“Many evaluation theorists, methodologists, and practitioners have concluded that measuring fidelity of implementation is an essential element in program evaluation studies,” (Lawton, 2017, p. iii). Within the specific context of Sullivan University academic assessment processes which I facetiously refer to as PECCconomics¹, this article seeks to elucidate that increasingly relevant “closing the loop”-related strategy known as fidelity of implementation (FOI).

Section 7 (Institutional Planning and Effectiveness) of the 2018 SACSCOC Principles of Accreditation posits an assessment process that is operationally inclusive and both decision-making- and budget-allocation-relevant. Obviously, any planning process must also accomplish – as noted below, SACSCOC prefers the word “achieve” – some preordained strategy or goal:

...effective institutions demonstrate a commitment to principles of continuous improvement, based on a systematic and documented process of assessing institutional performance with respect to mission in all aspects of the institution. An institutional planning and effectiveness process involves all programs, services, and constituencies; is linked to the decision-making process at all levels; and provides a sound basis for budgetary decisions and resource allocations.

Principles of Accreditation (PoA), p. 19

Such planning is necessarily mission- and outcomes-directed, which – in turn – implies directionality from standard Section 8.2’s (Student Achievement) “expected” outcomes in “seeking” implemented and iterative improvements processes. In his “genuine classic...a work of first-rank scholarship” (Amazon review), Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation in Higher Education (The ACE Series on Higher

The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of seeking improvement based on analysis of the results in the areas below:
(a.) educational programs;
(b.) general education;
(c.) academic and student services.

Principles of Accreditation, p. 20

Education, Astin—similar to SACSCOC—emphasizes “assessment as an ongoing, iterative process” (2012, pp. 195ff). In postulating a planful assessment process, SACSCOC’s 8.2 IE standard—as is well-known to the regional accredditor’s membership—invokes this algorithm: Simply a series of logical and self-contained instructions that show, from start to finish, how to accomplish a task (Fry, 2018, p. 8), such algorithms imply implementational consequentiality—if not implementational fidelity—to the predicated task.²

Pervasive within the PoA’s broad assessment framing language, SACSCOC emphasizes achievement of goals, viz.: “whether it [the institution] is successful in achieving its stated objectives (p. 3); “achievement of the institution’s mission” (6.0: (Faculty, p. 17); “includes a plan to assess achievement” (7.2: Quality Enhancement Plan, p. 19 “the extent to which the outcomes are achieved” (7.3: Administrative Effectiveness, p. 19); “the achievement of student outcomes and success” (10.0: Policies, Procedures, and Practices, p. 23); and, “achievement of teaching and learning outcomes” (12.0: (Academic and Student Support Services, p. 27). Such goal achievement is further attested in its essentialistic “heart of SACSCOC’s philosophy of accreditation” statement:

At the heart of SACSCOC’s philosophy of accreditation, the concept of quality enhancement assumes that each member institution is engaged in ongoing improvement of its programs and services and can demonstrate how well it fulfills its stated mission.

Principles of Accreditation, p. 4

Noted student learning outcome scholar, J. Fredericks Volkwein, has observed that outcomes “are central to the purpose of educational organizations, and the assessment of these outcomes supplies some of the most important evidence demonstrating institutional effectiveness” (2011, p. 3). Pieper rightfully observes:

> data analysis is the critical connection between what comes before—establishing objectives for outcome assessments, selecting assessment methods or designing assessment methods to suit institutional needs, and collecting and maintaining information—and what comes after—reporting and using assessment information. Assessment information cannot be used to either demonstrate accountability or improve learning and development if it is not analyzed or if it does not answer the right questions (2008, p. 9).

