

Applied Research Center Needs Assessment

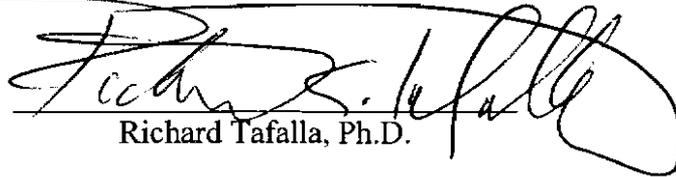
By

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A handwritten signature in black ink, appearing to read "Richard Tafalla", is written over a horizontal line. The signature is stylized and cursive.

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Abstract

As the Applied Research Center (ARC) was in the development phase, gaining information regarding the need and desire for the center was essential in order to determine how likely the center would be utilized after its implementation. Higher education institutions in the Midwest were identified as recipients of a needs assessment survey, which was deployed electronically to the appropriate individuals within chosen colleges. The survey included items relating to the potential need and use of the Applied Research Center services. Data was collected through the electronic survey tool and analyzed. Results showed that institutional research departments with three or less staff members showed more interest in surveys developed by the ARC, as well as more willingness to pay for survey participation and administration. Overall, the Student Engagement, Alumni Follow Up and Exit Interview surveys were of most interest to participants; the Mobile Technologies assessment showed the least amount of interest.

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## Chapter I: Introduction

In 2004, the University of Wisconsin-Stout achieved the Baldrige Award due to its engagement in continuous and quality improvement ([http://www.uwstout.edu/mba/news\\_release.html](http://www.uwstout.edu/mba/news_release.html)). The Baldrige Award is given to organizations that have followed rigorous steps to determine internal weaknesses, have improved operations at every level, and have been able to present proof of such success (Haavind, 1992). The overall goal of utilizing the methodologies set forth by the Baldrige is total quality in a competitive marketplace. Companies such as IBM, Federal Express, Xerox, Motorola, and Texas Instruments have received the Baldrige Award, with UW-Stout being the first higher education institution to join the list.

UW-Stout recognized the fact that quality improvement could only occur after problem areas were identified. Surveys developed by its institutional research department aided in this identification and subsequent results were used to form recommendations and implement change. Because UW-Stout has been successful in its operations, it has assisted other higher education institutions interested in continuous and quality improvement by using the methods outlined by the Baldrige criteria (<http://www.uwstout.edu/mba/>). The use of surveys developed by the ARC can help other institutions engage in improvement practices by defining their own problem areas and taking subsequent action in order to become strong competitors among other higher education colleges.

The institutional research component of the Budget, Planning & Analysis office, located at the University of Wisconsin-Stout, has recently developed the Applied

Research Center (ARC). The center specializes in providing research assistance to other higher education institutions (Wentz, 2007). Research assistance includes offering surveys that target student engagement, best learning practices, student satisfaction with their education and mobile technologies, and reasons for leaving the university. The ARC will also provide assistance with distribution of surveys, analysis of results, report writing, and preparing presentations. While the Applied Research Center was in its beginning stages, a needs assessment was conducted to determine whether or not these services were needed and desired from other institutions in order to operate in the most effective and efficient manner possible. The assessment was also designed so that results would show what surveys and services were of particular interest to participating institutions.

The goal of the Applied Research Center Needs assessment was to determine what types of institutional research were being done in other institutions, what types of services institutions were interested in, and interest in services provided by the UW-Stout ARC.

Many institutions have small institutional research departments with only one or two staff members, and, as a result, often lack the time or resources to develop their own surveys and perform all steps required when conducting a study. Departments existing under these circumstances could improve the quality of their institutions by utilizing the services offered by the ARC. Purchasing and administering ARC surveys would allow institutions to compare their own results against others who have also participated in administration, utilize data to narrow down problem areas, develop and implement strategies of change.

## Chapter II: Literature Review

### *Services of the Applied Research Center*

The Applied Research Center provides three primary types of services (Wentz, 2008). First, surveys used for benchmarking purposes, such as student engagement and retention, have been made available to interested parties. Higher education institutions can participate in established surveys and obtain data on their own results, as well as how their results compare with other institutions that have participated in the study. The UW-Stout ARC also helps institutions utilize the results from the benchmarking surveys by performing analysis, report writing, and developing recommendations.

Second, the research center provides custom services. ARC staff specializes in providing research in the following areas: mobile technology/ubiquitous computing assessment, student engagement, retention, active learning, teaching and learning research, program evaluation, and sociopsychophysiological studies.

