Introduction

DELTA's role within the Office of the Provost is to foster the integration and support of learning technologies in NC State's academic programs, both on the campus and at a distance. DELTA coordinates the funding and production of all distance-based credit programs and courses for the university, and promotes the quality of and access to education by extending the reach of the faculty, collaboratively applying expertise in technology and pedagogy in an efficient, effective, and service-oriented environment. DELTA manages the university's learning technology infrastructure, including WolfWare, an in-house developed course management system, Vista, an enterprise learning management system; Elluminate, a tool for synchronous online teaching and learning, and several campus video classrooms. DELTA offers various programs and services that provide training, support and resources for teaching and learning with technology. These services may range from developing and/or funding distance education courses and programs, to creating technology resources for face-to-face instruction, to working with the colleges to create specialized, technology-delivered education programs in support of critical constituencies in our state, such as the US military.

Key Findings from Recent Program Reviews and Evaluations

- LMS faculty and staff survey & LMS student survey
  During fall 2005, a survey was given to all faculty, administrators, and support staff who had Vista accounts. Findings revealed the majority of professional staff believed that Vista has the potential to enhance courses, help faculty members better organize their courses, and can be used to stimulate student thinking. Additionally, the majority of respondents agreed that Vista can increase student-to-faculty, student-to-student, and student-to-resource interactions, and improve the level of feedback given to the students. The majority of respondents (94%) indicated that they want Vista to continue to be available to them. See http://delta2.ncsu.edu/slic/slic_subcommittees/assessment/Fall%202005%20Vista%20General%20Release%20Professional%20Opinion%20Survey.doc for the full report.
  Another survey was given to all students using Vista. Findings revealed that students prefer phone support, followed by email support, for help. Half of the students believed that Vista supported their learning, with 43% indicating Vista helped them organize and manage their own learning better. See http://delta2.ncsu.edu/slic/slic_subcommittees/assessment/Fall%202005%20Student%20Opinion%20Survey.doc for the full report.

In response to these surveys, we have continued to work on improving Vista, focusing on system stability and providing training on how to use the tools in pedagogically sound ways. Additionally, we have partnered with the Informational Technology Division (ITD) to improve student support, creating Vista solutions and training help desk staff to respond to student calls. We have also started a Vista representatives group with members from each college that meet with our staff regularly to discuss challenges and improvement opportunities.

- Internal Audit report
  During FY 04/05, Internal Audit evaluated DELTA's business practices and compliance to university procedures. The audit included a review of the processes and controls over the financial and human resource transactions. The following four areas were specifically targeted: 1) expenditures within units (e.g. colleges) who receive funding directly from DELTA, 2) operational expenditures within DELTA, 3) approval and payment for distance education instruction, and 4) human resource processes. The report from Internal Audit indicated “we did not identify any issues that warrant a report and commend DELTA for a job well done.” This audit demonstrates our success in implementing effective business practices. Although this is one of our strengths, it is also an area that requires ongoing review and diligence.
• **DE student survey**
  Students enrolled in Flexible Access courses are surveyed each semester to obtain quantitative and qualitative data related to the students we serve and the services we offer. See http://distance.ncsu.edu/adde/reports/AssessmentReport2005-06.pdf for the most recent report. Findings show general satisfaction with DE services though improvements in communication and content delivery methods are indicated. Continued DE program growth and recruitment of new faculty to offer Flexible Access courses is indicated, based on analysis that 52.8% of student respondents rely on DE courses to accelerate their progress toward degree completion, and 31.9% expressed the need to seek courses at other institutions if DE courses were not available.

• **VCS customer satisfaction survey**
  From all of the VCS assessment efforts we have learned that demand for VCS classroom services is increasing beyond our ability to keep up with the current model. We're committed to finding ways to grow and improve service and materials in ways that can leverage our capital investments. We are hampered by the fact that the DE Facilities budget is not increasing in tandem with enrollments. (Since 2002, the university’s total funding for DE has increased by 57% while the DE facilities budget has decreased by 16% over the same period.) See appendix for VCS customer survey.

• **IDEA grant assessment**
  DELTA’s Innovation in Distributed Education Applications (IDEA) grants are provided to promote innovation in the use of instructional technology in online teaching and learning, build expertise in this area, and enhance the technology-rich learning environment at NC State. Since 2003, 63 IDEA Grants have been worked on by DELTA staff. Grant recipients have contributed to the campus teaching and learning environment in numerous ways, teaching Distance Education courses, supporting their peers using technology, and being recognized for their work in venues such as the Gertrude Cox Awards.

• **Summer Institute assessment**
  The Teaching with Technology Summer Institute is a way for faculty to learn about instructional technology tools and techniques that can be used to support teaching and learning at NC State. Since 2002, 188 faculty members and 21 staff members and/or graduate students have participated in this program. Yearly program assessments reveal the value of this program in helping faculty integrate technology into instruction (see Appendix for Summer Institute 2006 evaluation).

• **Competitive analysis of top 16 universities in DE**
  Competitive analysis of sixteen online institutions (in-state, out of state, public and private) comparing online degrees, enrollments, tuition. See appendix.

