



# **E-LEARNING AS A STRATEGIC IMPERATIVE FOR UNIVERSITIES IN IRELAND**

**November 2004**

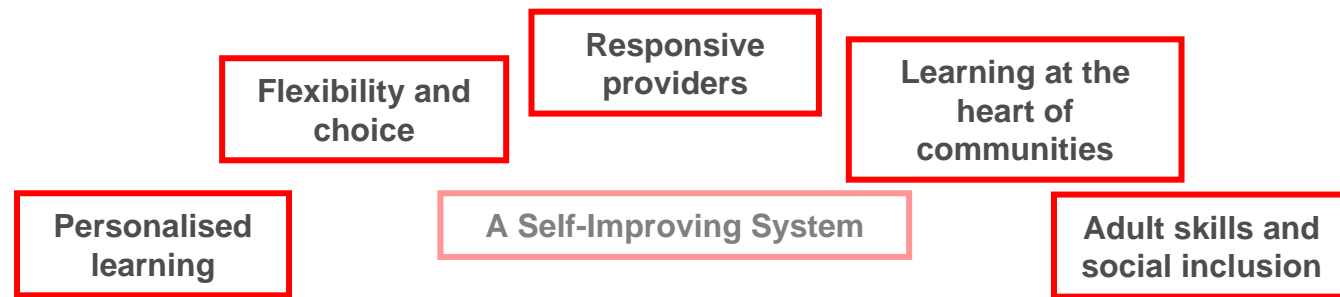
## ***The UK Experience of e-Learning***