[author emphases]

Yes, data analyses must first be predicated in order to drive improvement development, but such interpretative impact analyses may be abstrusely oracular—as one assessment scholar observes, if data do not “meaningfully evaluate the extent of student achievement, then the requirement is Kafkaesque, requiring institutions to legitimize the use of bad data, and punishing them when they cannot” (Eubanks, 2017, p. 5). Almost forty years ago, Scott averred that “quality has proven to be an elusive concept” (1980, p. 2). More recently, the declamatory Greek chorus

² By means of a famous trope, bricks-as-facts, the late physician Bernard K. Forscher presciently repined that researchers proliferate facts over the integration of those facts into “constructed edifices, called explanations or laws, by assembling bricks, called facts” (1963, p. 339). In today’s more facts-intensive and -available world, the SACSCOC algorithm provides a stepwise blueprint for assembling disparate assessment data into IE explanation.
continued: “most data is (sic) untrustworthy” (Kenett, 2019, p. 25); “innovations are rationally sold on the basis of sound theory and principles, but they turn out not to be translatable into practice with the resources at the disposal of teachers” (Fullan, 1982, p. 115); “although fidelity data are imperative for assessment best practices, the collection, analysis, and integration of implementation fidelity data are completely absent from most institutional and programmatic assessment cycles” (Smith, 2017, p. 75) and, “…the importance of quantification as a form of knowledge and a basis for policy decisions becomes ever more significant, and the consequences of its distortions more serious. Some categories are not counted at all…. Context is rarely measured, so that the incidence of events…maybe (sic) counted, but not the surrounding social, cultural, and emotional dimensions of an incident or its trajectory…. the cost of data collection means that data quality is often poor or missing” (Merry, 2019, p. 146). Still other scholars chime in, “unfortunately, evidence of learning improvement is virtually non-existent” (Fulcher, 2014, p. 16); and, “while assessing the purported outcomes of our efforts with students is probably the most important assessment we do, it is seldom done, rarely done well, and when it is done, the results are seldom used effectively” (Terenzini, 1996, p. 217). Those improvements propitiate a conventional assess-intervene-reassess model, what Fulcher has talismanically synopsized as “weigh pig, feed pig, weigh pig” (occasional paper title, 2014). Predicating the quality of the prior meta-assessment steps in which data are accumulated and analyzed to drive relevant and actionable outcomes designed to improve student learning, it follows that ensuring fidelity of implementation culminates analytical processes. Based on a dean or director’s sui generis knowledge of his/her department’s needs, analytical processes drive actionable improvements. Once expertly developed, plans need to be faithfully implemented to avoid “interventional drift,” “errors of inference,” or what political theorist Friedman terms the “pathologies of probability assessment” (chapter title, 2019).

Taking a cue from clinical, behavioral and psychological sciences (Vroom, Massey, Yampolskaya, and Levin, 2019; Stone-MacDonald, Pizzo and Feldman, 2018; Durlak, 2015; and, Lewis, Fischer, Weiner, Stanick, Kim, & Martinez, 2015; Wheeler, Mayton, Ton & Reese, 2014; Flannery, Fenning, Kato, & McIntosh, 2014; Hagermoser-Sanetti, Gritter & Dobey, 2011; Boyce & Hineline, 2002; Dumas, Lynch, Laughlin, Smith, & Prinz. 2001; and, Dane & Schneider, 1998), more recently assessment theory and higher educational research, are “awakening to the importance of the study of implementation and requirements for assessment of fidelity,” (Foster, 2011, abstract) particularly relative to planned interventions to improve student learning (see: references. In the abstract to her early (2010) article, Century observes “there is a growing recognition of the value of measuring fidelity of implementation (FOI) as a necessary part of evaluating interventions. However, evaluators do not have a shared conceptual understanding of what FOI is and how to measure it.” Similarly, Harrison asserts “Effective evidence-based practice (EBP) implementation is crucial to eliminating the science-to-service gap and getting the research into a usable form...” (Harrison, Spybrook, Curtis, & Cousins, 2017, p.111).

Likening FOI to product diffusion or technology transfer processes, Durlak – whose article entitled “Implementation Matters” approximates the name of this column – comprehensively
(500+ studies) de-foible-ized the pre-2008 literature. A preponderance of those meta-analytical studies offered strong empirical support (Durlak uses the term “convergent evidence” [p. 359] – just as Othello did to “oracular proof”) “to the conclusion that the level of implementation affects the outcomes obtained in promotion and prevention programs [and] findings from 81 additional reports indicate there are at least 23 contextual factors that influence implementation [e. g.] communities, providers and innovations, and aspects of the prevention delivery system (i.e., organizational functioning) and the prevention support system (i.e., training and technical assistance)” (2008, p. 327).

