Institutional, Departmental and Non-Academic Offices' Uses of Noel Levitz Student Satisfaction Data as Evidence in Assessment

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A Practical Problem

- Clients often bring issues to IR offices to which they need better understanding, but they often don't provide adequate questions
- We sometimes engage in the time consuming process of helping ourselves better understand the context and helping clients craft better questions—but, often we don't
- As a result, IR analysts typically provide analyses of what they think their clients need by interpreting and extending their requests; we prioritize speed over quality

A Practical Solution

- Interactive dashboard or Business Intelligence software provides a way to share data with clients in ways they can manipulate to discover and answer their own questions
- Statistical software vendors like IBM (SPSS), SAS, and Oracle have added BI modules to existing products
- These are typically enterprise-level and expensive solutions. (possible exception: Office 365 Power BI)
- Software programs like Tableau and Qlikview are initially less expensive and possibly more user-friendly

Tableau Software

- Tableau Server
  - Connect live to any data source and publish to any Tableau format (Public, Reader) plus enterprise credentialing for custom dashboards
- Tableau Desktop
  - Single user license costs around $700
  - Connect only to .csv data source
  - Export to Tableau Reader and Public
- Tableau Reader

Tableau Software

- Tableau Public Desktop (free) publishes only to Tableau Public (online)
- Tableau Desktop publishes:
  - packaged Tableau Reader workbooks which can be shared with clients who have downloaded and installed the free Reader
  - and to Tableau Public

NLSSI at CSI

- Collection in 2000 for strategic planning
- Pilot in spring 2011 sponsored by CUNY
- Establish baseline for PMP in 2013
- Stratified Random Sample
- Instructor web registration
- In-class administration
- Custom questions

NSSI Response Rates

Year	Sent	Collected (Usable)		College Pop.	Repre.
	N	%	N	N	%
2000	3,000	59.6	1,789	9,735	18.4
2011	2,096	60.5	1,269	12,227	10.4
2013	1,910	62.0	1,185	11,794	10.0

Cleaning your data

- Noel-Levitz provides syntax for cleaning data, and defining most variables.

```
VARIABLE LABELS
IMP1 "IMP:  Most students feel a sense of belonging here."
IMP2 "IMP:  The campus staff are caring and helpful."
IMP3 "IMP:  Faculty care about me as an individual."
IMP4 "IMP:  Admissions staff are knowledgeable."
IMP5 "IMP:  Financial aid counselors are helpful."
IMP6 "IMP:  My academic advisor is approachable."
IMP7 "IMP:  The campus is safe and secure for all students."
IMP8 "IMP:  The content of the courses within my major is valuable."
IMP9 "IMP:  A variety of intramural activities are offered."
IMP10 "IMP:  Administrators are approachable to students."
IMP11 "IMP:  Billing policies are reasonable."
IMP12 "IMP:  Financial aid awards are announced to students in time to be helpful in college planning."
IMP13 "IMP:  Library staff are helpful and approachable."
IMP14 "IMP:  My academic advisor is concerned about my success as an individual."
IMP15 "IMP:  The staff in the health services area are competent."
IMP16 "IMP:  The instruction in my major field is excellent."
IMP17 "IMP:  Adequate financial aid is available for most students."
IMP18 "IMP:  Library resources and services are adequate."
IMP19 "IMP:  My academic advisor helps me set goals to work toward."
IMP20 "IMP:  The business office is open during hours which are convenient for most students."
IMP21 "IMP:  The amount of student parking space on campus is adequate."
IMP22 "IMP:  Counseling staff care about students as individuals."
```

- Though you may have to adjust variables to fit custom questions.

```
/*START CUSTOM QUESTIONS.
VARIABLE LABELS
SAT74 "SAT:  The courses I have taken have helped me choose a career path."
SAT75 "SAT:  My degree program has prepared me well for employment."
SAT76 "SAT:  My degree program has prepared me well for graduate school."
SAT77 "SAT:  My college experience has inspired me to be an active member of my community."
SAT78 "SAT:  CSI's Health Center provides valuable services and resources to students."
```

Maximizing your data

- You can add metadata to help answer different questions.
- Example: Match NL Major to the corresponding college Department and Division.
- Collecting student ID's opens the door to more in-

```
SORT CASES MAJOR.
MATCH FILES /TABLE='L:\Conferences\CUNY Joint Retreat\2014\Majors_Crosswalk_SP13.SAV'  /IN maj
/FILE=* /IN innl
/BY MAJOR.
EXE.
```

Normalizing Data for Interactive Dashboards

- *VarstoCases* works with identical length variables
- Therefore, assign variables to an index that have the identical number of response categories
- Save file as a .csv (Comma Separated Values)

Syntax

```
NUMERIC SATN1 TO SATN110 (F1.0).
vector #origin = sat1 to sat98.
vector #destination = satn1 to satn98.
do repeat #operator = 1 to 98.
compute #destination(#operator) = #origin(#operator).
end repeat.
EXECUTE.

VARSTOCASES
  /ID=id
  /MAKE RESPONSE FROM SAT1 TO SAT98
  /MAKE RESPONSEN FROM SATN1 TO SATN98
  /INDEX=Index1(RESPONSE)
  /KEEP= DIVISION DEPT MAJOR TOTEXPECT TOTSATIS DOAGAIN DEGLEVN ETHNIC EMPLOY EDUGOAL
 NCLASSLEV CURENR AGE GENDER CHOICE RESCLASS OPTION1 GAP99 TO GAP110 SAT99 TO SAT110
  /NULL=KEEP.
DATASET NAME NL_2013.
```

To create a combined file

```
*COMBINE YEARS OF NL DATA INTO A TABLEAU FRIENDLY DATA SOURCE.
ADD FILES /FILE='L:\Conferences\CUNY Joint Retreat\2014\NL_2013_FLAT.SAV'  /IN=IN2013
                /FILE='L:\Conferences\CUNY Joint Retreat\2014\NL_FINAL_DATA_SP11_FLAT.SAV' /IN=IN2011.
DATASET NAME NL_COMBINED.
DATASET ACTIVATE NL_COMBINED.

STRING YEAR (A8).
DO IF IN2011.
COMPUTE YEAR='02012011'.
END IF.
DO IF IN2013.
COMPUTE YEAR='02012013'.
END IF.
FREQ VAR YEAR.

COMPUTE NLYEAR=
            DATE.MDY(NUMBER(SUBSTR(YEAR,1,2),F2),
                NUMBER(SUBSTR(YEAR,3,2),F2),
                NUMBER(SUBSTR(YEAR,5,4),F4)).
FORMATS NLYEAR(ADATE10).
VAR WIDTH NLYEAR (10).
FREQ VAR NLYEAR.
```

What can it do for you?

- Enhance survey data
  - You can use your index to filter results by question.
  - Filter responses by demographic data
- Allows one to link multiple tables and figures together into one comprehensive sheet.
- Allows one to share data easily with other individuals and departments.

Demonstration

Interacting with your data

Workshop

Now it’s your turn!

NLSSI Scales

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

Answer the following…

- Who feels the safest on campus? Males or Females?
  - By how much?
- Who believes their major requirement goals are clearly stated?
  - Associates or Baccalaureates?
  - Upper or Lower classmen?
- In what division do students think faculty care about them the most? The least?
- Out of students who did not wish to repeat their experience at CSI, were they most dissatisfied with Admissions, or with Financial Aid related items?
- What percent of students are satisfied with the amount of financial aid offered?

Improving Dashboards

- Clients may want to see different dimensions in the static display elements as their understanding grows
- Adding data elements, successive waves of data
- Adding/changing visual presentations