

# **Development of a Voluntary System of Accountability for Undergraduate Education\***

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**Abstract**

The Voluntary System of Accountability is a commitment by public 4-year universities to supply basic, comparable information on the undergraduate student experience to important constituencies through a common web report – the College Portrait. The information includes characteristics of the institution and its students, cost of attendance, student engagement with the learning process, and core educational outcomes. The system was collaboratively developed by public university leaders in response to the desire expressed by public commissions, elected officials and government entities for greater accountability within a system of transparent and comparable data. Common definitions exist for all data reported in the system and common conventions for data collection. Multiple measures of core educational outcomes and campus engagement can be selected by participants to guard against the possibility that the use of identical measures might subtly reduce diversity of educational approaches within U.S. higher education.

## Introduction

Public higher education plays a vital role in the United States, enabling social and economic mobility for individuals and creating cultural, scientific, and technological progress for society. Given its important role and the support received from public funds, public higher education is rightly held accountable through a variety of methods—accrediting bodies, state governing boards, and the federal government. Unfortunately, the vast quantity of information collected through these multiple, often fragmented, sources can obscure what is crucial information.

Flaws in the accountability reporting structures were readily apparent when the U.S. Secretary of Education’s Commission on the Future of Higher Education wrote in its September 2006 final report the “lack of useful data and accountability hinders policymakers and the public from making informed decisions and prevents higher education from demonstrating its contribution to the public good” (p. 4). This conclusion was accompanied by the inference that the failure of higher education to voluntarily create an accountability reporting model could lead to the federal government imposing its own accountability standards and metrics upon institutions.

That premise was articulated by many legislative and public officials including Charles Miller, Chair of the Commission on the Future of Higher Education, who warned that if higher education is “not responsive to change” and “doesn’t have a strategic vision,” then “things are going to be mandated.”<sup>1</sup>

Accountability was certainly not new to public higher education; every public university dedicates significant time and resources to serious and ongoing accountability appraisals. What was new was the call for baccalaureate level institutions to report data in a transparent manner

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<sup>1</sup> “18 Yeses, 1 Major No, Inside Higher Education.com, Aug. 11, 2006

that allowed comparison of undergraduate education among institutions. Also new was a call for reporting learning outcomes for undergraduates.

With the rhetoric becoming increasingly critical, the American Association of State Colleges and Universities (AASCU) and the Association of Public and Land-Grant Universities (A·P·L·U) set to develop a voluntary system of accountability as a mechanism to respond to the questions being asked by various stakeholders and to provide a meaningful basis for families and students to compare institutions. Because A·P·L·U and AASCU are membership organizations any accountability system was of necessity a *voluntary* one in which a university could elect to participate. Collectively, A·P·L·U and AASCU represent over 520 public colleges and universities that educate over two-thirds of U.S. baccalaureate students; therefore, an accountability system with significant member participation would represent a large segment of U.S. higher education

The development of the system began with a white paper shared broadly among A·P·L·U and AASCU members. Based on feedback from university leaders, the white paper was twice formally revised and the third version became the blueprint for the development of the Voluntary System of Accountability (VSA).<sup>2</sup>

Lumina Foundation provided funding to fully develop the VSA and staff from the associations coordinated the development efforts. However, eighty-two higher education professionals, who were nominated by the chief executive and chief academic officers, carried out the substantive work of selecting factors to report, approaches to facilitate comparisons, and choosing instruments to measure outcomes. These leaders, including presidents, provosts, institutional research officers, and student affairs officers, were organized into five task forces and two

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<sup>2</sup> Toward a Voluntary System of Accountability Program (VSA) For Public Universities and Colleges, Peter McPherson and David Shulenburg, 2006, <http://www.APLU.org/vsa-8-31-06.pdf>

technical work groups that met repeatedly over a 9-month period in 2007 to develop a common reporting template. Another 110 higher education professionals monitored development of the VSA and offered their own contributions to its development. Crucial input was also gathered at key stages through open sessions at association meetings of senior campus leaders.

In developing the system, the task forces and work groups sought to meet three goals:

- 1) to demonstrate greater accountability and stewardship to the public,
- 2) to enhance effective educational practices by measuring educational outcomes, and
- 3) to assemble information that is transparent, comparable, and understandable for students and their families as they compare college options.

The committees were also guided by the need to be accountable to three groups: 1) prospective students and their families; 2) faculty and campus staff, and 3) public policy-makers, members of the public and public/private funders of higher education. As decisions were made regarding the materials to be included in VSA, primacy was given to the information needs of the first group, students and their families.

