## Handheld Learning: theory & practice

**EnglishUK AGM 2011** 



### Handheld learning





#### **Handheld Learning:**

"this movement holds the seeds of a more sophisticated, more effective, more modern way of teaching, training and preparing our youth for a new world"

Robert Safran, Fast Company,

April 2010





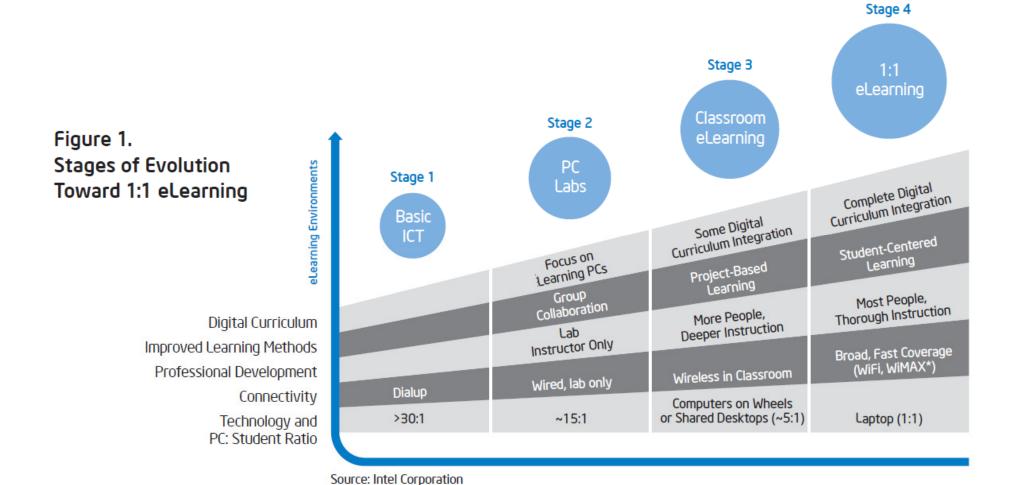


#### What is Handheld Learning?

- Using mobile phones 'in the wild' to collect data for lesson input
- Using tablets/mobile phones to study language activities

   exercises, reading, listening etc
- Using student laptops/handhelds in class for group activity
- Predicted convergence of phones, tablets, PCs as handheld devices for 1:1 elearning







### Why use Handheld learning?

- Not to replace classroom or teacher
- To extend classroom time
- To provide anytime, anyplace learning
- Motivation
- Relevance
- Authenticity
- Credibility



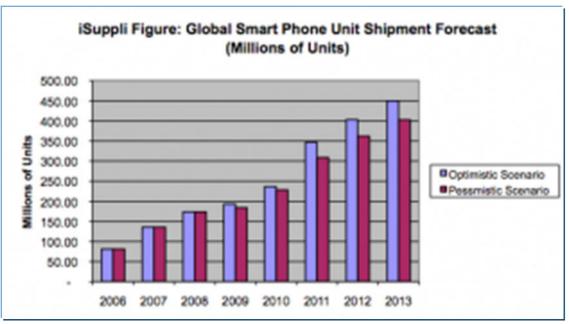
#### What others say:

- "'Mobile Phones Are The Future Of The Internet' said Google vice president and chief Internet evangelist Vinton G. Cerf
- Cerf has predicted that mobile phones, not personal computers, will fuel growth of the worldwide web as countries like India snap up millions of handsets monthly" AFP
- "Mlearning will provide the future of learning"
   Cooney & Keogh



#### **Growth of smartphones**

- •Morgan Stanley Research estimates sales of smartphones will exceed those of PCs in 2012.
- •According to figures for 2010 released by Gartner, smartphones accounted for 297 million (19%) of the 1.6 billion mobile phones sold that year. That's 72.1% more smartphone sales than in 2009. Gartner expect over 500 million smartphones to sell in 2012.
- •The Coda Research Consultancy predict global smartphone sales of some 2.5 billion over the 2010-2015 period, and also suggest that mobile Internet use via smartphones will increase 50-fold by the end of that period.





