

Oltre i libro misto: gli ambienti virtuali per l'apprendimento

Paolo Ferri Professore Associato Università degli Studi Milano Bicocca Paolo.ferri@unimib.it

Survey on-line Azienda Leader mondiale nel mercato dei Giocattoli Partecipanti* • Totale partecipanti aggiornato al 04/03/09 1.500

• Genitori di bambini tra i 3 e gli 8 anni

*e-mail inviate venerdì 30 gennaio 2009

Naviga in internet in compagnia dei suoi figli/nipoti?

| SPESSO | 97 | 9,2% |
|---------------|-----|-------|
| QUALCHE VOLTA | 531 | 50,3% |
| MAI | 427 | 40,5% |

| NAVIGANO | 628 | 60% |
|--------------|-----|-----|
| NON NAVIGANO | 427 | 40% |

| TOTALE | 1055 | 100,0% |
|--------|------|--------|
| | | |



I suoi figli/nipoti navigano in internet?

| Spesso | 100 | 9% |
|---------------|-----|-----|
| Qualche Volta | 277 | 26% |
| Mai | 678 | 64% |

| Navigano | 377 | 36% |
|--------------|-----|-----|
| Non Navigano | 678 | 64% |

| | Totale | 1055 | 100% |
|--|--------|------|------|
|--|--------|------|------|





6. Quali di questi gadget tecnologici sono usati dai tuoi bambini?



Americans online by age



Chart 1: Percentage of Americans online by age (Teens, 12-17, Nov. 2007-Feb. 2008, margin of error $\pm 3\%$. Adults, December 2008, margins of error differ by subgroup. See methodology).



Activity diagram: Overall online pursuits



Trends Today and on the Horizon Are Driving Technology Adoptions

- The *Horizon Report 2010*, published recently by the New Media Consortium and the Educause Learning Initiative, identified four trends as key drivers of technology adoptions for 2010 through 2015:
 - Abundance: Volume of resources and relationships accessible on the Internet changes the role of educators in sense-making, coaching, and validating the credibility of information
 - Just in Time Learning: People want and expect to be able to work, learn, and study at any time and wherever they want to do so
 - In the Cloud: Technologies are increasingly cloud-based and IT support is becoming increasing decentralized
 - Collaboration: Students output is increasingly collaborative, and there is more cross-campus collaboration between departments.

While this report focused on higher-education, these trends apply equally to K–12 and professional learners

Horizon Report Identified Six Emerging Technologies Impacting Teaching and Learning

- **Near term horizon** (within next 12 months):
 - Mobile computing: An increasing number of faculty and students are using mobile devices for collaboration and communication
 - Open Content: Movement began over a decade ago reaching tipping point
- Second adoption horizon (2-3 years out)
 - Electronic books: Pilot programs are informing future devices
 - Simple Augmented Reality: Overlays of digital information onto the physical world as well as code-generated 3-D models
- Far Term Horizon (4-5 years out)
 - Gesture-Based Computing: Devices controlled by natural movements will go from games to teaching and learning
 - Visual Data Analysis: Blending statistics, data mining, and visualization to understand complex concepts and relationships

Shopping List for the Ultimate Digital Textbook <u>http://www.tomorrow.org/index.html</u>

Nonprofit group Project Tomorrow surveyed 281,000 students from K–12 in all 50 U.S. states; offered ideas from students in grades 6–12 about desired features and functionality of digital textbooks:

- Ability to personalize book with highlights and notes (63%)
- Self-assessment (62%) or self-paced tutorials (46%)
- Links to real-time data like NASA and Google Earth (52%)
- Tap into an online tutor whenever necessary (53%)
- Link to PowerPoints of lectures supporting content (55%)
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- Access videos (51%), videoconferences (30%), podcasts from subject experts (34%)
- Create own podcasts or videos to support learning (48%)

Challenges for Digital Textbooks Remain Significant

- Open access business models are still largely unproven
 - "Free texts" depend on success of "bundling", print-on-demand print sales, enhanced products or services, and/or foundation, grant or endowment support
- Interactive, participatory learning spaces using assessments, gaming and simulations, online tutors, and virtual reality environments are expensive to produce and maintain
- Difficult to change the mindsets of educators who claim not having the time (or technical skills) to contribute
- Keeping content contextualized to local, regional requirements as well as global curriculum standards
- Early student reviews of the Kindle DX in education setting not very positive



Un modello risultante per l'e-learning



VLE e amineti vituali di apprendimento www.iuline.it







Blended Solutions per l'apprendimento ambiente didattico integrato

| Ambiente di apprendimento | Modalità di Comunicazione | Metodologia didattica | Strumenti Modalità |
|------------------------------|------------------------------|---|---|
| Presenza | Didattica Frontale | Arricchimento culturale Per contenuti | Riflessione/ Accumulazione Libro Interazione/ |
| Corso on-line | Gestione comunicativa | Autoapprendi- mento + tutoring Per obiettivi Bloom Mastery Learning | navigazione Acquisizione interattiva- Esperienza Esplicita Comunicazione interazione |
| Gruppo virtuale | Comunicazione | Processo Sfondi integratori | collaborativa Esperienza tacita Comunicazione |
| Community | Comunicazione Partecipata | Processo Sfondi CSCL Comunità di pratiche | condivisione Esperienze tacita Esperienza esplicita |

