

# NETWORK NEWS



## FOCUS ON INFORMATION FROM WASHINGTON

*NETWORK NEWS* is a project of the SHEEO/NCES Communication Network, sponsored by the State Higher Education Executive Officers (SHEEO) and the National Center for Education Statistics (NCES).

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This issue of *Network News* highlights information from Washington, D.C. including the recent modifications to the Higher Education Act and its impact on institutions.

Other articles of interest in this issue include the National Center for Education Statistics' (NCES) web site where users can obtain information about publications, surveys, and educational data; an overview of the National Postsecondary Education Cooperative (NPEC) Council meeting held on November 1-3 in Washington, D.C.; information on the BRIDGE project which examines the costs and benefits of providing higher education by way of mediated instruction; and remarks from the new Project Director of the SHEEO/NCES Communication Network.

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### Reauthorization Update

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The Higher Education Act (H.R. 6), one of the most important pieces of legislation for postsecondary education and first enacted in 1965, was reauthorized in October. H.R. 6 authorizes a number of programmatic initiatives related to higher education as well as most of the major financial aid

programs. Many of the provisions affect operational, reporting, and data gathering efforts at the institutional and state level. This article presents an overview of some of the approved modifications with additional detail on provisions that may directly affect SHEEO agencies regarding teacher education, campus crime, and college costs.

**Pell Grants.** One of the provisions that was followed closely by the traditional press raised the maximum Pell Grant to \$4,500 for academic year 1999-00. The authorized maximum increases each year by \$300 for the next five years, reaching \$5,800 in 2003-04. The spending bill for 1998-99, also just passed by Congress, sets the actual maximum award level at \$3,125 for the upcoming year. A new program, "Academic Achievement Incentive Grants," doubles the Pell Grant award for the first two years of postsecondary education for those students who graduated in the top 10 percent of their high school class. Pell Grants will be denied to students who attend colleges with default rates of 25 percent or more for three consecutive years.

**Student Loans.** Next year's borrowers will pay the lowest interest rates in almost two

decades. The rate will be set at the three-month Treasury bill rate plus 1.7 percent while students are enrolled, and the Treasury bill rate plus 2.3 percent once they leave school and are repaying their loans. Lenders will earn a slightly higher percentage rate than the one paid by students. The difference will be made up by a new government subsidy. Some borrowers who teach for a period of years in high-poverty schools may have up to \$5,000 of their loans forgiven.

**SPRE.** The authorizing language for State Postsecondary Review Entities (SPREs) was totally eliminated from the Higher Education Act. All references to SPREs were removed.

**Performance-based Organization.** A new office is to be established within the Department of Education and will be responsible for the operation of the student aid delivery system. The organization will design and implement a five-year performance plan with measurable objectives. The goal is to improve services to colleges and students, reduce federal costs, and integrate the department's student-aid delivery systems.

**Distance Education Demonstration Programs.** The bill creates a distance education demonstration program to test the quality and validity of these programs. Some students that are enrolled in distance-education programs will now be eligible for federal financial aid. New waivers will apply to students attending

one of 15 colleges or consortia of colleges that will be chosen for 1999. An additional 35 colleges or consortia will be chosen for the third year of the legislation. A special provision requires that the Western Governors' University will be one of the institutions chosen for 1999.

**Learning Anytime Anywhere Partnerships.** Another provision supporting learning technology was added in the form of a new program created to enhance the delivery, quality, and accountability of distance-learning and career-oriented lifelong learning programs. Ten million dollars was authorized to be appropriated for FY 1999 for grants or partnerships to develop distance learning programs or software, to develop methodologies for measuring competency, and for innovative student support services. Additional funds "are authorized to be appropriated" as necessary through 2003. Grants will not exceed five years and no more than 50 percent of the project costs can come from federal appropriations.

**GEAR UP.** A new grant program, "Gaining Early Awareness and Readiness for Undergraduate Programs" (GEAR UP), was created to develop early intervention services to provide low-income students motivation to attend college. Partnerships will be required between degree-granting post-secondary institutions, middle schools with a high-percentage of low-income students, the high schools these students will ultimately attend, and community organizations. Colleges

who participate will have to guarantee mentors, tutoring, and support to a class of seventh graders and continue these services until the class graduates from high school. One hundred and twenty million dollars was allocated in the FY 1999 budget for the first year of the program.