### **The Accountability Template Design Standards**

One of the key challenges in developing the VSA was to address questions about institutions using information sources that are widely available and accepted by the higher education community and, at the same time, responsive to the criticisms and concerns raised in national policy discussions. Another significant challenge was to identify and select measurement instruments that yield reliable and valid scores for institutional accountability. To help work through such challenges, the following standards were adhered to by the task forces and work groups during their deliberations: comparability, transparency, public disclosure, cost

effectiveness, targeted, and information without rankings. Each of these design standards are discussed in more detail below.

**Comparability** For the information to serve the needs of students in their search for the right university and to satisfy public accountability demands, VSA must contain comparable data across universities. The data elements must represent common reporting items for public universities offering baccalaureate degrees.

**Transparency.** The public must have confidence in the data. Definitions must be clear; conventions for data gathering and reporting must be well established. The American public tends to be suspicious that much of the information it receives is manipulated by the provider to create a favorable impression; VSA's usefulness as an accountability device will be diminished severely if such suspicion is cast on its data. A guiding principle is that VSA will never "spin" data.

**Public Disclosure.** All VSA data must be made available publicly if VSA is to satisfy student and public accountability needs.

**Cost Effectiveness.** Public universities do not have resources to devote to expensive new reporting. For that reason, the VSA utilizes data already collected for other purposes such as the federal Integrated Post-Secondary Educational Data Set or the Common Data Set. Existing student learning measures and student experiences surveys were used rather than creating expensive new measurements.

**Targeted.** The VSA will not serve all needs. The underlying purpose of the VSA is to address the information needs of key stakeholders regarding undergraduate education at U.S. universities. Data for monitoring research, institutional financial health, graduate education, etc., still must be maintained by universities.

**Information, not rankings.** By compiling a common set of data elements in a standard format, users can access and compare institutional characteristics easily. The VSA does not attempt to prioritize the information or direct attention to particular items. The breadth and variety of information presented as part of the VSA gives users the opportunity to focus on indicators that are significant to their individual circumstances. The ability to compare factors most important for individual situations provides a flexibility not found in predetermined rankings or lists. Combining data into any sort of index only obfuscates what the carefully defined, distinct data elements are intended to clarify.

### **Selection of Data Elements**

In addition to meeting broad design standards, the data elements selected were identified and evaluated based on input from student/family focus groups, feedback from the higher education community, and research on higher education. A phased in approach was adopted so that items more commonly available would be reported within a shorter timeframe (3 to 6 months after becoming a VSA participant) while the more complex items would have longer reporting schedule (2 to 4 years).

The data elements were brought together in the VSA *College Portrait*, a common web report that is organized into three primary sections: 1) student/family (consumer) information, 2) student experiences and perceptions, and 3) student learning outcomes. The college portraits can be accessed from each VSA institution's website or through a common website – [www.collegeportraits.org](http://www.collegeportraits.org). The web display of the College Portraits is ADA compliant and able to work with assistive technologies so that all users have full access to the information.

Beyond the actual data elements, an important contribution of the *College Portrait* is the presentation of the data in an understandable and comparable format for information users. The task force teams decided on a consistent format for the *College Portrait* elements that will be

used across individual institutions or systems. Within the standard format designed for comparability, several features were incorporated to allow institutions to reflect the distinctiveness of their individual campuses. On the opening webpage, institutions provide a brief description of what makes them distinctive—e.g., a mission or vision statement, program offerings, student body, faculty expertise, and so on. An institution may also display their school colors, mascot, and/or logo. The opening page includes a second text block that describes each institution's campus community and nine large button links are provided to take prospective students to information about the campus life, programming, and other opportunities available at the institution. The labels for these buttons and where they link to are completely discretionary for each participating institution. A number of VSA institutions have conducted extensive internal discussions about what to include among the nine buttons and what kinds of messages students should encounter on the linked pages.

Throughout the college portrait, "More Information" buttons can be activated to provide institution specific detail for the majority of the data elements in the *College Portrait* template. The "More Information" buttons allow a user to jump off the *College Portrait* pages and onto an information page developed by the college or university. There are also blocks for description and button links for institutions to describe student evaluations, surveys, and student learning outcomes.

The student/family information the *College Portrait* provides a wealth of descriptive information about a particular university community. The Student Experiences and Student Learning Outcomes sections delve deeper into the undergraduate experience by reporting on student experiences and involvement on campus as well as student learning outcomes. For the task forces assigned to these sections, thinking through how to publicly report this type of information at the institutional level was more difficult and significantly more complex than the relatively straightforward consumer information. For example, the challenge of appropriately balancing

comparability of information with institution choice was discussed at many junctures. The question underlying all of the deliberation was what choices would yield information of the most use to students, families, and the policy community?