Similarly, in her recent book chapter entitled “What is Fidelity of Implementation of Assessment and Why is it Important,” UMass Early Education expert Stone-MacDonald also emphasizes FOI’s “potential high-stake consequences” to the students’ future (2018, p. 15) and enumerates a cross-disciplinary-modellable constellation of

**QUESTIONS TO CONSIDER WHEN EVALUATING THE TECHNICAL PROPERTIES OF NORM-REFERENCED STANDARDIZED TESTS:**

1. Are the technical properties of the standardized test easy to find in the examiners manual?

2. How many children and/or families were included in the normative sample?

3. Was the normative sample representative of the larger target population?

4. Were there validity studies conducted to determine the extent that the test addresses the domains it claims to address? What were the conclusions of these studies?

5. Were there reliability studies to determine the stability of the scores? What were the conclusions of these studies?

6. Did the process of test construction and design include content area experts who evaluate the content of the items administered?

7. Did the test authors conduct item level analyses to determine whether items were biased against children and/or families of varied race, gender, culture, or socioeconomic status?

8. Does the test provide detailed descriptions of the scoring protocol and how it was determined?

9. Was the test revised after the initial validity, reliability, and item level analyses were conducted?

10. Are the procedures, instructions, and items sufficiently clear for the examiner, family and/or child?

(2018, p. 19)

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3 In APPENDIX A. INTERVIEW QUESTIONS of her unpublished dissertation which focuses on “Closing the Gap,” Guthrie poses a similar set of questions for Ohio administrators. Roman does the same in her APPENDIX D.
Yet, with clinical categorizations using the less academic term “treatment integrity” (Wheeler, et al., 2014; and, Hagermoser-Sanetti, et al., 2011), even FOI nomenclature appears foiblesomely plastic across its interdisciplinary landscape. With increasing canonicity – particularly within higher education assessment, the demonstrable achievement of goals, or the delivery of a program, or – as one scholar wryly deemed it – the “manipulation of the independent variable” (Moncher, 1991, n. p.), are commonly referred to as implementation fidelity. FOI research examines what Carroll’s seminal study summarizes as any impactful “variation[s] affecting the credibility and utility of research” (2007, from the abstract). Frequently cited in the literature, O’Donnell’s FOI definition, viz.: “how well an intervention is implemented in comparison with the original program design” (2008, p. 33; see also: Meyers, 2014, pp. 9ff for definitions of implementation fidelity) encapsulates the major elements of a veridicality-in-outcomes assessment construct.

Figure 1: Continuous Improvement Circle (CIC) Algorithmic Steps Operationalized by a 5-column table:

<table>
<thead>
<tr>
<th>CIC STEP 1</th>
<th>CIC STEP 2</th>
<th>CIC STEPs 3-4</th>
<th>CIC STEPs 5-6</th>
<th>CIC STEP 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify programmatic/departamental outcome(s):</td>
<td>Identify Measurement Instrument(s)</td>
<td>Data Gathered/Analyzed</td>
<td>Implement Data-driven Improvement Plan</td>
<td>Evaluate resultant Improvement(s)</td>
</tr>
</tbody>
</table>

1. 
2. a.)
Previously noted: overwhelmingly – but justifiably, the assessment literature decry the lack of dispositive instances of improved student learning: “Globally, higher education institutions aim to assess and improve students’ learning. However, assessment practices often do not culminate in improved learning. For instance, in the United States, empirical examples of learning improvement in higher education are exceptionally rare,” Smith, Finney, & Fulcher, 2019, p. 263). As deducible from Figure 1, FOI has potential PEConomic relevance for assessment presenters since its five protocols more dispositively assess the Sullivan University’s Continuous Improvement Circle (CIC)’s steps 5-7, viz.:

5. Make plans for improvement based on analyses of data;
6. Implement plans for improvement; and,
7. Evaluate and measure implemented plans to “close the circle;”

and, therefore, more conclusively assess an improvement plan’s complete and qualitative implementation, AKA “closing the loop” [see: Figure 3: Finney’s FOI Overview (2018 Assessment Institute slide) for a comparable assessment cycle illustration, into which Finney suggests interpolating FOI after step 2 of the SU Figure 1 model]. Incontrovertibly, “integrating