**Voluntary Early Retirement Incentive Plans.** This piece of the legislation modifies the Age Discrimination in Employment Act of 1967 and allows post-secondary institutions to offer early retirement incentives to tenured professors. These incentive plans are partly age-based and faculty who participate will receive additional benefits for retiring early. This is being presented as one way to reduce college costs.

**Teacher Education.** Three hundred million dollars was authorized in grants to states and college-school partnerships to improve the training of teachers and to recruit more teachers for underserved areas. The grants may be used to improve the accountability of teacher preparation programs, reform certification requirements, expand alternative certification options, make it easier to remove unqualified teachers and easier to recruit highly qualified teachers, and promote performance-based compensation. Institutions and states receiving these grants will be required to present reports demonstrating that the funds are being used to improve student achievement and improve the quality of teachers.

States are also required to present an annual "report card"

that uses consistent definitions and reporting methods that NCES has been charged with developing. Each state with teacher education programs is required to collect and disseminate information about the quality of the teacher preparation in their state including:

- a description of their teacher certification and licensure assessments;
- the standards prospective teachers must meet;
- the pass rate of their graduates on teacher-assessment exams; and
- the extent to which teachers are given waivers of certification requirements.

States are further required to identify teacher preparation programs that are performing poorly. Programs that have lost state support will no longer be able to enroll students who receive federal financial aid.

### **Security and Campus Crime.**

Campuses are currently required to publish crime statistics on an annual basis. The list of crimes to be accounted for has been expanded to include manslaughter, arson, and crimes based on actual or perceived race, gender, religion, sexual orientation, ethnicity, or a disability. A daily log of crimes must be maintained and made available to the public within two business days. The report should include all listed crimes that occur on a campus, on property controlled by the campus, and on all public property adjacent to the campus or under campus control. These statistics must be reported by crime type and location type.

This legislation also grants a waiver of FERPA (Family Educational Rights and Privacy Act of 1974) privacy rules and allows colleges to release the name of any student who has admitted or been found guilty of committing a violent crime or a non-violent sexual crime. An additional FERPA waiver allows institutions to inform the parents of any student under 21 found to be using or abusing drugs or alcohol on campus. Any student convicted of possessing or selling drugs also runs the risk of losing their federal financial aid. They can recover that aid upon completion of a federally recognized drug rehabilitation program and passing two unannounced drug tests.

**College Costs.** There are three major data and reporting components in this section of the legislation: improved data collection and dissemination, a study of costs, and a student aid survey. The data collection language requires the Secretary of Education to convene a series of forums with the goal of developing nationally consistent methodologies for reporting costs. The Commissioner of Education Statistics is charged with developing standard definitions for the following:

- tuition and fees;
- the price of attendance for a full-time undergraduate;
- the average amount of financial aid categorized by type of assistance; and
- the number of students receiving financial aid categorized by the type of assistance.

NCES is further required to report these definitions to all colleges within 90 days of the

enactment of the law and these definitions will be made available on the NCES web site soon. An "easily understandable" report will be presented to the public each year comparing three years of tuition and fees at all colleges across the country beginning with academic year 2000-01. Unfortunately, this aggressive timetable will not allow NCES to field-test this new report.

The cost study will be a national, longitudinal study on expenditures at institutions of higher education. This new and separate study will include information and trends in the following areas:

- tuition and fees relative to a comparison factor like the Consumer Price Index;
- faculty salaries and benefits;
- administrative salaries and benefits;
- academic support services;
- research; and
- operations/maintenance.

This study will evaluate changes over time, the relationship between expenditures and tuition and fees, and the relationship between financial aid, including tuition discounting, and tuition increases. It will also collect data on expenditures for technology and construction and the replacement costs for instructional buildings and equipment. The study results will be reported to Congress by September 30, 2002.

