



Minnesota
STATE COLLEGES
& UNIVERSITIES

CTL DESIGNED FOR LEARNING GRANTS 2007-2008

A Program for Redesigning Large-Enrollment Courses

This document and related resources can be found at
http://www.ctl.mnscu.edu/programs/special_Int/dfi.html

The Center for Teaching and Learning invites participation in a systemwide initiative that focuses on redesigning large-enrollment, multi-section courses using technology-supported active-learning strategies to achieve improvements in learning outcomes and cost savings. For the 2007-2008 academic year, the program expects to award up to eight grants with awards of up to \$25,000.

The goals of the program are to:

- adopt new ways to improve student learning outcomes;
- demonstrate student learning improvements through rigorous assessment;
- increase the internal capacity of System faculty and staff members to assess learning outcomes in systematic and comparable ways;
- increase consistency across multiple-section courses;
- free up instructional resources to be used for other purposes within the department or program; and
- develop the internal capacity of System faculty and staff to continue the redesign process.

The Designed for Learning program will build on the successful models and lessons learned from the National Center for Academic Transformation (NCAT) and on our experience in four current Designed for Learning pilot projects redesigning multi-section, large-enrollment courses at Minnesota State University, Mankato; St. Cloud State University; and Southwest Minnesota State University.

The project also supports other Minnesota State Colleges and Universities initiatives, including:

- Assessment of student learning outcomes (AQIP, NCA/HLC Accreditation)
- Systemwide discipline workshops, transfer meetings (integrating faculty effort between institutions and across institutional types)
- FIPSE-supported project on “Quality Matters” <http://www.qualitymatters.org>
- ELECT group of Early Childhood Educators working across 13 institutions
- Centers of Excellence
- Systemwide D2L use and learning object creation, and other use of Web and Internet technologies to support learning approaches and options for students
- Improving access and success for traditionally underserved communities

Center for Teaching and Learning grant programs are supported by funds from the Office of the Chancellor. Prospective applicants may contact:

GRANT MANAGER

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651.297.1483

BACKGROUND

Public higher education in Minnesota is challenged, as is the case throughout the nation, by the need to increase access, to improve the quality of student learning, and to control or reduce rising costs. These issues are interrelated in many ways. For example, if increased instructional costs result in increased tuition costs, then access may be curtailed for those least able to afford education. Or if the quality of education is compromised by ill-conceived cost-containment measures or poorly considered extension of access, then the promise of increased access becomes hollow. Fortunately, the solutions to these challenges appear to be interrelated as well.

Historically, improving quality or increasing access has meant increasing costs, while reducing costs generally meant reducing both quality and/or access. In order to remain vital and still serve a growing and increasingly diverse student body, higher education must find a way to resolve these familiar trade-offs between quality, cost, and access.

Many colleges and universities have adopted exciting new ways of using technology to enhance teaching and learning and extend access to new populations of students. Our own colleges and universities have been widely recognized for our successes in applying technology to improve access to higher education throughout Minnesota and to students across the country and the globe. Still, Minnesota State Colleges and Universities have not fully harnessed the potential of technology to improve the quality of student learning, increase retention, and reduce costs of instruction in courses that have the broadest impact

This project focuses on:

- courses with large enrollment across multiple sections;
- those which are required courses in programs of strategic importance
-- OR --
- those which are required foundation courses for students planning to enroll in such programs.

A New Approach

This is the second iteration of a program initiated by the Center for Teaching and Learning and the Office of the Chancellor. In 2006-2007, four teams of faculty members at three different institutions are launching their projects to redesign courses on their own campuses. That program worked closely with the National Center for Academic Transformation, a nonprofit organization that is dedicated to demonstrating how colleges and universities can redesign their instructional approaches using technology to achieve quality enhancement and cost savings. Although NCAT will not be so closely involved in direction of this project as before, CTL will continue to use NCAT's proven principles, and consult with them as necessary to help make these projects work. We will also sponsor membership for Designed for Learning grantees in NCAT's new Redesign Alliance, which provides access to redesign experts at colleges and universities throughout the country. More information about the Redesign Alliance can be found at <http://www.center.rpi.edu/RA.htm>.

