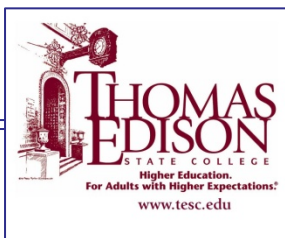


Mobile Delivery

Towards Portable Cloud Computing

July 29, 2009



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Mobile Delivery

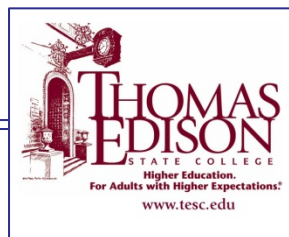
Towards Portable Cloud Computing

– Dr. Henry van Zyl

- Vice Provost, DIAL, Thomas Edison State College
- Manages 400+ courses in 7 delivery modes
- phvanzyl@tesc.edu

– Ann Boland

- Managing Partner, OHE Associates
- Specialists in mobile solutions for higher education
- ann@OHEassociates.com



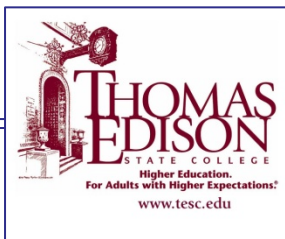
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Where we're going in this session

- The mobile environment
- The cloud environment
- The TESC environment
- The TESC + Hot Lava Mobile solution



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What do all of these people have in common?

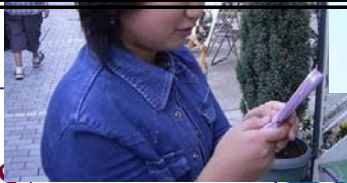
THE "BIG PICTURE"



Eric Schmidt, Google CEO

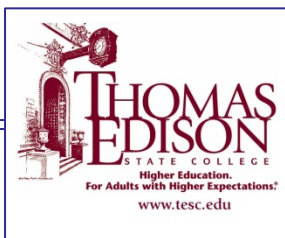
John Traxler, mLearning Author and Presenter

*"Looking at mobile learning in a wider context, we have to recognize that mobile, personal, and wireless devices are now **radically transforming** societal notions of **discourse** and **knowledge**, and are responsible for new forms of art, employment, language, commerce, deprivation, and crime, as well as learning."*



Where are we now?

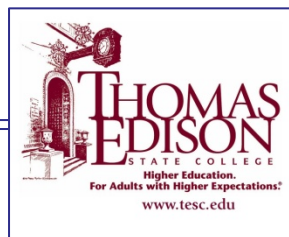
- Interest in Mobile learning has increased since 2000
 - Conference Growth
 - Academic research
 - Corporate implementation
- mLearning and eLearning Distinctions being made
 - Tethered – connected to your PC/laptop
 - What you habitually carry – keys and mobile
- Inherently personal and flexible
 - Informal or formal



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A Few Statistics

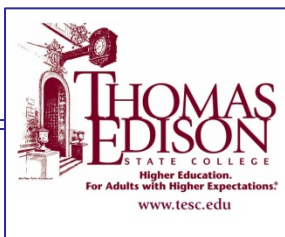
- 60% of the world's population uses a mobile device
 - 3x more wireless subscriptions than wireline
- By 2010, 90% of world's population in reach of a cell network
- 3rd world countries will not go the PC route
 - Mobile is cheaper, durable, energy efficient
- Proliferation of devices and mobile platforms
 - PC = 80's, Laptop = 90's, Mobile = new millennium
- Gartner – Q1 2009 – 269.1 million cell phones sold. 8.6% decrease Q 2 Q. Smartphones = 36.4 million units, 12.7 increase Q 2 Q.
- Mandatory web package



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Dynamics of the mLearning environment

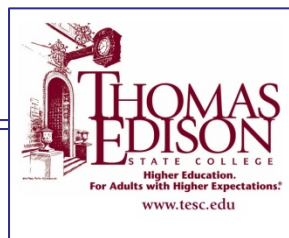
- **Variety of mobile devices**
 - Mobile phones/WAP enabled mobile phones – 2G devices
 - iTouch, iPhone – 3G devices
 - Portable gaming devices
 - PDA - Pocket PCs
 - Kindle – book readers
 - Netbooks



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Audience Poll ...

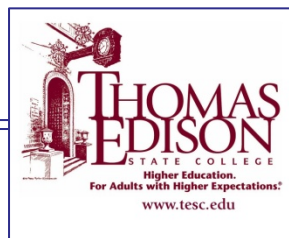
- How many of you have a mobile phone
- How many have a smart phone?
- How many have a web package with their smart phone?
- How many use smart phone to access WWW?