**Diana Laurillard**  
**E-Learning Strategy Unit**

department for

**education and skills**

creating opportunity, releasing potential, achieving excellence



The 5-year strategy for a 21<sup>st</sup> century education system



Objectives of DfES strategies

UNDER 5's    PRIMARY    SECONDARY-FE    ADULT SKILLS    HE

across all sectors



Contributions from e-systems



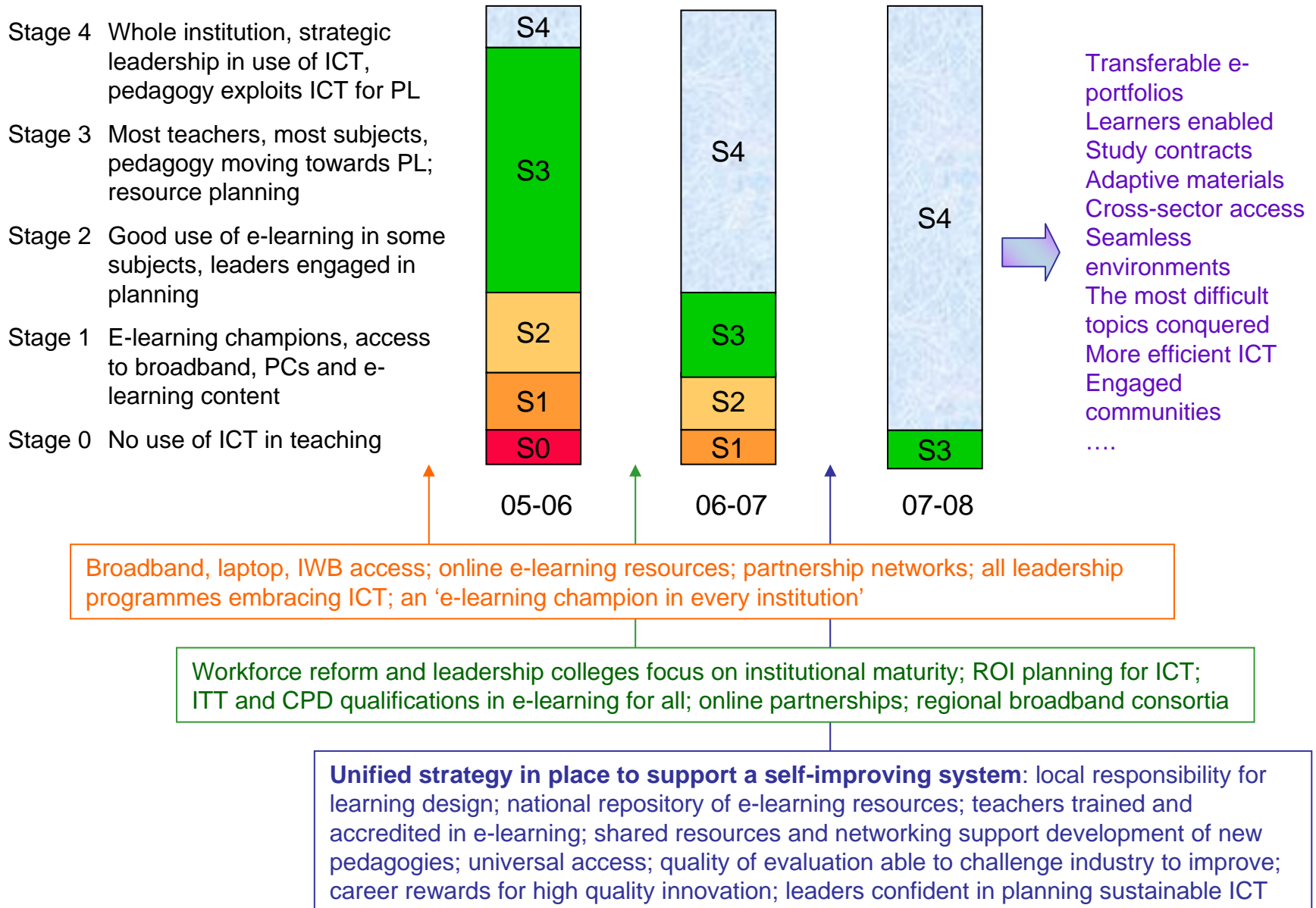
Critical dependencies



Implementation mechanisms??

**Unifying e-learning – A perspective on the 5-year strategy for education and skills**

# What does it take to build a self-improving system?



# The Vision: E-learning personalises the learner's journey ~

Online needs analysis links qualifications to jobs  
Access to information and guidance

Where will it get me?

Assessment on demand  
Formative feedback  
Progress files and e-portfolios

How do we know I've learned?

How will I learn?

Adaptive, interactive learning environments  
Adapting to learning style and pace  
Personalised feedback and support

How could I study?

Partnerships offering flexible  
courses, modes, locations  
and patterns of study

What can I learn?

Curriculum choice through partnerships  
Provider flexibility and online support  
Online registration and funding transactions

Why should I learn?

Personalised diagnostics  
Links to informal learning opportunities  
Access to advice and guidance

~ at

Early years  
School  
Adult skills  
HE

## Proposed priorities for delivering the unified e-learning strategy

### Personalising the Learning Experience

**Pedagogy:** Exploit the potential quality of adaptive e-learning via commissioning

**Assessment:** Agree programme for e-assessment, diagnostics

**Inspection:** Drive self-improvement through [a 'maturity model' for institutions](#)

**Support:** Mentoring schemes for learners through collaboration

**Quality standards:** Promote best pedagogy, support R&D, challenge industry

### Supporting the Learning Workforce

**Leadership:** Help leaders link ICT investment to strategic objectives

Provide the self-diagnostic models, [management tools](#) and support services to promote efficient use of e-learning

**Staff development:** Give teachers the training, tools and time for e-learning

**Career development:** Create reward systems for e-learning champions

### Integrating the e-Systems

**Sharing resources:** Agree universal broadband internet access

Agree roadmap for interoperability

**Build a thriving market:** Define a common learning architecture

Develop and mandate interoperability standards

Establish the centralised procurement framework

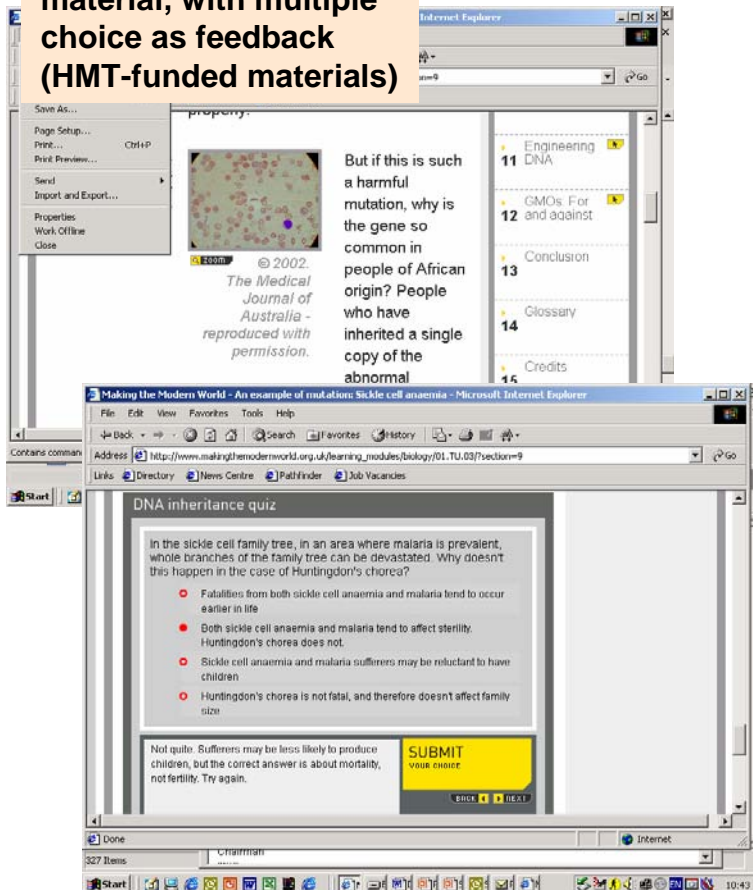
**Unifying learner support:** Agree the common data set, unique learner record, data warehousing, unified systems for delivery



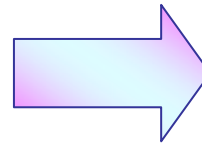
# What do we mean by “Personalising the learning experience”?