NCAT identified five different models for applying redesign elements. The five models represent different points on the continuum from a fully face-to-face course to a fully online course. NCAT also established a number of evidence-based approaches to assessing student learning, as well as a variety of strategies to overcome potential implementation obstacles.

Early course redesign projects focused on large-enrollment, introductory courses. Since undergraduate enrollments in the United States are highly concentrated in introductory courses, these courses have the potential to have significant positive effects on student success and, in many cases, to generate large cost savings.

Some common elements appear in successful redesign projects.

- The redesigns address the entire course, not just a single—or a few—class sessions.
- They emphasize active learning through greater student engagement with the material and with other students.
- Learning activities emphasize practice, feedback, and reinforcement.
- Interactive software often is heavily used, both individually and in teams individually and in teams.
- Differences in student learning styles are accommodated.
- Course management software helps monitor student performance to support mastery learning.
- There is differentiated use of personnel rather than relying on a single faculty member to do everything associated with delivering a course.

What Does “Cost Savings” Mean in Practice?

It is important to understand the context for reducing costs. In the past, cost reduction in higher education meant loss of jobs, but that's not the approach in these projects.

Institutional participants have used cost savings in the following ways:

- offering additional or new courses that previously could not be offered;
- satisfying unmet student demand by serving more students on the same resource base;
- breaking up “academic bottlenecks”—courses that delay forward progress of students within a subject area or program because they are oversubscribed;
- increasing faculty release time for research, renewal or additional course development; and
- combinations of these.

The Minnesota State Colleges and Universities System will allow any savings generated through the redesign projects to remain in the department or program that generated them.

Further information about NCAT is available at www.theNCAT.org.

FOCUS

Redesign efforts supported by this grant program must focus specifically on courses with high enrollments. Nationally, NCAT reports that at community colleges, about 50 percent of student enrollment is concentrated in just 25 courses; 35 percent of students at baccalaureate level are enrolled in the same number of courses.

In addition to affecting large numbers of students, there are other advantages to focusing on large-enrollment courses. In many such courses, the predominant instructional model is the large lecture. Many departments continue to organize courses in this way because they believe that it represents the most cost-effective way to deal with large numbers of students. The Designed for Learning program demonstrates that alternatives that improve quality and are less costly are possible.

Many large-enrollment courses are introductory. These courses are good prospects for technology-enhanced redesign because they have a more or less standardized curriculum and outcomes that can be more easily delineated. Successful learning experiences in them will influence students to persist and will help students make the transition to more advanced study.

Goals

- Solving teaching and learning problems
- Using a range of new learning approaches and technologies to support students' success
- Freeing up instructional resources to be used for other purposes within the department or program
- Systemwide applicability or scope
- Replicability (in other sections and at other institutions)
- Timeliness (can be completed in pilot timeframe)

ELIGIBILITY

- All full- and part-time faculty members, administrators, and staff at Minnesota State Colleges and Universities are eligible. Individual faculty members pursuing projects on their own should work with at least one other faculty or staff member in some capacity, for example as an outside evaluator for the project, a consultant on instructional design, or an administrative partner to overcome barriers to active learning.
- Applicants must be committed to completely redesigning and delivering a large enrollment course currently offered at a system institution.
- Large enrollment courses may be courses with very large sections (e.g., traditional lecture courses) or courses that offer large numbers of smaller sections. In all cases, more than one person should be involved in teaching the course.
- Applicant teams may be from a single institution or campus or from multiple institutions or campuses that offer the same course.

FUNDING

Amount of award: Up to \$25,000

Requests for CTL Designed for Learning funds should not exceed \$25,000. Total project budgets should not exceed \$50,000, and should include significant institutional matching funds. If the grant is intended or expected to be supplemented by other grantors, these potential supplements should be identified in the application. At least \$200,000 is available for this grants program.

