

***Florida Community College:  
Serving the First Coast through  
Educational and Technology Leadership***

***Robert J. (Rob) Rennie, Ph.D.***  
*Vice President, Technology & CIO*

AFCEA  
September 18, 2007



# About Florida Community College

- 10th largest U.S. Community College
- 5th largest U.S. degree granter
- 4th in A.S. Degrees
- 4th in Nursing Graduates
- Florida's 2nd largest College

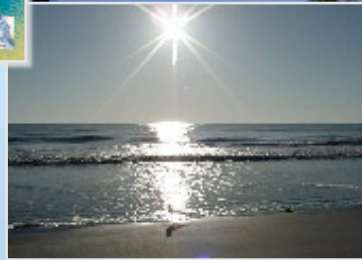
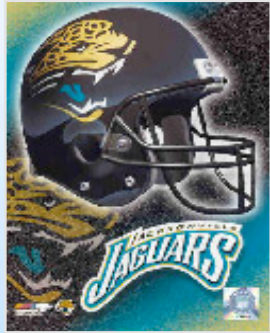


# Jacksonville

- Metro area of 1.2 million
- Largest geographic U.S. city
- Median age 35 (youngest FL city)
- Money Magazine 10 Best Places to Live and #1
- Hottest City for Business Expansion



# Broad Organizational Scope



Local



Global



National





Urban



Military



Suburban



Virtual



Rural



# College Goals

- Prepare students for distinctive success in the Global Information Age
- Optimize Access to & Participation in College Programs
- Elevate Customer Service to a Level Unsurpassed in Higher Education
- Respond Quickly & Effectively to the Human Resources Needs of Employers
- Enhance Institutional Performance & Accountability



# Our *REAL* Mission: *Culture Change*



EDUCATION IS O.K., I GUESS - BUT  
REMEMBER THE OLD  
SAYING



"IGNORANCE  
IS THE  
MOTHER OF  
ADVENTURE"



# Liberal Arts



# Fine Arts



# Business Programs



# **Bachelor's of Applied Science Degree**

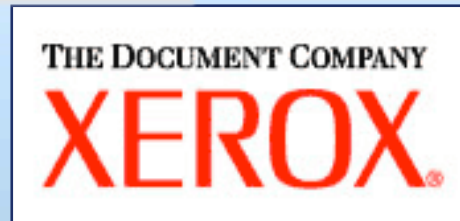


# Career Programs and Workforce Development

- Most career programs in Florida
- Fastest program development rate in Florida
- Broadest technology curriculum in Florida



# Technology



# Fire Academy



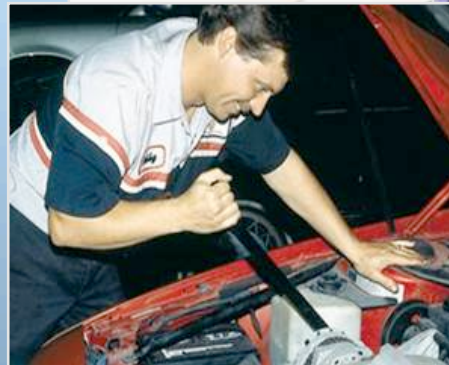
# Aviation Center



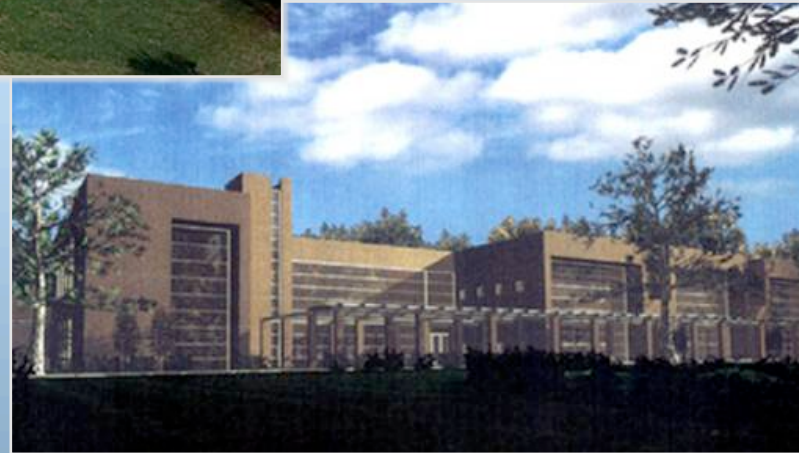
# Criminal Justice Center



# Polytechnic Academy



# Advanced Technology Center



# Information Technology



# Advanced Manufacturing

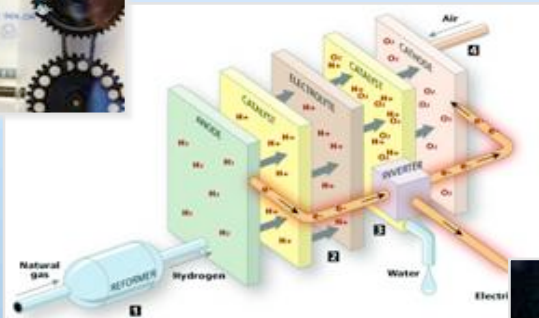


**SIEMENS**

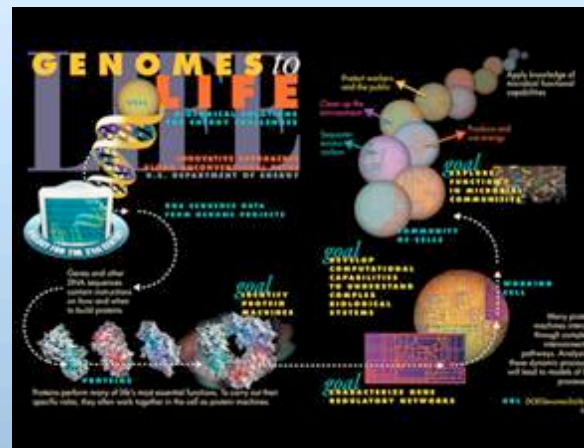
Global network of innovation



# Automotive Technology



# Bioinformatics



# Open Campus



# Institutes & Academies

- Military Education Institute
- Florida Security Institute
- Florida Construction Institute
- Technology Institute of the South
- Institute for Teacher Preparation and Development
- Institute for Staff and Organizational Development
- Culinary Institute of the South



# Institutes & Academies

- Institute for Financial Studies
- Legal Studies Institute
- Institute for Occupational Safety and Health
- International Academy for Scholarship and Learning Technology
- Creativity & Innovation Institute
- Institute for English Language Instruction
- Institute for LEAN Thinking



# Technology at FCCJ



**“Technology Leadership and  
Innovation are Critical  
to our Success.”**

*Dr. Steve Wallace  
College President*



# Vision

**Florida Community College will be viewed as a technological leader providing superior access to the resources of scholarship and career preparation through the application of advanced technologies.**



# Focus

- Environment for Digital Natives
- First Class Academic Computing
  - Faculty Computing
  - Student Computing
  - Academic Resources
  - Ubiquity
- Flexible and Agile Delivery Models
- Technology as a Value Creation Engine



# CIO's Charge Statement

The Technology Team at Florida Community College will **pursue every technological advancement of promise for the improvement of the educational process**, engage in continuous improvement of service quality, and conduct business in an academically-focused manner.