Third, the UW-Stout ARC hosts a polytechnic data-sharing in higher educational research (PolyDASHER) consortium, in which institutions can participate at no charge (<http://www.polydasher.org>). PolyDASHER is geared toward polytechnic institutions, such as UW-Stout. Institutions involved in the data-sharing consortium will be able to compare themselves against competitors and peers, which will in turn aid in strategic planning. The data will include the results of previously conducted surveys. Analysis will enable institutions to establish where weaknesses lie when compared to competitors, and review the areas in which they excel.

### *Benchmarking*

Benchmarking is essential to continually improving any organization (Harrington, 1995). It allows institutions to identify best practices and services that can be applied to their internal operations. Within higher education in particular, it has become increasingly important to examine student learning, engagement, retention, and employment after graduation and how it compares to other similar institutions.

Because ARC realizes the benefits of benchmarking data, it offers surveys that can be used for comparative purposes that will allow other institutions to evaluate certain aspects of their operations and make appropriate changes. Currently, four benchmarking surveys are available through ARC.

### *ARC Surveys*

The Student Engagement survey was developed based on phenomenological research at UW-Stout (Wentz, 2008). The survey measures how engaged students are in their learning based on definitions students provided about what it means to be highly engaged in learning. The survey includes twenty-nine scaled questions and two qualitative questions. The scaled questions fall into three categories: 1) what instructors were doing in the classroom when engagement in learning occurred; 2) what was happening in the classroom when engagement in learning occurred; and 3) what the students saw as their responsibility to engagement in learning. The survey also includes items relating to relationships, empowerment, application, passion of the instructor, asking questions and openness to experience.

The second survey, the Alumni Follow Up, is conducted every two years. UW-Stout surveys recent alumni and their employers to assess student satisfaction and

educational effectiveness. The surveys include separate undergraduate and graduate assessments and include questions about personal development in a variety of skill areas, preparation for employment, satisfaction with employment, quality of education and effectiveness of specific programs at UW-Stout. If alumni provide current employment information, Employer Follow Up surveys are sent to the contacts listed on their completed Alumni Follow Up surveys. Employers are asked to rate the performance of alumni.

The third survey offered, the Exit Interview, was developed in order to gather information about student demographics, circumstances supporting their decision to leave the university, if they plan on returning and if they intend to complete their education at UW-Stout. The survey asks branching questions to drill down into their reasons for leaving. It allows students to indicate a primary reason for leaving, as well as additional reasons.

Finally, the Mobile Technologies surveys were designed to assess ubiquitous computing programs. A suite of surveys and assessments are offered to evaluate satisfaction and usage of the program, as well as student learning outcomes.

The surveys included and discussed in the assessment related to student learning, satisfaction with education and the laptop program, and reasons for leaving the institution. Because students are imperative to the success of any institution, gaining insight into how they view various aspects of their college careers is essential to functioning in a competitive marketplace.

*Research for the ARC*

The Applied Research Center provides the aforementioned surveys. The purpose of this research is to establish what surveys are of most interest to four-year institutions in the Midwest, and to determine the willingness of universities to pay for each survey and available services such as administration, collection, analysis, and preparation of the final report and presentation. The assessment was also written so that the ARC could obtain information regarding number of staff members at each institution, sources used for benchmarking or comparative purposes, whether or not surveys are developed internally within each institution or if they are purchased from an outside source, surveys they would like to develop if they had the resources, and the importance of the availability and use of comparative data. Results from the responses to these items would enable the center to have an overview of research being conducted now within institutions and what future research is desired. The ARC can tailor its services and offerings based on common responses supplied by participants.

### Chapter III: Methodology

Higher education institutions in the Midwest were identified as possible recipients of a needs assessment survey, which was deployed electronically to the appropriate individuals within chosen colleges. The survey included items relating to the potential need and use of the Applied Research Center services. Data was collected through the electronic survey tool and analyzed. Most statistical analysis included frequencies and descriptives to identify the areas of most interest.

#### *Participants*

Using the Integrated Postsecondary Education Data System (IPEDS), 97 universities were chosen to participate in the ARC Needs Assessment (<http://nces.ed.gov/ipeds/pas/>). All four-year public and private Midwestern institutions offering advanced degrees were selected. Contact information was obtained by searching for the institutional research directors' email addresses at the website of each university. In a few instances, there was no institutional research department or contact, in which case the survey was sent to the directors of Academic Affairs.

