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Exploring the Landscape: What Institutional Websites Reveal About Student Learning Outcomes Assessment Activities

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Full Report

learningoutcomesassessment.org

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“To the extent an institution’s website is a window into its performance, this report shows that schools need to do more to inform the public about what they are doing with regard to assessing student learning outcomes.”

George D. Kuh

*Chancellor’s Professor and Director
Indiana University Center for
Postsecondary Research*

NILOA Director

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Exploring the Landscape: What Institutional Websites Reveal About Student Learning Outcomes Assessment Activities

Executive Summary

College and university websites are an increasingly popular medium to present information about institution and student performance to faculty and staff as well as to potential students, their families and policy makers. One way institutions can respond to persistent calls to be more forthcoming about students' gain from attending college is to make this information accessible via their institution website. Toward this end, the National Institute for Learning Outcomes Assessment (NILOA) examined institution-wide content on the websites of several hundred colleges and universities across the U.S. to determine the extent to which these institutions have made available information about student learning outcomes assessment. This complements other NILOA inquiries such as the NILOA 2009 National Survey (Kuh & Ikenberry, 2009), which recorded what chief academic officers *reported* their institutions were doing with regard to student learning outcomes assessment. Examining institution websites *shows* us what colleges and universities are communicating about those activities via their websites, thus providing an estimate of institutional transparency.

The Web Scan Study

The NILOA web scan documented *what institutions portrayed* in regard to student learning outcomes assessment on institution-wide web pages (as opposed to department or program-based web pages) by examining assessment activities, web page locations, and language institutions displayed on their websites regarding student learning outcomes assessment. Institutions were randomly selected from a group of all regionally accredited undergraduate degree-granting postsecondary institutions in the United States. A team of six researchers systematically reviewed 725 institution websites from March 2009 to August 2009. The web scan did not attempt to determine whether the institution reported the results of assessment efforts; that will be the focus of a subsequent web scan.

Major Findings

Transparency. *More assessment activity was reported by chief academic officers than was available on institution websites.*

The NILOA 2009 National Survey of chief academic officers found frequent reported use of such institution-level student learning outcomes assessment activities as standardized tests, national student surveys, and capstone experiences. The web scan results, in contrast, showed that information about such activities appeared much less frequently on institution websites. Moreover, using institution website search engines, terms such as *learning outcome(s)*, *outcome(s) assessment*, and *institutional assessment* produced returns at only about one third of the websites. Search engines on websites of public institutions were more likely than those of private institutions to return information for each of the terms.

Communicating Online. *The typical institution represented two student learning outcomes assessment activities on its website.*

Many different types of assessment activities were represented on institution websites such as surveys, capstone experiences, and portfolios; however, institutions typically posted information on only two of these, with the most frequently posted—by at least 30% of all institutions—being information on national student surveys, alumni surveys, and local student

surveys. Doctoral and public institutions tended to feature more indirect evidence of student learning (e.g., surveys) as compared to other institutional types. Baccalaureate and private institutions presented information on direct evidence of student learning (e.g., portfolios) more frequently than other institutional types.

Audience. *Student learning outcomes assessment information was most often available on web pages targeting internal audiences.*

The home and admissions pages generally are designed for external audiences such as prospective students and their families and the web scan rarely found information on student learning outcomes assessment on these web pages. The web pages where the majority of student learning outcomes assessment information was posted—those of the provost/chief academic officer and institutional research office—target such internal audiences as faculty and staff.

Conclusion and Recommendations

Proactively using the institution's website to communicate information about student learning outcomes assessment to multiple audiences remains a challenge. Institutions have more student learning outcomes assessment activities underway than they report on their websites. To meet transparency obligations and responsibilities, institutions should make more information about student and institutional performance accessible via their websites. Care should also be taken to help multiple audiences interpret and understand the information posted. Toward this end, colleges and universities are recommended to take the following steps:

- Prominently post student learning outcomes statements and resources in multiple places on the institution's website and update those postings regularly.
- State the institution's current activities related to student learning outcomes assessment on the institution's website.
- Provide examples and descriptions of institutional assessment activities to help multiple audiences develop an understanding of the outcomes specific to the institution.
- Explain the meaning and use of results of student learning outcomes assessments on the institution's website in layperson's language for multiple internal and external audiences.
- Minimize the need on the institution's website for password protection of student learning outcomes assessment resources, information, and results.
- Enable ease of access to information on the institution's website by making text and non-graphic versions of web pages available and by providing clear ways to navigate the site.



Exploring the Landscape

Introduction

The Internet is increasingly viewed as a means for institutional transparency because websites can provide a way to communicate to broad audiences the activities of the institution (Geissler, Zinkhan, & Watson, 2006). One response colleges and universities have to persistent calls to be more transparent with regard to student learning outcomes assessment is to make this information accessible via their website, as it provides a way to present information on institution and student performance broadly to audiences that are internal (e.g., faculty and staff) as well as external (e.g., prospective students and their families, policy makers). Transparency means being clear about the institution's practices—about what the institution needs to do better to enhance performance in addition to what the institution does well (Gambrill, 2007). Information institutions present online, however, remains fragmented and poorly coordinated (Deane, 2005).

To explore the extent to which institutions are making available information on student learning outcomes assessment, the National Institute for Learning Outcomes Assessment (NILOA) examined where and how institutions communicate student learning outcomes assessment information on their institution-wide web pages. The overarching research question was “What information about student learning outcomes assessment activities do institutions make available on their websites?” This complements other NILOA inquiries such as the NILOA 2009 National Survey (Kuh & Ikenberry, 2009), which recorded what chief academic officers *reported* their institutions were doing with regard to student learning outcomes assessment. Examining institution websites *shows* us what colleges and universities are communicating about those activities via their websites, thus providing an estimate of institutional transparency.

Web Scan Study

The NILOA web scan documented *what institutions portrayed* in regard to student learning outcomes assessment on their institution-wide web pages (as opposed to department or program-based web pages). The web scan sought to answer the following questions:

- What does the institution display on its website regarding student learning outcomes assessment?
- On which web pages is information about assessment of student learning outcomes located?
- Does the institution use specific student learning outcomes assessment language on its website?

To address these questions, a team of six researchers systematically reviewed 725 institution websites from March 2009 to August 2009. Institutions were randomly selected from a group of all regionally accredited undergraduate-degree-granting postsecondary institutions in the U.S. This web scan did not attempt to determine whether the institution reported the *results* of assessment efforts; that will be the focus of a subsequent web scan. More detailed information on the sample selection and web scan procedure is in Appendix A.

Web Scan Terminology

Evidence of institution-wide student learning outcomes assessment was organized into four categories. For a list of these categories, their definitions, and examples, see Appendix B.

Direct evidence of learning. An assessment approach that documents what students have learned in a concrete way. Direct evidence includes capstone experiences, portfolios, e-portfolios, standardized tests, and local tests.

Indirect evidence of learning. An assessment approach that represents or approximates what students have learned without providing a concrete demonstration of that learning. Included in this category are national student surveys, local student surveys, graduating student surveys, alumni surveys, and other similar instruments.

Capacity building efforts. Institution-wide activities focusing on developing staff expertise in conducting student learning outcomes assessment as well as financial resources available to support these efforts. Capacity building efforts include awards for assessment, faculty or staff development efforts, and events recognizing student achievement.

Assessment purposes. The animating reason for assessing learning, such as to guide and inform processes and instruction. Assessment purposes include accreditation, institutional membership initiatives, and general education.

Major Findings

The major findings are divided into three categories – transparency, communicating online, and audience. This section of the report introduces each category and presents highlights from the supportive web scan data.

Transparency

More assessment activity was reported by chief academic officers than was available on institution websites. Part of being transparent is enabling users to find student learning outcomes assessment information on the institution website that reflects current assessment activities. When we examined institution websites for information on student learning outcomes assessment, we found that institutions *reported* they were doing more in the NILOA 2009 National Survey than we *saw* on institutional web pages. In addition, when institution search engines were used to locate information on the terms *learning outcome(s)*, *outcome(s) assessment*, and *institutional assessment*; nothing was returned in numerous cases.¹ This leads us to believe that institutions are currently underutilizing their websites as a mode of communication for information regarding student learning outcomes assessment, however, it is important to note that because many factors figure into what is posted online, intent or importance of posted information is very difficult to ascertain from institution websites.

From the Data

The claim that websites are underutilized as a mode of communication stems from: (a) comparisons of reports from chief academic officers to information found on websites, (b) analyses of search engine returns, and (c) consideration of some of the primary purposes of student learning outcomes assessment.

What Chief Academic Officers Say Versus What Was Found on Institution Websites

Web scan data on student learning outcomes assessment information posted on institution websites was examined in relation to the responses of institutional chief academic officers in the NILOA 2009 National Survey.² Overall, chief academic officers reported in their survey responses that their institutions were conducting more institution-level student learning outcomes assessment activities than were evident in our scan of their websites (Figure 1). Specifically, more institutions reported using standardized tests, national student surveys, locally developed surveys, alumni surveys, and other surveys than were found in postings on their websites.