Figure 2: Finney’s FOI Overview

implementation fidelity and outcomes assessment can assist us all in making more informed programmatic decisions, increasing communication between program directors and implementers of programs, and ultimately meeting the needs of students by offering empirically-supported, effective programming” (Gerstner and Finney, 2013, p. 23). Delineated in Figure 4: Implementation Fidelity Components: Definitions and assessment, their five FOI protocols would validate that those steps’ intended improvements were faithfully implemented as actual end-of-assessment deliverables to “close the loop” (see: Banta & Blaich’s landmark “Closing the Loop” article, whose Table 1. Characteristics of Effective Outcomes Assessment Planning: Implementation presages FOI-like “Incorporat[ion of on-going evaluation and improvement of the assessment process itself” [2011, p. 23], however, those authors source Gerstner and Finney’s table nearly a decade earlier to: Banta, T. W. and Associates, Building a Scholarship of Assessment. San Francisco, CA: Jossey-Bass, 2002, pp. 262–263). FOI protocols would seem to be a logical assessment entailment to any proposed “closing the loop” initiative. Banta concludes her “closing the loop” article by asserting, “…the most important outcome of assessment is not gathering high-quality data, generating reports, or stimulating conversations among colleagues. That outcome is instead demonstrably improving student learning by assessing it and using the findings” (2010, p. 27). If the loop is not closed causal errors of inference may obscure the efficacy of such interventions and, consequently, ineffectual interventions may blithely persist. Lamentably, FOI is not more widely utilized for various reasons including immaturity of respective assessment processes, viz.: “untested assumptions, lack of understanding of implementation fidelity, and lack of guidance on the practice of collecting and using implementation fidelity data” (Gerstner & Finney, p. 16).

Figure 3: Implementation fidelity components: Definitions and assessment:
In Figure 4, Gertsner & Finney’s own research discovered that FOI researchers (principally: Swain, Finney, & Gerstner, 2013; Sheridan, Swanger-Gagné, Welch, Kwon, & Garbacz, 2009; Hagermoser, Sanetti & Kratochwill, 2009; Hulleman & Cordray, 2009; Mihalic, 2002; O’Donnell, 2008; Dane & Schneider, 1998. See References) codify the following five FOI protocols, for which they conveniently provide definitions and assessment strategies:

Typically, as Harn observes “it is assumed that evidence-based practices implemented with high fidelity will result in improved outcomes, whereas low fidelity will lead to poorer outcomes” (2013, from the abstract). Additionally, Gerstner & Finney predicate the following four scenarios by which FOI might be quantified:

Equally helpful is Swain, Finney & Gertsner’s leadership development interventional checklist (q.v.), which models specific SLO-complicit FOI strategies for ethical reasoning that faculty co-created during the summer training institute. “The checklist is a vital tool for fidelity research because it details the specific features of the educational intervention, and aligns those features to student learning objectives.” Altruistically for others’ use, they also note that the “checklist was general enough to be used across a wide variety of classes to collect fidelity…” Smith, Finney, & Fulcher, 2017, p. 85).
In concluding their highly useful FOI article, Gerstner and Finney summarize foibles of fidelity implementation based upon their experiences: “When employing the standard outcomes assessment cycle, we have observed two common (although not necessarily appropriate) conclusions are often made following unfavorable performance on an outcome measure: the measure is not functioning properly and thus cannot reflect program effectiveness; or the program needs revision or termination. If the outcome measure was meticulously selected/designed for the program and has adequate psychometric properties, poor measurement would not seem to be a likely cause of poor performance. Moreover, concluding that program revision/termination is necessary would be premature without any information as to whether or not the planned program was truly the implemented program” (2013, p. 25).

The university’s current assessment process involves coaching dyads who “assist the functional units Assessment Plan development, Presentation Preparation, Data analysis, and any other PECC related items necessary to assist the functional area in their PECC related obligations” (internal SU document, October 8, 2018). Essentially, peer-to-peer coaches ensure assigned departments’ end-of-cycle compliance with meta-assessment protocols reified in the PECC Assessment Plan Guidelines (APG) form. Institutionalization of FOI practices would require those coaches to provide more formative coaching specifically in the form of implementational invention auditors. Concomitantly, the APG form (and its complementary Balanced Assessment Scorecard Rubrics form: see Table 8, below) would need FOI modification. As modeled on the Swain, Gerstner and Finney Implementation Fidelity Checklist for a Leadership Development Program in Figure 5, the CoCI section of both forms could readily be expanded (see Figure 5. Implementation Fidelity Checklist Column Headers Juxtaposed to FOI-enhanced CoCI table Headers) to include the value-added five FOI protocols⁴, i.e.: 1. Program differentiation; 2. Adherence; 3. Quality; 4. Exposure; 5. Responsiveness.

