

REDEFINING EXCELLENCE IN DESIGNING AND TEACHING GLOBAL SUPPLY CHAIN AND OPERATIONS MANAGEMENT UNDERGRADUATE PROGRAMS

1. INTRODUCTION

“THOSE WHO CAN’T ... TEACH !!”

This is an all too familiar criticism of teachers in general and university professors in particular. It is an even stronger criticism of “business school” faculty. In this article, we demonstrate a success story in pursuit of proving this proverb wrong. This extra-ordinary story is about an undergraduate program in global supply chain and operations management (GSCOM) [in a non-ivy-league school] that DID NOT EXIST six years ago, and which across just “five annual graduating cohorts” has catapulted to yield the following statistics:

- It is now one of the most sought after programs by leading firms and boasts the following sample employers list: 3M, Accenture, Amazon, Bank of America, Belk, BMW, Boeing, Bosch, Caterpillar, Coca-Cola, Corning Illinois, Cummins, Deloitte, Eastman Chemicals, Eaton, Ernst & Young, Goodrich Corporation, IBM, Ingersoll-Rand, Intel, Johnson & Johnson, Macys, Michelin, Nestle, Northrop Grumman, Pepsico, Pfizer, Polo-Ralph-Lauren, Price-Waterhouse-Cooper, Raytheon, Rolls-Royce, Target, Textron, The Limited, and Tyco Electronics.
- The graduates of the program are securing world-class quality jobs, with a substantial number of the graduates being placed into “operations”, “manufacturing”, “supply chain”, or “process excellence” leadership development tracks in these leading firms. A substantial number of them start at \$60K or above (a few even getting into mid-\$70K range).
- The graduates are getting these jobs by competing with operations and supply chain graduates from the best ranked programs around the country, and quite often, by competing with engineering graduates from well regarded schools like Georgia Tech and Purdue University.

- The placement rate “at graduation” over the last five years has been between 75 to 100 percent (even at the height – or bottom – of the current recession).

Again, the fact that this program did not even exist six years ago should make one wonder- does it sound too good to be true? In the following sections, we describe the deliberate strategy that the core faculty in this program adopted, and numerous assumptions regarding academics that the team questioned and broke down to achieve these unparalleled outcomes.

2. ABC-GSCOM PROGRAM MISSION AND DESIGN

The current ABC-GSCOM program was envisioned and designed in the academic year 2006-07. A conscious investment in the right faculty resources kicked off the birth of the new program and teaching vision. In Fall 2006 and Spring 2007, the core faculty team undertook a serious market scan to analyze the strengths of leading operations and supply chain programs in the country. In parallel, the core faculty brought to bear their own rich past experiences in interacting with the industry, and conducted informal focus groups of what skills and competencies were emerging for operations and supply chain professionals as the most critical attributes essential for success in organizations. Using the insights from these efforts, and based on the fact that the prominent employers in the region included a healthy mix of manufacturing (automotive, nuclear, utility) and service sectors (banks, insurance companies, hospitals), resulted in the development of the following mission statement of the program:

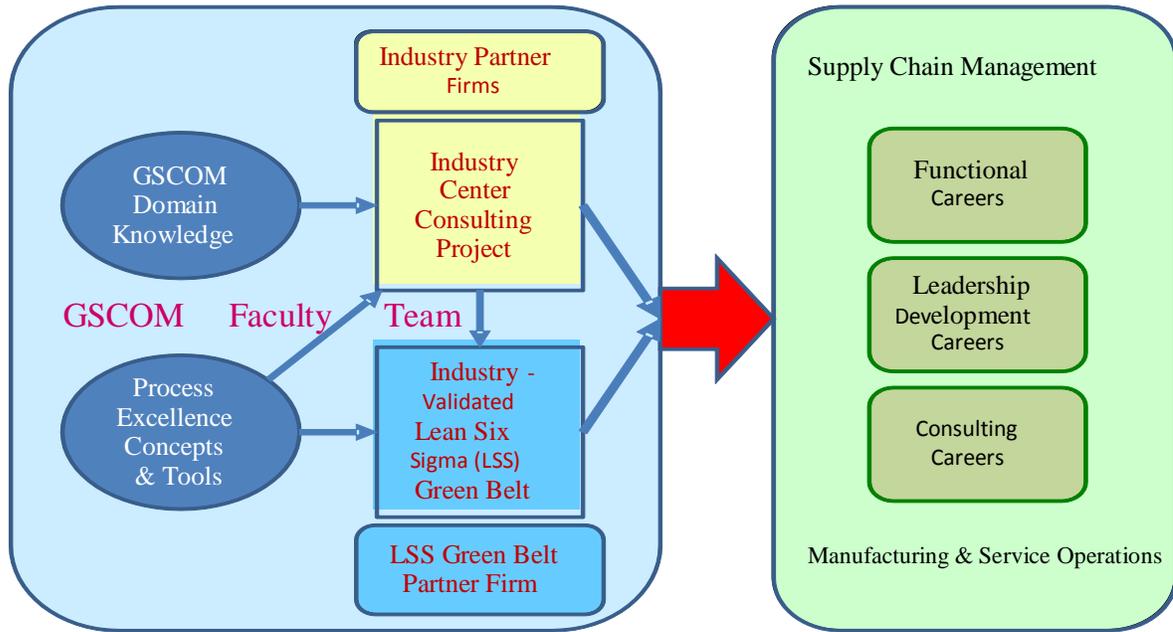
*Global Supply Chain and Operations Management (GSCOM) for “any (manufacturing or service) organization” entails: (A) Designing “operations and supply chain strategy” to support business and marketing strategy; and (B) Designing, implementing, managing, and improving “products and core business transformation processes” to realize the specific operations and supply chain strategy. The **mission** of the ABC-GSCOM program is to produce undergraduate students with state-of-the-art knowledge in “operations and supply chain domain” with “complementary competencies in managing related business processes” and practical applied consulting experiences that equip them well for GSCOM related careers in domestic and global manufacturing and service firms.*

This mission statement has propelled all our efforts ever since. The program design to support this mission called for the following elements:

- (1) Coursework that focused on inter-organizational processes as well as internal operations of a firm
- (2) A balance of strategic issues of supply chain and operations design, as well as tactical execution issues and skills/competencies required to perform these tasks
- (3) A clear process perspective that prepared graduates to “think” and “implement” process approach to operations and supply chain performance, with the requisite process improvements tool-kit, and
- (4) Create an actual experience of utilizing the knowledge and tools in a real organizational context.

To implement an innovative program that would help us accomplish this mission, we decided to incorporate industry participation at critical junctures and integrate industry-validated competencies into the program’s structure. Figure 1 shows the resulting architecture of the state-of-the-art ABC-GSCOM Program. Note that in this design, we have complemented the domain knowledge of operations and supply chains with process perspective in programmatic as well as experiential and industry-validated components of GSCOM students’ journey toward graduation. Also, notice that the GSCOM core faculty team is involved in all aspects and phases of a student’s journey through the program, through the coursework as well as through consulting project work, and the “industry-validated lean six sigma green belt certification” that is helping our graduates to successfully compete with those from even the very best programs around the country. Our program’s strategic industry partners (described in Section 3) are also integrally embedded in the program, especially at the capstone consulting project and green belt certification stages of the program. Why would they not be since they actually get to preview and hire the talent ahead of the open job market?