• **Professional Writing Virtual Report**
  A pilot study begun in fall 2004 compares learning outcomes between online and campus-based courses in Professional Writing. A synopsis of the findings thus far reveals equivalent learning outcomes and student and faculty satisfaction levels (see appendix for additional information).

• **DE retention study**
  A report was completed in December 2006 identifying research-based factors related to DE student retention and attrition, and making recommendations for NC State’s DE program. Some of the strategies for mentoring and attrition mitigation are in the process of implementation or upgrading, and the others will be adopted in the next several years (see appendix for full report).

• **SWOT analysis – Workforce diversity and retention**
  Among other issues identified in a recent internal SWOT analysis, one of DELTA’s key strengths was determined to be our talented, diverse, and motivated staff. Workforce diversity and retention is challenging but essential to DELTA’s success.
• Educause Core Data survey
NC State participates in the annual Educause Core Data Survey, which provides comparison data about information technology environments and practices among member institutions. Three central units from NCSU participated in the most recent survey (see http://www.educause.edu/coredata/). The NCSU data showed that DELTA’s IT staff salary expenditures are much lower than those elsewhere on campus and this needs to be addressed.

IT Financing & Management
#4 What was the total compensation for fiscal year 2004-05 for the following categories of personnel employed by or through the central IT organization of your campus

<table>
<thead>
<tr>
<th></th>
<th>RMIS</th>
<th>Com Tech</th>
<th>ITD</th>
<th>Delta</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>12,098,154</td>
<td>2,499,000</td>
<td>5,179,963</td>
<td>2,395,677</td>
<td>22,172,794</td>
</tr>
<tr>
<td>Students</td>
<td>34,000</td>
<td>175,000</td>
<td>118,828</td>
<td>327,828</td>
<td></td>
</tr>
<tr>
<td>Consultants</td>
<td>1,275</td>
<td>1,275</td>
<td>1,275</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractors</td>
<td>75,000</td>
<td>100</td>
<td>75,100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12,098,154</td>
<td>2,608,000</td>
<td>5,356,238</td>
<td>2,514,605</td>
<td>22,576,997</td>
</tr>
</tbody>
</table>

Excerpt from Educause Core Data Survey 04-05

We can also see that NCSU as a whole spends substantial money on IT infrastructure, most of which does not go toward the core academic enterprise of teaching and learning. As a result, we would like to raise the awareness of the campus in our TLT investments and their importance in the hopes that they attain the high priority they deserve.

Dashboard Measures

DELTA uses a variety of dashboard measures to assess performance and guide strategic decision-making. Those measures are summarized below.

• Budget reviews
Prior to each fiscal year, we project available funds for the purpose of strategic allocation. The funds considered in this process are continuing state-appropriated funds (distance education and traditional), projection of enrollment change (distance education fundable), and projection of tuition receipts (distance education non-fundable). We undergo a stringent process in determining the allocation of funds to colleges throughout the university (see further explanation of this process below). Throughout the fiscal year, we review budgets and revise allocations. We have identified some challenges in this process. Our statistical data historically has included all distance education funding. To be more consistent with similar data provided by the Provost’s Office, we plan to separate out the allocation of 101-purpose codes funds. We also recognize the need to allocate funds on a continuing basis to colleges with established distance education programs.

• LMS reports
The DELTA LMS reports (see http://raleigh.delta.ncsu.edu/lms_reports/) track many details of LMS usage over time to provide us data for tactical and strategic planning. Our LMS usage has been growing much more rapidly than we could have ever anticipated, further illustrating the critical need to fund these tools to a higher level to facilitate faculty engagement and ensure student success.

• Wolfware and Vista tool usage
During late spring 2006, we begin capturing usage data from our campus Learning Management Systems (LMSs) – WolfWare and Vista. A usage analysis from March – May, 2006 indicated that the faculty who used Vista used the “content tools” (tools that faculty used to create and deliver course content to students) more than any of the other tools, and that the discussions tool was the primarily used communication tool. Our success is in working toward a streamlined way to capture this data. We will need to monitor usage trends in order to help us provide appropriate support, training, and continued infrastructure for the tools used
most often to support teaching and learning activities. Our challenge is identifying the best ways to analyze and interpret the large amount of available data, turning it into useful information related to our support, training efforts and infrastructure development efforts. Just in time data related to LMS use can be found at: http://raleigh.delta.ncsu.edu/lms_reports/index.php.

- **Training reports**
  During FY 2006, DELTA experienced a 17% increase in regularly scheduled workshop enrollments this year, and a 3% increase in scheduled custom training sessions. Additionally, there was a 34% increase in requests for individual help in the form of e-mails, phone, and in-person help calls, and we have experienced 30%+ per year increases in requests for individual assistance since FY 2003. These numbers represent an increasing need for professional development and support for faculty including regular workshops and centrally planned activities, especially related to the pedagogy of teaching with technology. More importantly, there is clear trend of individuals needing just-in-time and just-in-context support, represented by the increase in requests for custom training sessions, and in the large increase in help related calls. Our success story is that we are clearly engaging more faculty in teaching and learning with technology activities; conversely, our challenge is being able to continue to provide quality support for these increasing numbers. See the appendix for the DELTA Instructional Services Unit Activity Report for further details.

