

# INSTITUTIONAL RESEARCH AND ASSESSMENT PLANNING TEAM

## CHARGE

The Institutional Research/Assessment Planning Team was specifically charged with:

- Inventorying the activities in each IR office to determine overlap/commonality of tasks, as well as identifying those activities that are unique, yet essential, to individual campuses.
- Identifying opportunities to perform common activities more efficiently using functional/excellence teams assigned to areas of specialty.
- Ascertaining skills/strengths necessary for common and ad hoc activities.
- Identifying technology, training support and other resources that may be needed to facilitate streamlining processes.
- Developing a hybrid organizational model incorporates excellence teams but allows IR professionals to continue to meet the unique needs of their specific campus and report data to the System Office.

## MEMBERSHIP

### System Office Team Lead

William Gammell	Director, CSCU Office of Research & System Effectiveness	CSCU
-----------------	--	------

### Members

Sue Anderson	Professor of Respiratory Care	NVCC
Michael Ben-Avie,	Director of Assessment & Planning	SCSU
Caitlin Boger-Hawkins	Director of Planning, Research & Institutional Effectiveness	NWCC
Michael Broderick	Director of Planning, Research & Institutional Effectiveness	COSC
Paula Bunce	Institutional Research Specialist	CCSU
Yvonne Kirby	Director of Institutional Research & Assessment	CCSU
Mark Lynch	Professor of Math/Science	GCC
Qing Mack	Director of Institutional Research	ACC
David Nielsen	Director of Planning, Research and Assessment	MCC
Laura Qin	Director of Institutional Research	TRCC
David Pettigrew	Professor of the Philosophy	SCSU
Jenny Wang	Director of Institutional Research	CCC
Jan Kiehne	P-20 WIN Program Manager/ IR Specialist	CSCU
Annie Davis	Executive Assistant	CSCU

## MEETING SCHEDULE

Tuesday, May 23, 2017

1:30pm – 3:30pm

System Office, Room 206

Tuesday, June 6, 2017

1:30pm – 3:30pm

System Office, Room 305

DRAFT

Tuesday, June 20, 2017	10:00am – 12:00pm	System Office, Room 206
Wednesday, July 5, 2017	1:00pm – 3:00pm	System Office, Room 206
Wednesday, July 19, 2017	1:00pm – 3:00pm	System Office, Room 206
Tuesday, August 8, 2017	1:00pm – 3:00pm	System Office, Room 206
Tuesday, August 22, 2017	1:00pm – 3:00pm	System Office, Room 206
Tuesday, September 5, 2017	1:00pm – 3:00pm	System Office, Room 206
Tuesday, September 26, 2017	1:00pm – 3:00pm	Via WebEx
Tuesday, October 3, 2017	1:00pm – 3:00pm	System Office, Room 206

## CSCU INSTITUTIONAL RESEARCH/ASSESSMENT: SITUATIONAL ANALYSIS

As per the Higher Education Act, each institution is required to have a Program Participation Agreement that authorizes the distribution of federal financial aid to students. Each CSCU institution is required to report specific information to the National Center of Educational Statistics, via the Integrated Postsecondary Education System (IPEDS) including information on employees, students, finances, and student financial aid. In addition to complying with annual IPEDS reporting requirements, institutions that distribute federal financial aid must also be accredited by a regional accrediting agency; in this case, it is the New England Association of Schools and Colleges (NEASC). As part of the accreditation process NEASC requires that each institution assess student learning, complete the E-Series and Data First Forms, and undertake appropriate institutional planning and evaluation activities supported by institutional research (see: NEASC Standards Two: Planning and Evaluation, Four: The Academic Program, Five: Students, and Eight: Educational Effectiveness).

The CSCU institutional research/assessment community has been called upon to overhaul basic business functions, to reduce costs, to enhance decision support, and to put investments into places that enhance student success. At the same time, there is a growing demand for information among both internal and external stakeholders. CSCU leaders, as well as students, faculty, advisors, and enrollment managers need information that goes beyond traditional measures of activity such as enrollment and credit hour production, to better understand the conditions that produce student success, including the connection between resource use and student outcomes. Other constituencies want to know more about Connecticut students, beginning with their K-12 preparation, and continuing through their workplace performance. At the accreditation level, NEASC is requiring extensive information on student achievement, as evidenced by the new Educational Effectiveness Standard.

Connecticut higher education is going through a period of rapid change, faced with an imperative to increase student access and success without diluting quality in the context of real financial constraints. CSCU leaders need to meet an unprecedented public demand for information while also doing more with data to improve performance within our institutions.

