Recent Trends in General Education Design, Learning Outcomes, and Teaching Approaches

Key Findings from a Survey among Administrators at AAC&U Member Institutions

Conducted on Behalf of the Association of American Colleges & Universities

By Hart Research Associates

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Association of American Colleges and Universities

Methodology

From July 15 to October 13, 2015, Hart Research conducted an online survey among 325 Chief Academic Officers or designated representatives at AAC&U member institutions to explore how higher education institutions today are defining common learning outcomes and to document priorities and trends related to general education, equity, and emerging teaching practices.

The margin of error is ± 4.4 percentage points for the entire sample, and it is larger for subgroups. The total population for the survey included 1,001 AAC&U member institutions that were invited to complete the survey, and thus the response rate for the survey is 32%. The sample is representative of AAC&U's total membership in terms of both institution type (11% associates, 30% bachelor's, 39% master's, 19% doctoral/research, and 1% other) and affiliation (46% public, 53% independent/religious, and 1% proprietary).

Select findings from the survey about institutional approaches to general education design, learning outcomes, and teaching practices are outlined in this report.

In addition, see other reports summarizing additional findings from the survey:

- <u>Bringing Equity and Quality Learning Together: Institutional</u> <u>Priorities for Tracking and Advancing Underserved Students' Success</u> (released November 16, 2015)
- *Trends on Assessment of Learning Outcomes* (planned release February 2016)

See: <u>http://www.aacu.org/about/2015-membersurvey</u>

Overview of Key Findings

Institutional Learning Outcomes:

- Nearly all AAC&U member institutions have a common set of learning outcomes for <u>all</u> of their undergraduate students.
- There is significant agreement across AAC&U member institutions about the learning outcomes they have adopted for all students. These outcomes apply to a broad range of skills and knowledge areas.
- Although more AAC&U member institutions have common learning outcomes for all students today than they did in 2008, educational leaders do not report that students have a greater understanding of these goals than they did seven years ago.

Use of Evidence-Based Teaching and Learning Strategies:

- Many institutions are implementing evidence-based practices to advance student success, and they are most likely to require highimpact interventions that support the successful transition to college.
- Though most AAC&U member institutions offer significant learning projects for at least some students, fewer actually require all of their students to participate in these types of projects.
- Only a limited number of institutions require the use of electronic portfolios, although there has been a slight uptick in the proportion of those that do in the past seven years.
- Most AAC&U member leaders think some faculty at their institution are using available digital learning tools effectively, but they indicate room for their campuses to expand the effective use of digital learning tools.

General Education Design and Reform Trends:

- General education redesign is growing as a priority, and administrators now are more likely than in 2008 to report an emphasis on the <u>integration</u> of knowledge, skills, and applications in the program.
- Compared with 2008, administrators today are more likely to say their institutions' general education programs have "clear learning outcomes" and "assess student achievement of learning outcomes."
- Many AAC&U member institutions include global courses and first-year seminars in their general education programs, but fewer than two in five require experiential learning practices.
- AAC&U member institutions are as likely to use the distribution model for their general education programs today as in the past, though nearly all use other integrative features in combination with a distribution model.
- Although member institutions today are more confident that their general education programs are well integrated with students' major requirements than they were in 2008, there still is room to better link general education programs to majors.

Key Findings

1 Institutional Learning Outcomes: Most AAC&U member institutions have a common set of learning outcomes for <u>all</u> of their undergraduate students.

Fully 85% of AAC&U member institutions report that they have a common set of intended learning outcomes for *all* undergraduate students. This is up from 78% of institutions that said they had common learning outcomes in 2008. In addition, 70% of institutions are tracking students' achievement of these learning outcomes.

Does your institution have a common set of intended learning goals or learning outcomes that apply to ALL undergraduate students?



Baccalaureate (88%) and master's institutions (87%) are slightly more likely than doctoral/research institutions (79%) to have a common set of learning outcomes that apply to all students. Religious institutions (92%) also are slightly more likely than public (82%) and non-religious independent institutions (84%) to have them.

All AAC&U member institutions have specified intended learning outcomes in at least a few of their departments, including fully 67% who say that *all* departments have them and another 27% who say most departments do. In 2008, a comparable 65% of member institutions said they had defined outcomes in all departments in 2008. There is little difference by Carnegie Classification or Affiliation.

2 Consensus on Broad Skills and Knowledge Areas: There is significant agreement across AAC&U member institutions about the learning outcomes they have adopted for all students. These outcomes apply to a broad range of skills and knowledge areas.

