



**FECS'10 - The 2010 International Conference on Frontiers in
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USING COMPUTER GAME COURSES TO ENHANCE ENROLLMENT IN IT PROGRAMS

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Welcome

WorldComp'10 - Las Vegas, NV

Download the presentation "Using Computer Game Courses to Enhance Enrollment in IT Programs" by clicking [here](#).

This presentation was given at [WorldComp'10](#) in:

[FECS'10](#) - The 2010 International Conference on Frontiers in Education: Computer Science and Computer Engineering

in Las Vegas, NV on July 12-15, 2010

Game Development Proposal Updated April 2010

Innovations 2010 Conference - Baltimore, MD

Student Success and Retention Conference 2010

Special Information for CIS122 Students

Emergency Information

MHCC Game Development In The News

Great Prices on New Software

The Future of Web Design

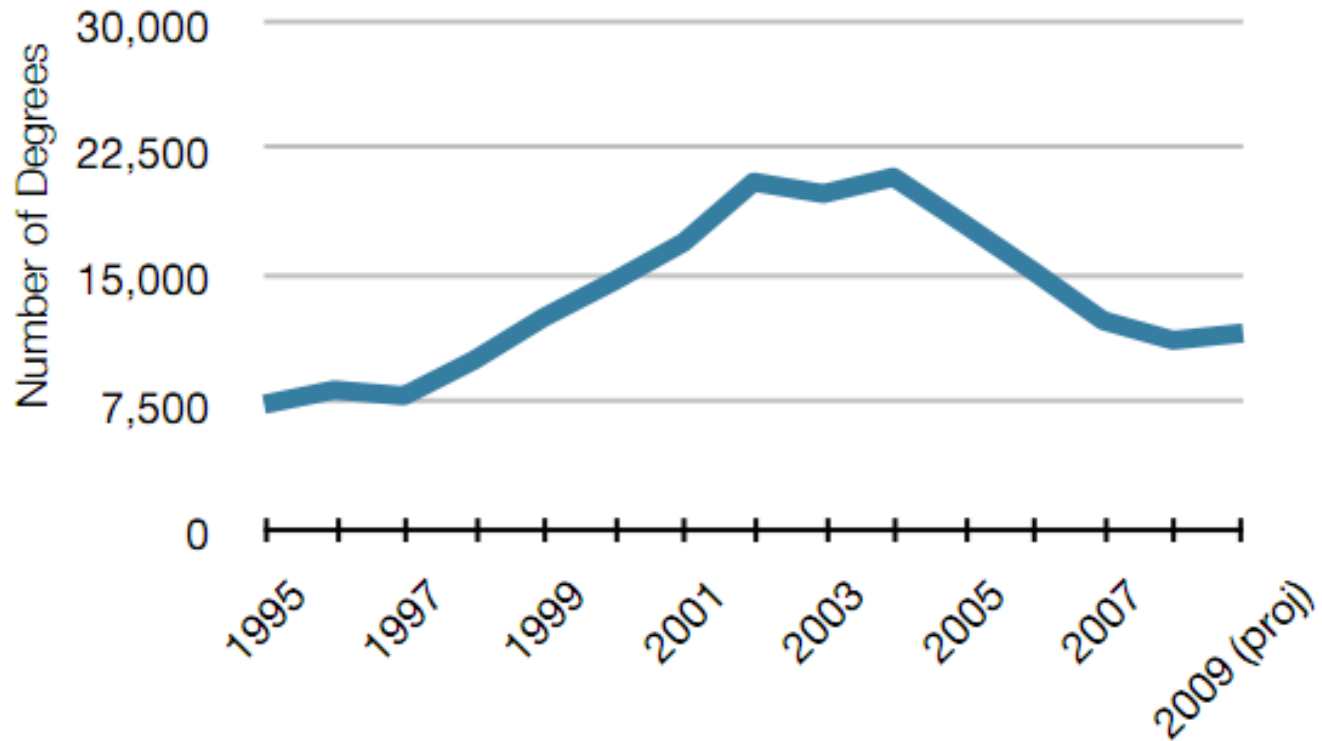
Welcome to
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THE student
support web site
for Dr. Wayne
Machuca, CIS
instructor for Mt
Hood Community
College, Gresham,
OR.