# Staff & Organization

- Non-traditional model
- Hire for pure intellectual horsepower
- Strong professional network orientation
- Highly risk tolerant - 'Go Big or Go Home'
- Value creativity & problem solving
- Entertainment product development model
- Strong R&D & early adoption commitment
- Extremely high expectations



# Technology Evolution: Maturity Stages

DIMENSION	PALEO	MESO	NEO
IT Role	Support transactions and keep records	Support processes and integrate functions/ organizational alignment	<b>Create value, new products, new business</b>
Enablement of Organization	Volume, speed of work	Integration	<b>Differentiation/ Competitive advantage</b>
Managements Focus	Functional capability	Cost containment	<b>Value creation</b>
Processing/ Capability	One size fits all	<b>Scalable</b>	Utility (on demand)
Storage	Specific	<b>Share/Partitioned</b>	Virtualized
Hiring Profile (Developers)	Specific skill (project type/ toolset based)	Skill breadth & depth (Tech Environment Based)	<b>Raw intellectual horsepower</b>

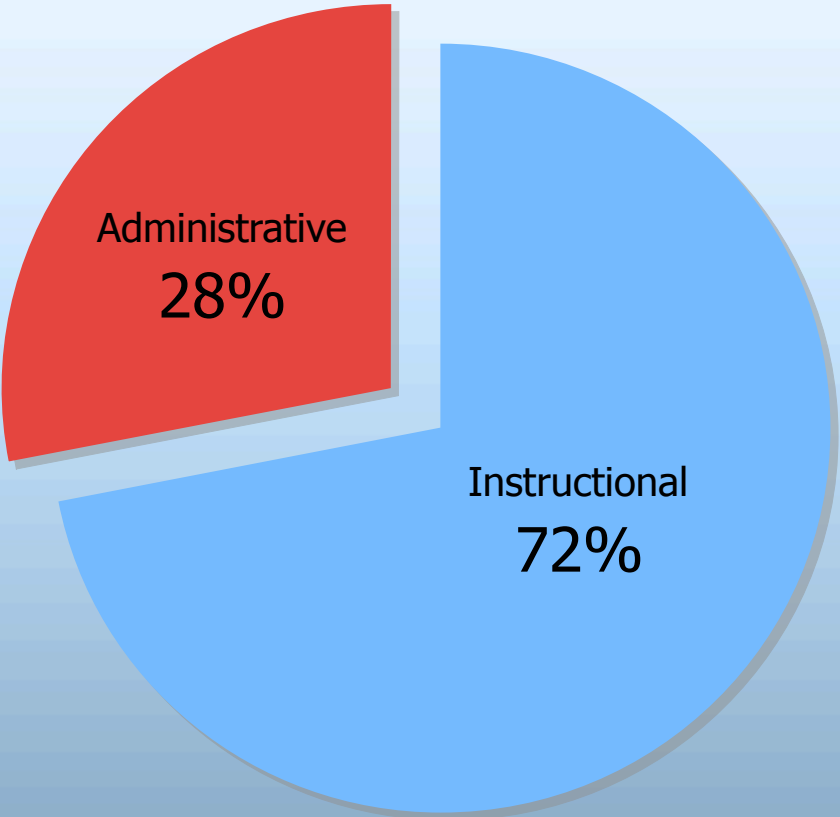


# Technology Evolution: Maturity Stages

DIMENSION	PALEO	MESO	NEO
Development Environment	Factory	<b>Boutique</b>	Independent professionals
Org Expectations of IT Staff Employment	<b>Hire &amp; keep</b>	As long as we want them	Free agency
Access	People go to where access is (Constrained)	Access goes to where people are (Ubiquitous)	<b>Access everywhere (Pervasive)</b>
Access Mode	Limited wire	Plentiful wire	<b>Wireless</b>
Small Apps	Custom	Off-shelf	<b>Commodity</b>
Big Apps Source	Custom	Homogeneous packages	<b>Best of breed mix</b>
App Integration State	Poorly Integrated (if at all)	Integrated (forced fit)	<b>Seamless integration (SOA)</b>

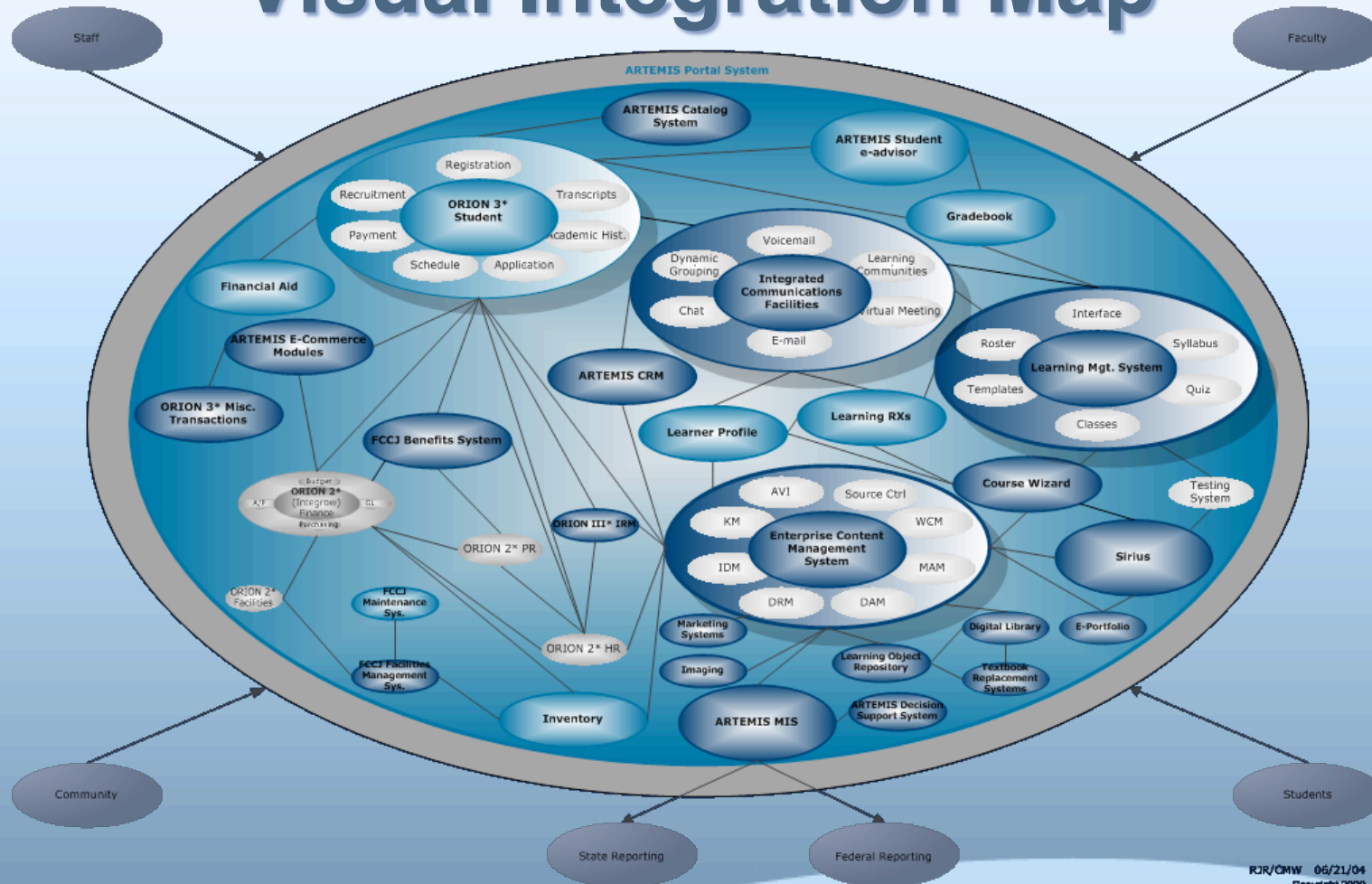


# Fiscal Resources





# Technology Architecture: Visual Integration Map



# Smart Classrooms & Faculty Technology



# Academic Technology

- 325+ Smart Classrooms
- Approximately 9,000 Student Computers
- Free Email for Students & Staff
- Free Web Storage for Students
- Free and Open Access to all Labs
- 100% Wireless network coverage
- 100% Portal-based Services
- E-learning & Learning Management Systems



# Enterprise Computing Environment (Hardware)

- Sun Enterprise Servers
- IBM & EMC Storage Area Networks
- CISCO Network Equipment
- Apple, Dell, & Sun Application Servers & Storage (325)
- Central Management Platform
- Located at College Data Center (Deerwood)
- Workstations - College-wide (7600)



# Enterprise Computing Environment (Systems Software)

- Sun Solaris Operating Systems
- ADABAS, Oracle, & SQL Databases
- Software AG Web Methods BPM & SOA Suite
- Natural, Java, and .Net Development Tools