#### *Instrumentation and Data Collection*

The assessment included items relating to: types of surveys institutions participate in, whether or not IR departments develop their surveys internally or if they are obtained from an outside source, what sources they refer to for benchmarking purposes and items concerning interest in services and surveys provided by ARC (see Appendix A for full survey).

After all contact information was collected and the assessment gained approval from the Institutional Review Board, the survey was electronically sent to the

institutional research directors at each university. They were asked to complete the survey within two weeks of receipt. After one week, a follow-up message and survey was deployed asking those who did not respond to please do so.

#### *Data Analysis*

At the close of the survey, responses were imported from the survey tool utilized by UW-Stout into the Statistical Program for Social Sciences (SPSS) for analysis. Most analysis included frequencies, descriptive and comparative measures. Because there were a limited number of qualitative responses, they were not numerically coded by theme for further quantitative analysis. However, comments are listed in the results section.

#### *Limitations*

Data collection was limited due to the fact that only institutions in the Midwest were targeted as recipients of the survey. Had the survey been administered to a larger sample, and perhaps to schools across the United States with the same polytechnic designation as UW-Stout, more information regarding interest and need for the ARC could have been obtained.

Also, participants were only given information about the ARC and its services in the invitation letter included in the email with the link to the survey. It may have been useful to send brochures that were more aesthetically pleasing and organized to selected participants prior to sending out the survey. A brochure could have provided respondents with a physical copy to refer to while answering items relating to specific surveys the ARC has developed.

## Chapter IV: Results

The response rate for this survey was 32% (31/97). For the purpose of the ARC Needs Assessment, mostly descriptive analyses were performed. Most participants (40%) reported that they had 2-3 staff members in their institutional research departments, followed by 28% who employed 1-2 members (see Figure 1).

Participants were asked what types of surveys their institutions participate in or currently administer. The item was divided by internally developed surveys and those that are purchased from an outside source. Alumni (65%), student satisfaction (61%), and student engagement (57%) surveys were selected most frequently (see Figure 2). The least administered surveys were those relating to mobile technologies and ubiquitous computing (13%).

Participants were also asked to provide the names of any additional surveys they offer that were not included in the given responses. The following are examples of surveys that were mentioned:

- *IR customer satisfaction*
- *library services, business/financial services*
- *community and local business surveys*
- *instructional improvement survey*

Results for surveys that are obtained from outside sources showed that the majority of respondents (80%) purchase the NSSE, followed by the CIRP (36%) and the Noel Levitz (28%). The ACT Student Opinion Survey and ECAR assessments were selected by only 4% of the respondents (see Figure 3).

When asked what surveys were purchased other than those that were listed, participants responded with the following:

- *BCSSE (Beginning College Student Engagement Survey)*
- *CSEQ (College Student Experience Questionnaire)*
- *CLA (Collegiate Learning Assessment)*

Participants were asked what surveys they would like to develop internally if they had the resources, or what surveys they would like to purchase from an outside source such as the ARC. The full list of responses included:

- *Employer surveys, community needs assessment surveys to guide program development and enhancement, marketing research to guide student recruitment*
- *Retention survey*
- *Student satisfaction, alumni surveys*
- *Post-graduate surveys*
- *Alumni, Community Engagement, Student Satisfaction, Evaluation of Departments*
- *Student learning*
- *Faculty/Staff opinion*

When respondents were asked what action their IR departments take when it is determined that there is a need for a new survey, 42% reported that they develop it internally and 21% forego development due to lack of time or resources. Eighty percent of those who reported they forego development were from IR departments with 0-3 staff members and 60% develop surveys internally. No participants reported that they contract outside sources to develop surveys for them or purchase existing surveys relating to their topic of interest but not customized to their institutions. Thirty-eight percent of the participants provided other responses. All comments included:

- *purchase in some cases, develop own instrument in other cases*
- *we purchase externally, if available, otherwise develop our own*
- *more than one of the above, depending on circumstances*

- *We have contracted an outside source to develop one AND we have purchased an existing survey to have normed data for comparison*
- *consult with the requestor on how we can help develop it*
- *depends on the issue*
- *all of the above*

With regard to benchmarking, participants were asked what sources they refer to for comparative purposes. Almost all of the respondents (96%) indicated that they benchmarked against peer institutions, followed by institutions with the same Carnegie classification as their institution (68%), other institutions that have the same level of control as far as being public or private (48%), institutions with similar enrollments (40%), institutions that share similar characteristics (40%), and national averages (28%) (see Figure 4).

