The PECC mission and charter state the following:

*In addition to aggressively pursuing the mission of the PECC (i.e.):

To ensure quality assurance, the Sullivan University Planning and Evaluation Coordinating Council (PECC) systematically evaluates and assesses institutional effectiveness processes and their data- and values-driven results as presented by members of the Sullivan University community,*

the university continues to use its proven Continuous Improvement Circle (CIC) model.

**Figure 1: Continuous Improvement Circle (CIC):**

To improve day-to-day educational and support services to its students. *Continuous Improvement Circle Methodology: In order to implement the CIC process, the university*
identified three on-going, major components of its planning and evaluation process, which it has successfully executed over the past several decades as follows:

- Major area achievement
- General education
- Satisfaction with the educational process and product.

Additionally, it asserts:

*Since 2000, the key assessment instrument used by Sullivan University for determining satisfaction with the educational process and product is the Noel-Levitz® (now, the Ruffalo℠ Noel-Levitz) Student Satisfaction Inventory™ (SSI™), a third-party, consistent, and nationally-respected assessment instrument. Assessing student input by cohort and program for 90+ [actually, now 70+] inventoried assessment areas, the SSI™ provides the university comparative national data relative to other traditional four-year undergraduate degree-granting private institutions (norm group) via performance gap metrics. The SSI™ scores also provide comparative data relative to prior years' Sullivan scores. In sum, the Noel-Levitz® SSI™ enables the university to measure itself against three dataset metrics: past performance, a norm group, and goals.*

Then, it delineates the annual process by which the Ruffalo℠ Noel-Levitz Student Satisfaction Inventory™ (RN-L SSI™) is administered, viz.: the Senior Vice President for Administration administers the SSI™ to undergraduate, day, evening, online, and graduate students in the spring quarter each year for all campuses. The scores are sent to RN-L for compilation; the results are submitted to the PECC, processed by the Associate Provost/Dean of the Graduate School; and, then, scores exceeding a satisfaction-to-performance gap (typically) of 1 are uploaded to the IE PORTAL. Once uploaded, academic as well as non-academic deans/department heads are required to analyze results and develop a plan for improvement to be implemented as soon as approved and as soon as possible, but no later than the next academic quarter. These analyses and plans are recorded on the IE PORTAL for the PECC; and, the CIC’s *a posterori* process continues.

*The Noel-Levitz® instrument measures student perceptions (hence, it constitutes an indirect measurement) of the effectiveness and user friendliness of the following university functions (scales):*

- Recruitment
- Registration Effectiveness
- Financial Aid
- Campus Life
- Academic Advising
- Safety and Security
- Instructional Effectiveness
- Campus Support Services
- Campus Climate
- Student Centeredness
Concern for the Individual

Service Excellence

RN-L’s web page indicates:

The Student Satisfaction Inventory™ gives you a powerful tool to improve the quality of student life and learning. It measures student satisfaction and priorities, showing you how satisfied students are as well as what issues are important to them. Use this data to:

- Guide strategic action planning
- Strengthen student retention initiatives
- Meet accreditation requirements
- Identify areas of strength for institutional marketing
- Chart your progress toward campus goals

As manifested through their PECC presentations, many of the university’s academic and student services units utilize SSI™ empirically driven data for these express purposes. The following figure illustrates the university’s annual assessment cycles and the corresponding departments assessed. Red check marks indicate those departmental assessments (59%, 13 of 22) utilizing the Ruffalo℠ Noel-Levitz Student Satisfaction Inventory™ instrument (an sample of which is available at https://www.ruffalonl.com/upload/Student_Retention/SSI/Samples/SSIFormA4yrPaperandPencilSample.pdf.

Figure 3: Ruffalo℠ Noel-Levitz Student Satisfaction Inventory™ (sample survey page):

Each item below describes an expectation about your experiences on this campus. On the left, tell us how important it is for your institution to meet this expectation. On the right tell us how satisfied you are that your institution has met this expectation.
Typically, departmental RN-L data analyses function to provide differential Y2Y environmental insights. Those data supplement more SLO-relevant data otherwise generated by each departments’ uniquely applicable assessment instruments:

**Figure 4: 2017-18 PECC Longitudinal Assessment by Department:**

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As highlighted in figure 5, the RN-L SSI™ instrument produces demographically informed gap score-based data.

