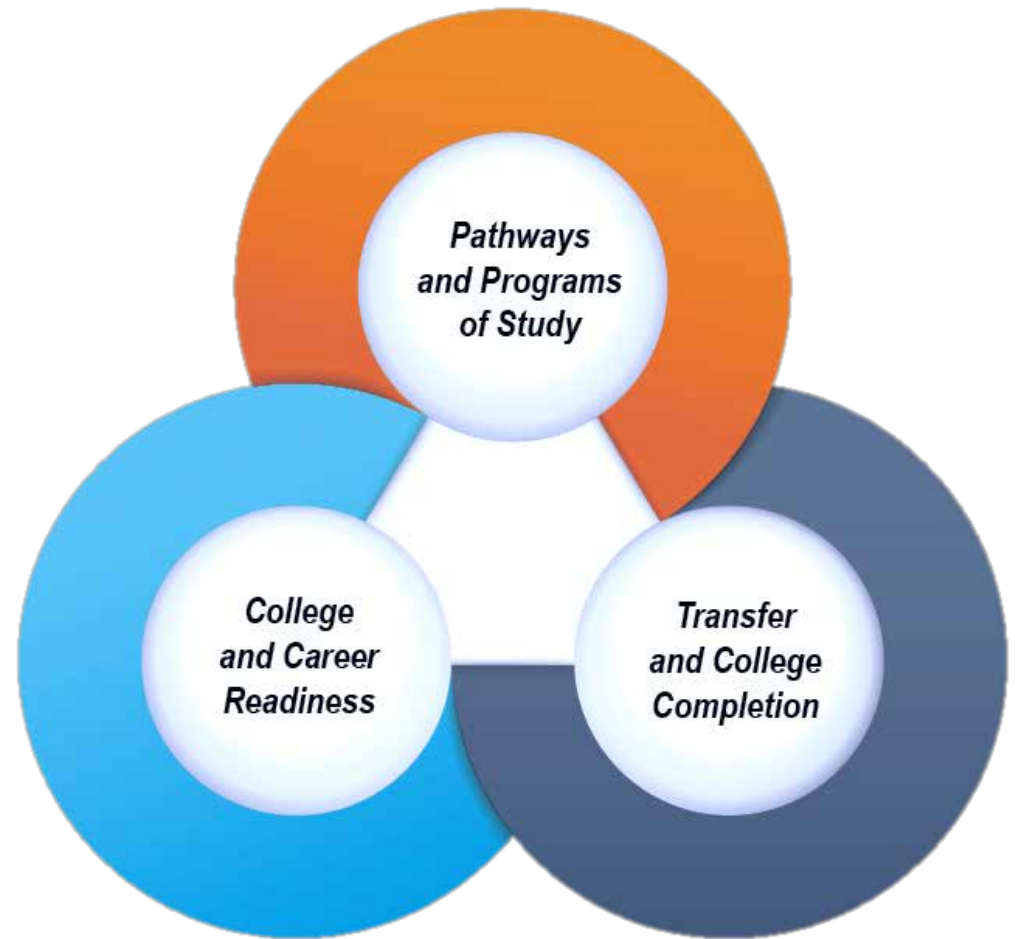




What Programs are These Students in? Alternative Methods for Measuring College Retention, College Completion, and Labor Market Outcomes

OCCRL's Mission

OCCRL researchers study policies, programs, and practices designed to enhance outcomes for diverse youth and adults who seek to transition to and through college to employment.



Strengthening Pathways for All Students Through Research and Leadership

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When & Why
assign programs of study

01

The Framework for Today's Presentation

02 Assignment in a
Complex & Fluid System

Methods
for assigning programs of study

03

04 Strengths & Limitations
of each method





Programs of study are sequences of courses that incorporate a non-duplicative progression of secondary and postsecondary elements, which include both academic and career and technical education content (Nicholson-Tosh & Bragg, 2013).



The *When & Why* of Assigning Programs of Study

Retention

- Non-engagement with program of study coursework (Jenkins & Cho, 2012).

Completion

- Varies by career cluster (from 1% to more than 50%, Zeidenberg & Scott, 2011).



The *When & Why* of Assigning Programs of Study

Variations in **labor market earnings/gains** by career cluster / field of study, and programs of study.

- Bosworth, 2010;
- Compton, Laanan, & Starobin, 2010;
- Dadgar & Weiss, 2012;
- Maguire et al., 2012;
- Van Noy & Jacobs, 2009;
- Van Noy & Weiss, 2010, 2012



Assignment in a Complex & Fluid System



Observational studies of a fluid and dynamic educational environment where change is temporal, non-linear, and non-uniform.