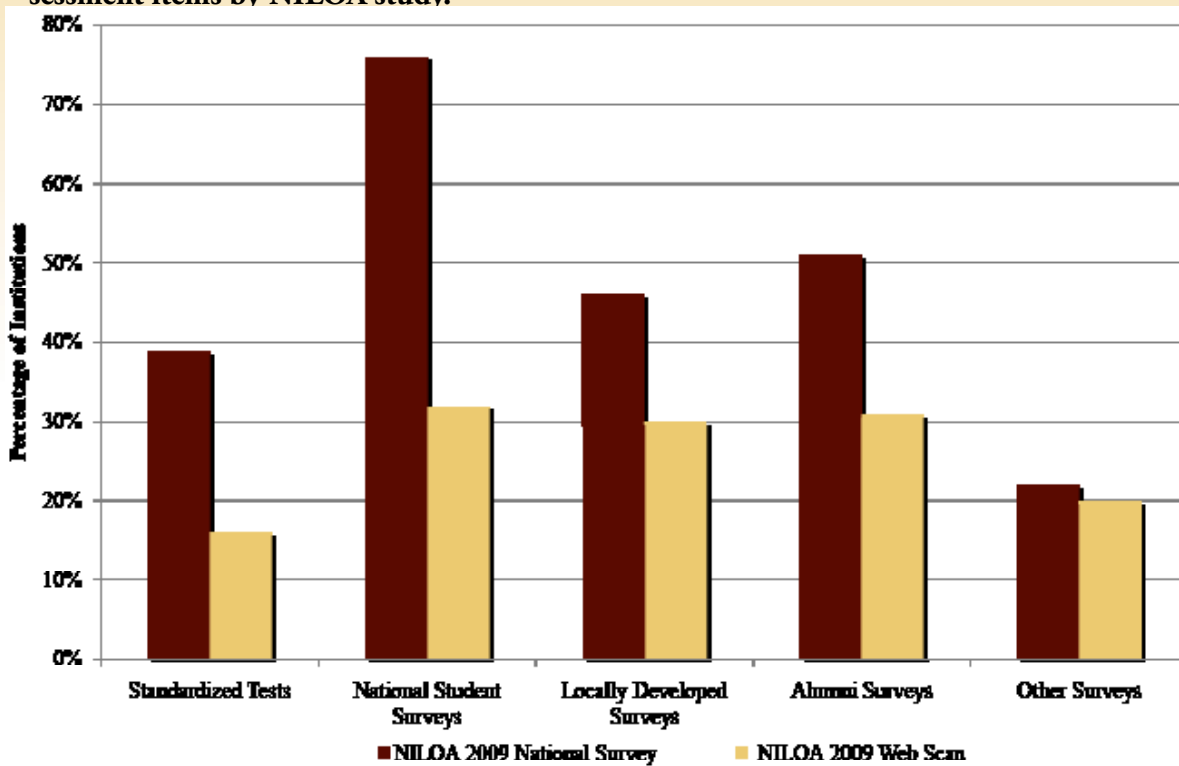
When institutional responses on the NILOA 2009 National Survey were matched in a 1:1 comparison with institutions scanned in the NILOA 2009 Web Scan, the results were very similar to those presented in Figure 1. On average, 32% of the institution websites posted information on each of the assessment activities reported in their NILOA 2009 National Survey responses. This means that 68% of the time, information on assessment activities was not posted on the institution website when it was reported in the survey.

¹ Institutions without search engines or with search engines that could not be used at the time of the web scan (91 institutions) were removed from analysis.

² The 725 institutions in the web scan were a 25% sample of the institutions surveyed in the NILOA 2009 National Survey of chief academic officers.

Transparency means being clear about the institution's practices - about what the institution needs to do better to enhance performance in addition to what the institution does well.

Figure 1. Percentage of institutions providing information on specific student learning outcomes assessment items by NILOA study.



Website Search Terms and Engines

Learning outcome(s), *outcome(s) assessment*, and *institutional assessment* were used as search terms on institution website search engines to see whether information could be found by searching the website. When the terms were entered into the institutional search engine, interesting differences emerged in the search returns by institutional control³ and Carnegie type.⁴

Differences by Institutional Control and Carnegie Type

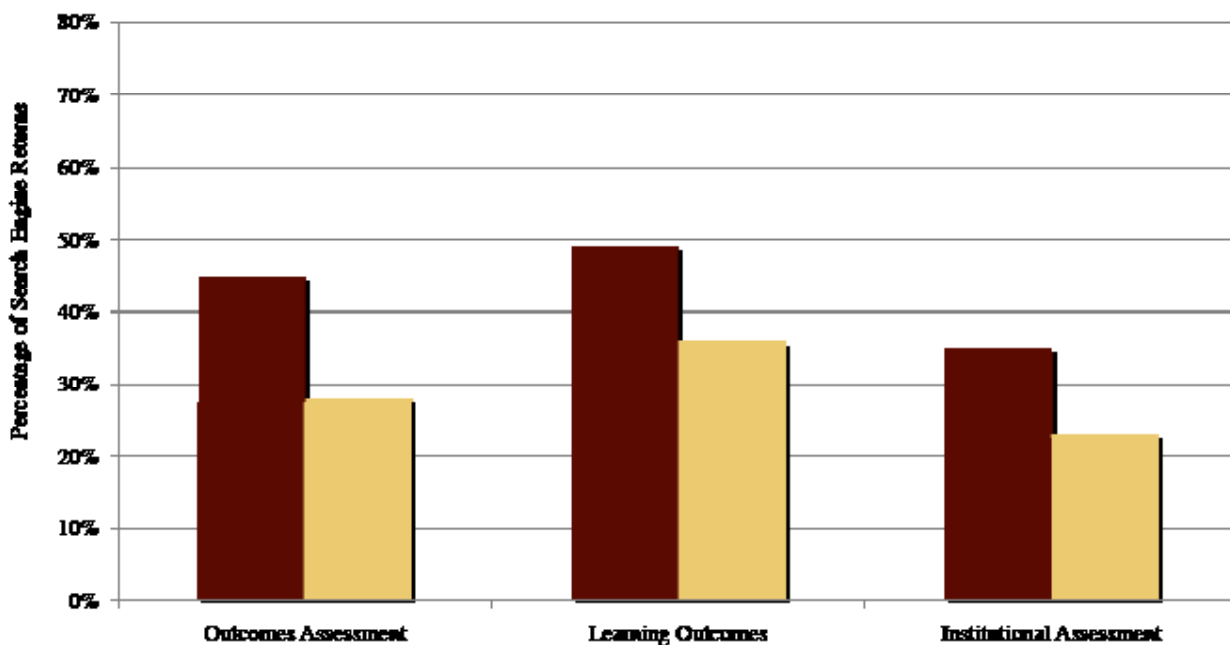
- The terms *learning outcomes* and *outcomes assessment* produced the greatest number of search returns on both public and private institution websites, and yet less than half of the public and private institution websites produced any such information for either of these terms.
- Website search engines of public institutions were more likely than those of private institutions to produce information for each search term (Figure 2). On public institution websites, *learning outcomes* produced such information 49% of the time while private institution websites produced such information for this term 36% of the time. *Outcomes assessment* produced such information 45% of the time at websites of public institutions and 28% of the time at those of private institutions.

³ Institutions in the sample were initially divided into three groups by institutional control – public, private-not-for-profit, and for-profit. None of the for-profit institutions had institutional research web pages, and less than 4% had provost/chief academic officer or strategic plan pages. Due to the lack of available institution-wide web pages, for-profit institutions were removed from further analysis by institutional control.

⁴ The Carnegie types include doctoral, master’s, baccalaureate, associate’s, specialized, and tribal institutions. Specialized and tribal institutions were grouped under “other Carnegie types” when their individual numbers were too small for statistical analyses.

- Search engines on websites of doctoral institutions were more likely than those of other Carnegie types to produce information for each term, followed closely by master’s institutions. Searches on websites of baccalaureate and associate’s institutions were less likely than those of doctoral and master’s institutions to produce such information for each term, with websites of “other” institutions least likely to produce such results.
- The results of these institution website searches reflect the language institutions use and the power of the search engines to retrieve appropriate information. However, given that regional accrediting agencies require institutions to share student learning outcomes statements and 75% of all institutions say they have learning outcomes statements (Kuh & Ikenberry, 2009), it is surprising that using the search terms would produce so few results (36%).

Figure 2. Percentage of search engines producing information by institutional control.



Purposes of Student Learning Outcomes Assessment

There are multiple purposes for institutions’ to provide information on student learning outcomes assessment, including but not limited to responding to calls from regional accreditation agencies, being involved in institutional membership initiatives (e.g., VSA, Transparency by Design), or showcasing general education assessment activities.

