

“The Platform” (ELMLP): Opportunities and Challenges – A Researcher’s Perspective

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The ELMLP

- “A relational data environment linking multiple datasets”
 - * PSIS
 - * RAIS
 - * T1FF
- Truly a “platform:” current form + future enhancements

PSIS

- Centralized PSE administrative data
- Student & program information
- Unit of observation: program-person-year
- Annual, province-by-province basis since 2009

PSIS – Program Information Included

- Institution/type
- Credential
- Program CIP code & name
- Program start date, graduation flag
- Major(s)
- Credits: cumulative to date, transferred, to graduate
- Co-op (a bit of an exception)
- More...

PSIS – Program Information *Not* Included

- Courses taken
- Minor(s)
- GPA: PSE, high school
- Distance education flag
- Class size
- Etc. – i.e. Other detailed information

PSIS – *Student* Information Included

- Birthdate
- Sex
- Mother tongue
- Immigration status/country
- Province & FSA (permanent & current)
- Indigenous/vis. min. (as reported)

RAIS

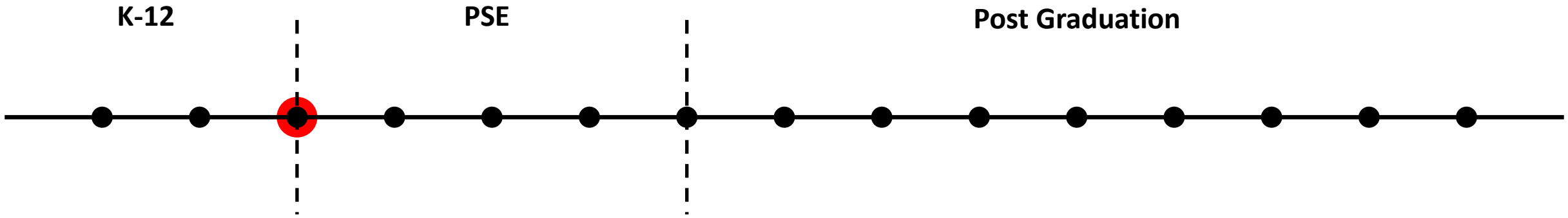
- Similar to PSIS, also from 2009
- Adapted to trades & apprenticeships
- Fewer student characteristics

T1FF: Think of Your Tax Form

- Individual-level information (and “parental” income)
- Earnings, other employment income, # T4 slips
- Self-employment income
- EI, SA & CTB
- PSE tax credits
- CPP/QPP & RPP contributions, union dues
- NAICS: main, second, #
- Province & tax prov.
- Sex & age
- # of children, family type/size

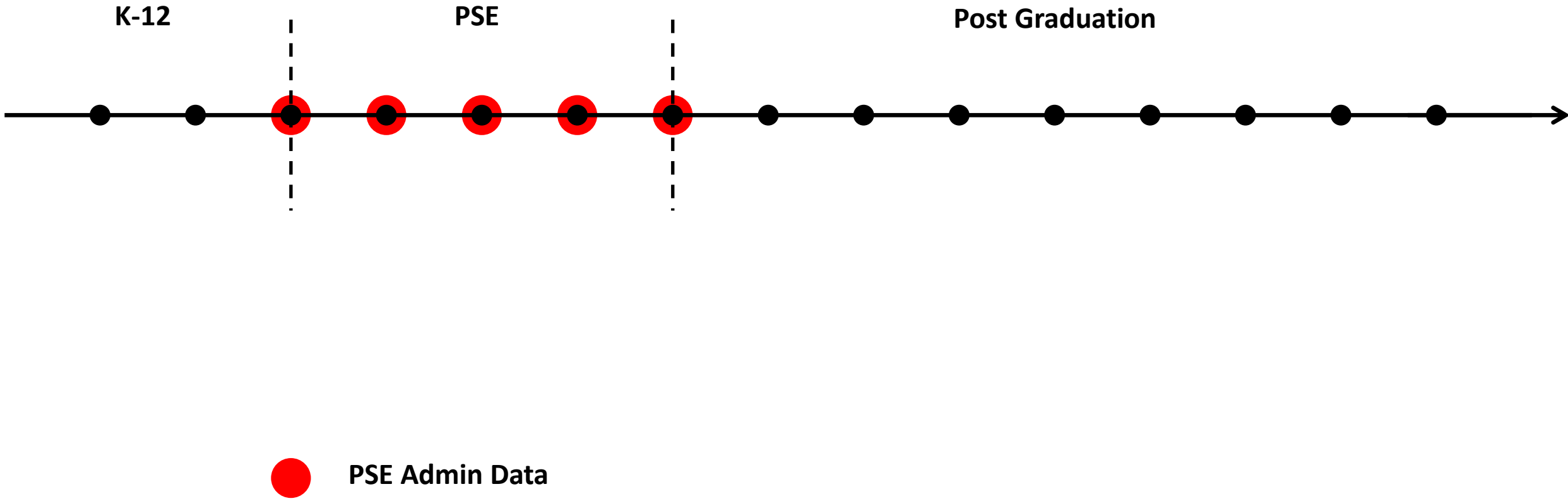
A Starter Research Agenda: A Few Suggestions/Illustrative Ideas

