

Enrolling, Engaging and Retaining CS Students @



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A snapshot...



- 60% of students belong to underrepresented groups
- 50% of students are first generation students
- Before 2013, 2 CS class sections per quarter
- No fulltime CS instructor

...then there were some changes...

- ▶ Java → Python for CSC 110
- ▶ In-Class-Exercise (ICEs)
- ▶ Women-in-STEM
- ▶ #HourofCode
- ▶ C++ Study Group
- ▶ CS Tutors
- ▶ Grace Hopper Conference Scholarships
- ▶ College Visits



...Current state

- ▶ More CS class sections - 5 sections offered this quarter
- ▶ ~30% women in CS Classes
- ▶ A thriving Women-in-STEM movement
- ▶ More participation of students in #HourofCode
- ▶ 20+ Students to WiSE Conference at UW
- ▶ CS Student Engagement activities funded by Google grant
- ▶ Long-term plans for taking students to GHC



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the start...

- ▶ First figure out what students need
- ▶ Get the students to signup
 - ▶ Members
 - ▶ Officers
 - ▶ Committee members
- ▶ Constitution, Bylaws
- ▶ College Contacts
 - ▶ Club Center
 - ▶ Faculty
 - ▶ Administration



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the follow through...



- ▶ Guest Lectures
- ▶ Workshops
- ▶ Fieldtrips
- ▶ Networking
- ▶ Conferences
- ▶ STEM Fair
- ▶ #HourofCode



#HourofCode the start...

- ▶ Origin: from Code.org (blocks; drag & drop)
- ▶ #HourofCode at South Seattle College
 - ▶ Spring 2014 - First Attempt
 - ▶ Used Code.org's Hour of Code program
 - ▶ Limited potential / real-world applications
 - ▶ Summer 2014 - Take Two
 - ▶ Theme: Code Wizards Unite!
 - ▶ Self-driven curriculum
 - ▶ Talks on project planning, online education resources
 - ▶ Attendance was low and un-even
 - ▶ Participants felt "lost" - needed more structure



#HourofCode

the next phase...

- ▶ Fall 2014 - Third time's the charm
- ▶ Focused Curriculum: Open Source Group Project
 - ▶ Launch Planned for End of Spring 2015
- ▶ Focus on open source web dev & tools
- ▶ More committed participants (~18)

- ▶ Challenges:
 - ▶ Finding facilities to hold weekly sessions
 - ▶ Tech challenges
 - ▶ Do all participants have their own laptops?
 - ▶ How to bring new participants up to speed?
 - ▶ Community building