Accreditation

Specifically, as found in chief academic officer responses to the NILOA 2009 National Survey, regional accreditation is viewed as a primary driver of student learning outcomes assessment activity. When asked to identify and rank the factors prompting their institution to assess student learning outcomes, chief academic officers listed accreditation requirements at the top (Kuh & Ikenberry, 2009). In addition, regional accreditation agencies are beginning to examine ways institutions should be more transparent. For instance, the Western Association of Schools and Colleges Accrediting Commission for Senior Colleges

and Universities released a task force report in October 2009 providing guidance to their member institutions on transparency and accountability with external audiences including recommendations on what institutions should post online in regard to student learning outcomes assessment activity and data. This example highlights a trend toward expecting more detailed and accessible online information.

According to the web scan, most institutions (81%) listed accreditation somewhere on their website, so 118 institutions were selected for a deeper analysis of the information posted on accreditation as it related to assessment of student learning outcomes. Information publicly available on their websites included statements of institutional accreditation, accreditation and reaffirmation letters, institutional self-study reports, and specific web pages dedicated to the self-study process. Of these 118 institutions, 35% posted their self-studies and only 21% posted their accreditation letter.

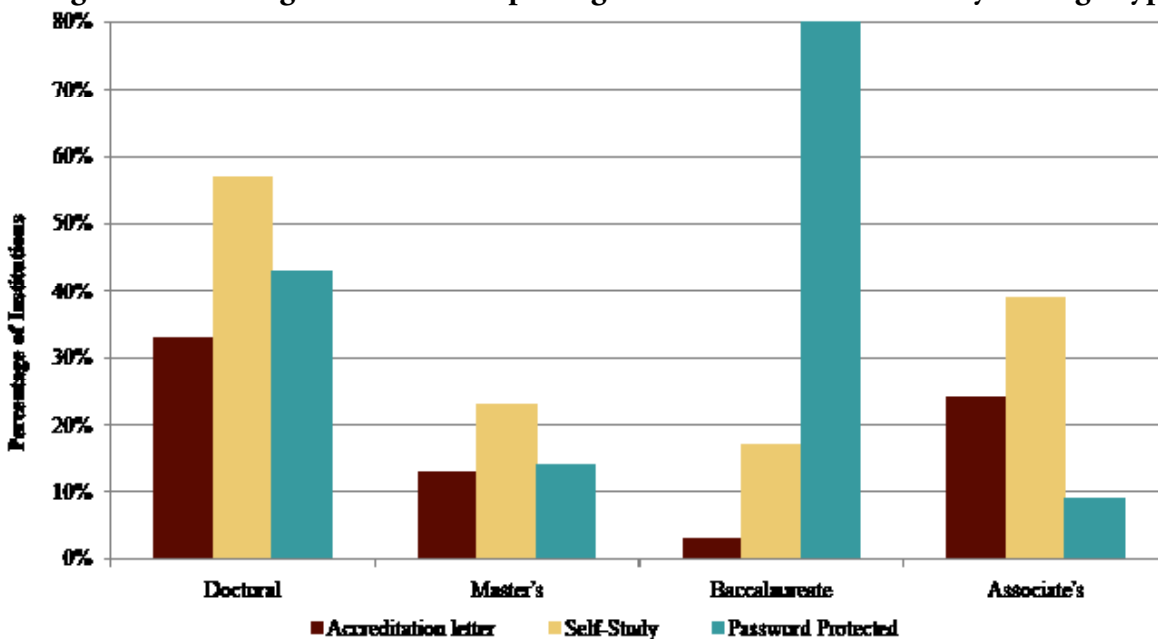
- The posted accreditation letters, 90% of the time, requested additional information and follow-up institutional response in three to five years on student learning outcomes assessment. In addition, 75% of the accreditation letters posted asked for greater faculty involvement in student learning outcomes assessment.

Differences by Institutional Control and Carnegie Type

- Public institutions (62%) were more likely than private institutions (20%) to post their self-studies.
- Private institutions (70%) were more likely than public institutions (18%) to password protect their accreditation information.
- Out of the 118 institutions, 74 institutions included accreditation letters and self-studies on their websites; baccalaureate institutions were the most likely to password-protect their self-study and associate’s institutions were the least likely (Figure 3).
- Doctoral institutions, followed by associate’s, provided the most information on self-study and accreditation letters. Baccalaureate institutions provided the least amount of this information on their sites.

Regional accreditation agencies are beginning to examine ways institutions should be more transparent.

Figure 3. Percentage of institutions posting accreditation information by Carnegie type.



Institutional Membership Initiatives

Another common purpose for conducting student learning outcomes assessment is to participate in institutional membership initiatives (e.g., VSA College Portrait, Transparency by Design). In the NILOA 2009 National Survey, respondents listed institutional membership initiatives as having minor to moderate importance in prompting such assessment activities. This means that institutional membership initiatives were less influential than accreditation as a driver of assessment.

- Information related to institutional membership initiatives was found for 17% of the institutions scanned. However, those institutions that displayed information on the initiatives did so frequently, across an average of 51% of the institution-wide web pages scanned for this study.

Differences by Institutional Control and Carnegie Type

- Public institutions (26%) were more likely to post information on institutional membership initiatives than were private institutions (8%).
- Doctoral institutions were more likely than all other Carnegie types to post information on institutional membership initiatives.

General Education

For this project, institution-wide assessment activities that focused on the improvement of general education curricula were tracked in a category called “general education.” Among all institution-wide web pages scanned, 52% of institutions included information on assessing student learning outcomes for general education.

- For almost half (47%) of the institutions with information about a single assessment activity—such as a survey—on their websites, that activity related to improving general education. When information about two or three assessment activities was found, the inclusion of information on improving general education increased to 52% and 65%, respectively.

Differences by Institutional Control and Carnegie Type

- Private institutions (59%) were more likely than public institutions (48%) to include information related to general education.
- Baccalaureate institutions were more likely than other Carnegie types to display information related to the assessment of general education.

Communicating Online

The typical institution represented two student learning outcomes assessment activities on its website. Simply posting assessment information online does not make it meaningful, understandable, or useful. For information to be transparent, institutions must not only make the information available but must also effectively communicate their activities via the institution website. The Internet is viewed by many as a quick and efficient way to communicate learning outcomes assessment information to audiences both within and beyond the walls of higher education institutions (Labre & Walsh-Childers, 2003; Park &

For information to be transparent, institutions must not only make the information available but must also effectively communicate their activities via the institution website.

Gretzel, 2007; Pike, 2002). An apt analogy for the potential of Internet communications comes from Leimer (2009), who describes an institution website as a “24-hour representative” available when offices are closed, displaying resources and activities for all who access it. When we examined institution websites for communications regarding student learning outcomes assessment, we found the websites often showed that such activities as surveys, capstone experiences, and portfolios were regularly conducted—but that information on only two of these was typically shared on the websites. The most frequently posted information on assessment activities—by at least 30% of all institutions—was on national student surveys, alumni surveys, local student surveys, and capstone experiences. Doctoral and public institutions tended to feature more indirect evidence of student learning (e.g., surveys) as compared to other institutional types. Baccalaureate and private institutions presented information on direct evidence of student learning (e.g., portfolios) more frequently than other institutional types.

From the Data

Our understandings of online communication strategies stem from what was available for review on the websites. This section of the report considers the number and types of assessment activities publically available on institutional websites.

Number and Types of Assessment Activities Represented Online

Institution websites were examined to see whether information was available on direct and/or indirect evidence of student learning outcomes. This web scan focused on whether postings about institutional activities included student learning outcomes assessment information related to these evidence types,⁵ but it did not look for information on assessment results or on the use of such results. In a study that did examine results of student learning outcomes assessments on college websites, Holland, Fink, Baur, Francis, and Lenio (2009) scanned the institutional research pages of 112 institutions and found that while they did provide descriptions of student learning outcomes for colleges, programs, and majors, only 9% of the institutions used these web pages to report outcomes assessment results or student achievement data. Future NILOA research is dedicated to understanding and outlining quality measures for the presentation of learning outcomes assessment results and use of such information on institution-wide websites.

- Regarding information about direct (e.g., capstone experience) and indirect (e.g., alumni survey) evidence of learning represented across institution-wide web pages, the number of evidence types recorded per institution ranged from 0 to 9, with a median of 1 (mean of 2.2). For 35% of the institutions, no information on direct or indirect evidence of learning was found. Just over one third (38%) of the institution websites noted between 1 and 3 evidence types, while 27% of institution websites noted 4 or more evidence types.
- When information about direct or indirect evidence of learning was found on a website, it was often discovered to be available on several

⁵ Throughout this report, the term used to refer to both direct and indirect evidence of student learning outcomes assessment is “evidence types.”

The most frequently posted information on assessment activities - by at least 30% of all institutions - was on national student surveys, alumni surveys, local student surveys, and capstone experiences.

