The CAST department in CTIS offers an AS degree in Interactive and Multimedia as well as two different certificates in the same technology area... a skills certificate (25 units) and a career certificate (52-54 units). The department only has one full time faculty member, relying on adjuncts to teach the bulk of the classes.

A. ASSESSMENT OF INTERNAL AND EXTERNAL FACTORS AND STUDENT SUCCESS

EXTERNAL FACTORS
The biggest external factor effecting the department (and the rest of the CTIS division) is the collapse of the hi-tech infrastructure in Silicon Valley and, to a lesser extent, the rest of the country. Here are the factors in more detail:

- Student enrollment in CAST continues to decline, primarily because the job market ceases to look attractive. This should turn around in a year or two.
- The job market in this area has been hit pretty hard now that the lion’s share of the work is for the website applications.
- Software manufacturers continue to churn out newer and better versions of all the software applications that we teach... sometimes upgrading more than once per year. In the past, with the financial situation a bit better, CAST has been able to keep up with this at great expense. This is no longer possible. Several action plans have been put in place (see below) that will allow less expensive ways to keep up.
- The blizzard of software upgrades has also affected the book situation. The bookstore often obtains the latest version of the software texts (and the software) from the manufacturers. This puts the students, who are learning on a slightly older model in a situation where they cannot buy the correct texts. This also frustrates the faculty.
- The large unemployed workforce has made it relatively easy to find qualified part time instructors in this area... but will this revert to form when the job market clarifies?
- Demand for more classes, certificates, and degrees online continues to spike.

INTERNAL FACTORS

- CAST enrollment has gone from a high of approximately 12,600 WSCH to 10,300 WSCH in 02/03. This is a 20% decline.
- CAST students are primarily vocational, and fall into one of three categories
  - Working students upgrading their career skills who mainly attend afternoon and evening classes. Their goal is a certificate or possibly an additional AS degree.
  - Continuing ed folks who are coming to the school to learn a specific application. They will come, stay for a quarter or two and then leave.
- Responding to the online demand for education, we are putting an ever increasing variety of classes into ETUDES. Our faculty has responded to this thrust very well (and voluntarily). Microsoft Office training has been particularly successful in this mode, as opposed to low enrollments and cancelled classes in face-to-face mode.
- The new versions of software require faster and more sophisticated software to run them. Many of our computers in the lab are getting obsolete and unable to handle the load. Upgrading this equipment is expensive.
- The joint programs with the Fine Arts division are in need of an update. Classes have been changing and the curriculum sheets needs to be synchronized with these changes.

B. STUDENT SUCCESS EVALUATION

The last student success statistics available are 01/02 numbers and these show that CAST is running at about a 86% success rate. This is a few percentage points above the overall college success rate of 84% during that same period.

C. STUDENT EQUITY/DIVERSITY ANALYSIS

Student success by ethnicity analysis shows that Native American (79%), Black (74%) and Hispanic (77%), students under perform the CTIS average success rate by 5%-12%. The White population does the best at 88%.
The CTIS student population contains 5.8% fewer Asians, 1.3% fewer Blacks, 3.7% fewer Hispanics, and 5% more Whites than the at-large population. The male-female ratio is 0.44 in CAST versus .85 in the overall population.

D. ACTION PLANS AND PROPOSED PROGRAMMATIC CHANGES:

1. Program Goals Related to Educational Master Plan and Partnership for Excellence:
   a. Through outreach activities, increase the Hispanic and Black population in the CAST program to more closely track that of the overall school population. The goal is to get 50% of the way to parity.

2. Other Program Improvement Plans:
   a. Work with the Fine Arts division to update the Graphics and Multimedia programs making them more accurate and more reflective of the rapidly changing technology
   b. Review all current class outlines, and bring them up to date.
   c. Work with the software vendors to procure better “deal” on the software per seat. This can be done on several fronts:
      i. Perfect the distribution-by-license technique that will allow us to distribute fewer copies of the software and deploy the smaller resource set on a statistical basis. This plan is underway and has already shown some level of success
      ii. Get better deals from the vendors using personal contacts and state resources. This activity is also underway with some successes with Adobe, Macromedia, and Microsoft. There are some significant holdouts at this time (like Quark).
   d. COIN, CAST, and GRDS need to work together to develop a joint advisory committee.

E. ENROLLMENT AND PRODUCTIVITY GOALS

Productivity in CAST has always been extremely high. Three years ago it was over 700, and two years ago it was over 600. Due to lower than expected enrollments, and the resulting smaller class sized productivity in the 02/03 year is estimated to be in the 530 range. By a combination of judicious scheduling and a targeted PR campaign, CAST goal for the coming academic year will be to, once again, hit the 600 level. In parallel to this, and to make the higher productivity possible, the enrollment (WSCH) will need to increase a bit, hopefully back to the 11,000 level.

F. SUMMARY OF RESOURCES REQUESTED

1. FULL-TIME EQUIVALENT FACULTY OR STAFF NEEDS:
   Faculty: The CAST department now has an FTEF of approximately five for the 02/03 year. The portion of this from full-time faculty is about 0.85. This result in the full-time faculty delivering 17% of the classes, which is very low compared to state guidelines... but given the current levels of enrollment and the fast changing nature of the curriculum this is probably inevitable. This brings the new technologies and new ideas more quickly into the department. No additional full-time faculty are anticipated at this time (not withstanding retirements et. al.).