1. First Track Students Through PSE Using PSE Administrative Data



 PSE Admin Data

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1. PSE Experiences & Outcomes

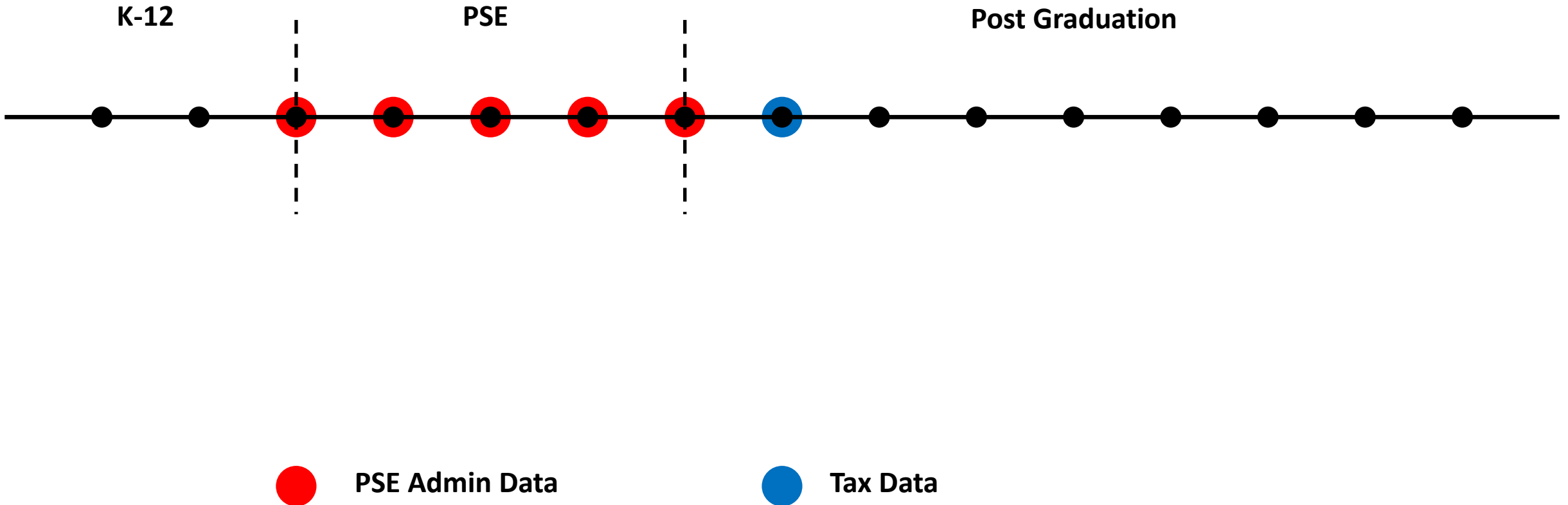
1. Start now

- Persistence, mobility, completion, pathways
- Specific schooling experiences (e.g., co-op)
- All at system level – or the researcher's choice