# TV & Multi-Media

- Creation of Content on Various Platforms
- Full Television and AV Production Capability
- Comcast Channel 26 (Open Campus)
- iTunes University
- Streaming
- DVD & CD
- Podcasts

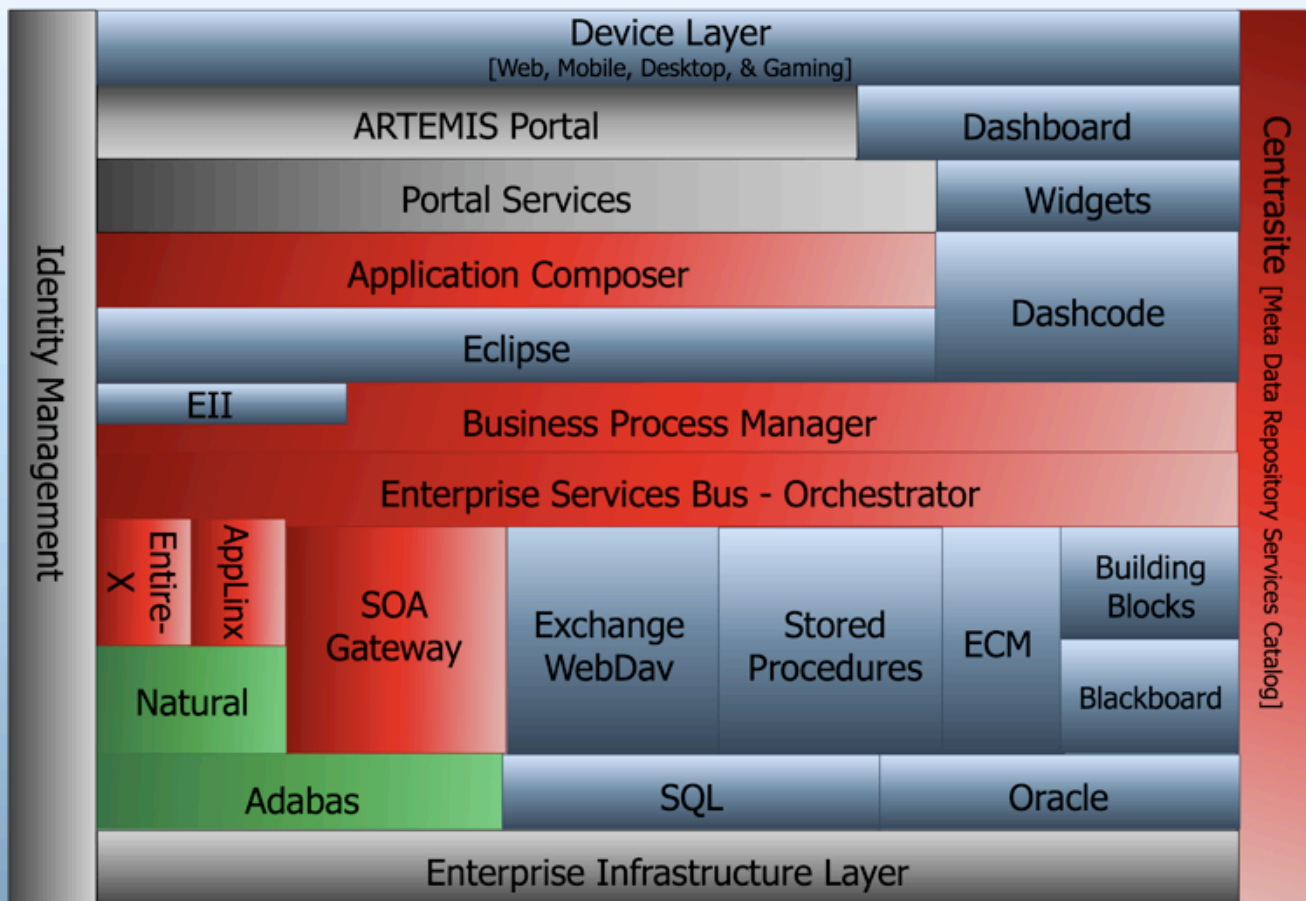


# Service Oriented Architecture (SOA)

- Standards and 'services' based model of systems development and deployment
- Business Process Management (BPM)
- Enterprise Service Bus Implementation
- Seamless Application Integration
- Extends life of systems



# Integrated SOA Architecture



# **IT as a *Value Creation Engine*: The Value Chains Concept**

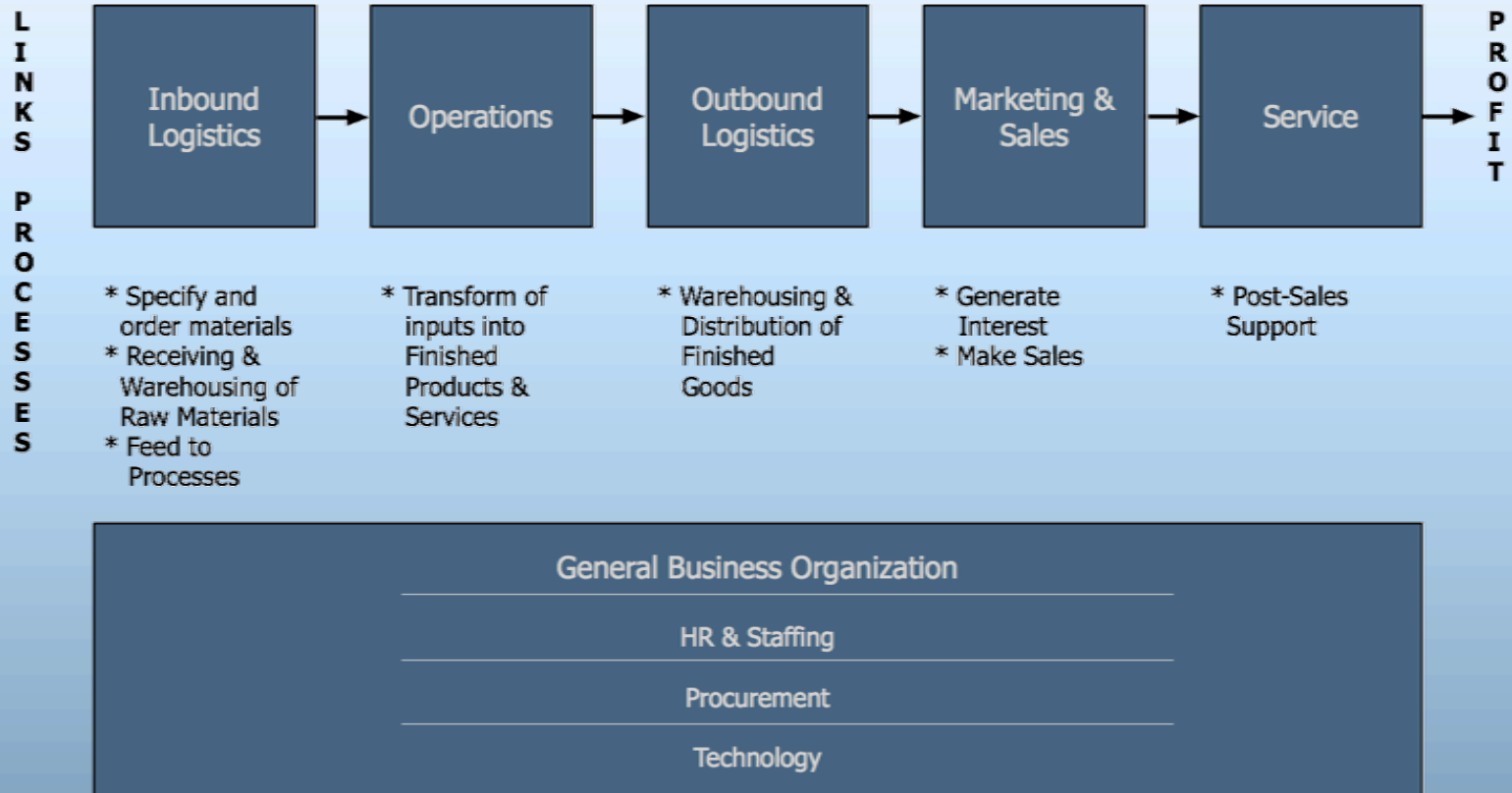


# Value Creation

- Technology as a Value Creation Engine
- Build EVA (Educational, Enablement, or Experience vs. pure Economic Value)
- Value Chain not unlike business