### Survey of teachers' phone use - Nik Peachey

#### Survey Results

◆ Page 2 of 11

Which of these devices do you own?	
	Response Percent
iPad	34.5%
Other tablet type device	6.9%
iPhone	48.3%
iPod Touch	24.1%
Android phone	24.1%
Internet capable phone	41.4%
I don't own a mobile device	10.3%



#### Research – Cooney & Keogh

## Use of mobile phones for language learning

- promote oracy in Irish
- increase student motivation through the use of familiar technology
- increase student use of the 4 skills - reading, writing, speaking, listening
- investigate the use of ICT in assessment

Cooney & Keogh

- 67% of teachers said students made progress
- 95% said they enjoyed using the technology
- students regarded the integrated technologies as a positive move from more traditional methods
- proved to break down barriers to students learning and speaking
- students abilities to learn autonomously were enhanced
- teachers commented positively on the shift from teacher-led to student-led learning
- teachers noticed increased motivation and student interest



#### **Research - Reinders**

#### Twenty ideas for using mobile phones in the language classroom

- "many students find phones easier to use than computers they are more familiar"
- "phones are social tools that facilitate authentic and relevant communication and collaboration among learners"
- "an ideal tool to support linked to 'situated learning theory' (Lave & Wenger, 1991)
  which states that learning is more likely to take place when information is
  contextually relevant and can be put to immediate use"
- "more exposure to the target language, and more practice, or time on task, explains most of the variations in students' success"
- "...they give students control over their own learning. Students control the medium and teachers, by elaborating how best to use the medium, provide a blueprint for autonomous learning, especially during he wide range of daily social activities where mobile phones are more likely to be used"



#### **Classroom devices - OLPC**

- Negroponte: "OLPC's mission is to empower the world's poorest children through education"
- "2,100,000 children and teachers have XO laptops"
- Uruguay
- Paraguay
- Peru new: 1m in 2011
- Madagascar
- India
- Nepal
- Gaza & Ramallah
- Kenya
- Afghanistan
- Rwanda





### **OLPC** mission

#### 2,100,000 children and teachers have xo laptops

"As the pace of change in the world increases dramatically, the urgency to prepare all children to be full citizens of the emerging world also increases dramatically.

What children lack is not capability, it is opportunity and resources.

 In the first years of OLPC we have seen two million previously marginalized children learn, achieve and begin to transform their communities."





#### **OLPC - Sugar interface**

 Based upon 40+ years of educational research at Harvard and MIT, Sugar promotes "studio thinking" through demonstrations, projects, and critiques, as well as "studio habits of mind", by developing craft, engagement, persistence, expression, observation, reflection, and exploration.



Journal
Object and activity browser



Book & PDF reader



Write Word processor



Documentation and Help for Sugar



Chat
Collaborative discussion



Web browser based on Mozilla Firefox



Distance Measure the distance between two laptops



Learning, programming, & authoring environment



Calculate
A basic collaborative calculator



Turtle Art
Pseudo-Logo graphical
programming language



Maze
A timed maze game



Memorize
Compete against others to find
matching pairs of images, sounds,
or text



Moon
View current lunar phase and eclipse information



Introductory Python programming environment



Paint Simple paint activity



Scratch
An easy-to-learn, multimedia programming language

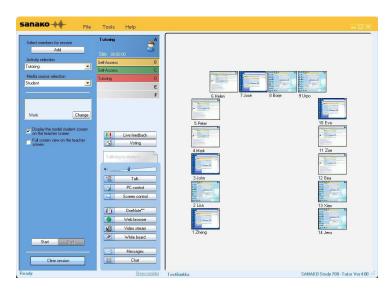


#### **Intel classmates**

- •3 million classmates installed
- •Classroom management
- Teacher screen control
- •ICT pairwork