**Figure 5: Ruffalo℠ Noel-Levitz SSI™ (sample demographics page):**

Choose the one response that best describes you and darken the corresponding oval for each of the items below.

102. Gender:  
- Male  
- Female  
- Prefer not to respond

103. Age:  
- 18 and under  
- 19 to 23  
- 24 to 34  
- 35 to 44  
- 45 and over

104. Ethnicity/Race:  
- African-American  
- American Indian or Alaskan Native  
- Asian or Pacific Islander  
- Caucasian/White  
- Hispanic  
- Other  
- Prefer not to respond

105. Current Enrollment Status:  
- Full-time  
- Part-time

106. Current Class Load:  
- Full-time  
- Part-time

107. Class Level:  
- Freshman  
- Sophomore  
- Junior  
- Senior  
- Special Student  
- Graduate/Professional  
- Other

108. Current GPA:  
- No credits earned  
- 1.00 or below  
- 2.00 - 2.49  
- 2.50 - 2.99  
- 3.00 - 3.49  
- 3.50 - 3.99  
- 4.00 - 4.00

109. Educational Goal:  
- Associate degree  
- Bachelor's degree  
- Master's degree  
- Doctoral or professional degree  
- Certification (initial or renewal)  
- Self-empowerment/pleasure  
- Job-related training  
- Other

110. Employment:  
- Full-time off campus  
- Part-time off campus  
- Full-time on campus  
- Part-time on campus  
- Not employed

111. Current Residence:  
- Residence hall  
- Fraternity/Sorority  
- Own house  
- Rent room or apartment off campus  
- Parent's home  
- Other

112. Residence Classification:  
- In-state  
- Out-of-state  
- International (not U.S. citizen)

113. Disabilities:  
- Physical disability or a diagnosed learning disability?  
- Yes  
- No

114. When I entered this institution, it was my:  
- 1st choice  
- 2nd choice  
- 3rd choice or lower
The SSI™ solicits student response to approximately 70 questions (although a few additional institution-specific customized questions can also be added). A **performance gap score** results from comparison of student respondents’ perceived importance ascribed to a given question and their corresponding **satisfaction score**. RN-L collates these data against a purported national peer group comprising (in our case) 4-year public and private institutions. This comparison generates a quantitative mean difference between the department score and the peer score. Mean differences may result in a negative or positive differentiated metric, which may be asterisked as follows:

* Difference statistically significant at the .05 level (see Figure 6, *Recruitment & Financial Aid: -0.51*)
** Difference statistically significant at the .01 level
*** Difference statistically significant at the .001 level

Additionally, RN-L also provides institutions with Y2Y comparative data; and, since the university’s peer group includes many institutions radically unlike Sullivan University, the institution generally models Y2Y data to generate improvements.

**Figure 6: RN-L Institutional Summary by Scales**

Student respondents (N’s) data are aggregated by academic department: the “1090” departmental code shown below (Figure 7, with additional codes shown in Figure 8) identifies this dataset as responses emanating from Baking and Pastry Arts students. Problematically, some departments’ N’s are low as a result of the random distribution of the survey and any adjunctive low enrollment numbers for any given department. Low N’s correspondingly reduce the utility of those output data for valid and reliable assessment.
For optimal utilization of output data, it should be relevantized by department, which can be achieved using the aforementioned departmental codes. Some questions (inputs) also inherently link to departments, such as library questions 13 and 18 (see Figure 7). Respectively, these questions solicit student input related to the university library’s customer service (“helpful and approachable”) and collections/services (“resources and services are adequate”). In formulating “double-barreled” (see: Babbie, “Avoid Double-barreled Questions” in his The Basics of Social Research) survey questions (i.e., an information fallacy which solicits one response to a multipartite question), RN-L’s data are marginally compromised.

**Figure 7: RN-L SSI™ Baking and Pastry Arts Department for two library questions:**

![Figure 7: RN-L SSI™ Baking and Pastry Arts Department for two library questions](image)

However, the library department attempts to recapture some integrative validity/reliability by systematically triangulating those data with comparable data generated by its own proprietary survey. Flick asserts that triangulation “extend(s) the research at several points by integrating an additional theoretical or personal perspective, by using more than one methodological approach, and so on” (2016, p. xvi). “The basic idea underpinning the concept of triangulation is that the phenomena under study can be understood best when approached with a variety or a combination of research methods… In qualitative inquiry, researchers tend to use triangulation as a strategy that allows them to identify, explore, and understand different dimensions of the units of study, thereby strengthening their findings and enriching their interpretations” (Rothbauer, 2008, p. 892). Rothbauer further postulates, “Qualitative researchers may increase the credibility of their research findings by drawing from evidence taken from a variety of data sources. For example, to name just a few common sources of data, researchers may gather evidence from interviews, participant observation, written documents, archival and historical documents, public records, personal papers, and photographs. Each type of source of data will yield different evidence that in turns provides different insights regarding the phenomena under study” (p. 893).