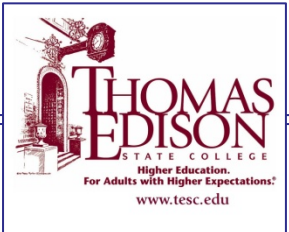
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Dynamics of the mLearning environment: A delicate balance

- Devices
- Format
- Learning Needs
- Content
- Carriers
- Data Transfer



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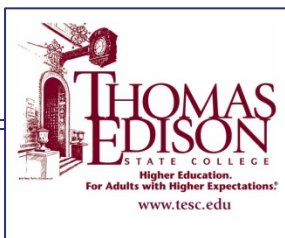
How mobile learning works...



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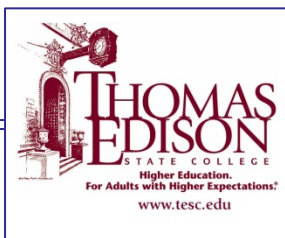
- Questions?



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The cloud environment

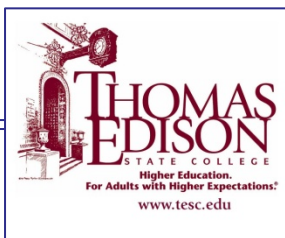
- Access to information and ability to participate 24/7
- Device agnostic
- Serves the multi-tasking student
- Must provide accountability
- Tracking and integration



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The TESC Environment

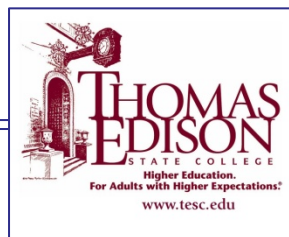
- 16,000 students – all distance learners
- adults – average age 34
- BlackBoard 7
- 30,000+ course enrollments in 400+ courses
- Rolling enrollments; 12 semesters per year
- Average student age 38; working adults on the go
- 50%+ are in the military



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The need for a mobile solution

- Military
- Multi-tasking – career persons and soccer moms and dads
- People on the go
- Appeal for younger learners and a new generation of learners
- Enrollment challenges
- Need to have, not nice to have - tie to BlackBoard



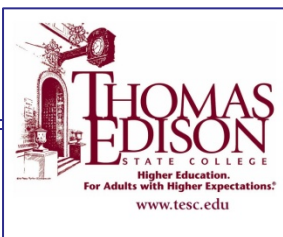
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The TESC + Hot Lava Mobile Solution

- Content to be mobilized

- standard quizzes for 20 courses
- all same format
- all multi-choice
- Hot Lava content converter
- Immediate reporting of score to BlackBoard environment
- Mentor able to check and guide students regardless of when or where they completed the quiz
- 1,000 students initially

- Commence 7/1/09



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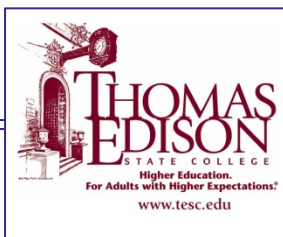
Mobile Delivery

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Multiple choice on a
BlackBerry BOLD