Apprendere con i learning object 1.0 o 2.0

In generale, i modelli sono forme miste di:

Didattiche espositive: costruite attraverso l'erogazione di materiali didattici digitali, cioè Learning Object preconfigurati ad hoc che di fatto sostituiscono o integrano le parti di contenuto generalmente spiegate a lezione



Nel Usa e nel mercato internazionale è una realtà



Thomas D. Klein University of Arizona Business and Economics

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- Capacity http://www.agilemind.com
 Founded in 2001, <u>Agile Mind</u> uses technology to enhance
- Founded in 2001, <u>Agile Mind</u> uses technology to enhance equity and high achievement for adolescents in math and science
- The Charles A. Dana Center at the University of Texas at Austin helps the company develop research-based resources for a broad range of students and teachers particularly those in underserved schools
- Productivity tools, performance reports, and professional development services help foster exemplary, sustainable teaching practices
- Participating students are showing large achievement gains
- Agile Mind has served 2 million students and almost 20,000 educators in the past 5 years

agile Mind

In pursuit of high achievement



MATHEMATICS UNFOLDING

Welcome Note to students CONCEPTUAL PATHWAYS & Functions Volume Rate Survey Contact us



Precalculus

4 <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>6</u>
 ▶

As you move beyond Algebra II and into other advanced mathematics courses, you will continue to use rate as a way to understand the behavior of more complex functions. This animation demonstrates how to analyze the rate at which a population changes with respect to time. By understanding this rate of change, you can choose the right type of function to model the population over time.



A good way to begin your analysis is to determine whether the function appears to be increasing everywhere, decreasing everywhere, or exhibits some combination of increasing and decreasing intervals.



BENEFITS FOR STUDENTS

High achievement—and college preparation—are accessible to all students, regardless of geography or economic situation

Until now, rigorous college-preparatory mathematics—the kind of program students need to excel and to be accepted into the nation's best universities—has been available only to a privileged few.

With Agile Mind course support services, all students have access, 24 hours a day, to high caliber curricular support, assessment, and test preparation—presented in a way that invites them, keeps them motivated, and ensures their success. Students:

- Understand even the most difficult concepts with hands-on tools—animations, simulations, in-depth exploration and practice
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- Practice AP[™]-style questions in Agile Mind AP[™] Calculus and AP[™] Statistics
- Receive continuous feedback with interactive guided assessments that include animations, tips, and self-test questions and answers
- Benefit from teacher and classmate support through class-based learning community tools
- Access courses from any home or school computer —instruction is optimized for 28.8 kbs. dial-up Internet connection speed

Learn more about specific services for <u>administrators</u> and <u>teachers</u>.

5

We are using both the Agile Mind and Agile Mind services for our campus. Our students are responding very well. Students are actually requesting more time to work with the Agile Mind math services. This is the first time I recall students requesting more time for school work!

- Sonia Juarez, Vice Principal, McCollum High San Antonio, Texas

GUIDED TOUR

Sign up for a tour to experience how Agile Mind services can work for you and your students. You will be contacted by one of our representatives.

A CHIDED TOUR

Flat World Open Content per l'educazione superiore

http://www.flatworldknowledge.com/



Integrazione di contenuti open, personalizzazione dell'insegnate e assement (Online Quizzes - Help you prepare for exams, Flashcards –

Quick, review of all key terms & definitions, Audio Study Guide - MP3 chapters, audioguide) **a pagamento**



Adoption has increased from 1,000 students at ~30 schools in Spring 2009 to 40,000 students at ~470 schools in Fall 2009

Every chapter, every book, includes digital study guides such as flashcards, practice quizzes, audio guides

Approximately 65 percent of students make some kind of purchase, most ~\$30

Curriculum per i piccoli tutto open content on-line

- Using an open-content, web-based, collaborative model termed the "FlexBook," <u>CK-12</u> offers tools to create, distribute, and customize high quality educational content
- CK-12 provides access to free texts that are aligned to state standards with developmentally correct content
- Educators can create customized digital text from existing texts, chapters, web pages under a Creative Commons Attribution-ShareAlike license
- Encourages collaborative learning via a community where authors, teachers, and students create, access, share, rate, recommend, and publish
- Texts provided currently through a combination of author donations, licensing partnerships, incentives for community-based authorship, and university collaborations
- http://ck12.org/flexr/search/Start%20your%20FlexBook%20Search/

On content Web Based cooperare e costruire on-line



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Features of the Future Electronic Textbook

- We'll read it on a device that combines facets of the cell phone, iPod, Kindle, Flip camera, and laptop, with a color touch screen and multimedia capabilities
 - The recently announced iPad comes fairly close
- Placing the cursor next to a term brings up its definition; clicking on a place-name deploys Google Earth
- Maps, charts, and graphs, instead of static, depict the spread and flow over time while providing interactivity
- Instead of a single picture for a particular item, site, or artifact, a gallery of photos is embedded in the e-text
- Augmented reality shows models and concepts in 3-D
- Users can instantly contribute comments, photos, and videos to the book's gallery