#### **Classmate installations**

- There are 3m classmates in :
- Portugal
- Venezuela
- Uruguay
- Macedonia
- + 1.5m new plan for Argentina
- + 20m planned:1 for every familin Vietnam





### 1:1 elearning in Turkish state system

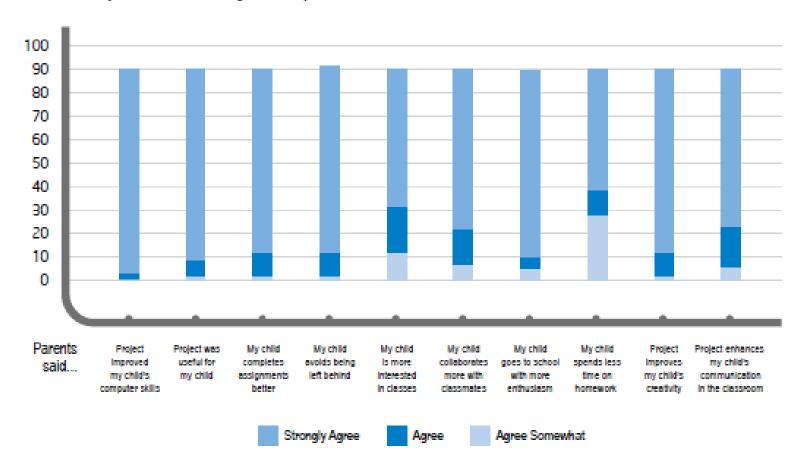
Table 1. Turkey's 1:1 eLearning Project Objectives

Project Objectives	Description
Online content and professional development	Prepare teachers to integrate technology in their teaching through educational online content. Give staff time to learn about technology integration.
Innovative technologies	Provide high-quality education to more students at a lower cost by increasing computer awareness and teaching students how to use new technologies.
Student-centric problem solving and collaboration	Improve student access to information by using new technologies and Internet connectivity to foster student-centered problem solving, collaborative projects, and independent research.
Ubiquitous access	Provide equal educational opportunities by empowering students and teachers to utilize technology when and where they need to.
1:1 eLearning environment	Increase student-centered learning and achievement through laptops dedicated to students in their classrooms.
Student motivation	Increase students' performance, motivation, and engagement, as reflected in their grades.



### 1:1 elearning in Turkish state system - parents

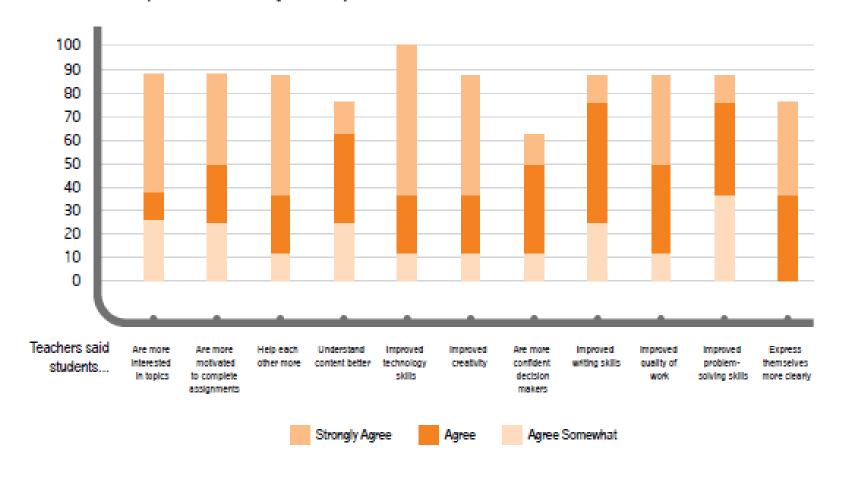
Parents' Perceptions of the Project's Impact on Their Children<sup>2</sup>