An additional study on costs requires the Bureau of Labor Statistics, in consultation with NCES, to develop a higher education "market basket" that will track changes in the price of the items that make up the

cost of postsecondary education. This would not be a single cost number or an index like the Higher Education Price Index (HEPI) but rather a list of the items that comprise the cost of higher education. This report is also due to Congress by September 30, 2002.

Any college that does not provide the requested information on expenditures in a timely and accurate manner is subject to a \$25,000 fine. NCES directed a lot of energy towards removing this language from the legislation but they were ultimately unsuccessful.

The Education Secretary is also required to implement a survey of student aid recipients at least once every three years. NCES surveys a sample of students once every four years with the National Postsecondary Student Aid Study (NPSAS); however, they will be modifying their schedule to meet the requirements of this new legislation. The stated goals are to:

- identify the population receiving student aid;
- determine the income and other socio-economic factors for that group;
- describe the combinations of aid students are receiving; and
- describe the debt burden of this group and their ability to repay those debts.

The survey is required to be representative of all full-time and part-time students of all levels in all types of institutions.

This broad-reaching legislation will affect almost every sector of postsecondary education.

Many students will see changes in their federal financial aid packages and many other students will see improved access to postsecondary education. At the same time, reporting requirements for many institutions will increase as Congress calls for more information about teacher preparation, costs, and student security. This is a statement from Congress of the need for more accountability from postsecondary education. Federal legislators are responding to national demands for more information about higher education and the costs of obtaining a postsecondary degree.

SHEEO will be providing additional information on several pieces of the legislation, particularly the cost study and teacher education report card. *Network News* will provide updates on these activities and others related to this legislation as they become available.

*The full text of the Higher Education Act (H.R. 6) can currently be found under the THOMAS search feature on the Library of Congress web site at [www.loc.gov](http://www.loc.gov).*

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## Update on NCES Electronic Resources

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Developing electronic resources for information dissemination has been a high priority at the National Center for Education Statistics (NCES) in recent years, and these efforts are now paying off. Visitors to the NCES web site can

explore firsthand the multitude of educational data, surveys, and publications produced by NCES. Users can read and download information, learn how to obtain printed reports and CD-ROMs, and even generate custom tables from NCES data sets. Both novices and experienced researchers will find this web site a good starting point for investigations of all kinds.

This article highlights some of the features of the NCES web site, found at [nces.ed.gov](http://nces.ed.gov). However, no written description can fully describe the multitude of resources available, nor capture the experience of navigating the web site. The reader is cautioned that this web site is dynamic and may have changed since this article was published. Readers are encouraged to log on and see for themselves what resources are currently available.

**Home page.** Visitors to the NCES home page are greeted with "News from the National Center for Education Statistics." This includes a description of new publications, announcements of upcoming events, and other timely Department of Education information. Visitors are also introduced to three new NCES web features that encourage their active participation:

- The News Flash Subscription Service, through which individuals may subscribe and receive e-mail alerts about NCES news. (For more information, turn to page 7.)
- StatChatplus, for on-line discussion of education

information and related issues.

- The daily quiz question to test one's knowledge of education data.

Interested users can click on any of these "buttons" to begin their journey.

In addition, depending on their knowledge about NCES and their current needs, users can choose among the following "buttons" to move further into the web site:

- Commissioner's Remarks
- What's New?
- Search NCES
- Publications

- Data Products
- Survey and Program Areas
- ED at a Glance
- Projects with Partners
- NCES Conference Connection
- FAQ Section
- NCES Staff
- Search NCES
- NCES Help

Each of these options is worth exploring, and this article will highlight just a few.

**Searching by survey.** Most NCES data collection is organized by survey, and users desiring an overview of NCES work might begin their inves-

tigation by clicking on "Survey and Program Areas" at [nces.ed.gov/surveys/datasurv.html](http://nces.ed.gov/surveys/datasurv.html). This search produces a list of all major NCES surveys, with a paragraph description of each.

By perusing this information, users will quickly gain familiarity with NCES work and can identify which surveys they might explore further. Clicking on individual surveys provides further details, such as a survey overview, design, components, policy and research issues, publications, and contact staff for additional information.