Those who responded that they compare themselves to colleges with similar characteristics were asked to explain further. Responses included:

- *% Commuter students; % students of color; % part-time; 2nd year retention & 6-year graduation rate*
- *Big Ten*
- *We hired a consultant to identify institutions nationwide to which we could compare ourselves based on enrollment, similarity of academic programs, and faculty salaries*
- *Institutions with similar mission. E.g. Land-grant.*
- *created an analysis tool using IPEDS data to help select peers from the campuses*
- *Athletic Conference Schools*

When asked to provide other resources used for benchmarking purposes, participants offered the following:

- *Would prefer to use our internally-generated peer groups.*
- *Well-established studies, e.g., AAUP for faculty salary comparisons.*
- *Within State Athletic Conference Schools*

Respondents were next asked how important they felt the availability and use of benchmarking data, as well as the ability to collaborate with other institutions utilizing the same survey instrument was to them. About 80% agreed that the availability and use of benchmarking data is important or very important (see Figure 5). The ability to collaborate with other institutions showed that 39% found this aspect to be important or very important, 48% thought it was somewhat important, and 13% said that it had no importance.

The next item related to interest in surveys developed by the ARC. The Alumni Follow Up survey was selected most frequently with 73% of the respondents indicating that they were either interested or very interested. After the Alumni Follow Up survey, the Exit Interview had a 70% interest rate and 67% of participants were interested in the Student engagement assessment. The Mobile Technologies surveys had the least amount of interest (30%). Although no statistical significance was found between number of staff members and interest in ARC surveys, it was discovered that institutional research departments with 0-3 staff members expressed more interest than those with 4 or more employees.

For each survey of interest (Alumni Follow Up, Student Engagement, Exit Interview, Mobile Technologies), respondents were asked to indicate for which services they would be willing to pay. Services included: survey participation, survey administration, collect and analyze data, preparation of final report, preparation of results presentation, or none. Most respondents (60%) indicated that they were not interested in

paying for services associated with any of the surveys (see Table 1). The Student Engagement survey showed more interest than the others. Thirty-five percent of respondents indicated they would pay for survey participation, survey administration (19%), collection and analysis of data (23%), and preparation of final report (15%). The Alumni Follow Up showed the second most interest with participants willing to pay for survey participation (25%), survey administration (17%) and collection and analysis of data (12%). For both the Exit Interview and Mobile Technologies surveys, interest in services offered averaged only about 8% with most interest falling under survey participation.

**Table 1: *Willingness to pay for services***

	Survey participation	Survey administration	Collect and analyze data	Preparation of final report	Preparation of results presentation	None
<b>Alumni Follow Up</b>	25%	17%	12%	4%	4%	54%
<b>Student Engagement</b>	35%	19%	23%	15%	4%	42%
<b>Exit Interview</b>	17%	9%	9%	4%	0%	61%
<b>Mobile Technologies</b>	17%	6%	6%	6%	6%	83%

Willingness to pay for services was correlated with number of staff members in each of the respondent's institutional research departments. Again, no statistical significance was found, but those with 0-3 staff members were more likely to pay for survey participation, survey administration, collection and analysis of data than institutional research departments with 4 or more staff members.

Next, respondents were asked if they would like to receive any additional information about the ARC; two individuals requested copies of the results of this study.

Lastly, participants were asked to provide additional comments or suggestions. The following list includes the responses:

- *While I said in Question 11 I would not be willing to pay for any of the services listed, I might reconsider in the future.*
- *One other area of surveying I forgot to mention earlier is student evaluation of teaching. We need to modernize our methods in that area and may be in the market for a commercial product or vendor.*
- *We may be interested in your services in the future but are not at a point where we would be able to pay for services now.*
- *I'm not really interested in purchasing any more survey services at this time.*

## Chapter V: Discussion

As it was in its beginning stages, determining the need and interest in the Applied Research Center was essential to developing services that would be utilized by outside sources. An electronic needs assessment was sent to all private and public universities in the Midwest offering four-year and advanced degrees. The results showed that institutional research departments with three or less staff members showed more interest in surveys developed by the ARC, as well as more willingness to pay for survey participation and administration. Overall, the Student Engagement, Alumni Follow Up and Exit Interview surveys were of most interest to participants; the Mobile Technologies assessment showed the least amount of interest.