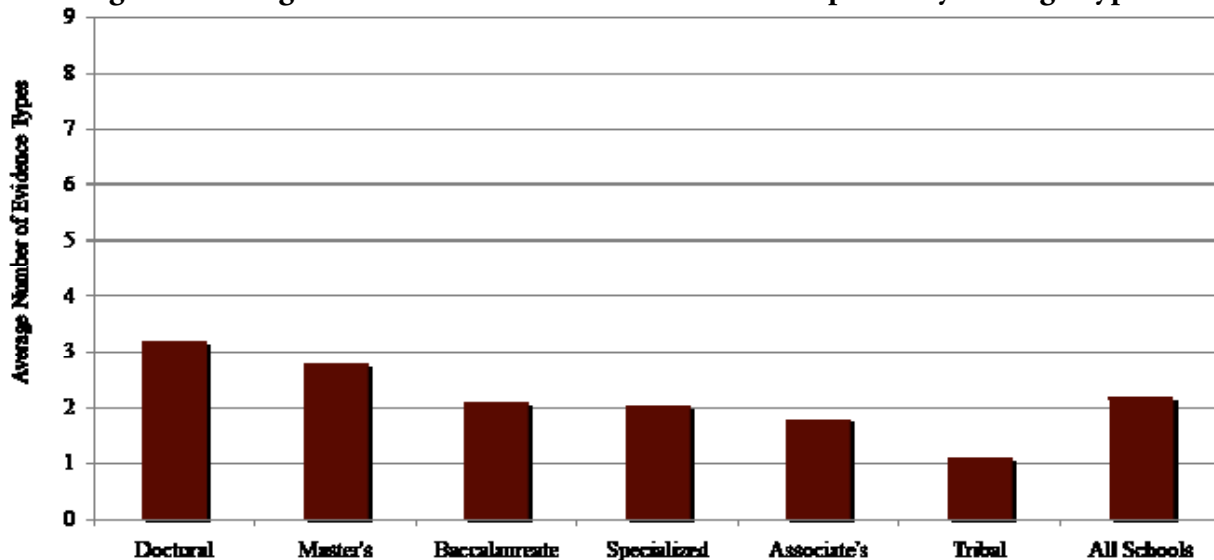
institution-wide pages. When capstone experiences were mentioned on an institution's website, for instance, they were also mentioned on an average of 64% of available institution-wide pages scanned. This suggests that institutions selected a few assessment items and placed information pertaining to them on multiple institution-wide web pages.

Differences by Institutional Control and Carnegie Type

- Across the institution-wide web pages scanned, public institutions had the highest average number of evidence types found per institution (2.5), followed by private institutions (2.0).
- Across the institution-wide web pages scanned, an average of 3.3 instances of direct or indirect evidence of learning was found for doctoral institutions—the largest in comparison to other institutional types (Figure 4). Tribal institutions demonstrated the lowest average number, at 1.1 evidence types.
- Despite having fewer evidence types represented on their institution-wide web pages, associate's and baccalaureate institutions tended to display those that were represented more frequently across the institution-wide web pages scanned than did doctoral and master's institutions. This means that public institutions and doctoral institutions had the largest variety of information available on direct and indirect evidence of learning, while private institutions and baccalaureate institutions had less variety but displayed information in more locations.

Institutions select a few assessment items and place information pertaining to them on multiple institution-wide web pages.

Figure 4. Average number of direct and indirect evidence posted by Carnegie type.



Indirect Evidence of Learning

Indirect evidence of learning included national student surveys, local student surveys, graduating student surveys, alumni surveys, and other surveys. The majority of institutions used some form of a survey as opposed to using a combination of a survey and other assessment activities such as capstone experiences, portfolios, and standardized tests to assess student learning.

- The most frequently posted types of indirect evidence of learning (each at approximately 30% of institutions) were national student surveys, alumni surveys, and local student surveys. Figure 5 provides the percentages of institution websites by each type of direct and indirect evidence of learning.
- Indirect evidence of learning in this study was found more often on websites of public institutions than on those of private institutions (Figure 6).

Direct Evidence of Learning

Direct evidence of student learning included capstone experiences, portfolios, e-portfolios, standardized tests, and local tests. Information on local tests (at 7% of institutions) and e-portfolios (at 8% of institutions) was the least likely to be posted, while the most likely to be posted (at approximately 30% of institutions) was information on capstone experiences (Figure 5).

- Information on standardized tests was found more often on the websites of public institutions than on those of private institutions, while information on capstone experiences was found more often on private than on public institution websites. Little difference was found between private and public institution websites regarding portfolios and e-portfolios (Figure 6).

The majority of institutions used some form of a survey as opposed to using a combination of a survey and other assessment activities.

Figure 5. Percentage of institutions that posted direct and indirect evidence of assessment.

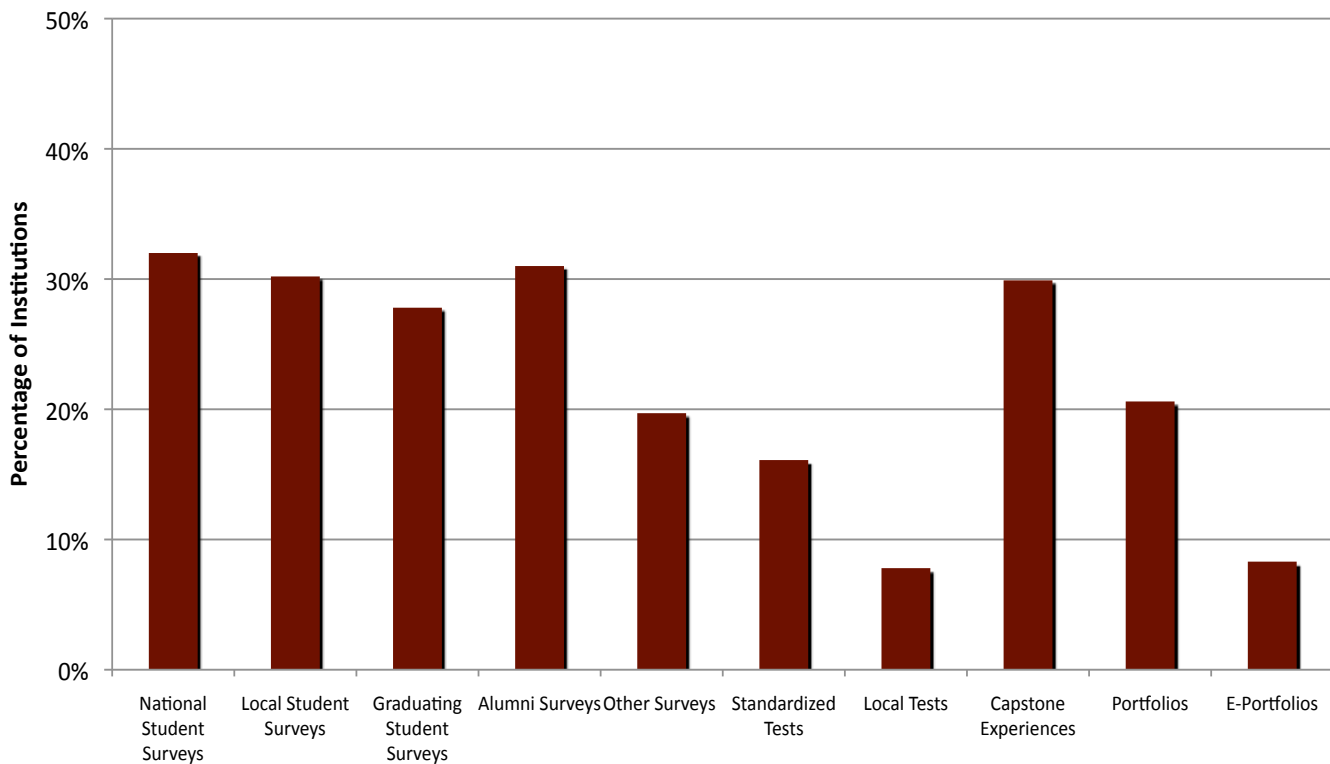
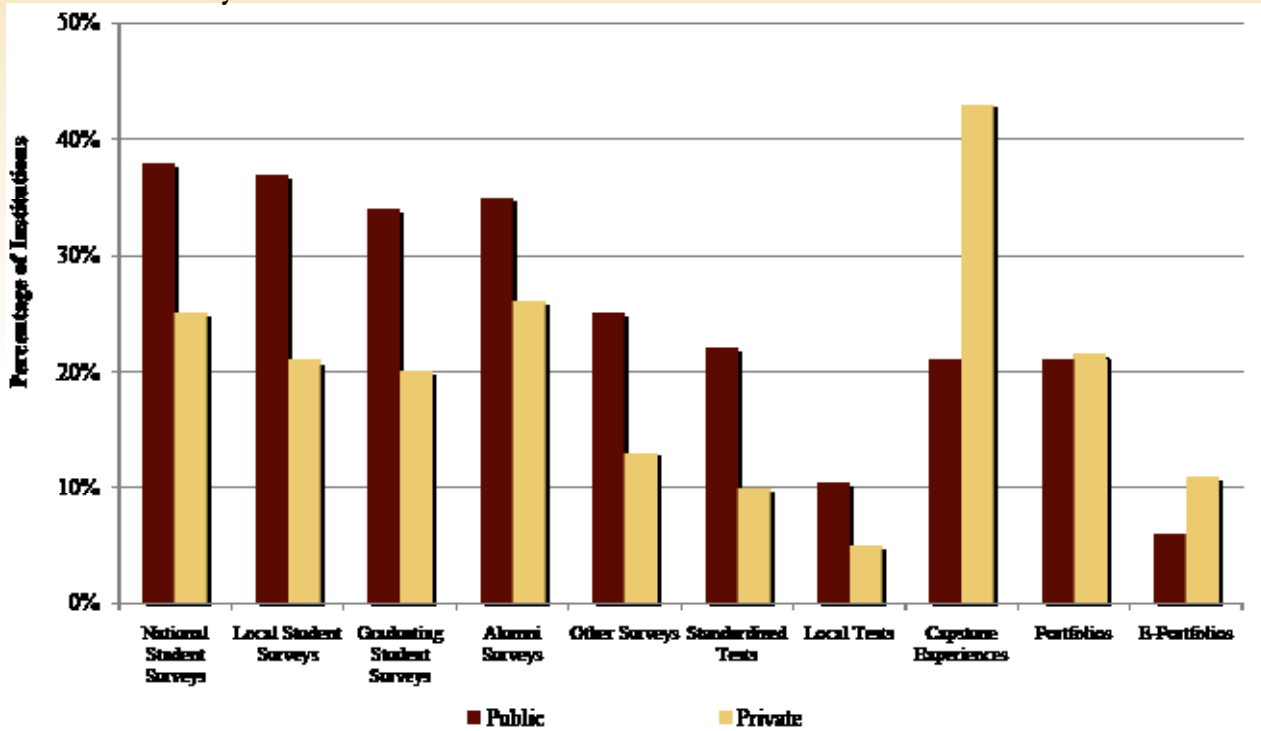


