

BEST PRACTICES IN EXPERIENTIAL EDUCATION MEASUREMENT

Prepared for New York Institute of Technology

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In the following report, Hanover reviews literature on experiential education measurement in order to identify best practices and effective strategies for tracking community-based impact.



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EXECUTIVE SUMMARY

RECOMMENDATIONS

Based on a review of secondary literature and best practices among experiential education offices, Hanover recommends that New York Institute of Technology (New York Tech):

Clearly establish goals against which to measure experiential education programs. Although goals may be clear internally, sharing explicitly stated goals with stakeholders allows New York Tech to develop corresponding metrics to assess whether goals are met. For example, measuring students' participation in internships and community service programs is an important experiential education metric that is in line with best practices. Metrics to assess *presumed* goals, such as employability after graduation or improved community outcomes, are also necessary. Clearly stating these goals ensures alignment between objectives and measured outcomes.

Take advantage of existing surveys and other tools to enhance program measurements. Certain institutions reviewed for this report use national surveys like the National Survey on Student Engagement (NSSE) to track student outcomes, such as openness to diversity. New York Tech should consider employing such tools, which also allow for peer institution comparisons, in addition to internally-developed surveys, which measure outcomes between students who do and do not participate in experiential learning. Manhattan College does this by tracking the employment outcomes of experiential education participants and non-participants.

Measure success with community partners through a survey. Previous studies measuring the effect of internships on student careers track several metrics, such as the rates of employers offering full-time jobs following internships, retention rates, and internship extension rates. Surveys of community partners for service-learning programs have most often measured partners' opinions on the quality of student contributions as well as the organizations' interest in future partnerships. Common success metrics include partner ratings about students' reliability, level of effort, and communication, as well as the likelihood of the organization pursuing future partnerships with the higher education institution.

HIGHEREDUCATION

KEY FINDINGS

No single best measure for experiential education exists. A review of best practices in experiential education measurement reveals that variation in forms of experiential education, students' backgrounds, and in the activities themselves complicate the measurement of program outcomes. However, institutions and experts generally agree on the principles of experiential education and the values such programs are thought to promote, such as combining content and process and developing self-awareness and critical thinking. This can allow for the development of explicit metrics to ensure programs incorporate those principles and achieve those outcomes.

Metrics should be developed based on the goals of the experiential education activity. Despite the difficulty in identifying causal mechanisms between experiential education and student learning or employment outcomes, institutions can develop metrics for experiential education programs based on the goals they identify. For instance, if an institution implements experiential learning programs based on a belief that participation in such programs will enhance students' critical thinking, the institution can design pre- and post-activity survey questions to indicate changes in student attitudes.

Tools for evaluating experiential education activities should collect information from all parties involved and take multiple forms. Best practices in measuring experiential education reveal that students, educators, and host organizations all have important perspectives in the holistic assessment of experiential education. In addition to asking students to self-report on the effects of experiential learning and for employers' and others' feedback on the students' performance, New York Tech should employ a wide range of tools to capture participation levels, self-reported outcomes, and objective measures. Survey tools are the most common assessment instruments, but best practices suggest that a mix of tools is most effective in assessing programs. Examples include portfolios, focus groups, and observations.

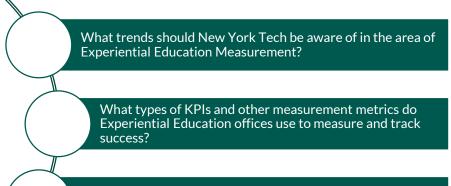
RESEARCH QUESTIONS AND METHODOLOGY

METHODOLOGY

To assist New York Institute of Technology (New York Tech) as it seeks to improve its ability to track and monitor success across a variety of initiatives and offices, including its Office of Experiential Education, Hanover conducted a best practices study to understand best practices in measuring experiential education. The report covers trends in measuring experiential education and tools New York Tech can use to track and monitor these metrics.

The following analysis is based on a review of information drawn from institutional websites as well as publicly available data sources, including national associations, popular publications, and academic journals. The report also includes a review of selected peer, aspirant, and liberal arts institutions suggested by New York Tech, and profiles experiential education measuring systems at three institutions.

RESEARCH QUESTIONS



What tools can New York Tech's Experiential Education department utilize to track and monitor these metrics?

