



Birds of a Feather for Post-Secondary Institutions



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Program Overview

- Join your colleagues from other post secondary institutions to discuss promising practices for implementing the new Academy curriculum
- This is also an opportunity to share your strategies for creating successful pipeline models from high schools, including dual enrollment and articulation models

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Session Goals

- Provide an interactive platform for instructors to share their best practices, and exchange ideas about implementation of the new curriculum
- Work in a group setting with your peers
- Flexibility: This is your time to discuss topics that are meaningful to you, and get feedback from your peers
- Use the list of example topics and related attachments to help drive your discussion, or come up with your own ideas

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Next Steps

- Divide up into groups of 6–8 people
- Appoint a note taker, and someone to report out
- Spend 25 minutes discussing ideas
- Final half hour: Individual groups report back to the larger group
- Topic ideas to jump start your thinking have been provided by some west coast instructors and are on the following slides

Possible Discussion Topics from West Coast Instructors

- Reducing Attrition
- Articulation/Dual-Enrollment
- Student Involvement
- In the Classroom
- Exploration Tips and Tricks
- Packet Tracer

Reduce Attrition



“At Chemeketa Community College we have all four CCNA® Exploration courses embedded as core courses in a two-year AAS degree program in Network Technology, which assures more students stay for all four CCNA courses. The attrition rate is in line with other two-year degree programs in electronic, computer, and engineering technologies at our college.”

Roger White, Instructor
Chemeketa Community College, Salem, OR

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Reducing Attrition

- Implement Discovery 1 and 2 as General Ed courses for non-majors
Pierre Thiry @ CCSF
- Providing extra hands-on lab practice time and use of packet tracer and NETLAB access for after hours practice on real lab equipment
Roger White @ Chemeketa CC
- AVTEC customizes the curriculum by starting students in Discovery 1-2, and then finishing with Exploration 2-3-4
Mark Ganser @ Alaska Vocational Technical Center Information Technology Program

Articulation



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Articulation

- The University of Hawaii and the Hawaii CC system have a new “3+1” Bachelor of Applied Science Degree in Networking (where 1st 3 years are completed at a CC)

Wayne Lewis @ Honolulu CC

- In California, Networking Academy courses are identified in statewide articulation agreements

Richard Grotegut @ Ohlone College

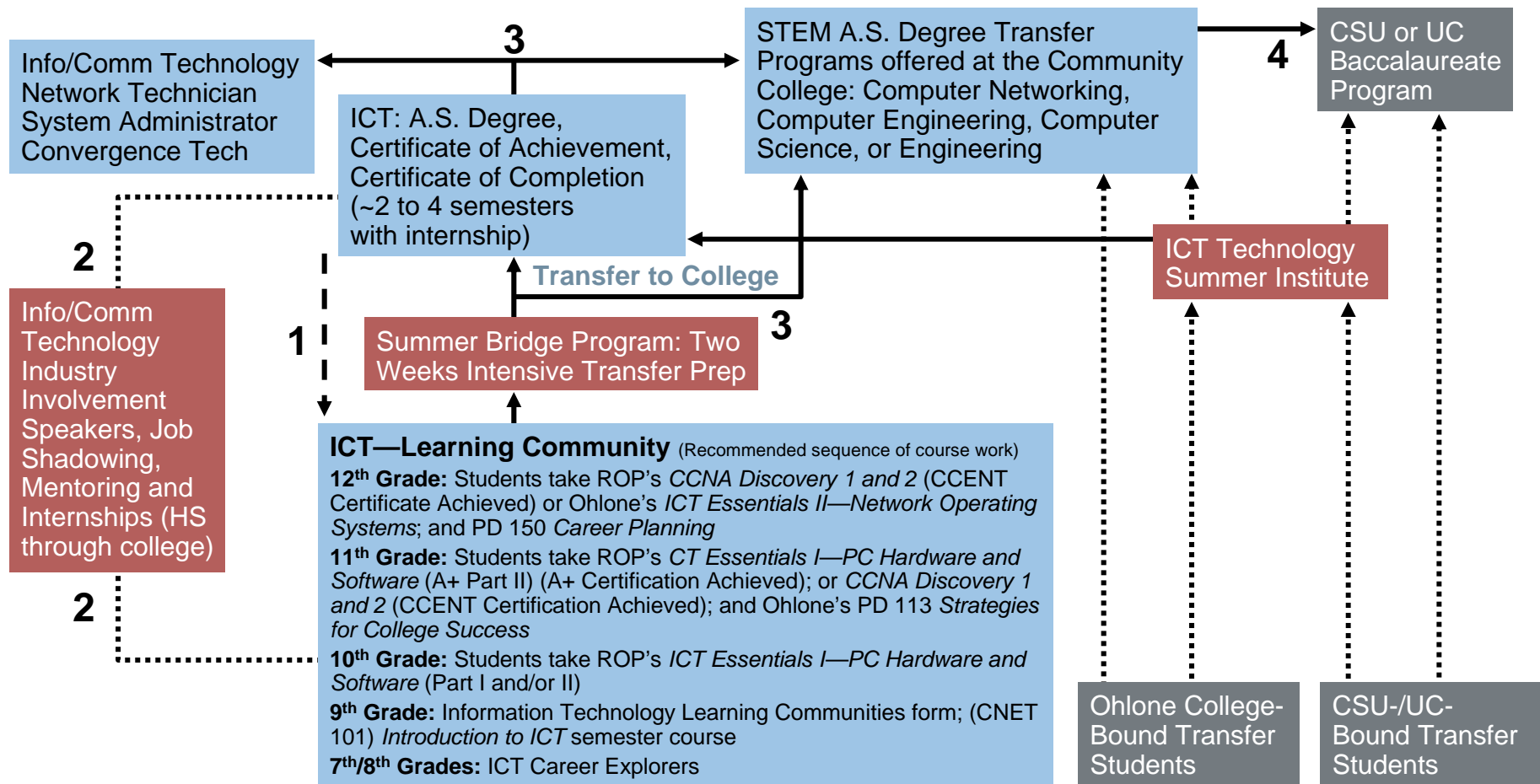
- Ohlone CC uses a pathway chart when actively meeting with prospective new academies or talking to education officials