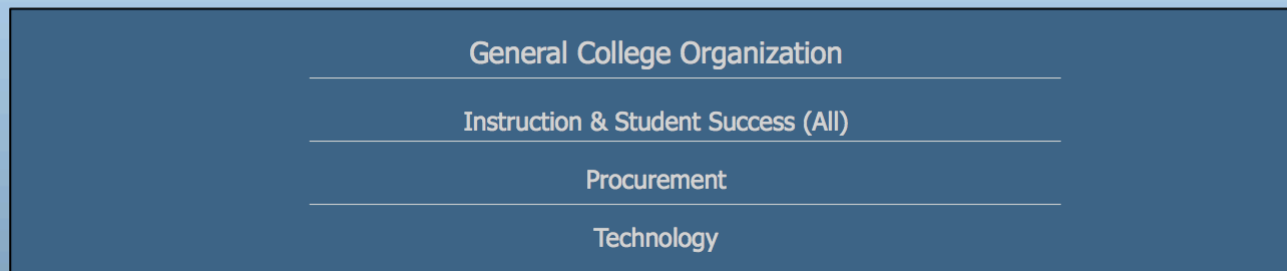
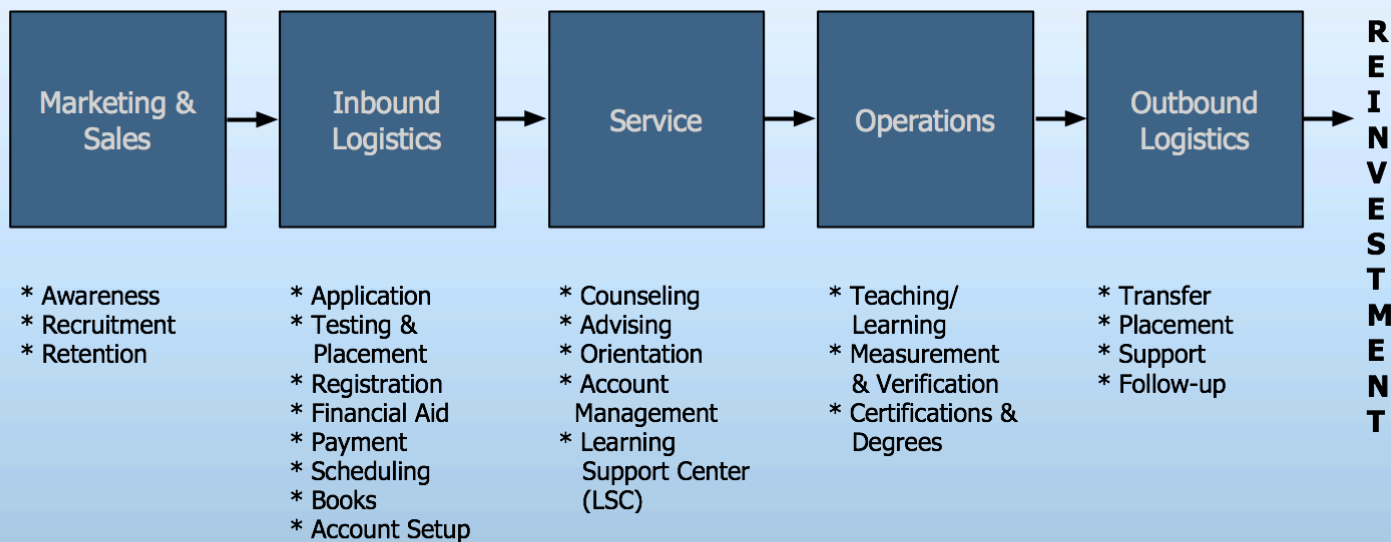


# Generic Industry Value Chain

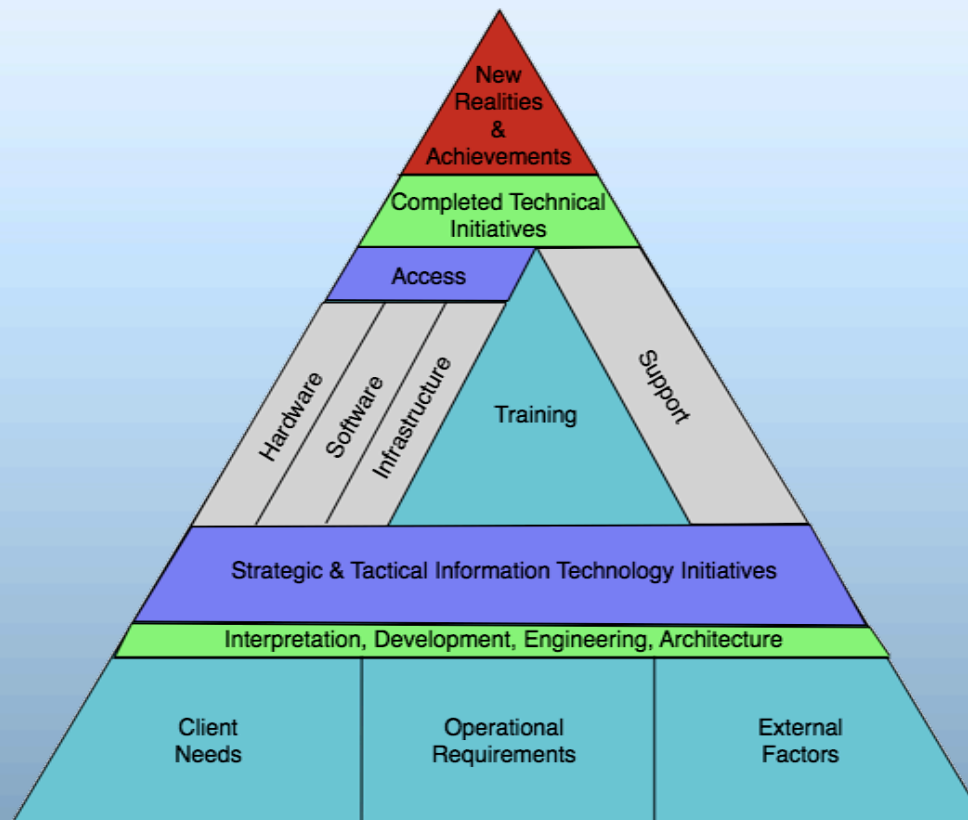


# Higher Ed Value Chain

L  
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S



# Technology Enablement Model



# Dr. Rob's top 10 Trends

- Experience as Brand
- Social Computing
- Content Creation & Management
- Content Distribution & Consumption
- Service Oriented Architecture (SOA)
- Web 2.0
- Mac's (& LINUX/UNIX) integration to Enterprise
- Federated ID Management
- Hybridization of Courses
- VR & Simulation



# Smart Markets & Space



# Smart Markets & Space vs. Share

- Smart markets have frequent turnover in the general stock of knowledge embodied in services, products, or processes. *The market knows how our business works, no secrets.*
- Market share is % of an industry's total business. Market space is the greater playing field of ever expanded and enriched services around the traditional offerings. *We own more of the consumer's total spend.*



# Smart Tech-Savvy Consumers & Competitors

- ***Digital Immigrants-*** Always have an accent in digital language, for example:
  - Print out email
  - Read the manual
  - Print documents to edit
  - Meeting in person to share
  - Asking if they got your email
- ***Digital Natives-*** No Accent, natural integration of technology in all aspects of life