### 1:1 elearning in Turkish state system - teachers

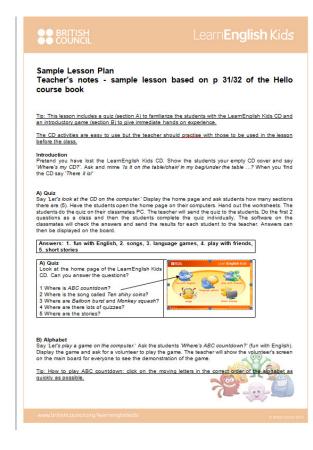
Figure 3. Teachers' Perceptions of the Project's Impact on Students<sup>2</sup>

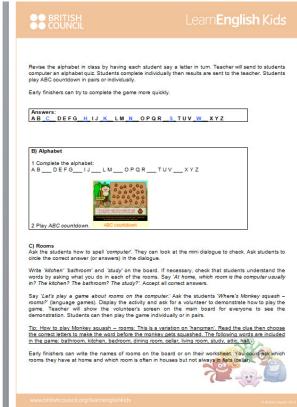




#### British Council / Intel Classmate Research – Egypt pilot

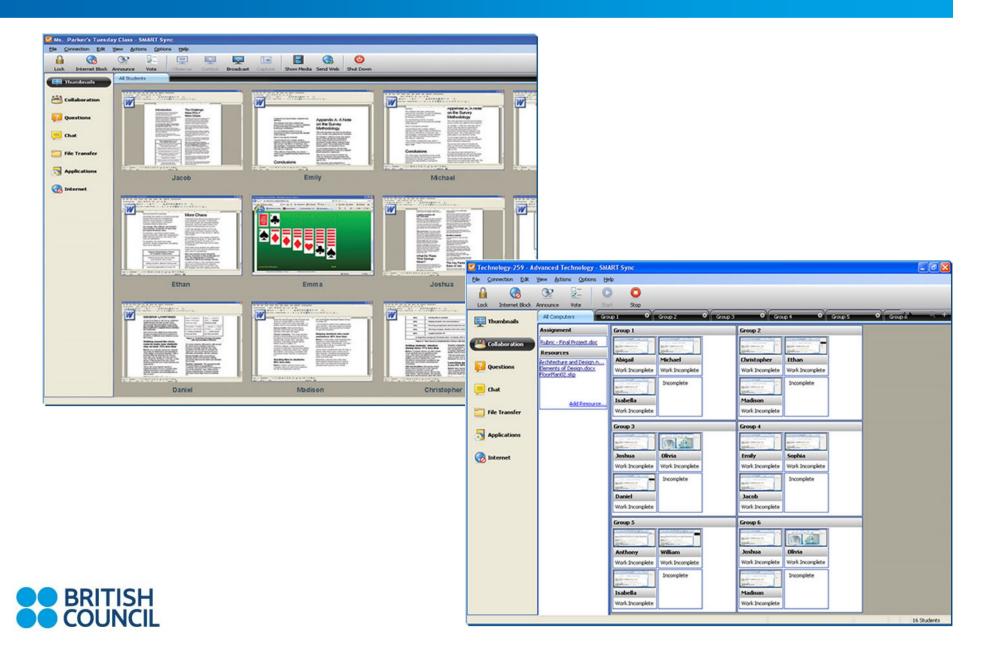
- •What impact does using the Classmate PC have on the teacher (skills, knowledge, behaviours and training implications)?
- •Does the use of the Classmate PC lead to any changes in attitudes towards the target language of English among students?
- •Does the use of the Classmate PC lead to any changes in attitudes towards the use of technology among the students and teachers?