Figure 1. Achieving “Unexpected Competencies” for a GSCOM Graduate



This theme of academic-industry embedding in the ABC-GSCOM program was accomplished through the following five-course sequence beyond the core operations management survey course (MGSC 395) which is required of all business graduates:

ABC-GSCOM PROGRAM COURSE STRUCTURE
<i>MGSC 395: Survey of Operations and Supply Chain Management (Core Course Required of all Business Majors)</i>
<i>MGSC 485: Business Process Excellence</i>
<i>MGSC 486: Global Sourcing Strategies</i>
<i>MGSC 487: Global Sourcing Strategies</i>
<i>MGSC 491: Supply Chain Management Strategies</i>
<i>MGSC 497: Capstone GSCOM Consulting Project</i>

3. INNOVATIVE FEATURES OF THE ABC-GSCOM PROGRAM

3.1 Balance between external supply chain and internal operations orientation

Typical leading supply chain programs focus on a subset of the three domains: (1) purchasing and sourcing (2) physical distribution and logistics or (3) operations. Our program balances all of these aspects through the set of courses incorporated in the program structure. It is evident from the actual

consulting work done by our graduates spanning projects from all of these three domains (described in detail later).

3.2 Balance between Manufacturing and Service Operations

There is specific emphasis in our program on applicability and applications of operations and supply chain management strategies to manufacturing and service sectors. This is also clearly evident in our program's strategic partnering (described in more detail later) with leading manufacturing and service firms like Siemens, Colonial Life, Palmetto Health, and Walmart.

3.3 Focus on Concrete Competencies and Tools

Based on our discussions with employers and practitioners, we decided to balance the coverage of strategic issues of supply chain management with specific analytics and tools/topics. Thus, the domain topics included not just overall strategies of sourcing, distribution, and operations, but also specific technical topics of Total Cost of Ownership models, balanced scorecards, network optimization, quality monitoring, operations planning and control, and ERP implementation (including actual SAP training); as well as service design and planning topics such as revenue management, locations, and layouts. The courses are also matrixed with training of advanced industrial engineering (IE) and operations research (OR) analytics, including math programming, simulation, network modeling, and simulation.

3.4 Business Process Perspective

One of the most unique features of the program is its emphasis on developing a business process perspective for designing, managing, and improving supply chains and internal operations. The process perspective is embedded in the supply chain domain courses (MGSC 486 – Service Ops, MGSC 487- Sourcing, and MGSC 491 – SCM), but it is mastered in the dedicated “Business Process Excellence” course (MGSC 485). This course covers in great depth the following dimensions of process design, management, and improvement: Lean Implementation, Theory of Constraints and Process Optimization, Process Simulation, and Six Sigma Philosophy (DMAIC & DMADV) and toolkit. In order to hone their

skills in analysis and improvement of processes in preparation for actual live consulting projects in the Capstone course, students in MGSC 485 are also required to execute comprehensive self-identified improvement initiatives in surrounding organizations. Students have completed some very innovative and important projects in this course (e.g., Red Cross Blood Bank Donation Process Improvement, Immigrant Victims Assistance Network Processes Improvement, UPS Assembly Line Analysis, Healthcare Center Patient Cycle Time Improvement, etc.). The business process perspective and improvement skills are further enhanced in a unique initiative described later.

3.5 Uniquely Significant Consulting Experience

Can one become a good driver or a pilot (or even get a license) by “just reading” about how to be a good driver or a pilot? To provide students opportunity to apply the knowledge and skills acquired through the program to actual industry problems, “ABC-Global Supply Chain and Process Management (ABC-GSCPM) Center had been envisioned and launched in anticipation of the ABC-GSCOM Program. Over the last five years, we have partnered with leading firms, including, Coca Cola, Colonial Life, Cummins, Eaton, Johnson & Johnson, MeadWestvaco, Palmetto Health, Pfizer, Siemens, Sonoco, Trane-Ingersoll Rand, Walmart, and Westinghouse Nuclear Fuels.

The Center engages a partner firm strategically with the program (in exchange for an annual membership fees) where the partner firm can propose operations and supply chain improvement projects to the ABC-GSCPM Center. The ABC-GSCOM program’s capstone project then provides an opportunity for graduates to work in teams of 5 or 6 students, actively supervised and mentored by expert faculty mentor(s) on one of these actual operations or supply chain improvement challenges faced by the Center partners. The industry partner provides the initial problem statement but students, along with faculty mentors and the client project team (typically consisting of process owner, process participants, and project coordinator) tackle the project in a one-semester, three-credit course format. The project experiences in ABC-GSCOM Program are much more significant and value added than comparative project experiences in other programs along several important dimensions:

- The capstone consulting class is actually run along the model of a professional consulting firm. We have developed a comprehensive 85-page “Project How To Handbook” that must be adhered to by all consulting teams (see the Project Handbook Table of Contents in [Appendix A](#)).
- The project follows a disciplined 14 week calendar with specific milestones, reporting requirements, and engagement protocols and templates (launch meetings, site tours, data collection, telecommunications, midterm presentations, final client site presentations, annual industry summit presentations, executive summaries, project closure documents). (see the Project Calendar in [Appendix B](#)).
- Projects are identified by top management, represent front-burner problems, and often, the sponsoring firm does not have the capability to solve the problem. Performance metrics of sponsoring managers are attached to the success of the projects,
- Projects represent prominent single-location challenges (e.g., *improvement of claims process at Colonial Life*, or *throughput improvement at Trane-Ingersoll Rand coil plant*) or span organization-wide processes (e.g., *configuring a new inventory positioning and transportation channel optimization strategy for Walmart*, or *New Supply Chain Design for Cummins Turbo technologies*).
- Student teams work on an average of 750 person-hours on these projects across three months (much more than expected of a 3-credit hour course). Because of their own motivation and professionalism, students often work beyond faculty requests. Faculty mentors invest about 100 hours in planning each project with the Center partner firm, in helping students scope the project, in visiting client for scoping and measurement and data collection, and pilots, and in mentoring them in the analysis phase of the project. Thus, these are detailed and rigorous professional level engagements with client firms.

- Projects follow a systematic and comprehensive lean six sigma process framework (DMAIC / DMADV) with appropriate tools in each phase being used according to the project needs (see Project Tools Map in [Appendix C](#)).
- Recommendations of projects are presented to the top management at the conclusion (e.g. Walmart projects are presented at Walmart global headquarters in Bentonville, AK).
- Pilot implementations often occur before the project’s end, and recommendations are implemented for most projects within six months to one year of the projects’ completion.
- Over the last five years, we have executed 54 projects in the ABC-GSCOM program, with a cumulative identified savings of more than 50 million dollars in the client firms. These projects have led to recommendations and implementations to help client firms improve their operations and supply chain performance along the following dimensions:
 - (a) Fixed and variable cost reductions (e.g., Trane, Sonoco)
 - (b) Revenue enhancements (e.g., Trane, Palmetto Health)
 - (c) Customer satisfaction and experience improvement (e.g., Colonial Life, Palmetto Health)
 - (d) Strategic operations and supply chain planning capability enhancement (e.g., Coca-Cola, Cummins, Flextronics, and Sonoco)
 - (e) Competitive positioning improvement (e.g., Pfizer, Walmart)
 - (f) Enhancement in collaboration across units within the client organization (e.g., Sonoco, J&J) and client’s collaboration with upstream and/or downstream supply chain partners (e.g., Sonoco, Westinghouse).

