to making decisions. Most students feel
uncomfortable in making a decision (even if it is only for a case study) when they feel they do not have all
the information. I teach them the importance of analyzing available data and making assumptions as needed,
and how to use the appropriate decision support tools with the data they have. The second part of this goal
refers to evaluating the impacts of their decisions on the other parties in the supply chain, either within the
same company or half way around the world. To this end, using mathematical models, case studies, and
simulations, I try to build the students’ intuition on concepts such as the cost and consequences of changing
order sizes at short notice, how lead times must be taken into consideration when using overseas suppliers,
how to deal with the increased risk of supply disruptions as supply chains become more complex.

4. The role of information and technology in managing the increasingly complex operations
companies face today. In the age of big data, it is important to teach our students how to collect the right data
and how to manipulate it to help with decision making. I try to incorporate spreadsheet models into the
course as much as possible and put the students’ skills to test by building spreadsheet analysis into the case
studies. In terms of technology, I want them to be aware of the cutting-edge supply chain management
technologies, but I make it clear up front that I will not be teaching specific software packages. Throughout
the course, I also underline the fact that implementing the latest technology or software will not solve
operational problems unless the underlying processes are designed right and often times simply redesigning
the process may solve the problem without making a big technology investment.

During the first class session, I go over the topics we will cover in the course and talk about how
each topic relates to one or more of these four themes. In addition, during the course, every time I finish a
course module I do mini reviews to relate what we have learned to these four themes. This helps the students
put the parts together and not lose sight of the overall objectives of the course
Of course, the biggest part of course delivery is the actual experience in class. I believe that a good instructor should both explain the course material very well and also motivate the students to learn the material on their own. To be able to explain the material well, I am always very well-prepared and organized for class. I never take it for granted that I taught the same thing multiple times before. My students always praise me for being enthusiastic about the material I teach and how well-prepared I am. They state that this motivates them to study for class. In motivating the students to learn the material, I have a three-pronged approach. First, I make sure I am conveying the practical relevance and importance of the material I am teaching. If business students do not see the practical implications of a topic, they will not be engaged. Hence, for each new topic, I start the session discussing several business situations where the topic is relevant. I utilize recent news clips, videos, or students’ own business experiences. Another useful tool is case studies. When they are put in the shoes of real decision makers and see first-hand how what we learned in class helps them make sounder decisions, they better appreciate the tools and topics we cover. Second, I motivate them by making my classes as engaging as possible. I mix different teaching methods (lectures, in-class exercises, group presentations, case discussions, etc.) throughout the course and utilize several teaching media (slides, blackboard, video clips, simulations, etc.) in a single session. I ask a lot of questions and encourage the students to do the same. If I am teaching a new mathematical concept, I build in-class exercises into the lecture and ask the students to work on them, preferably in groups. This allows them to learn from each other and seeing that other students are having difficulty with the same concept encourages them to ask questions. Third, I use student assessments such that there is a steady stream of a diverse set of deliverables. For example, in MBA 540 I assign five case studies, one simulation they play over a two-week period and submit a debrief for, and two in-class exams. To help them prepare for the exams, I post practice problem sets on every topic we cover and the problems get progressively harder – the first problem on the set may be very similar to an in-class exercise but the last problem will require them to manipulate the models we study in a way they have not seen in class. I prefer in-class exams because they allow me to test whether the students have retained the basic intuitions I am trying to teach. The cases and the simulation, on the other hand, are open-ended and force the students to conceptualize the business problem, filter the information that will be useful in making the decision, and often utilize a spreadsheet to analyze the data. Finally, being accessible to students is part of good delivery. In addition to the traditional office hours, I utilize the electronic media such as email, the course web site and more recently even Skype to communicate with the students. My students say that they find me very approachable and willing to help both in and outside of class.
Evaluation of Teaching

My teaching is well-received by my students. Here, I include numeric teaching evaluation scores from the eight sections of MBA 540 Operations and Supply Chain Management I taught since I joined the Poole College of Management. The students are asked to rate the course and the instructor out of five (1 being the lowest and 5 being the highest score) along 12 dimensions as listed in Table 2. I have taught two sections of MBA 540 in both the Fall and Spring semesters. On the table, the two sections I taught in the same semester are indicated by S1 and S2. For example, S2015_S1 refers to the first section I taught in Spring 2015.