We request feed
back on the new
design and lay
out. Please feel
free to send
comments
through the site

AFTER 2000, ENROLLMENTS IN CS, CIS AND IT COURSE FELL DRAMATICALLY

Figure 1. BS Production (CS & CE)



Zweben, S. (2008). Computing Degree and Enrollment Trends. Computing Research Association. Washington, DC.

REASONS FOR THE DECLINE?

- Dot-Com bubble of 2000
- Perception of IT jobs moving “off shore”
- Amplified by a number of call centers moved overseas
- Others

REALITY

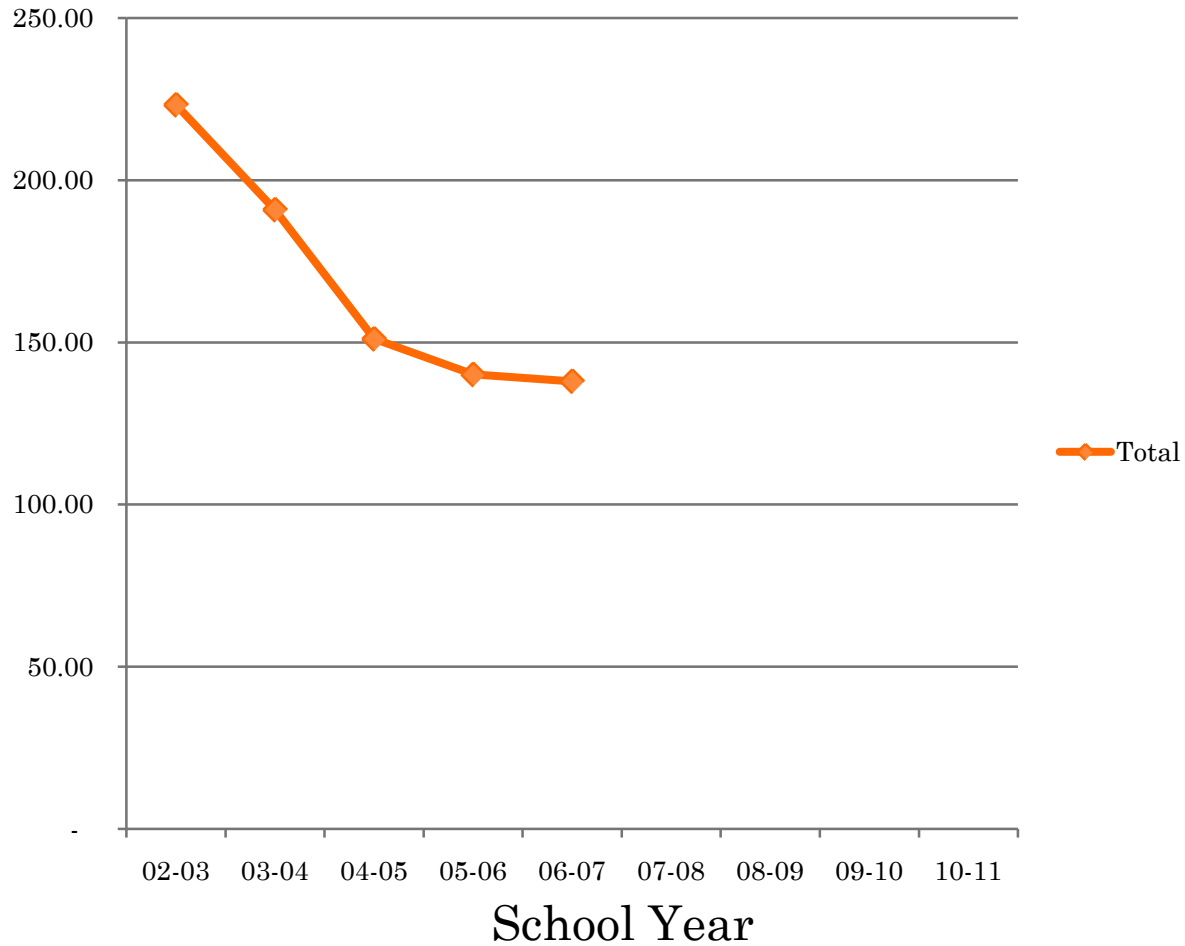
- Only about 5% of tech jobs actually relocated.
- Demand for technology skills *increased* in the early to mid-2000's
- Baby-Boomer techs began to fade from the market place
- BLS Statistical data showed 5 of the top 11 careers were IT

RESULT

- High Demand
- Low Supply
- H1B Visa Debate

DECLINE MATCHED NATIONAL TRENDS

Total CIS SFTE by SY



NEED

- Recruit more students into traditional IT programs.