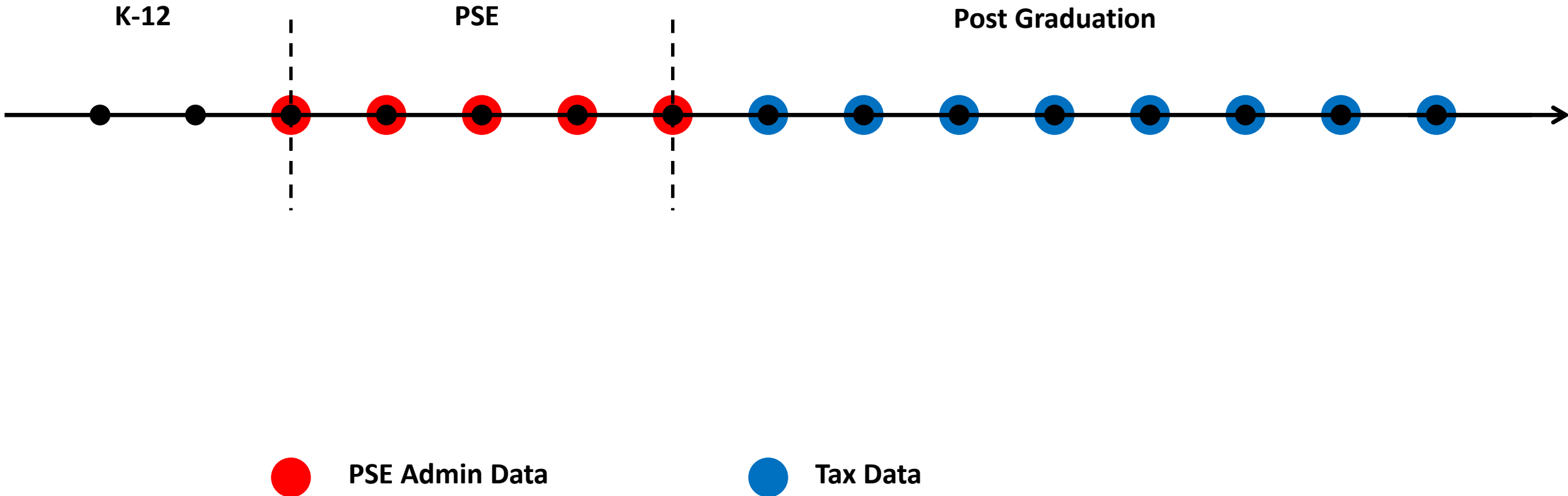
2. When more data added

- Other schooling experiences
- Performance, Engagement & satisfaction
- Skill level & development (skills!)
- What else?

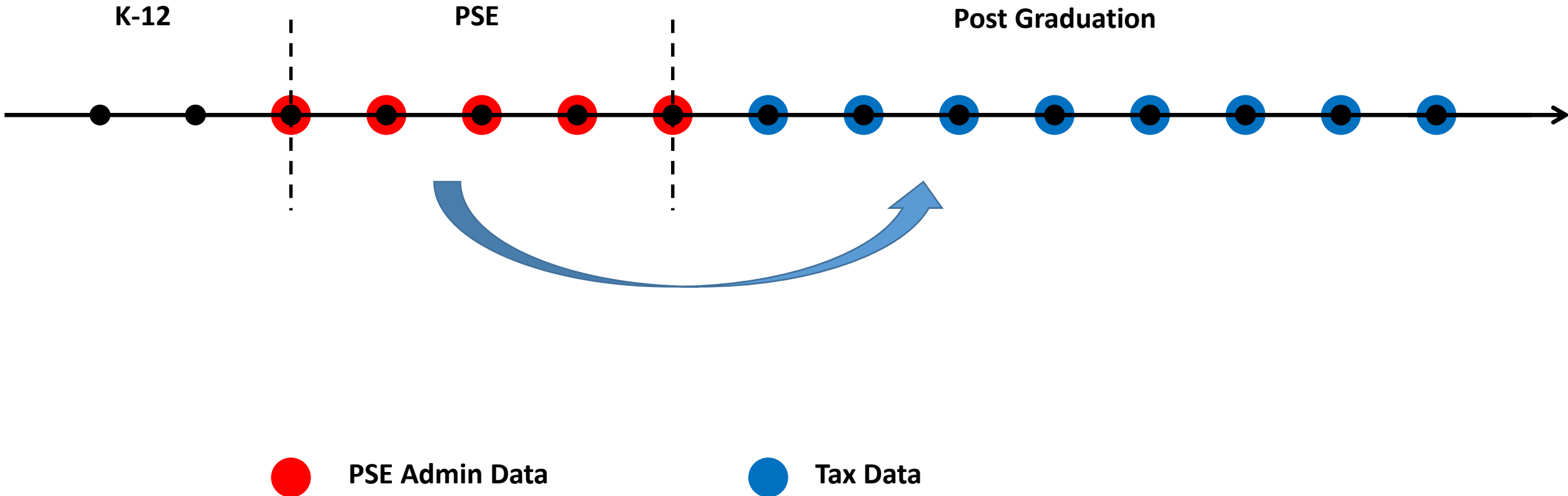
2. Then Follow Them Post-Graduation Using Tax Data