⁴ In contrast, Hamilton-Read’s 2016 Response to Intervention (RtI) study examines fidelity by: assessment: data-based decision making (DBDM): multi-tiered system of supports (MTSS): infrastructure and support; and, fidelity and evaluation. In addition, summing all of the points earned from ratings of each of the five essential components derived a “total RtI score (pp. 21ff). Also, see Carpenter’s Database: ProQuest Dissertations & Theses Global Response to intervention: An investigation of training, perceptions, and fidelity of implementation.
differentiation; 2. Adherence; 3. Quality; 4. Exposure; and, 5. Responsiveness. They assert that this “The act of program differentiation offered the stakeholders an opportunity to articulate their understanding of the link between the program outcomes and the program itself. That is, clarification of and commitment to the program objectives and programming was greatly facilitated by this differentiation process” (p. 20). From my perspective, the Swain, Finney & Gertsner model’s OBJECTIVES equates to the SU CIC’s EXPECTED OUTCOMES. Similarly, their PROGRAM DIFFERENTIATION (albeit a grey) component, which they aver is “not ‘assessed’” (ibid.) seems to constitute a basic component of the IMPROVEMENT PLAN itself and not, per se, the ASSESSMENT OF IMPROVEMENTS.

Departmental improvement plan implementations occur pari passu throughout the annual assessment cycle necessitating more formative life-of-cycle rather than summative end-of-cycle coaching. For her FOI coaching study of checklist cooperative learning procedures and collegiality re-enforcement among instructors, Putnam utilized descriptive and inferential statistics for quantitative data and manually recorded and analyzed qualitative data analysis collegiality data “revealed that peer coaching had no significant impact on collegiality among teachers (p $<$.05), although responses in both groups were positive. Analysis of the data from the checklists revealed that the use of peer coaching does lead to greater fidelity of implementation (p $<$.05) than fidelity of implementation without peer coaching,” (1995, p. iii). Putnam concluded: 1. voluntary participation is extremely important in peer coaching; 2. readiness is crucial to the success of a peer coaching project. Many factors influence a teacher's sense of readiness. Peer coaching requires that teachers have a conceptual understanding of the instructional strategy they select for implementation; and, training was also an issue (ibid., pp. 132ff). Inarguably, superimposition of FOI protocols strengthen both normative and institution- idiosyncratic close-the-loop assessment strategies. Many close-the-loop assessment appear to be mere amplification of the improvement process itself rather than specific second-cycle assessment of those plans. Inculation of a first-order CoCI mindset is essential before achieving FOI inculation. As such, FOI protocols constitute a second-order metacognitive maturation of basic first-order culture of continuous improvement (CoCI) protocols.

Figure 6: CoCI Table’s Column’s Algorithmic Explication

<table>
<thead>
<tr>
<th>CoCI Column</th>
<th>Institutional Effectiveness Algorithmic Explication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>CIC step 2: ASSESSMENT METHODOLOGY:</strong> (i.e.: How Assessed)</td>
</tr>
<tr>
<td>3</td>
<td><strong>CIC steps 3-4: ASSESSMENT DATA</strong> (Summarize results) - list longitudinal data by location and modality. - Use <strong>course mapping</strong>, Course mapping examples. - Note N’s for all data.</td>
</tr>
<tr>
<td>4</td>
<td><strong>CIC step 5: PLAN FOR IMPROVEMENT</strong> (or Steps Taken to Produce Improvement)</td>
</tr>
</tbody>
</table>
In the examples below, I have excerpted a typical assessment outcome from representative 2019 departmental PECC presentations. I elided column 2 and 3 of the 5-step CoCI table since those column’s information is tangential to the purposes of this FOI discussion. Instead, the examples focus on mission-derived EXPECTED OUTCOMES (column 1) which drive PLANS FOR IMPROVEMENT (column 4) resulting in second-cycle assessment of those improvements. The following practical examples might be conceptualized as heuristic rather than didactic examples. That is, they do not specify FOI steps to enhance loop closure, but allow readers to discover for themselves how best to operationalize FOI’s five-step protocols for these respective departmental examples. From a didactic perspective, readers may also determine whether step 5, Assessment of Improvement Steps, actually assesses the posited step-4 Plan for Improvement or simply functions to amplify those stated plans. Obviously, any first-cycle year’s plans cannot be evaluated until the second-cycle year has provided an opportunity for those plans to have been implemented. In first-cycle year’s Assessment of Improvement Steps, such extenuation of loop closure might been explained (see: Figure 7F). However, any second-cycle year plans for improvement, should be assessed systemically and explicitly, per SACSCOC’s IE definition. Yet, ultimately, “the value in value added depends on the ecology” (Braun, article title).