AAC&U member institutions' common learning outcomes address a broad range of skills and knowledge areas. Across the 11 skills and 11 knowledge areas measured in the survey, majorities of member institutions who have a common set of learning outcomes say their learning outcomes address 18 of the 22 areas.

| Proportion of Institutions That Have Learning Outcomes for All Students That Address Specific Skills and Knowledge Areas (among institutions that have a common set of learning outcomes for all students) ¹ | | |
|--|-------------|-------------|
| | <u>2008</u> | <u>2015</u> |
| | % | % |
| Writing skills | 99 | 99 |
| Critical thinking and analytic reasoning skills | 95 | 98 |
| Quantitative reasoning skills | 91 | 94 |
| Knowledge of science | 91 | 92 |
| Knowledge of mathematics | 87 | 92 |
| Knowledge of humanities | 92 | 92 |
| Knowledge of global world cultures | 87 | 89 |
| Knowledge of social sciences | 90 | 89 |
| Knowledge of the arts | N/A | 85 |
| Oral communication skills | 88 | 82 |
| Intercultural skills and abilities | 79 | 79 |
| Information literacy skills | 76 | 76 |
| Research skills and projects | 65 | 75 |
| Ethical reasoning skills | 75 | 75 |
| Knowledge of diversity in the United States | 73 | 73 |
| Integration of learning across disciplines | 63 | 68 |
| Application of learning beyond the classroom | 66 | 65 |
| Civic engagement and competence | 68 | 63 |
| Knowledge of technology | 61 | 49 |
| Knowledge of languages other than English | 42 | 48 |
| Knowledge of American history | 49 | 47 |
| Knowledge of sustainability | 24 | 27 |

Among those who say their institution has a common set of intended learning outcomes, the area in which there has been the most notable decline since 2008 is

¹ Please see Appendix for results on learning outcomes that address each area of intellectual skill or ability among <u>all</u> AAC&U members.

in the proportion who say their learning outcomes address the area of technology (down from 61% in 2008 to 49% today). Conversely, the most notable increase has been among those who say their learning outcomes address research skills and projects (up from 65% in 2008 to 75% today).

3 Student Understanding of Learning Outcomes: Although more AAC&U member institutions have common learning outcomes for all students today than they did in 2008 and many offer orientations to liberal education to all or some of their students, educational leaders do not report that students have a greater understanding of these goals than they did seven years ago. Among AAC&U member institutions who say they have learning outcomes for all undergraduates, fewer than one in 10 (9%) indicate that almost all students understand those intended learning outcomes, and 36% think that a majority of students understand them. Thus, the majority of administrators say that some students (45%) or not many students (10%) understand them. This shows little change from 2008 when 5% said almost all students understood their institution's learning outcomes for all students and 37% thought that a majority of students.

This is despite the fact that 42% require all students to take orientations to liberal education, and another 23% make it optional.

4 High-Impact Educational Practices: Many institutions are implementing evidence-based practices to advance student success, and they are most likely to require high-impact practices that support the successful transition to college.

Most AAC&U member institutions offer the 10 high-impact practices tested in the survey on their campuses, with more than nine in 10 offering internships (98%), undergraduate research (96%), practicums and supervised fieldwork (97%), study abroad (96%), global or world cultures studies (93%), service learning in courses (93%), and first-year experiences that support the transition to college (91%).

However, a majority of institutions only require three of the high-impact practices tested <u>for all of their students</u>. Two of those focus on supporting first-year students. Fully 60% of AAC&U member institutions indicate that their campus requires all students to engage in first-year experiences that support the transition to college, and more than half (52%) require all students to participate in first-year academic seminars. Additionally, a little more than half (52%) require all students to take global or world cultures studies.

Only one in three institutions requires *all* students to participate in diversity studies and experiences, but 87% offer it to students. Other evidence-based, high-impact practices such as service learning, learning communities, undergraduate research, and internships are offered by many institutions, but few require all students to participate in them.

| | Required of All <u>Students</u> % | Optional % |
|---|--|---------------|
| First-year experiences that support the transition to college | 60 | 31 |
| First-year academic seminars | 52 | 30 |
| Global or world culture studies | 52 | 41 |
| Orientations to liberal education, including its purposes and value | 42 | 23 |
| Diversity studies and experiences | 34 | 53 |
| Service learning in courses | 14 | 79 |
| Learning communities | 12 | 59 |
| Undergraduate research | 9 | 87 |
| Practicums and supervised fieldwork | 7 | 90 |
| Internships | 6 | 92 |
| Study abroad | 2 | 94 |

Approaches AAC&U Member Institutions are Taking with Regard to Select High-Impact Interventions (among all AAC&U member institutions)

In a 2014 survey conducted for AAC&U, employers indicated that they generally value graduates' completion of various applied and project-based learning experiences. Nearly all employers say they would be more likely to consider hiring a recent college graduate who had completed an internship or apprenticeship, including three in five (60%) who say their company would be *much* more likely to consider that candidate. Large majorities of employers indicate that a recent graduate's completion of various other types of applied and engaged learning experiences—such as a comprehensive senior project, a collaborative research project, a field-based project with people from other backgrounds, or a community-based or service learning project—also would positively influence their hiring decision.