   Staff: CTIS has nine laboratories and over 350 computers to maintain and update. This is accomplished by three laboratory coordinators (one full time assigned to the Middlefield Campus) and two instructional associates. Up until the end of the past academic year, there was a supervisor position, which was vacated due to a retirement. Enrollments are quite a bit down this year, which have made it possible to do without the supervisor for now. When this situation changes (enrollments pick up etc) then it will be critical to replace the supervisor.

2. FACILITIES NEEDS: (Include all aspects of the physical setting, e.g., room size, seating type and arrangement, multimedia equipment, lab stations, etc., that might provide a more effective student learning environment.)

   All of our nine laboratories utilize furniture of WWII vintage. They are of different styles, and to a certain degree unstable and unsafe. When the buildings are renovated next year it would be wonderful if we could replace all or most of these chairs and tables.

   Most of my instructors use computer-driven projectors to augment their class presentations. Since most of the classrooms do not (at the moment) have ceiling mounted projectors, my lab staff must provide these projectors and demo units by placing them on rolling carts and bringing them to the classrooms. This is time consuming and hard on the projectors which have fragile and very expensive
bulbs to replace. When the buildings are renovated, I would like to ceiling mount all of our projectors, outfitting both the 4300 and 4200 buildings with them. We already have the projectors.

The computers in most of our labs are already getting obsolete. The money that has in the past been available to replace these machines on a three-year cycle is not going to be there for the next year or two at least. These machines very much need to be upgraded. For PC’s they need to be P4 machines, preferably with flat panel 15” displays. For Mac’s they need to be G4 machines... in the IMAC configuration.

Software updates also need to take place on a regular basis. CTIS has improved this situation somewhat by developing a “license distribution scheme” which allows us to put software on all machines but only pay for a much smaller number of copies which are then available on a first-come-first-served basis to the users. We have also been able to take advantage of less expensive upgrades through educational discount programs. Despite all this, we still need to spend upwards of $20,000 per year just to keep even with the pace...

3. MATERIALS AND SUPPLIES BUDGET AUGMENTATION:
The discretionary budgets that can be used for supplies and materials have been decreased each year for the past 3 years. This is making it very difficult to buy the supplies necessary to hold classes (dry erase markers, paper, etc.). Budgets need to be restored to two-year ago levels as a minimum, and be then subject to yearly COLA’s to take care of increased costs.

Evaluation of academic year 2002-03.
List names of participants assisting in this program review.

Primary program contact person: C. Lindauer
LindauerChuck@fhda.edu
Full-time faculty: McIlhiney, Will
Part-time faculty: Administrators:
Classified staff:
Students:

Date of evaluation: 10/29/03
Phone or email address:
PROGRAM NAME: Interactive and Multimedia Technologies

Degree/certificate options available:
- AS degree in Interactive and multimedia technologies
- Skills Certificate in Interactive and Multimedia Technologies

PROGRAM MISSION

Prepares the student to design and produce effective presentations that combine graphics, text, sound, music, video and animation, and require an imaginative blend of art, science, technology and communication skills. This will lead to a variety of careers in authoring and scripting, film and video animation, audio and video editing, graphic design, interface design, etc.

EXPECTED STUDENT OUTCOMES: A student completing this should be able to:
1) Understand the various multimedia career paths and have a wide knowledge of the range of projects in the business world
2) Be able to layout and design a multimedia project
3) Understand the use of a wide range of multimedia products such as Photoshop, Flash, Illustrator, Premier, etc.
4) Understand and be able to fully utilize the Internet as one medium of choice.

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<thead>
<tr>
<th>PROGRAM CONTENT PROFICIENCIES/COMPETENCIES</th>
<th>Desired Attributes: What should a student be able to do upon graduation?</th>
<th>REQUIRED PROGRAM COURSES related to this outcome: Where do students acquire experience?</th>
<th>OUTCOME MEASURES — Evidence or Sample Demonstrating Deep Learning: How do we know what a student has achieved?</th>
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<tbody>
<tr>
<td>1) Career paths and range of projects</td>
<td>• Understand the multimedia market place and career choices</td>
<td>COIN 51, GRDS 51,56, 51 or CIS 51A</td>
<td>• Completion of class work with success</td>
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<td>2) Multimedia project</td>
<td>• Complete a project from conception to implementation</td>
<td>CAST 70B, C, D, GRDS 76, 86</td>
<td>• Project portfolios from class work</td>
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<td>3) Use of Multimedia products</td>
<td>• Be able to easily use a wide range of tools</td>
<td>CAST 70A, G, CAST 52A, CAST 92A, CAST 93A</td>
<td>• Success in classes (also demonstrated in portfolio)</td>
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<td>4) Internet</td>
<td>• Be able to create a Web site and put up a project on it</td>
<td>COIN 51, 61, 70 CAST 52A, CIS 27A</td>
<td>• Success in class work • Web site designed and implemented</td>
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<tr>
<th>CORE COMPETENCIES</th>
<th>CORE COMPETENCIES: Outcomes and Attributes Distinct to This Program</th>
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<tr>
<td>Communication</td>
<td>• Present a project in a group setting</td>
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<td>GRDS 51 or CIS 51A, GRDS 76, 64A, CAST 70C, 93A, CIS 002</td>
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<tr>
<td>Computation</td>
<td>• Create scripts and program websites for project implementation</td>
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<td>COIN 70, Any CIS class, CAST 52A</td>
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<td>Creative, Critical &amp; Analytical Thinking</td>
<td>• Design of project in conjunction with customer’s needs</td>
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<td>GRDS 76, 20, 87, CAST 70C</td>
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<td>Community/Global Consciousness &amp; Responsibility</td>
<td>• Work with non-profits as possible on portfolio items</td>
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<td>CAST 70C</td>
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