**Figure 7A:** CoCI Example: Admissions Department

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected Outcomes</strong></td>
<td><strong>Plan for Improvement</strong></td>
<td><strong>Assessment of Improvement Steps</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A. Provide outstanding customer service to prospective students.</td>
<td>Due to increased virtual interviews with all Admissions Advisors, in 2019 the way the response rate for interviews will be calculated differently. The virtual interviews and on-campus interviews conducted will be separated out and 80% of on-campus interviews and 10% of virtual interviews will be calculated and the amount of surveys received must be higher than the numbers combined. Every month, each Admissions Advisor will be sent both their response rate and survey average. If anyone is under the goal, they will be coached to improvement. Close watch will be kept on survey scores as there is a chance that more virtual interviews could result in lower survey scores.</td>
<td>As scores are monitored consistently and coaching is being implemented, average scores should increase over the previous year.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7B: Example of IT Services

<table>
<thead>
<tr>
<th>Expected Outcomes</th>
<th>Plan for Improvement</th>
<th>Assessment of Improvement Steps</th>
</tr>
</thead>
</table>
| 1. Improve overall security posture. | • Continue to make changes based on Office 365 secure score.  
• SOP for user account creation and termination as well as data retention, nearly 20,000 depreciated accounts have been purged.  
• Azure AIP  
• MFA  
• Laptop management using Azure AD | Assessment in this area is typically measured against the industry average due to the fast pace of change. (See example 1 of secure score below) We are currently 52 points above the industry average, and I’ll expect that to continue to increase. |

---

### Figure 7C: CoCI Example: Career Services Department

<table>
<thead>
<tr>
<th>Expected Outcomes</th>
<th>Plan for Improvement</th>
<th>Assessment of Improvement Steps</th>
</tr>
</thead>
</table>
| 1A. Track all graduates annually to determine if they are working in their field of study or if they are unable to work due to continuing education, medical, military or visa matters. | Each quarter, Directors of Career Services meet to discuss outcomes and policies, and determine which procedures are working well and what needs to be adapted to new needs within the department. Career Services is constantly looking at ways to improve the process of tracking recent graduates.  
In 2018, a newly created report was developed to take the place of a previously used Excel pivot table. The need for improvement was realized in finding that the pivot table were often in need of manipulation and coding fixes that resulted in inefficient process flow. Inaccurate results were often reflected as well, due to the coding issues. This new report fixes all of those issues. We will continue to monitor the report to make sure results are accurate. | This process has fully completed the CIC and is in a reevaluation stage; since the report is so new, we are back in the data gathering stage (Step 3) and will continue to reassess.  
We keep track of all policies and any changes/updates in the SOP, which is reviewed quarterly for revision and updates. This process continues to go through the CIC.  
We also continue to monitor the post-secondary landscape to make note of any change in potential benchmark guidelines. |
**Figure 7D:**  CoCI Example: Financial Planning & Financial Planning Services Department

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Outcomes</td>
<td></td>
<td>Plan for Improvement</td>
<td></td>
<td>Assessment of Improvement Steps</td>
</tr>
<tr>
<td>1.B. Provide excellent customer service to all future SU students.</td>
<td>Continue current plan. In 2018, FP identified a need for one-on-one coaching and training to provide role-play opportunities and for the FPC to work closely with a manager on areas of need. Therefore, FP implemented and performed bi-weekly coaching meetings with the individual FPCs throughout the year.</td>
<td>Data confirms this training was successful and will continue.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Figure 7E:**  CoCI Example: Library Services Department