A sample list of the ABC-GSCOM projects is provided in [Appendix D](#). The projects directly result in savings and improvements for the Center partner firms and provide our graduates a very high-quality consulting experience prior to graduation. At the end of the GSCOM program in April, the projects are showcased during the “ABC-GSCPM Center’s Annual Industry Summit” by the Project superteams (faculty consultants, student analysts, and client sponsor team) to more than 100 invited attendees from all Center partners, key employers, and special invited guests in Downtown Marriott. This event opens up new opportunities for the graduates for immediate or future career opportunities.

3.6 “Industry-Validated” Lean Six Sigma Green Belt Certification through the Undergraduate GSCOM Program

To our knowledge, ABC-GSCOM is the only undergraduate business program that actually graduates students with an industry-validated and industry-administered Lean Six Sigma Green Belt Certificate. We launched this initiative with Sonoco Products Company, a \$5 billion global leader in packaging industry. The Lean Six Sigma Coordinator at the University and a Sonoco executive co-champion this initiative. GSCOM graduates must complete the following stringent requirements to be awarded the “Sonoco Lean Six Sigma Green Belt Certificate”:

- (1) Pass a written Green Belt Exam from Sonoco in “one attempt” (competency threshold 80%):

The contents of the Exam blends the Sonoco Green Belt Curriculum with contents from the ABC-GSCOM program spanning Lean and Theory of Constraints (from the MGSC 485: Business Process Excellence course). A comparison of this exam with the actual ASQ guidelines reveals a 75% overlap with ASQ’s **Black Belt** Certification Body of Knowledge.

- (2) Complete the Capstone GSCOM Consulting Project (MGSC 497) successfully: The project must be assessed as “green belt worthy” by the certification panel consisting of the ABC University and Sonoco Lean Six Sigma Champions team.

- (3) Demonstrate substantial value-added contribution to the project (assessed through comprehensive peer and faculty mentor evaluations, and client’s feedback).

To date, we have graduated 310 ABC-GSCOM graduates over the last five years. Of these, 270 students have completed the Capstone Consulting Project (MGSC 497) experience. Of these, 213 students successfully completed the Sonoco Lean Six Sigma Green Belt requirements (a success rate of 70%). It demonstrates the rigor and selectivity of the certification initiative.

As the enrollments have blossomed, the capstone class has become competitive. Forty students over the past year were not admitted into the Capstone course, but instead took an alternative course in APICS-CPIM certification, through which they completed the first two modules of the 5-module CPIM certification, in itself a valuable accomplishment.

4. OUTCOMES ASSESSMENT: WHAT DOES THE MARKETPLACE THINK?

What applies to industry applies to academic programs as well. Regardless of how highly one thinks of one's own innovations in products and services, marketplace provides the ultimate validation of the value. So, how have the unique programmatic features of the ABC-GSCOM program translated into outcomes for our graduates? What does it mean for the ABC-GSCOM graduate to possess the unique twin qualification: "uniquely significant consulting experience" and "singular program-based industry-validated and industry-administered lean six sigma green belt certification" at the end of a hard-earned GSCOM degree? Let us apply "business venture analogy" equating our graduates to "products" of our GSCOM entrepreneurial venture.

Primary Metric – Placement Rate and Quality (Product Sales): The most critical objective metric was already provided on Page 1 of this article --- the extremely impressive placement rate and quality of the employers of the program's graduates spanning leading Fortune 500 firms, and placements are national (not regional), in premium career tracks such as leadership development programs or consulting, and commanding premiums. The market value of the program is captured further by the following business-value-oriented metrics:

New/Top Customers: Most of the leading employers have historically not even visited ABC campus for recruitment. Our students get these jobs through direct application on corporate career websites (e.g., 3M, Boeing, IBM, and Intel).

Repeat Purchase and Loyalty: Once an employer hires a first graduate from the program, they hire multiple graduates over ensuing years (e.g., Accenture, Amazon, Bank of America, BMW, Boeing, Cummins, Eaton, and Raytheon), which is a clear indicator of sustained value proposition in the marketplace (repeat customers)!

Premium Pricing: In many employer firms, hiring managers don't know how to put a market value on the unique value proposition of the graduates. In many cases, the program faculty have

negotiated compensation packages (upward, sometimes by as much as 10-15K) on behalf of the program and the candidates with these employers!

Product Quality and Field Performance: Many employers have provided feedback that our graduates perform at the top performance levels on the job vis-à-vis established leading program's graduates.

Stakeholder Satisfaction: In order to evaluate what our program's strategic partners and employers think about the program, please see the example feedback from Johnson & Johnson and Sonoco Products Company ([Appendix E](#) and [Appendix F](#)).

Sustained Product Value Enrichment: An increasing number of our program's graduates are now either nearing or getting six sigma "black belt" certifications at their employer firms! Many early graduates are moving on to enriched career opportunities with higher responsibilities (and compensations). See [Appendix G](#) for example feedback from ABC-GSCOM alumni.

Special Recognition: During such a short time, we have had two winners of the *Gene Richter National Scholarship for Future Supply Chain Leaders* from the Council of Supply Chain Management Professionals. This prestigious award is usually given out to the best supply chain programs around the country. Also, our program has been ranked in *Top 20 Supply Chain Programs* by the Garter Consulting Group in 2011.

5. INNOVATIVE PROCESSES BEHIND THE SUCCESS

As with any successful organizational innovation and initiative in the teaching domain, several participants and processes must work in tandem to make the final success possible in a sustainable fashion. In this section, we describe some of the innovations we implemented while executing this initiative. Essentially, we actually practiced the business strategies, supply chain strategies, and process strategies that all of us in this field actually prescribe to the industry.

5.1 GSCOM Field and Program Information Campaign

GSCOM is the least familiar field/major to business undergraduates. Informal surveys in our initial semesters (Fall 2006 and Spring 2007) at even the 300 level “Introduction to GSCOM classes” typically revealed that less than 5% of students actually knew what the role of GSCOM competencies in organizations is and what the career opportunities are. How can any entrepreneurial venture succeed if nothing is known about its potential products and services?

We undertook a systematic “GSCOM Information Dissemination Campaign” starting Spring 2007, which we have continued. We created four different detailed PowerPoint presentations and a word “GSCOM Competencies, Careers, and Career Development Guide” for the following four stakeholders:

- *ABC Business School Undergraduate Advising Office:* If Undergraduate Advisors don’t have a clear understanding of the GSCOM field (and how it is distinct from and how it complements other fields in business school), how can they competently advise students about it, and how can they “source” the right talent of incoming students into the program?
- *ABC Business School and ABC University Offices of Career Management:* How can they help the students who would be graduating in a couple years, if they don’t know what careers these graduates will go into and what specific types of employers and careers to seek out for the program from the industry?
- *ABC Incoming Freshmen, Sophomores, and Juniors:* A simplified version was used to provide an interesting, yet valuable introduction to the field before students commit to other default majors, such as Accounting, Finance, Management, and Marketing. We proactively tackled this challenge. We made presentations at the ABC Scholars Day (potential incoming freshmen invited to ABC in the Spring before joining ABC as freshmen), at business and university professional fraternity rushes (Alpha-Kappa-Psi and Delta-Sigma-Pi), and in freshmen and sophomore core courses (scheduling 15-minute quick intro to field presentations). We have now undertaken a new initiative to reach out to the top 5% of high school juniors and seniors in area high schools.