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>S2015_S1</th>
<th>S2015_S2</th>
<th>F2014_S1</th>
<th>F2014_S2</th>
<th>S2014_S1</th>
<th>S2014_S2</th>
<th>F2013_S1</th>
<th>F2013_S2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The instructor stated course objectives/outcomes</td>
<td>4.8</td>
<td>4.8</td>
<td>4.5</td>
<td>4.3</td>
<td>4.5</td>
<td>4.5</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td>2</td>
<td>The instructor was receptive to students outside the classroom</td>
<td>4.8</td>
<td>4.7</td>
<td>4.6</td>
<td>4.5</td>
<td>4.7</td>
<td>4.6</td>
<td>4.6</td>
<td>4.5</td>
</tr>
<tr>
<td>3</td>
<td>The instructor explained material well.</td>
<td>4.7</td>
<td>4.5</td>
<td>4.2</td>
<td>4.1</td>
<td>4.4</td>
<td>4.4</td>
<td>3.8</td>
<td>4.1</td>
</tr>
<tr>
<td>4</td>
<td>The instructor was enthusiastic about teaching the course</td>
<td>4.9</td>
<td>4.7</td>
<td>4.8</td>
<td>4.1</td>
<td>4.6</td>
<td>4.6</td>
<td>4.1</td>
<td>4.8</td>
</tr>
<tr>
<td>5</td>
<td>The instructor was prepared for class</td>
<td>5</td>
<td>4.9</td>
<td>4.8</td>
<td>4.4</td>
<td>4.6</td>
<td>4.7</td>
<td>4.3</td>
<td>4.8</td>
</tr>
<tr>
<td>6</td>
<td>The instructor gave useful feedback.</td>
<td>4.5</td>
<td>4.6</td>
<td>4.5</td>
<td>4.1</td>
<td>4.4</td>
<td>4.4</td>
<td>3.4</td>
<td>4.2</td>
</tr>
<tr>
<td>7</td>
<td>The instructor consistently treated students with respect</td>
<td>4.7</td>
<td>4.8</td>
<td>4.8</td>
<td>4.3</td>
<td>4.6</td>
<td>4.8</td>
<td>4.7</td>
<td>4.8</td>
</tr>
<tr>
<td>8</td>
<td>Overall, the instructor was an effective teacher</td>
<td>4.8</td>
<td>4.6</td>
<td>4.4</td>
<td>4.1</td>
<td>4.3</td>
<td>4.4</td>
<td>3.6</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>The course readings were valuable aids to learning</td>
<td>4.4</td>
<td>4.3</td>
<td>4.1</td>
<td>4.3</td>
<td>4.3</td>
<td>4.4</td>
<td>3.7</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>The course assignments were valuable aids to learning</td>
<td>4.4</td>
<td>4.7</td>
<td>4.4</td>
<td>4.1</td>
<td>4.4</td>
<td>4.3</td>
<td>3.7</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>This course improved my knowledge of the subject</td>
<td>4.6</td>
<td>4.7</td>
<td>4.5</td>
<td>4.3</td>
<td>4.4</td>
<td>4.6</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>12</td>
<td>Overall, this course was excellent</td>
<td>4.5</td>
<td>4.5</td>
<td>4.1</td>
<td>3.9</td>
<td>4.3</td>
<td>4.3</td>
<td>3.4</td>
<td>4.1</td>
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Table 2. Course Evaluations for MBA 540 Operations and Supply Chain Management
In addition to the numeric course evaluations, it is also very fulfilling to get student comments such as the ones below, which reconfirm that I am meeting my goals in teaching this course.

“Great job teaching us supply chain, Eda. The process analysis will definitely be handy for my future endeavors. Gold star for you!”

“Seems to genuinely care about her students more than any professor I've had. Truly wants her students to engage and understand.”

“- Interesting and challenging case studies - The simulation was fun but also opportunity to apply the methods and frameworks learned in class - The textbook was just OK, I didn't feel like it provided a lot of extra knowledge or practice in addition to the slides and other class materials - Overall the course exceeded my expectations”

“Very enthusiastic about the course, always positive, good listener - Lots of interesting and valuable interaction with class, encouraged questions & comments in class - Provided quick and clear answers via email - Assigned interesting reading, provided review and analysis of the latest OSC related corporate news - Effective use of technology: all lectures were recorded, plus recorder review sessions prior to midterm and final exams - Clear evaluation criteria, consistent grading - Quick grading, the assignments were returned quickly - Very informative and helpful feedback on assignments”