

# Evidence: Program Assessment for Continuous Improvement

## Putting Assessment to Work in New Jersey Colleges

Assessment Directors from nine NJ institutions joined several Stockton personnel at the Seaview on April 10, 2014 for a day-long symposium on Assessment Use. We met to discuss assessment-use practices and to share strategies that will support and increase the use of assessment findings for decision-making in all our colleges. Provost Harvey Kesselman welcomed the group and charged us to develop recommendations for both faculty and administrators.

Dean Claudine Keenan joined us and added her expertise and experience to our discussions during the afternoon session as we summarized our suggestions.

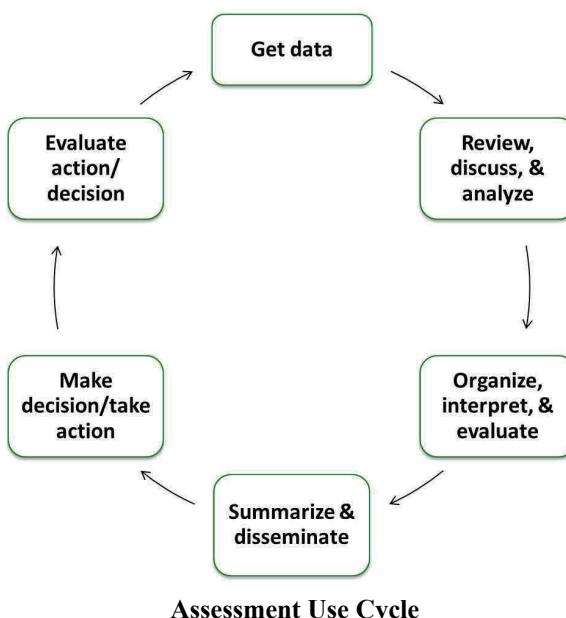
We discussed a cycle of use for assessment data and agreed that the following conditions would support the practice of using assessment findings to guide decision-making.

### Committed leadership from the Chief Academic Officer

The Provost must be the flag bearer in modeling assessment use, emphasizing its importance, making decisions that are based on assessment data, communicating assessment findings to the Board of Trustees, and setting a tone for the academic community in the college that evidence-based decision making is not only the expectation, but is a requirement.

### Commitment to transparency

Assessment personnel must share our goals, processes, findings, and the decisions that are based on those findings in order to inspire the confidence of the college community in the usefulness of assessment. This practice will increase participation in assessment activities and will set the expectation of useful assessment



### Active leadership from Deans

The Deans must connect the principles and the theories to the implementation, the allocation of resources, the recognition of good work, and they must spearhead the communications within each school. At the school level, the Deans must wield the sticks and distribute the carrots to reinforce the notion that good assessment work includes the use of assessment data to make changes.

### Incentives and disincentives

Not only must we have incentives for using assessment, we must have disincentives for failing to do so. It is not enough

to recognize good work, we must also indicate by the allocation of resources that assessment use is expected practice and that failing to use assessment data is falling short of the expectations.

### Connection of institutional data to milestones – e.g. graduation

Institutional data must be presented in the context of important community milestones such as graduation rate.

### Connecting assessment use to strategic planning and budgeting

The planning process must be connected to outcomes and assessment. The money be assigned to areas of priority or demonstrated need and assessment must be an integral part of the planning process.

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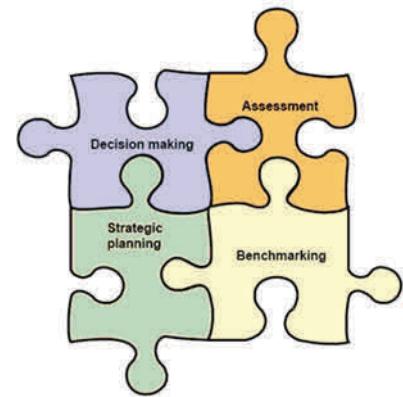
## Assessment to Work *(continued from previous page)*

### Responsive and engaged Institutional Research office

Institutional Research should be responsible for the appropriate dissemination of the institutional data in manageable and meaningful increments. Institutional Research should be a part of the assessment conversations that take place in colleges.

### Active faculty leadership

Both junior and senior faculty should be encouraged and rewarded for leadership work in the assessment of learning. Active faculty leadership will stimulate buy-in from a wider group of faculty.