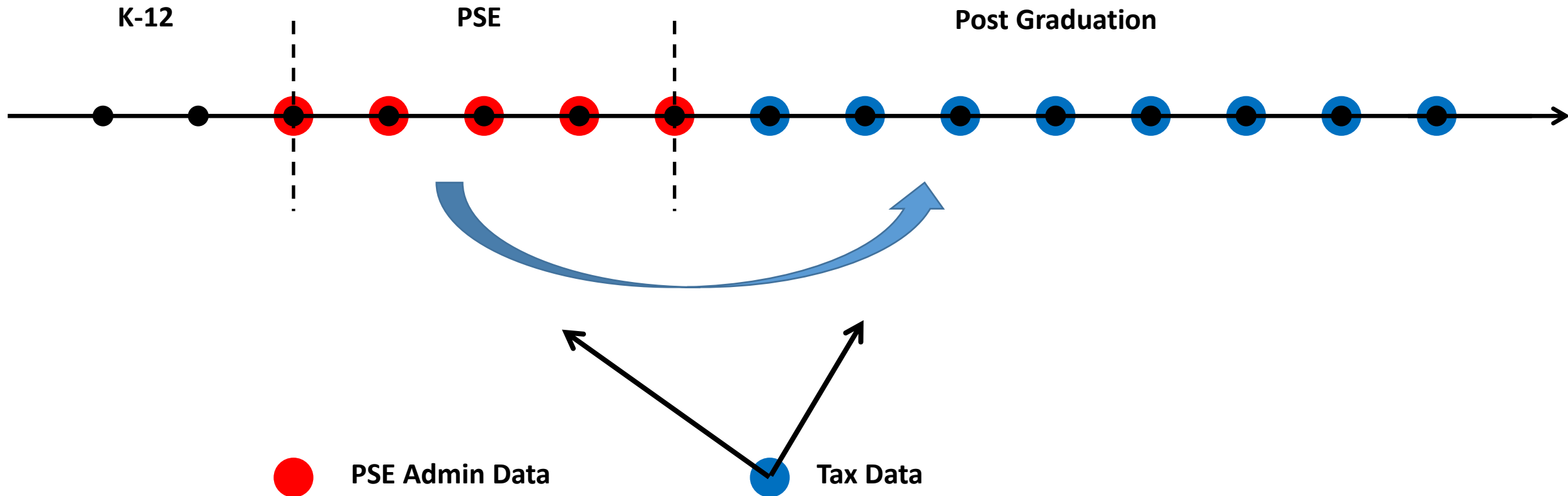
2. Then Follow Students Post-Graduation Using Tax Data



