

CTE NOTEBOOK

**Volume 11
Issue 2
Winter 2008**

"Integrative Learning"

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Reinert CTE Mission Statement

The mission of the Paul C. Reinert, S.J. Center for Teaching Excellence is to support Saint Louis University faculty and graduate students so that they can better serve the intellectual, spiritual, and social needs of all learners.

The Reinert Center for Teaching Excellence

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This issue of the CTE Notebook focuses on the idea of integrative learning, that is, learning from diverse perspectives. We invited faculty from a variety of departments around campus to share their thoughts on the subject, what they consider to be integrative learning, how they implement it in the classroom, and what have been its successes and shortcomings.

The whole ESL program is an example of integrative learning. We call it sustained content-based learning with a service learning component included in the last level.

Each level of ESL consists of 22 hours of class where the reading, writing, grammar, pronunciation and labs are linked to a core content class. This means that the students are learning language skills appropriate for their level while studying a semester-long topic. There is a lot of scaffolding involved for the lower levels. In addition, the teachers need to work as teams in order to link with each other and the content teacher.

The service-learning component is our way of integrating with SLU's 5-point mission. This is in place of traditional field trips. The students reflect on their experiences in writing as part of their course content.

- Diana F. Pascoe-Chávez, Modern and Classical Languages

One of the best examples of integrative learning in our school takes place in the Contemporary Adult Spirituality Program.

For example: The Spirituality: Ethics and Leadership class is team taught. One professor introduces the concepts of honorable and ethical leadership, then the other professor facilitates a webquest dealing with a current ethical issue. The students then analyze the issue from the facts gathered and from a leadership stance in order to make recommendations for resolution. Thus, integrating their understanding of ethical concepts with leadership theory.

-Mary Rose Grant, Adult Credit Program

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From the Director

One of the challenges students face in learning something new is how to connect what they are learning in courses from diverse disciplines and how to integrate new knowledge and skills with what they already know. The challenge for the faculty member is how best to help students make these connections. This issue of the Notebook focuses on integrated teaching and learning and offers strategies for faculty members to assist students in making connections. The issue is an outgrowth of workshops on integrated teaching that Dr. Elizabeth Fathman (Sociology and Criminal Justice) and Dr. Beth Hill (Reinert Center for Teaching Excellence) have led during the summer and the current semester.

As this fall semester draws to a close and you begin planning for the holiday break, I want to alert you to two programs that will be occurring in early January. On January 8, the Center for Teaching Excellence and the Division of Research and Innovation will co-sponsor a program on “Incorporating Teaching & Research throughout the Academic Life Cycle.” Details and registration information are available at <http://itr.slu.edu>. On Thursday, November 15, Neil Fleming, creator of the VARK learning styles inventory will return to campus to present two workshops. The Center for Teaching Excellence will sponsor a workshop on “VARK and Learning Styles” from 2:30 – 4:30, and the School of Professional Studies will sponsor a second workshop in the early evening. Watch Newslink or contact the Center for Teaching Excellence (977-3944) for further details on these programs.

May you have a relaxing holiday break. The Center staff looks forward to serving you in the New Year.

--SAVE THE DATE--

**Incorporating Teaching & Research
Throughout the Academic Life Cycle**

January 8, 2009

8:30 - 2:30

Additional details available soon at:

<http://itr.slu.edu>

Sponsored by:

Division of Research & Innovation
Reinert Center for Teaching Excellence

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A central goal of my course in cross-cultural psychology is to foster the use of "diverse and even contradictory points of view and [the contextual] understanding of issues and positions." (adapted from Wiki website, http://en.wikipedia.org/wiki/Integrative_learning). We study psychological theories that focus on context and then we apply those theories to the study of intelligence, perception, personality, interpersonal relationships, etc as those issues are expressed in different cultural settings. For example, the meaning of intelligence is extremely variable. Few of us could pass an intelligence test that involved hunting a caribou, skinning it, and making clothing from the hide. An example of different points of view is that persons from individualistic cultures have difficulty understanding why someone from a collectivist culture would choose to have an arranged marriage. I strive to make behaviors like this more understandable from the collectivist perspective.

