

η πληροφορική
στην εκπαίδευση

μια **επισκόπηση**
διεθνών πηγών

Γιώργος Μπουκέας
boukeas@gmail.com

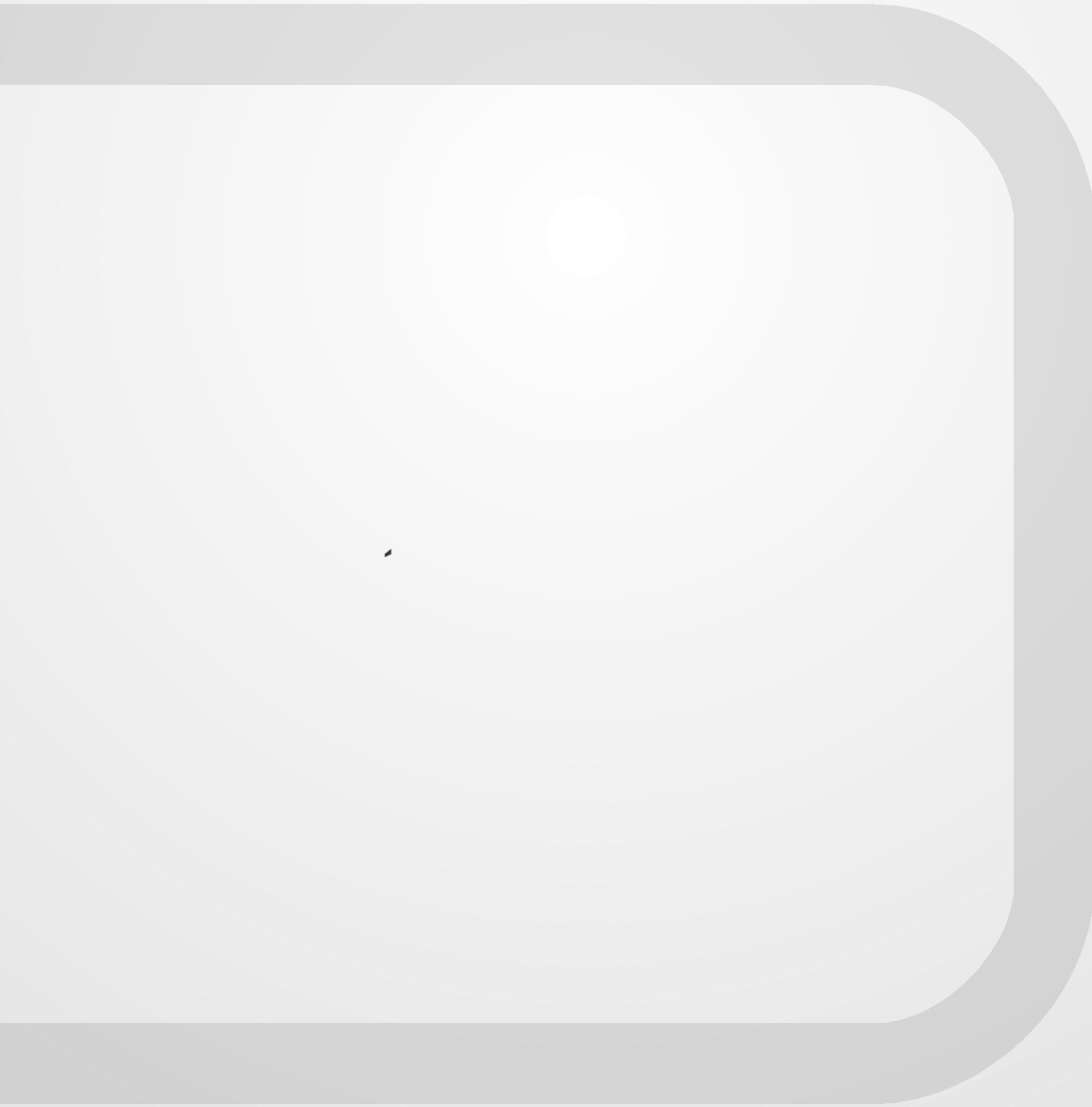
Μάρτιος 2011

η πληροφορική
στην εκπαίδευση

προγράμματα
σπουδών

διδακτικό
υλικό

μελέτες



προγράμματα
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στόχοι

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υλοποίηση

*A Model Curriculum for
K-12 Computer Science*

**A Model
Curriculum
for K-12
Computer
Science:**

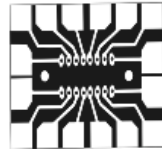
**Final Report
of the
ACM K-12
Task Force
Curriculum
Committee**