- **DE courses, enrollment statistics, technology usage statistics**
  Distance Education enrollments continued to build, achieving a 20% growth rate over the previous year. Thirty-two new or re-recorded courses were added to the Flexible Access schedule. Internet delivery continues to dominate course delivery methods, but a trend toward incorporation of video and other rich media is beginning to emerge. See appendix for 2005-06 DE Annual Report for other statistics and charts related to enrollments.

- **Program development data**
  New degree, certificate, and subject specialization programs are tracked through their stages of development from concept to implementation, averaging 4 or 5 new initiatives each year. See the appendix for the 2005-06 established program list, and the initiatives in various stages of development.

- **Cost per SCH by program**
  DELTA developed a cost analysis spreadsheet in FY 2002-03 and this evaluation tool has continued to be updated yearly for the DE program cost evaluation. In the cost analysis the cost of the student credit hour (SCH), which is reported by UPA, is adjusted based on the total funding, which DELTA receives as their annual DE budget. We use this evaluation as a check and balance of the DE funds that is allocated to colleges for the DE programs. The annual funding allocated by DELTA to the DE programs is based on their SCH projection and we track the actual SCHs produced by the program. This evaluation tool has allowed us to make cost effective decisions by measuring the effectiveness of the DE funding. See appendix for DE Program Cost Analysis.

- **IDEA grant resource allocation**
  DELTA tracks costs on IDEA grants awarded to faculty for development of new online courses and related resources, both in terms of dollar allocations and staff time expended. More than 3,500 staff hours and $109,000 were dedicated to IDEA grants awarded during the FY 05-06 cycle (see appendix for IDEA Grants awarded.) Our success is that we provided around 3% more staff hours on FY 05-06 projects, compared to FY 04-05 projects. Our challenge is that in order to make considerable impacts on the teaching and learning activities within a particular course, significant time is needed from our professional staff, and there is a limit on the amount of time we can provide per course with the existing number of staff that we have.
• **Marketing tool – tracks effectiveness of marketing efforts**
  
  The DELTA marketing system implements a sophisticated constituent relationship marketing (CRM) tool to provide efficient processes dedicated to capturing data for DE student recruitment. The purpose of the DELTA Marketing system is to engage prospective DE students and generate customized promotional materials to encourage DE enrollment. The system tracks via web form submission, geo-demo targeted online banner ad placements, implements sophisticated, targeted promotional materials to prospective and current students to increase DE enrollment. Additionally, the process handles generating bulk-emails, creating labels for USPO-mail, dynamic statistics reporting, and other marketing business processes for student recruitment. The data processing tool tracks the effectiveness of online marketing efforts.

**Forecast**

Three external influences which are important to understanding DELTA’s past performance and future goals are 1) organizational and fiscal factors within the university, 2) UNC system-level initiatives, and 3) the provost’s student success initiative. These are briefly outlined below.

1. **Organizational and Fiscal Factors.**
   
   • Budget uncertainty. DELTA was established under the Office of the Provost in 2000 with the understanding that the Vice Provost for DELTA would manage the newly established Distance Education Enrollment budget to accomplish two strategic university goals: 1) grow NC State’s distance education programs, and 2) expand the university’s capacity and support for teaching and learning with technology, both on the campus and at a distance. Since the beginning, DELTA has strategically managed the DE enrollment budget to accomplish these goals. While that model worked well initially, it is now showing critical signs of stress which must be addressed if NC State is going to continue as a leader in e-learning as suggested by the university’s strategic plan. Some of the critical signs of stress include:
     
     - Pressure to compensate for failures to meet on-campus enrollment objectives by shifting the DE enrollment growth funds to support non-DE related budget priorities. Budget predictability is imperative for planning and funding new DE programs to meet enrollment growth objectives.
     
     - Uncertainty in the disposition of out-of-state tuition receipts. The colleges expect DELTA to fund them for out-of-state DE enrollments, yet we do not have mechanisms in place to accomplish that. Last year, 100% of those funds, approximately $1.5M, were diverted to other university purposes. As a result, numerous growth opportunities for DE outside of NC are falling by the wayside. In addition, the fact that we are totally supporting the out-of-state enrollments with appropriated funding designated for in-state DE enrollment places the university in a very uncomfortable position from an accountability standpoint.
     
     - Erosion of facilities support for DE. While DE enrollment growth has increased at a rate of more than 20% per year for the past five years, the DE enrollment funding dedicated to facilities has been eroding since 2002. This has forced more and more of the academic DE budget to be diverted to support of facilities and infrastructure. This is clearly not sustainable.
     
     - Growth of college-managed DE programs. DELTA has been strategically shifting the DE growth away from Flexible Access to programs managed in the colleges. While this decentralization strategy more closely aligns with our traditional university structure, it is much more costly than the centralized model of offering and supporting DE, and will necessitate increased non-DE funding to support the on-campus demand for DELTA infrastructure and services.

2. **UNC System Initiatives.**
   
   • TLTC Large Course Redesign initiative. The UNC Teaching and Learning with Technology Collaborative (TLTC) providing leadership for the redesign of large enrollment courses to optimize the student experience and learning outcomes through appropriate blending of technology and face-to-face instruction. DELTA Instructional Services, along with FCTL, are actively engaged in this project. We expect this effort to help move us toward an effective blended or “hybrid” instructional model for the institution. This is a
strategic objective for DELTA, and a key component of the provost's student success initiative (see below).

