Pre-Institute Data Exercises

Due Wednesday, December 15, 2022

The following data exercises will help to inform the Rural Pathways Institute on February 8-10, which will include activities to guide college teams and community partners in examining data on skills builders--adult learners who are taking one or two career education courses--and discussing the implications of these data for college redesign. The following document describes the data exercises your college must complete prior to the institute. WestEd and the University of Michigan will lead a pre-work webinar for team leads and institutional research staff on Zoom on October 31 from 3-4 pm ET to review the data exercises and answer any questions you may have.

Part 1: Identify skills builders and skills builder pathways at your college

A. **Identify skills builder students, characteristics, and courses.** Skills builders can be identified by your institutional research office. Detailed instructions for the analysis are available below. Document your findings in the Excel file provided for your college.

B. **Identify relationships between skills builder courses and awards.** Share the information from the skills builder analysis with faculty and deans in the departments/metamajors that have more than ten skills builders. Ask them to identify how common skills builder course sequences relate to certificates and degrees at your college. Document your findings in the same Excel file as your skills builder analysis.

Part 2: Review information to support discussion on ways to expand skills builder participation and encourage completion of related degrees and certificates

C. In advance of the February institute, you will receive a customized report that identifies possible underserved populations that could be recruited into your skills builder pathways, how your skills builder courses relate to your completion patterns as identified by CCRC, how your college's skills builder courses relate to high-demand skills and jobs in your region, and considerations for ensuring your skills builder courses provide an onramp for economic mobility.

For questions on these data exercises, please contact Jennifer May-Trifiletti at jmaytrif@umich.edu.

Email the completed Excel file to Sarah Cale at sarah@ncii-improve.com by Wednesday, December 15, 2022.

Identifying Skills Builder Students, Characteristics, and Courses

Understanding Skills Builder Students

Skills builders are a distinct group of community college students who:
- Enroll in community college for a short time, typically 1 to 2 semesters
- Take comparatively few course credits (units of for-credit coursework), often attending part-time
- Take classes that are exclusively or mostly in career and technical education (CTE) fields
- Are highly successful in their coursework, with course completion rates and GPAs that tend to be much higher than the overall community college student population

Research by the University of Michigan has shown that skills builders:
- Account states, they account for between 1-in-7 and 1-in-9 new community college entrants
- Are older, on average, than the overall community college student population
- Are disproportionately (but not exclusively) white men
- Usually leave college without a credential and without transferring to a four-year institution
- On average, they reap meaningful earnings gains from their short time in college

Identifying Skills Builders

The University of Michigan conducted a robust analysis of statewide administrative data sets from California, Colorado, Ohio, and Michigan to identify skills builders. The research team found that skills builders could be identified with a high level of accuracy by focusing on four behaviors: duration of enrollment in community college, total number of credits attempted, proportion of credits in CTE fields of study, and credit course success rate.

For more information, reference the following recently published journal article:

Bahr, P. R., Chen, Y., & Columbus, R. (in press). Community college skills builders: Prevalence, characteristics, behavior, and outcomes of successful non-completing students across four states. Journal of Higher Education. https://doi.org/10.1080/00221546.2022.2082782

Methodology for Identifying Skills Builders
For the purpose of this homework assignment, identify a cohort of students who enrolled in 2016-17. All students in the cohort should meet all of the following criteria:

- *Prior attendance of a community college:* The student has **not** previously attended your institution or (to the extent that it can be determined) any other community college, as indicated by administrative records or self-reports of prior community college enrollment or community college awards
- *Prior attendance at other institutions:* The student **may** have attended a less-than-two-year institution, private two-year institution, or four-year institution previously, and even may have been awarded a degree by those institutions, but the student was not enrolled in an education institution in the year prior to enrolling in your institution
- Dual enrollment: The student was **not** a dual-enrolled high school student when first enrolling in community college

Focusing on the longitudinal records of the student cohort, skills builder students meet **all** of the following criteria:
- Enrolled in community college for ≤ 6 academic semester terms
- Attempted ≤ 35 semester-equivalent credits
- Proportion of total credits that were in CTE fields of study ≥ 0.65
- Overall credit success rate ≥ 0.79, where courses completed with a grade of "D" or better or "Pass" are considered successfully completed

Note: if you find that you have very few skills builders who first enrolled in 2016-17, expand your base cohort to include students who first enrolled in 2014-15, 2015-16, and 2016-17.

Among students who meet all of the skills builder criteria, disaggregate results by the following criteria:
- Academic discipline (such as by department, metamajor, or program in which most credits were taken)
- Prior academic experience (first time, some college, prior award)
- Educational goal
- Median age as of October 1, 2016
- Race/ethnicity
- Gender

For academic disciplines in which there are 10 or more skills builder students, identify:
- Common courses taken by skills builders