**HOT LAVA
MOBILE**

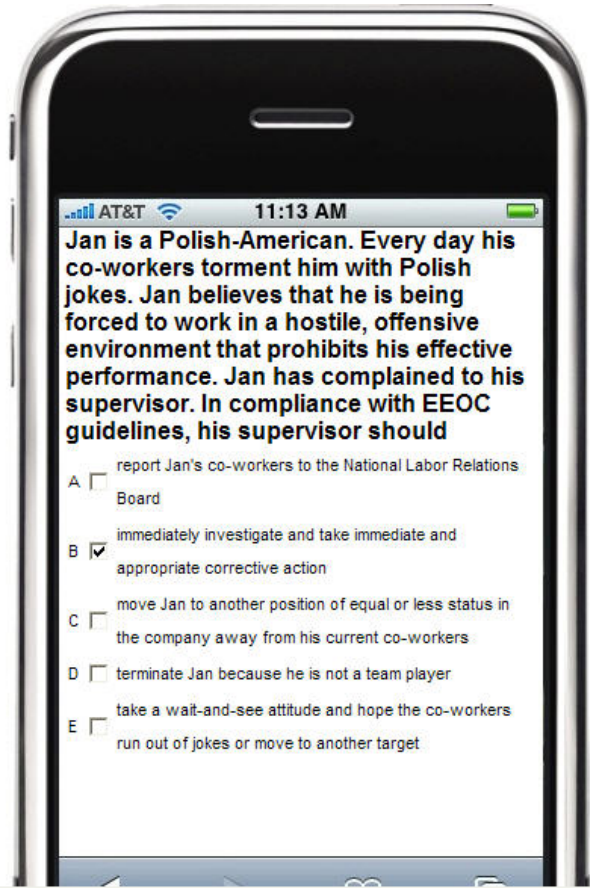


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Mobile Delivery

Towards Portable Cloud Computing

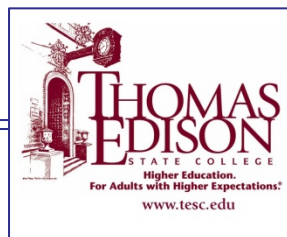
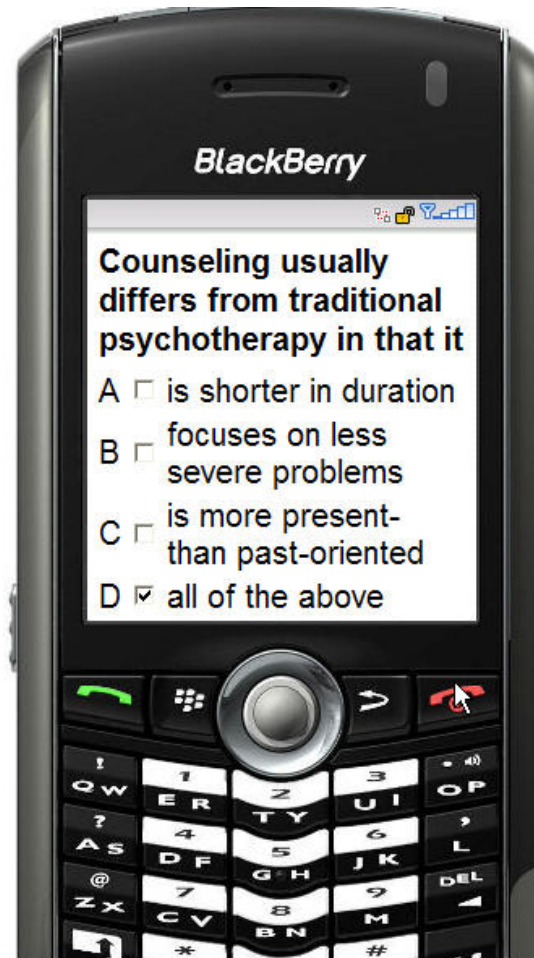
On an iPhone



Mobile Delivery

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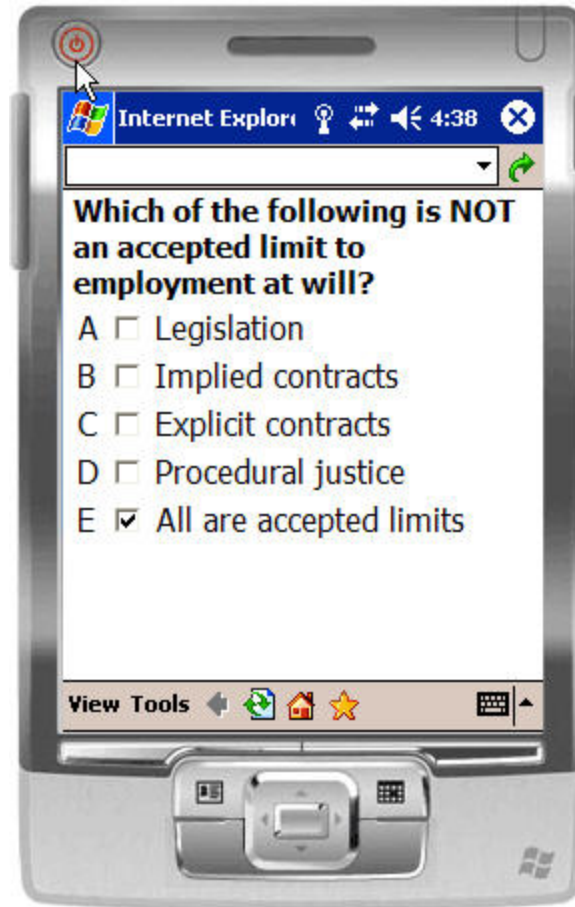
BlackBerry 83xx



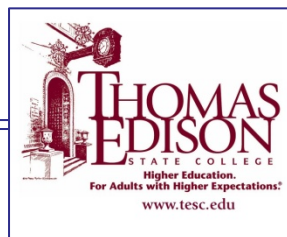
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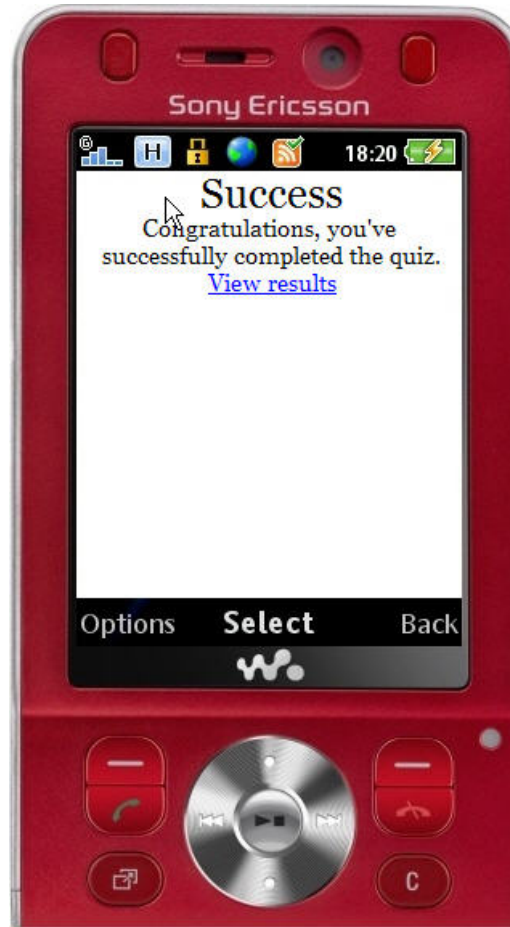
Pocket PC