- *ABC-GSCOM Potential Employers and ABC-GSCPM Center Potential Partner Firms*: This detailed presentation describes all unique design features and profiles of our students and graduates, our past successes in consulting projects, and graduate placements. This was a critical part of promoting our program with numerous employers during in-person visits to the employers and teleconferencing. We still promote the program to new employers/center members using it.

Delineating GSCOM Value Proposition vis-à-vis Other Business Disciplines: An excerpt of explaining the linkages between GSCOM and other business disciplines for the GSCOM Field, Careers, and Career Development Tips documents is shown below:

What are the key Synergies between GSCOM and other Business Disciplines?

1. Accounting: How could you track performance and productivity of your financial, human and technical resources without understanding the processes and operations they are utilized for? Especially, understanding processes is critical to developing managerial costing and productivity standards for operations. When one can't match accounting numbers with the facts on the ground (operations), we get ENRONs and WORLDCOMs. The Sarbanes-Oxley Act has mandated firms to enhance the visibility of the link between their business operations and accounting numbers.
2. Entrepreneurship: Why do so many small businesses fail, even though they have excellent business value proposition and are able to garner initial financial support? Most of them cannot stabilize their operations or match their operations and supply chain infrastructure to increasing demands for their products and services. Franchises are the best success stories that spell loud and clear the synergies of entrepreneurship and standardization of operations and supply chain processes.
3. Finance: Would financial institutions lend you money if you did not produce the right products cost effectively, and ended up losing customers and money? Also, understanding operations and supply chain infrastructure capabilities and synergies is pivotal to successful analyses of investments, and specifically mergers and acquisitions.
4. Human Resource Management and Leadership: Would it be enough for you to be a good people-person without skills and competencies of designing, planning and improving the core activities of your business that people and other resources support? One of the key determinants of high "people" performance is the "process infrastructure design effectiveness."
5. International Business: Why has GE outsourced not just call center operations but also its R&D operations to India? How are Walmart's strategies for expansion in China structurally and operationally different from its strategies in North America? Why did it pull out of Germany? Why do Toyota and Honda transplants in the US produce higher quality vehicles than the Detroit Big Three? Why is Chevron's role in Nigeria's militia unrest critical to our relationship with this fifth largest oil supplier to the US? Answers to these "global business" questions clearly

highlight one underlying theme -- “international/global business” competency is synergistically complemented by GSCOM knowledge. In today’s complex and interlinked global economies, global supply chain and operations management provide the most natural framework to understand the determinants of short- and long-term successes of international and global business. The dynamics of business process outsourcing, plant and facility relocations, global sourcing strategies, global talent scouting, total product cost, and global logistics and distribution strategies are just a few of the numerous critical pillars of gaining strategic and tactical competencies in effectively managing responsive and responsible global organizations.

6. Marketing: Would you as a customer buy a product that doesn’t satisfy your needs or has inferior value proposition (net value in terms of quality versus cost or price) to competing products? Leading firms in any industry win with dual competencies. They tap the current and latent customer wants and desires better and quicker than competition (Marketing competency). But equally importantly, they know how to develop products and services that customers want faster and more value-effectively than their competitors (GSCOM competency). Classic examples are: Dell, Rubbermaid, Wal-Mart, and Honda.
7. MIS: Success of information systems is highly contingent upon manager’s knowledge of business process and operations decisions that these information systems support. Information systems can be competitive weapons or expensive investments depending upon whether they help a firm’s tactical and strategic operations? Opportunities abound for “systems analysis” careers for MIS graduates who understand business processes and information needs for these processes. BPO (business process outsourcing), SCM (supply chain management), ERP (enterprise resource planning), and CRM (customer relationship management) offer the best intersections of MIS and GSCOM capabilities.

Marketing GSCOM Program at Engineering-Centric Employer Firms: Initially when we approached some traditional engineering-centric employer firms with our program’s intended outcomes and how the graduates would fit their supply chain and operations management needs, a typical response was ... “But we have always hired industrial engineers for process improvement.” We countered this stereotype by explaining to them the intent of our program and the profile of the graduate they would hire from our program. The following expert from the GSCOM Careers document explains the distinction between GSCOM and engineering graduates:

ABC-GSCOM Competencies: The strategic dimensions of GSCOM help to link the overall business and marketing strategies to focused strategic and tactical operations and supply chain capabilities (e.g., Toyota and Wal-Mart). The technical/analytical tools of operations and supply chain management help to create products and processes that serve the customers (better products and services that maximize value) as well as sustain and grow short- and long-term profits for a company (e.g., Honda, Rubbermaid). Our GSCOM graduates bring “business perspective” to operations-, process-, and supply chain improvements. Additionally, they also have complementary expertise in other business majors and a global perspective including multiple languages and international cultural immersion experiences.

Distinction from Engineering Competencies: Traditional Engineering (mechanical, electrical, chemical, civil, and aerospace) is critical to designing products and physical machinery to produce products and services. Industrial engineering applies work design and measurement tools to enhance productivity of jobs on individual or groups of machines (many-a-times focused on manufacturing). GSCOM really helps design the macro-level managerial infrastructure (e.g. aggregate capacity planning, facility locations, facility and process design, and medium and short term resources planning and control, sourcing, and optimization of supply chain network) and execute operations and processes (and improve them) to make the "value-add" possible. GSCOM competencies / careers span from production to quality to purchasing to distribution to service management to operations/process improvement consulting.

ABC-GSCOM program has been able to place more than 10 graduates (each) at two of these very same employers who were averse to hiring GSCOM majors instead of industrial engineers. Now we place our graduates routinely alongside engineers from schools like Georgia Tech.

5.2 Practicing What We Teach – GSCOM Program Sourcing – The Ideal Student Profile

The pedagogical goal of the GSCOM program is to develop high-performing professionals. Hence, our target is a student who is intelligent, analytic-minded, hard-working, sincere, and career-focused. A well-designed program with direct linkages to industry and job outcomes has attracted the top performers in the school. The rigor and workload expectations are however clearly conveyed through informational campaigns, and each course of the program is designed and executed at a high level of rigor that sends that message. Part of informational campaign also explains the linkage between GSCOM and other business disciplines and majors (see an Excerpt of GSCOM Field and Careers Information below). Therefore over the last five years, the typical GSCOM program graduate has also dual-majored (sometimes triple-majored) in other areas such as accounting, economics, finance, entrepreneurship, human resources management, international business, or marketing.

Even though there is no “admission by application” selection process, the program, by its character and demands has resulted in self-selection by sincere and intelligent student body. About forty percent of our graduates are also bilingual (Chinese, French, German, Japanese, Portuguese, and Russian) and some are even tri-lingual due to their language emphasis as a part of their international business major or language majors. These attributes are increasingly adding to their competitive position vis-à-vis

other candidates in the GSCOM marketplace (which by very nature is global). Finally, a majority of GSCOM students now complete at least an internship, while many do more than one. They are also professionally active in APICS and/or ASQ, and work actively in campus organizations.

