

Current Technologies and Best Practices For Distance Education

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Opening Survey: which type of distance education have you participated in?

- a. Correspondence course with snail mail/postal service
- b. Radio course
- c. Television course
- d. Internet course
- e. More than one of the above
- f. Other type



Question: online courses

- a. are less effective than traditional face-to-face courses**
- b. are more effective than traditional face-to-face courses**
- c. can be at least as effective as traditional face-to-face courses.**

According to a 2009 Department of Education review, the answer is : **C**



Two Sides of the Story



Developing quality online courses and teaching online courses are hard work.

However,

higher education students in online learning generally performed better than those in face-to-face courses.



Question: Which country has the largest online student population?

- A. the United States of America**
- B. the United Kingdom**
- C. China**
- D. India**

The answer is : A



Question: Which of the following segments is predicted to have the most growth over the next five years in regards to self-paced e-learning in the U.S.?

- A. Healthcare 20%**
- B. higher education 8%**
- C. PreK-12 Education 18%**
- D. Government**
- E. Corporate and businesses**
- F. Academic Education (K-12 and higher Education combined)**
- G. Other**

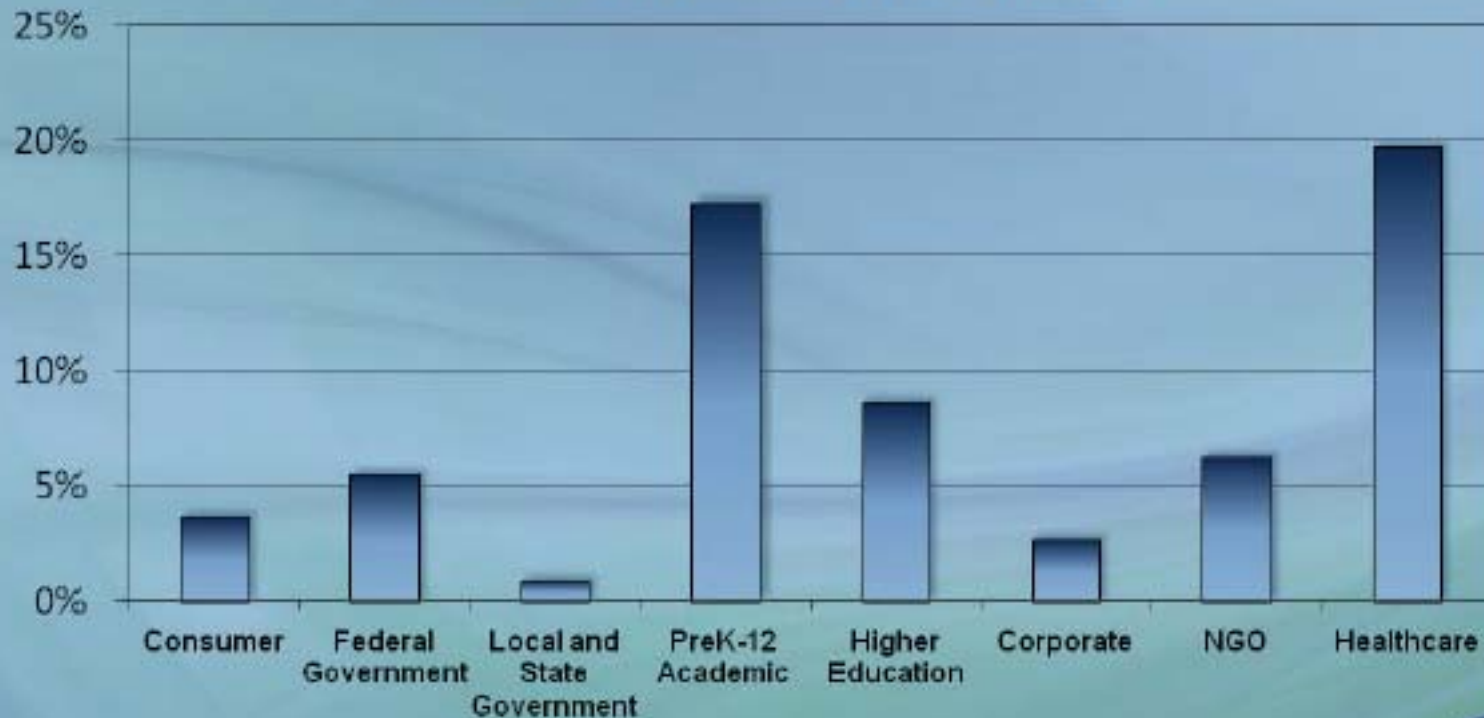
The answer is : F



2009-2014 US Self-paced eLearning Five-year Growth Rates by Buyer Segment

Note: Low growth does NOT equate to low revenues. Demand can be relatively low and still generate significant revenues for suppliers.