The Student Engagement, Alumni Follow Up and Exit Interview surveys were developed to determine what factors contribute to the ways in which UW-Stout students learn best and their opinions regarding the quality of their education. Because students are the heart of any institution, the surveys provide invaluable information that can assist in the improvement of educational and learning components within universities. Providing additional information, such as aesthetically pleasing, informative brochures, to participants and other institutions in the United States could provoke more interest in the ARC. A simple email, like the invitation letter, is easily overlooked and less interesting to read than a physical copy that is more organized with bullet points and eye-catching detail.

The services provided by the ARC are certainly beneficial; however, marketing these services is the key to drawing in more interest. The Applied Research Center Needs Assessment has somewhat narrowed down the target audience, which is a starting

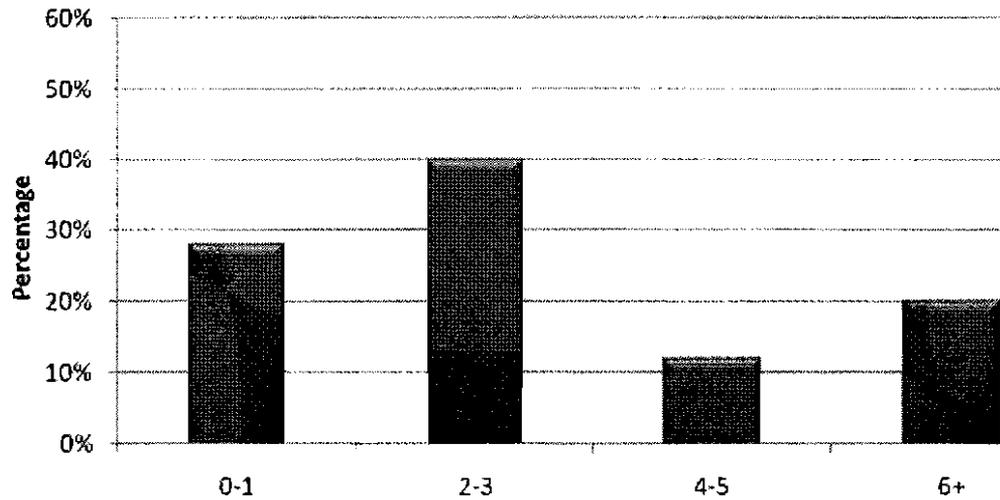
point for determining to whom more information should be distributed. Smaller universities with smaller institutional research departments have shown more interest than larger institutions, therefore, compiling a distribution list based on similar criteria may be advantageous.

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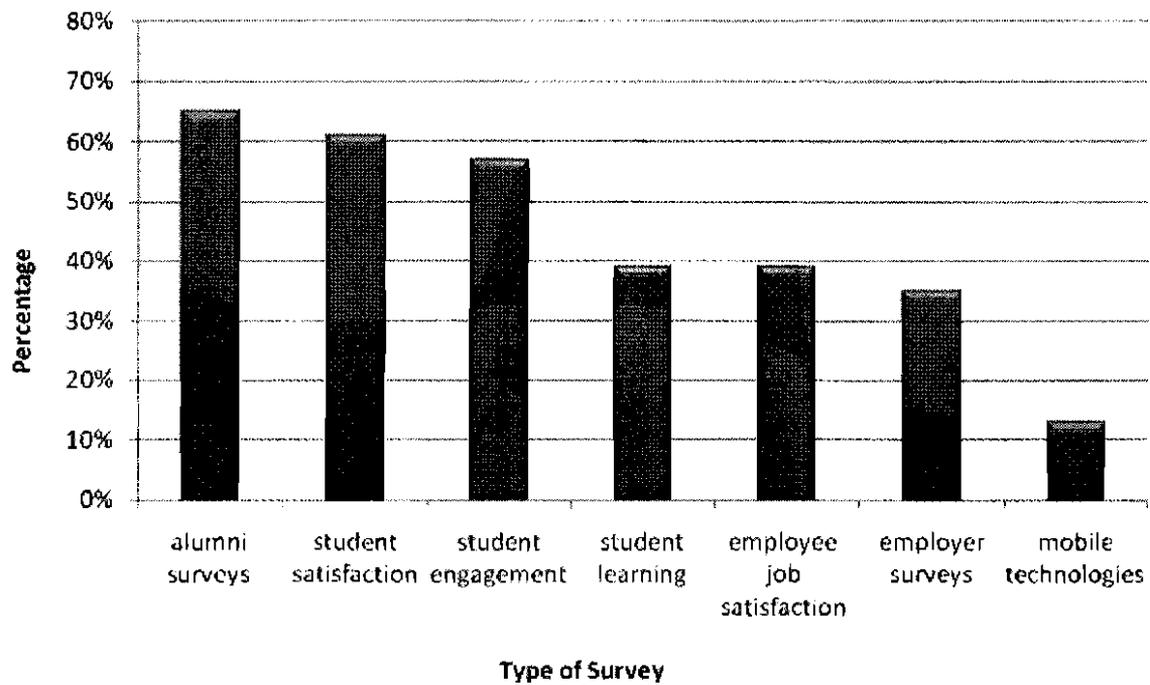
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## Appendix A: Analysis Results