Against this backdrop of growing demand, our IR offices—many with a single staff person—are at times challenged to keep pace. A report published by the Institute for Higher Education Policy (2016) states, “Institutions with fewer FTE IR staff generally had less flexibility to use data beyond required state, system, federal, and accreditor reporting.” Many IR offices associated with CSCU institutions are operating at full capacity. Given the demands for data collection and report preparation, there is little time to attend to deeper research, analysis and decision support. The capability to provide more in-

depth analyses is needed to help management guide scarce resources to where they will have the most positive effect.

The pages below describe a new organizational structure for producing institutional research, assessment information, and providing a higher level of decision support. By pooling our resources, we have an opportunity to achieve more.

"The whole is greater than the sum of the parts." (Gestalt psychologist Kurt Koffka)

## CRITICAL SUCCESS FACTORS RELATED TO THE IR/ASSESSMENT CONSOLIDATION

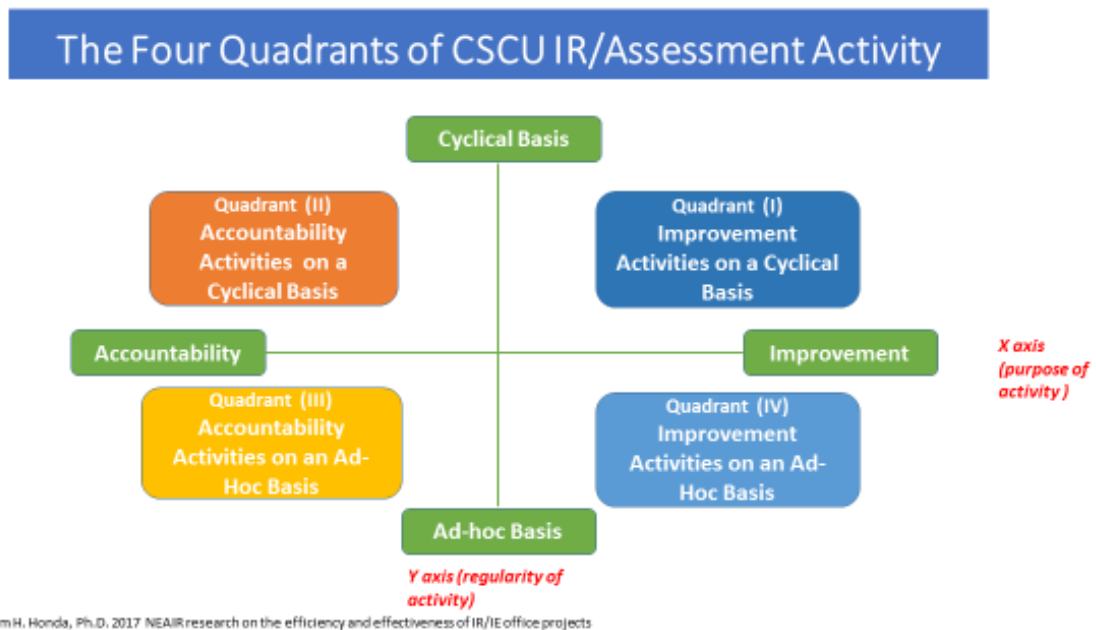
Committee members believe that CSCU leadership must understand the following critical success factors. If each of these issues are not managed well, there is a risk that the initiative will not reach its full potential.

1. In both the 4-year and 2-year components of CSCU, the state-of-the-art data warehouse currently under development will be necessary, but is likely to take a number of years and resources to complete. A sustained priority is needed by key leadership.
2. Expanded data access privileges for the staff will be necessary, as well as training for an improved tool for preset queries, i.e. Web Focus or other tools with extended IT support.
3. In order to maintain an IR/Assessment operation at a cutting edge level, continued professional development for all staff will need to be a priority.
4. These recommendations, for example any future campus reassignments, may have union ramifications.

## CURRENT IR ACTIVITIES ACROSS THE SYSTEM

IR activities occur on two dimensions. First, IR projects can be classified by the regularity of the activity (cyclical/routine or ad-hoc). The second dimension shows the purpose of the activity (accountability vs.

improvement) – (see graphic below).