REVIEWED INSTITUTIONS

Institution	Location	Institution Type (Relative to New York Tech)
Augsburg University	Minneapolis, MN	Liberal arts
Drexel University	Philadelphia, PA	Peer/target
Manhattan College	Riverdale, NY	Peer/target
Rutgers University-New Brunswick	New Brunswick, NJ	Aspirational
Stevens Institute of Technology	Hoboken, NJ	Peer/target



OVERVIEW

OVERVIEW

Experiential education covers a range of activities, goals, and principles.

Experiential education can refer to a wide variety of activities, from outdoor adventure programs to project-based learning design. According to the <u>Association for Experiential Education</u> and relevant <u>literature</u> on the topic, experiential education entails the application of certain principles, including but not limited to a combination of content and process; an unpredictability of outcomes which can allow participants to experience success, failure, and uncertainty; examination of values; and self-reflection. In general, the development of metrics for any experiential education program should begin with a clear statement of program goals, which will allow it to be more easily assessed.

TYPES OF EXPERIENTIAL EDUCATION

Field-based

- Outdoor Adventure Programs
- Internships
- Service Learning Programs
- Community Engagement Programs
- Study Abroad Programs

Classroom-based

- Project-based Learning
- Role Play
- Research Projects

MEASURING EXPERIENTIAL EDUCATION

Despite a lack of understanding of causal mechanisms, experiential education is thought to have many broad benefits. Although some researchers have argued that causal links between experiential education programs and expected outcomes are difficult to establish (e.g. Eyler 2009, Steinke and Buresh 2002; International Labour Organization 2018), institutions generally consider such programs valuable. For example, Augsburg University, which requires all students to complete an Augsburg Experience course, asserts that experiential education:

- Engages students in examination of themselves and their values:
- Provides the opportunity to examine critically the social, cultural, political context and ethical dimensions of the experience;
- Facilitates professional development within the context of a discipline;
- Facilitates participation in and contribution to our broader communities.

Metrics should be designed around a program's purported goals. New York Tech operates service learning, community engagement, and internship programs in order to promote values such as critical thinking and real-world immersion. As illustrated in the table below, an explicit statement of such goals lends itself to the development of metrics to track program success.

Program	Program Goal	Sample Metrics
Internship	Provide students with relevant work experience that will give them an advantage in the job market	 # hours spent working with local organizations # students reporting enhanced skills % of employment following graduation among students who completed an internship
Service Learning	Give students experience in solving real-world problems while advancing community development	 # hours spent in community organizations Perceptions of organization members on effectiveness of student involvement



TRENDS IN EXPERIENTIAL EDUCATION MEASUREMENT

DEFINING AUDIENCE AND OUTCOMES

Metrics for experiential education programs should reflect the range of actors and array of goals involved. Because experiential education activities have multiple goals and involve multiple parties (for example, with both students and educators frequently playing the role of both participant), measuring program outcomes should involve collecting feedback from educators, employers, community members, and students themselves. Similarly, experiential education involves both process and content, implying that institutions should concentrate on measuring both levels and forms of involvement as well as learning and other outcomes. Finally, although limited in practice, effective experiential education measurement should track both immediate and longer-term impacts.

For example, City Year, a national service program that unites young adults for a year of full-time community service, tracks both the impact of its work on community partners (schools), perceptions of these partners, and long-term outcomes of its student participants.

TOOLS FOR MEASURING EXPERIENTIAL EDUCATION OUTCOMES

In general, measurement can be broken down into three areas: student skill development, student long term (usually career) development, and community impact. Existing literature and best practices among institutes of higher education point to a range of tools that can be used to assess outcomes in each of these areas, including:

- · student, employer, and educator evaluations and surveys;
- project or case-based exams;
- journal assessments;
- project reports;
- portfolio assessments.

Such tools are discussed more on the following pages.









3x

more likely

Schools partnering with City Year are up to 3x more likely to improve proficiency rates in math.



more likely

Schools partnering with City Year are 2x more likely to improve on state English assessments.

92%

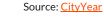
of teachers

School staff agree that City Year AmeriCorps members help to foster a positive learning environment for their students.

30,000+

City Year alums

Our alums are working in a wide range of professions, including education, business, law and public policy.