- **TUNCO.** "The University of North Carolina Online" initiative was conceived by President Bowles to proactively expand key DE programs of the UNC system institutions to a national and international market. NC State has submitted 23 DE degree and certificate programs for potential inclusion in the TUNCO initiative. This represents a great opportunity to enhance NC State's national and international visibility through these programs. To take advantage of the opportunity will require us to resolve the budget and infrastructure issues described in item 1 above.

- **UNC Vista (LMS) Council.** DELTA led the establishment of the UNC Vista Council, a collaborative agreement among five UNC institutions (NC State, UNC Charlotte, UNC Wilmington, UNC Asheville, and Western Carolina University), to share physical infrastructure and staff efforts to deploy and support Blackboard's Vista enterprise learning management system (formerly WebCT Vista). Our cost studies indicate an approximate 50% cost savings resulting from this collaboration. While coordination of such a critical academic infrastructure component among five institutions is a significant challenge, the efficiencies gained are substantial, and should be a model for other large academic technology projects.

3. **The Provost's Student Success Initiative.**

- In the vice provost's deliberations on efforts through which we could collectively impact student success at NC State, two items emerged on the short list which are squarely in DELTA's area of responsibility: 1) the use of "hybrid" or "blended" learning courses to reduce scheduling constraints and improve learning outcomes, and 2) use of technology to provide supplemental instruction for courses with low pass rates. A focus on these efforts will impact DELTA's resource planning and allocation for the compact planning period.

**Office Goals for 2010**

- **Overarching goals**
  - seamless integration of DE and on-campus TLT
  - clarity and focus on institutional stance on DE+LT
  - More effective communications mechanisms with campus constituents
- **Resolve budget uncertainties and move from zero-based budgeting model to continuing budget model for established DE programs**
- **Address 2010 projected demand for DE and LT**
  - Streamlined services
  - Increased strategic collaborations with key NCSU partners, colleges, and UNC campuses
  - More and better TLT infrastructure and training capacity
- **Focus efforts on Student Success project**
  - Large course redesign
    - Hybrid (blended) courses
    - Supplemental instruction resources
  - DE advising and mentoring
- **Improve ability to keep abreast of new technology for TLT, evaluate and disseminate to campus**
- **Implement mechanisms to attract and retain a diverse and qualified workforce**
- **Develop long-term plan for DELTA permanent home**
Action Items

1. Develop formula-based DE/LT funding model.
   a) Short Name.
      Formula-based Budget
   b) Purpose and Description.
      We will develop a formula-based budgeting process to more accurately match funding allocations with projected enrollments. This process will allow the allocation of budgets on a continual basis for established distance education programs. It will also allow budget decisions to be made in a more timely and strategic manner. DELTA will create a formula-based spreadsheet and begin to analyze FY 07/08 budgets with an anticipated completion date of April 30, 2007.
   c) Justification and Intended Impact.
      Allocations for Distance Education programs are currently made on a fiscal year basis. Although one-time funding provides some flexibility, it no longer meets the needs of established distance education programs. For instance, the disadvantages of paying permanent employees on one-time funds are obvious when hiring new faculty and while working through legislative increases. A continuing-funding base, adjusted in accordance with enrollment growth, would not only enable program coordinators to plan more strategically but would also more clearly illuminate the relationship of available budget with enrollment growth or decline. An additional advantage to a formula-based budgeting process is the ability to clearly identify expenditures supporting out-of-state enrollments and to ensure that out-of-state tuition dollars are invested back into the appropriate programs and not offset with state-appropriations.
      Once developed, we will continue to monitor the formula-based process, adjusting percentages as appropriate, with the goal of allocating funds in accordance with growth and potential. As in the past, enrollment projections will be closely monitored and compared to actual enrollment numbers and allocations will be adjusted appropriately. This action will contribute to the university’s Investment Priority to “strengthen the university’s resource base” by providing greater stewardship of state-appropriated funds. It will also improve the effectiveness of distance education programs by promoting a more meaningful budgetary process.
   d) Funding Requirements.
      No new funds are required to implement this action.

2. Course Redesign Initiative.
   a) Short Name.
      Large Course Redesign (New)
   b) Purpose & Description.
      Large course redesign projects utilize technology to improve student learning outcomes in large introductory courses, and are often associated with the academic transformation work of the National Center for Academic Transformation’s redesign projects (see http://www.center.rpi.edu). Models for large course redesign include the supplemental model (class meetings remain constant but the course is supplemented with online activities/materials), the blended learning or hybrid model (online activities/materials replace part of the class time), and the fully online course model (online activities/materials replace part of the class time). Successful redesign projects require administrative commitment, solid technology infrastructure, faculty development, and an assessment plan. Specific steps to be taken on this project include:
      a) participation in the UNC TLT large course redesign project
      b) work with University Registrar to identify potential large course redesign projects
      c) work with appropriate Deans and Department heads to secure administrative support for identified redesign projects
      d) work with appropriate faculty members involved, providing professional development and curricula support
e) create a team consisting of DELTA, Library, and FCTL staff to support redesign projects
f) work with UPA to create overall assessment model for the redesign projects

c) Justification and Intended Impact.
A number of introductory campus courses have high withdrawal or failure rates and/or high enrollments with waitlists (sometimes caused by course repeaters). Course redesign projects take strategic advantage of available technologies, identifying large introductory courses with low completion rates, high enrollments, or other issues could benefit from a large course redesign. While a number of assessment models for these projects are possible, evidence of impact should include measurable differences in course completion rates (decrease of DWF) and in the availability of seats for high enrollment courses.