2005

- Game Training State of the Art
 - Heavily in “Arts” programs and schools
 - Many online “colleges”
 - Some high-level, hard core programming courses (C++, OpenGL, others)

 - Emerging technologies
 - Flash
 - XNA [Xbox, Unreal, others]
 - Small Computer [think iPhone]

 - High School programs [GameMaker, Alice, Others]
- Problem: most required strong programming background (inappropriate as an entry-level CC programs)

DECISION

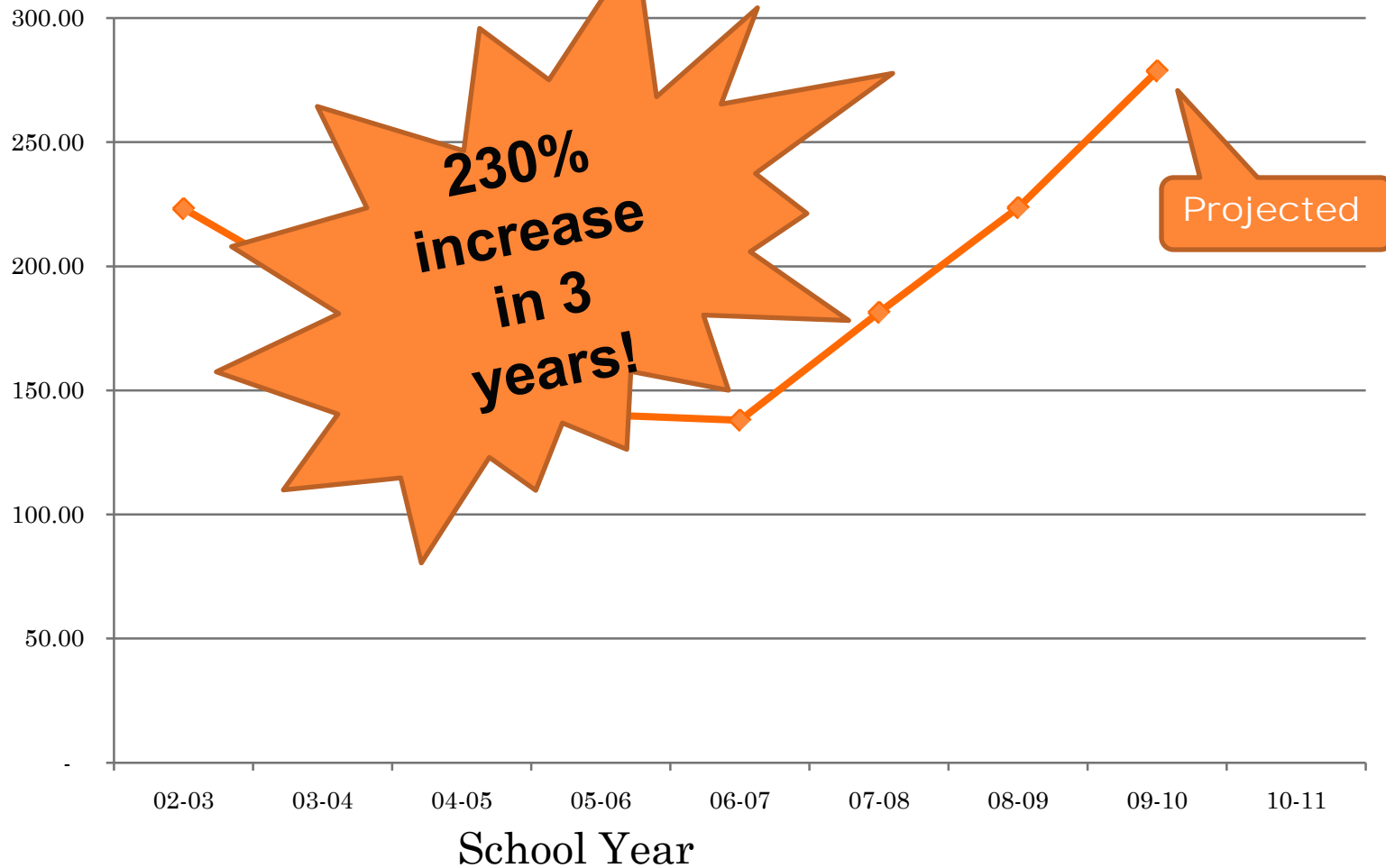
- Create a 3-class series of game classes
 - Basic gaming with Alice
 - 3D Modeling with Maya
 - ActionScript2 programming with Flash CS2
- Non-Transferable
- Elective Only
- Not associated with any degree
- Low Priority (sustainability would be a consideration)