5.3 Ensuring High Quality Input – Innovations of the Survey Core GSCOM Class (MGSC 395)

Since the ABC-GSCOM program does not enroll students on an “admission by application” basis, the introductory survey course is designed not only to give a broad and deep understanding of the GSCOM field and competencies, but is also executed at a rigor and depth that is unusual for a “core survey course”. Simultaneously, it also incorporates interesting and in-depth assignments beyond textbook contents. For example, we have used “The Goal” (Goldratt) focused reading (with 15 specific questions spanning the entire novel) as an integrated part of the course. Sometimes, other contemporary books have been added as “brainstorming opportunities” of how GSCOM impacts global issues (e.g., “The Story of Stuff” by Annie Leonard; to examine the role of GSCOM in environmental sustainability). Finally, innovative Term Papers have been assigned to make students think and link GSCOM to their other career choices or practical topics.

One such out-of-the-box “Term Paper Option” asked students to focus on the applicability of at least three topics from the survey course (e.g., forecasting, aggregate operations and capacity planning, and facility location) to an organization (e.g., hospital or bank of manufacturing firm) or industry (healthcare or retail) of their own choice. Students were required to write a report (length at least 10 double-spaced but no upper limit) by blending the information from the text book, internet (valid sources), even articles from focused practitioner journals in GSCOM (e.g., Interfaces, Production & Inventory Management, etc.), and by interviewing actual managers (e.g., Emergency Room Director, Bank Branch Manager, Plant/Store Manager, and so on). Students, when high expectations are put on them, work wonders. The course resulted in interesting term papers related to coffee shops, hospitals, convenience stores, as well as retail, healthcare, and wine industry! Many of the top students become

interested in GSCOM program after spending quality efforts on their own to explore the field. This rigor helps students to know if the program is NOT for them due to lack of aptitude or motivation to work hard.

5.4 Marketing the Product – GSCOM Career Tips and Preparation for Successful Job Search

GSCOM core faculty participates actively in students' career planning and preparation throughout the program, ranging from identifying internship opportunities to conducting GSCOM Career Workshops to GSCOM Resume Writing (which is different from any other discipline) to providing tips to identify job opportunities both at employers attending on-campus career fairs and those who don't recruit from campus. The students must get their updated resumes approved from our faculty coordinators before placing them on the school's job's database. We share the Resume Book of our students with our Center partners and key employers.

During the GSCOM Career Workshops (at the start of Fall and Spring semesters), students are given specific step-by-step tips on Resume building, applying, and interviewing. These events also feature one of the Center partner firms or a key employer and their functional managers and human resource managers, who provide inside tips on what employers seek in successful applicants. GSCOM faculty also provide specific tips on exactly how to find GSCOM jobs (because there can be so many and such diverse job descriptions, and even demonstrate how to navigate the Careers Website for a leading employer like Boeing to identify the relevant jobs. Finally, the events feature our own alumni who have successfully landed high-profile jobs, and who can give first-hand advice on successful job search.

Throughout the year, a faculty member works actively with ABC-School Office of Career Management to coordinate communication of GSCOM job opportunities to students. Our key faculty members even attend the campus Career Fairs to motivate our students to do well. This unusual effort (employers do not expect to meet faculty at career fairs) conveys the seriousness of providing the best graduates from the program to employers. In some instances, we were able to inform employers of our candidates' fit to their announced positions for which they had come to interview engineering candidates. We have been able to refocus these employers' recruitment efforts to our program through these

unconventional and unexpected outreach efforts. Because of our cumulative work with numerous organizations for consulting projects, both as a part of ABC-GSCOM program and other past experiences, we get direct enquiries from many employers and alumni. These opportunities are directly conveyed to active GSCOM candidates through our ABC-GSCOM intra-net, and Blackboard.

5.5 Closing the Loop – Job Selection and Negotiation Guidance

Once students start interviewing at the prospective employers, GSCOM faculty mentors help them with interview preparation, and brainstorm negotiation strategies in the event of job offers. For many employers, the first time around, it is difficult to price the unprecedented value of these graduates' packaged competencies which often take the following form: internship + GSCOM consulting experience + industry-validated lean six sigma green belt + dual/triple major + multiple language skills + cross-cultural immersion. The faculty assists the firms in that task. Many employers regularly communicate with GSCOM faculty regarding emerging needs and “next waves of positions,” and ask us regarding availability of candidates beforehand.

5.6 Post Graduation – Keeping the GSCOM Graduates in the Loop – Expanding the Pie

Once graduates successfully acquire jobs, we ensure continued connection with the graduates through a dedicated LinkedIn group established for current students and alumni of the ABC-GSCOM program. But even more importantly, we keep communication lines open to help them settle into their new careers and offer help if needed initially when they have any professional questions. With all of the mentoring and support to the graduates, it is no wonder that our alumni are now bringing these same employers back to the program for “repeat purchases” of talent and “strategic recruitment engagements”.

6. KEY PILLARS OF THE ABC-GSCOM PROGRAM

6.1 ABC-GSCOM Faculty

What is unusual about all the innovations described in this article section is the “100% ownership, commitment, and involvement of the core GSCOM faculty in all of the design and execution processes”.

The GSCOM faculty not only has the right intent and attitude to carry out this innovative approach to GSCOM education, but also possess the unique competencies that are critical to the success of such an industry-focused yet academically rigorous program. A few highlights of the faculty group’s competencies below explain why the vision and execution of the ABC-GSCOM Program has been so successful in creating a unique organizational transformation.

UNIQUE PACKAGE OF COMPETENCIES OF ABC-GSCOM FACULTY
Faculty group’s cumulative industry consulting projects experience exceeds 100 significant GSCOM consulting engagements in global leaders such as Coca-Cola, Cummins, GE, GM, Eaton, Ingersoll-Rand Trane, Johnson & Johnson, MeadWestvaco, NCR, Pfizer, Siemens, and Walmart.
Faculty includes the first and only university professor with Six Sigma Master Black Belt certification from the American Society for Quality in charge of the unique industry-validated Sonoco Green Belt initiative for the program’s graduates.
Faculty have won several professional, state-level, and university-wide teaching excellence awards. Faculty members on this award application include an author of a leading operations and supply chain college text book.
Faculty has the proven ability to recruit strategic industry partners and employers.
Faculty group concurrently possesses a high-quality scholarly research profile and accomplishments and still demonstrates a rare practical outlook on GSCOM academics and a rare passion for student success.

Marketing of the program to internal and external stakeholders, sourcing the right talent, proactively helping students with careers and jobs, direct participation in marketing the program to employers, and helping students actually get the best jobs and best offers are faculty (not staff) tasks.. We believe that apart from the unprecedented vision and execution of the coursework by ABC-GSCOM faculty, it is also their full physical and emotional engagement in the “non-conventional” processes that has resulted in these extra-ordinary outcomes in such a short time.

