

## **Methodologies Used in the Study of the Nature of Innovation in the Community College**

### **Methodology: Categories of Innovation**

The League for Innovation has a complete historical file on all the innovations that have been recognized since the beginning of the Innovation of the Year Award in 1982. The researchers decided to review and categorize all these innovations from 1999 through 2008 in terms of their content or substance in order to identify major areas of innovative activity as well as trends. There were 173 innovations with brief descriptions and, where applicable, titles of the innovation. The innovations were placed in a spreadsheet by year with brief descriptions included along with columns for identifying the assigned category such as basic skills, faculty and staff development, and student support services. See the list of categories below.

The researchers created a set of guidelines (see guidelines below) for categorizing the innovations. Using the draft categories and draft guidelines, the researchers worked as a team to categorize the innovations in 1999 and 2008 to make sure they were operating from a common base. The full description available for each innovation was reviewed by the three staff members, discussed in detail, and agreed upon. This process resulted in several revisions of the categories and the guidelines.

In the next step, each of the researchers worked independently, using the revised categories and guidelines, to determine the categories for the innovations for the years 2000 through 2007. The results were combined, and where there were differences or questions the three members convened as a team to make the final determination.

### **Innovations by Categories**

#### *Primary Category*

- Course/Program Development
- Student Support Services
- Basic Skills/Developmental
- ESL
- Global Awareness
- Instruction
- Curriculum Development
- Faculty/Staff Development
- Cross-Sector Partnerships
- Student Support and Academic Services Collaboration
- Workforce Development
- Business/Finance
- Facilities
- Community Service
- Library
- Diversity

- Sustainability
- Learning Outcomes
- Miscellaneous

#### *Secondary/Delivery Areas*

- Information Technology
- Distance Learning
- Cross Sector Partnerships

### **Guidelines for Categorizing Innovations**

1. Innovations should be categorized on the basis of their content or substance rather than on the mode of delivery.
2. Distance Learning (DL) should not be used as a category but may be a sub-descriptor of a category when distance learning plays a major role in delivering the content or substance. Distance Learning, to distinguish it from Information Technology, includes some activity related to instruction or learning.
3. Information Technology may be used as a category when the innovation is primarily about information technology and cannot be assigned to a content/substance category. In some cases information technology (IT) may be used as a sub-descriptor.
4. Cross-Sector Partnerships may be used as a category when the innovation is primarily about the partnership and cannot be assigned to a content/substance category. In a number of cases cross-sector partnerships may be used as a sub-descriptor.
5. An innovation may be assigned to two different categories when it is reflected about equally in each category. The total number of categories tallied will be larger than the total number of innovations.
6. New categories of innovations will be created as necessary to reflect emerging programs and complex collaborations.

### **Methodology: The Survey of Innovation of the Year Award Recipients**

The proposal to MetLife Foundation for this project gave high priority to a survey of the winners of the League for Innovation's Innovation of the Year Award. The award was established by the League in 1982 to recognize an annual winner or a winning team for the outstanding innovation from each of the League's 19 board colleges. Beginning in 2005, all League member institutions were invited to participate. Criteria for selecting the winners are provided by the League, and colleges are urged to add any criteria they think appropriate. In addition to receiving the award, winners are recognized with a photo and brief description of the winning innovation in an edition of the League's electronic publication, *Innovation Showcase*.

For this project it was decided that only the winners from 1999 through 2008 would be included. Winners from earlier years would be difficult to locate, and the winners from this time frame constituted a substantial number of over 400 participants for the survey. Because participation was limited to League board institutions from 1999 through 2004, the data set was restricted to Innovation of the Year Award recipients from those 19 colleges.

The researchers began drafting a survey in early 2009, drawing on their experiences with the awards program, selected readings, and a review of the available information in League files about the winners and their innovations. Three researchers contributed to the early draft. The first draft of the survey was reviewed by a focus group of 20 invited community college leaders interested in the topic of innovation. The focus group met for two hours on March 16, 2009, during the League's annual Innovations conference (Reno, Nevada). Facilitated by the researchers, the focus group included a number of League Representatives, winners of the Innovation of the Year Award, and several individuals selected for their special interest in innovation.