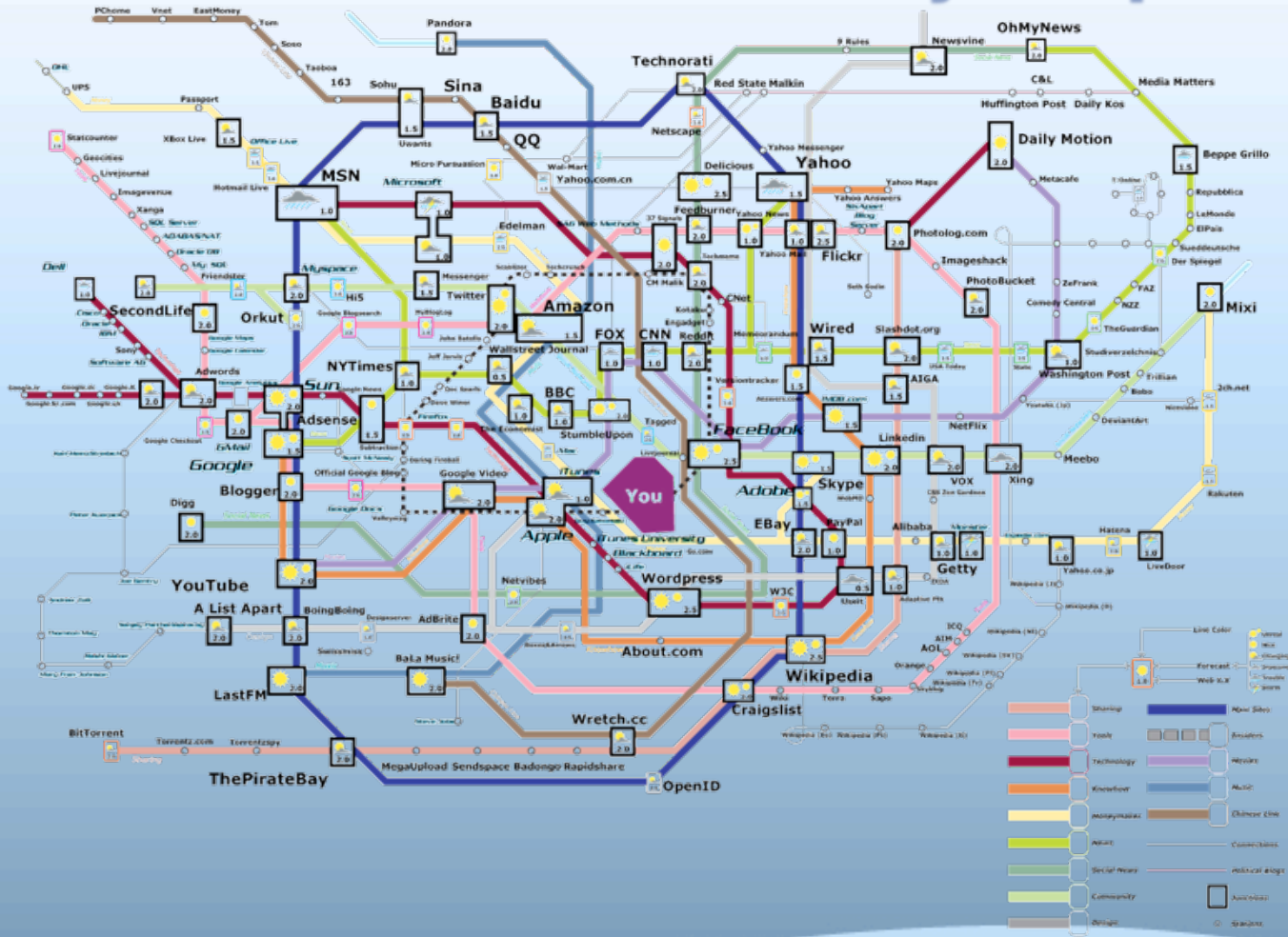


# Digital Natives

*“The pink button thing  
is the delete key.”*



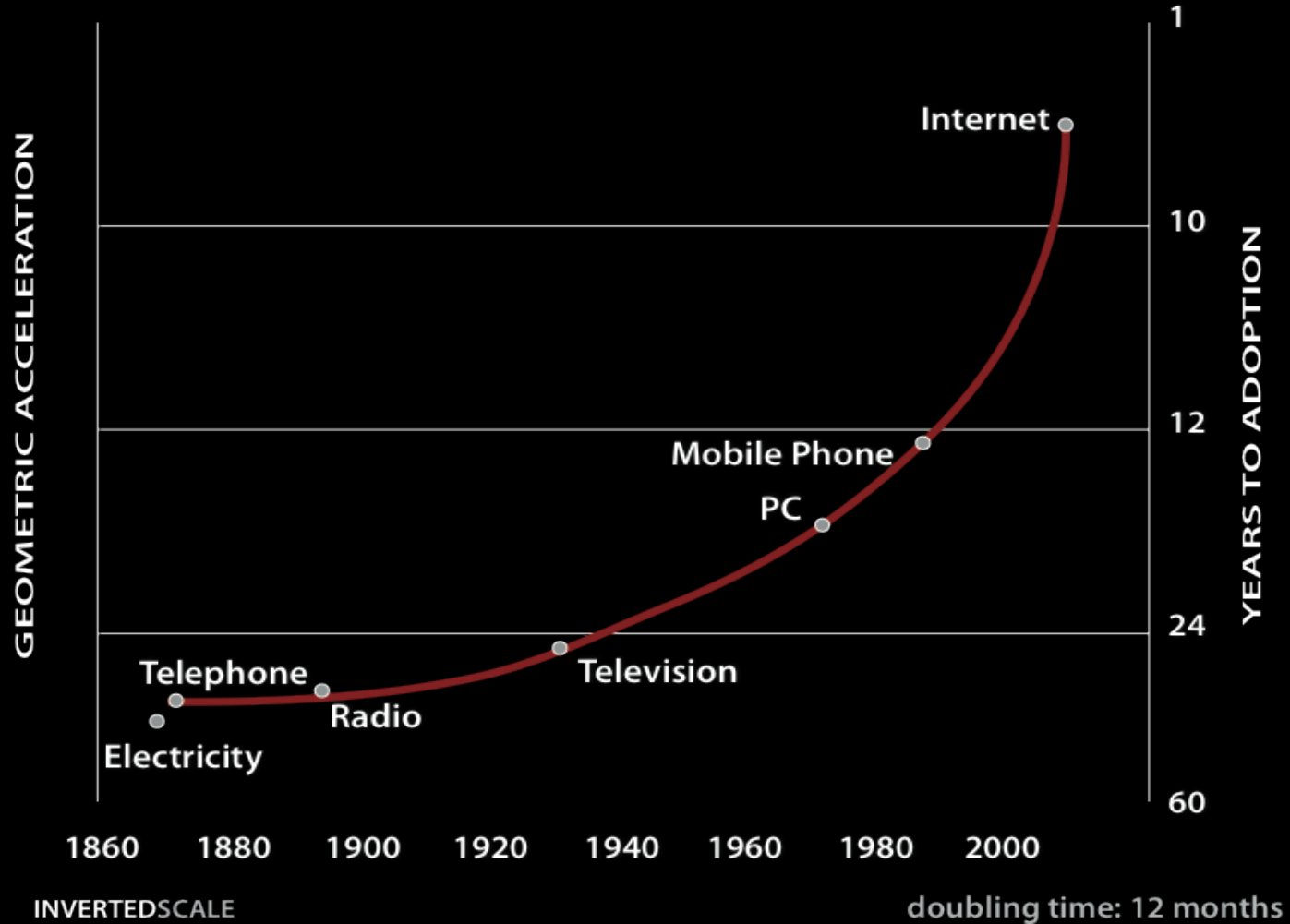
# Web Trends Subway Map



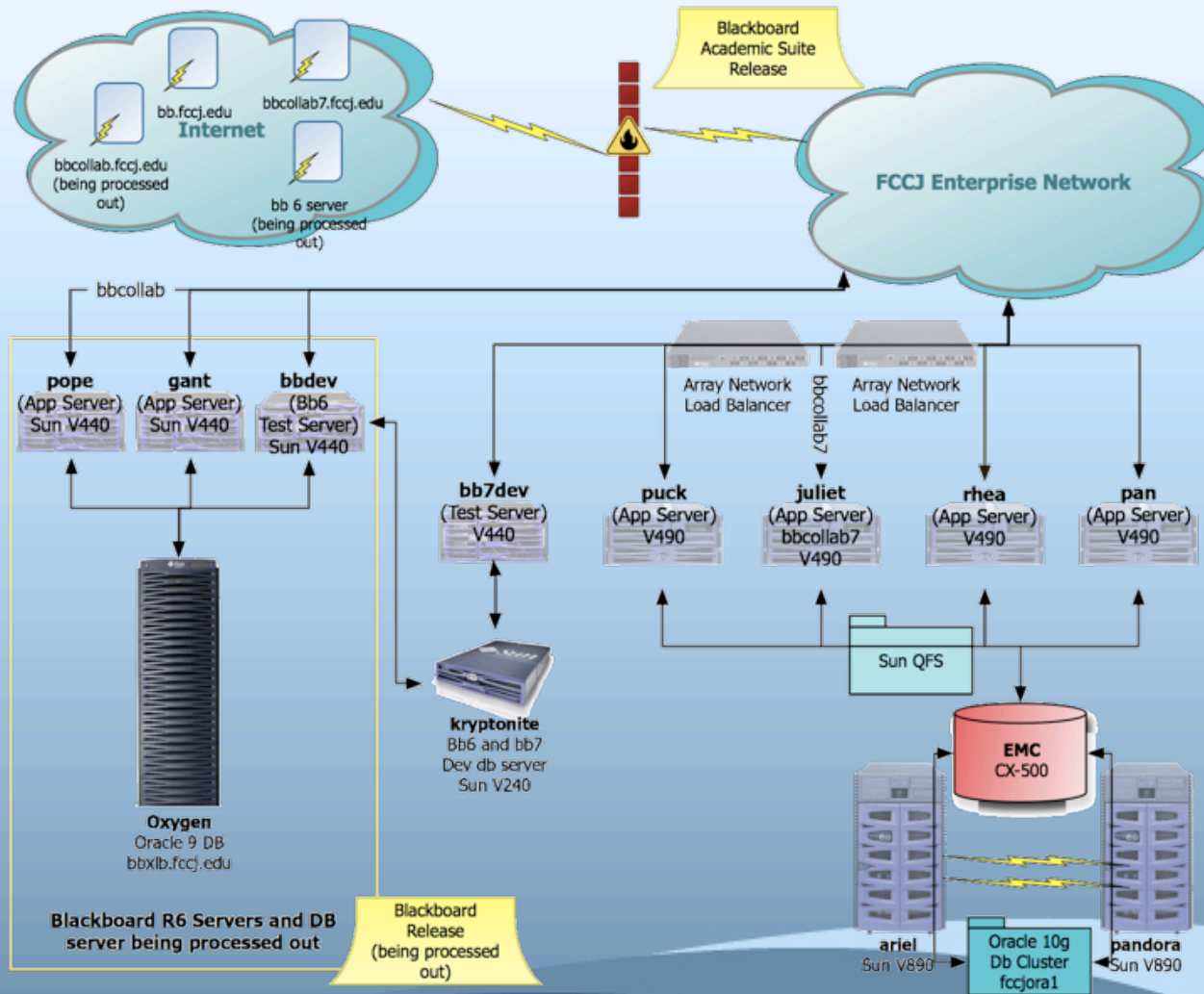


# Accelerating Pace of Change

VELOCITY: THE ACCELERATING PACE OF CHANGE



# Blackboard 7



## Announcements

## Course Information

## Course Documents

## Assignments

## Projects

## Communication

## Discussion Board

## Tools

## First Podcast

## Tools

- Communication
- Course Tools
- Course Map

- Control Panel
- Quick Unenroll

- Refresh
- Detail View

## SUMMER2007-CGS1100-MICRO APP BS/EC-253581 &gt; ANNOUNCEMENTS

VIEW TODAY

VIEW LAST 7 DAYS

VIEW LAST 30 DAYS

VIEW ALL

**August 23, 2007 - August 30, 2007**

**Fri, Aug 03, 2007 -- Class will Not meet on the August 10**

Class will Not meet on the August 10 but it will meet on August 17th.

Thanks

Rusty


**Sun, Feb 20, 2005 -- New Perspectives on Microsoft® Office 2003 First Course, Second Edition**  
 By Carey/Zimmerman/Shaffer/Adamski/Finnegan

Welcome to the course! As a student in this course, you will learn the most important topics of Microsoft Office 2003. No prior computer experience is assumed. You will first be presented with an overview of Windows XP and File Management. Once you are comfortable with the basics of computing and operation systems, you will briefly cover some e-mail basics and internet browsing skills. Next, you will learn the Office 2003 programs, including Word 2003, Excel 2003, Access 2003, and PowerPoint 2003. You will also learn how to integrate these applications, essential computer concepts, and how to create Web pages using each of these applications.


**Sun, Feb 20, 2005 -- SAM 2003**

Since 1998, Course Technologys award-winning **SAM** software has helped hundreds of thousands of instructors and learners master critical computer skills such as Microsoft Office, operating systems, the Internet and much more. Click [here](#) to login to **SAM 2003**.


**Sun, Feb 20, 2005 -- Student Online Companion**

Use the [Student Online Companion](#) to locate everything you need to accompany your textbook. Find student data files, Internet Assignments, Lab Assignments, PowerPoint presentations, and Microsoft Office Specialist exam correlation grids.



Blackboard

Blackboard Content System™ (Release 7.1.467.26)

Copyright © 2003-2006 - Blackboard Inc. All Rights Reserved. U.S. Patent No. 6,988,138.