### **Smart Sync: classroom management**



#### Classmate evaluation - Broadgreen County Primary

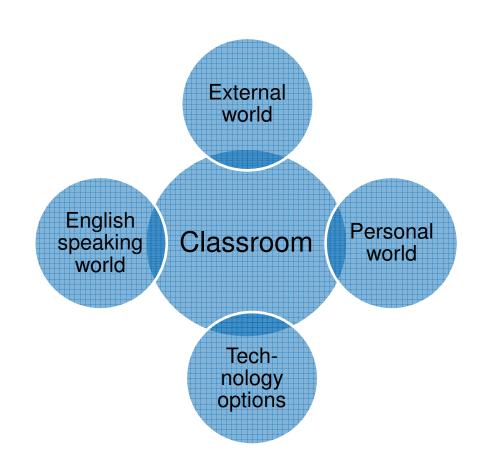
- 87 percent of teachers indicated that the project helped their students develop 21st century skills such as teamwork, independent thinking, problem solving, public speaking, and writing. Teachers also said their students understood the lessons better, increased their technology skills, were more interested in their lessons, and were more motivated to complete their assignments.
- 75 percent noted their desire to have students take the classmate PCs home.
- 89 percent of students said the project helped them learn better and develop a more indepth understanding of the content.
- 90 percent of parents said the project had a positive effect on their children's motivation and learning.
- In addition to these tangible findings, observers identified:
  - Increases in students' interest in their courses
  - Increases in teachers' interest and motivation
  - Higher attendance rates compared to traditional classes, perhaps as a result of teachers using techniques such as three-dimensional animations and simulations to present lessons
  - New self-development opportunities for teachers

Pilot programme at Broadgreen County Primary, Liverpool



#### **New learning modes for new generations**

- Online learning
- Self-paced learning
- 1-to-1 learning
- Handheld learning
- Mobile learning
- Collaborative learning
- Time-shifted learning anytime, anyplace
- Synchronous / asynchronous learning
- Blended learning





#### Ashridge Business School – Gen Y Learning Styles

- 1. Doing is more important than knowing
- 2. A need for immediacy
- 3. Trial and error approach to problem-solving
- 4. Low boredom threshold
- 5. Multitasking and parallel processing
- 6. Visual, nonlinear and virtual learning
- 7. Collaborative learning
- 8. Constructivist approach



#### Task

 Are your learners different from learners 5-10-15 years ago?

What consequences (if any) should we draw from this?



#### More applications....

#### **Phonecasting**

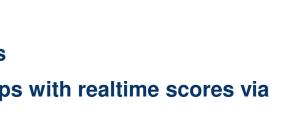
 replaces the microphone with a phone and a dial in number to call and record to. Podcast audiences simply dial up podcast shows on demand from their phone. www.phonecasting.com

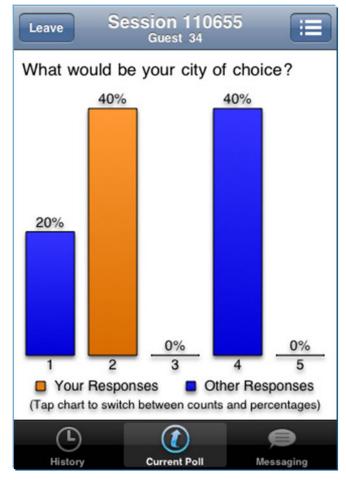
#### **Phlogging**

- Phone blogging call ipadio.com from any phone, anywhere in the world (or use our apps) to broadcast your voice back to your website, your blog, and your social networks - auto-post to your blog and Facebook/Twitter
- Used by Oxfam in Haiti disaster relief

#### **Personal Response Systems**

Voting & assessment apps with realtime scores via mobile







#### Case Study: Learning Spanish with Ipadio

- "This past week one of the teachers in our World Language Department used student cell phones and ipadio to record pairs of students having a conversation about a famous Mexican painting.
- Prior to the activity the teacher paired the students off and had them write a dialogue in Spanish talking about the Mexican painting.
- On the day of the activity the students paired off around the room and using one cell phone dialed into Ipadio, entered the 4digit access code, and began talking.
- Each of the recordings was saved in the teachers private ipadio account. Later that day the teacher listened to the conversations and assessed each student's performance.
- The take away for the teacher was that she could listen to the recordings at her leisure and replay the conversations as much as needed to properly assess the student's performance. The teacher can provide much richer feedback and even replay the recording for the student. The students enjoyed the activity and were eager to listen to themselves speaking."