The second draft of the survey was revised by the principal investigator and the research assistant based on the responses of the focus group. Special attention was given to the creation of the item related to definitions because of its centrality to the study. A list of definitions was compiled from the responses suggested by participants in the focus group and refined by the researchers to reflect a variety of definitions gleaned from the literature and tailored for the educational environment. A great deal of the literature on innovations addresses business models of innovation aimed at creating products; these perspectives do not translate well into education.

The list of definitions was organized into ten that, in the view of researchers and focus group participants, reflected a variety of approaches to innovation—all appropriate to the culture of education. In May, the list was distributed to the 19 League Representatives who were asked to select the 5 definitions they felt were most relevant and useful for the community college. League Representatives selected 6 definitions (one was a tie) that were included as an item in the survey.

A second item in the survey was also selected for special development: the characteristics of a community college culture that encourage and support innovation. In April, at the semiannual meeting of the League Representatives in Annapolis, Maryland, the researchers conducted a two-hour work session with the 19 League Representatives who addressed the question, "What are the characteristics of a community college culture that encourage and support innovation?" League Representatives had read a brief paper on this issue prepared by the researchers and distributed to the participants before the meeting. The outcomes of the work session were recorded by the researchers and the results were organized into 18 characteristics.

On May 14, 2009, a survey that included the 18 characteristics was sent to the 655 CEOs of colleges that hold membership in the League's Alliance. These are colleges that have considerable interest in innovation. They receive special publications from the League and their staff attend League conferences at special rates. The CEOs are surveyed four times a year on topics of special interest to CEOs. In the May 14 survey, the CEOs were asked to rate the importance of each of the 18 characteristics in defining a community college culture that supports and encourages innovation. There were 88 responses to the survey for a return rate of 13 percent. The return rate for the preceding three surveys was 14 percent, 14 percent, and 15 percent so the return rate for this survey was typical.

From the 18 characteristics, the top 10 in priority order of the ratings were selected for inclusion in the survey to be sent to the Innovation of the Year Award winners. The winners were asked to rate the importance of each of the characteristics on the same scale used by the CEOs.

To continue developing the survey, the researchers reviewed a number of key resources on innovation over the summer including:

- Ellis, K. (2005). *Research on Educational Innovations*. Fourth edition. Larchmont, NY: Eye on Education.
- Orange, C. (2002). *The Quick Reference Guide to Educational Innovations: Practices, Programs, Policies, and Philosophies*. Thousand Oaks, CA: Corwin Press.
- Council on Competitiveness. (December 2004). *Innovate America: National Innovation Initiative Report*.
- Heindl, D. (2008). *Innovative Infrastructure: A White Paper*. Nth Degree Software.
- Adams, K. (September 2005). *The Sources of Innovation and Creativity*. National Center on Education and the Economy.

The third draft of the survey was field tested in July 2009 on a sample of 32 recent winners of the Innovation of the Year Award from 13 League Alliance colleges. League staff selected colleges that are active members of the Alliance; some of the winners represented teams so there are more winners than colleges. Alliance winners participate in the same process and are guided by the same criteria as winners in the 19 board member colleges of the League. None of the survey participants in the final survey were from Alliance colleges. Only seven winners from Alliance colleges responded for a return rate of 22 percent. Given the fact that many faculty are not on campus in summer months and that members of teams may not be as responsive as individual winners, the return rate is acceptable. In any case, the seven respondents provided excellent comments that were used to create a fourth draft of the survey.

In August, the fourth draft of the survey was sent to the eight members of the project's National Advisory Committee for review and critique. Seven of the members responded; four offered specific suggestions for additions in response options and changes in wording. One committee member suggested an additional item for the characteristics of institutions that support and encourage innovation, which was included. The researchers used the feedback from the committee to create the fifth and final draft of the survey.