-Judith Gibbons, Psychology & International Studies

I am approaching integrative learning in two main ways this semester. In my Anthropological Theories course I am using concept maps to teach students about the connections between different anthropological and other social science theories, and I have the students create their own concept maps of the theories we have discussed in class. Concept maps are an excellent tool for thinking about and diagramming connections among various concepts and integrating them into a single "map." They are visually non-linear, and they work on the principle that people learn best by relating new information to that which they already know (which is itself pretty non-linear). The other tool I am using in my classes is the wiki. I set up a wiki for each of my classes, where I post class outlines and other related

materials, and then direct students to "fill in the blanks." Wikis are web-based platforms, and student can access them in class, adding notes in real time as the class activity is happening. The notes are live and sharable with all the other students in the class, who can themselves go back and change them update them, correct them, enhance them, integrating their own understanding of the material with those of their classmates. As the instructor, I also review the students' notes to make sure nothing outrageous or incorrect makes it into the record. Students have responded positively to both these approaches, and I plan to continue using them in future semesters.

-Elizabeth Fathman, Anthropology

BSDP-572 Communicable Diseases and Infection Control is designed to teach the fundamentals of infectious diseases and strategies to control infectious disease outbreaks. In order to assess student learning, I have developed assignments that are problem-based rather than traditional regurgitation of information. This requires the students to integrate materials across subjects and apply the information to real world situations. For example, one assignment is to conduct an epidemiological investigation using information provided to the students. Course materials from a variety of topics (laboratory testing, immunology, human behavior, surveillance, outbreak investigation, etc) must be integrated and applied in one assignment. Students are encouraged to discuss the outbreak information amongst themselves, as they would in a work setting. I have found that this assignment assesses the students' knowledge and application of the material much better than a traditional test or essay questions.

-Terri Rebmann, School of Public Health

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Jim Korn Scholarship of Teaching and Learning Award

In 2006 the CTE established the James H. Korn Award for the Scholarship of Teaching and Learning in recognition of Psychology Professor Emeritus Jim Korn's contribution to research on teaching and learning. The intent of this award is to promote faculty inquiry and scholarly research on teaching and learning. Nominees must be full-time SLU faculty members (within a team of individuals, one member must be a full-time SLU faculty member). Nominees have conducted research on teaching and student learning and published or presented the results of their research.

The 2008 recipients of the Jim Korn Scholarship of Teaching and Learning Award are Mary Rose Grant, PhD, School of Professional Studies, and Drs. Michael Goldwasser and David Letscher from the Department of Mathematics and Computer Science.

Drs. Goldwasser and Letscher redesigned the introductory computer science course incorporating object-oriented programming (OOP) at the beginning of the course, which affords students the opportunity to write more sophisticated and graphic programs. Their collaboration has resulted in four published articles that describe their course design.

Dr. Grant began the Distance Learning Program at the School of Professional Studies in 2001. From her extensive qualitative and quantitative research on adult-centered online learning environments and best online teaching practices, Dr. Grant has developed an online teaching certification for faculty who teach online. Dr. Grant has published her results and presented her findings at many conferences.



Photo, from left to right: Mary Rose Grant, PhD, School of Professional Studies; Jim Korn, PhD, emeritus professor of Psychology and CTE board member; Michael Goldwasser, PhD, and David Letscher, PhD, Mathematics and Computer Science

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I teach a freshman inquiry course, Math 124 (designed by my departmental colleagues Anneke Bart and Bryan Claire), that is expressly designed to cross boundaries: Mathematics and the Art of M. C. Escher. The point of the course (at least, as I see it) is to explore both how art is formed and informed by mathematics and how art illustrates and makes clear mathematical concepts. Among other tasks, the students are required to produce a piece of Escher-like art (tessellation of the plane in some specific geometric pattern, using recognizable figures) with a report that details how the artistic vision influenced the choice of geometry that forms the picture, and how the geometry influenced the art.

The main text for this course is an on-line wiki: http://math.slu.edu/escher/index.php/Main_Page.