### NCES Surveys

#### Elementary/Secondary Surveys

- Common Core of Data (CCD)
- Current Population Survey (CPS)
- Fast Response Survey System (FRSS)
- High School Transcript Studies
- National Household Education Survey (NHES)
- Private School Survey (PSS)
- Schools and Staffing Survey (SASS)

#### Postsecondary Surveys

- Baccalaureate and Beyond (B&B)
- Beginning Postsecondary Students (BPS)
- Integrated Postsecondary Education Data System (IPEDS)
- National Household Education Survey (NHES)
- National Postsecondary Student Aid Study (NPSAS)
- National Study of Postsecondary Faculty (NSOPF)
- Postsecondary Education Quick Information System (PEQIS)
- Recent College Graduates Study (RCG)

#### Longitudinal Surveys

- Early Childhood Longitudinal Study Program (ECLS)
- High School and Beyond (HS&B)
- National Educational Longitudinal Study of 1988 (NELS:88)
- National Longitudinal Study of the High School Class of 1972 (NLS)

#### Education Assessment

- National Adult Literacy Survey (NALS)
- National Assessment of Education Progress (NAEP)

#### Libraries

- Academic Library Survey
- Public Library Survey
- School Library Survey
- State Library Agencies (SLA)

#### International Comparisons

- International Comparisons
- Third International Mathematics and Science Study (TIMSS)

**Searching for publications.** The "Publications" button at [nces.ed.gov/pubsearch/index.html](http://nces.ed.gov/pubsearch/index.html) leads users to a catalog of NCES products and tools for searching its on-line library. Options include:

- Publications released in the last 90 days
- Data products released in the last six months
- Indicator reports and statistical compendia
- Issue briefs
- Technical publications
- Publications by survey and program area
- Publications by subject A-Z
- Search by NCES publication number

**Searching for data.** More experienced researchers may want to delve deeper into the data. By selecting "Data Products" at [nces.ed.gov/data.html](http://nces.ed.gov/data.html), they can obtain information on released and on-line data products, as well as surveys with restricted data licenses (due to confidentiality legislation).

Users wanting immediate access to the data can click on "On-line Data Products" at [nces.ed.gov/data.html#on-line](http://nces.ed.gov/data.html#on-line). This provides access to several web-based electronic resources:

- IPEDS Interactive Database Search
- The Data Analysis System (DAS)
- IPEDS and CCD CD-ROM Products
- International Archive of Educational Data

For example, readers interested in the Data Analysis System (DAS) will discover the following at [nces.ed.gov/das](http://nces.ed.gov/das):

#### **DAS on the Web**

The Data Analysis System (DAS) is a Windows software tool that allows access to Department of Education survey data. The DAS generates tables specified by users who "tag" row and column variables of interest to them. The output tables contain the estimates (usually percentages of students) and corresponding standard errors which are calculated taking into account the complex sampling designs used in NCES surveys. In addition, the DAS software can create correlation matrices that can be used as input for most popular statistical software programs for multivariate analysis.

There is a separate DAS for each survey data set, and all have a consistent interface and command structure.

Further information on how to use the DAS is provided.

Delving further into the IPEDS Interactive Database Search at [nces.ed.gov/ipeds/earlyrelease/index.html](http://nces.ed.gov/ipeds/earlyrelease/index.html), users would find the following:

#### **Integrated Postsecondary Education Data System Interactive Database Search**

This is a search tool for selecting postsecondary education institutions based on criteria whose values you choose. You select institutions by searching on their characteristics after choosing the survey you are interested in. This facility will give you the ability to browse the data on your screen and to download the selected records in delimited ASCII format.

This system has been developed to 1) enable researchers to obtain selected information on their institutional peers and 2) help the general public find institutions with certain characteristics. Because of this, DO NOT attempt to use the data for any other purposes. Comments or questions about the data or capabilities are encouraged and should be sent to [samuel\\_barbett@ed.gov](mailto:samuel_barbett@ed.gov).

Review the search screens to get the look and feel of what is offered. Then fill in one or more boxes with data values and then click on the "submit form" button to get the list of institutions which meet your criteria. Then click on the selected institutions' "UnitIds" for additional data. Filling in more boxes is better than less because fewer selection criteria usually means longer lists.