The survey was distributed by the League office through an electronic service, Constant Contact, on September 9, 2009, to 400 winners of the Innovation of the Year Award. A follow-up request was sent two weeks later. Of the 400 winners, 117 returned surveys for a response rate of 29 percent. The response rate was lower than expected for possibly two reasons: (1) The survey was distributed in September, which is one of the busiest months of the year for faculty and staff returning to begin a new term. Because of the project time framework, the researchers had no alternatives; it took all spring and summer to create the survey, and if it had been distributed much later than September there would not have been time to compile and analyze the data for reports due at the end of the calendar year. (2) Several studies have indicated that the return rate on electronic surveys is lower than paper-and-pencil surveys for various reasons, including concerns about confidentiality and perceptions of surveys as excessive email or spam. (Cook,

Heath, and Thompson, 2000; Sills and Song, 2002). In any case, the 117 responses were sufficient to provide a rich data base on the perspectives of winners of the Innovation of the Year Award.

### **Methodology: The Culture of Innovation**

As this project evolved, the idea of examining the characteristics of a community college culture that support and encourage innovation emerged as an important aspect of the nature of innovation. The idea first emerged in a discussion with the 20 invited members of the focus group that met during the League's annual Innovations conference held in Reno, Nevada, on March 16, 2009. Participants in the focus group felt that while descriptions of the nature of innovation would be helpful, a carefully constructed list of institutional characteristics that support innovation would be particularly beneficial as the basis for guidelines that could be used by college leaders to assess their institution's commitment to innovation.

The timing to include a study on characteristics was serendipitous inasmuch as the League Representatives would be gathering in Annapolis, Maryland, in April for their semiannual meeting. The chair of the League Representatives was contacted and agreed to schedule a two-hour session with the Representatives to address the key question: What are the characteristics of a community college culture that encourage and support innovation?

The researchers prepared a background brief on this dimension of the project for the meeting of the League Representatives that included the following assumptions about the key role these leaders play regarding the nature of innovation:

1. The 19 colleges that are board members of the League for Innovation are, by definition, among the most innovative community colleges in the U. S. and Canada.
2. The 19 League colleges champion and recognize innovation as a hallmark of their culture.
3. League Representatives, as the institutional conduits to the League and as respected and seasoned leaders, are champions and supporters of innovation.
4. League Representatives are a rich resource of information and perspectives on innovations, on the innovative process, and on college culture that encourages and supports innovation.

Held on April 23 in Annapolis, Maryland, the two-hour work session was facilitated by Laura Weidner, Project Research Assistant, assisted by Cynthia Wilson from the League office. From this session, the researchers compiled a list of 19 characteristics that were further refined by the researchers into a list of 18 characteristics.

The final list was organized into a survey format that asked respondents to rate each characteristic on a five-point Likert scale ranging from "Highly Unimportant" to "Highly Important." The nineteenth item requested that respondents, "Please add any characteristics not listed here that you think are important in defining a community college as having a culture of innovation."

This survey was distributed to all 19 League Representatives on May 14, 2009, and 17 of the League Representatives responded for a response rate of 89 percent. On May 14, 2009, the survey was also sent to the 655 CEOs of colleges that hold membership in the League's Alliance. These are colleges that have considerable interest in innovation and receive special publications from the League, and whose staff attend League conferences at special rates. The CEOs are surveyed four times a year on topics of special interest to CEOs. There were 88 responses to the survey for a return rate of 13 percent. The return rate for the preceding three surveys was 14 percent, 14 percent, and 15 percent so the return rate for this survey was certainly average. From these surveys of League Representatives and Alliance CEOs, researchers created a list of the top 10 characteristics to be included as an item in the survey of innovation winners.

The survey of the winners was carefully constructed and vetted with numerous groups. When the fourth draft was reviewed by the project's National Advisory Committee, one member suggested adding an additional characteristic to the item on characteristics of a community college culture that support and encourage innovation: "The college routinely evaluates and discusses the impact of innovation." This characteristic was clearly applicable and was added to the fifth and final version of the survey.

The survey was distributed on September 9, 2009, to 400 winners of the Innovation of the Year Award. Of the 400 winners, 117 responded for a response rate of 29 percent.