## An Alternative Perspective on Assessing Internship Portfolios

Michael Rodriguez (POLS)

The prevailing mode of assessing internships is to construct a rubric that measures the achievement of predetermined performance (or proficiency) standards. The portfolios for Stockton's Washington Internship Program represent the documentary evidence of how students attain their academic, professional, and personal goals. Portfolios contain the initial articulation of these goals at the beginning of the internship - in the IDP (Individual Development Plan) - and a final self-evaluation in a Capstone Reflection. From the careerist orientation these two documents represent the bookends of a linear trajectory that begins with goal-articulation (Point A) and ends with goal-attainment (Point B). The underlying metric of proficiency for program evaluators, prospective employers, or graduate schools is whether the intern demonstrates clarity of mind at Point A and proceeds along an uninterrupted pathway to Point B.

Notwithstanding the utility of assessment from the careerist orientation, an alternative (existentialist) approach can also yield invaluable insights into the richness and complexity of experiential learning. If the quintessential purpose of the former is the *achievement of goals*, then the *discernment of self* lies at the heart of the latter. The careerist approach presumes students begin their internships with undaunted clarity about the content of their career goals (personal goals are of secondary importance). The existentialist approach recognizes that goal-articulation is often conditioned by a pronounced sense of uncertainty, or unsettledness, about career (academic and professional) and personal goals. The sine qua non of internship portfolios in the careerist approach is their utility in demonstrating proficiency in satisfying program requirements for purposes of assessment



and grading, whereas in the existentialist approach portfolios constitute venues for engaging in the broader project of self-representation, exploration, and discernment. In this sense, the construction of an internship portfolio involves a deeply self-reflective exercise in identity formation (Yancey, 2004; Tierney, et al. 1998; Carlson & Yungblut, 1998).

Moreover, the structure of the careerist approach is summative, i.e., the assessment generally occurs at the end of the experiential learning experience. In contrast, the existentialist approach is more conducive to formative evaluation wherein the discernment, articulation, and redefinition of goals are assessed as the internship semester proceeds. The two approaches are not mutually-exclusive. Utilizing one (summative evaluation) for purposes of satisfying the imperative for measuring proficiency standards and satisfying program accountability does not diminish the value of the second (formative evaluation), which enables students to fully engage the process of identity formation through the discernment, articulation, and self-evaluation of their career and personal goals (Dougan, 1996; Dudley, 2001).

But is it possible to construct an assessment rubric that incorporates formative evaluations from the existentialist approach? This challenge was undertaken through an intensive content analysis of 170 internship portfolios of Stockton College interns from the 2006-2011.<sup>1</sup>

<sup>1</sup> The study is available at the William J. Hughes Center for Public Policy website (<http://intraweb.stockton.edu/eyos/hughescenter/content/docs/HC-Experiential%20Learning-2013-Feb.pdf>)

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The construction of an assessment rubric from the existentialist approach was informed by the three types of discernment students described in their portfolio self-evaluations. The first relates to the **levels of uncertainty** that are embedded in the portfolio narratives that chronicle the articulation and realization of academic, professional, and personal goals. Indeed, the portfolio self-evaluations are the most poignant when students reflect on the myriad opportunities for personal growth they experience during their internships. The second is reflected in the propensity among many interns to utilize the internship experience to arrive at **decision points** in their academic, professional, and personal trajectories, points which constitute critical junctures in their career and personal development. The third type is evident in how interns utilize the internship to **integrate** their academic training with the para-professional skills they acquire throughout the internship experience. Markers of these three types of discernment (i.e., the existentialist approach) are as amenable to (qualitative) evaluation of an intern's intra-personal development as performance standards are appropriate for empirical evaluation in the careerist approach.

## References

- Carlson, Marybeth, and Laura Hunt Yungblut. 1998. "Where the Wild Papers Are: Producing A Student Portfolio in the Undergraduate Seminar." *The History Teacher* 32 (1):43-56.
- Dougan, Alberta, Macke. 1996. "Student Assessment by Portfolio: One Institution's Journey." *The History Teacher* 29 (2): 171-178.
- Dudley, Martha. 2001. "Speaking My Mind: Portfolio Assessment: When Bad Things Happen to Good Ideas." *The English Journal* 90 (6): 19-20.
- Tierney, Robert, J., et. al. 1998. "Theory and Research into Practice: Portfolios: Assumptions, Tensions, and Possibilities." *Reading Research Quarterly* 33 (4):474-486.
- Yancey, Kathleen, Blake. 2004. "Postmodernism, Palimpsest, and Portfolios: Theoretical Issues in the Representation of Student Work." *College Composition and Communication* 55 (4):738-761.