2009-2014 Demand by Segment



Ambient Insight 2009



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2009: Top U.S. Higher Education Online Institutions by Enrollment Totals

Institution	2009 Online Enrollment Totals	Online Enrollment Growth from 2008 to 2009
University of Phoenix Online	310,400	22%
Kaplan University	68,200	47%
DeVry	56,300	26%
Strayer University	54,300	25%
American Public Education	53,600	49%
Bridgepoint Education	45,500	101%
Walden University	40,500	17%
UMassOnline	40,000	18%
Liberty University	36,200	15%
Education Management	34,800	54%
Capella Education	33,900	26%
Grand Canyon Education	32,600	53%
University of Maryland University College	30,400	17%

Source: *The Worldwide Market for Self-paced eLearning Products and Services: 2009-2014 Forecast and Analysis*, Ambient Insight, February 2010.

Current Uses of Online Education: What it is like:

- testing of skills and knowledge
- Content delivered through tutorials and scenario-based learning, problem-solving strategies using instructional design
- Scarcity of e-coaching and the use of mobile devices
- Physical sciences courses >social sciences courses

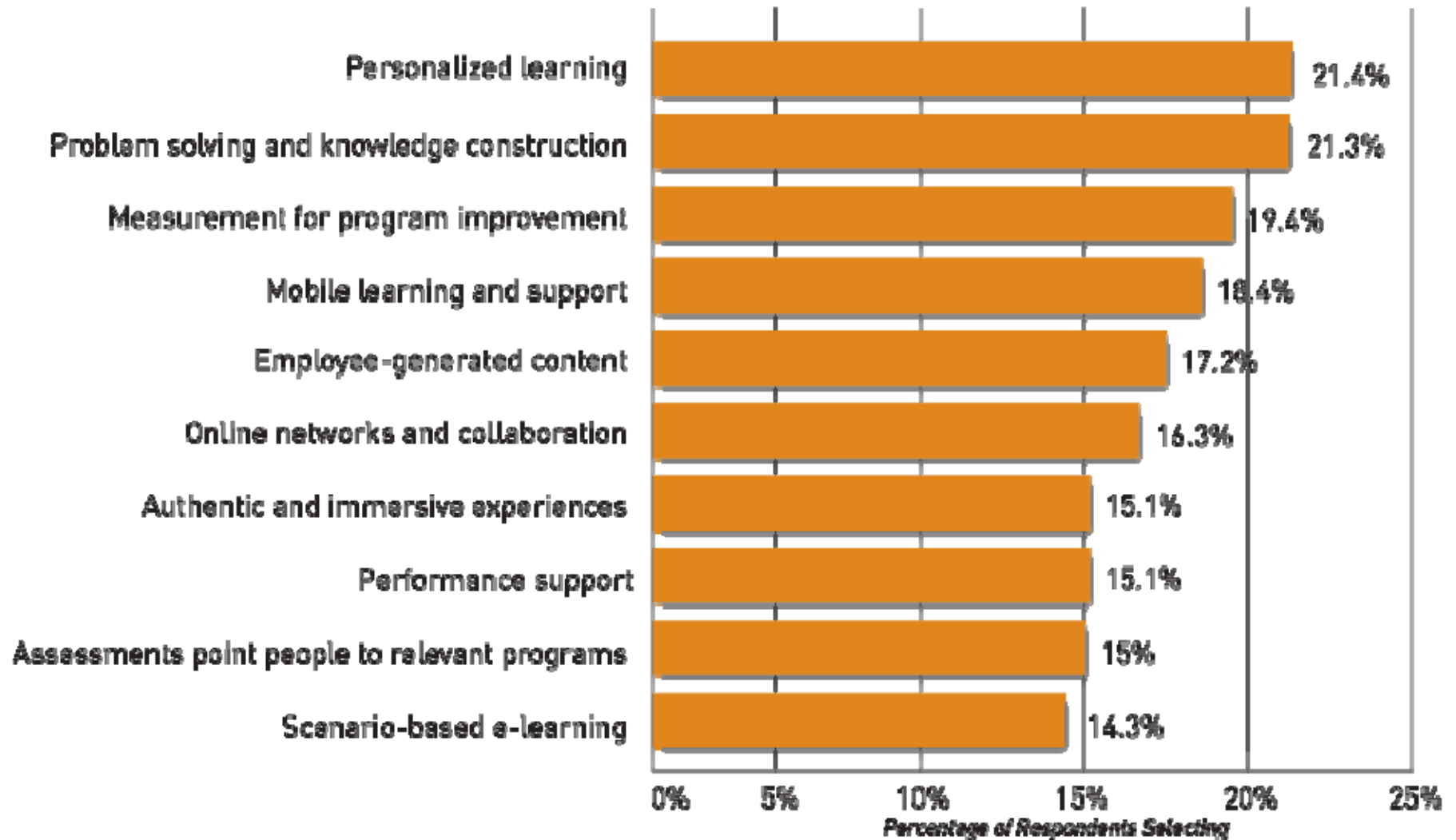


What It Ought To Be

- customized, personalized learning experiences
- Problem-based learning,
- more measurement for program improvement.
- more courses on social sciences



Figure 3. Top 10 Future Aspirations



How Do We Get There?