HIGHER EDUCATION

MEASURING SKILLS DEVELOPMENT

AREAS OF MEASUREMENT

Experiential education programs should evaluate development in students' cognitive, behavioral, and affective learning. In a study of standards for project-based learning at business schools, experts argue that the multidisciplinary and iterative nature of experiential learning requires the evaluation of student performance across the *cognitive*, *affective*, and *behavioral* domains. In other words, programs should aim to measure students' "learning and adaptation over time;" their "satisfaction and commitment;" and "the quality and quantity of performance on tasks" over the course of the program. Measuring such individual developments can involve administering surveys where students self-report these changes (e.g. below), tracking student engagement and attitudes through nationally-administered surveys such as the National Survey on Student Engagement (NSSE), as well as role plays or reflection assignments (e.g. right panel).

Self-reported competencies "very" or "extremely" improved by undergraduates who completed an internship or co-op

COMPETENCY	PERCENTAGE
Professionalism/Work Ethic	79.2%
Teamwork/Collaboration	72.6%
Oral/Written Communications	71.5%
Critical Thinking/Problem Solving	66.6%
Leadership	59.1%
Digital Technology	48.7%
Career Management	48.7%
Global/Intercultural Fluency	33.3%

Source: National Association of Colleges and Employers

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SAMPLE TOOLS FOR MEASURING SKILLS DEVELOPMENT

- Maintenance of a learning journal or a portfolio
- Reflection on critical incidents
- · Presentation on what has been learnt
- Analysis of strengths and weaknesses and related action planning
- Essay or report on what has been learnt (preferably with references to excerpts from reflective writing)
- Self-awareness tools and exercises (e.g. questionnaires about learning patterns)
- A review of a book that relates the work experience to own discipline
- Short answer questions of a 'why' or 'explain' nature
- A project that develops ideas further (group or individual)
- Self-evaluation of a task performed
- An article (e.g. for a newspaper) explaining something in the workplace
- Recommendation for improvement of some practice (a sensitive matter)
- An interview of the learner as a potential worker in the workplace
- A story that involves thinking about learning in the placement
- A request that students take a given theory and observe its application in the workplace
- An oral exam
- · Management of an informed discussion
- A report on an event in the work situation (ethical issues)
- Account of how discipline (i.e. subject) issues apply to the workplace
- An identification of and rationale for projects that could be done in the workplace

<u>ployers</u> Source: <u>University of Dayton</u> (adapted from Moon 2004)

MEASURING PROFESSIONAL IMPACT/COMMUNITY IMPACT

MEASURING PROFESSIONAL IMPACT

Measuring professional development outcomes involves collecting information on participation levels and types; employer experience; and students' long-term development. Although several institutions track their graduates' career outcomes in general, most do not appear to systematically track the link between *experiential education* and employment metrics. One exception is Manhattan College, which uses graduate surveys to capture the difference in employment status between alumni who completed internships or community engagement activities and those who did not (see page 9). A few studies, such as a recent report by the International Labor Organization or an annual survey by the National Association of Colleges and Employers (NACE), try to measure the effects of internships on job prospects in other ways (see below).

New York Tech should consider enhancing its existing assessment data with an annual survey of graduate outcomes that ties internship experience to postgraduate outcomes.

Employer-Focused Report Metrics



Several studies outside of higher education explore the effects of internships on employment outcomes.

NACE Internship & Co-op Survey Report

- Offer Rate
- Conversion Rate
- 1-Year Retention Rate
- •5-Year Retention Rate

ILO Interns and Outcomes Working Paper

- Respondent learned useful things during internship
- Respondent thought internship was useful to later find a regular job
- Company offered to extend internship
- Company offered the intern a job after completion of the internship

MEASURING COMMUNITY IMPACT

Contributing to community development is a key goal of many experiential education activities. Several universities consider themselves anchor institutions, or large, non-mobile institutions that play a key role in community development. Many of the institutions surveyed for this report promote an identity of caring about and actively trying to contribute to the community. For example, Stevens Institute of Technology talks about having "cultural and intellectual, community, and economic impact" on the community where it is located in Hoboken, New Jersey. Its website lists a number of community service activities that reflect both student and community-centered goals.

Measuring community impact should also be tied to the original goals of the activity. At <u>Drexel University</u>, for instance, the Office of University and Community Partnerships "provides a long-term strategy to improve the quality of life in Powelton Village and Mantua, the neighborhoods adjacent" to its campus. The goals of its activities include:

- A clean, safe, and sustainable neighborhood, with expanded security patrol boundaries and increased investment in safety infrastructure;
- Improved economic opportunities, through economic development initiatives that provide new opportunities for neighborhood residents;
- Stronger educational options for the community, with partnerships with neighborhood public schools;
- Greater access to health and wellness resources for families and residents;
- A livable and affordable residential community;
- Private/public partnerships to create vibrant retail and commercial corridors near campus.