Points of consensus within the Committee:

- Cyclical/routine projects plus the development and maintenance of data marts tend to be those that are common activities across all institutions (Quadrants I and II). Each campus is presently doing these activities independently.
- Assessment information needs primarily reside on the Improvement side (Quadrants I and IV), for instance, the compilation and reporting of Taskstream/TK20 information. Any new IR/Assessment organization should play a major role in producing and analyzing assessment information; more on this is provided below. However, assessment of student learning outcomes and evaluating academic program quality is, and should remain, a responsibility of the faculty with IR support as needed. In some CSCU institutions assessment is coordinated by IR staff, while in others the coordination is done by faculty.
- Service from an IR professional on each campus is essential, particularly for ad hoc research assignments and their intimate knowledge of their campus' unique programs, people, and culture.
- No consensus was achieved when trying to determine where the highest percentage of time was presently being devoted – common or ad-hoc activities.

---

## CURRENT MODEL/PROCESSES

Connecticut State Universities (4) and Charter Oak State College (1) –

Each 4-year institution has an office charged with IR activities; in some cases the same office coordinates or is directly involved with assessment. Each IR/Assessment office engages separately in common activities because they are distinct institutions and their databases are separate and distinct. Each of the four CSUs operate with a unique instance of BANNER, with substantial differences in those instances. Charter Oak uses another system, JENZABAR.

### **Connecticut Community Colleges (12) –**

In all colleges there is an office charged with IR activities. The majority of IR personnel are providing extensive support to the institution's assessment activities. Each IR/Assessment office has engaged separately in common activities, because they are distinct institutions. However, they all draw data from the same database (BANNER), and this provides an opportunity to conduct common activities in a shared resources environment.

---

## **REALTIONSHIP BETWEEN THE PROPOSED IR ORGANIZATION AND ASSESSMENT INITIATIVES**

In its discussions the Committee struggled with envisioning IR's role in assessment activities in the new consolidated unit. A number of questions remain unanswered at this point, and answers to those questions would guide the credible design of an appropriate assessment role for the unit.

Assessment planning will be part of academic planning as a next phase of work in community college consolidation. In the meantime, the consensus of the Committee is that we stand ready to provide any data support and/or coordination as necessary.

The value of predictive analytics and data mining are essential. Higher level tasks such as projecting enrollment yields and retention rates within key prospective and current student subpopulations, strategic leveraging of extremely limited financial aid funding, identifying student experiences that produce beneficial outcomes, modeling alternative scenarios examining their impact on enrollment and revenue, establishing analytically-driven admissions application targets to support enrollment and revenue objectives, benchmarking the institution against national and peer database and other environmental scanning aligned with key performance indicators identified by the campus are critical to student success.

## SUMMARY OF STRATEGIES

The steps described below will produce:

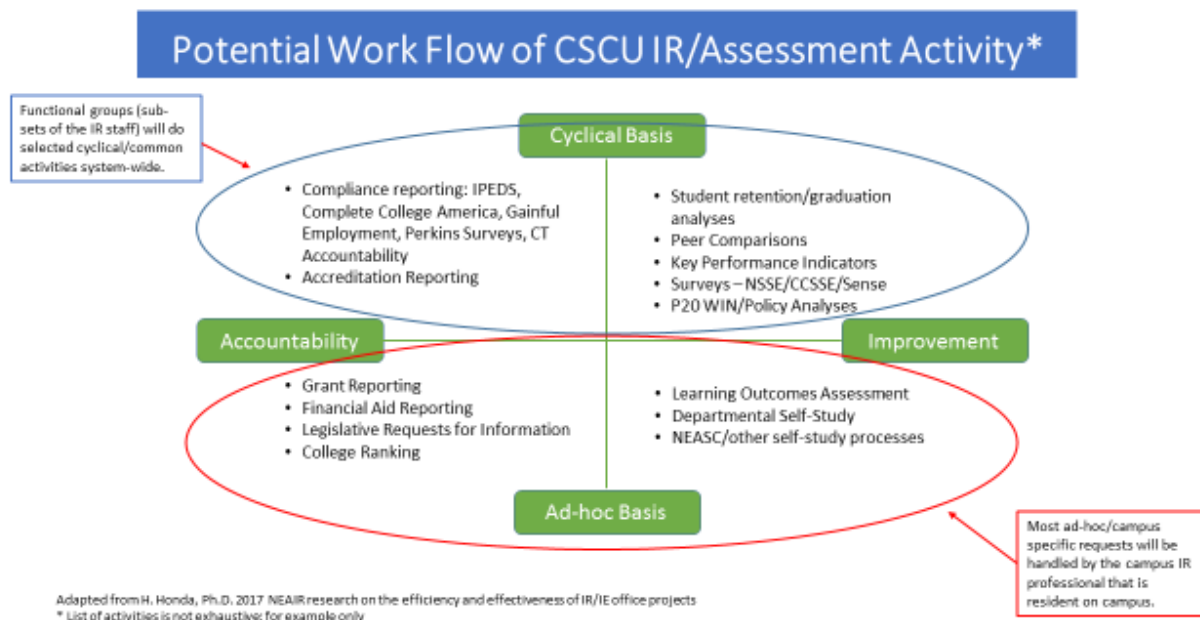
- A centralized community college institutional research function which provides support to each campus.
- A new era of data governance and report standardization for all CSCU institutions; and,
- A distributed research function.
- Value-added management information for institutions and enrollment management initiatives, as well as system-wide and state policy issues.