Figure 6. Percentage of institutions whose websites included information on direct and indirect evidence by institutional control.

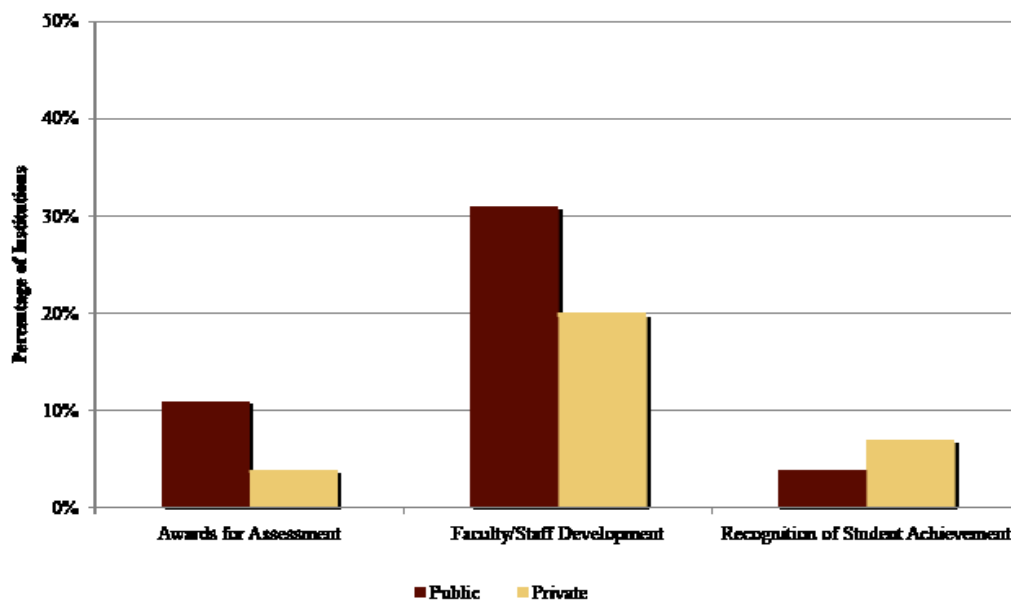


Capacity Building

Evidence of capacity building efforts included awards for assessment, faculty or staff development efforts, and recognition of student achievement.

- Information about awards for assessment and faculty and staff development was found more often on public than on private institution websites (Figure 7). Although recognition of student achievement was found more often on private than on public institution websites, less than 5% of websites across the entire set of institutions had any evidence of such information.

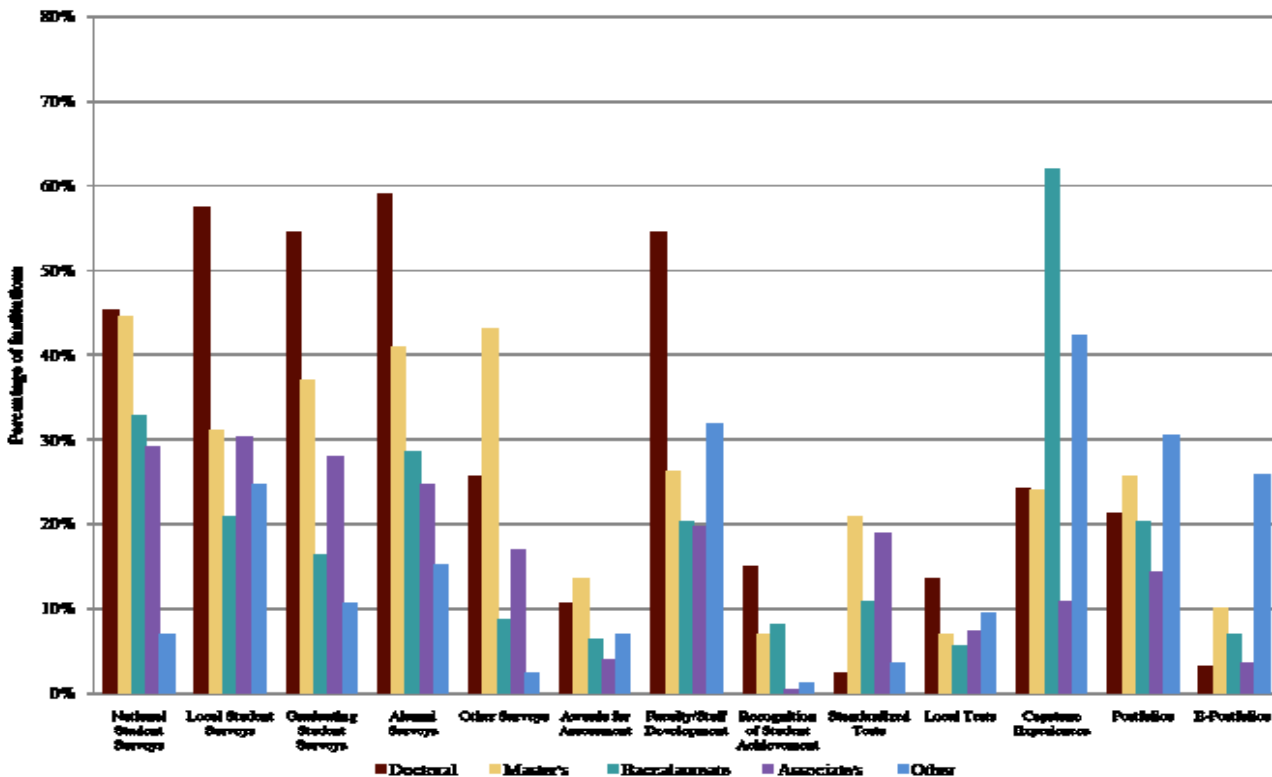
Figure 7. Percentage of institutions whose websites provided evidence of capacity-building efforts by institutional control.



Differences by Carnegie Type

- Indirect evidence of learning outcomes in the form of some of the surveys examined (i.e., national student surveys, graduating student surveys, and alumni surveys) was found more often on the institution-wide web pages of doctoral and master's institutions than on those of other Carnegie types (Figure 8).
- Baccalaureate institutions, compared to other Carnegie types, more often displayed direct evidence of learning outcomes on their institution-wide web pages in the form of capstone experiences, while less frequently displaying indirect evidence of learning outcomes in the form of local student surveys and graduating student surveys.
- Doctoral institutions' institution-wide web pages also contained more information on the capacity building efforts of faculty and staff development (54%) than did the websites of other Carnegie types. Faculty and staff development was the capacity building effort most likely to be represented on institution websites (at an average of 40%).

Figure 8. Percentage of institutions whose websites included direct and indirect evidence by Carnegie



Password Protection

Some institution websites required a password for access to what appeared to be student learning outcomes assessment information. Of the 725 institution websites scanned, 68 password-protected this information, with the vast majority being websites of private institutions (92%). Several institutions were contacted to determine the reasons for password-protecting portions of their websites. Institutional responses to these queries took three forms:

- Temporary password protection: The information behind the password was a document in draft form that would be available to other audiences when finalized.