This initiative ties in with NC State’s student success project, which we support as one of our goals. Participation in this initiative harnesses one of NC State’s distinctive characteristics; that is, using e-learning to enrich learning. Additionally, this initiative supports the NC State investment priority of developing faculty of the highest quality, as professional development activities related to course redesign provide a real opportunity to rethink entire curricula and methodologies to include more active learning opportunities for students.

d) Funding Requirements.
$95,500 FY 2007-08, $30,000 FY 2009-10


a) Short Name.
Enterprise LMS

b) Purpose and Description.
Now that NC State has an Enterprise level Learning Management System, it is time the university recognized it as such and funds it appropriately. DELTA has been managing our LMS on a shoestring budget, and has done quite well getting things up and running, and collaborating with other campuses in the UNC System. However, distance education money has been subsidizing the much higher, on campus use of the LMS. Across the board in DELTA, approximately 65% of salaries come from DE money, the licensing fees for Vista, $118,360, are paid from ETF funds, which is less than 30% of the ETF money taken in from DE students ($420,062.91), and all DELTA operating expenses used for LMS, approximately $300,000 this fiscal year, come from DE funds. We argue that an LMS, which is necessary for the business of NC State, and for student success, should be considered at least as important as the administrative systems that are used on campus and funded at a reasonable level. A peer comparison study recently issued by MIT shows that all of the responding schools except one spent more than $38 per student per year annually, not including any one-time or startup costs. We currently spend about $11 per student per year.

c) Justification and Intended Impact.
It’s clear from our tracking reports that the demand for use of our campus LMS is increasing at an astronomical rate. In terms of Reg &Rec sections and enrollments served, Vista usage has more than doubled from Fall 2005 to Fall 2006. Preliminary numbers for Spring 2007 show similar growth. Surveys show that a large barrier to entry is the fact that all our LMS tools are not integrated into a one-stop shop. We know how to integrate the tools, and we have a wealth of experience doing such integration projects. However, we are all but consumed with the daily running of the systems and have precious little time left for development. We can use surveys and tracking data to determine whether our efforts are effective. We currently know who uses our tools, when they start and when they stop. If our integration work is successful, those numbers will go up. Improving the LMS will help develop a faculty and staff of the highest quality.
Easy to use LMS tools would enable our faculty to easily manage their course loads in a pedagogically sound way, facilitating improvements in their instructional skills while saving them time to devote to other scholarly pursuits. These tools will also strengthen the university’s core infrastructure. This speaks to the very nature of the request. We are, exactly, asking to help strengthen the university’s core infrastructure, by declaring that the enterprise LMS is part of the core infrastructure and funded as such.

One of our overarching goals is a seamless integration of DE and on-campus TLT, and that would be furthered by a more seamless integration of our enterprise LMS. This item also speaks to several other goals, including addressing 2010-projected demand for DE and LT, and a focus on student success. In the long run it will. Once we develop a seamless integration of the pieces of our LMS arsenal, it will improve both effectiveness and efficiency of faculty, students, our training, the help desk, and other auxiliary services.

d) Funding Requirements.
$125,000 FY 2007-08, $125,000 FY 2008-09

4. E-Portfolio Initiative.

a) Short Name.
Campus E-Portfolio Pilot.

b) Purpose and Description.
There are many quarters within the university that use portfolios, electronic or not. We would implement the Vista e-Portfolio module to start the process of bringing e-Portfolios to the campus.

c) Justification and Intended Impact.
There have been many small pockets of e-Portfolio activity within the university, and an ad-hoc group has been meeting to discuss e-Portfolio possibilities for several years (driven by FCTL, DELTA and the Libraries)
One of the features of an e-Portfolio system is the ability to do assessments of program objectives. We would draw upon the campus expertise to implement e-Portfolios and assess our success and impact with the tool itself as well as our usual data gathering techniques This action item could contribute to the following investment priorities:

- Strengthen the university’s core infrastructure. This would add another enterprise class tool for teaching and learning to our current offerings.
- Enrich undergraduates’ educational experience through their active engagement with society. E-Portfolios have been shown to be useful to help students foster critical thinking skills as well as develop their communication skills.
- Develop a faculty and staff of the highest quality. E-Portfolios can help demonstrate when faculty are successful (by looking at the aggregate results from their students) offering them more effective feedback, and evidence for RPT. Also, faculty, themselves, could take advantage of this system and keep track of their research, publications and other scholarly activity.
- Strengthen the university’s resource base. An e-Portfolio system could strengthen the ties between alumni and the university, and could, potentially, encourage more alumni to contribute (or we could charge a fee for access to the portfolio after graduation).