### **The VSA College Portrait**

The following sections describe each of the three College Portrait sections in more detail – student/family information, student experiences and perceptions, and student learning outcomes.

#### **Student and Family Information**

The student/family section of the *College Portrait* addresses the question: “*What information would be most helpful to prospective students and their families in deciding which college or university best fits their educational wants and needs?*” This section include data elements such as costs of attendance, degree offerings, living arrangements, student characteristics, graduation rates, transfer rates, and student plans after graduation.

The underlying definitions and standards for most of the data elements on the first three pages follow those established through the Common Data Set Initiative (CDS)—a collaborative effort among the institutional research community and publishers to improve data quality and accuracy (see <http://www.commondataset.org>).

In addition to the available Common Data Set information, the VSA added a student progress indicator that relies on data available through the National Student Clearinghouse (see <http://www.studentclearinghouse.org/>). The National Student Clearinghouse data provides the ability to report not only students still attending a particular institution or who have graduated from that same institution but also students that have transferred to another institution and are persisting in their pursuit of a baccalaureate degree or who have earned their bachelor’s degree

from another institution. The combined success and progress rate provides a more complete picture of student progress through the higher education and is increasingly valuable as the majority of students attend more than one institution before they graduate (Adelman, 2006).

Another important addition to the CDS elements is a college cost calculator that allows a prospective student to enter a subset of their family income information and to receive an estimate of what her or his actual costs of attendance will be at a particular institution. The tool is designed to provide more accurate cost information so that students, particularly low-income students, will not “opt-out” of college because they mistakenly believe the cost of attending is much higher than it actually is.

### **Student Experiences and Perceptions**

The charge for the task force that created the second section of the *College Portrait* was to identify a set of appropriate instruments that could be used by VSA institutions to measure student engagement and institutional support and to develop a reporting structure that would allow comparisons across survey instruments.

The rationale for including engagement data is the substantial body of educational research that concludes the more students engage in educationally purposeful activities the more they learn and the more likely they are to persist and graduate from college (Kuh, Kinzie et al., 2007). The same research shows the most effective institutions are those that provide opportunities for substantive interaction between faculty and students, create classroom experiences that actively engage students in the subject matter, offer programming that encourages students to devote more time and effort to their learning, and foster environments that support diversity (Astin, 1992; Pascarella and Terenzini, 2005).

Identifying instruments was relatively straightforward as several well-known and respected surveys are available for this purpose including the National Survey of Student Engagement (NSSE) (see <http://nsse.iub.edu/index.cfm>) and the College Senior Survey (CSS) developed by the Cooperative Institutional Research Program (CIRP) at the Higher Education Research Institute out of UCLA (see <http://www.gseis.ucla.edu/heri/cirpoverview.php>). The task force also evaluated several other instruments and added the College Student Experience Questionnaire (CSEQ) (see [http://cseq.iub.edu/cseq\\_generalinfo.cfm](http://cseq.iub.edu/cseq_generalinfo.cfm)) and the University of California Undergraduate Experience Survey (UCUES) (see <http://ucues.berkeley.edu/home>) to the choices that could be used and reported as part of the VSA.

Developing a common method and structure for reporting the results from each of the instruments proved a more complicated task. To frame the discussion, a review of the relevant literature was conducted and six constructs were selected due to their strong correlations with increased student learning and development (Keller, 2007). The six constructs are:

- group learning,
- active learning,
- experiences with diverse groups of people and ideas,
- student satisfaction,
- institution commitment to student learning and success, and
- student interaction with faculty and staff.

For each of the constructs, the task force carefully selected similar questions from each survey to maintain rough comparability across survey instruments. The response categories for each question were also considered and chosen to support this comparability.

The remaining task was determine which results to report as most of the survey instruments are administered to first- or second-year second students as well as graduating seniors. Should the results of first-year and graduating students be reported in an attempt to show student development across time? After further evaluation, the task force concluded that not all the survey instruments and the standard administration protocols allowed for the reporting of gains in a meaningful and valid way; therefore, the results from the survey instruments are characterized as a snapshot of student experiences, activities, and perceptions at the institution. The responses of seniors are displayed as they have spent the most time at the institution and can more accurately reflect the full range of the experiences on campus.

### **Student Learning Outcomes**

Measuring and reporting student learning outcomes are key components of the *College Portrait* and are responsive to the calls from federal commissions, members of Congress, employers, and the academy itself (see for example Bok, 2006) to better assess what universities contribute to the core learning of students earning a bachelor's degree. As discussed in the introductory section, the VSA was created with the assumption that public universities have an obligation to demonstrate their stewardship of both public funding and the human capital by measuring their accomplishments and gathering data to monitor and improve performance.