# Wikis

- Collaborative digital work space for faculty & students
- Web page authoring system
- Provides a foundation for multiple participant discussion of topics and creation of shared product in a web-environment





Wiki

navigation

- article
- discussion
- view source
- history
- unwatch

- Main Page
- Community portal
- Current events
- Recent changes
- Random page
- Help
- Donations

search




toolbox

- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link

# Main Page

Welcome to the **FCCJ wiki server!**

A wiki is a collaborative web page - that means a web page more than one person can work on! These documents, with multiple authors, can be revised and edited many times, to develop a collaborative understanding of a subject. FCCJ's wiki server provides a great place to work on ideas with your colleagues and students. See an FCCJ (example). You get all the benefits of web pages, including linking and images, combined with an easy way to write and make changes.

We're pleased to offer you this new collaboration resource, and hope you'll enjoy the unique possibilities that wikis have to offer. If you're new to wiki pages, please take a moment to [read more about wikis at Wikipedia.](#)

Take some time browse the projects and wiki pages you find here. When you're ready to get started with your own pages, or to edit the pages you browse, be sure to check the help pages for guidance.



This page was last modified 15:01, 30 March 2007.

This page has been accessed 1,200 times.

Content is available under Attribution-Noncommercial-Share Alike 3.0 .



- Privacy policy
- About FCCJ Wiki
- Disclaimers

# Blogs

- Web logs (journals) published to the web
- Provide open access to content
- Facilitates interactivity, communication, & commentary on issues
- Extremely flexible tool





## FCCJ Weblog & Podcasting Server

For use by FCCJ Faculty and Staff.

AUGUST 19, 2007

### Welcome!

Welcome to our new weblog and podcasting server!

This resource is an excellent way for you to create subscription-based content for your classes! Use it for announcements, journalling, special projects, class discussions, lecture archives, research databases and other ideas.

If you need any help in accessing your account, please contact Frank Barber for more assistance (ext. 2933 or [fbarber@fccj.edu](mailto:fbarber@fccj.edu)).

Special thanks to Ian Vanhoof, Director of Emergent Technologies, for getting this blog server up and running!