An E-Portfolio system would add another major set of tools to our suite of technology for teaching and learning. As such, it has a broad impact on DELTA's goals. It would increase the TLT infrastructure, and help us to further integrate TLT in on-campus and DE offerings. The e-portfolio initiative will not directly improve effectiveness or efficiency of continuing programs, however, since the e-Portfolio system is tied into our Vista LMS system, it, itself, will benefit from many efficiencies that we've already established with our LMS. Also, the user experience is very similar to that in the LMS, so there would be fewer new things for faculty and students to learn than with a stand-alone system.
d) Funding Requirements.
$300,000  FY 2008-09


a) Short Name.
   Video Classroom Redesign
b) Purpose and Description.
   Our current Video classrooms output primarily video, and require an operator dedicated to the room. This AI will redesign the rooms to allow them to run in a more automatic mode, allowing staff to monitor several programs, and will shift the primary output to a rich media presentation.

c) Justification and Intended Impact.
   Demand for video classrooms is increasing, and will quickly surpass the operators we have available to staff the rooms. In fact, we already have rooms in development that are beyond our current staffing ability. In addition, the higher resolution VGA source of a Rich Media presentation will address quality issues with the current model. We have made some sample Rich Media presentations and can clearly see the quality improvements. We will continue to engage our customers and do quality assurance testing to monitor the production quality. This AI will strengthen the university’s core infrastructure. These classrooms will fill a niche between the ClassTech classrooms, and full production studios, and will improve the quality of our output significantly. This AI will contribute to DELTA's goals in several ways, but most noteworthy will be the ability to provide quality instructional resources to both traditional and DE students, thus improving student success. This AI will improve efficiency. DELTA will be able to provide more hours of video classroom time, with higher quality output, and without having to increase the number of operators as quickly as we would with the old model.

d) Funding Requirements.
   No additional funding in requested, however, we do request that the DE Facilities Budget be updated to reflect the increase in DE enrollments. In the past several years, that money has not increased along with the enrollments.

6. Workforce Diversity and Retention.

a) Short Name.
   Workforce Diversity and Retention
b) Purpose and Description.
   We will develop and implement best-hiring practices to attract a diverse and qualified applicant pool and hire the most-qualified individual when filling vacancies. We will also promote retention by providing equitable salaries for current and new employees. A task force will be charged to consider current hiring practices, including advertising venues, and to draft a document of best practices for our division. Our Business Officer will serve as Chair of the task force. We will ask the Office for Equal Opportunity to review and provide input for the final document. Additionally, we will continue to use the Career Banding process to ensure salary equity among SPA banded employees. The Vice Provost, in consultation with the Senior Management Team, will also continue to evaluate salary equity among EPA professionals. We will emphasize professional development of our employees and provide opportunities and support when appropriate.

c) Justification and Intended Impact.
   Although search committees are provided step-by-step guidelines and access to hiring policies, they are in need of best practice suggestions. The idea of the task force is for individuals that have served on various search committees to share successful practices as well as things that did not work so well. Some of the questions that might be answered: Which advertising venues have provided a diverse, highly qualified pool in our area of specialty? What sort of matrix might you use to review qualifications? Should you require an interview presentation?
The Career Banding process has demonstrated some salary inequities that we are currently addressing. Additionally, there are no clear salary ranges for most EPA professional positions and close monitoring of salaries is necessary to ensure equity. As indicated in the university’s Investment Priority to “develop a faculty and staff of the highest quality,” competitive compensation is critical to attracting and retaining high-quality faculty and staff. It is also recognized in the university’s Investment Priorities that professional development is critical to retaining high-quality employees. It is essential within DELTA for employees to have access to professional development opportunities. Not only will this assist with employee retention, it would help retain the current level of effectiveness; employees must be provided opportunities to stay abreast of the latest developments in their areas of specialty.

d) **Funding Requirements.**
   No additional funding is requested.

7. DE Centralized Services.

   a) **Short Name.**
      DE Services Consolidation

   b) **Purpose and Description.**
      Distance Education began the process to consolidate student services within the DE unit during the 2006-07 fiscal year, providing a streamlined approach for comprehensive services. Efficiencies in staff, space, and work assignments will result in a significant cost savings, achieving an economy of scale. In-house services also increase points of contact with DE faculty and students, enabling the DE staff to better understand and serve their needs. Outcomes will be measured by DE student surveys administered each semester, annual faculty surveys to gather feedback and to solicit recommendations for new and enhanced services, and cost comparisons of internal vs. outsourced DE services from 2005-10.

   c) **Justification and Intended Impact.**
      This initiative contributes to “engaged learning in a technology-rich learning environment” and preparing the "foundation for a lifetime of learning” through consolidating services tailored to meet the needs of distance learners and allowing timely response to their changing needs.

   d) **Funding Requirements.**
      No funding is requested; this initiative should realize an annual cost savings of $100,000.