APPLICATION/IMPLEMENTATION TIMELINE

<i>Academic year</i>	<i>Application Deadline</i>	<i>Implementation</i>	<i>Final Report Due</i>
2007-08	March 30, 2007	April 2007-May 2008 or January 2008-December 2008	June 6, 2008 or January 30, 2008

PLANNING YOUR PROGRAM

Understanding the planning methods is a key to the effectiveness of the process. Once learned, the methods are easily transferable to other courses and disciplines. NCAT's high level of success with course redesign was due to selecting initial participants who were ready to succeed, teaching them the methods of planning and design, and actively supporting them as they develop both plans and courses. In the Minnesota State Colleges and Universities program, we will replicate NCAT's approach and provide prospective applicants with planning resources drawn from prior projects—through a series of workshops and consultations. Prospective applicants will be supported directly by CTL staff and grantees, and by membership in NCAT's Redesign Alliance, throughout the process.

The program employs a seven-stage process.

Stage One: Learning How to Redesign

- Faculty and staff members and administrators from all Minnesota State Colleges and Universities institutions are invited to apply for this opportunity. Potential applicants should familiarize themselves with the course redesign process as developed by NCAT. A mandatory planning **Web seminar** will be held on February 2, 2007. Registration deadline for this seminar is January 31. This seminar will be conducted by CTL staff.
- A mandatory **proposal-writing seminar** for applicants will be conducted on March 1, 2007 at Minneapolis Community and Technical College by CTL staff members and faculty members who are currently redesigning courses in the Minnesota State Colleges and Universities system. The goal of this seminar is to give participants the tools to write a successful proposal, and to provide significant individualized assistance with applicants' redesign plans. Through presentations, case studies, and group work, participants will learn how to adapt redesign methodology to the needs of their particular institution. Workshop participants should be the core team member(s) who will implement the redesign project if funded. The workshop will also give participants an opportunity to share ideas, to obtain feedback from program staff, and to assess the quality of their proposal ideas in relation to others.

Participants will be expected to have completed some assigned reading about course redesign prior to the workshop and to have discussed some redesign possibilities with colleagues. Participants should come to this workshop with a draft Assessment Form and Course Planning Tool (from http://www.center.rpi.edu/R2R/R2R_Planning_Resources.htm)

The workshop will be conducted in concert with CTL's annual Realizing Student Potential/ITeach conference. See http://www.ctl.mnscu.edu/facdev/user_event-list.php?eventtype=conference&eid=69 for conference details.

Stage Two: Establishing Institutional Teams

Institutions interested in submitting proposals will establish institutional teams to undertake large-enrollment course redesigns. These teams should include the following people:

- *Faculty Experts.* Course redesign requires that faculty experts explicitly identify the course's desired learning outcomes and agree on course content. Large-enrollment courses typically include more than one faculty member. To ensure course consistency, these faculty experts must work together on the redesign, resolve any differences in how the course will be offered, and collaboratively plan the most effective way to accomplish the redesign goals.
- *Administrators.* Because these redesigns impact multiple sections, large numbers of students, and academic policies and practices, it is important to involve academic administrators on the team. The level of these administrators will depend on the organization and size of the institution. For some it will be the academic vice president or designee, for others it will be a dean or department head. These team members can play an important role when institutional issues such as changes in scheduling or the use of classroom space arise. If unexpected issues arise in the process of redesign implementation, administrators can help the team resolve them quickly and effectively across institutional offices.
- *Information Technology Professionals.* These team members provide expertise in the use of information technology so that redesign goals are accomplished in ways that make the technology as easy for students to use as possible.
- *Instructional Design Experts* can contribute ideas about how to increase interaction with content as well as with other students. They can also suggest design approaches to ensure that the technology does not limit students' learning options.
- *Assessment Experts.* CTL staff will suggest straightforward methods to enable student learning in the redesigned course to be compared to that of the traditional course. It is, however, useful to include someone who is knowledgeable about assessment and research design on the team, particularly if the institution seeks to measure additional facets of the redesign—such as performance in downstream courses or student satisfaction. This expertise may be found in departments of education or psychology or in office of institutional research.

Stage Three: Identifying the Course

Some courses—and some faculty members—may be more ready than others to be the focus of a large-scale redesign effort.