## Interactive Assignments to Enhance Reflective Thinking and Decision Making Within the Concept of Genetic Testing

Christine Gayda-Chelder (PSCH)

The goal of this project was to assess the development of *reflective thinking* following an in-class group activity involving the resolution of a biomedical ethical dilemma. Dewey (1933) has defined the construct of reflective thinking as follows: "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends" (p.9).

Students in my undergraduate course *Lifespan Development* learn about prenatal growth and the many disorders that may be diagnosed in utero with increasing ease and accuracy. For example, the presence of Down Syndrome may now be confirmed with a noninvasive blood test known as MaterniT21. In order to enhance understanding of how the results of this test may influence a family, students

are asked to work in small groups of five. Each student assumes the role of a parent or sibling within their "family." The following situation is presented: "You are a family of five or six (two parents and three or four teenage children/siblings). An unexpected pregnancy has occurred, and Mom is carrying a child who is confirmed to have Down Syndrome by the MaterniT21 test. As a family, you must all decide what you will do among the following choices: 1) have the baby; 2) give the child up for adoption; 3) choose an abortion. A detailed explanation as to how you made your decision must be presented to the class."

This activity has been a part of my course for many years, with students engaging in "heated" debates about decisions made. Students have commented that the task is "hard" and that it does ask them to think



Christine Gayda-Chelder

about a reason for choosing abortion that they had never before considered. This assessment project therefore attempted to evaluate in a much more systematic manner how the activity is influencing student thinking/reflection.

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## Interactive Assignments to Enhance Reflective Thinking and Decision Making Within the Concept of Genetic Testing (continued from previous page)

Following the assignment, students were invited to voluntarily complete a brief questionnaire adapted from Kember et al. (2000), based upon a 5-point scale of “definitely agree” (5) to “definitely disagree” (1). Twenty-three students agreed to participate among two sections of 69 students in which the activity was presented. Below are the questions asked and average responses to each statement:

As a result of this activity I have changed the way I look at myself. Average response = 2.61

This activity challenged some of my firmly held ideas. Average response = 3.17

As a result of this activity I have changed my normal way of looking at things. Average response = 2.70

During this activity I discovered faults in what I had previously believed to be right. Average response = 2.96

The one statement that seems to indicate

that the activity may have an impact upon reflective thinking is, “This activity challenged some of my firmly held ideas.” In future semesters an attempt will be made to enhance participation in completing the survey to increase sample size. The opportunity for qualitative feedback via written comments will be included, along with additional assessment tools that may be available within the construct of reflective thinking. A similar activity will also be evaluated in my *Clinical Neuropsychology* course in the Fall 2014 semester. In this class students learn about the neurological disorder Huntington’s Disease. If one parent has the disease, each child has a 50-50 chance of developing the disorder as well. An individual may find out if they will develop the disease by means of a blood test at any point in their life. Students again form families (as siblings of a parent with Huntington’s) and must decide if they wish to take the test which will indeed tell them if they will develop Hunting-

ton’s themselves. These tasks are certainly challenging, but hopefully they teach our students the complexities of ethical decision making within the context of various forms of genetic testing. As medical technology advances, so do our many choices.

### References

Dewey, J. (1933). *How We Think: A restatement of the relation of reflective thinking to the educative process*. Boston: D.C. Heath.

Kember, D., Leung, D. Y. P., Jones, A., Loke, A. Y., McKay, J., Sinclair, K., Tse, H., Yeung. (2000). Development of a questionnaire to measure the level of reflective thinking. *Assessment & Evaluation in Higher Education* (25), 4, 381-395.

## Assessment of Clinical Reasoning in Physical Therapy

**Patricia Quinn McGinnis (DPT)**

Assessment of student learning is an important component of higher education today. In addition, accreditation standards for various health professions identify expected outcomes for student learning in the academic and clinical settings. (1) Physical Therapy Program faculty strive to foster clinical reasoning and reflection skills during academic coursework in order to prepare students for the complexities and uncertainties they will encounter in clinical practice. While existing academic course activities are structured with that outcome in mind, this has not been specifically assessed. After participating in the 2013 Summer Assessment Institute, my plan for the fall semester was to make assessment of clinical reasoning skills *explicit* and *intentional* in the Neuromuscular Physical Therapy courses. Existing assessment methods were effective in measuring content knowledge and application to clinical cases, but providing formative and summative feedback on students’ development of clinical reasoning remained more challenging to measure and formally assess.