-Steven Harris, Math and Computer Science

Integral learning is something I do in some way in almost every ethics course I teach. Most Christian ethicists today draw upon a variety of sources in order to answer complex moral questions. When students are asked to do the same, they learn good ethical method and come to see connections between theology and other disciplines. In Faith and Politics class, this means reading both political science and theology. In Sexual Ethics, we draw upon psychology and women's studies as well as Christian scripture and tradition. In Christian Moral Life, we bring short stories and novels into conversation with readings on Christian norms and virtues. An integrated approach sets up better ethical arguments and gives students a sense of how all of their coursework can contribute to thinking about what it means to live a good life.

-Julie Hanlon Rubio, Theological Studies

Theodosius Dobzhansky, a pioneer in evolutionary biology once said that "Nothing in biology makes sense except in the light of evolution". This has served as a cornerstone for the teaching and learning of biology. However, can evolutionary theory serve to integrate disciplines outside the realm of biology? That is the question that I have posed to my students in my Evolutionary Biology course this semester. There are an ever increasing list of connections between evolution and disciplines such as economics, linguistics, religion, forensics, artificial intelligence, software design, public policy, etc. I am asking students to delve into such connections and discuss how these disciplines interact for their final project for this course. Each student will write a paper synthesizing this interaction as well as a short presentation in class.

-Shawn Nordell, Biology

I am currently working an intensive ESL program. We are attempting a sustained content-based program. The core content course is like a freshman seminar, but there is a service-learning component. The other classes are skills-based.

The most difficult thing about attempting this type of teaching is the communication between teachers. We have several sections of each class, and we are trying to have consistency in instruction. Also, we have to communicate between content teachers and skills teachers.

Reflection is key for instructors because this is a constant learning process. As an ESL teacher, I am not a content expert. In order to integrate content with skills I have to constantly think about how to link the two areas. Also, I have to think about the connections I want the students to make with the text books they read, the projects they participate in, the movies they watch, and our class discussions. It is a juggling act, at times, or maybe a whole circus act since we are trying to get everyone involved.

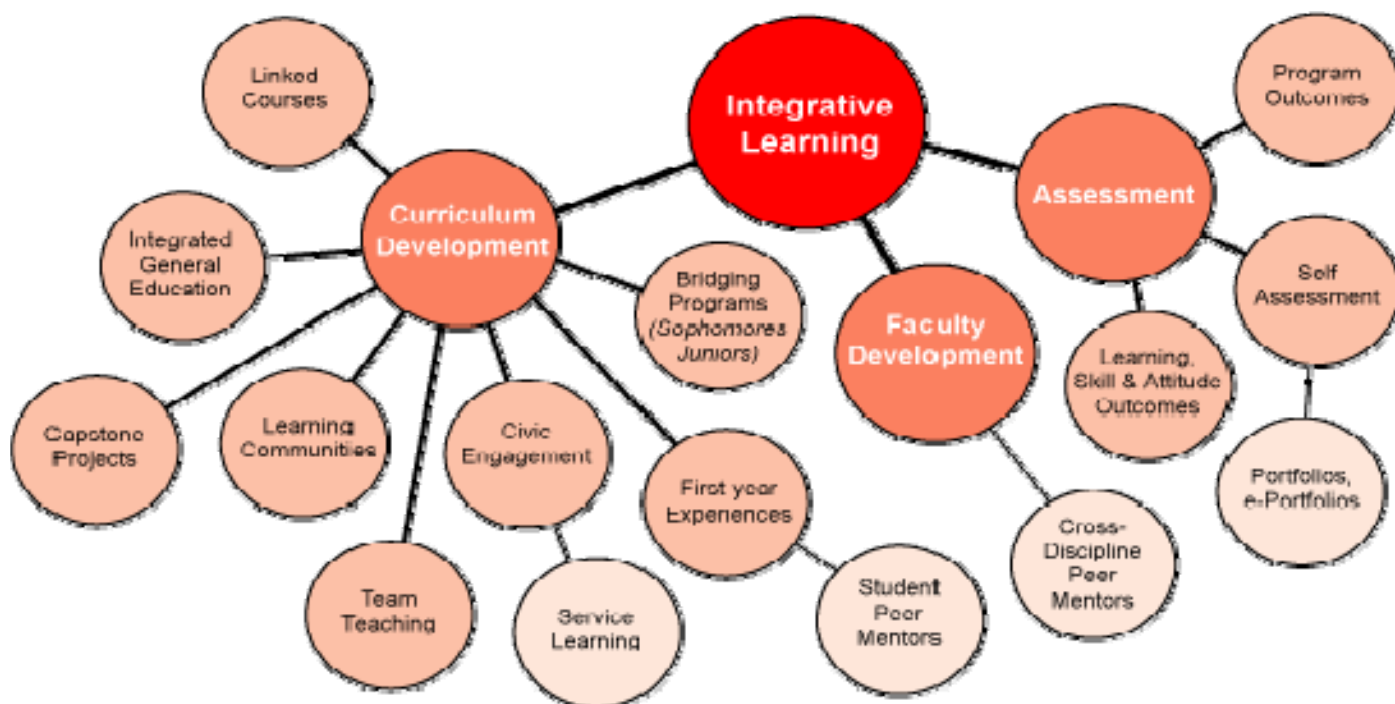
-Lauren Rea, English as a Second Language