Complexities related to:

- Programs of study
- Students engagement with programs

Complexities related to the programs of study

📍 Embedded, stacking, and “build your own” programs of study

📍 Temporal changes in programs, program completion requirements, and non-sequential course numbering

📍 Foundational, general studies, and other common courses



Complexities Related to Students Engagement of Programs

 Student Intent

 "Missing" Credentials

 Transfer and Prior Learning Credits

 Concurrent Enrollments:
Multiple Programs
Multiple Institutions

Method 1: Students Declared Program of Study

Postsecondary institutions routinely collect data on students' educational intentions (declared major and/or program of study)



Limitations:

- Is it a program of study or field of study?
- Reflects highest level of intended attainment.
- Is often a static over overwritten.
- May not accurately reflect students intent.

(Adelman, 2005; Bailey, Leinbach, & Jenkins, 2006; Gardenhire-Crooks, Collado, & Ray, 2006, Zeidenberg & Scott, 2011).

Method 2: Course Taking Patterns

1. Assign students to the field they took the most courses towards (Jacobson, Mokher, 2010; Stuart, 2009).
2. Threshold of courses a) 12 credits single subject = concentration (Jenkins & Weiss, 2011), 3 course threshold (Jenkins & Cho, 2012).
3. Cluster students based on course-taking behaviors (Zeidenberg & Scott, 2011).
4. Match non-completers to completers coursework (Zeidenberg, Scott, & Belfield, 2015).

Method 2: Course Taking Patterns - Limitations

1. Do not allow for multiple programs of study simultaneously
2. Assign to broad field of study, not program
3. Retrospective assignment, requires complete course history to assign