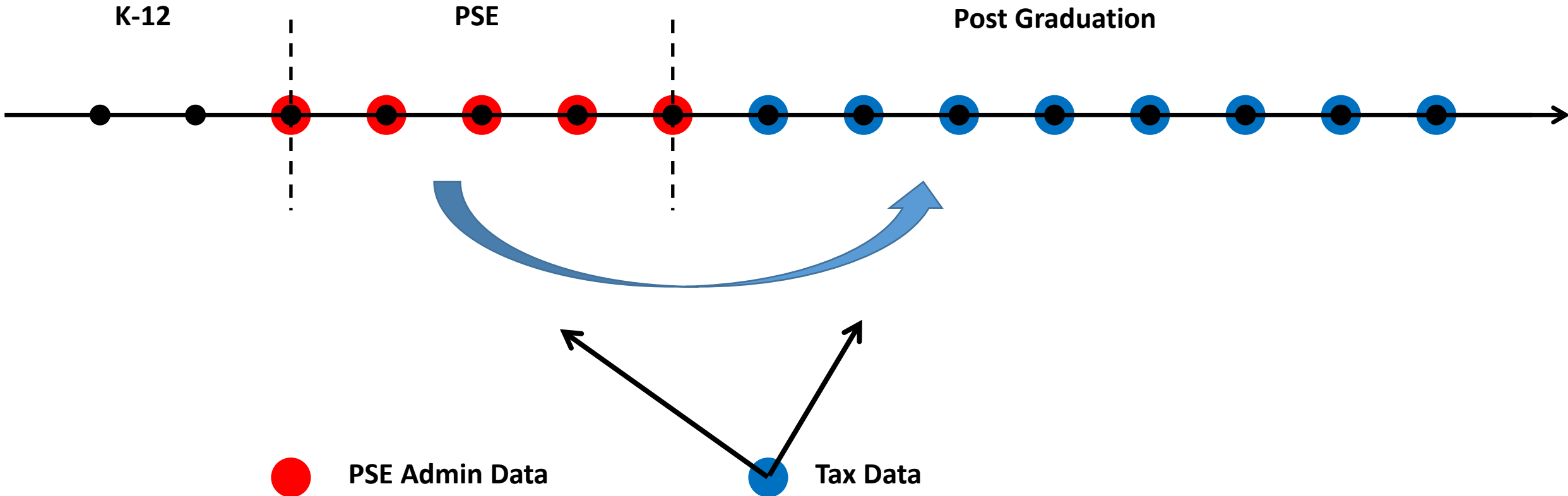
3. Connect PSE Experiences to Post-Graduation Outcomes



4. But Tax-Based Information Also for the PSE Years



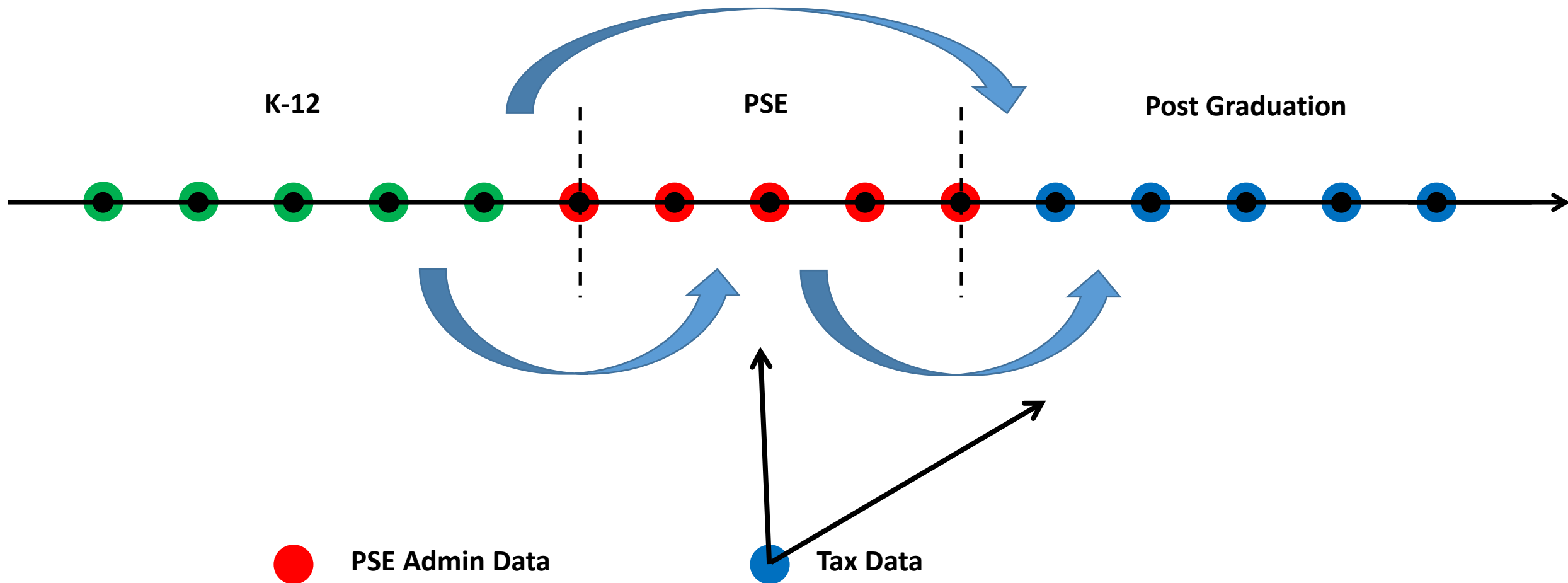
That's It - Like Never Before (National Level)