6.2 Students

As described in Section 5.2, the unprecedented expectations of intellectual capability and hard work as well as professionalism demanded by the ABC-GSCOM program meant that the program could not be executed successfully if student body was not up to these standards. We can proudly say that we have been able to raise the intellectual curiosity and then the dedication of our eventual GSCOM graduates by targeting the best students in the ABC-School of Business. Majority of them come to the university from all over the country, and a substantial number of these students as well as some of the smarter accounting/finance/marketing majors become interested in our GSCOM program. Over the course of the program, these students devote tremendous amount of energy and time to master the GSCOM competencies. Most of them actually work long hours and on weekends (along with the faculty mentors) on finalizing their project client presentations during the last weeks of the program, while some of their peers have already started graduation-celebrations! Depending upon project requirements, some even skip their Spring Breaks!!

6.3 Strategic Partners

Our strategic partners represent the third leg of the triad on which ABC-GSCOM Program's success hinges. The strategic partners of the ABC-GSCPM Center have included some of the biggest names, like Johnson & Johnson and Walmart. ABC-GSCOM program practically embeds itself strategically into the Center partner firms for the purpose of helping their actual operations and supply chain performance. The partner firms love the value proposition since they actually get the professional consulting from the GSCOM faculty at a much discounted rate, and also get to preview the emerging superior-quality talent of graduates. Therefore, client firms tackle critical projects through ABC-GSCPM Center, and also invest their functional managers and process owners closely and first-hand into these projects. Projects sometimes entail multiple site visits across the country. An example of the trust, respect, and value-perception Center partners possess for this program: Walmart schedules the final client presentation at the Bentonville world headquarters with the top brass of their global supply chain team

(more than 25 top supply chain managers) attending the final presentation (usually two to three hours in duration). With hefty returns on investment, the Center partners have become real strategic partners of the program, and champion it within their own firms and also amongst their network of firms. In this sense, they actually become ambassadors of the program, opening opportunities for their business suppliers or customers to get engaged with the program. A sample feedback of what our strategic Center partners view as the value proposition of the ABC-GSCOM Program is shown in [Appendix F](#).

7. TRANSFERRABILITY

We strongly believe that the state-of-the-art ABC-GSCOM undergraduate program, along with its innovative supporting processes and pivotal roles of key stakeholders (students, faculty, and strategic industry partners) will challenge the status quo in many institutions. However, it is transferrable in parts or as a package to any other GSCOM program. Strategies promoting the program to potential students and educating the advising offices or career management offices are quite universally applicable and transferrable. But the package as a whole could be transferrable to other institutions and programs as long as the following critical success criteria are satisfied:

- *Reframing of GSCOM faculty role and responsibility:* GSCOM faculty must start viewing their role as drivers of program and student success, not just in terms of teaching rigorous and relevant competencies, but also in promoting the field and attracting the right student talent into the programs. They must be competent in not just teaching classroom lectures or conducting research, but also in mentoring students and disseminating knowledge and skills through actual application consulting projects that allow students to graduate with lean six sigma certifications.
- *Student Population Characteristics:* This approach is also contingent upon availability of analytic-minded, intelligent, sincere, and career-minded students. We believe that every university has at least a critical mass of these talented students. It again is contingent upon the attitude, will, priorities, capabilities, and aptitude of key GSCOM faculty to attract these students into the GSCOM program.

- *Execution of the Program:* Note that each of the courses in our GSCOM program maintains the highest level of practical relevance, emphasis on strategic thinking, as well as concrete analytics. This also implies that the faculty is capable of teaching, and is willing to teach, these courses at this level of practical relevance and rigor. Unless the faculty displays mastery in these topics, the program cannot succeed. The capstone consulting experience eventually stacks the students and the faculty against “live and critical client operations / supply chain improvement projects.”
- *Industry Support:* As already mentioned, without a substantial critical mass of strategic industry partners, this model of GSCOM program cannot function effectively. In our experience, it is a significant amount of upfront and ongoing investment of core faculty team’s time and efforts that makes the Consulting Center vibrant. But again, once the value is established, the strategic center partners benefit the program and graduates at multiple levels and in a sustained fashion.
- *Program Size:* This model of GSCOM program will be difficult to scale up into a large, mass program in GSCOM for obvious reasons. The most important reason is that finding GSCOM faculty who “can and are willing” to redefine their roles and responsibilities to make this model work is a challenge. Beyond that, because the model requires intensive first-hand involvement in execution of core program and supporting initiatives, it is difficult to envision a program with more than 50 or 75 graduates per cohort and still maintain the quality. Higher direct costs can be funded directly by industry partnerships.

8. CONCLUSION

Instructional innovations span the entire spectrum of new ideas or novel implementations of existing ideas. They can also range in scope from a single-course to complete-programs. In this article, we have presented a cutting-edge model of an undergraduate GSCOM program, and presented the unprecedented outcomes realized over a span of five years. The program’s vision and execution strategies have dispelled several conventionally held beliefs about expectations from undergraduate students and roles and responsibilities of GSCOM faculty (or university professors in general). We have

highlighted ways to produce a product (GSCOM graduates) that is so valuable that even seasoned customers (leading employers in this instance) cannot initially place a market value on these outcomes! But we have also decoded the DNA of how to design and make such novel programs work, and what preconditions and organizational climate must exist for them to be successful. We hope that our success and shared tips will motivate other programs and faculty to undertake similar proactive efforts to shape the future of their GSCOM graduates. Cumulatively as a GSCOM discipline, it is equally critical to succeed along this teaching and program dimension in order to have a vibrant presence in the professional space. The better the talent we bring into our field and the better we prepare them for professional careers, the better professional practice we will end up with. Thus, along with scholarly research, these programmatic innovations will ensure professional health of the field. Though we did not enumerate it in the article, an unintended benefit of designing and executing this program was that it has also allowed us to succeed in scholarly research because of exposure to real world problems, data gathering opportunities, and managerial inputs from seasoned executives, thus making our research grounded in practical challenges and issues.

9. APPENDIXES

APPENDIX	DESCRIPTION
A	ABC-GSCOM Capstone Consulting Project Handbook – Table of Contents
B	ABC-GSCOM Capstone Consulting Project Calendar
C	ABC-GSCOM Capstone Consulting Project – Lean Six Sigma Tools Map
D	ABC-GSCOM Capstone Consulting – Sample Projects
E	Sample Feedback from ABC-GSCOM Program Employers
F	Sample Feedback from ABC-GSCPM Center Strategic Partner
G	Sample Feedback from ABC-GSCOM Program Alumni

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Appendix B.

