Five Pilots, One Plane

Developing the course that delivers the AP Principles content!
The Task ...

- The Commission and the Advisory Committee have specified the content in broad strokes.
- The Pilot’s task is to express it in the fine detail of a college class ...

Rothko to Seurat
Designing the CS Principles curriculum is not as easy as the last course you designed ...
Five Campuses, Five Teachers

The pilot schools and instructors ... 
- Metropolitan State College, Denver: Jody Paul 
- UC Berkeley: Dan Garcia 
- UC San Diego: Beth Simon 
- UNC at Charlotte: Tiffany Barnes 
- U Washington: Larry Snyder 

The teachers were chosen from among the Commission and Advisory Committee Members
## Cross-Campus Comparison I

<table>
<thead>
<tr>
<th>Institution</th>
<th>Title</th>
<th>First Offering</th>
<th>Proj Enroll</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCD</td>
<td>Living in a Computing World</td>
<td>Fall (S) 2010</td>
<td>20</td>
</tr>
<tr>
<td>UC B</td>
<td>The Beauty and Joy of Computing</td>
<td>Fall (S) 2010</td>
<td>90</td>
</tr>
<tr>
<td>UC SD</td>
<td>Fluency with Information Technology</td>
<td>Fall (Q) 2010</td>
<td>900</td>
</tr>
<tr>
<td>UNC C</td>
<td>The Magic of Computing</td>
<td>Spring (S) 2011</td>
<td>30</td>
</tr>
<tr>
<td>UW</td>
<td>Computer Science Principles</td>
<td>Winter (Q) 2011</td>
<td>40</td>
</tr>
</tbody>
</table>
## Cross-Campus Comparison II

<table>
<thead>
<tr>
<th></th>
<th>Programming Language</th>
<th>Lec</th>
<th>Lab</th>
<th>Dis</th>
<th>Wks</th>
<th>Total Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MSCD</strong></td>
<td>Scratch, HTML/CSS</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td><strong>UC B</strong></td>
<td>BYOB Scratch</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>14</td>
<td>98</td>
</tr>
<tr>
<td><strong>UC SD</strong></td>
<td>Alice, Excel</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td><strong>UNC C</strong></td>
<td>Alice, possibly others</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td><strong>UW</strong></td>
<td>Processing, Python</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>50</td>
</tr>
</tbody>
</table>
All pilots need a recruiting plan ...
All pilots have a different academic goal

- UW's goal for CS Principles course:
  - Teach those essential CS principles that educated people need to know in the 21st century

- Goal for Fluency w/ Information Technology:
  - Teach the essential computing knowledge needed to be an effective computer user throughout life

- Comparison of goals, briefly –
  - CS P: teach key concepts of phenomenon of computing
  - Fluency: teach key concepts to be a lifelong power user
Computer Science Principles

- Developed with Hélène Martin
  - CS Teacher, Garfield High, Seattle

- Heavy emphasis on activities
  - “Active and engaging” for students in late teens
  - Some possibility of spanning the “50 vs 140” mismatch
  - Has the “tell me, show me, engage me” advantage
  - Essential to driving #1 big idea: Computing is Creative
  - Allows for high degree of “currency”
Cool, No? We Need Your Approval

- College Board (not pilots) needs your approval
- Two part approval
  - Winter 2011: Content Survey
    - Departments are sent Claims and Evidence (content) and asked to look it over – give your comments
  - Spring 2011: Endorsement Survey
    - Say if your department will give credit or placement to successful test takers of AP CS Principles Exam
... my college’s perspective on CS:P & the Exam...

☑ • It is a introductory college-level experience, exceeding traditional high-school or developmental experiences

☑ • We intend to offer credit for students who succeed on CS:P

☑ • (a) ☑ We intend to offer a course comparable in content /purpose to AP CS:P by Fall 2014 and/or

(b) ☐ We will place students earning a successful score on the AP CS:P Exam into the sequent computing course

☑ • (optional) We are willing to be listed on CB’s website as supporting college credit and placement for the CS:P Exam
Summary – We Need Your Help

This is a once-in-a-career chance to spread CS Principles widely

- Follow the UW course development:
  - http://csprinciples.cs.washington.edu/uwpilot

- Find more on CS Principles Pilots at
  - http://csprinciples.cs.washington.edu
  - http://csprinciples.org