5 <u>Integrative/Applied Learning Projects</u>: Nearly all AAC&U member institutions offer significant integrative or applied learning projects for at least some students, but less than one in four requires all students to participate in these types of projects.

Overall, 94% of AAC&U member institutions have significant learning projects as either a requirement of or an option for some or all students. Less than one in four (23%) institutions requires *all* students to participate in this type of project-based learning, however. Half (50%) of the institutions require some students and programs to participate in significant learning projects that involve applied or integrative learning, and 21% make them optional for at least some students.

Integrative/Applied Learning Projects

Some campuses are exploring ways to engage students in more problem-based learning. For instance, institutions are providing opportunities to students to do significant learning projects that are integrative and/or applied and that take a semester of study or longer. These projects may be conducted within capstone courses, research projects, or in fieldbased activities or internships. Which describes your campus's current approach to significant learning projects like these?



Baccalaureate institutions (31%) and master's institutions (25%) are slightly more likely than doctoral/research institutions (16%) to require *all* students to participate in a significant learning project. Non-religious independent institutions (36%) are more likely to do so than are religious institutions (26%) and public institutions (14%).

In the 2014 employer survey, large majorities said they believed that requiring students to complete a significant applied learning project in college would improve both the quality of learning (70% would improve a lot or fair amount) and the quality of graduates' preparation for careers (73% would improve a lot or fair amount). Fully 60% of employers said they thought that *all* college students should be expected to complete a significant applied learning project before they graduate. Additionally, large majorities indicate that they would be more likely to hire a recent college graduate who has engaged in applied and project-based learning experiences.

Digital Learning Opportunities: The large majority of administrators at AAC&U member institutions think that at least some of the teaching faculty at their institution are effectively using available digital learning tools. Nonetheless, most indicate room for their campuses to expand the effective use of digital learning tools, with notable differences in the appetite for the expansion of digital learning by Carnegie classification and affiliation.

Only about one-third (36%) of chief academic officers think that most of the teaching faculty at their institution are effectively using available digital learning

tools, and another 61% think that some faculty are doing so. Just 3% think very few are doing so.

There is broad agreement across administrators at AAC&U member institutions, however, that most of the teaching faculty at their campuses should be using *more* digital learning strategies in undergraduate courses (89% agree, including 44% who strongly agree). There is a notable difference in the intensity of agreement by Carnegie Classification: 52% of administrators at doctoral/research institutions and 53% at master's institutions strongly agree, compared with just 29% at baccalaureate institutions. Those at public institutions (51% strongly agree) also are in closer agreement than are those at religious (42%) and non-religious independent institutions (36%).

Overall, more than three in five (62%) administrators indicate that increasing the number of undergraduate online courses is a high or medium priority at their institution. There also are notable differences by Carnegie classification and type of institution on this question: more administrators at doctoral/research (68% medium/high priority) and master's institutions (70%) indicate it is a priority than do those at baccalaureate institutions (37%). Those at public institutions (78%) also are more likely than those at religious (57%) and other independent institutions (40%) to prioritize increasing the number of undergraduate online courses.

Digital Learning Among AAC&U Member Institutions

| (among all AAC&U member institutions) | | |
|---|---------------------------------------|--|
| | <u>All</u> <u>Respondents</u> % | |
| Proportion of current faculty using digital learning tools effective in their courses | | |
| Most | 36 | |
| Some | 61 | |
| Very few | 3 | |
| All or most of our teaching faculty should be using more digital learning strategies in undergraduate courses or programs | 22 | |
| Total agree | 89 | |
| Agree strongly Priority institution places on increasing the number of undergraduate online courses offered to students | 44 | |
| High priority | 26 | |
| Medium priority | 36 | |
| Minor/not a priority | 38 | |
| Competency-based education programs at institution | | |
| Entire program is competency-based | 1 | |
| Offer some programs in CBE format | 10 | |
| Do not currently offer, but are considering developing | 40 | |
| Do not currently offer, no plans to develop | 49 | |

Competency-based education programs are currently offered by only a small number of AAC&U member institutions (11%), but 40% of administrators say their campuses are considering developing them; 49% say they have no plans to do so. Those at baccalaureate institutions are the most likely to say they do not offer CBE programs and have no plans to do so (72%)—compared with just 44% of those at doctoral/research institutions and 37% of those at master's institutions.