8. DE Student Retention Initiative.

   a) **Short Name.**
      DE Student Retention Study

   b) **Purpose and Description.**
      Following the recommendations provided in the DE student retention and attrition study (1A), several actions are being implemented to recruit, retain, and achieve successful outcomes for a diverse DE student population. Recruitment efforts will focus on students who have some post-secondary education but who are unable to attend campus-based programs due to constraints of time, schedule or life circumstances. Admissions counseling will help gauge student preparedness, identify academic and career goals, and help ensure participation in the NC State community through orientation sessions and other ongoing help desk and information resources. DE support staff will communicate regularly with DE students, with procedures developed to identify and follow-up with students at risk for attrition or dissatisfaction with their DE studies. Baseline DE student attrition data will be collected beginning with the fall 2006 semester at key points in the semester to gauge the impact of intervention strategies on retention and attrition rates. A research study will also be conducted to follow up with students who drop or withdraw from DE classes after census day to identify and remedy causes of student attrition. Focus groups will be held periodically with DE faculty, students, and community groups to augment
statistics and data collected from individual experiences. A follow-up report will outline the steps taken to mitigate obstacles to student success, and outcomes achieved as measured by reduced attrition rates, continued studies, and higher grades achieved.

c) Justification and Intended Impact.
This initiative contributes to "engaged learning in a technology-rich learning environment" and preparing the "foundation for a lifetime of learning" through an optimization of learning opportunities made available through distance education technologies to students irrespective of time, location, or life circumstances. It addresses concerns that DE attrition rates are higher than campus-based courses and programs by seeking remedial action to minimize unsuccessful outcomes. It also seeks to recruit and retain a student population that is as diverse as those enrolled in campus-based programs.

d) Funding Requirements.
No additional funding is requested.

9. DE Quality Assurance Study.

a) Short Name.
DE Quality Assurance Project

b) Purpose and Description.
This proposed project continues until a pilot study of ENG 331-2-3 Professional Writing courses compares DE and campus-based student learning outcomes (see Section 1A) through 2010. Twenty Internet-based course sections of technical, science, and business professional writing, taught to approximately 450 students each semester will be compared to a similar number of campus-based sections and students. The additional three years for this study will help identify emerging trends in online pedagogy and their corollary in student learning outcomes. This long term analysis should also provide corroborating evidence for the results seen thus far in both student and faculty satisfaction: that student preference for online courses exceeds supply, progress toward degree is enhanced through minimizing schedule conflicts, student evaluations and success rates are consistent between online and classroom sections, instructors incorporate assignments in their online sections that challenge students to do their best work, and gradual transformation of faculty attitudes toward online instruction as they gain confidence in teaching and learning outcomes for their online sections. Outcomes will be measured by UEI comparison of campus and online sections, annual surveys to compare faculty satisfaction rates for campus and online sections, and analysis of grade reports to compare outcomes of campus and online sections.

c) Purpose and Description.
There is still some lingering doubt that online instruction can be the full equivalent of campus-based instruction. This long term study seeks to dispel that doubt, with quantifiable evidence of faculty and student satisfaction and course outcomes. This initiative contributes to "engaged learning in a technology-rich learning environment" and preparing the "foundation for a lifetime of learning" by ensuring that university standards of excellence apply to DE courses as well as campus courses. Students who need to change or augment their careers through courses and programs available through DE with minimal schedule constraints can be assured of a quality education throughout their lifetime.

d) Funding Requirements.
No new funding for DELTA is requested for this initiative, however we are requested that DELTA be relieved of the ongoing cost of supporting the English Professional Writing program, given that the SCHs generated are counted in the on-campus funding. The cost of this program for FY0607 is $275,800, while the Purpose Code 101 funding generated is more than $400,000.
10. Strategic Partnership Expansion: UNC Online Partnership.

a) Short Name.
UNC Online

b) Purpose and Description.
Engagement in The University of North Carolina Online partnership to expand distance education enrollments and meet in-state projections, plus appropriate national and international student audiences. The DELTA Marketing and Partnership Development Office provides leadership for the UNC system initiative and will manage the NCSU partnership implementation process to meet enrollment projections.

c) Justification and Intended Impact.
Out of state, public and private competition is capturing NC State distance education enrollments. U.S. Online Education reached 3 million students and $5 billion in 2005. Competitive institutions include: University of Phoenix (130,000 students, 56 programs), Walden University (23,000 students, 34 programs), University of Maryland University College (48,000 students, 40 programs), UMass Online (21,000 students, 40 programs, emphasis is on serving its own state).
Impact will be measured by meeting online degree program enrollment projections, engagement and expansion of new online degrees through faculty and student support.

Participation in UNC Online supports NC State’s Investment Priorities which are strengthened by the role of the engaged research university through a comprehensive state, national and potentially international enterprise, providing an additional mechanism to build graduate and professional programs, and fosters innovation-driven economic development through partnerships.

Expanding online degree programs supports the development of outstanding teaching programs in the areas identified as state and national needs.

DELTA’s goals include providing greater access to higher education for nontraditional learners. UNC Online partnership will serve more students, meet the growing demand for online education worldwide, and potentially generate new revenue for the benefit of University academic activities. Furthermore, this will promote the University as a leader in educational innovation, quality, service and access.