What it is:
testing &
tutorials &
scenarios



**Adopt best
practices to use
with the most
appropriate
tools**

What it ought
to be:
customized,
personalized
learning
experiences;
measurement
for program
improvement



Instructional Design

Analysis →

Design →

Development →

Implementation →

Evaluation →



What it should be	How to achieve it
Personalized learning	(later in detail)
Problem solving and knowledge construction	Real-life Projects/ simulations, Group discussion, critical reflection, collaboration, peer review,
Measurement for Program Improvement	<u>Program evaluation</u> , feedback;
Mobile learning and support	<u>iPhone</u> , Gphone, PDA
Learner-generated content	<u>Wiki</u> , blog, webpage, <u>start a free wiki</u>



What it should be	How to achieve it
Online networks and collaboration	Chat, discussion, facebook , wiki, twitter
Authentic and immersive experiences	Paramedic training in Second-life Medicine in Second Life ; simulation
Performance support	Signals (later in detail; tracking report;)
Assessments point people to relevant programs	Signals (Customized feedback; email; comment)
Scenario-based e-learning	Role-play; discussion; project; simulation



Personalized Learning

- Provide a wide variety of curriculum choices
- Attention to individual learning styles
- Technology learning access
- A variety of learning environments
 - Opportunities within and beyond the course so that learning programs may be tailored according to the individual needs and preferences of each student



Signals: Personalized learning tool from Purdue



The screenshot shows the Signals website interface. At the top right, there are links for Home, About, Help, and Logout. The main heading is "Signals" with the tagline "Stoplights for student success". Below this, a grey box contains the text: "Signals helps you identify and communicate with at-risk students based on their performance in Blackboard." Three yellow sticky-note style boxes are arranged horizontally, each with a title and a description:

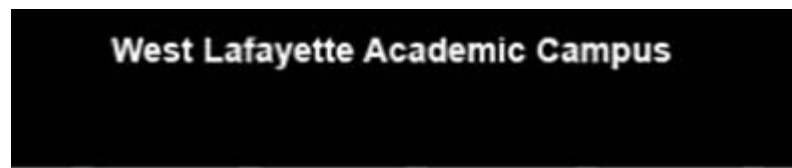
- Customize**: Pick from any of your grade book's columns. You have complete control on when your interventions are run, how many and how often.
- Create Reports**: Reporting tools show you when students are at risk. Choose from specialized reports to help predict which students are in need of help.
- Take Action**: Send personalized emails & release notifications to your student's course page in Blackboard.

Below these boxes is a link with a question mark icon labeled "Before You Begin". At the bottom center is a large green button with the text "Get Started!".



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What students see:



Your location: [Home Page](#)

Introduction to Science

Dear Theresa,

Based on your use of online resources and assignments, and according to need to succeed in this course. If you continue as you are, it's likely that you'll do better, or get more help.

To get help, please do one or all of the following:

1. Stay after your scheduled lab meets to get help from your TA
2. You can go to the weekly help session at the CHM resource center. They are open 8am - 11pm, Monday through Friday.
3. You can make an appointment for help with your TA. His or her email address and office hours are on your syllabus.
4. You can meet with me in my office during my office hours - 1-2pm on Mondays, or 9-10am on Wednesdays.

If you try, I'm sure you can do well in this class! Please try one of these things, or contact me at memail@purdue.edu for help.

Prof. Bertram
123 LILY



Your location: [Home Page](#)

Introduction to Science - I Prof. E. Bertram



[Go! Keep up the good work!](#)



[Unit One](#)



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Testimonies

Student Testimony: Ashley Lambrosa

Instructor Testimony: Tim Delworth

Project contact: Kim Arnold

kimarnold@purdue.edu



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Research on Mobile Learning

Study 1: young people with poor literacy and numeracy skills and who lack interest in traditional learning

Study 2: Continuing Education Lecturers and their students

Study 3: teachers and tutors

<http://www.lsnlearning.org.uk/>

<http://www.molenet.org.uk/>

<http://www.m-learning.org/>



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Designing M-learning courses

- Content
- Layout (example)
- Navigation
- Graphics
- Follow recommended web practices
- Connection Speed
- Assessment



Barriers to e-learning

- Money
- Other familiar concerns



Creating Personalized Learning Curriculum with What You Have

- Individualized goals/ categorized goals and course objectives
- Learning materials presented in multiple format for students with different learning styles
- Frequent assessment, pretest, self test, review, discussion questions to assess learning
- Evaluate assessment performance and send individualized feedback/ help reminder/ praise via email, announcement, etc
- Offer opportunities for students who looks for more challenging tasks and students who need extra help
- Offer opportunities for students to collaborate



Time for You

What can you do to personalize your course/ program? (goals, assessments, point of action upon analysis of assessment result, etc.)