ABC-GSCOM Capstone Consulting Project Calendar

STEP	DESCRIPTION	TIMELINE	PARTICIPANTS
1	Project Proposals Due to Professor XYZ	By January 10 (Class start date)	GSCOM faculty, Client Firm
2	Project Selection and Scoping	By January 17	GSCOM faculty, Client Firm
3	Student Teams Assignment and Project Launches ; Student Team gives a consolidated word file of their resumes and an excel file with individual and team availability schedule to the entire team (client sponsors, team members and Faculty Mentors)	By January 24	GSCOM Faculty, Students, Client Manager and Client Firm
4	Project Methodology (Data Collection and Analysis Plan) Approval: The “ D ” MAIC Phase	January 31	GSCOM Faculty, Students, Client Manager and Client Firm
5	Actual Project Execution (with frequent periodic reviews by faculty and client manager): The D“MA”IC Phases	February 1 st week through April last week	GSCOM Faculty, Students, Client Manager and Client Firm
6	Mid-Term Client Presentation (must schedule this right at the launch-meeting time)	February Last Week or March 2 nd Week (March 3-11 is Spring Break)	GSCOM Faculty, Students, Client Manager and Client Firm
7	Project Recommendations Approval; and Pilot Implementation (when possible); Developing Control Plan The DMA“IC” Phases	To Be Completed by Mid-April	GSCOM Faculty, Students, Client Manager and Client Firm
8	Project Executive Summary Draft to GSCOM Faculty Supervisor	April 3 rd week	GSCOM Faculty, Students, Client Manager and Client Firm
9	Final Project Presentation to Client Firm (must schedule this right at the launch-meeting time)	April 4 th week (By April 23)	GSCOM Faculty, Students, Client Manager and Client Firm
10	Two Sets of Final Project Deliverables (one to Client and one to Faculty Mentor): Client Presentation + Exec Summary Final Draft.	By May 2	Students, GSCOM Faculty and Client Manager and Client Firm
11	Student Peer Evaluations	By Final Exam Day (May 2)	Students
12	Green Belt Exam	Final Exam Day (Wed May 2: 9-11am)	Students (attendance is mandatory)
13	Client’s Project Evaluations to Dr. XYZ (please send email)	By April 30	Client Manager (students to follow-up with them)
14	Course Grading	By May 5	GSCOM Faculty

Appendix C. Capstone Consulting Project – Lean Six Sigma Tool Map (Excerpt for “DEFINE” of DMAIC/DMADV)

PHASE 1 – DEFINE

CATEGORY	QUESTIONS/ISSUES	TOOLS/RESOURCES
About Project	Is this the right project? (benefit-cost, linkage to business strategy)	Balanced Scorecard, Voice of Business - Financial Metrics (ROI, Market Share), Stakeholder Benefits Other Tools for Consensus Building/Decision Making Affinity Diagram, Nominal Group Technique and Multivoting, Prioritization Matrix
	Who will be in charge of the project (Sponsor)? Who is the process owner? Who will be on the project team? What will be the communications plan? What will be the deliverables? What will be the timeline? What will be the budget?	Project Charter including Overall Goals for Customer Performance and Business Performance Improvement, Gantt Chart.
About Process	What is the overall process?	Process Map, SIPOC, SwimLane Diagram, Value Stream Map
	Who are the customers?	CTQ Tree, VOC – Kano, Affinity Diagram
	What are the important customer outcomes of the project? (Delighters, Satisfiers, Dissatisfiers)	
	What are critical Ys? How is the current process performing on these Ys? How important are the Ys?	Performance – Importance Matrix (2x2 matrix): Identify each Y in one of the cells. High Importance-Low Performance are critical Ys. High Importance – High Performance are strengths. Don’t worry about low importance Ys.
	What are the resources on the process and what is their role in and concerns about the process?	Voice of 4M Resources (VOR): 4Ms include Man, Machine, Materials, and Methods employed to process customers using these 3Ms.
	What are possible Xs that could impact Ys?	Brainstorming, Focus Groups, Multi-Voting (Nominal Group Technique), Inter-Relationship Diagrams, Matrix Diagrams, Prioritization Matrix

Appendix D.

ABC-GSCOM Projects – Sample List

1. Dealer Transportation network cost and service optimization for **Snider Tire Company** (Spring 2012)
2. Engine skids returns process for **Cummins Engines** (Spring 2012)
3. Filling process analysis and warehousing capacity estimation for **Coca-Cola Bottling** (Spring 2012)
4. Paper mills and conversion plants network inventory and transportation optimization (including consignment warehouses) for **Sonoco Products Company** (Fall 2011)
5. Material shrink Root-Cause Analysis and Mass Balance Control for **Hilex Poly Co.** - Milesburg PA (Fall 2011)
6. Blood lab inventory process improvement at **Palmetto Health** (Spring 2011).
7. Carton mix (number and sizes) optimization for **Walmart.Com** Carrollton DC (Spring 2011)
8. Supply Chain Cost Improvement Projects Evaluation and Tracking Process and Decision Support System for **Westinghouse Nuclear Fuels** Division. (Spring 2011)
9. Total supply chain cost analysis and decision tool implementation for **Flextronics.** (Spring 2010)
10. Integrated supply chain risk analyses (SCRA) and decision tool implementation for **Cummins Turbo Technologies** (Charleston, SC). (Spring 2010)
11. Process analysis and reconfiguration of header cell layout and manpower allocation to support lean initiatives for **Trane Ingersoll-Rand.** (Spring 2010)
12. Internal supply chain inventory optimization for break-pack items at **Walmart** Global Logistics for the US networks: Bentonville, AR (project done for global logistics leadership team but had national scope). (Fall 2009)
13. Design of a new global supply chain and transportation network for minimizing total cost of ownership for **Cummins Turbo Technologies** (CTT Global Supply Chain Group, Huddersfield, UK). (Spring 2009)
14. Claims process improvement at **Colonial Life.** (Spring 2009)
15. Throughput analysis and operations standardization for Vitro5.1 and Eci blood testing machines for **Johnson & Johnson** (Spring 2008)

Appendix E. **Employers' Sample Testimonials (Excerpts)**
(Full testimonials available upon request)

**Randall Tucker, Director, Franchise Operations - Therakos & Clinical Laboratories
Ortho Clinical Diagnostics, Part of the Johnson & Johnson Family of Companies**

“Over last four years, nine projects were undertaken by the program’s students of which four were conducted by the undergraduate student teams. These have been high-priority projects for the respective areas within OCD. The first project’s blood lab testing cell operations optimization was actually embedded later into our global marketing and promotion strategy with tremendous implications for revenue and customer service. The second project provided template for distributor center fulfillment improvement for both pick-pack-ship lines as well as distribution order fulfillment wave planning. The third and fourth projects have actually reduced the warehouse footprint at the Raritan plant and improved the resource productivity significantly.

Majority of recommendations from ABC-GSCOM projects have been incorporated into our lean campaigns. J&J has accumulated net cost-savings and process improvement benefits to the tune of \$5 million through these projects. Additionally, the projects have introduced our internal process owners to best practices in process analyses and improvement.

In addition to the direct benefits from these projects, what I have been struck most by is the absolute professional approach taken by the ABC-GSCOM faculty and students to working through each of these consulting engagements. The disciplined DMAIC approach that the teams follow is very much aligned with J&J’s own stringent internal lean DMAIC six sigma improvement approach, and the teams literally embedded themselves into our internal improvement efforts. The on-site visits by students to scope the projects and gather the data during the Define and Measure phase allowed me personally to see many of these teams in action at New Jersey OCD plant. The maturity and process improvement concepts and tools knowledge exhibited by these undergraduate teams actually confused many at the plant into thinking they were graduate students, and this happened more than once.