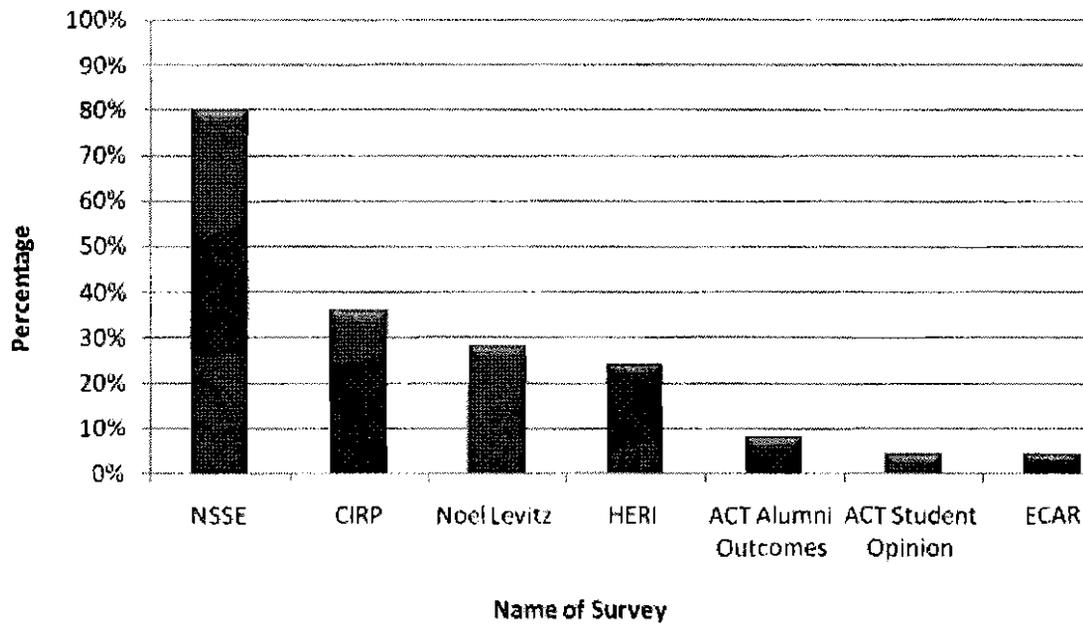
**Figure 1: How many staff members work in your IR department?**



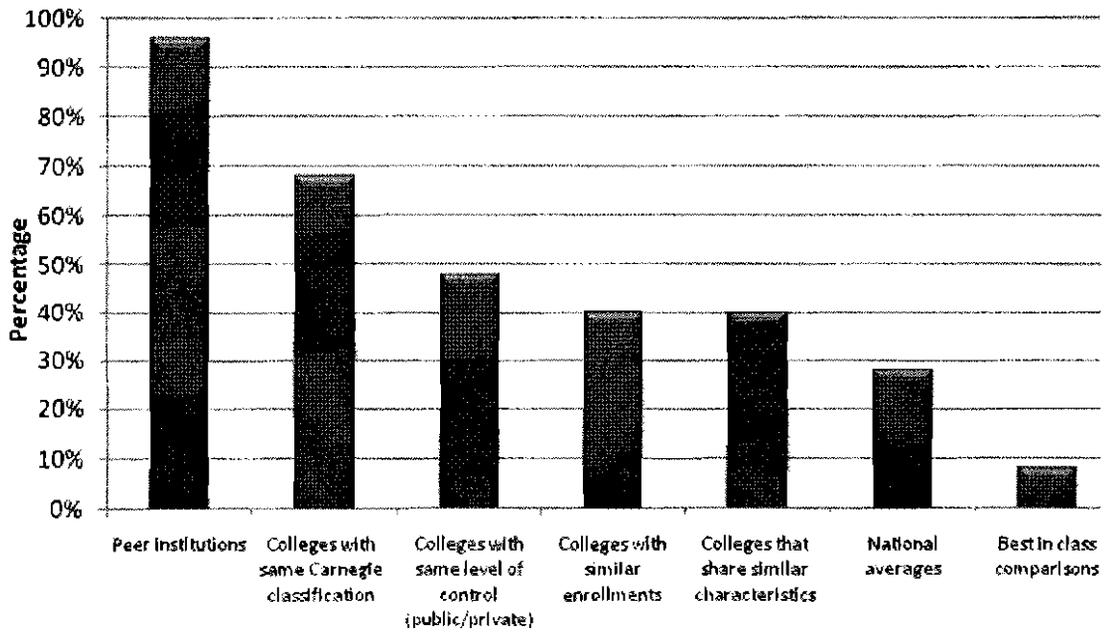
**Figure 2: What surveys do you develop internally?**