Second Edition



A High-School Curriculum Exploring What Computer Science Is and What It Can Do

EXPLORING COMPUTER SCIENCE



Joanna Goode
University of Oregon

Gail Chapman
Computer Science Equity Alliance

*Exploring
Computer Science*

2008

REVISED

The Ontario Curriculum
Grades 10 to 12

Computer Studies

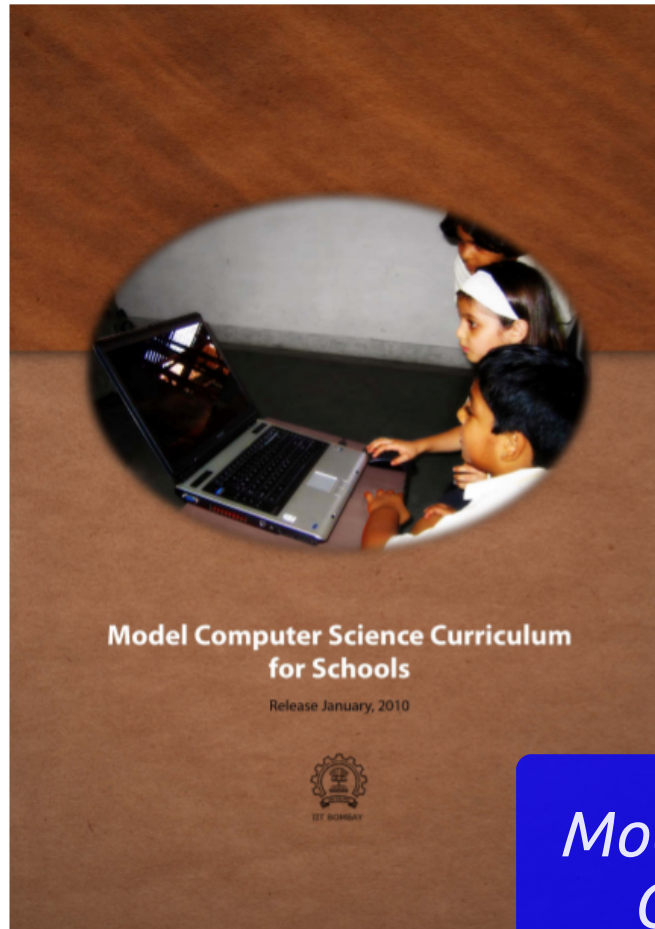
*The Ontario Curriculum,
Grades 10 to 12:
Computer Studies*