Richard Grotegut @ Ohlone College

(See next slide)

Information and Communication Technology (ICT) Pathway for SF Bay

High School—Community College—ICT Job and/or University Pathways



1. ICT student interns return to their high school as peer tutors
2. Information and Communication Technology industry involvement throughout high school and college
3. ICT students opt for job training and/or university transfer program
4. ICT students majoring in a STEM area transfer to a university

Student Involvement



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Student Involvement

- Have students take legacy labs and convert/build packet tracer activities for the class

Wayne Jarvamaki @ North Seattle CC

- When ITE, Discovery 1 and 2 classes finish, AVTEC opens a computer repair shop for 1 week on campus as the final week of each course; This provides student IT work experience; AVTEC customers are non-profits, and small businesses

Mark Ganser @ AVTEC

- Success of after school computer, or networking club that refurbishes and donates hardware to needy organizations, developing nations. Retains students and helps get women into IT

Lee Hilliard and the “Nextenders Club” @ College of the Canyons

In the Classroom



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In the Classroom

- We use supplemental handouts with practice activities for IP addressing, subnetting and access control lists
Roger White @ Chemeketa
- More lab focused approach to instruction-pull out concepts in the context of doing lab work
Wayne Lewis @ Honolulu CC
- Present content in 20 minute chunks. Go into lab. At end of lab, have a breakout to de-brief each other. Gives students a chance to apply what they've learned in the lecture
Wayne Jarvimaki @ NSCC
- Use Illuminate in the classroom for students who are sick or absent, this also allows students who have moved to finish a class
Michael McKeever @ Santa Rosa JC

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In the Classroom

- Working on videos (5 and 10 min clips) to review tough concepts. E.G., sub netting; PPT, audio, and instructor head shots are included