**Other information.** Other kinds of information are available on the NCES web site as well. For example, under "Help" at [nces.ed.gov/nceshelp.html](http://nces.ed.gov/nceshelp.html), users can learn how to download Portable Document Files (PDF) as well as the Adobe software needed to view these files. Information is also provided about ZIP format archive files, and the encoding/decoding process through UUENCODE and UUDECODE.

In sum, the NCES web site is a dynamic place, growing and changing continuously. People exploring the site for the first time will be pleasantly

surprised at the wealth of information available at their fingertips. Those who last visited a while ago will enjoy trying out the new features. In any case, everyone who works with education statistics is certain to find something of interest on the NCES web site and to come away with a new appreciation of the value of electronic information resources.

### News Flash Subscription Service

To subscribe to NCES' News Flash Subscription Service, go to [nces.ed.gov/newsflash/index.asp](http://nces.ed.gov/newsflash/index.asp). After providing your e-mail address (required) and other identifying information (optional), you can select your areas of interest from the following:

- Publications and Data
  - New Data Products
  - New Publications
  - Updates/Revisions of Data Sets
- NCES Conferences/Training/Workshops
  - Conferences
  - Training
  - Workshops
- NCES Web Applications

You will be added to a subscription list to receive up-to-date e-mail alerts on the areas you selected.

Visit the NCES web site at [nces.ed.gov](http://nces.ed.gov), and send your comments or questions to [NCESwebmaster@ed.gov](mailto:NCESwebmaster@ed.gov)

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## NCES Reports

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The following reports were released by NCES in 1998. For more information on these and other reports and data products and to browse or download files, visit the publications page on the NCES web site at [nces.ed.gov/pubsearch/index.html](http://nces.ed.gov/pubsearch/index.html).

### Data sourcebooks

*The Condition of Education.*

*Digest of Education Statistics.*

*Projections of Education Statistics to 2008.*

### Student participation and progress

*The 1994 High School Transcript Study Tabulations: Comparative Data on Credits Earned and Demographics for 1994, 1990, 1987, and 1982 High School Graduates, Revised.*

*Degrees and Other Awards Conferred by Degree-Granting Institutions: 1995-96.*

*Dropout Rates in the United States: 1996.*

*Fall Enrollment in Postsecondary Institutions, 1996.*

*Indicator of the Month: Graduate Field of Study, By Sex.*

*Indicator of the Month: Racial and Ethnic Differences in Participation in Higher Education.*

*Profile of Undergraduates in U.S. Postsecondary Education Institutions 1995-96.*

*Report in Brief: NAEP 1996 Trends in Academic Progress.*

### Finance

*Federal Support for Education: Fiscal Years 1980 to 1998.*

*Student Financing of Graduate and First-Professional Education, 1995-96: With Profiles of Students in Selected Degree Programs*

### Faculty/Staff

*Fall Staff in Postsecondary Institutions, 1995.*

*Handbook on Human Resources: Recordkeeping and Analysis.*

*Retirement and Other Departure Plans of Instructional Faculty and Staff in Higher Education Institutions.*

*Salaries of Full-time Instructional Faculty, 1995-96.*

*Salaries, Tenure, and Fringe Benefits, 1996-97.*

**Technology**

*Distance Education in Higher Education Institutions.*

**NPEC reports**

*Better Decisions Through Better Data. (Available early 1999).*

*Definitions and Assessment Methods for Critical Thinking, Problem Solving, and Writing (soon to be available on NPEC's "What's New" page).*

*Reconceptualizing Access in Postsecondary Education.*

*Technology and its Ramifications for Data Systems.*

*Unit Record Exchanges in Postsecondary Education: Case Profiles of Seven Exchange Systems.*

*Unit Record Versus Aggregate Data: Perspectives on Postsecondary Education Data Collection, Retention, and Release.*

**Other**

*1997 Directory of Postsecondary Institutions.*

*Index to NCES Issue Briefs and Indicators of the Month.*

*The Status of Academic Libraries in the United States: Results from the 1994 Academic Library Survey with Historical Comparisons to 1974.*

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**NPEC Council Meeting**

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The fourth annual National Postsecondary Education Cooperative (NPEC) Council meeting was held on November 1-3, 1998, in Washington, D.C. NPEC is a voluntary partnership of postsecondary education data providers and data users with the goal of "**Better Decisions Through Better Data.**" The Council meeting provided an opportunity for over 140 NPEC members to meet together, hear presentations on current postsecondary education issues, and review the current member-run and NPEC-sponsored cooperative projects.