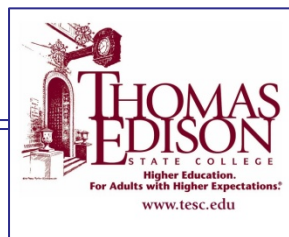
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Sony Ericsson



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View Results

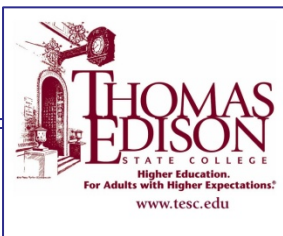


User Results Summary from 7/7/09 12:00 t 7/7/09 5:39

Created on 7/7/09 5:39

<u>Company</u>	<u>Thomas Edison State College</u>
Name	aboland
First and last name	Ann Boland
Email	ann@oheassociates.com
Module name	BIO-208 Chapter 1 Quiz
Entry	7/7/09 5:35 PM
Resume	7/7/09 5:35 PM
Exit	7/7/09 5:38 PM
Duration	2 minutes 55 seconds
First attempt	7/7/09 5:38 PM
Last attempt	7/7/09 5:38 PM
Number of test attempts	1
Score	47
Pass level	100
Pass/Fail	failed

report_user

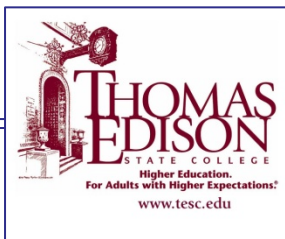


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View Results, con't.



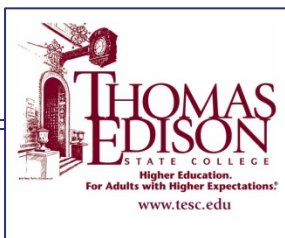
Pass/Fail	failed
All pages were read	true
Last page	23
Answers	{3:1:w3=,B,,, 10:1:w10=,B,,, 17:1:w17=A,,,, 5:1:w5=,,C,, 14:1:w14=A,,,, 19:1:w19=A,,,, 22:1:w22=,,,D, 20:1:w20=A,,,, 15:1:w15=,B,,, 1:1:w1=,B,,, 18:1:w18=A,,,, 7:1:w7=,,C,, 11:1:w11=,,C,, 13:1:w13=,B,,, 9:1:w9=,B,,, 4:1:w4=,,C,, 12:1:w12=,B,,, 23:1:w23=,,,D, 16:1:w16=A,,,,



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Results at TESC

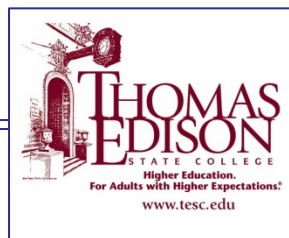
- Now offering quiz modules in 20 courses
- Optional diagnostic tool
- Integrated into course space
- Not initially credit-bearing



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Future mobile developments at TESC

- They said it couldn't be done – entire courses
 - Hybrid of tethered and mobile
 - Military need
 - Executives and people on the go need mobility
 - Online testing
 - E-book delivery
 - Language courses

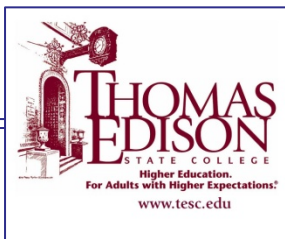


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- Questions?



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Mobile learning ... Contact details

– Ann Boland

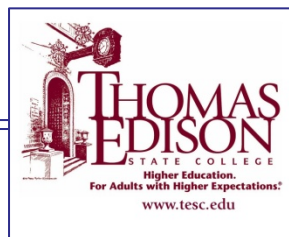
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- OHE Associates
- 2720 W Calle Cuero de Vaca
- Tucson, AZ 85745

- 520-777-9543
- Ann@oheassociates.com
- www.oheassociates.com
- register at our website for a mobile learning demo delivered to your mobile device

– Dr. Henry van Zyl

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