T<u>E-Portfolios</u>: Many AAC&U member institutions use electronic portfolios, but few institutions require them for all students.

Today 64% of AAC&U member institutions say they use electronic portfolios for at least some students and programs, including just 7% that require them for all students and 57% who use them for some students. This is up from 54% of member institutions who were using them for at least some students in 2008. (An additional 23% of member institutions currently say they are exploring the feasibility of using e-portfolios. Only 13% say they have no plans to develop them.)



Doctoral/research institutions (80%) are the most likely to require at least some students to use e-portfolios, compared with 70% of master's institutions and 54% of baccalaureate institutions. For each type of institution, fewer than one in 10 says they require all students to use them.

In the 2014 survey of employers, fully 80% said that when evaluating a job candidate, it would be helpful to have access to an electronic portfolio summarizing and demonstrating the individual's accomplishments in key skill and knowledge areas, in addition to a résumé and college transcript.

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8 General Education Redesign: The majority of AAC&U member institutions continue to say that general education is more of a priority than it was five years ago, and they are much more likely to say they are placing greater emphasis on integration of knowledge, skills, and application than on broad knowledge acquisition in their general education programs.

More than half (55%) of AAC&U member institutions indicate that general education has become more of a priority over the past five years, while 43% say there has been no change and only 2% said it has become less of a priority. These figures are virtually unchanged from what institutions reported in 2008: 56% more of a priority, 3% less of a priority, 41% no change.

Two in three (67%) administrators say their institutions are placing more emphasis on integration of knowledge, skills, and application in their general education program, and nearly as many (61%) indicate their campus is placing more emphasis on applied learning experiences. Half (51%) are placing more emphasis on cross-cutting skill development, while just one in three (32%) is placing more emphasis on broad knowledge acquisition. Among institutions that are placing a higher priority on general education today, larger proportions are placing more emphasis in each of these areas.

Proportion Of Member Institutions Placing More Emphasis On The Practice



9 Clarity and Assessment of General Education Learning Outcomes: There have been notable increases in the proportion of administrators who describe their institutions' general education programs as "having clear learning outcomes" and "assessing student achievement of learning outcomes." Large majorities of institutions say that each applies to their general education program today. When it comes to the characteristics of their general education programs, more than three in four administrators say their institution has clear learning outcomes (76% describes well)—up from 63% who said this in 2008. More than two in three say their institution assesses student achievement of learning outcomes—a marked increase from 49% who said this described their institution in 2008. There has been less change in the proportion who thinks "has requirements that are linked to outcomes" applies today (66%) compared with seven years ago (62%).

Characteristics of General Education Programs



Proportions saying each describes* their institution's general education program

* 4 + 5 ratings on a five-point scale, 5 = describes the program very well

Institutions that require significant learning projects for all students are notably more likely to describe their general education program as having clear learning outcomes (82%), to assess student achievement of learning outcomes (85%), and to have requirements that are linked to outcomes (81%).

Additionally, institutions that assess outcomes in all departments and in general education are more likely than those that do not to say their general education program has clear learning goals and has requirements that are linked to outcomes.

10 General Education Program Components: AAC&U member institutions report similar curricular patterns for their general education programs today as in 2008: they are most likely to include global courses and first-year seminars. Just over one in three *require* experiential learning in their general education programs.

Institutions include some curricular approaches more than others in their general education programs. They are most likely to include global courses (70% describes general education program very or fairly well) and first-year seminars (63%), and more than half say they include diversity courses (60%) and interdisciplinary courses (55%). Approaches that involve engagement in real-world learning are

incorporated less frequently, but nearly half (46%) now say they include service learning in their general education programs and 42% say they include civic learning or engagement activities. Nonetheless, only 36% of institutions require experiential learning opportunities in general education.



General Education Program Components

Proportions saying each describes* their institution's general education program

1 1 General Education Design Models: The distribution model (76%) is the most common feature that member institutions employ for their general education programs today, but a larger share (92%) use other integrative features, either in combination with a distribution model (68%) or not (24%).

When it comes to models for general education programs, more than nine in 10 (92%) institutions are using more than one feature, including 68% that employ a distribution model in combination with another model and one in five (24%) that uses another feature or model without a distribution model. That leaves just 8% of institutions only using a distribution model today.