Applicants should think carefully about which courses are good candidates for redesign at their institution and respond to the following course readiness criteria in their grant application:

- Will changes in the course have a high impact on the curriculum?
- Are decisions about curriculum in the department, program, or school made collectively--in other words, beyond the individual faculty member level?
- Are the faculty members able and willing to incorporate existing curricular materials in order to focus work on redesign issues rather than materials creation?
- Do the faculty members have an understanding of and some experience with integrating elements of computer-based instruction into existing courses?
- Have the course's expected learning outcomes and a system for measuring their achievement been identified?
- Do the faculty members involved have an understanding of learning theory?
- Is there recognition on the campus that large-scale course redesign using information technology involves a partnership among faculty, IT staff, and administrators in both planning and execution?

Stage Four: Developing Final Project Plans and Grant Proposals

CTL staff members can provide individualized assistance as prospective grant recipients prepare their proposals. Institutions are encouraged to submit drafts of their plans for review and feedback before the final submission. The final submission deadline is March 30, 2007.

Award decisions will be made by April 20, 2007 so that campuses can begin work in the summer.

Stage Five: Planning and Developing the Project

FOR FALL 2007 IMPLEMENTATION: Institutional teams will engage in focused on-campus planning during the spring and summer of 2007. They will complete redesign preparations, finalize project teams, complete redesign activities, modify existing course materials when necessary, and incorporate additional content into course materials, before piloting the redesigned course in fall semester, 2007.

FOR SPRING 2008 IMPLEMENTATION: Institutional teams will engage in focused on-campus planning during the spring, summer, and fall of 2007. They will complete redesign preparations, finalize project teams, complete redesign activities, modify existing course materials when necessary, and incorporate additional content into course materials, before piloting the redesigned course in spring semester, 2008.

Stage Six: Piloting the Redesign

During fall 2007 or spring 2008, campus teams will conduct pilot implementations of their course redesigns. Teams will collect initial assessment data that compares student learning outcomes in the traditional course with those in the redesigned format. Teams will make adjustments in the course materials and organization, if needed, in preparation for a full implementation in spring 2008 term.

Stage Seven: Implementing the Full Redesign

In spring 2008 or fall 2008, teams will fully implement their course redesigns and collect data on comparative student learning outcomes and on final instructional costs.

SUBMISSION AND REVIEW PROCESS

Selection Criteria

- Selection of the initial projects will be made by a Designed for Learning review committee of System faculty and staff members.
- Projects must demonstrate department- and institution-level commitment
- Projects must engage teams of faculty
- Preference will be given to foundation courses.
- Improved learning outcomes will be weighted more heavily than cost savings

In addition to selecting projects that are likely to succeed and to have the highest impact, CTL will try to work in a variety of disciplines and campus types using varying approaches to the redesigned courses.

Final proposals should include the following sections:

1. Cover Page and Certification Signatures (see attached)

2. Abstract

Following the cover page, write a one-page, single-spaced abstract. The abstract should conform to the following format:

- Paragraph 1: summarize the current (traditional) course including numbers of students enrolled.
- Paragraph 2: summarize the academic problem that you are addressing.
- Paragraph 3: summarize the planned course redesign.
- Paragraph 4: summarize how the redesign will enhance quality.
- Paragraph 5: summarize how you will assess the impact of course redesign on learning.
- Paragraph 6: summarize how the redesign will produce cost savings and what you intend to do with the savings.

(For sample abstracts, please see the PCR project descriptions at http://www.center.rpi.edu/PCR/Proj_Desc.htm)

3. Application Narrative

Use a font no smaller than 12 point. Please double space your proposal.

Select a redesign model (see http://www.center.rpi.edu/PlanRes/R2R_ModCrsRed.htm) and explain why you chose it and how you intend to include the *Five Principles of Successful Course Redesign* within it.

- Describe the learning materials you intend to use.
- Select and describe a cost reduction strategy (see http://www.center.rpi.edu/PlanRes/R2R_CostRed.htm). Explain why you chose it and what you will do with the savings.

- Include a timeline for your redesign project. You must plan to conduct a pilot during the fall 2007 term and a full implementation during the spring 2008 term OR conduct a pilot during the spring 2008 term and a full implementation during the fall 2008 term.