The Future Electronic Textbook Facilitates Collaboration and Continuous Learning

- Links lead to further scholarship or modules about topics of particular interest to the reader while encouraging comments and collaboration
- Creative Commons license allows modules to be remixed and repurposed
- Open video allows easier editing and remixing of video, audio, and text
- Social web features promote distributed, ongoing conversations between authors, scholars, and readers
- Deep Web semantic search unlocks additional in-depth, professional content, returning results customized to the reader's interest that are not cluttered by irrelevant content

These capabilities are possible now, in one way or another, but have yet to be harnessed—how do we get there?

| cK-12 | Chapter: Basic Mathematical Computations | × Close |
|--|--|---|
| bout Home Browse | Mathematical operations, variable expressions, and vector and matrix computations in an m-file environment are explored. Modified: Sep. 17, 2009 21:16:01 Created: Sep. 17, 2009 21:16:01 | Attributions Author: Darryl Morrell Author: Anders Gjendemsjø |
| Editing: Untitled F 1 Introduction to Proble 2 Problem Solving 3 Basic Mathematical C | AUTHOR: Darryl Morrell and Anders Gjendemsjø SOURCE: Problem Solving with MATLAB LICENSE: [http://creativecommons.org/licenses/by-sa/3.0/ CC-BY-SA] A In the following, text that could be input to an m-file environment or text that is output by an m-file environment is denoted in this font | Categories Computer Programming Other Number Operations Topics |
| 5 Introduction to Progra 6 For Loops 7 Conditionals 8 While Loops | Basic Mathematical Operations Operations and Expressions An m-file environment has all of the standard arithmetic operations (addition, subtraction, etc.) and functions (sine, cosine, logarithm, etc.). Table 1 lists the most commonly used operations; in this table, x and Y are scalars. (A scalar is a single value, as opposed to a vector or matrix which consists of many values.) Some Common Scalar Mathematical Operations. | Tags arithmetic operations; array; column; complex numbers; mafile environment; matrices; matrix operations; precedence; row; scalar; variables; vectors; |

Nel mondo il One to one computing è un realta OLPC www.olpc.org

2.000.000 di Laptop ai Bambini



E in Italia ?: libri misti un'opportunità articolo 15 un opprtunità



User name

classe

Password



Non sei ancora registrato? Clicca qui.



Il progetto libropiuweb.it Per lo studente, oltre al libro c'è dell'altro... nel cellophan col libro c'è un Access kit, una promettente busta di cartone che contiene un codice magico grazie al quale lo studente potrà usare il suo computer per imparare prima e meglio ... ad esempio esercizi ... oltre a quelli sul libro altri esercizi, col vantaggio che il computer ti avverte se sbagli, ti suggerisce come fare, ti rimanda alla teoria, ti dà un punteggio e ti dice se sei abbastanza preparato per l'interrogazione o il compito in



Il colore della storia 3 Secondaria I grado

La volontà di aggiornare il testo di Scambi tra civiltà alle nuove disposizioni ministeriali ha reso necessaria





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| Pannello di controllo | 2. La Prima Guerra Persiana | | | |
| Polis | La battaglia di Maratona | digitatlante | Insegnante | Vai > |
| Eva Cantarella, Giulio Guidorizzi | 3. La Seconda Guerra Persiana | | | and a second |
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Problematiche: Yes we can

- Infrastrutturazione dello scuole
 - Classi 2.0
 - Progetto Innovascuola
- Formazione degli insegnati
 - Agenzia Scuola 500.000 formati
 - ricambio generazionale più di 500.000
 insegnati in uscita (2013)



Classroom 2.0- One to One Computing



Il "**Progetto CI@ssi 2.0**" coinvolgerà **156 classi** con un utilizzo avanzato de UR ICT e permetterà di sperimentare la costruzione di nuovi ambienti di apprendimento basati sul digitale. Le classi saranno attive dal prossimo anno scolastico

- si sono candidate 2.382 Classi, 14.019 insegnanti;
- il progetto sarà coordinato dal **Ministero** e dall'**Agenzia Scuola** e avrà il supporto di **18 Università**;
- coinvolgerà 1500 Insegnanti di tutte le discipline e 3400 Studenti.

Nell'**a.s. 2010-11** sarà esteso anche alle Scuole Primarie e Secondarie di II grado.



Classroom 2.0- One to One Computing

l'Agenzia è invitata a proporre il progetto per l'attuazione dell'iniziativa **Cl@ssi 2.0** con particolare riferimento sia al supporto alla progettazione che alla sperimentazione.

2010

- 156 lower secondary school classrooms (K10-13)
- 30.000 euro each classroom
- one-to-one computing in each classroom
- Uninerisity coachinig
- Ministry oraganization and training

2011

- 200 Primary School classroom
- 150 Upper secondary school

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