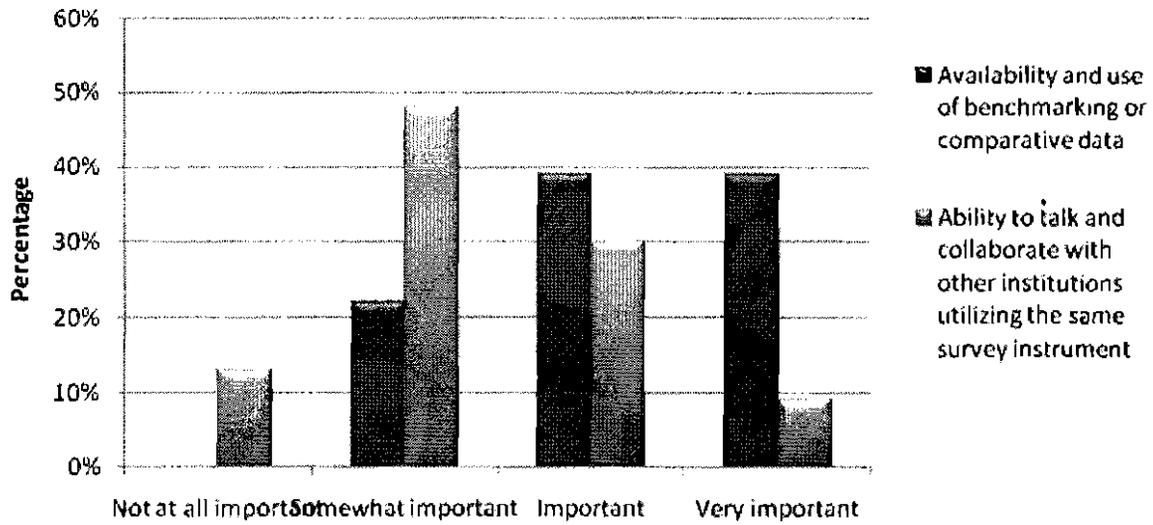
**Figure 3: What surveys do you purchase?**



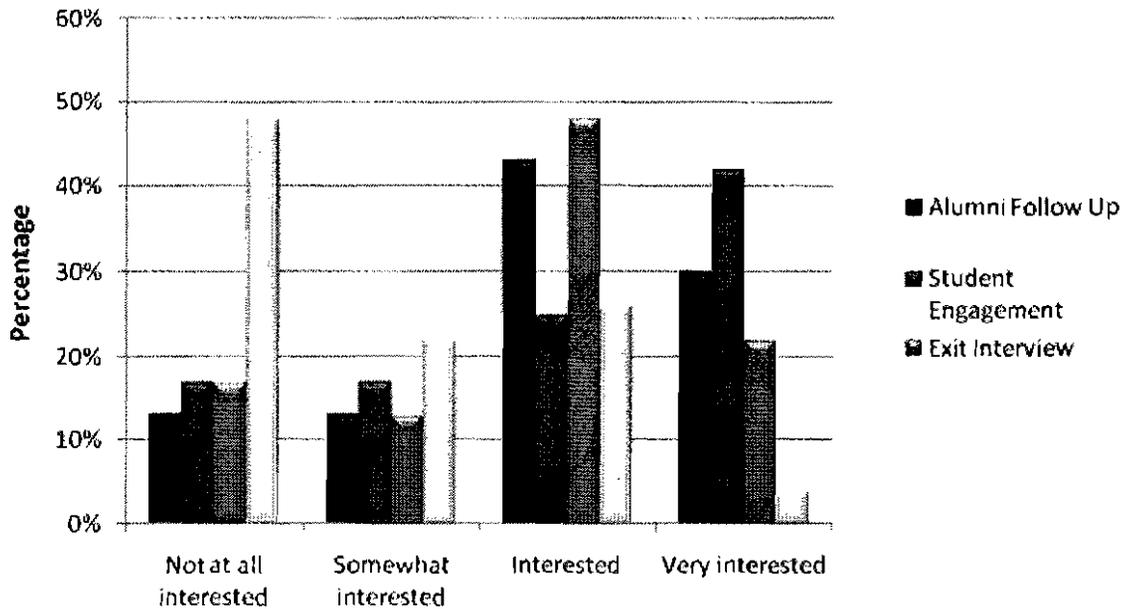
**Figure 4: When benchmarking data is applicable and available, what sources do you refer to for comparative purposes?**