## RECOMMENDATIONS RELATED TO CHARGE: DEVELOP A HYBRID ORGANIZATIONAL MODEL

The main charge given to the IR/Assessment Committee is to develop a hybrid organizational model, a structure that incorporates excellence teams, but allows IR professionals to continue to deliver service associated with the unique needs of their specific campuses.

### POTENTIAL INSTITUTIONAL RESEARCH/ASSESSMENT WORK FLOW

Examples of common functions appropriate for centralization, and those that would remain campus-based.



## COMMUNITY COLLEGES

While IR professionals across the 12 community colleges have a long history of informal cooperation, the formal integration of IR/assessment activities across the system has been limited. A comprehensive institutional research function spread across a single college with multiple campuses could increase efficiency while encouraging a more comprehensive and consistent approach to producing data-based management information. This structure will allow on-campus research staff to continue to meet unique local needs, while common cyclical activities will be performed by small functional teams. Sharing the burden of common activities will allow campus-based staff more time for in-depth and specialized analyses that inform and support effectiveness efforts in areas such as student advising, TAP, PA12-40, etc. Ultimately, increasing the efficiency of IR activities and processes will contribute to the efficiency of the entire system.

---

## FOUR-YEAR INSTITUTIONS

Each of the four-year institutions (CSUs and COSC) is charged with a unique and different mission as to how best to serve the state of Connecticut, and each is required to report specific information to the National Center of Educational Statistics, via the Integrated Postsecondary Education System (IPEDS). As mentioned above, each has a separate data system. Consequently, a shared resource opportunity is less viable than the situation within the community colleges. The ability to have IR professionals at one CSU, for instance, accessing and creating common reports as suggested in the schematic above for the other CSU institutions is limited significantly. There are, however, some opportunities to gain efficiencies through increased collaboration. For example, providing the CSUs with access to the CSCU IR Repository which contains common/standardized data elements for all CSU students and courses would allow limited reporting across the four institutions to be done via this one data resource. This would allow IR professionals from one CSU to report on data for another CSU, if the latter was short-handed. Including COSC in the IR Repository is another potential opportunity to integrate data analysis capabilities.

---

## HOW WILL THIS WORK?

### For the community college campuses –

- All IR professionals would be part of the same staff, and have a reporting line to the CSCU Office of Research & System Effectiveness, and maintain a strong dotted-line (communication) with their respective campus leadership.
- IR professionals would have assignments in one or more functional/excellence teams (see examples of teams below). These teams of two or more individuals would have the appropriate access to BANNER and IRDB, and do the cyclical/routine tasks heretofore done by 12 offices.
- It is envisioned that some ad-hoc campus-specific requests, such as labor market data or alumni marketing lists, could be directed to the appropriate functional/excellence team; thus freeing up IR professionals on campus to provide for other tasks unique to local needs.

### For the four-year institutions –

- Given that the four-year institutions presently do not work off of a common database, altering their current reporting relationships would be impractical. However, the four-year staff will be required to participate in a new stronger dotted-line (communication) relationship with the CSCU Office of Research & System Effectiveness.

- The work of functional/excellence teams has two levels. First, most teams will be responsible for creating data-based products, for instance reports, data tables and visualizations, etc. Secondly, other teams will engage in creating “thought products.” That is, establishing data governance policies and procedures, developing Key Performance Indicators, designing system-wide research, as well as other activities that will emerge. At this second level, four-year staff will participate in separate functional/excellence teams that can convene with their community college counterparts as is necessary.