ENROLLMENTS BETWEEN FALL 2007 AND WINTER 2010

- Number of class offerings: **14**
- Total unique enrollments: **238**
- Average students/class: **17**
- Estimated SFTE Contribution: **47.6**

A SIGNIFICANT TURN-AROUND

Total SFTF by School Year

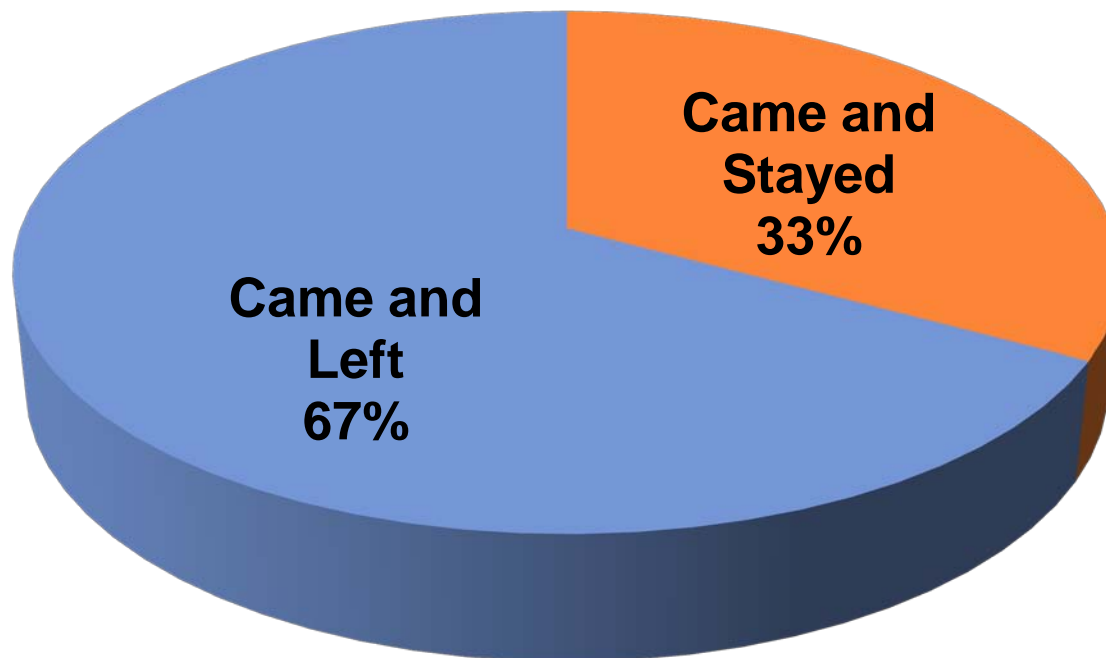


MISSION ACCOMPLISHED?

- Wanted to take a deeper look at the enrollments.
- Questions:
 - Who were these new students?
 - Were they taking subsequent CIS/CS classes?
 - Where were they going?
- Enrollments were up, but if this was attracting 100+ students, why weren't the SFTE's up 200 or 300?

INTERESTING RESULTS

- Looking at just the portal class:
- 147 total unique enrollments (not including Winter 10 term).
- Of which 50 were already IT students leaving ***n=97***



CONFOUNDING VARIABLES

- The researcher is also the developer, marketer, and instructor for the courses. He most definitely has a vested interest in the success of the program.
- Coincidentally, the CIS program expanded to include CISCO Academy status, Oracle Academy, and a new Computer Forensics program.
- Coincidentally, the economic downturn led to a dramatic increase in enrollments school-wide.

OBSERVATION

- Offering Game Development classes will increase attraction to the traditional IT classes.
- It can also chase people away...
- Game classes will attract people who would not normally consider computer classes.

THE CHALLENGE

- What to do with them once they arrive?
- Can the institution be dynamic enough to respond to the increase?
- Will the student graduate with a degree that is both relevant *AND* will lead to a “living-wage” career?