The task force and work group assigned to this portion of the VSA were challenged to find useful and credible evidence of the value that higher education adds in student learning outcomes. The ultimate goal was to identify a number of educational outcome assessment instruments capable of measuring student gains in critical thinking, analytical reasoning and written communication at the institution level across all academic disciplines. It was critical that any instrument selected should also facilitate comparisons across institutions and provide useful feedback to institutions for improvement.

During the vetting process, the work group in particular wrestled with questions that did not have ready-made answers as they ventured into uncharted areas of psychometrics, test design, and data reporting. Particularly thorny questions of reliability, validity, sampling, test administration, and participant motivation were raised and in some cases could not be completely addressed. After an extensive review of 16 candidate instruments, the groups recommended three instruments to include as part of the VSA:

- Collegiate Assessment of Academic Proficiency (CAAP <http://www.act.org/caap/>),
- Collegiate Learning Assessment (CLA [http://www.cae.org/content/pro\\_collegiate.htm](http://www.cae.org/content/pro_collegiate.htm)), and
- Measure of Academic Proficiency and Progress (MAPP <http://www.ets.org/>).

The results from one of the three instruments are described in the *College Portrait* template as learning gains or value-added. The learning gains reflect the difference between the actual and expected scores of graduating and entering students, taking into account the academic ability of the students. The same methodology is used across all instruments to compute and to describe the learning gains. The methodology was originally developed for the CLA but has been tested and validated by ACT for the CAAP and by ETS for the MAPP<sup>3</sup>.

Even with the extensive review and evaluation process that was undertaken for each of the selected instruments, the volatile mixture of technical matters, philosophical differences, and political fears swirling about value-added measurement caused the task force, work group, and other contributors to move forward with caution. Accordingly, the measurement of core learning outcomes within the VSA is designed as a pilot project. The task forces understood that many public institutions had not previously measured these broad cognitive skills at the institutional

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<sup>3</sup> For more information on the methodology, see

- CLA: [http://www.cae.org/content/pdf/CLA\\_Technical\\_FAQs.pdf](http://www.cae.org/content/pdf/CLA_Technical_FAQs.pdf)
- ACT: [http://www.voluntarysystem.org/docs/cp/ACTReport\\_LearningGainsMethodology.pdf](http://www.voluntarysystem.org/docs/cp/ACTReport_LearningGainsMethodology.pdf)
- ETS: <http://www.voluntarysystem.org/docs/cp/RR-08-47MeasuringLearningOutcomesUsingMAPP.pdf>
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level and then analyzed the results to report learning outcomes. To give institutions adequate opportunity to become familiar with the administration of the instruments and to evaluate the value of the results, a four-year trial period was put into place before any results must be published as part of the *College Portrait*.

The task force and work group, as well as those providing feedback throughout the development process, repeatedly emphasized that the instruments used as part of the VSA should be employed as part of a comprehensive assessment system that includes locally developed assessments of learning (e.g., portfolios), measures of engagement, direct measures of learning, student satisfaction and tests of discipline knowledge. Therefore, the *College Portrait* also reports evidence of how institutions evaluate student learning locally, including links to institution-specific outcomes data such as program assessments and professional licensure exams.

Even after the extensive vetting of the student learning section by the task force, work group, and other stakeholders, the decision to include the measurement of core learning gains within the VSA was not taken lightly. The presidential advisory board thoroughly reviewed the task force and work group recommendations before recommending the VSA with the inclusion of learning outcomes measurement to the AACSB and APLU Boards. The AACSB and APLU Boards in turn discussed the issues before unanimously endorsing the VSA and recommending that association member universities participate. Nevertheless concerns surrounding the inclusion of core learning outcomes measurement within the VSA remain and must be addressed by additional data and research such as the ongoing construct validity study and the learning outcomes workshops scheduled for the summers of 2009 and 2010. Both of these are described in more detail later in this document.

### **Learning Outcomes Research**

In fall of 2007, the U.S. Department of Education awarded a \$2.4 million grant to A·P·L·U, AASCU and the Association of American Colleges and Universities (AAC&U) to study the assessment of student learning and development. The grant has three areas of focus: (1) conduct a construct analysis of the three outcomes measures (CLA, CAAP and MAPP) that are options for participating VSA universities, (2) develop rubrics to identify from student portfolios the cognitive outcomes arising from the university experience and (3) develop and field-test an instrument to measure changes in student preparation for success in the workplace and success in civic engagement. The instrument is being designed for administration to incoming freshmen and graduating seniors. The testing was completed in late 2008 and the results of this study will be available in summer of 2009.