Throughout the semester, the projects would entail working through telephone conferencing and emails and Webex sessions, and the teams demonstrated competence, maturity, and focus to ask the right questions and drive the right analyses and recommendations. The presentations made by the teams at the end of the semesters were most often by telephone conferencing and were attended by twenty or more participants, including process owners and functional managers, and senior managers from OCD from various locations (including international). The final presentations would be up to two hours long in which the teams were asked all sorts of questions about data, assumptions, analyses, and recommendations, prioritization, and ROI of project work. I was always impressed by how the teams handled these high-pressure deliverables so admirably that invariably some of the attendees would mistake them for IMBA teams from ABC.

In my years of experience, I have worked with graduates from top programs around the country, and particularly from the East Coast leading programs. But objectively speaking, I have not come across any program that instills such a high level of professional and domain competencies in operations and supply chain management. We have actually started hiring from the ABC-GSCOM program into our hyper-competitive “Global Operations Leadership Development (GOLD)” that has until now been skewed toward schools on the East Coast.”

Appendix F. **Feedback from Center Members (Excerpts)**
(Full testimonials available upon request)

Keith Holliday, Director, Supply Chain & Corporate Operational Excellence
Lean Six Sigma Champion, Sonoco Products Company

“Over several decades of my professional experience in operations management across companies like DuPont, Rhone Poulenc, and Sonoco, I have interacted with programs and graduates of many leading universities. By far, the ABC-GSCOM Program stands out as the most unique in terms of the sets of cutting-edge competencies that the GSCOM Professors are imparting to their graduates, both in specifics of supply chain and operations management as well as in continuous improvement technologies such as Lean Six Sigma.

We at Sonoco made a decision early on to collaborate with ABC-GSCOM Program as a strategic partner (actually the founding member of the ABC-GSCPM Center), not just to execute joint consulting projects with the program and their Center, but also to partner with the program in their Lean Six Sigma Green Belt initiative. This represents the most novel aspect of the ABC-GSCOM Program.

I have unique insights into ABC-GSCOM faculty and students’ competencies. As a part of the Sonoco-ABC Lean Six Sigma Green Belt Certification process, I and Sonoco’s Lean Six Sigma program leader independently evaluate all the projects that are executed through the ABC-GSCPM Center (not just Sonoco projects). We have assessed the 50+ projects executed by ABC-GSCOM undergraduate students in organizations such as Coca Cola, Colonial Life, Cummins, Eaton, Johnson & Johnson, MeadWestvaco, Palmetto Health Richland, Pfizer, Siemens, Sonoco, Walmart, and Westinghouse Electric. These projects have yielded impressive value to the client organizations both in terms of actual performance improvement and also in many cases enhanced the process improvement skills and competencies of managers in the client firms.

Based on interactions with the project teams and faculty mentors, and attendance at the program’s Annual Industry Summits, I know that the faculty and students do a very professional and thorough job with every consulting engagement, beyond what is expected of an academic program (in fact in many instances comparable to a professional consultant engagement). And the students display a level of competence and maturity that is simply not expected of any undergraduate students. I believe these are some of the best supply chain graduates in the country.

Finally, I have not encountered university professors with more practical acumen and competence and dedication to student success than the ABC-GSCOM faculty. Many of the projects conducted for ABC-GSCPM Center at the partner firms (including Sonoco) are quite complex and the ABC-GSCOM faculty are able to help students apply the right analytics and recommend the right solutions that the client firms actually are able to implement. It is this blend of technical competence and understanding of organizational dynamic that the faculty disseminates to the graduates of this program. It is no surprise that the quality of the students, the program, and the faculty driving the program, are resulting in extraordinary career opportunities for the program’s graduates.”

Appendix G.

ABC-GSCOM Program Alumni Feedback (Excerpts)

(Full testimonials available upon request)

Erin Mckie (May 2009) – Business Process Consultant, Colonial Life - UNUM

“The Capstone project that I worked on for Colonial Life Insurance Company focused on improving the corporate business process of resolving claims. My team and I were able to successfully apply DMAIC tools such as FMEA, Cycle Time Analysis, and Theory of Constraints, resulting in over \$100,000 in savings for the company. The project was ultimately presented to an audience of 40 top corporate executives including the President of Colonial Life and Senior VPs of Operations and Finance. Additionally the GSCOM program provided an opportunity for me to earn a Green Belt certification from Sonoco Products Company. Ultimately these achievements enabled me to receive two competitive job offers prior to graduation!

I am proud to be a GSCOM alumnus and attribute much of my professional success to the GSCOM faculty. Over the last three years, I have been promoted twice and have successfully completed five Lean/Six Sigma projects for the company – resulting in over \$600,000 in savings. The GSCOM program faculty’s strong commitment to their students and teaching excellence creates an unparalleled experience and makes success possible for hundreds of students and alumni year after year.”

Elizabeth Lafitte (May 2009), ASQ-Six Sigma Black Belt – Process Engineer, Palmetto Health

“The class mix combined with my Capstone project with Johnson & Johnson have enabled me to not only be successful in my role as a Process Engineer at Palmetto Health, but also has assisted me in playing a vital role in the future of the health system’s future, accomplishing savings of over \$5 million. Since graduation in 2009, I have had the opportunity to participate on and lead projects at Palmetto Health that have covered a diverse mix of departments, divisions, and/or service lines—from decreasing inventory in Radiology to increasing throughput on the nursing units to designing a new service line. Without my education and experience from the ABC-GSCOM Program, I would not have been able to accomplish and succeed in my position. I also obtained my ASQ Six Sigma Black Belt at the age of 22, and could not have accomplished that feat without the support of Dr. XYZ and his indoctrination of Six Sigma into my brain!”

Andrew Schwark (May 2009), CPIM – Senior Supply Chain Analyst, Eaton Hydraulics

“I should emphasize that the competitiveness provided by this program has long surpassed the initial job interview and job offer. I can attribute much of my success with both of my post-undergraduate employers to experiences gained during my GSCOM program tenure. As a supply chain ERP consultant with Wipro Technologies, my Capstone project experience allowed me to embark on a number of kaizen projects with a major corporate client in the realm of order management IT support. Such projects had an impact on a global level; given the client’s global footprint (support impacted operations in countries as far-flung as Brazil, Japan, New Zealand, and China) as well as Wipro’s own off-shore contingent in India. My involvement in these projects, often using a fast-track version of DMAIC as well as several tools evoked in the ABC curriculum, led to my being named “Consultant of the Month for the entire North American JD Edwards practice”, and allowed me to embark on a two-month best practice sharing trip to our campuses in Bangalore and Chennai, India. As a senior supply chain analyst at Eaton Corporation, I can attest to the fact that my completion of the Capstone project and mastery of key lean, six-sigma, and procurement fundamentals was essential to my being identified as qualified for the position. I have specifically put my understanding of supplier management strategy to good use, now managing 25 domestic and international suppliers and corresponding value streams for a top-performing plant in the Industrial Division. Our specific facility has been so impressed by the range of knowledge from the ABC program that three other graduates have recently been hired for similar positions. I have been fortunate myself to have been promoted to a Manufacturing Coordinator position, where I’ll be expected to share my knowledge of lean concepts with shop floor employees and engage in both kaizen and value-stream mapping continuous improvement initiatives. My example is only one of many at Eaton Corporation of the opportunities the GSCOM program has provided—ABC is now a primary focus school for all Supply Chain hiring, a huge endorsement for the program and skill sets it develops.”