Echo Rantanen @ Spokane CC

- Process: Read material before class, lecture, read again in class

Echo Rantanen @ Spokane CC

Exploration Tips and Tricks



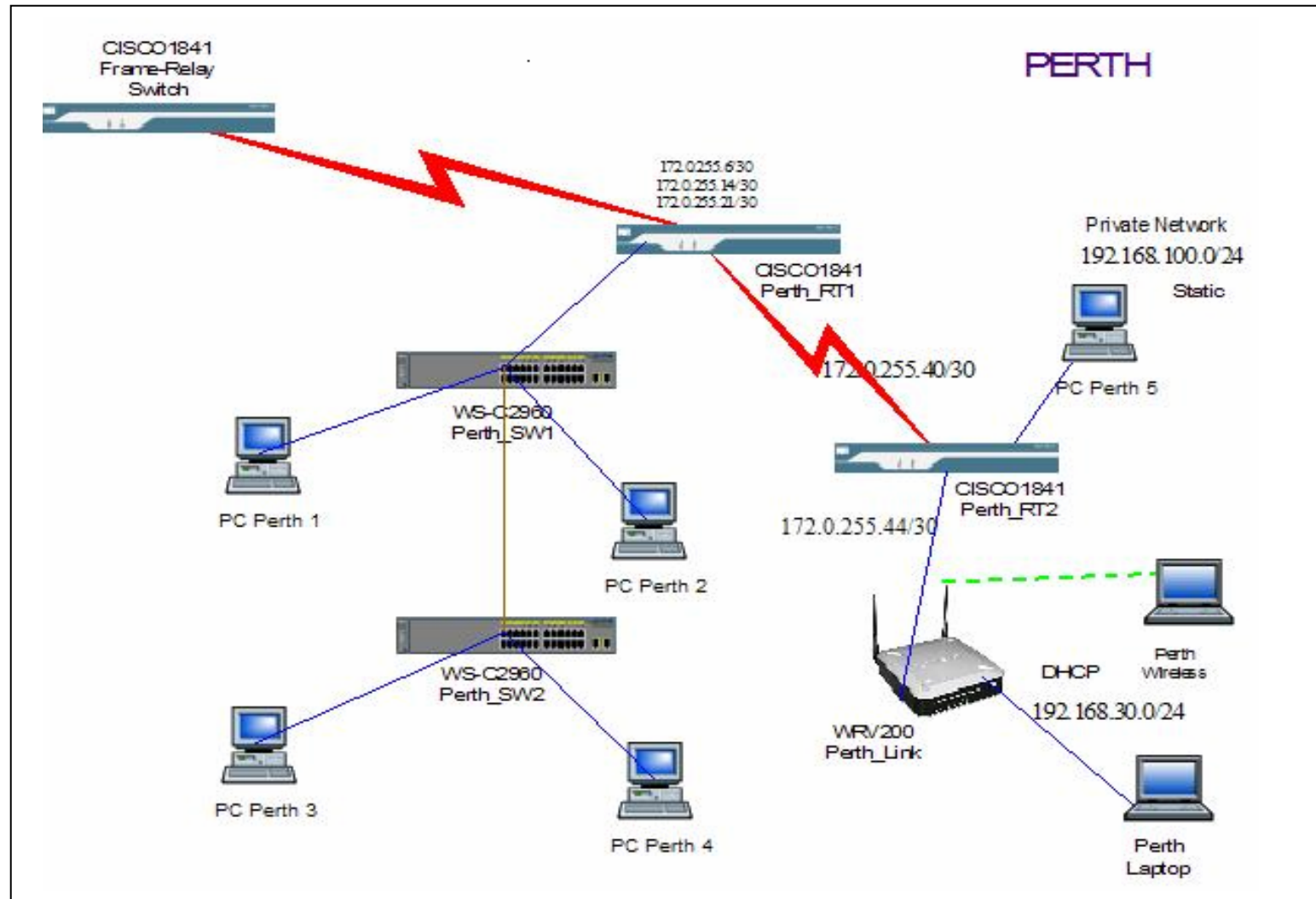
“I created a skills-based Final Assessment for Exploration 4. This final incorporated almost every concept, and protocol from all four Exploration classes, except for Exploration 2 (EIGRP and STP). The students configured all protocols they had learned. The goal was to get students to work in teams... another element to build into the class. There are three to four students per team. Outcome: teamwork, review previous classes, tie everything in... sum it all up. The Skills Final also helps prep students for the CCNA exam.”

Michael McKeever

Santa Rosa Junior College

Michael can be reached at mmckeever@santarosa.edu
for a copy of the final exam and related topologies

Topology from SRJC Exploration Skills Final



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Exploration Tips and Tricks

- Need to be able to relate material from any course in Exploration to other 3

Michael McKeever @ Santa Rosa JC

- Better CCNA instructor after taking CCNP

Able to better explain CCNA concepts

Michael McKeever @ Santa Rosa JC

- Exploration 2- long/difficult course

Stick to key points in E2

Know the content beforehand

Spend the first 3 weeks of E3 reviewing E2

E2 has 11 chapters, versus 7 in E3

Packet Tracer



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Packet Tracer

- Packet Tracer expands capability to teach online
Wayne Lewis @ Honolulu CC
- PT Pain Point: Packet Tracer is the big winner for CCSF, sometimes however, students have a hard time on exams because they don't know how to connect their hardware
Pierre Thiry @ CCSF
- Packet Tracer shouldn't be used to replace equipment. SCC relied on it too much. Students were missing the hands on piece. Benefit of PT is that if a student misses a hands on lab, PT can be a substitute. Students learn that 70% of problems are physical or hardware based. PT does not allow for the same kind of trouble shooting as the actual equipment
Echo Rantanen @ Spokane CC

Notes

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Notes

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