- Internal-only information: The information behind the password was considered internal to the institution and not for public consumption because institutional representatives believed that sharing it would hinder improvement or the public would not understand the data.
- Student-level data: The information behind the password contained student-level data that could be used to identify individuals and, thus, for data security only authorized users were allowed access to it

Audience

Student learning outcomes assessment information was most often available on web pages targeting internal audiences. Multiple audiences are interested in information on student learning outcomes assessment. To further enhance communications regarding student learning outcomes assessment beyond posting assessment activities, the information should be tailored to specific audiences. Some audiences are internal to the institution such as students, faculty, and staff while others are external such as potential students and their families, policy makers, employers, and state governments. Certain institutional web pages are more likely to be viewed by internal and external audiences respectively. The home and admissions pages generally are designed for such external audiences as prospective students and their families, and the web scan rarely found information on student learning outcomes assessment on these web pages. The web pages where the majority of student learning outcomes information was posted—those of the provost/chief academic officer and institutional research office—generally target such internal constituents as faculty and staff.

From the Data

This section first provides information on the types of institution-wide web pages that were reviewed in the scan followed by a discussion of the student learning outcomes assessment activities.

Types of Web Pages Available

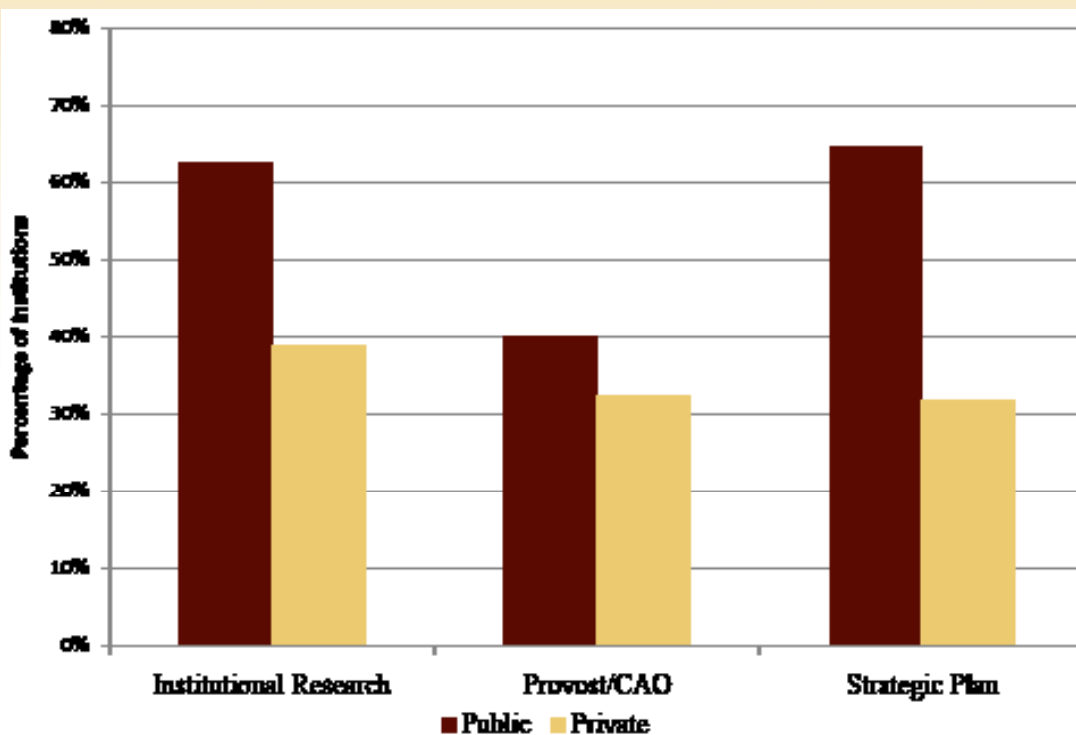
Keeping in mind that this web scan was conducted over a limited time, from March 2009 to August 2009, and that websites are continuously updated and subject to change, institutions are posting information on student learning outcomes assessment in locations on their institution websites that may determine who is likely to find and view the information. In addition, the web pages where information is posted vary by institutional control and Carnegie type.

Differences by Institutional Control and Carnegie Type

- All institutions had a home page and all but three institutions had an admissions page.
- Overall, public institutions had more institution-wide web pages available for scanning than did private institutions. Specifically, public institutions were more likely than private institutions to have institutional research and strategic plan web pages (Figure 9).
- Doctoral institutions were more likely than other institutional types to have web pages for institutional research, the provost/chief academic officer, and the strategic plan. Specialized institutions were the least likely to have these. Associate's institutions were less likely than master's and doctoral institutions to have a provost/chief academic officer page.

To further enhance communications regarding student learning outcomes assessment beyond posting assessment activities, the information should be tailored to specific audiences.

Figure 9. Percentage of institutions with internally targeted web pages by institutional control.



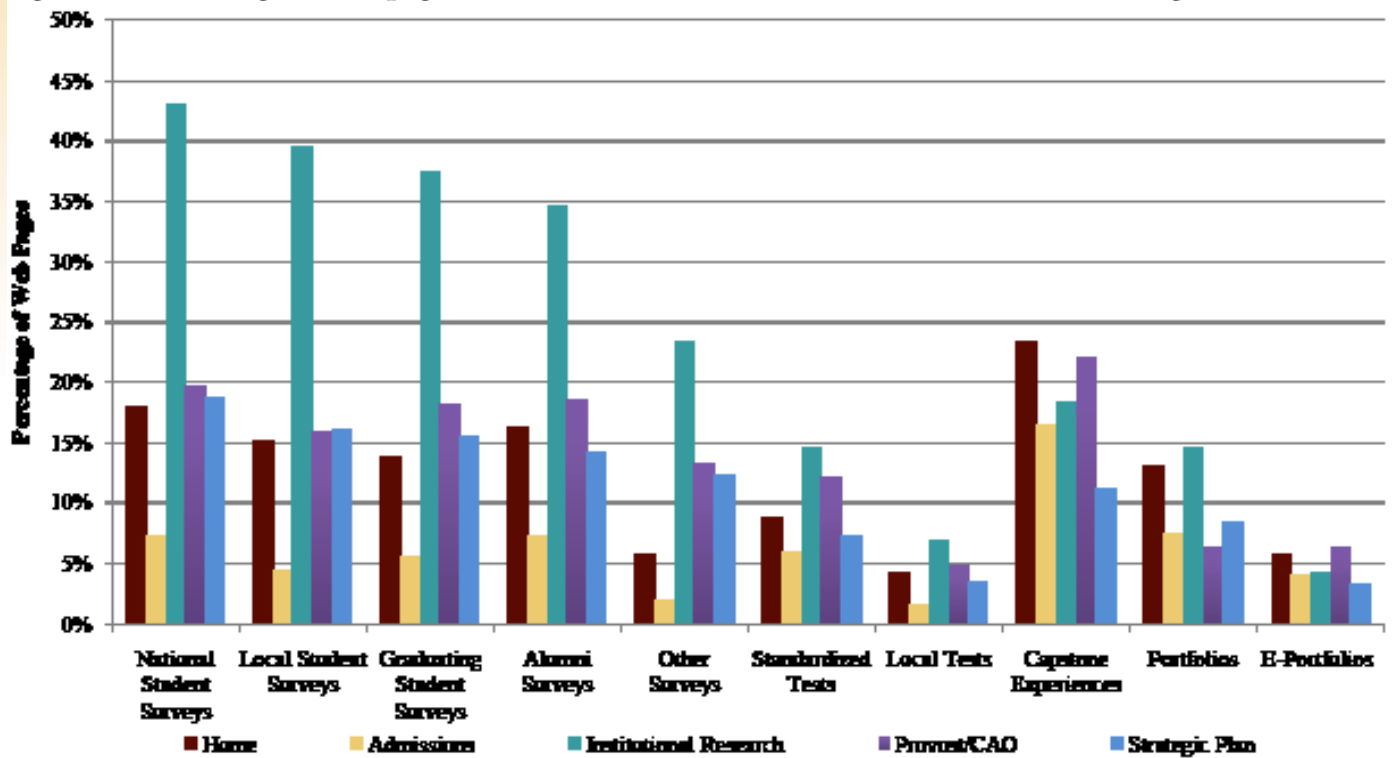
Website Locations of Types of Assessment Information

Certain assessment items tended to be located on specific institution-wide web pages. (Figure 10). For example, institutional research office web pages were more likely to display indirect evidence of learning such as surveys than other types of institution-wide pages. Given that doctoral institutions were more likely to have institutional research office web pages as well as a greater number of institutional web pages available, findings could be skewed in favor of these larger websites. This means that there were more locations for sharing information on student learning outcomes assessment with multiple audiences. However, if the audiences are not aware of the web pages or cannot understand the information presented, then little communication of learning outcomes assessment is facilitated.