**Figure 5: How important is the use of benchmarking data & collaboration with other colleges using the same survey instrument to your institution?**



**Figure 6: Please rate your interest in the following surveys:**



**Appendix B: UW-Stout Applied Research Center Needs Assessment**

1. Name of Institution \_\_\_\_\_
2. How many staff members work in your institutional research department:
  - a. 0-1 person
  - b. 2-3 people
  - c. 4-5 people
  - d. 6+ people
3. What types of surveys does your institution currently administer or participate in?  
Please check all that apply.

Internally Developed Surveys:

- employee job satisfaction or morale  
 student satisfaction  
 student engagement  
 student learning  
 alumni surveys  
 employer surveys  
 mobile technologies/ubiquitous computing surveys  
 other, please list: \_\_\_\_\_

Surveys that you purchase:

- NSSE  
 ACT Student Opinion Survey  
 ACT Alumni Outcomes survey  
 HERI UCLA Faculty Survey  
 Noel Levitz  
 Educause Center for Applied Research (ECAR): Application and use of information technology (i.e. laptop use)  
 Cooperative Institutional Research Program (CIRP): Freshman Survey, Your First College Year Survey, College Senior Survey, etc.  
 Other, please list: \_\_\_\_\_

4. If you had the resources to develop your own surveys or if there are any surveys that you would be interested in obtaining from an outside source such as the Applied Research Center, what topics would they cover?

5. When it is determined that there is a need for a new survey, does your institution or department:
- a. develop it internally
  - b. contract outside sources to develop it for you
  - c. forego development due to lack of time and/or resources
  - d. purchase an existing survey that relates to your topic of interest, but is not customized to your institution
  - e. other \_\_\_\_\_
6. When benchmarking data is applicable and available, what sources do you refer to for comparative purposes?
- a. Peer institutions
  - b. Institutions with the same Carnegie classification as your institution
  - c. Institutions with the same level of control as your institution (public/private)
  - d. Institutions with similar enrollments
  - e. National averages
  - f. Best in class comparisons
  - g. Institutions that share similar characteristics to your institution, explain:  
\_\_\_\_\_
  - h. Other, please list: \_\_\_\_\_

7. Please rate the importance of the following:

	NOT AT ALL IMPORTANT	SOMEWHAT IMPORTANT	IMPORTANT	VERY IMPORTANT
Availability and use of benchmarking or comparative data				
Ability to talk and collaborate with other institutions utilizing the same survey instrument				

8. Please rate your interest in the following surveys:

	NOT AT ALL INTERESTED	SOMEWHAT INTERESTED	INTERESTED	VERY INTERESTED
Alumni Follow Up				

Student Engagement				
Exit Interview				
Mobile Technologies				

9. For each survey listed, please indicate which services you would be willing to pay for:

	Survey participation	Survey administration	Collect and analyze data	Preparation of final report	Preparation of results presentation	None
Alumni Follow Up						
Student Engagement						
Exit Interview						
Mobile Technologies						

10. Would you be interested in having someone contact you to provide additional information about the Applied Research Center and its services?

- a. Yes:  
 Name \_\_\_\_\_  
 Best way to contact you \_\_\_\_\_
- b. No

11. Please include any additional comments or suggestions:

Thank you for your participation in this survey!