



# Promoting Effective Teaching and Learning through an Educational Innovation Collaborative

After establishing the goal and vision for the EIC, a faculty needs assessment survey was conducted to determine the services that would be utilized by LTU faculty. The needs assessment identified the need for seminars/workshops, incentive grants for innovation, reference materials, and collaborative opportunities. The EIC has addressed all of these topics through a three year grant (2003 – 2006) from the Kern Family Foundation. The grant provides funding for educational **workshops and seminars**, establishment of a **resource center**, administrative support, and **faculty development grants**. Finally, the EIC participates in new faculty orientation each year to assist new faculty.

## Workshops and Seminars

Total annual attendance at EIC events exceeds 200 with over 100 individual faculty and adjunct faculty participating in one or more of the events. A chronological sample of events is as follows:

- Lecture - “Applying the Science of Learning at Lawrence Tech” – Milton Hakel, Bowling Green State University, November 3<sup>rd</sup>, 2003 (attendance – 70 people).
- Workshop – “Writing Learning Objectives for Course and Curriculum Improvement” - Donald Carpenter, Lawrence Tech University, January 8<sup>th</sup>, 2004 (attendance – 36 people)
- Workshop – “Cooperative Learning”, Pamela Lowry, Lawrence Tech University, January 8<sup>th</sup>, 2004 (attendance – 36 people)
- Workshop – “Learning Styles and Their Implications for Teaching”, Cynthia Finelli, University of Michigan, January 8<sup>th</sup>, 2004 (attendance – 39 people)
- Lecture – “Conducting Educational Research at Lawrence Technological University”, Donald Carpenter, Lawrence Tech University, April 9<sup>th</sup>, 2004 (attendance – 15 people)
- Workshop – “How to Teach Creativity and Innovation in Technical and Professional Programs” Edward Lumsdaine, Michigan Tech University and Monika Lumsdaine, E&M Lumsdaine Inc., May 13<sup>th</sup>, 2004 (attendance – 28 people)
- Lecture – “Developing Leaders: From Annapolis to Southfield”, Col Arthur Athens, United States Naval Academy, September 14<sup>th</sup>, 2004 (attendance – 60 people)
- Workshop – “The Art and Technology of Teaching”, Mike Jacobs and Robert Herrick, Purdue University, April 8<sup>th</sup>, 2005 (attendance – 50 people)



L to R: Charles M. Chambers, President of LTU; Milton Hakel, Distinguished Faculty and Psychologist, BGSU; and Donald Carpenter, Chair of the EIC.

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**Abstract:** The Educational Innovation Collaborative (EIC) at Lawrence Technological University (LTU) is a University wide initiative to promote instructional innovation, effective teaching practices, and improved student learning through faculty development and support. The EIC is a committee of faculty members representing each college at LTU along with ex-officio members from the Office or the Provost. The presenter is the Chair of the Collaborative. The EIC was formed in the spring of 2003 in response to the University Strategic Plan, which called for the establishment of “an Educational Innovation Collaborative (EIC) with membership from each College to support innovative curricula, interdisciplinary programs, and learning methodologies.”



**Goal:** The goal of the EIC is to promote educational excellence and innovation at Lawrence Technological University through faculty development and support.

In support of the Goal, the published objectives of the Educational Innovation Collaborative are to:

- Create a platform for the advancement of best practices and adoption of innovation;
- Organize best practices sessions on teaching and learning;
- Facilitate the creation of collective knowledge in effective teaching;
- Engage faculty members intellectually and offer opportunities to be active stakeholders in their profession;
- Engage faculty members in alternative learning methodologies to enhance teaching and learning;
- Organize workshops on effective educational strategies, for example developing learning objectives, active learning techniques, etc.;
- Provide service, support, and advice on teaching for full-time and adjunct faculty in need of improvement;
- Maintain a library of educational materials using various media;
- Work with faculty and the Office of University Advancement on academic grant proposals to provide additional funding for EIC activities

**Vision:** To improve educational excellence and innovation at Lawrence Technological University.



## Faculty Development Grants

The EIC awards four \$2500 faculty course and curriculum development grants annually. This is a competitive process with grant proposals undergoing a peer review process. The grants are meant to be an incentive for faculty to adapt current courses or create new courses to improve the education of engineering students. Any costs associated with the course development (videos, books, equipment, etc) is paid by University and/or Departmental funds. Under the conditions of the funding, the courses are not required to be offered in Engineering, but must address engineering education and affect a significant number of engineering students.

## Resource Center

The EIC established an instructor reserve section in the main library that currently consists of more than 30 volumes. A review of circulation indicates a majority of items have been checked out at least once and that multiple faculty have utilized the resources. In addition, several random winners from workshop attendees were given copies of McKeachie’s “Teaching Tips” and Lumsdaine’s “How to Teach Creativity and Innovation.” Examples of book found in the instructor reserve section:

- Writing Instructional Objectives for Teaching and Assessment – 7<sup>th</sup> edition (2004) by Norman Gronlund
- Teaching Tips – 11<sup>th</sup> Edition (2002) by Wilber McKeachie
- Successful College Teaching – Problem Solving Strategies of Distinguished Professors (1998) by Sharon Baiocco and Jamie DeWaters
- Tools for Teaching (2001) by Barbara Davis
- Making the Most of College – Students Speak Their Minds (2001) by Richard Light
- Keep on Moving! Entrepreneurial Creativity and Effect Problem Solving (2003) by Edward Lumsdaine and Martin Binks
- New Faculty – A Practical Guide for Academic Beginners (2002) by Christopher J. Lucas and John W. Murry, Jr.
- Advice for New Faculty Members – Nihil Nimus (2000) by Robert Boice
- What the Best College Teachers Do (2004) by Ken Bain
- Creating Significant Learning Experiences (2003) by L. Dee Fink
- How People Learn – Brain, Mind, Experience, and School (2000) by National Research Council



Lawrence Tech is a private non-profit university located on 120 acres in Southfield, MI. The University has approximately 400 students and prides itself on being a private university with a public purpose. The University is a comprehensive institution with four colleges (Architecture & Design, Arts & Sciences, Engineering, and Management) and a motto of “Theory and Practice.”