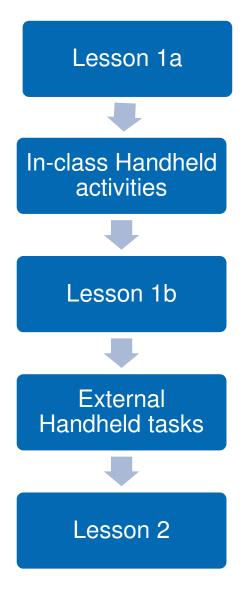




#### PACER - Technology model

Building on ARC and ESA, we need a technology-enhanced model, e.g.:

- Pre-teaching
- Authentic input via technology
- Classroom communicative practice
- External practice via technology
- Reinforce in classroom







# People expect to be able to work, learn, and study wherever they want.

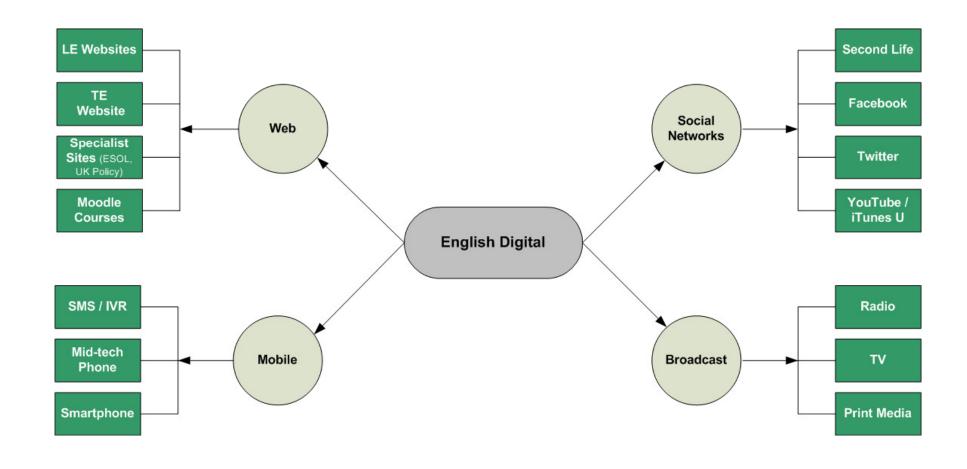
Horizons 2011 Report







### **English Digital framework**



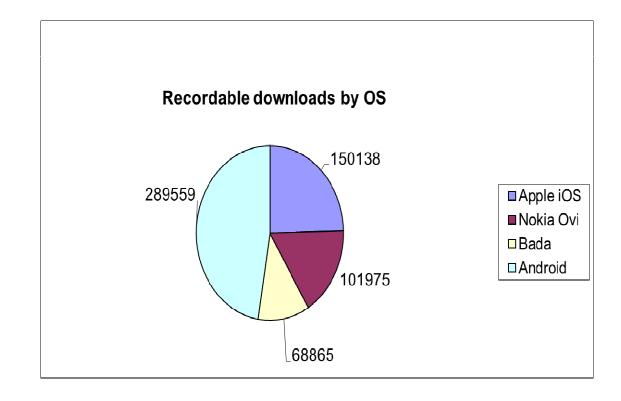




#### SMS practice



### Apps









## MyWordBook

- Improve your vocabulary with MyWordBook, an interactive vocabulary notebook for language learners.
- Browse preloaded flashcards of the most important words in the English language.
- Each flashcard contains pictures, sounds, example sentences, translations and notes to help you remember.
- Language specific and international versions available.









