Proposed Work Scope for Research and Educator Engagement Strategy: Longitudinal Data Analysis Subcommittee of the College Access and Success Work Group

In a recent issue brief, Nicole Yohalem and colleagues at the Forum for Youth Investment use the analogy of "insulating the leaky education pipeline" to underscore the urgency of the current national crisis in educational attainment. They recite the familiar litany of negative outcomes: three-fifths of community college students nationally are required to take remedial math and reading courses before advancing to credit-bearing coursework; fewer than one-fourth of these students graduate within eight years; three-fifths of 4-year college enrollees graduate within six years. The authors conclude that reversing these trends will require substantial new investments and policy changes in the following areas:

- **Coordination**: Better alignment between secondary graduation standards and post-secondary entrance requirements, coordinating assessments, and increasing exposure of high school student to collegiate work and expectations
- **Support**: Intensifying efforts especially on the part of community colleges to adopt student-centered approaches to learning, re-examining the role of remedial education, and providing additional social supports for struggling students
- **Data**: Aligning or unifying K-12 and higher education data systems and other pipeline elements such as public health, housing, transportation, community-based providers, etc.

To address the crisis in educational attainment here in Rhode Island, the Office of Higher Education and the Department of Elementary and Secondary Education have co-convened a working group on College Access and Success. The full Work Group has in turn established four working subcommittees to examine different aspects of the challenge and develop effective responses based on sound data and best practice. The Longitudinal Data Analysis (LDA) Subcommittee identified the following objectives at its first meeting:

- Identify effective practices and develop strategies to sustain and expand college access and completion programs in Rhode Island
- Utilize the statewide longitudinal data system to identify key determinants of successful transition of students from high school to college
- Conduct collaborative research by capitalizing on the collective expertise and resources of LDA member organizations: Rhode Island Office of Higher Education, the Rhode Island Department of Elementary and Secondary Education, higher education institutions, K-12 representatives, General Assembly staff, Providence Plan, Rhode Island Kids Count, etc.
- Engage educators from the K-12 and higher education sectors in the analysis of data and interpretation of findings
- Use outcomes of the process to inform changes in state policy and institutional practice

Based on outcomes of the first meeting of the LDA we present for discussion the following first-year scope of work:

1) **Set research priorities.** The LDA is committed to supporting three "pilot studies" as its first phase of work. With assistance from the Providence Plan's Data Hub, studies will examine the following major areas of interest:

- Degree to which NECAP and SAT scores predict successful transition to credit-bearing, college coursework (the prediction study/data story)
• Efficacy of various student support services on college access and retention (the efficacy study/data story)
• Retention/completion trends for students transferring from CCRI to a four-year institution (the transition study/data story)

2) Develop "data stories". As noted above, staff of the Providence Plan together with other members of the LDA (study group) will create "data stories" that correspond to the key analytic questions surfaced by the full sub-committee. For example, the "prediction data story" will examine the degree to which the following factors predict various degrees of college success:
• NECAP scores in the content areas of reading, writing, and mathematics.
• SAT composite and sub-scores in the content areas of reading, mathematics, and writing.
• Correlation between ACCUPLACER results and NECAP scale scores at each of the four performance levels (Substantially Below Proficient, Partially Proficient, Proficient, and Proficient with Distinction).
• Disaggregated analysis of dependent variables (including semester 1 and 2 GPA) by racial/ethnic minorities, special education, income status, gender, age, and geographic distributions (e.g., suburban, urban ring, urban school districts) -- for each institution.

The full subcommittee (or Work Group?) will examine the data stories and propose additional analytic questions and implications. The other purpose of the subcommittee review will be to fine-tune the agenda for the constituency group meetings -- i.e. "data summits".

3) Engage key constituencies in interpretation of data stories. Again, the success of this project hinges on the sustained engagement of key educator constituencies from the K-12 and higher education sectors. Representatives of those who work closest with students will be central to the interpretation of data stories and in mining implications for secondary and post-secondary practice and policy. Below we present an agenda scenario for a typical constituency group session:


Part 2: Presentation of data story -- research team presents PowerPoint of findings from longitudinal data analysis on core questions -- see pilot studies; clarifying questions (30 minutes).

Part 3: Constituency groups meet to discuss core questions -- Implications of these findings for your practice? Other analytic questions you'd like to see examined? Data system design -- information, functionality, power (60 minutes).

Part 4: Group reporting and analysis: Might be useful to let the staff present major trends from a new "instantaneous synthesis" tool we're developing -- then get the tables to elaborate and refine (45 minutes).

Part 5: Closing -- Report on the use of these findings; reporting back; ultimate design of programs, policies, data systems (15 minutes).

Future Work. Over time the LDA will build on the base of knowledge and products created in this first year of research and engagement. Through the ongoing efforts of College Access and Success work and Race to the Top, the LDA will also play an instrumental role in the design and piloting a statewide college readiness indicator and response system.