4. Tools and Forms

Available at http://www.ctl.mnscu.edu/programs/special_Int/dfi.html.

- Complete the Pilot Course Delivery Assessment Plan and the Final Course Delivery Assessment Plan for the pilot and final implementation of your redesign project. These are attached to this document.
- Complete the Course Planning Tool (see <http://www.thencat.org/PlanRes/CPTdesc.htm>) Provide a brief narrative that explains the entries in the Course Planning Tool where necessary.
- Complete the Course Structure Form (see <http://www.thencat.org/PlanRes/CSF.htm>).

5. Budget

Provide attached budget summary and budget narrative.

Proposals should be submitted electronically to thomas.wortman@so.mnscu.edu.

Proposal Submission Deadline: March 30, 2007.

TIMELINE

- **February 2, 2007** Web Seminar: Register by January 31 by e-mail to thomas.wortman@so.mnscu.edu
- **March 1, 2007** Workshop at Minneapolis Community and Technical College 10:00 a.m. – 3:00 p.m.
Register by February 22 by e-mail to thomas.wortman@so.mnscu.edu
- **February – March 2007** Teams develop project proposals
- **March 30, 2007** Teams submit final proposals to thomas.wortman@so.mnscu.edu
- **April 20, 2007** Awards announced

CTL Designed for Learning Grants

PILOT COURSE DELIVERY ASSESSMENT PLAN

Institution _____

Course Title _____

1. Which method of comparing learning outcomes do you intend to use? (check all that apply)

_____ Parallel Sections

_____ # of traditional sections _____ # of students in each section _____ total # of students

_____ # of redesign sections _____ # of students in each section _____ total # of students

_____ Before and After (Pretest/Posttest)

Source of baseline information:

Timeframe _____

(i.e., fall 2006 semester, AY 2006-2007, five-year average 2001-2006)

_____ # of traditional sections _____ # of students in each section _____ total # of students

_____ # of redesign sections _____ # of students in each section _____ total # of students

2. Which method of obtaining data do you intend to use? (check all that apply)

_____ A - Comparisons of common final exams (internal and external)

_____ B - Comparisons of common content items selected from exams

_____ C - Comparisons of pretest and posttests

_____ D - Comparisons of student work using common rubrics

_____ E - Comparisons of course grades using common criteria

Describe briefly (If D or E, please also describe the rubric/criteria)

CTL Designed for Learning Grants

FINAL COURSE DELIVERY ASSESSMENT PLAN

Institution _____

Course Title _____

1. Which method of comparing learning outcomes do you intend to use? (check all that apply)

_____ Parallel Sections

_____ # of traditional sections _____ # of students in each section _____ total # of students

_____ # of redesign sections _____ # of students in each section _____ total # of students

_____ Before and After (Pretest/Posttest)

Source of baseline information:

Timeframe _____

(i.e., fall 2006 semester, AY 2006-2007, five-year average 2001-2006)

_____ # of traditional sections _____ # of students in each section _____ total # of students

_____ # of redesign sections _____ # of students in each section _____ total # of students

2. Which method of obtaining data do you intend to use? (check all that apply)

_____ A - Comparisons of common final exams (internal and external)

_____ B - Comparisons of common content items selected from exams

_____ C - Comparisons of pretest and posttests

_____ D - Comparisons of student work using common rubrics

_____ E - Comparisons of course grades using common criteria

Describe briefly (If D or E, please also describe the rubric/criteria)

CTL Designed for Learning Grants

BUDGET SUMMARY AND BUDGET NARRATIVE

Use this table to organize your proposed budget information, or create your own grid using the budget categories below. Write a brief description of each budget item and attach a one-page budget narrative describing and justifying each item in greater detail.

