CS as a Graduation Requirement: A Catalyst for Systemic Change

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CaféCS: Chicago Alliance for Equity in Computer Science
Overview:

- Impact in Chicago

- Brief history

- Group discussions on:
  1. What are key steps to build an RPP?
  2. How to leverage a pilot for institutional change?
  3. What problems follow success?
  4. What are pressing needs for teachers?
  5. What are district administrator concerns?
CS is a high school graduation requirement (2016)

Using ECS, in 72 / 93 district high schools

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Portland 2008
UCLA PD 2009
CSTA 2010
CS4HS PD 2011
NSF Funding 2012
Summer PD... 2013
CS Grad. Requirement 2014
RPP 2015
2016
2017

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CPS: 106 high schools, 113,873 students. 87% Low income, 24.6 pupils/teacher
Portland 2008 2009
CSTA

UCLA PD 2010 2011
CS4HS PD

NSF Funding 2012 2013 2014 2015
Summer PD...

CS Grad. Requirement 2016 2017
RPP

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Denotes new ECS projects managed by the ECS team for 2017-2018.

Golden, CO - CSPdWeek (5 sessions of ECS PD with teachers from all over the country)
Group Discussion

1. Please get in groups of 4-6
2. Choose time-keeper, recorder & reporter
   Shift this clockwise each time
3. Write main thoughts on your group’s poster.
   Choose one thought to report out. Don’t repeat.
1. What are key steps to building a good researcher/practitioner partnership involving teachers, university partners, and district leaders?

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1. Steps...

2. How can a pilot (including curriculum, PD, and/or coaching) be leveraged for institutional change?

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1. Steps...
2. Leverage Pilot… Relative importance
3. What are the problems you might expect, once the graduation requirement has been adopted?
1. Steps...
2. Leverage Pilot… Importance of PD, etc.
3. Problems
4. From teachers’ perspectives, what are the most pressing needs in implementing CS across a school system?
1. Steps...
2. Leverage Pilot... Importance of PD, etc.
3. Problems
4. Pressing needs for teachers
5. What are primary concerns from the school district administrator point of view?

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Lessons Learned:

1. Work both bottom-up (teachers) and top-down (district champion)

2. Be patient. It takes time to change instructional and institutional culture. For lasting results don't try to grow faster than relationships of trust.

3. Build excess teacher capacity. Coaching and ongoing supports are necessary.

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