The keynote address was delivered by **Dr. Judith Eaton**, President of the Council for Higher Education Accreditation (CHEA). CHEA is an institution-based association that serves as a national advocate for voluntary self-regulation through accreditation. Dr. Eaton spoke on the tension between accreditation and accountability, presenting accreditation primarily as an internal activity while accountability reflects external or public expectations. This creates a tension for institutions between internal and external factors at a time when there is a growing expectation that accreditation can meet accountability demands. Addressing this tension and meeting multiple demands will require more data and analysis, she argued, including more effort in developing core data sets and competency-based indicators. CHEA is turning to organizations like NPEC for assistance with data and issue identification, strategy formulation, and identifying indicators that demonstrate results.

A series of concurrent sessions followed the keynote address. These sessions were designed both to inform Council members and solicit input on projects' current status and future directions. A summary of several of those sessions is presented here.

Representatives from the **Policy Panel on Racial/Ethnic Categories** presented information on the upcoming changes in racial and ethnic reporting. Among their recommendations, they suggested that institutions could choose to capture more categories than those requested by the federal legislation as long as they were aggregated into the OMB categories. They recommended collecting data through two separate questions; one on ethnicity (Hispanic/Latino or Not Hispanic/Latino) and one question on race. They also recommended that institutions should try to update existing records and collect data on new students at the same time. Institutions may also want to carry the old codes in addition to the new codes. They addressed the fact that tabulation guidelines are forthcoming from OMB and that they are expected by March 1, 1999.

The **Strategic Planning** subcommittee summarized the current planning proposal and solicited feedback from NPEC members. The criteria for project approval and review were discussed including centrality and balance, coordination with other work, timeliness and utility, feasibility and cost

effectiveness, and quality. The subcommittee recommended that NPEC will be most successful if it takes advantage of the relationships between multiple projects. With that goal in mind, the chairs of the working groups all met together to discuss possible connections between the groups and to coordinate their efforts. The subcommittee also recommended that NPEC focus its efforts in the following four areas:

- Student Outcomes;
- Access;
- Data Infrastructure and Relationships; and
- Costs, Finances, and Productivity.

Work is already under way in each of the first three areas. These recommendations are a reflection of the subcommittee's proposal that NPEC should undertake fewer projects (three to four at any time) while placing an emphasis on the strategic importance of projects to the postsecondary education community.

Another series of meetings were held on **Unit Record Data Exchanges**. Members of this working group presented a list of best practices including the need for a clear purpose when creating a data exchange, the value of protecting privacy, the necessity of ensuring the trust of the participating institutions, and a need to maintain data quality. They also raised a number of ongoing concerns including a need for FERPA clarification. In January, this group will ask the NPEC Steering Committee for approval to do a pilot test of a unit record data exchange titled Completion and Transfer Exchange (CATE). This voluntary three-year pilot would focus on directory-type data such as matriculation, program completion, and the educational outcomes of transfer.

Additional sessions were held on **IPEDS Redesign, Workforce Development, Competency-based Initiatives, Ramifications of Technology for Current Surveys, Student Transitions, and Access**.

The Council heard a luncheon address from **Dr. Pat Forgione**, the NCES Commissioner of Education Statistics. Dr. Forgione spoke on partnerships and the value of building relationships. He suggested that having a clear data agenda allows NCES and NPEC to have an impact in legislative discussions especially since Congress currently has an aggressive need for data. Dr. Forgione also discussed the recent reauthorization of the Higher Education Act and the NCES efforts to work with

Congress on the Act. Responding to the legislation with generalities is not good enough, he went on to say. Both Congress and the public need data and NPEC can help. Dr. Forgione described the need for "data of quality that are useful to many audiences." NCES is working in this direction in many ways including the IPEDS redesign, responding to the cost study requirements (related information on page 3), making their data more easily accessible on their web site (related article on page 4), and making the Postsecondary Studies Division a separate divisional unit in NCES under the direction of Associate Commissioner Dennis Carroll.