Two measures used by the Physical Therapy Program to assess Program outcomes for accreditation purposes are the Professional Behavior Program (PBP) and the Clinical Performance Instrument (CPI) (2). The PBP is a self-assessment completed by students each year of the Program. Students meet with faculty to discuss their professional growth as they progress through the curriculum. The CPI is completed at midterm and end of the clinical internships by the student as well as his/her clinical instructor. Academic faculty also have access to the CPI information to track student progress during their internships. While these tools are used to assess program outcomes, select components could be utilized to assess teaching and learning outcomes within specific courses in the academic curriculum.



**Patricia Quinn McGinnis**

Reflection and critical thinking skills are essential components of developing clinical reasoning. In the Neuromuscular Physical Therapy courses students were encouraged to reflect on their performance in lab sessions with simulated patient cases, in order to

identify errors & /or aspects of their performance for further refinement. Likewise they were encouraged to provide feedback to their peers during lab activities. One of the course goals was for students to become more comfortable with giving and receiving feedback to one another as they become more adept at reflecting on their actions as a source of learning. These are expected behaviors for clinical internships as well as future clinical practice after graduation.

In the past, pairs of students would alternate between playing the role of the patient and the therapist as they learned new treatment and handling skills in lab sessions. In an effort to make teaching and learning of critical thinking and reflection more explicit and intentional, select lab experiences were re-structured last fall such that specific roles were assigned during the practice of performance skills. Students worked in groups of 3 with the following roles: patient, therapist, and observer. Students had repeated opportunities to assume each role with a series of patient cases. Following practice of a given treatment activity, students provided feedback to their colleagues, and asked questions to encourage the “therapist” to explicitly describe their reasoning processes. When circulating around the room as students practiced, the instructor intentionally asked the “observer” and “patient” their perspectives before offering my own suggestions. In addition the instructor periodically facilitated a group debriefing so that small groups shared insights with the class as a whole.

In addition, twenty-two students in PHTH 6500 / 6510 Neuromuscular Physical Therapy I & II courses were surveyed at the mid-point and end of the semester, using two surveys: Assessment of Teaching and Learning in Neuromuscular Physical Therapy and Reflection Questionnaire (3). The Assessment of Teaching and Learning questionnaire included 10 questions; questions 1-8 were adapted from the PBP and CPI, while questions 9-10 were drawn from Stockton’s Essential Learning Outcomes rubric for critical thinking (items 3.4 & 3.5) and were most closely related to the areas of interest for this project. Responses to each question included both a Likert scale and an open ended response to provide an example of the behavior. Responses to key indicators are presented below:

| Behavior  | Rarely | Sometimes | Often | Very Often |
|---|--------|-----------|-------|------------|
| Provide constructive feedback to peers (baseline)   |        |           |       |            |
| (post-test)   |        | 4         | 14    | 4          |
| Reflecting about my thought processes (baseline)  | 1      | 9         | 10    | 2          |
| (post-test)   |        | 2         | 13    | 7          |
| Identify & question my assumptions/ hidden assumptions & ask whether they help or hinder my thinking (baseline) | 2      | 13        | 6     | 1          |
| (post-test)   |        | 5         | 16    | 1          |

The Reflection Questionnaire (3) was specifically developed as an instrument to determine whether students engage in reflective thinking during coursework in the health sciences. The reliability and validity of the instrument has been established with undergraduate and graduate students in occupational therapy, physical therapy, nursing and radiology. The survey consists of 16 questions rated on a Likert Scale. SPSS 21.0 was used for data analysis. Paired t-tests (pre/post data) revealed trends toward improvement in the subscales for “reflection” and “critical reflection” but the changes were not significant. High baseline scores may have resulted in a ceiling effect for results.

In order to determine how clinical reasoning and reflection skills transfer from academic courses to the clinical setting, we will track student performance of this cohort via the CPI throughout their Clinical Internships during the spring and summer semesters. The assessment results will be used to inform planning of future course offerings. Based on the results thus far, the remaining labs will be re-structured next fall to include therapist, patient, and observer roles. We also plan to introduce a new assignment where students will videotape their performance of select skills in lab. They will submit the video with a written reflection about the performance, and identify aspects for further refinement. The data collected last fall will be the foundation for creating rubrics for this new assignment. Our goal is to move beyond assessment of content knowledge and to provide graduates with the clinical reasoning skills needed to adapt to the changing demands of health care.

1. Commission on Accreditation in Physical Therapy Education. American Physical Therapy Association.
2. Physical Therapist Clinical Performance Instrument for Students. 2006. American Physical Therapy Association.
3. Kember et al. (2000) Development of a Questionnaire to Measure the Level of Reflective Thinking. *Assessment & Evaluation in Higher Education*. Vol.25(4):381-395.