

DR. GREG LEMAN, DIRECTOR OF UNIVERSITY ENTREPRENEURIAL INITIATIVES AND THE CURTIS HANKAMER CHAIR IN ENTREPRENEURSHIP AT BAYLOR, IS A BIG FAN OF INNOVATION. AMONG OTHER COURSES, HE TEACHES THE "INITIATING AND SUSTAINING INNOVATION" ENTREPRENEURSHIP CLASS AND SERVES AS DIRECTOR OF BAYLOR'S i5 PROGRAM:

IMMERSION INTO INTERNATIONAL INTERDISCIPLINARY INNOVATION.

CREATING a CULTURE for SUCCESSFUL INNOVATION

BY KRISTIN TODD STIRES

In May 2008, he presented at the annual International Forum on Innovation and Entrepreneurship in Shanghai, China. His presentation entitled "Creating Skills and Environment for Innovation" is backed by his experience as an engineer, scientist, business leader, and leader of innovation in industry.

So what skills and environment does Lemman say are needed for successful innovation? He asks three overarching questions to summarize his points:

- *What are the enduring realities that must be accounted for?*
- *What are specific issues that stand out in the 21st century?*
- *How do these things affect us or what are the implications?*

Lemman references a paper written ten years ago by Dr. Raj Aggarwal, "Technology and Globalization as Mutual Reinforcers in Business: Reorienting Strategic Thinking for the New Millennium" published in the *Management International Review*, 39. Lemman said the "mega-trends" of the technology revolution and globalization that Aggarwal discusses and the relationship between those trends remain valid today.

"Information technology and other tech fields are exploding in their rate of development," Lemman said. "And, in the words of Friedman, the world is going flat. One reason both of these changes are accelerating is because they feed each other—the more digital our world becomes, the lower the barriers to globalization become. The more global the world becomes, the more valuable technology becomes, so each drives the other forward."

Lemman describes three types of "worlds" in his presentation that affect innovation: global world, digital world, and accelerating world. The global world refers to emerging opportunities and the visibility and availability of those opportunities to everyone. The digital world composed of the IT revolution accelerates globalization. For example, software development can connect programmers in India, China and other locations by dividing tasks and completing them at the lowest cost location.

The accelerating world takes into account the fast pace of knowledge. Within our accelerating world, Lemman said product life cycles in many industries are shrinking and have been cut



RESEARCH IN ACTION

1980

2010

- Core of most jobs not yet invented ↔ Career long use of engineering base
- May work for or start 20 companies ↔ May work for 2-3 companies
- Entrepreneurship tied to everything ↔ MBA degree helps get into management
- Global impact on every role ↔ International assignments for senior leaders
- Opportunity developed by the graduate ↔ Opportunity comes from employer

back to about 1/6 of what was common 25 years ago, which has spurred concepts such as open innovation. Skill sets require more upkeep and investments are harvested more quickly. This quick “turnover” rate has to be effectively managed.

Given the global, digital and accelerating worlds of the 21st century, Leman said countries and companies must be proactive in creating cultures conducive to innovation.

“Countries must be innovation-friendly,” he said. “They must have access to capital at the speed of the market and have assurance that reward is retained. Failure must be accepted as a good teacher. Companies must be agile and eager in keeping up with the pace of reinvention, which is always increasing. They need to be creative in alliances and R&D while staying outwardly aware.”

As a professor, Leman looks at the implications of education on the innovation process. He uses comparative measures of past

versus present conditions for college graduates to

determine the best approach for establishing innovative mindsets.

Starting the innovation process through education in the classroom, Leman incorporates three interdependent competencies into his curriculum for developing future leaders in innovation: business, technology and a global outlook.

“Successful investing and innovation depend on lifelong use of these ‘new basic skills’,” he said. “What I am trying to do is take what I learned in developing innovation skills and atmosphere in industry and create an educational program that allows our students to have the skills to lead innovation, and to understand how to create company culture that will foster growth. For innovation to be truly successful, it must be sustainable.”