To login to the server and begin your weblog, please use the following link:

[Main Weblog Login](#)

Posted by Frank on August 19, 2007 1:45 AM | [Permalink](#) | [Comments \(0\)](#) | [TrackBacks \(0\)](#)

### Search

Search this blog:

Search

### Recent Posts

- [Welcome!](#)
- [Configuring your blog](#)
- [Why can't I see my posts?](#)

Subscribe to this blog's feed

[\[What is this?\]](#)

### Categories

### Archives

- [August 2007](#)

Powered by  
[Movable Type Enterprise](#)

# Virtual Reality

- Various platforms for presenting a virtual 3d learning experience, including popular online worlds and gaming environments.
- Created a virtual campus in Second Life to provide VR-based student experiences
- A pilot project, developed with the LSC & Open Campus, provides academic advising in Second Life.
- Instructional projects are being developed with Kent Campus and Distance Learning.





Communicate

Chat

Fly

Snapshot

Search

Build

Mini-Map

Map

Inventory

# iTunes University

- Apple-hosted system for podcast & academic content distribution
- Based on iTunes music store system
- Distribution of podcasts, movies, lessons, etc.
- Faculty-created and commercial content



LIBRARY

- Music
- Movies
- TV Shows
- Podcasts
- Audiobooks
- Radio

STORE

- iTunes Store**
- Purchased

PLAYLISTS

- Party Shuffle
- Florida Community College



FLORIDA  
COMMUNITY  
COLLEGE  
AT JACKSONVILLE

**QUICK LINKS**

- FCCJ Home Page
- Academic Calendar
- Campuses/Centers
- Distance Learning
- FCCJ Library

FCCJ COURSES

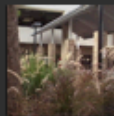


**College Algebra MAC 1105**  
Last Modified: Fri Jul 20, 2007  
Total Tracks: 20



**English Composition II ENC 1102**  
Last Modified: Fri Jul 20, 2007  
Total Tracks: 4

CAMPUS LOCATIONS



**Downtown Campus**  
Last Modified: Mon Aug 13, 2007  
Total Tracks: 2



**Kent Campus**  
Last Modified: Tue Aug 14, 2007  
Total Tracks: 2



**North Campus**  
Last Modified: Mon Aug 13, 2007  
Total Tracks: 2



**South Campus**  
Last Modified: Mon Aug 13, 2007  
Total Tracks: 4



**Open Campus**  
Last Modified: Mon Aug 13, 2007  
Total Tracks: 2



**Centers & Outreach**  
Last Modified: Tue Aug 14, 2007  
Total Tracks: 2

# MySpace & Facebook

- MySpace and Facebook are media rich, profile based, online social networks
- The College is creating an official presence in both of these online networks with the intention of improving the existing student experience and access to student resources
- Leverages current student behavior



# SIRIUS Instructional Design Wizard

- Educational Content Creation
- Software based on sound Instructional Design concepts
- Emphasizes a high-quality student experience
- Focuses on learning outcomes
- Incorporates motivation and learning research
- Integrates multi-media/multi-modal learning assets
- Encourages interaction & individualized feedback
- Considers various learning styles
- Supports Academic Freedom

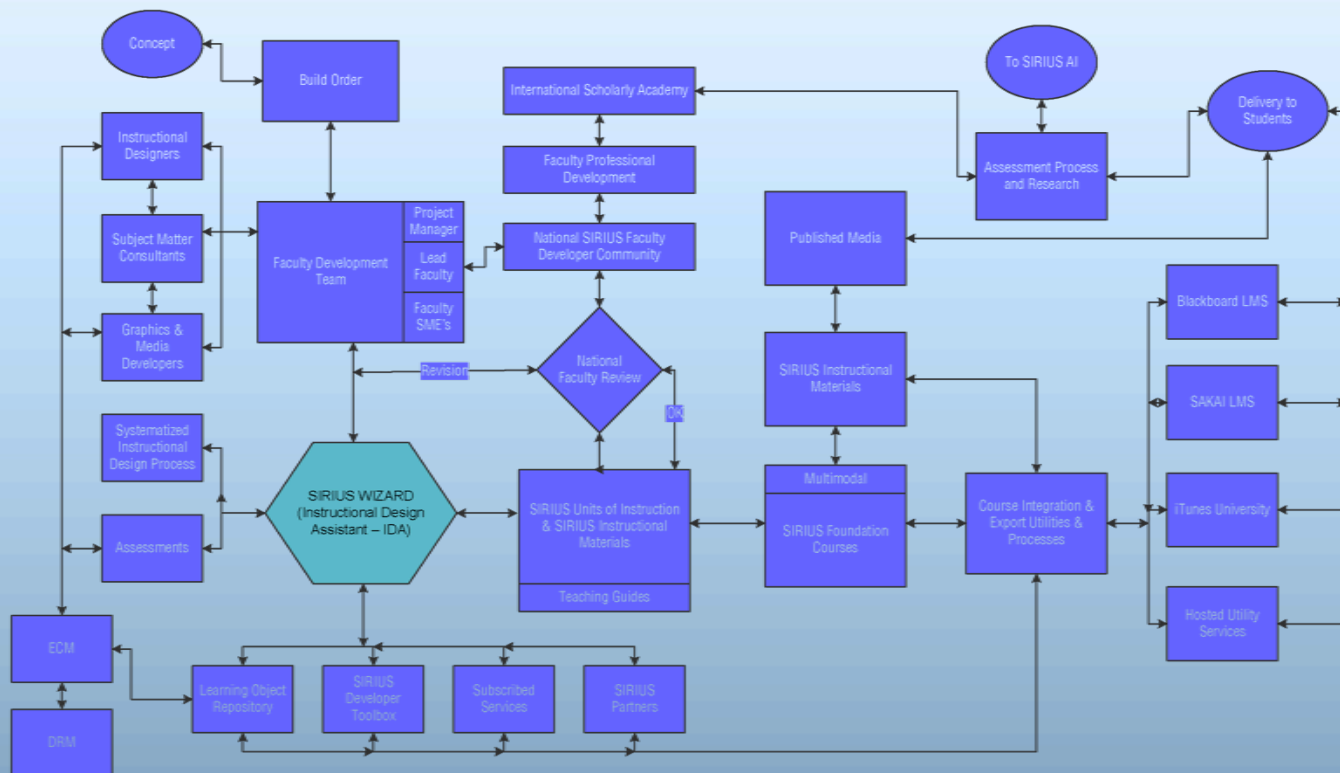


# SIRIUS Instructional Design Wizard

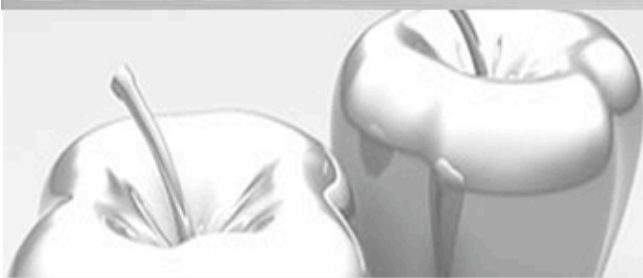
- Multi-tool Technology: Makes it possible to pull learning assets from multiple sources, compile as desired, and push to instructional product (text, CD, etc) or online course management system (cartridge)
- A critical element of our textbook replacement
- The system used to create SIRIUS foundation courses and materials



# SIRIUS Academics™ Wizard IDA Process Flow







# Sirius Academics

INSTRUCTIONAL DESIGN ASSISTANT

[main menu](#)
[comment board](#)
[help](#)
[logout](#)

## Step 1 : Analysis

Who is the audience?  
 What do they need to learn?  
 What is the budget?  
 What are the delivery options?  
 What constraints exist?  
 When is the project due?

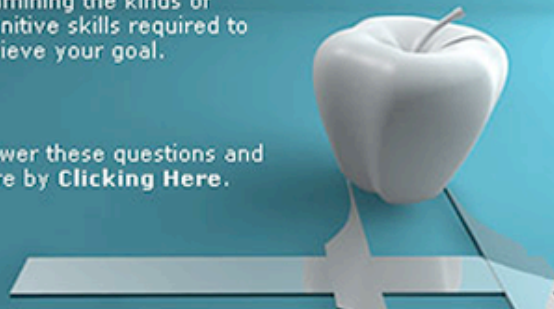
Answer these questions and more by [Clicking Here](#).