Clearly-defined goals such as these will allow New York Tech to assess the success and impact of community engagement programs.



Source: NACE

MEASURING PROFESSIONAL IMPACT/COMMUNITY IMPACT

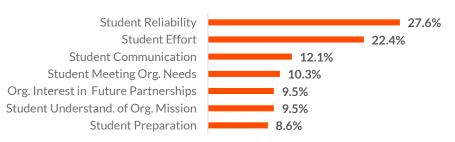
SERVICE LEARNING ASSESSMENT

Common community partner success metrics focus on quality of student contributions and the organizations' interest in future partnerships. A 2014 <u>study</u> of online survey assessment tools used for service-learning projects found that two basic categories of evaluations were employed (typically working in congruence) among 121 <u>Campus Compact</u> members:

- ❖ Formative Assessments: occur during the semester and seek to "inform instruction and help students use the results to enhance their own learning."
- ❖ Summative Assessments: typically occur at the end of the semester or activity, and "sum up how students achieved assigned tasks and goals. These assessments are typically graded and used to evaluate the students' learning outcomes and achievements and for accreditation."

Summative assessments can be **formal** (researched and tested; typically quantitative) or **informal** ("not formally researched, but have been used pedagogically and anecdotally").

In surveys of community partner institutions, as well as those aimed at faculty and student participants, universities were most likely to rely on summative questions. Common closed-ended metrics to assess community partnerships include:



ASSESSMENT TOOLS

- Structured class presentations
- Structured peer evaluations
- Surveys
- Structured writing evaluations
- Structured interviews
- Structured community partner observations

- Community partner/peer evaluations
- Structured midterm report
- Final report, paper, or project
- Structured Course evaluations
 - Standardized assessment
 Structured
 - midterm report
- Summative -Formal
 - Exams/quizzesPortfolios
 - Surveys

Formative-Informal

Formative-

Formal

- Focus groups
- Journal writing
- Reflective papersClass discussions
- Class activities
- Instructor observations
- Online discussions
- Unstructured interviews
- · Community partner observations

Summative-Informal

- Focus groups
- Class activities
- Journal writing
- Unstructured self-report
- Unstructured service-work sheets
- Unstructured exit interviews
- Unstructured performance-based evaluation



Source: <u>Journal of Higher Education Outreach and Engagement</u>

Note: For full metric details see Appendix.

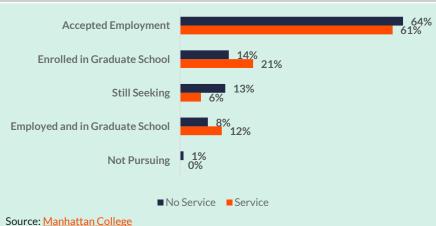
CASE PROFILE: MANHATTAN COLLEGE

INTERNSHIP AND COMMUNITY ENGAGEMENT METRICS

Manhattan College advertises a high Return on Investment (ROI) for experiential education and uses an annual <u>career outcomes report</u> as evidence. The report surveys each graduating class and assess its career outcomes, including employment status, salary range, and type of employer.

Some of the key metrics Manhattan College tracks to measure experiential education programs are:

Internships/Career-Related Experiences	Community Engagement
Do students have a "career-related experience" while enrolled?	Participation in volunteer, community service, advocacy, and /or civic engagement activities while enrolled
Which kinds of students (e.g. from which college) get a "career-related experience" while enrolled?	Difference in career outcomes between students that participated in service vs. those that did not participate in service
How many students/graduates hold paid internships while enrolled?	Graduates' indication of whether or not participation in service affected their career plans
How many students/graduates hold unpaid internships while enrolled?	Graduates' indication of their likelihood of participating in service after graduation
How satisfied are students with their career-related experiences while enrolled?	





CASE PROFILE: LOYOLA UNIVERSITY CHICAGO

TRACKING PARTICIPATION

Loyola University Chicago's grounding in the Jesuit tradition strongly encourages experiential education. The University tracks the numbers of students who engage in various experiential education activities and their employment outcomes after graduation, which it then advertises on its admissions page.