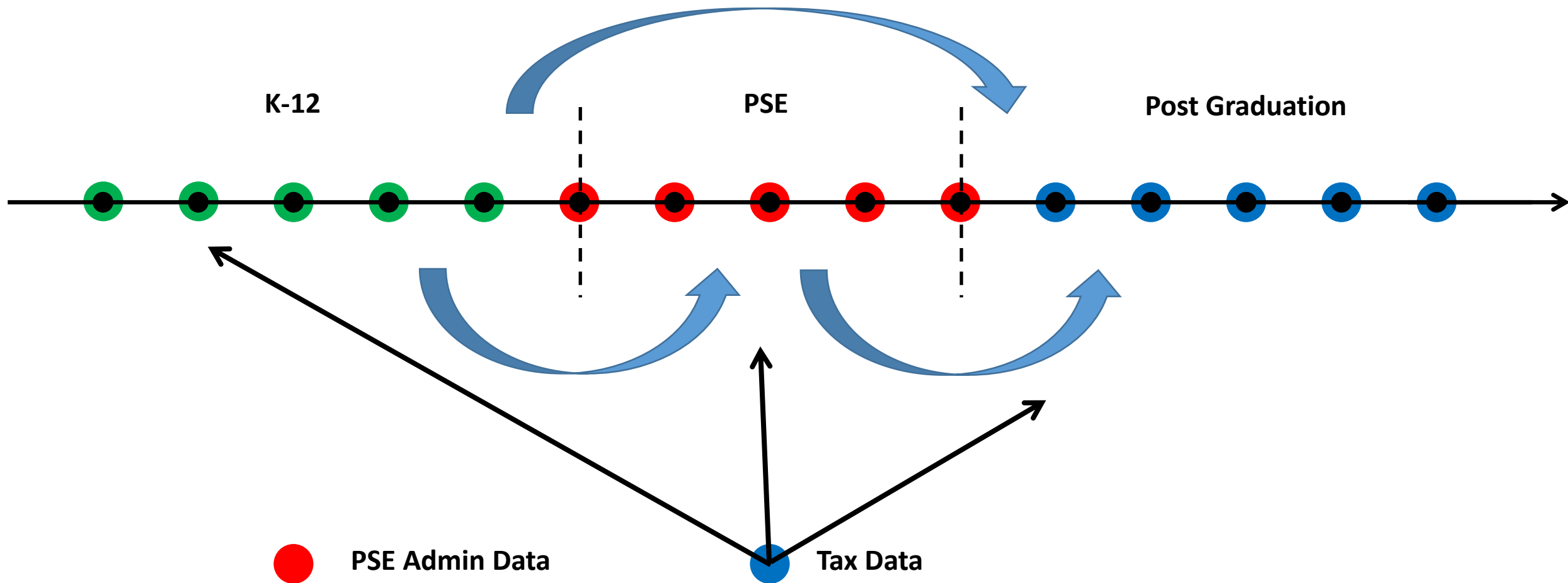
2. Post-Schooling Experiences & Outcomes

- Earnings
- Income from other sources
- Other outcomes (e.g. savings, family outcomes, loans)
- Place of residence & mobility
- Relate to
 - Student/individual characteristics
 - Schooling experiences (credential, co-op, more...)
 - Socio-economic/other background (PSE postal code)