#### Wordshake

Make as many words as you can against the clock in two minutes



## 60 Second Word Challenge











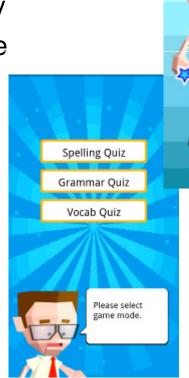


### Johnny Grammar's Quizmaster

Test yourself against our grammar expert Johnny Grammar with this app for Android™ smartphone and share your score with friends via Facebook. The game features:

- •3 levels of grammar questions
- hundreds of vocabulary questions
- a spelling quiz on commonly misspelled words







### Learn**English** Mobile

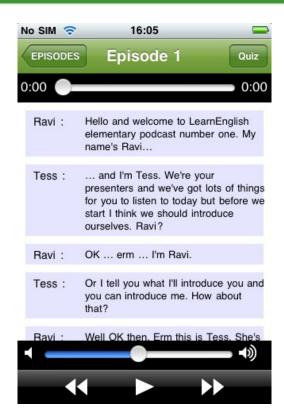
#### Learning on the move



## LearnEnglish Elementary

LearnEnglish Elementary Podcasts app is a series of English learning podcasts for you to directly download and enjoy on your phone.

- Tapescript scrolls with audio in time
- Communicate with the podcast presenters through social media
- Comprehension questions for each episode Available on:











## Big City

Big City Small World is an audio soap for learners of English. Set in London, it follows the lives of a group of regulars in Tony's cafe.

#### The application includes:

- •Over 30 episodes with synced tapescripts
- •10 cartoons with accompanying language learning points.







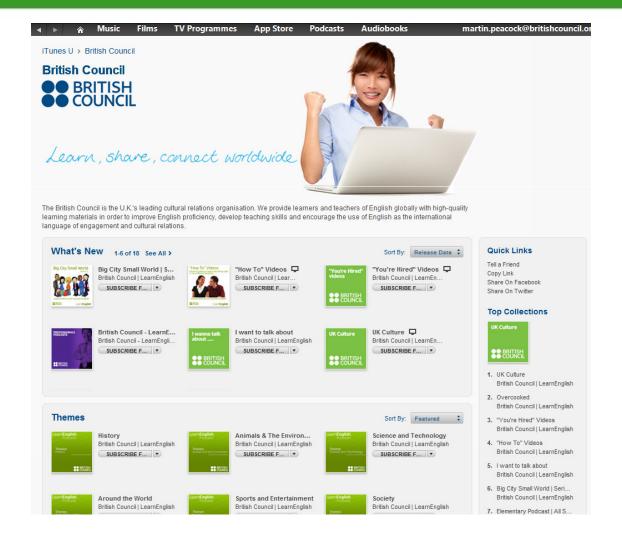




#### Learn**English** Mobile

#### Learning on the move

# Social Media – iTunesU





## LearnEnglish Kids

- Using existing content or new content?
- Single interactive story or selection of games or songs?





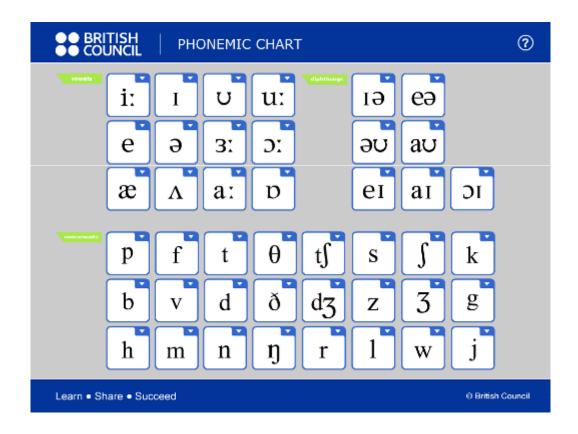




## Sounds Right

Sounds Right is the British Council's first pronunciation chart for learners and teachers worldwide.