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Outcomes</td>
<td></td>
<td>Plan for Improvement</td>
<td></td>
<td>Assessment of Improvement Steps</td>
</tr>
<tr>
<td>1. Providing curriculum-supportive collections. Goal A) To select materials based upon faculty input augmented by traditional library acquisition methodologies and established professional bibliographies (such as both the AACP Basic Resources and the AACP Core Journals lists), and to provide user-friendly access to basic and supplementary</td>
<td>Resource selection (Continuous) (All locations)</td>
<td>We observed a decrease in circulation of materials at some locations and faculty satisfaction at Louisville Main location. The matters will require further study.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Satisfaction of the quality of materials, however, remains high. Both 2018 Student and Faculty surveys indicate satisfaction well into the 80-90th percentiles. The Noel-Levitz survey reveals similar positive findings, as seen below.

**Circulation and average age of library collections – 2018**
- **Main**
  - General collection: 2004
  - Culinary: 1999
  - Reference: 2004
- **Lexington**
  - General collection: 2008
  - Culinary: 2007
  - Reference: 2007
- **Dupont Circle**
information sources materials, regardless of format, for each undergraduate and graduate (including the College of Pharmacy and PhD programs), curricular and general education discipline. Collections will provide educational enrichment opportunities for the intellectual, social, and professional development for both resident and online students by promotion of the development of critical thinking, effective verbal and written communication, computer/information literacy, teamwork/research and an appreciation for lifelong learning, cultural diversity and the expression of professionalism.

<table>
<thead>
<tr>
<th>Collections</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>General collection</td>
<td>2011</td>
</tr>
<tr>
<td>Reference</td>
<td>2012</td>
</tr>
<tr>
<td>Atkinson Square</td>
<td></td>
</tr>
<tr>
<td>General collection</td>
<td>2011</td>
</tr>
<tr>
<td>Reference</td>
<td>2005</td>
</tr>
<tr>
<td>eBooks</td>
<td>2007</td>
</tr>
</tbody>
</table>

### On-site circulation statistics

<table>
<thead>
<tr>
<th>Location</th>
<th>2017</th>
<th>2018</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>810</td>
<td>867</td>
<td>+2.24%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018: Lexington</td>
</tr>
<tr>
<td></td>
<td>3545</td>
<td>3067</td>
<td>-13.48%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018: Dupont</td>
</tr>
<tr>
<td></td>
<td>222</td>
<td>197</td>
<td>-11.26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2018: Atkinson</td>
</tr>
<tr>
<td></td>
<td>533</td>
<td>558</td>
<td>+4.69%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2018 Student Survey

Satisfaction of library’s on-site resources: 4 or 5 on a 5 point scale

<table>
<thead>
<tr>
<th>Location</th>
<th>2018</th>
<th>2017</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisville*</td>
<td>81.54%</td>
<td>80.46%</td>
<td>+2.13%</td>
</tr>
<tr>
<td></td>
<td>(n: 66)</td>
<td>(n: 63)</td>
<td></td>
</tr>
<tr>
<td>Lexington</td>
<td>90.20%</td>
<td>88.91%</td>
<td>+1.29%</td>
</tr>
<tr>
<td></td>
<td>(n: 51)</td>
<td>(n: 50)</td>
<td></td>
</tr>
</tbody>
</table>

2018 Faculty Survey

Satisfaction of selection of materials: ratings of 4 or 5 on a 5 point scale

<table>
<thead>
<tr>
<th>Location</th>
<th>2018</th>
<th>2017</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louisville*</td>
<td>80.84%</td>
<td>93.74%</td>
<td>-13.90***</td>
</tr>
<tr>
<td></td>
<td>(n: 53)</td>
<td>(n: 58)</td>
<td></td>
</tr>
<tr>
<td>Lexington</td>
<td>80.00%</td>
<td>91.99%</td>
<td>+1.74</td>
</tr>
<tr>
<td></td>
<td>(n: 16)</td>
<td>(n: 16)</td>
<td></td>
</tr>
</tbody>
</table>
The survey responses for the 2018 Faculty Survey were skewed somewhat due to an issue with order and wording of answer choices regarding this specific question. This will be addressed in the 2019 version of the survey.