reach every student

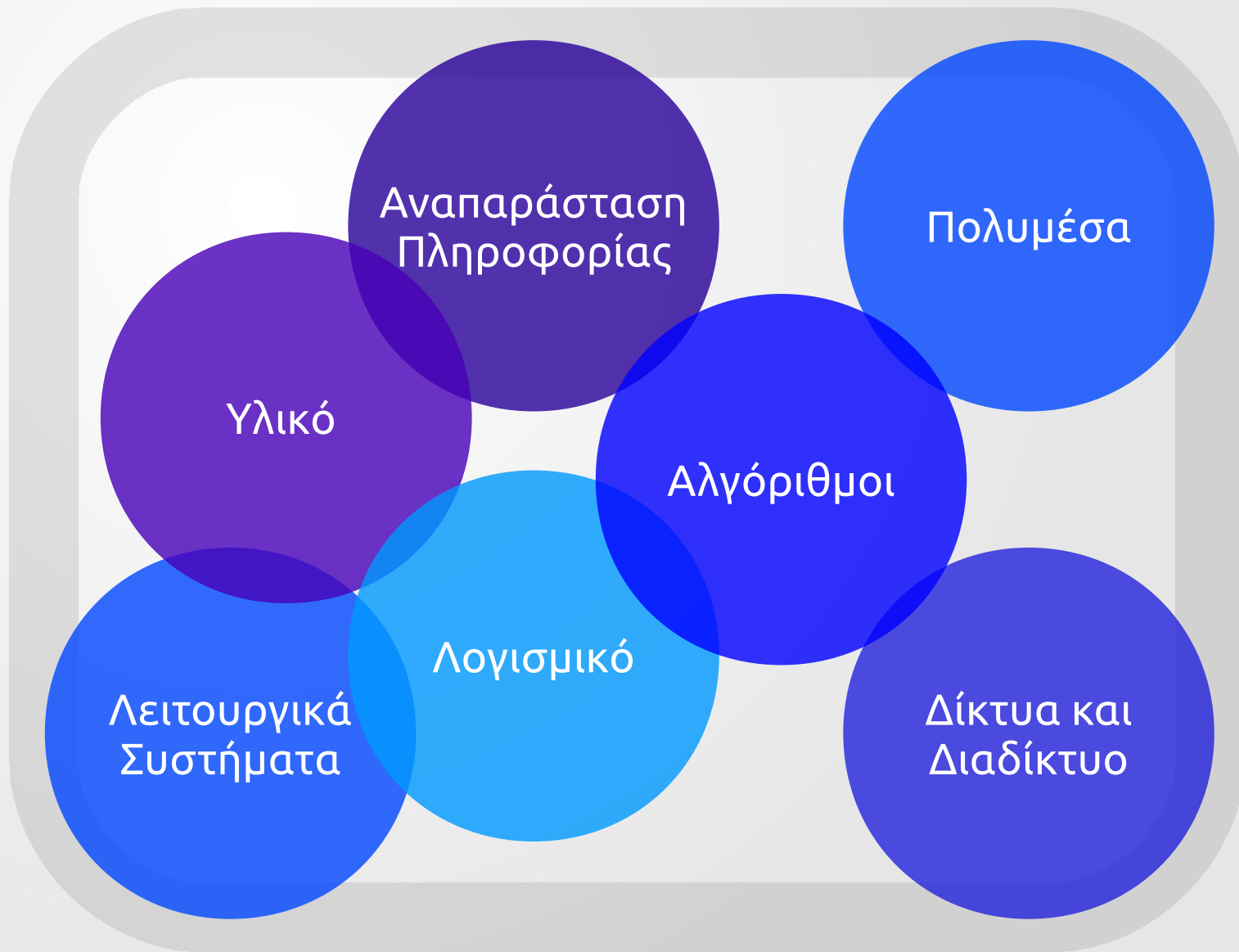
 Ontario

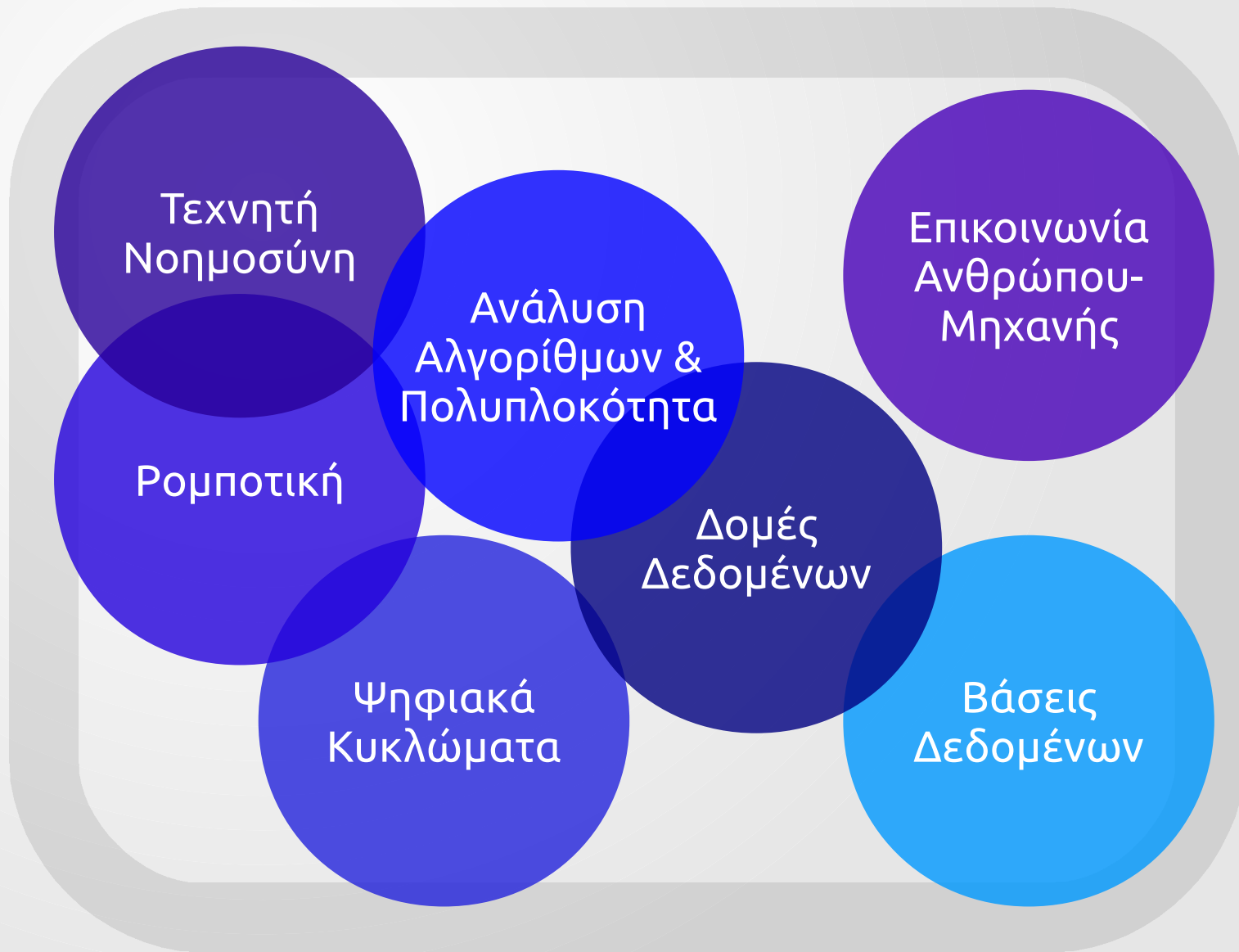
CS Curriculum for K-12 Schools



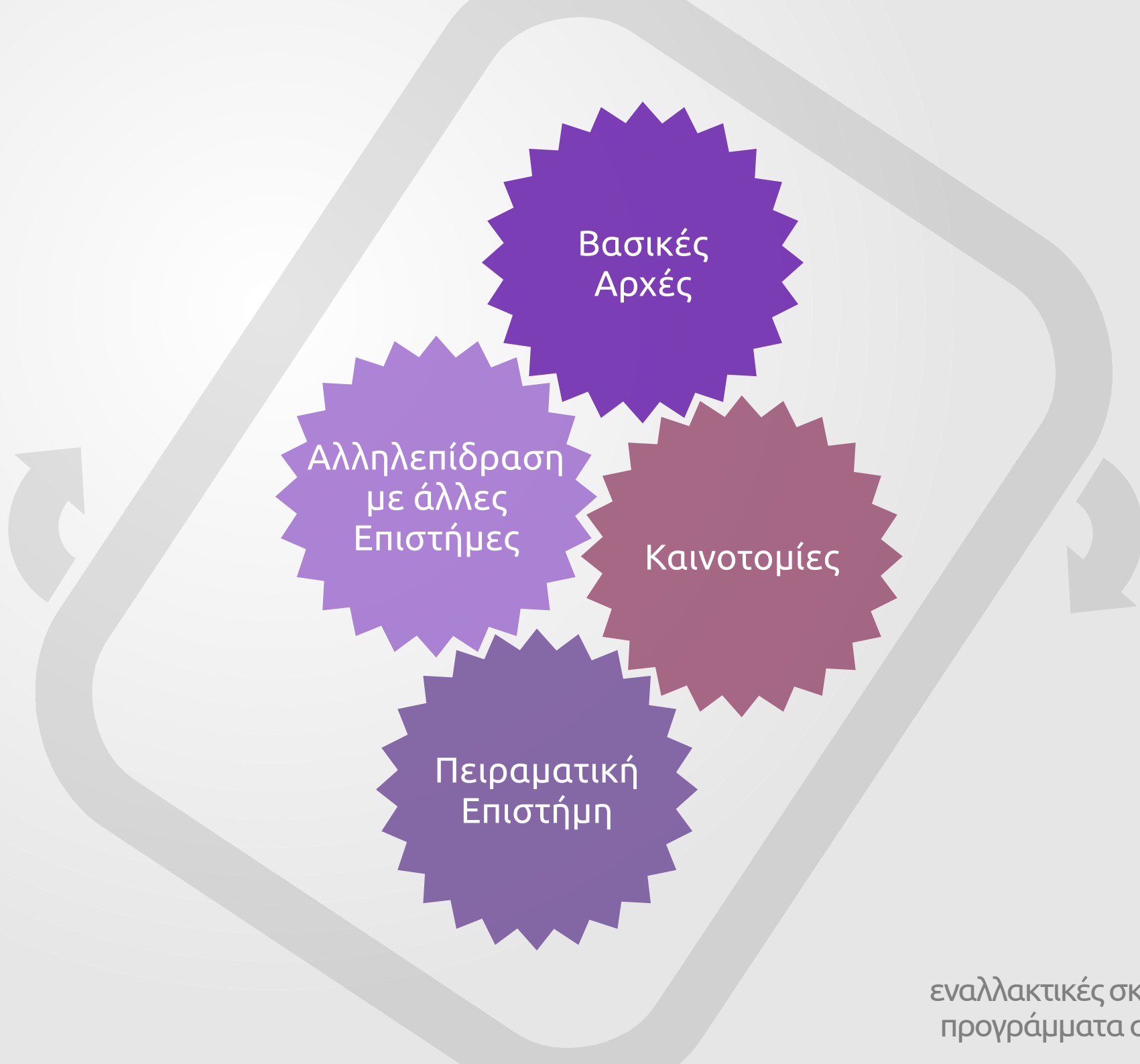
Model Computer Science Curriculum for Schools











εναλλακτικές σκοπιές για
προγράμματα σπουδών

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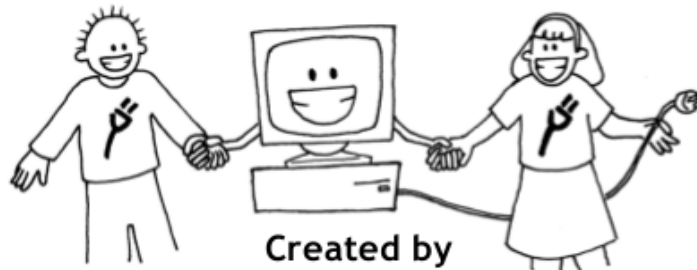
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διδακτικό
υλικό

COMPUTER SCIENCE *Unplugged*

An enrichment and extension
programme for primary-aged children



Created by
Tim Bell, Ian H. Witten and Mike Fellows



Adapted for classroom use by
Robyn Adams and Jane McKenzie

Illustrated by Matt Powell

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Θεωρία
Πληροφορίας

Αναζήτηση

Ταξινόμηση

Προβλήματα
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Επικοινωνία
Ανθρώπου - Μηχανής