Differences by Evidence Types

- Provost/chief academic officer web pages included information on surveys, standardized tests, and capstone experiences; admissions and home pages had the least amount of information on student learning outcomes assessment of all institution-wide web pages. This may suggest that institutions do not see student learning outcomes assessment information as a topic with which to market their institution to potential students or that institutions view this as internal information.

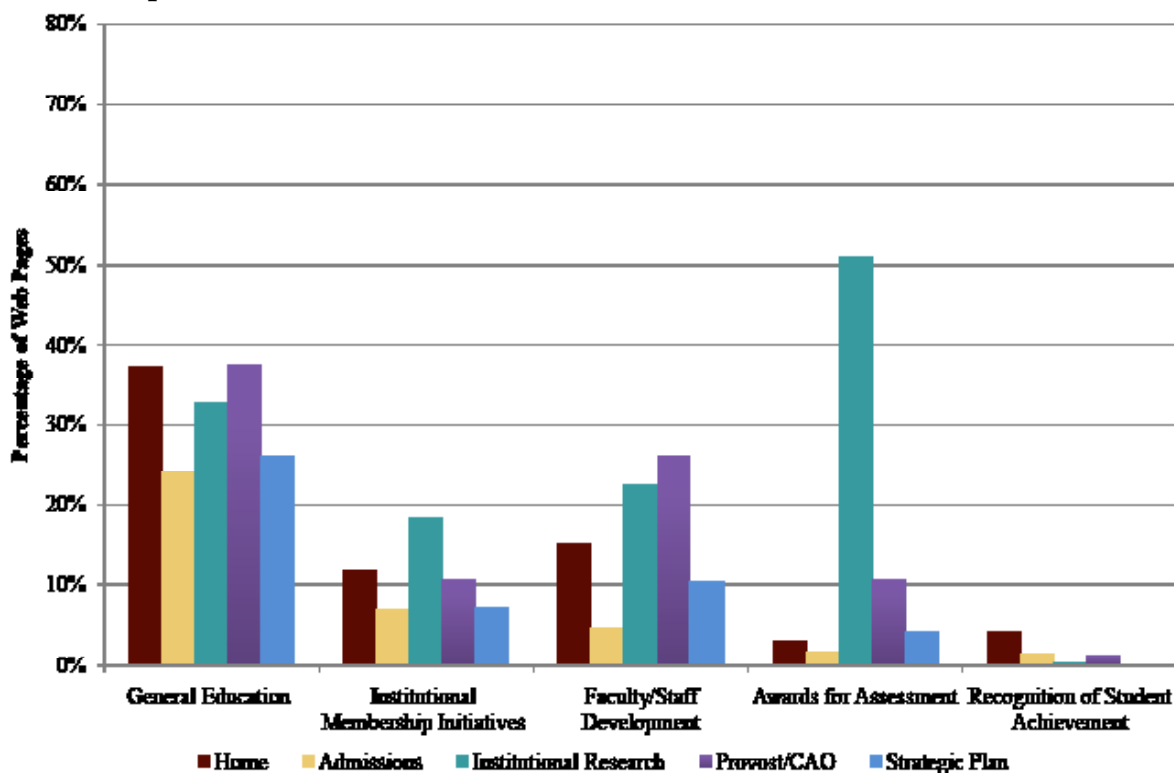
Figure 10. Percentage of web pages which included direct and indirect evidence of learning.



Differences by Assessment Purposes and Capacity Building

- Among the purposes for student learning outcomes assessment, general education was more likely than other purposes to be represented across institutional web pages. Information on institutional membership initiatives was generally found on the web pages of the provost/chief academic officer and institutional research (Figure 11).

Figure 11. Percentage of web pages on which assessment purposes and capacity building efforts were posted.




- Faculty and staff development information was located most often on the provost/chief academic officer and institutional research web pages, while awards for assessment were found almost exclusively on the institutional research web page. Overall, very few instances of recognition of student achievement were found.
- Web pages for admissions, followed closely by those for a strategic plan, contained the least amount of information on assessment purposes and capacity building efforts among all institution-wide web pages, and in many cases the least amount of information on direct and indirect evidence of student learning.

Conclusions and Recommendations

Proactively using institution websites to communicate information on student learning outcomes assessment to multiple audiences remains a challenge. Institutions have more student learning outcomes assessment activities underway than they report on their websites. To meet transparency obligations and responsibilities, institutions should make more information about student and institutional performance accessible via their websites. Care should also be taken to help multiple audiences interpret and understand the information posted. Toward this end, colleges and universities are recommended to take the following steps:

- Prominently post student learning outcomes statements and resources in multiple places on the institution's website and update those postings regularly. This information could take forms such as providing a list of learning outcomes, an assessment plan, and/or a summary of information on current assessment activities.
- State the institution's current activities related to student learning outcomes assessment on the institution's website. In addition to showcasing selected assessment activities, the institution should be sure to communicate the various ways that student learning outcomes assessment occurs on campus.
- Provide examples and descriptions of institutional assessment activities to help multiple audiences develop an understanding of the outcomes specific to the institution.
- Explain the meaning and use of results of student learning outcomes assessments on the institution's website in layperson's language for multiple internal and external audiences. In addition to reporting results, analyze and interpret them to help others make sense of what the results mean for the institution.
- Minimize the need on the institution's website for password protection of student learning outcomes assessment resources, information, and results. If an institution decides to password-protect information, then it should provide a brief explanation of why.
- Enable ease of access to information on the institution's website by making text and non-graphic versions of the web pages available and by providing clear ways to navigate the site.

Institutions have more student learning outcomes assessment activities underway than they report on their websites.



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Appendix A

This appendix provides detailed information on the procedures used to conduct the web scans, including sample selection and procedures for both the primary institution-wide web scan project and an in-depth web scan for accreditation information. Confounding variables and study limitations are also discussed.

Web Scan Sample

The sample of institutions for the web scan was chosen from information provided by the Carnegie Classification of Institutions of Higher Education⁶ and was drawn from the population of the NILOA 2009 National Survey (Kuh & Ikenberry, 2009). To determine the web scan sample, institutions were divided into six institutional strata based on the BASIC2005 variable for institution type in the Carnegie classification file. This created the six strata of tribal, specialized, associate's, baccalaureate, master's, and doctoral institutions. Due to the differences in the numbers of institutions (from 30 to 1,039) across Carnegie types, a fixed proportional stratified sample of 25% provided the best range of institutions for the web scan. Due to the limited number of tribal colleges all 30 were included.

Following the creation of the six strata, the proportion within each Carnegie type of public, private not-for-profit, and private for-profit institutions was determined to ensure representative scanning. These proportions and their numbers within the sample of each type are shown in Table A1.⁷ Finally, the sample was checked for distributed representation across the additional variables accompanying the Carnegie Classification information (e.g., enrollment numbers, size and setting, geographic region, accreditation type).

Table A1: Population size and sample size by percent public/private/for-profit.

Type	Public N	Private N	For-Profit N	Public %	Private %	For-Profit %	Public Sample	Private Sample	For-Profit Sample
Associate's	927	67	45	90	6	4	234	16	16
Doctoral	168	99	5	62	36	2	42	25	1
Master's	260	330	19	43	54	3	65	81	5
Baccalaureate	121	590	13	19	79	2	31	127	3
Specialized	24	165	30	11	75	14	6	41	8
Tribal	22	8	0	73	27	0	22	8	0
Total	2,809 All Types						725 All Types		

In the process of cleaning the data to prepare for analysis, ten institution websites were removed from the analysis due to the website being entirely in Spanish, the institution no longer being open or accepting students, or the institution merging with another institution.

Web Scan Methods

Each component of the web scan procedure addressed the web scan's questions:

- What does the institution display on its website regarding student learning outcomes assessment?
- On which web pages is information about assessment of student learning outcomes located?
- Does the institution use specific student learning outcomes assessment language on its website?

⁶ This downloadable list can be found at <http://www.carnegiefoundation.org/classifications/>

⁷ Each sample was drawn from the Carnegie type proportional to the public/private/for-profit make-up of that type. For example, the sample of 260 associate's institutions is composed of 234 public institutions, 16 private, and 10 for-profit institutions.

Web Page Scan Set

Researchers first scanned a planned set of web pages for each institution, beginning with five institution-wide web pages:

- Home
- Admissions/prospective students
- Institutional research office
- Provost/chief academic officer
- Strategic plan

Any items related to student learning outcomes assessment found within five clicks from a beginning web page were recorded in a database. Marketing research has suggested that Internet users are not likely to look for information beyond three to four clicks on a website (Geissler, Zinkhan, & Watson, 2006). To ensure generous and complete review in this study and to allow for deeper exploration of the site, five was chosen as the number of clicks for this web scan procedure. Proximity to the beginning page, measured by the number of clicks from that page, became a proxy for degree of transparency of information on the website. In addition to recording the occurrences of student learning outcomes assessment, researchers could also make notes in an “other” category of unique or unanticipated findings, making it possible to document the various assessment activities posted on institution websites.