*More information about NPEC can be found on their web site at <http://nces.ed.gov/npec>.*

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## Benefits and Costs of Mediated Instruction and the BRIDGE Project

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Interest is currently very high in controlling the cost of postsecondary education, in meeting increasing access demands, and in using technology to meet academic and fiscal challenges. A recent project, funded by the U.S. Department of Education and jointly sponsored by the California State University (CSU), the National Learning Infrastructure Initiative (NLII), and State Higher Education Executive Officers (SHEEO), looked at these issues with the goal of estimating both the benefits and the costs associated with distance education and distributed delivery. The two-year project, entitled "Case Studies in Evaluating the Benefits and Costs of Mediated Instruction and Distributed Learning", is directed by **Dr. Frank Jewett** at the California State University (CSU) Chancellor's Office.

This multi-year project had its origins in the national benefit-cost discussions first initiated by CSU in 1992. Soon after, SHEEO joined CSU as a sponsoring partner of the discussions with a particular interest in the statewide public policy aspects. Three NLII meetings were held in 1995 and 1996 that led to the development of this particular project. The project's original scope had two primary objectives:

- Conduct eight to ten **benefit-cost case studies** comparing mediated or technology-centered instruction with classroom instruction; and
- Develop a **simulation model** to compare the costs of campus growth based upon mediated

instruction vs. the same growth based upon traditional classroom instruction.

The first project goal was to conduct **case studies comparing mediated instruction with classroom instruction**. Ten campus-based studies were undertaken; six were of institutions using instructional television, and the other four looked at computer software instruction. Dr. Jewett determined that learning outcomes compared between classroom and mediated instruction were essentially the same; there was "no significant difference" for instructional television and only "weak evidence" of improved learning associated with computer courseware used for teaching remedial math and English composition. However, access for students was improved via television especially for remote areas where statewide participation rates increased by three percent to six percent. In all cases there was a sense of institutional renewal especially for faculty development and, in some of the cases, for inter-institutional relations. The results of these benefit comparisons, especially those related to learning outcomes, are consistent with a substantial amount of other research on this topic.

### 10 Campus Based Studies

#### Instructional Television

Cleveland State/Univ. of Akron  
Rio Salado Comm. College  
Educ. Network of Maine  
Rensselaer Polytechnic Institute  
Old Dominion  
SUNY at Brockport

#### Computer Courseware

Baruch College  
University of Pittsburgh  
California State University  
Virginia Polytechnic Institute and State University

The cost analysis component of the case studies looked at direct costs (including both operating and capital or start-up costs) on a course-by-course basis. The primary direct cost of classroom instruction is the instructor's salary. The imputed capital cost of the classroom is relatively small. A real difference emerges between classroom and mediated instruction associated with mediated course start-up expenses. These fixed costs tend to be higher

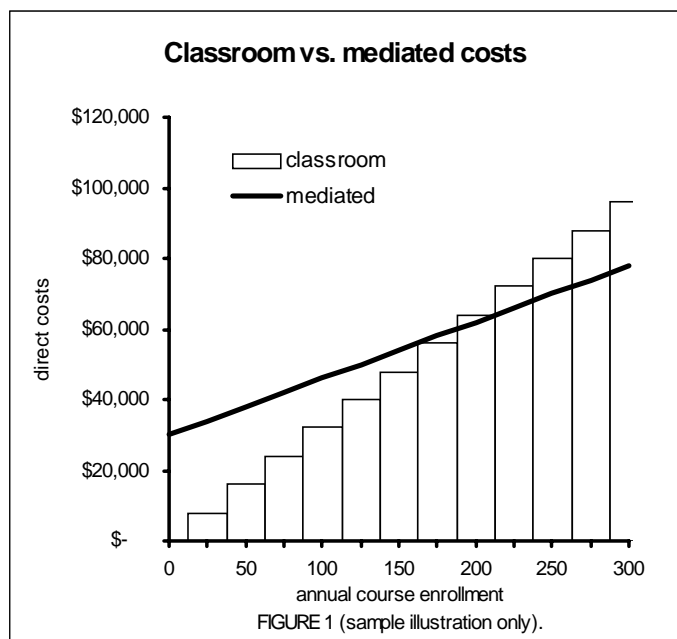
than the classroom fixed costs due to special equipment needs, course production costs, communication costs, license fees, etc. However the incremental costs or the cost associated with adding more student enrollments are less for mediated courses (see Figure 1). The economic rationale is that the change in technology allows the resources, including faculty resources to be used more efficiently as enrollment increases. These cost conclusions are also consistent with the work of others.