Budget Summary

Budget Category	Brief Description	CTL Fund Request	Matching Funds	Total Budget
Compensation for Project Manager(s); please include name(s) and your method for calculating the compensation				
Compensation for other faculty members; please include name(s) and your method for calculating the compensation				
Consultant/Contractor Fees				
Instruction/Training				
Travel				
Student Compensation				
Equipment				
Materials/Supplies				
Other				
TOTAL				

Notes

Proposal budgets must include some form of matching funds. Please identify the source of matching funds and confirm the commitment in the dean's letter of support. Budgets may not include overhead (facilities and administration) costs in the CTL Funds Request. Facilities and administration costs up to 12 percent may be included in matching funds.

Budget Category	Budget Guideline
Compensation for Project Manager(s)	Estimate the amount of time and compensation the Project Manager(s) should receive directly or as a contribution to the cost of reassigning the personnel from their regular duties. Make this estimate in consultation with your sponsored programs office or your business office. Compensation must be paid in keeping with the terms of all applicable Minnesota statutes and collective bargaining agreements. Applicable fringe benefits associated with CTL-funded compensation will be calculated and paid at the conclusion of the project, in addition to approved grant amount. Funds may not be used to hire assistants for regular course activities or academic duties. <i>Requests wherein budgets are primarily for faculty member compensation ordinarily will not be funded without extraordinary justification.</i>
Other Faculty Compensation	Compensation for additional faculty members involved in projects outside of regular assigned duty. Compensation must be paid in keeping with the terms of all applicable Minnesota statutes and collective bargaining agreements.
Consultants or Subcontractors	Fees for non-campus personnel to provide training or professional services to the project or faculty members. Compensation must be paid in keeping with the terms of all applicable Minnesota statutes and collective bargaining agreements.
Instruction/Training	Training and instruction for project participants in new teaching methodologies or equipment/software procedures related to project goals. CTL grant funds are not intended to fund individual or group requests to upgrade or renew faculty expertise in discipline or program area, nor professional development training in areas that are unrelated to teaching.
Travel	Costs directly related to the project or associated with meeting with other system employees and project collaborators (meals, lodging, and mileage) will be considered. Requests for travel to attend conferences or training institutes are rarely funded. Professional development funds may be used as match.
Student Compensation	Estimate the number of student hours that will be paid (at campus rates) for assistance directly related to the project
Equipment	Equipment that is directly relevant to the proposed project will be considered. Equipment is generally worth \$5,000 or more and has a usable life of at least two years. <i>Requests whose budgets are primarily for equipment will ordinarily not be funded without extraordinary justification.</i>
Materials/Supplies	Special project supplies, which may include printing, copying, postage, long distance telephone.
Other	Other costs directly related to your project.
TOTAL	

CTL Designed for Learning Grants
APPLICATION COVER SHEET

Title of the Project

Amount Requested (CTL funds)

BRIEF PROJECT ABSTRACT (Do not exceed 100 words)

Project manager

Title/Position

Institution

Address

City, State, ZIP

Phone

Fax

E-Mail

Other Contact Name

Title/Position

Institution

Address

City, State, ZIP

Phone

Fax

E-Mail

Certification Signatures

Based on the criteria for eligibility in the grant guidelines, I am eligible to apply for this funding. I understand and agree that, if this application is funded, a written final report, including actual expenditures and stipends earned, will be submitted per the guidelines in the final grant document. I will provide a copy of my report to the chief academic officer and the sponsored programs and/or business officer of my institution. I understand that unless there is a law characterizing some portion of the information submitted as private, grant proposals will be treated as public information on submission in accordance with the Data Practices Act.

Project Manager Signature	Date	Print Name
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Applications must be received by March 30, 2007 and must include:

- Completed cover sheet
- Certification signatures
- One-page project abstract
- Project narrative
- Tools and forms
- Budget summary and budget narrative
- Letter of support from dean

Our institution assumes responsibility for academic and fiscal management of the project and addressing any intellectual property and/or copyright issues, consistent with board policy and collective bargaining agreement(s). We understand that, if this application is funded, our institution will enter into an interagency agreement with the Office of The Chancellor, Minnesota State Colleges and Universities.

Chief Academic Officer Signature	Date	Print Name
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Sponsored Programs and/or Business Officer Signature	Date	Print Name
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We expect application submissions via e-mail directed to thomas.wortman@so.mnscu.edu.

GRANT MANAGER

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