This research should produce a number of benefits for the VSA. First, the construct analysis of the three existing student learning measures will enable VSA participants to better select the appropriate learning outcomes instrument based upon the research. It will also provide institutions with a clearer understanding of the relationship between the constructs measured by each of the tests. Ultimately, this information may provide the VSA Oversight Board with a basis for deciding whether additional or replacement tests might be authorized for use in VSA.

The student portfolio rubric development may permit the future inclusion of student portfolios as a cognitive outcome measure within the VSA. Finally, if the development work on the workplace and civic engagement preparation measurement is successful, the VSA Oversight Board may consider adding that to VSA. The reporting of these skills was originally part of the VSA considerations but our task forces could not find acceptable measurement devices to justify their inclusion. Given that many employers cite skills such as leadership ability and the ability to work in groups as crucial along with critical thinking, problem-solving and written communication abilities, and as government leaders point to the low participation of young people in the

electoral process, the ability to include such measures within the VSA would make it a more complete accountability reporting instrument.

### **Learning Outcomes Seminars**

In spring of 2009, the Lumina Foundation awarded a third grant to the VSA project to conduct a series of seminar that will provide assistance to VSA participants in implementing the student learning outcomes section.

The implementation and application of learning outcomes measurement is complex enough for VSA institutions to require technical assistance from outside experts. The tasks are also multifaceted and context-specific so the most effective methods will differ depending on factors specific to a university. The best assistance for one university is likely to come from a peer university. The seminars are intended to capitalize on the sharing of ideas among similar institutions as well as the advice of measurement experts.

The seminars will focus on two key areas – test administration and interpretation/application of results. For example, to effectively administer any of the three instruments student motivation is vitally important – students selected for the sample must show up to take the test and students must perform at their ability level while taking the test. Further, once the test results are returned to the university, leaders must be able to understand and use the results to adapt the learning environment and increase learning gains.

The seminars in 2009 will focus on the administration of the tests and the seminars in 2010 would focus on the application of test results. A compendium of lessons learned will be produced after the three seminars are completed in 2009 and again after the three seminars are completed in 2010 for further distribution.

## **VSA Oversight Board**

When the VSA was endorsed by the AACSB and A·P·L·U Boards in November 2007, the boards created a VSA Oversight Board to enhance and maintain the integrity and effectiveness of the project. The VSA Oversight Board members include presidents, provosts as well as officers representing student affairs, institutional research, university relations, and governmental affairs that provide a broad perspective to guide the future direction of the VSA.

### **Concluding Thoughts: What is Gained?**

One of the contributions of the VSA is to assist institutions with the difficult and complex tasks of self evaluation and improvement. A benefit of measuring student experiences and learning outcomes at the institution level is the ability of institutions to compare and contrast their results to those of their peer institutions. Being able to identify other institutions that are achieving desirable results will allow an institution to know where to turn for potential models as it works to tailor its own efforts at providing the best quality educational experience for its own students.

Institution level assessments are sometimes dismissed as irrelevant because the results are not easily translated into specific curricular improvements. However, the underlying purpose of institution level assessment is not to pinpoint specific changes to individual courses. The focus of institutional assessment is the entire curriculum, indeed the whole of the university experience, and how it can be altered or improved to insure that graduates obtain the broad, higher order skills and abilities of a truly well-educated individual. Institution level assessments used within the VSA determine whether a university's students are acquiring such skills at a level that is what would be expected given the entering ability of the students. The institutional leaders must then decide if the outcomes are acceptable for their institution, mission, and students. If not, faculty, administrators, student affairs officer, and other campus leaders must then delve further to find out what part of the learning environment needs to be enhanced or

modified. Other tools will be utilized such as major or disciplinary assessments and program evaluations. Institutional assessments such as those included within the VSA are not intended to replace other types of outcome assessments but to complement and extend those efforts.

The VSA *College Portrait* is designed to shift the national focus away from reports based on institutional reputation and toward reports based on institutional performance for the students it serves. The VSA is a first step in changing the conversation in this promising direction.

Agreeing to create and implement a voluntary national set of accountability standards cannot be the end of this process. New measures for evaluating educational outcomes and student engagement will be developed and old ones may prove to be inadequate. What is an adequate accountability process today may not be considered adequate tomorrow as changes in the educational environment and technology emerge. VSA has created a mechanism to provide oversight for the agreed upon set of standards and to permit the system to be responsive to changes in the environment as well as the development of new assessment instruments and strategies.

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