The project's conclusions from the case studies are:

- mediated instruction can generate benefits (especially learning and student access) at least equivalent to classroom instruction; and
- mediated instruction is subject to economies of scale and has the potential to be less expensive than classroom instruction given sufficient course enrollments.

Restated, this means that with sufficient enrollment, institutions can use mediated instruction to obtain the same or similar benefits with a lower cost. Future study is needed to determine if these benefits, found on a course level, apply to mediated instruction at the campus level.

The second major objective of the project was to build a **campus cost simulation model**. This model, known as BRIDGE, is based upon two campuses. Both start with the same initial enrollment (e.g. 10,000 FTE), identical instructional programs and similar facilities. Both grow by the same amount (e.g. additional 10,000 FTE) over a period of 30 years. However, the two campuses have different futures. The traditional lecture/lab campus, identified as LL in the model, grows by adding classroom instruction. The mediated campus (MED) adds all of its FTE growth in a combination of broadcast courses and asynchronous network courses. The LL campus is projected based on existing data and in thirty years is expected to look similar to existing campuses in terms of faculty, staff, programs, and facilities. The MED campus is projected based upon user-provided cost data including course production and maintenance costs, broadcast and network costs, remote site costs (if any), course sharing arrangements among institutions (if any) and costs associated with student interaction, evaluation, and grading.



The "crossover point" as illustrated in Figure 1 shows the relationship between costs and enrollments at the course level. BRIDGE is designed to model the relationships between course costs and average course enrollments at the campus level. BRIDGE will allow users to experiment with their own cost and enrollment data and find combinations of mediated course costs and enrollments that would be lower than the costs associated with lecture and lab instruction. Information of this sort would allow institutions to determine the optimal combination of mediated and classroom instruction based on the associated costs and benefits.

The project is currently nearing completion. Additional information will be forthcoming regarding the final report and the model availability.

*For current information, please see the web site at [www.calstate.edu/special\\_projects/](http://www.calstate.edu/special_projects/) or directly contact Frank Jewett at [frnkjewett@aol.com](mailto:frnkjewett@aol.com) or Frank Young at [fyoung@calstate.edu](mailto:fyoung@calstate.edu).*

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## **New Network Director: Hans P. L'Orange**

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I am very pleased to be joining SHEEO, NCES and you as part of the Communication Network.

There are many fascinating issues and topics in postsecondary education right now and we will do our best here at the Network to keep you informed about the developing world of higher education. Please let us know if there are areas that are important to you that we haven't addressed.

I have already had the pleasure of meeting with many of you and hope to contact many more of you in the coming months. For those of you that don't know me, I come from the world of institutional research. I was at the University of Colorado at Boulder for over ten years, most recently as the Associate Director of Institutional Analysis. That experience allowed me to work on many of the issues currently on the table from an institutional and occasionally state perspective. I truly welcome the opportunity to work at a more global level with the Network.

On a more personal level, I'm very happy to be able to stay in Colorado. My wife and our two sons enjoy the Colorado lifestyle and try to get out in the mountains as frequently as we can. Winter is here and that means downhill skiing for the boys and cross-country skiing for me. However, if you hear me complaining about the weather, that's probably a reflection of my childhood in Hawai'i. I grew up on a cattle ranch there and that's the reason you'll still see me wearing my cowboy boots in both Denver and Washington.

Please don't hesitate to contact me, Alene, or Diane on questions you may have about *Network News* or if you have suggestions on future issues. I can be reached at 303-299-3688 or [hlorange@sheeo.org](mailto:hlorange@sheeo.org). I look forward to working with you.

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