^{* 4 + 5} ratings on a five-point scale, 5 = describes the program very well

The majority of institutions uses a distribution model with additional integrative features.

Other features: Distribution model only Common intellectual Distribution model with other features experience One or more other features only Thematic required courses Upper-level requirements 68% Core curriculum 64% Learning communities 24% 18% 15% 8%

Which of these features are part of your institution's general education program?

November – December 2008 July – October 2015

Three in four (76%) member institutions employ a distribution model in their general education program, and 66% use capstone or culminating experiences in either major programs or general education. (Three in five (60%) use capstone or culminating studies in major programs, and one in five (26%) uses capstone studies in general education.)

At least two in five (41%) institutions incorporate a common intellectual experience, thematic required courses (42%), and a core curriculum (44%). Just over one in five (22%) has learning communities. Nearly half (46%) now report that they require upper-level general education courses, slightly more than reported having this requirement in 2008.

| General Education Program Design Eleme (among all AAC&U member institutions) | nts |
|---|--------------------------------|
| | All <u>Respondents</u> % |
| Distribution model | 76 |
| Capstone or culminating studies (taken in major programs) | 60 |
| Upper-level general education requirements | 46 |
| Core curriculum | 44 |
| Thematic required courses | 42 |
| A common intellectual experience | 41 |
| Capstone or culminating studies (taken as part of general education) | 26 |
| Learning communities | 22 |

12 Integration of General Education and Majors: More member institutions feel that their general education programs are well integrated with students' major requirements today than felt this way in 2008, but there is still room to better link general education courses to majors.

Today, 58% of administrators think their institution's general education program is very (21%) or fairly (37%) well integrated with students' major requirements. This is up nine points since 2008, when 48% felt they were very or fairly well integrated. Nonetheless, with just 21% who think they are very well integrated, and 42% who think they are only somewhat or not well integrated, there is room to better integrate the two.

| Integration of General Education and Major Requirements | | |
|---|------------------|------------------|
| | <u>2015</u> % | <u>2008</u> % |
| Very well integrated | 21 | 11 |
| Fairly well integrated | 37 | 37 |
| Only somewhat well integrated | 31 | 37 |
| Not well integrated | 11 | 15 |
| Total very or fairly well integrated | 58 | 48 |
| Total only somewhat or not well integrated | 42 | 52 |

Administrators at institutions that use a distribution model with another feature (55% very or fairly well integrated) are less likely than those who use another feature without a distribution model (69% very or fairly well integrated) to think their general education program is well integrated. Those whose institutions use a capstone model in general education are among those most likely to feel they are well integrated (73% very or fairly well integrated).

Final Note

This report is the second in three reports AAC&U is issuing in 2016 summarizing findings from this survey of a representative sample of chief academic officers at AAC&U member institutions. These reports build on two earlier reports issued in 2009 and document the ways in which AAC&U member institutions are working on the educational reform goals articulated in AAC&U's current strategic plan, *Big Questions, Urgent Challenges: Liberal Education and America's Global Future*.

For more information on previous surveys and the full text of AAC&U's strategic plan, see <u>www.aacu.org</u>.

| Proportion Of Institutions That Have Learning Outcomes For All Students That Address Specific Skills and Knowledge Areas (among all institutions) | | |
|---|------------------|------------------|
| | <u>2015</u> % | <u>2008</u> % |
| Writing skills | 84 | 77 |
| Critical thinking and analytic reasoning skills | 84 | 74 |
| Quantitative reasoning skills | 80 | 71 |
| Knowledge of science | 78 | 71 |
| Knowledge of mathematics | 78 | 68 |
| Knowledge of humanities | 78 | 72 |
| Knowledge of global world cultures | 76 | 68 |
| Knowledge of social sciences | 76 | 70 |
| Knowledge of the arts | 72 | N/A |
| Oral communication skills | 70 | 69 |
| Intercultural skills and abilities | 68 | 62 |
| Information literacy skills | 65 | 59 |
| Research skills and projects | 64 | 51 |
| Ethical reasoning skills | 64 | 59 |
| Knowledge of diversity in the United States | 62 | 57 |
| Integration of learning across disciplines | 57 | 49 |
| Application of learning beyond the classroom | 55 | 52 |
| Civic engagement and competence | 54 | 53 |
| Knowledge of technology | 42 | 48 |
| Knowledge of languages other than English | 41 | 33 |
| Knowledge of American history | 40 | 39 |
| Knowledge of sustainability | 23 | 18 |

Appendix