Catalogue Courses
for all programs

01

02 Identify courses
by field of study

Identify courses
unique to programs of study

03

04 Assign unique courses
in the student record database

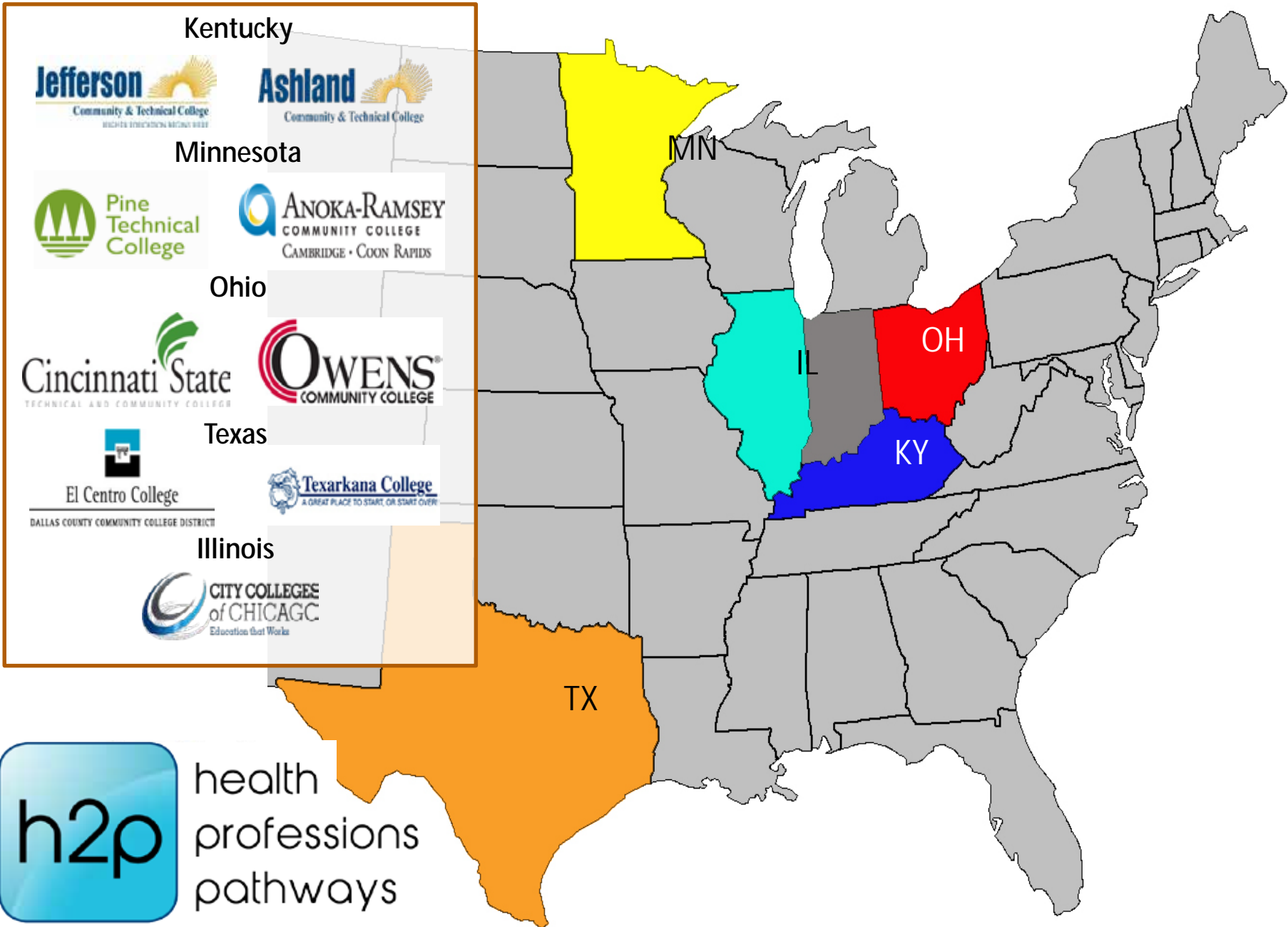
Refine & Test Assignment 05

Method 3:
Curriculum
Course Record
Crosswalk



Method 3: Curriculum Course Record Crosswalk

1. What **percentage of healthcare students** can we assign to a program of study using this technique?
2. What is the **lag** between students starting their healthcare coursework and program of study assignment?
3. How accurate is this technique in **predicting the credentials** that students will go on to complete, particularly in relation to use students' declared intentions?



Kentucky



Minnesota



Ohio



Texas



Illinois



h2p

health
professions
pathways

Method 3: Curriculum Course Record Crosswalk

Q. 1 & 2 – 8 colleges

n= 2,935 students who took health care courses at the nine H2P consortium colleges



Q. 3 – 6 colleges

n=2,403 students identified by the colleges as in health care programs at six of the nine H2P consortium colleges

Method 3: Curriculum Course Record Crosswalk

Student Level Records

- Demographics
- Course Data
- Credentials Awarded
- Declared Program of Study

Program Data

- Curriculum Plans for Fall 2014
- State and College Course Listings – where applicable

Method 3: Curriculum Course Record Crosswalk

Type 1 students with assigned POS of those who have taken technical courses

College	Student with healthcare courses	No. Assigned	% Assigned
1	310	266	86%
2	254	219	86%
3	350	248	71%
4	295	290	98%
5	308	307	100%
6	345	315	91%
7	803	667	83%
8	270	231	86%
H2P	2935	2543	87%

Method 3: Curriculum Course Record Crosswalk

Number of assigned students by terms lag between initial technical coursework and program of study assignment						
College	0	1	2	3	4+	
1	240	8	6	10	2	
2	175	15	17	8	4	
3	199	28	6	6	9	
4	218	13	30	15	14	
5	269	13	13	8	4	
6	220	27	38	18	12	
7	474	63	68	37	25	
8	173	21	16	10	11	
H2P	1968	188	194	112	81	
<p>* Term lag includes all Spring, Summer, and Fall terms regardless of if students were enrolled each term. A "0" indicates the student was assigned a POS the same semester as they took their first healthcare coursework. Healthcare coursework is any coursework provided in the department/division for students in health related programs of study.</p>						

Method 3: Curriculum Course Record Crosswalk

Program of Study Versus Declared Major

Assign POS Match	Consortium	College 1	College 2	College 3	College 4	College 5	College 6
No	159	5	55	28	5	56	10
Yes	1287	173	89	262	267	323	173
Percent Match	89%	97%	62%	90%	98%	85%	95%
Declared POS Match	Consortium	College 1	College 2	College 3	College 4	College 5	College 6
No	384	12	52	35	94	134	57
Yes	1062	166	92	255	178	245	126
Percent Match	73%	93%	64%	88%	65%	65%	69%

Limitations: Curriculum Course Record Crosswalk

1. Under assign students to higher level programs (AAS) of study in cases of stackable credentials
2. Is vulnerable to temporal changes in program course data
3. Under assign students to flexible or general education programs



Significance: Curriculum Course Record Crosswalk

1. Assignment can be done at the department, college, or consortium level
2. Students can be assigned to multiple programs of study
3. Assignment can be real time, can be used in continuous improvement/action research
4. Potentially valuable for research on pathways, stackable credentials, retention, and subgroup studies

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