The Big Picture With K-12

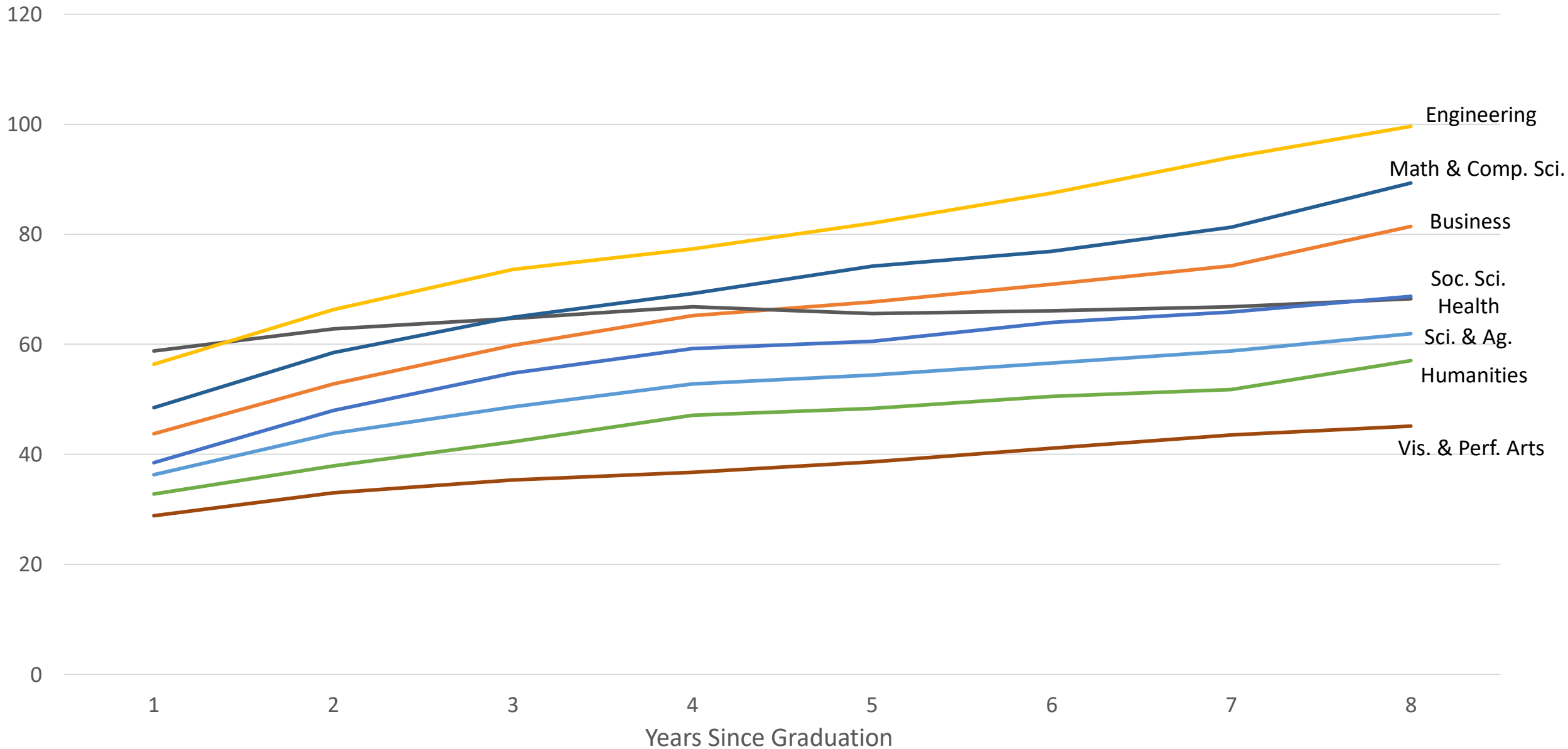


The Big Picture With K-12

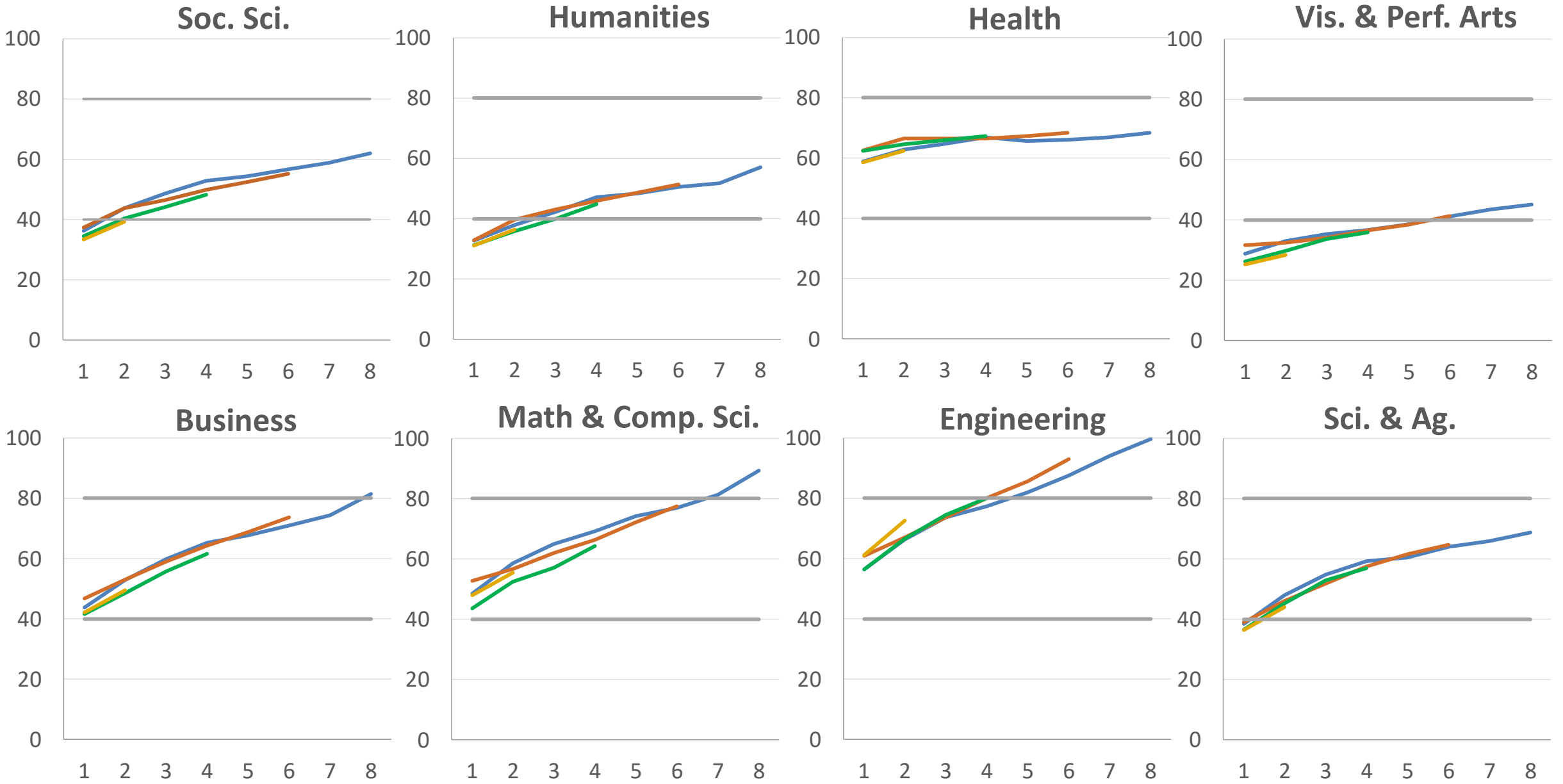


Early ESDC-EPRI project:
“Barista or Better”

Mean Earnings of Graduates by Field of Study (\$2014)



Selected Cohorts – All Areas of Study



Oh, By the Way...The ELMMLP
is Extremely Complex

Tracking through PSE is Complex

- 1 record per program each year
- Multiple programs per year possible
- Need to link programs across years
 - individual's master ID
 - credential
 - program
 - start date

Tax Data Are Also Complex

- Understand definitions/meaning of each variable
- Data not necessarily consistent over time (death code...)
- Sometimes missing data – including whole years
- Variables for analysis may need to be constructed
- Sample selection issues (e.g. earnings)
- Ultimately data are limited (e.g. wage rate, labour supply): how to use to best advantage?

PSE data complex + tax data complex =
doubly complex

Limitations and Cautions

Not everything a researcher would want

- Go with its strengths – which are unequalled
- While working around limitations



Response Rates: Incomplete Reporting

- Imputed institutions
- Variables
 - Suitable for analysis in select jurisdictions only
 - e.g., Co-op, FSA (PSIS: permanent and current)
 - Not recommended for analysis
 - e.g., Aboriginal or visible minority
 - Not included
 - e.g., current FSA from T1FF
- See documentation

General Research Strategies: Devising a Specific project

Customizing for Each Project

- Start with research question
- Identify structure of data required and build (unit of observation critical!)
- Populate with needed variables
 - PSE-based variables
 - Tax-based variables
 - Constructed variables (e.g., socio-economic status or labour market conditions from census or LFS)
- While paying attention to limitations and cautions

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The Big Picture