OUR STUDENTS IN ACTION

2,930 STUDENTS PARTICIPATED IN SERVICE-LEARNING

1 IN 3 STUDENTS STUDY ABROAD AROUND THE GLOBE

100,000+ HOURS OF VOLUNTEERING LOGGED

25+ SPIRITUAL AND SERVICE CLUBS ON CAMPUS

98%

GRADUATES EMPLOYED OR PURSUING GRADUATE OR PROFESSIONAL SCHOOLS WITHIN THREE MONTHS 88%

GRADUATES EMPLOYED WITHIN THREE MONTHS

525+

EMPLOYERS HIRED LOYOLA STUDENTS FOR ACADEMIC INTERNSHIPS 44%

LOYOLA GRADUATES WERE EMPLOYED BEFORE GRADUATION

Source: Loyola University Chicago undergraduate admission/outcomes

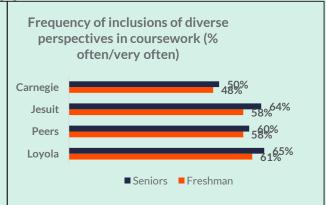
HIGHEREDUCATION

TRACKING OUTCOMES

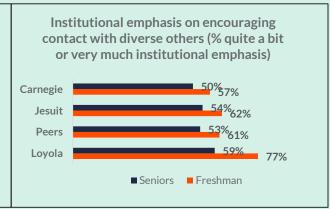
The Office of Institutional Effectiveness at Loyola University-Chicago reports on <u>student outcomes</u>, including "engagement with diversity" and "quality of interaction with others." These data come from the <u>National Survey of Student Engagement</u>.

Sample Student Engagement Measures:

Included diverse perspectives in course discussions or assignments



Encouraging contact among students from different backgrounds



Source: Lovola University Chicago Office of Institutional Effectiveness

CASE PROFILE: RUTGERS UNIVERSITY — NEW BRUNSWICK

DEFINING PROGRAM GOALS

Rutgers University-New Brunswick offers experiential education in the form of <u>internships/co-ops</u>, <u>externships</u>, and <u>living-learning communities</u>. Goals for each of these programs are clearly established. For example, the <u>goals</u> of its new externship program are to:

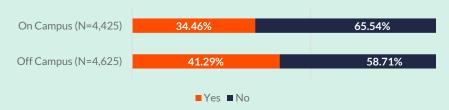
- Create a new professional development curriculum for students
- Increase the number of students who participate in an externship
- Increase the number of students who participate in an internship within one one year of completing the program

In its most recent <u>strategic plan</u>, the university also commits to an innovative co-curricular transcript program for students, which allows students to present their work in experiential education in a parallel manner to their academic work. In its strategic plan, the university also commits to continuing to track and measure its progress toward such commitments through surveys such as NSSE and the Student Experience in the Research University (SERU) survey.

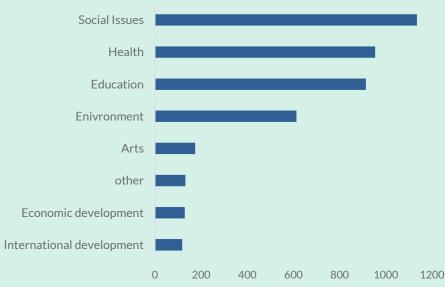
In its <u>analysis</u> of civic engagement among New Brunswick students, the university uses SERU data to track metrics including:

- 1) Participation in community service
- 2) Reasons for getting involved in community service
- 3) Types of community service
- 4) Hours of community service
- 5) Community service during summer
- Influence of community service participation on desire to participate in community service following graduation
- 7) Participation in 2016 elections
- 8) Views on individual roles and engagement in political process

During this academic year, have you participated in community service? (% of total response)



What was the focus of the organization where you did this community service? (Select all that apply)



Source: Rutgers University Office of Research & Academic Planning



APPENDIX

SERVICE LEARNING ASSESSMENT METRICS

- 1) Student Reliability Were the students reliable and punctual?
- 2) Student Effort Did the students follow directions and show genuine effort?
- 3) Student Communication Did the students use appropriate communication skills?
- **4) Student Meeting Org. Needs** Were the students able to achieve the goals and objectives that you anticipated to meet your community's needs?
- 5) Student Understanding of Org. Mission Did the student(s) demonstrate an understanding of your organization's mission?
- 6) Org. Interest Future Partnerships Are you interested in working with service-learning students in the future?
- 7) Student Preparation Were the students prepared for the work they did with your program?

Source: <u>Journal of Higher Education Outreach and Engagement</u>







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