Search Terms

When scanning an institution website, researchers used the website’s search engine, whenever possible, to search the site for specific student learning outcomes assessment terms based on those used by accrediting agencies and national higher education associations such as the Association of American Colleges and Universities.⁸ Each search term was entered in quotes in its singular and plural form. Some search engines automatically search for the plural or singular and, therefore, double counting may have occurred due to differences in search engine function. The number of search results returned was recorded as well as the locations of the linked pages, i.e., “department/program-based,” “institution-wide,” or “both.” If more than two thirds of the search results were linked to the web pages of specific departments or programs, the results were marked “department/program-based.” If more than two thirds of the search results were linked to web pages catering to a wide variety of departments, programs, or internal and external audiences, the results were marked “institution-wide.” If a clear majority was not found, the results were marked as leading to “both” department/program-based and institution-wide web pages. These steps helped us determine whether student learning outcomes assessment language was being used on the institution website and at what levels.

Reflection and Reviewer Information

Each section of the web scan database form included an area for comments and additional items related to learning outcomes not specifically requested on the form. Also, the reviewers’ initials, the date the web scan was conducted, and the length of time taken to complete the scan were recorded, because each website was visited at a specific moment in time and was likely to be updated after the researcher scanned the site. Reviewer training, consistency, and communication were facilitated via practice reviews, training sessions, periodic reflective journaling, midterm data analyses, and group feedback sessions. Reflective journaling was conducted at the completion of every 20 scans or at the end of every two weeks, whichever came first. This allowed the researchers to remark on the process in general as well as to reflect on any trends or gaps found while scanning the websites.

⁸ Search terms included core competency, core competencies, institutional assessment, learning objective, learning objectives, learning outcome, learning outcomes, outcome assessment, outcomes assessment, and student achievement.

Accreditation Scan

An in-depth scan of website postings regarding institutional accreditation was conducted on 118 institution websites to examine the relationship between student learning outcomes assessment information and accreditation information posted by institutions. This was necessary, as 81% of the 715 institution websites evaluated listed accreditation information somewhere on their website, but it was not clear what that information entailed. To develop a better understanding of posted accreditation information, 118 institution websites were selected as a sample of websites where any mention of accreditation was found on their institution-wide web pages. The same five institution-wide web pages in the initial web scan were scanned again in the accreditation scan, and information found within five clicks of those pages was recorded. The questions posed to examine the relationship between institutions' posting of regional accreditation information and student learning outcomes assessment information included the following:

1. Is information about student learning outcomes assessment posted in relation to information about accreditation on the institution's website?
2. If information about the institutional self-study is posted, does the self-study mention or include a focus on student learning outcomes assessment?
3. If the accreditation letter is posted, does it mention student learning outcomes assessment?

Gathering data relating to these questions involved examining accreditation information posted on web pages including accreditation letters, self-studies, and information about student learning outcomes assessment. The accreditation scan examined the documents for student learning outcomes assessment information and for terminology used. Document analysis was employed with posted self-study materials and accreditation letters.

Confounding Variables

An area of potential limitations is the confounding of variables used in the data analysis. Chi-square tests were run between institutional control and Carnegie type, returning significant results ($\alpha=.000$). This indicates there are more public institutions than private not-for-profit institutions at the associate's level, as well as more private not-for-profit than public institutions at the baccalaureate, master's, and specialized levels. A one-way ANOVA of institutional enrollment by Carnegie type also had significant differences ($\alpha =.000$). Post hoc tests suggest that doctoral institutions have larger enrollment numbers than all other institutions. They also suggest that master's and associate's institutions do not show a statistical difference from one another, yet they have smaller enrollments than doctoral institutions and larger enrollments than baccalaureate, specialized, and tribal institutions. If certain website attributes are related to institutional control, the relationships presented above may affect how the data analysis by Carnegie type appears, and vice versa.

In addition, when enrollment size and institutional control are examined, post hoc tests indicate that public institutions have higher enrollments than both private and for-profit institutions. Size of website in terms of the number of institution-wide pages available for scanning is also related to enrollments, with higher-enrollment institutions containing more institution-wide web pages than institutions with smaller enrollments. In addition, the number of assessment items is related to the number of institution-wide pages, so there may be some confounding between enrollment and assessment items found.

Limitations of the Web Scan Study

The web scan methodology described above is not without weaknesses. Due to a lack of literature regarding web scan methodology, the research procedure in this web scan study had to be designed without the advantage of previously tested techniques to rely on. In determining the methodological procedure to adhere to in the scan, several conversations around potential limitations occurred. Those limitations include the following:

Website Changes

- Websites have the potential to be continuously changed and updated, however, a website scan captures a snapshot of a website at one moment in time and may not necessarily reflect current practice.

Website Access

- Portions of some websites required a log-in, or password, to continue viewing information. Information that required a password on a website could not be documented in the web scan.

Website Finances and Structure

- Scanning institution websites gathers information that may partly reflect the importance an institution places on the Internet as a means of communicating information as well as the institution's financial and technological capacities. By looking at specific pages and predetermined content criteria, this limitation is somewhat addressed.
- Variations in search engines across websites proved problematic in institution website scans. Some websites did not have a search engine, while others searched different aspects of the website, did or did not require the use of quotes, or used Google⁹ for searches. Comments clarifying these variations were included at the end of the search term list in the database.

Researcher Bias

- There is some concern that the content specified to be examined (i.e., search terms, examples of student learning outcomes assessment activities) are biased towards the practices of large public four-year institutions and, as such, may be biased against other institutional types.
- As in any project with multiple researchers, this study had a concern about inter-rater reliability. Steps were taken to address this issue. First, training on how to scan was conducted before researchers began to gather data. Second, the reflections that researchers periodically shared provided a means to regularly discuss data gathering experiences. Finally, a midterm data analysis, feedback session, and discussion provided further training.
- Responsibilities for scanning institution websites were divided by the institutions' Carnegie type among the project's researchers. Inter-rater variation or researcher bias cannot be ruled out due to researchers' differing understandings of institutional types. Thus, Carnegie type may have been confounded in this study with researcher bias and experience in unanticipated ways.

⁹ www.google.com

Appendix B

Table B1. Student learning outcomes assessment categories examined during institution-wide web scans.

Direct Evidence of Learning	
Capstone Experiences	Degree-culminating experiences or courses (e.g., thesis, recital)
Portfolios	Collections of student work showcasing achievement of learning objectives
E-Portfolios	Collections of student work showcasing achievement of learning objectives that are created, maintained, and shared in an electronic format
Standardized Tests	National tests of student learning (e.g., Collegiate Learning Assessment, WorkKeys, Collegiate Assessment of Academic Proficiency)
Local Tests	Locally developed tests of student learning
Indirect Evidence of Learning	
National Student Surveys	Nationally-normed surveys designed to gauge student outcomes and experiences (e.g., Student Satisfaction Inventory, National Survey of Student Engagement)
Local Student Surveys	Locally developed surveys designed to gauge student outcomes and experiences
Graduating Student Surveys	Surveys of graduating students about outcomes and experiences at the institution
Alumni Surveys	Surveys of an institution's graduates about employment, graduate school, and other outcomes
Other Surveys	Surveys of nonstudent stakeholders (e.g., faculty, staff, employers) regarding student learning
Capacity Building Efforts	
Awards for Assessment	Awards given to faculty, staff, or departments that celebrate achievements or support future activities for assessment of learning outcomes
Faculty or Staff Development Efforts	Workshops, courses, materials, websites, etc. that assist faculty and staff with conducting learning outcomes assessment
Recognitions of Student Achievement	Recognitions of student success and achievement of learning (e.g., undergraduate research conference, awards banquet, student honors)
Assessment Purposes	
Accreditation	Learning outcomes assessment activities related to meeting accreditation standards for institutional effectiveness and student learning outcomes
Institutional Membership Initiatives	Information on student learning outcomes assessment portrayed in response to a formalized public call or system of accountability (e.g., VSA, U-CAN, AAUDE)
General Education	Institution-wide assessment activities focused on the improvement of general education curricula

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National Institute for Learning Outcomes Assessment (NILOA) Mission

NILOA's primary objective is to discover and disseminate ways that academic programs and institutions can productively use assessment data internally to inform and strengthen undergraduate education, and externally to communicate with policy makers, families and other stakeholders.

The ideas and information contained in this publication are those of the authors and do not necessarily reflect the views of Carnegie Corporation of New York, Lumina Foundation for Education, or The Teagle Foundation.



About NILOA

- The National Institute for Learning Outcomes Assessment (NILOA) was established in December 2008.
- NILOA is co-located at the University of Illinois and Indiana University.
- The NILOA website went live on February 11, 2009.
www.learningoutcomesassessment.org
- One of the co-principal NILOA investigators, George Kuh, founded the National Survey for Student Engagement (NSSE).
- The other co-principal investigator for NILOA, Stanley Ikenberry, was president of the University of Illinois from 1979 to 1995 and of the American Council of Education from 1996 to 2001. He is currently serving as Interim President of the University of Illinois.

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