Τεχνητή
Νοημοσύνη

Πρωτόκολλα

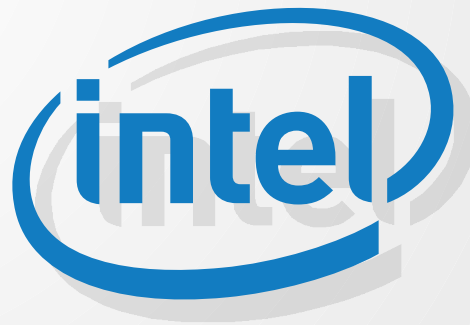
Κατανεμημένα
Συστήματα

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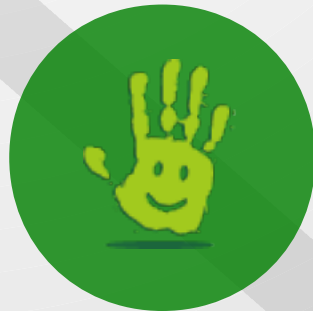
Υπολογιστές και
Μαθηματικά



CS4FN



*The
Journey
Inside*



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μελέτες

μελέτες

τρέχουσα
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προκλήσεις

λύσεις

*The New Educational Imperative:
Improving High School
Computer Science Education*

The New Educational Imperative:
Improving High School Computer Science Education

Using worldwide research and professional experience to improve U. S. Schools

By CSTA Curriculum Improvement Task Force





Running On Empty:

The Failure to Teach K-12 Computer
Science in the Digital Age

*Running on Empty:
The Failure to Teach K-12
CS in the Digital Age*



Association for
Computing Machinery



Computer
Science
Teachers
Association

Computing at School: the state of the nation

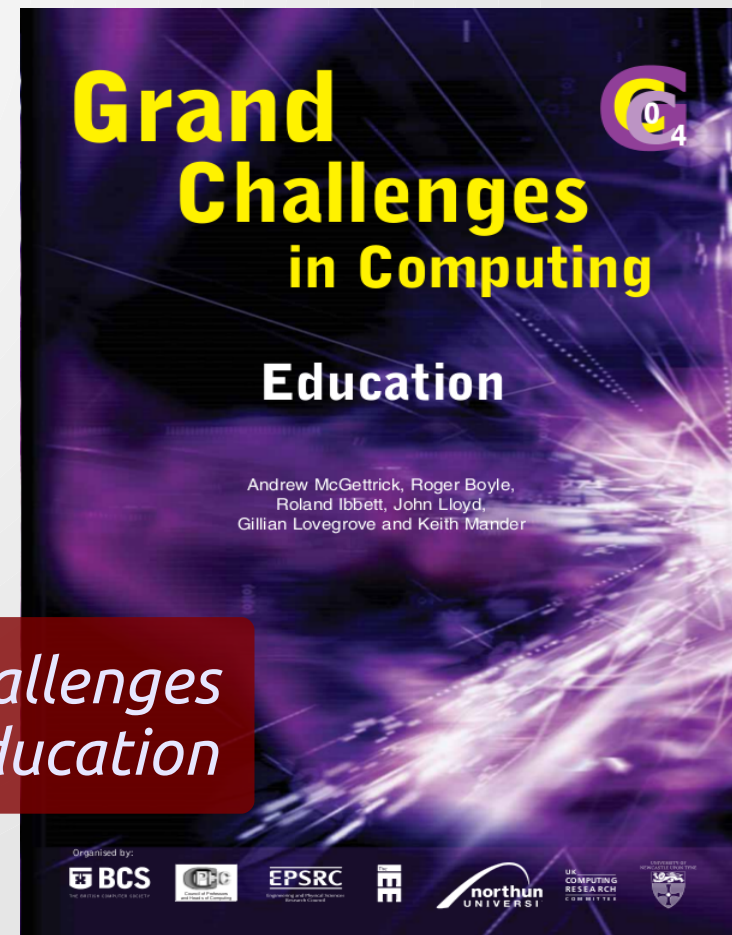
Computing at School: the state of the nation