Defining and Implementing Integrative Learning

Beth Hill, Ph.D, Reinert Center for Teaching Excellence

In putting together this edition of the CTE notebook and asking SLU faculty members to share their integrated learning strategies, an interesting comment came across the email: “I am bothered by the creation of a new “in” term for something that good teachers have always done.” The phrase integrative learning has been around since 1986 thanks to Jerry Perez de Tagle (<http://en.wikipedia.org/wiki/>), but I will defer to the contributor that the term may very well be a new academic buzz word. Much like a “hybrid” car and an “electric” car; essentially the same but the hybrid is easier to sell than electric. The more intriguing point for me was the contributor’s notion that all good teachers have always done integrative learning. Do all good teachers use integrative learning strategies? What is integrative learning?

The verb to integrate means “to bring together or incorporate (parts) into a whole” so says Random House Webster’s Unabridged Dictionary (1998). Yet when speaking of education, what parts are we integrating for the purposes of learning?



(From concepts presented in: Huber, M. T., Hutchings, P., & Gale, R. (2005). Integrative Learning for Liberal Education. Peer Review, Summer / Fall.)

Previously when I talked about integrative learning, I thought about a process that was more aligned to interdisciplinary teaching which is part of integrative learning. However, as you can see from the concept map above, integrative learning is more than curriculum development. Integrative learning is an ongoing conversation between curriculum development, faculty development and assessment. Operationally defined, a teacher using integrative learning would be someone who developed and taught their classes using a mosaic of teaching strategies. They would review their course assessments at the end of their semester as well as reflecting on their own teaching style. Along with their course and self assessments, they would also be aware of their departmental program assessment outcomes. Throughout the school year, the teacher would routinely interact with peers in other disciplines for value added faculty

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development. This teacher may not always be effective in the eyes of the students or department chairs, but they routinely reflect on the major components of integrative learning, regularly asking the question: Based on my departmental program, course and self assessments, are changes needed in my curriculum and, if so, am I willing and able to seek faculty development to enrich my educational perceptions and teaching pedagogies?

USING VARK AND LEARNING STYLES

NEIL FLEMING, CREATOR OF VARK

THURSDAY, JANUARY 15

2:30 – 4:30

KNIGHTS ROOM, PIUS LIBRARY

What is VARK?

(VARK-- Visual, Aural, Read/write and Kinesthetic)

VARK is a questionnaire that provides users with a profile of their learning preferences.

These preferences influence the way we learn and teach.

LIGHT REFRESHMENTS WILL BE SERVED

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THE REINERT CENTER FOR TEACHING EXCELLENCE

Information to Pass On to Graduate Students

Balancing Life, Love, and Graduate School

Come to a panel discussion that focuses on how to balance your coursework, teaching, and research responsibilities with your personal life.

Shelley Minteer, Ph.D.
Chemistry

Doug Pettinelli, Ph.D.
Counseling and Family Therapy

Brian Till, Ph.D.
Marketing

**Please join us for a beneficial discussion with
hot chocolate and cookies!**

December 4 @ 2:00—3:30 pm

Busch Student Center Room 251A

RSVP @ cte@slu.edu or 977-3944

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