---

## POTENTIAL CSCU FUNCTIONAL/EXCELLENCE TEAMS

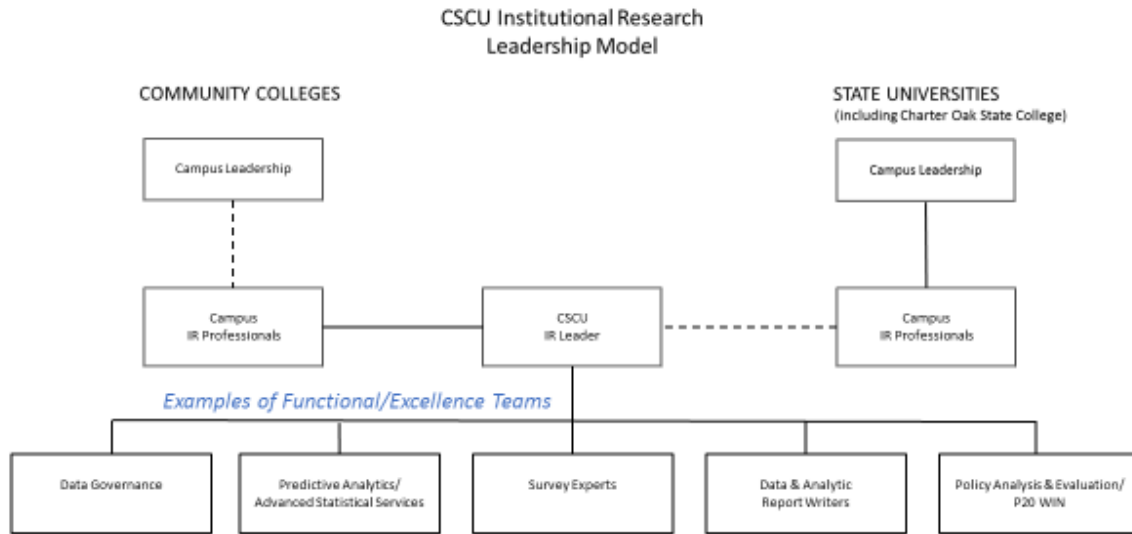
The following are some recommendations of functional/excellence teams that the committee considers necessary. However, these should not be considered the only teams that are ultimately deemed necessary for implementation or even after:

1. Data Governance Team – This team is responsible for ensuring high quality data in the present and future databases; including populating a single data warehouse (or data marts) where frozen data from all institutions will eventually reside.
2. Data Report Writers – Technical writers that produce and maintain scripts/ queries/ data blocks to produce numbers for “standard” reports that are requested on a regular basis.
3. Analytic Report Writers – Analytic writers that produce illustrated system and campus-specific reports with findings and implications. This team also pulls the data together for a variety of accountability reports.
4. Survey Experts – Manage and administer CCSSE, SENSE, NSAR and other student surveys, Graduate Surveys, Employer Surveys, and Perkins Web Survey. Develop, administer and analyze surveys for special initiatives.
5. Policy Analysis & Evaluation/P20 WIN – Will work to inform the formulation of higher education policy and provide analyses that evaluate the effectiveness of existing policy; also support connections between CSCU and major policy groups such as SHEEO, NASH, Complete College America, Jobs for the Future, and Achieving the Dream. The Team will support the program manager for the Statewide Longitudinal Data System (P20 WIN - the Preschool through Twenty Workforce Information Network) to leverage the utility of this valuable data resource.
6. Predictive Analytics/Advanced Statistical Services – Predictive analytics and other technical tools, such as dashboards, will be developed by this team to provide decision support to enrollment management, student advisement, policy evaluation, and a variety of student success initiatives.
7. Data Support for Various Campus Offices – Examples are Continuing Education – non-credit marketing lists, WIOA reporting, Development - Alumni marketing lists, HR - Affirmative Action Plan data, and Financial Aid – Max Hrs., NotSAP, etc.



---

## PROPOSED ORGANIZATIONAL STRUCTURE



### IDENTIFY TECHNOLOGY, TRAINING SUPPORT AND OTHER RESOURCES NEEDED TO FACILITATE STREAMLING PROCESSES

These recommendations are heavily reliant on information technology and resources. Although the system has made substantial purchases of appropriate tools (see item 3 below) that will be useful over the next several years, many of these tools are not yet available for use. Until such resources are fully implemented, much of the resource sharing outlined above will be sub-optimal.

#### Recommendations:

1. Community college IR staff will need access to the Banner and the IRDB beyond their campus. This means IT will need to work with ORSE to implement new access privileges.
2. In both the 4-year and 2-year components of CSCU, a state-of-the-art data warehouse will be necessary, and is in initial planning stages now, but is likely to take a number of years and additional resources to complete. In the interim, the IRDB (institutional research database for CCs) and the IR Repository (system office IR database for CSUs) will need enhancements. We need IT to make this a priority.
3. Concentrated training with Tableau, Web-Focus, Argos, and Taskstream/TK-20.