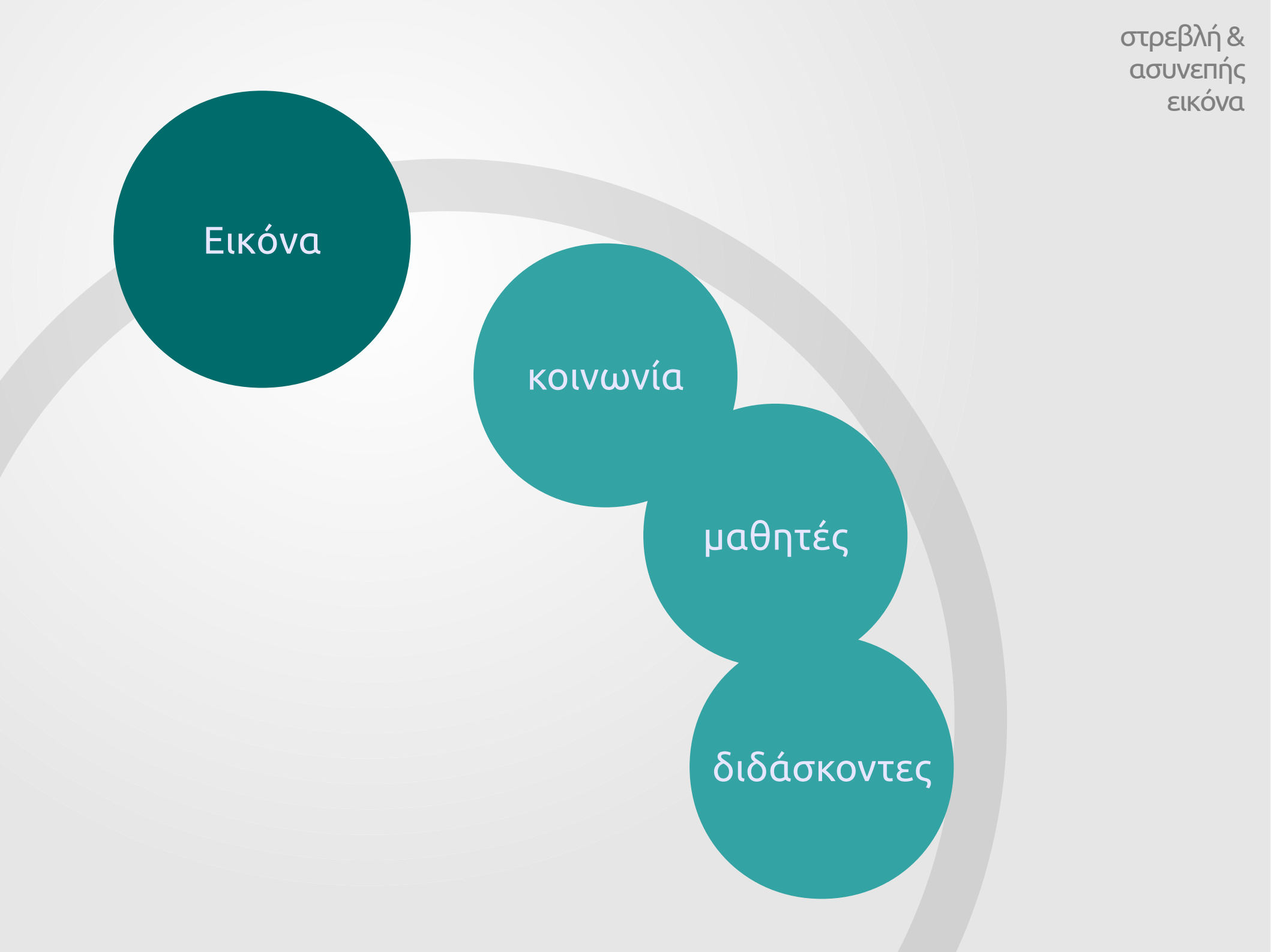
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For the UK Computing Research Committee

V7, January 2010

Contact: Simon Peyton Jones (simonpj@microsoft.com)

Grand Challenges in Computing - Education





Εικόνα

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μαθητές

διδάσκοντες

Εκπαιδευτική
Τεχνολογία

Ψηφιακή
Ευχέρεια

Προγραμματισμός

Εκπαιδευτική
Τεχνολογία

Ψηφιακή
Ευχέρεια

Προγραμματισμός

Επιστήμη

ανάγκη για
αλλαγή

Προγράμματα
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Ευχαριστώ!