This app is for the iPad.









### Grammar-vocab

Downloadable packs Questions
 (B, E, I, A)

- Dozens of question types
- Exercises, reference and tests
- Extendable market with downloadable content







## Reading

Practice activities for reading skills:

- Scanning
- Skimming
- Speed reading
- Comprehension









#### Reference

- Lesson plans
- Learner materials
- Publications (English Next, teacher manuals etc)







#### Learn**English** Mobile



british council

RESULTS FOR "british council"

Search Optic

About 6



#### LearnEnglish Elementary

BRITISH COUNCIL / EDUCATION

★★★★★ (493)

INSTALL

English learning podcasts with exercises from the British Council LearnEnglish Elementary Podcasts app is a series of English learning podcasts for you to directly dow...



#### Johnny Grammar's Quizmaster

BRITISH COUNCIL / BRAIN & PUZZLE

★★★★★ (162)

INSTALL

Johnny Grammar's Quizmaster is an English learning game from the British Council This interim update lengthens the time to 15 seconds Update with further options to f...



#### **Big City**

BRITISH COUNCIL / EDUCATION

★★★★★ (83)

INSTALL

Big City Small World is an audio soap for learners of English. Big City Small World is an audio soap for learners of English brought to you by the British Council. Se...



#### Wordshake

BRITISH COUNCIL / BRAIN & PUZZLE

★★★★★ (77)

INSTALL

A fun English learning game brought to you by the British Council! A fun interactive game competing against the clock trying to make as many words as you can with grid...

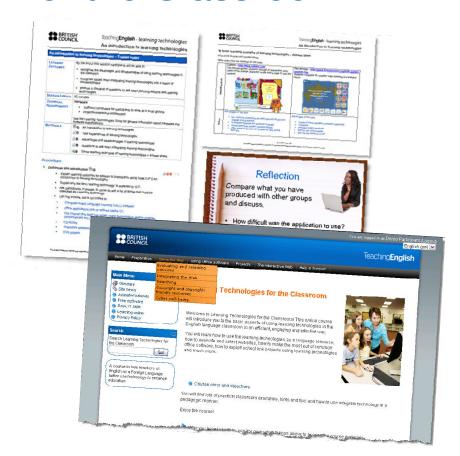


#### Routes to excellence

#### e-Moderator course



# Learning Technologies for the Classroom

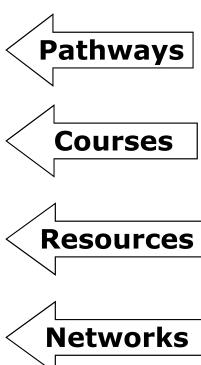




#### Routes to excellence

## Continuing Professional Development Framework

1	Starting	Learning the principles	
2	Newly-qualified	Putting principles into practice	
3	Developing	Building confidence and skills	
4	Proficient	Demonstrating confidence, experience and reflection	
5	Advanced	Exemplifying good practice	
6	Specialist	Leading and advising	





#### Routes to excellence

## Handheld Learning Training

#### mLearning in Practice:

"mLearning in Practice is a course about mobile learning, or 'mlearning' - learning with mobile or handheld devices. The course aims to explore mLearning from both the learner's and the educator's perspective.

We look at the range of mobile or handheld devices currently available for learning, and we examine current best practice and principles in mLearning. We consider mLearning both in and outside the classroom, and in both formal and informal learning situations."

The Consultants-E

6 weeks online - 595€

http://www.theconsultants-e.com/training/courses/mlearning.aspx

#### Contacts

- British Council sites:
  - -www.LearnEnglish.org.uk
  - -www.TeachingEnglish.org.uk
- Journals with ICT/tech content:
  - Technology Matters Modern English Teacher
  - ETP, ELTJ, Language Learning & technology (free)
- Michael.Carrier@britishcouncil.org