UNC Online collaborative participation leverages effectiveness and efficiency of resources to serve more students and meet the growing demand for online education.

d) Funding Requirements.
No additional funding is requested.


a) Short Name.
Proactive Communication Initiative (New).

b) Purpose & Description.
The purpose of this initiative is to provide more effective communication mechanisms to campus constituents. Elements of effective communication may include providing timely and accurate website information, creating easily readable reports for distribution to colleagues and clients, and providing other mechanisms of communication (e.g. newsletters, email alerts) that keep constituents engaged in DELTA activities. Steps to being more proactive communicators include:
- DELTA website maintenance
  (a) Ensure fresh, engaging content
  (b) Identify missing content and resources
- DELTA reports
  (a) Provide regular DELTA reports to the campus community
- DELTA newsletter
c) **Justification and Intended Impact.**
   One of our DELTA goals is to provide more effective communication mechanisms to campus constituents. Colleagues across the campus have asked that we have better mechanisms for communicating what DELTA is doing, including sharing resources and reports. Focus groups with key constituents can be conducted in FY 2007, prior to implementation, and in FY 2009, after we establish this position and implement new communication strategies, to ascertain if we are better meeting the communication needs of our partners.

d) **Funding Requirements.**
   We plan to use money reallocated from the Associate Vice Provost for Learning Technologies position (position abolished) to hire a Technical Communicator, so no additional funding is necessary.

12. **New position to support new technology evaluation and dissemination.**

   a) **Short Name.**
   Technology Evaluation (New).

   b) **Purpose and Description.**
   The purpose of this initiative is to provide staff some small portion of time to investigate new technologies and to keep abreast of trends in technologies. We would distribute the work load across more personnel, allowing each some time devoted to evaluation and dissemination.

   c) **Justification and Intended Impact.**
   One of our DELTA goals is to improve our ability to keep abreast of new technology for TLT, evaluate and disseminate to campus. Many of our campus partners look to us to inform themselves about new pedagogical technologies. Our information and instructional staff have been feeling overwhelmed in maintaining the infrastructure and support for existing technologies and feel precious little time for investigative examination of new technologies, which weakens our ability to plan, and to spread knowledge of new technologies to the rest of campus.

   d) **Funding Requirements.**
   $75,000

13. **Plan for DELTA permanent home.**

   a) **Short Name.**
   DELTA Home

   b) **Purpose and Description.**
   The DELTA main office is in leased space in Venture III. We also have space in Partners I and the DH Hill Library, and will gain 2800 square feet in Park Shops at the completion of the building renovation. With the exception of the Library space and the new Park Shops space, all DELTA space is leased, requiring more than $250,000 annually, approximately 5% of our internal budget. We would like to find a permanent home in university owned and supported space so that these funds could be reallocated to DELTA’s core academic support mission.

   c) **Justification and Intended Impact.**
   DELTA’s budget is strained by the high growth of DE and the increasing use of Learning Technologies on campus. The funds required to pay for our space would benefit the university much more if they could be invested in new program development and improving the learning technologies infrastructure.

   d) **Funding Requirements.**
   This action item does not require funding, but requires a commitment from the university to work with us to establish a home for DELTA within university space so that our academic funds can be used for academic purposes.

14. **Centralized approach to captioning and transcription.**

   a) **Short Name.**
   Captioning and Transcription. (New)
b) **Purpose and Description.**
   This entry is included as a placeholder for a possible initiative. DELTA and ITD have had preliminary discussions regarding potential cost savings to the university by bulk purchase of captioning and transcription services. This initiative cannot be finalized until it has been discussed with DSO.

c) **Justification and Intended Impact.**
   TBD

d) **Funding Requirements.**
   TBD

**Resources**

a) **Progress Report on 2000-07 Compact Plan Initiatives**
   See Spreadsheet 4a.

b) **Budget Review**
   Details to be discussed at the Compact Plan meeting.

c) **Recent Efficiency Improvements**
   The position of Associate Vice Provost was eliminated and two positions under that position now report directly to the Vice Provost. Reallocations are detailed in Spreadsheet 4c.

d) **Future Efficiency Improvements**
   Spreadsheet 4d details further reallocations resulting from the elimination of the AVP for Learning Technologies position. Additional planned efficiency improvements will be discussed at the Compact Planning meeting.

**Planning Process**

The DELTA compact planning process was a collaborative effort of the senior management team (SMT). This team consists of the Vice Provost and his Executive Assistant, the Associate Vice Provost for Distance Education Planning and Development, the Associate Vice Provost for Marketing and Partnership Development, the Director of Instructional Services, the Director of Information Technology, and the DELTA Business Officer. The senior management team attended an all-day retreat on January 4 to begin the planning process, developing an outline for each component of the plan. The responsibilities for fleshing out the plan were divided among SMT members, each of whom worked on his or her components. The components were integrated, vetted, and refined at our bi-weekly SMT meetings.

**Appendices provided on CDROM:**

2006 VCS Survey Results  (VCS Customer Satisfaction Survey)
2006 VCS survey Staffing Results  (VCS Customer Satisfaction Survey)
Four Year RIO Data (IDEA Grant assessment)
SI 2006 Post Final Report  (Summer Institute assessment)
Competitive Analysis (Competitive analysis of top 16 universities in DE)
Eng331-2-3  (Professional Writing Virtual Report)
Distance Education and Diversity Report (DE retention study)
NCSU-Educause (Educause Core Data survey)
LMS Reports samples  (LMS reports)
IS 2006 Annual Report  (Training reports)
DE Annual Report 05-06  (DE courses, enrollment statistics, technology usage statistics)
DE Program List 05-06 (Program development data)
DE Program Cost Analysis (Cost per SCH by program)
IDEA grant resource FY 2005-06 allocation (IDEA grant resource allocation)