## Step 2 : Design

Select the most appropriate Web-based environment by examining the kinds of cognitive skills required to achieve your goal.

Answer these questions and more by [Clicking Here](#).



## Step 3 : Development

Development is a process of creation and testing of learning experiences and seeks to answer questions such as:

Have the learning needs and characteristics of the participants been accurately analyzed?



## Step 4 : Implementation

Implementation is the presentation of the learning experiences to the participants utilizing the appropriate media.



## Step 5 : Evaluate

Evaluation is of two levels. The most important is to gauge the success of the participant obtaining and retaining the demonstrated skills and understandings.



## My Options

Edit your profile, view your course schedule and manage Course Plans.



# IT Leadership Academy

- The IT Leadership Academy (ITLA) is an executive education program for the development and advancement of IT leaders.
- The inaugural ITLA event March 2005
- Quarterly programs
  - conferences and symposia
  - colloquia and lecture series
  - research and reports.



# IT Leadership Academy

- 100% funded by corporate sponsorships
- One year of operating funds in reserve
- Over \$300,000 in sponsor funding
  - Cognizant Technology Solutions
  - Sun Microsystems
  - SAS Institute
  - Telwares Communications



# ITLA

• Over 250 C-level participants to date (representing over 70 of the Fortune 500) including:

- **AFLAC**
- Allstate Insurance Company
- **American Express**
- American Film Institute
- AmerisourceBergen
- Amgen, Inc.
- Arizona State University
- Avnet, Inc.
- Bank of New York
- **Barnes & Noble**
- Barr Labs
- BCBS (CA, FL, MA)
- **Best Buy**
- BlueLinx
- BNSF Railways
- **Boeing Information Technology**
- Booz Allen Hamilton
- **Boston Globe/Wired/Fast Company/Variety**
- Bowdoin College
- **British Petroleum**
- Burlington Coat Factory
- California National Bank
- Cardinal Health
- CDG Group NJ



# ITLA

- **Centex Homes**
- Chico's FAS inc.
- Choicepoint
- **Cingular**
- CIO Decisions Media Group | Tech Target
- **Citistreet**
- Clarks Companies, NA
- Clipper Advisory Group, LLC
- Cognizant Technology Solutions
- **Coldwater Creek**
- **Commonwealth of Massachusetts**
- Computerworld
- Convergys
- CSX Technology
- **Delphi**
- EMC Corporation
- EMCOR Group, Inc.
- **Ernst & Young**
- Exeter Group
- **Fast Company**
- Federal Mogul Corporation
- **Federal Reserve Bank**
- **Fidelity Investments**
- First Horizon National Corporation



# ITLA

- Florida Rock
- **Ford Motor Company**
- **GE Commercial Finance**
- Glidewell Labs
- **General Motors Technology**
- **GMAC Financial Services**
- **Goodyear Tire and Rubber Company**
- Gorham Savings Bank
- Gulf Power
- **H&R Block**
- Halliburton
- **Harvard Business School**
- Hasbro
- **Honeywell Global Technology Services**
- **HP**
- **IBM-Aerospace & Defense**
- Idea Integration
- ING Insurance Americas
- **Intel**
- IT Florida
- Jones Lang LaSalle
- **JPMorgan Chase**
- Keybank
- Landstar Systems, Inc.



# ITLA

- **Liberty Mutual**
- Limited Brands
- Mac Papers, Inc.
- **Marriott**
- Matrix Technology Group, Inc.
- **McKesson Corporation**
- **Merrill Lynch**
- Michigan State University
- **Microsoft Corporation**
- MITRE
- **Monster Technologies**
- **Morgan Stanley**
- **Motorola Technology**
- MPS Group, Inc.
- **NASD**
- National Academy of Sciences
- **National Amusements (CBS & VIACOM)**
- NetJets, Inc. - A Berkshire Hathaway Company
- Network Services Company
- **Nielsen Media**
- North Coast Electric
- **Northrop Grumman Corporation**
- Oceaneering International
- **Ogilvy & Mather**



# ITLA

- Olin College
- **P&G/Gillette**
- Pabst Brewing Company
- Pepco Holdings, Inc.
- **PGA Tour**
- Plains All American Pipeline
- **Proctor & Gamble**
- Progressive Medical, Inc.
- PSS/Worldwide Medical
- Public Broadcasting System
- Quest Diagnostics Incorporated
- **Radio Shack**
- Recruitmax
- Robert Frances Group
- Rollins, Inc.
- Safelite Auto Glass
- **SAP America, Inc.**
- SAS Institute
- **Sysco**
- Talley Defense Systems
- TD Ameritrade
- Telwares Communications, LLC
- **TempurPedic International, Inc.**
- Schneider National, Inc.



# ITLA

- Seagull Software
- **Shell Oil**
- Shutterfly, Inc.
- Skadden, Arps, Slate, Meagher & Flom LLP
- **Smart and Final**
- Sonora Quest Laboratories
- **Soros Fund**
- **Southern Company Services**
- SpadaforClay Group, Inc.
- **State Street Global Markets**
- Sterling Bank
- **Sun Microsystems, Inc.**
- **Terex Corporation**
- The Doctor's Company
- The Lean Health Group
- **The Medicines Co.**
- The Robert Thomas Group
- Thought Works
- TNS Global
- **Toyota**
- TSYS
- UGS Corp.
- Unison
- Unity Builders Group



# ITLA

- **US Military Academy at West Point**
- Valuation Research Corp
- **Verisign**
- VFINITY Corporation
- **Volkswagen of America**
- **W. P. Carey & Co. L.L.C.**
- **Wachovia Capital Markets, LLC**
- Wake Forest University
- **Walmart.com**
- Wescorp
- Xaltitude
- Z+ Partners



# ITLA

## Global Technology Leaders Serve as Faculty

- Thornton May, Global Futurist & Program Leader
- Yuri Aguiar, Ogilvy & Mather
- James Baty, Ph.D., Sun Microsystems, Inc.
- David Bauer, Merrill Lynch
- Paul Bergamo, Liberty Mutual
- David Boyanowski, National Amusements (CBS & VIACOM)
- Catherine Brune, Allstate Insurance Company
- Michael Carper, Coldwater Creek
- Greg Chetel, Proctor & Gamble/Gillette



# ITLA

- John Chickering, Fidelity Investments
- Marty Colburn, NASD
- Nida Davis, Federal Reserve Bank
- Mike Fulton, Proctor & Gamble
- David Gutierrez, ING Insurance Americas
- Louis Gutierrez, Commonwealth of Massachusetts
- Norm Happ, H&R Block
- Andreas Hestermeyer, Volkswagen of America
- Michael Hugos, Network Services Company



# ITLA

- Michael Iacona, Monster Technologies
- Lynn Jacobs, Dreamworks
- Charles Morgan, Centex Homes
- Mykolas Rambus, W. P. Carey & Co. L.L.C.
- Robert Sandow, Soros Fund Development Services
- Cheryl Smith, McKesson Corporation
- Marc West, H&R Block
- Patrick Wise, Landstar Systems, Inc.
- Bruce Wong, GM



# Relationships

- Software AG International Executive Committee
- Apple University Executive Forum
- Curriki Advisory Board
- Microsoft Developer Network (MSDN)
- Open Source Communities
- Apple Developer Network (ADN)
- Java Developer Community
- Gartner & Forrester Analyst Reference



# Recognitions & Awards



- Ranked #1 by Center for Digital Education
- CIO named to Computerworld's Premier 100 Technology leaders
- Microsoft featured ARTEMIS I as best-of-breed solution
- Ranked most wired by Yahoo
- Featured in Computerworld, CIO Decisions, and in Sun and Software AG literature

**Microsoft**

**YAHOO!**



# Jacksonville



*Where the future leads*

**Thank You**