Website: Success of finding needed information: rating of 4 or 5 on a 5 point scale

- 2017 Louisville: 86.36% (n: 267)
- 2018 Louisville*: 87.50% (n: 183)

Percent change: +1.14%

- 2017 Lexington: 80.19% (n: 103)
- 2018 Lexington: 86.3% (n: 74)

Percent change: +3.64%

***

2018 Noel-Levitz Survey

Satisfaction with Library resources:

- Louisville – n: 814
  - Adequacy of resources: 5.45
  - Percent change: -0.18%
  - Gap score: 0.31
  - Percent change: +0.05%

- Lexington – n: 207
  - Adequacy of resources: 5.97
  - Percent change: +1.6%
  - Gap score: 0.34
  - Percent change: +47.83%

See Appendix C: Faculty Survey, Quantitative Data, Student Survey, Quantitative Data and Noel-Levitz Survey.

Figure 7F: CoCI Example: Student Services Department

<table>
<thead>
<tr>
<th>1 Expected Outcomes</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.A. (STUDENT LIFE): Increase students</td>
<td>Plan for Improvement</td>
<td>New plan to be assessed in the next cycle.</td>
<td>Student Services will adopt a more structured approach to event and activity offerings across campuses to include at</td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide opportunities for engagement by offering at least one offering per category per quarter.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Categories will be derived from the Housing and Residence Life Wellness Wheel (See Appendix A) which includes six different areas for student life enhancement (social, diversity, community outreach, professional development, health and wellness, and personal development categories).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Services will also increase organization participation by double in the coming year through renewed student, faculty, and staff encouragement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a more structured and consistent approach to engagement opportunities are offered and increased participation in organizations and groups is recognized, the level of satisfaction should raise, and the gap score should decrease as it relates to students' sense of belonging.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additionally, more detailed and timely data will improve the alignment of engagement opportunities with student interests and assess specific program learning objectives.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lastly, Student Services will utilize student mobile app technology to improve and increase feedback.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Figure 8: Potential FOI Rubric for the Balanced Assessment Scorecard Rubrics form**

<table>
<thead>
<tr>
<th>ASSESSMENT INDICATOR</th>
<th>Recommended Immediate Action (1)</th>
<th>Developmental Phase (2)</th>
<th>Recommended Annual Review (3)</th>
<th>Recommended Biennial Review (4)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. <strong>ASSESSMENT OF STEPS TAKEN TO PRODUCE IMPROVEMENT</strong> (CIC Steps 6 &amp; 7)</td>
<td>Based on FOI protocols, the IP was partially implemented.</td>
<td>Based on FOI protocols, the IP was partially implemented.</td>
<td>Based on FOI protocols, the IP was fully implemented.</td>
<td>Based on FOI protocols, the IP was fully implemented.</td>
<td></td>
</tr>
<tr>
<td>V. a. To determine the efficacy of the prior cycle’s improvement plan (IP) (“close the loop”) strategy, all the prior-year IP’s outcomes are assessed using fidelity of implementation (FOI) protocols, viz.: 1. Program differentiation; 2. Adherence; 3. Quality; 4. Exposure; and, 5. Responsiveness (<a href="http://www.rpajournal.com/dev/wp-content/uploads/2013/11/SF2.pdf">http://www.rpajournal.com/dev/wp-content/uploads/2013/11/SF2.pdf</a>)</td>
<td>The IP was partially implemented with low QUALITY resulting in nonexistent/poor performative response for any prior-cycle outcomes.</td>
<td>The IP was partially implemented with average QUALITY resulting in nonexistent/poor performative response for some prior-cycle outcomes.</td>
<td>The IP was fully implemented with high QUALITY resulting in a satisfactory performative response across most prior-cycle outcomes.</td>
<td>Based on FOI protocols, the IP was fully implemented with high QUALITY resulting in a satisfactory performative response across all prior-cycle outcomes.</td>
<td></td>
</tr>
</tbody>
</table>

NEXT QUARTER’S ARTICLE will focus either on LOW-N ASSESSMENT STRATEGIES or SACSCOC INTERIM REPORT OVERVIEW
References


Forscher, B. K. (1963, October 18). “Chaos in the Brickyard.” *Science* [Letters section], 142(3590), 339. [https://science.sciencemag.org/content/142/3590/339.1](https://science.sciencemag.org/content/142/3590/339.1)