I propose that triangulation of outcome data from multiple assessment instruments constitutes an institutional effectiveness high impact practice. Triangulation is most commonly used in data collection and analysis techniques, but it also applies to sources of data (p. 892). To optimize triangulation at the department level, library survey data is also disaggregated by respondent’s department. The library’s comprehensive library-specific survey purposively addresses a wide range of library functions targeting faculty and staff in addition to student audiences. In consequence, it forensically enlarges on the two questions posed in the RN-L SSI™.

**Figure 8: Library Longitudinal RN-L SSI™ Data Disaggregated by Academic Department:**
By postulating the similar service- and collection-salient questions, the library enlists a “convergent criterion” for its quantitative-to-quantitative-methods-researched data. As an assessment aid, the library solicits qualitative input from student respondents to its proprietary survey. To inform the qualitative data, these adjunctive respondent comments are evaluated for their qualitatively inferential significance. Finally, all data are analyzed longitudinally.
Bottomed on triangulated data, subsequent library analyses seek creative strategies to drive Y2Y improvements. However, as a latter-day Hamlet might have observed, “there’s the rub…in the data analyses, that must give us pause.” From one or multiple instruments - once the appropriate instrument for measurement of outcomes is selected, digital systems readily collect data. Some systems may parse data into general categories, but, most often, knowledgeable department deans and directors perform the analytical heavy lifting and generate data-driven improvements.
Lastly, as noted, the Ruffalo℠ Noel-Levitz Student Satisfaction Inventory™ (SSI™) is a third-party, consistent, and nationally-respected assessment instrument. For the purposes of providing comparable environmental-specific data to similar institutions, the instrument is far from perfect; and, its environmental data only tangentially impact actual student learning objectives. Ideally, departments would avail themselves of more pedagogically relevant instruments, which would allow them to triangulate data across multiple instruments that directly measure student learning.

In their new book, Lester, et al., emphasize that “one of the first issues that needs to be addressed for any form of analytics to be performed is the capture of data. Without data — useful data — there is no scope for any analysis to be performed” (Johri, 2019, p. 6). For SACSCOC, “useful data” is cognate with “mature data,” a rose by any other name…. Although it is not mentioned as such in the new PoA or the new Resource Manual, SACSCOC emphasizes the capture of mature data and recursive analytical processes: “9. At the time of its review, the institution is responsible for producing mature data. Mature data can be defined as sufficient information used as a basis for sound decision making” (2012 Resource Manual, p. 48). Obviously, if data cannot generate actionable improvements, they are not "mature." To enhance intelligibility of this construct, Lester notes that EDUCAUSE issued the following table to assess dimensions of analytics maturity, viz.:

- Decision-making culture, including senior leadership commitment and the use and cultural acceptance of analytics
- Policies, including data collection, access, and use policies
- Data efficacy, relating to quality, standardization, “rightness” of data and reports, and the availability of tools and software for analytics
- Investment and resources, consisting of funding, an investment versus an expense mentality, and the appropriateness of analytics staffing
- Technical infrastructure, consisting of analytics tools and the capacity to store, manage, and analyze data
- IR involvement, capturing interaction between IT and IR
Yet, RN-L provides institution-level data manipulated into many relevant categories, such as improved areas. Typically, our institution targets areas whose mean difference exceeds one (1.0) for strategic improvement. In some instances, aggregate data may indicate a macro-phenomenological problem, e.g. with Financial Aid and Recruitment. To the extent possible, each department will want to granulize any aspects of that problem to the departmental (micro-phenomenological level) in order to address improvements. Oftentimes, factors, which inhere in students themselves - seemingly beyond department, or institution control, exacerbate such issues, and, further complicate rectification. Even so, until a more specifically applicable instrument is found/developed, departments should execute their CIC assessment strategies and triangulate data - where possible - in order to effect any improvements for those aspects of the problem over which they have some control.

References