From presentational designs (electronic books), which under-exploit the technology...

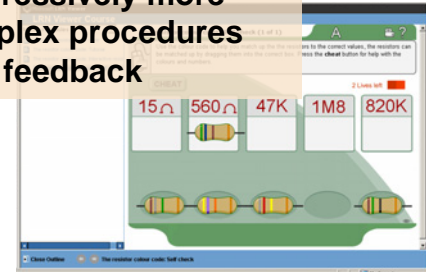
**Presentational material, with multiple choice as feedback (HMT-funded materials)**



... to interactive, independent learning with formative feedback



**Individual teaching to rehearse progressively more complex procedures with feedback**



**Creative tool for learners to control their engagement with e.g. drama**



**Virtual learning environment for supported practice of skills – e.g. safety at work**

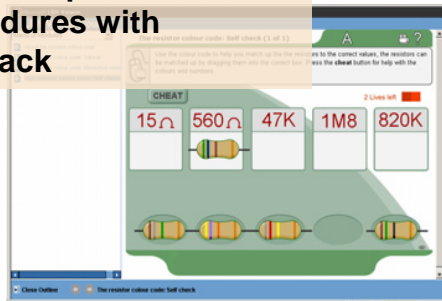


What do we mean by  
 “Supporting the learning workforce  
 through achieving economies of scale”?

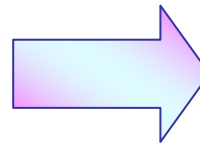
From aggregated form and content (packages)  
 which restrict teacher innovation...

... to disaggregated tools and assets -  
 teachers can share, improve,  
 innovate and exchange, building the  
 pedagogical knowledge base

Individual teaching to  
 rehearse progressively  
 more complex  
 procedures with  
 feedback



Creative tool for  
 learners to  
 control their  
 engagement with  
 e.g. drama



A concept-generation  
 exercise for art history

# What do we mean by “Integrating the e-systems”?

Learner data is transferred between institutions, supporting smooth transitions from primary to secondary to college

Interoperable systems enable schools/colleges to collaborate in support of the 14-19 strategy

Queen's Online : My Homepage  
Staff :

Monday 17th May 2004

[Queen's Homepage](#) | [Help](#) | [My Homepage](#) | [Logout](#)

**My Services**

- My Email
- My Files

**Administration**

- Employment Details
- Internal Vacancies
- My Bookmarks

**Other**

- Change Password
- Phonebook

**Research**

- Project Costing
- Research Links

**Teaching**

- Messaging
- My Modules

**University Services**

- A - Z of Services
- Service Areas

**Alerts**

[Information Services] [Email Downtime - See csv announce page](#)

**News & Events**

**Headlines**

- 14/05/2004 Euro election web predictions
- 12/05/04 Queen's seeks nominations for outstanding graduate ...
- 12/05/04 Ceremony marks students' foundation for academic s ...
- 12/05/2004 Launch of the Lomac Tiles University Boat Race
- 12/05/2004 ARK reports on Church members' attitudes

**Links**

- Press Releases
- Campus News
- Events

**University Quick Links**

- Car Parking

**Information About**

- Learning & Teaching
- Research
- Admin
- Queen's Online
- The University

**Online Documents**

- University Publications
- Procedures
- Staff Handbook

**My Bookmarks**

No bookmarks stored

[Add / Edit Bookmarks]

Institutions personalise online information, linking learning and teaching activities to student records

Teachers can drop material from public libraries into their own lesson-planning system

Coordinated websites within the Learning Franchise create a seamless information and transactional environment for learners

Learners (or parents) can access online resources, peer interaction, and support, from home or work



## Moving towards a Unified e-Learning Strategy...

Innovation led by enthusiasts only

Strategic innovation led by institutional leaders

External funding for hardware provision

Sustainable provision linked to strategic aims

Variable access and usage by institution

Universal access and embedded use in all institutions

Fragmented, sector-based e-learning practice

System-wide approach to strategic actions

Topic-based content with limited activities

Adaptive activities supporting learners' individual needs

Minimal involvement of teachers in design

Generic design tools to engage all teachers

Teaching as a skill learned once

Teaching as a professional, innovative activity

Ass't of traditional skills and knowledge only

Inclusion of e-enabled learning skills and application

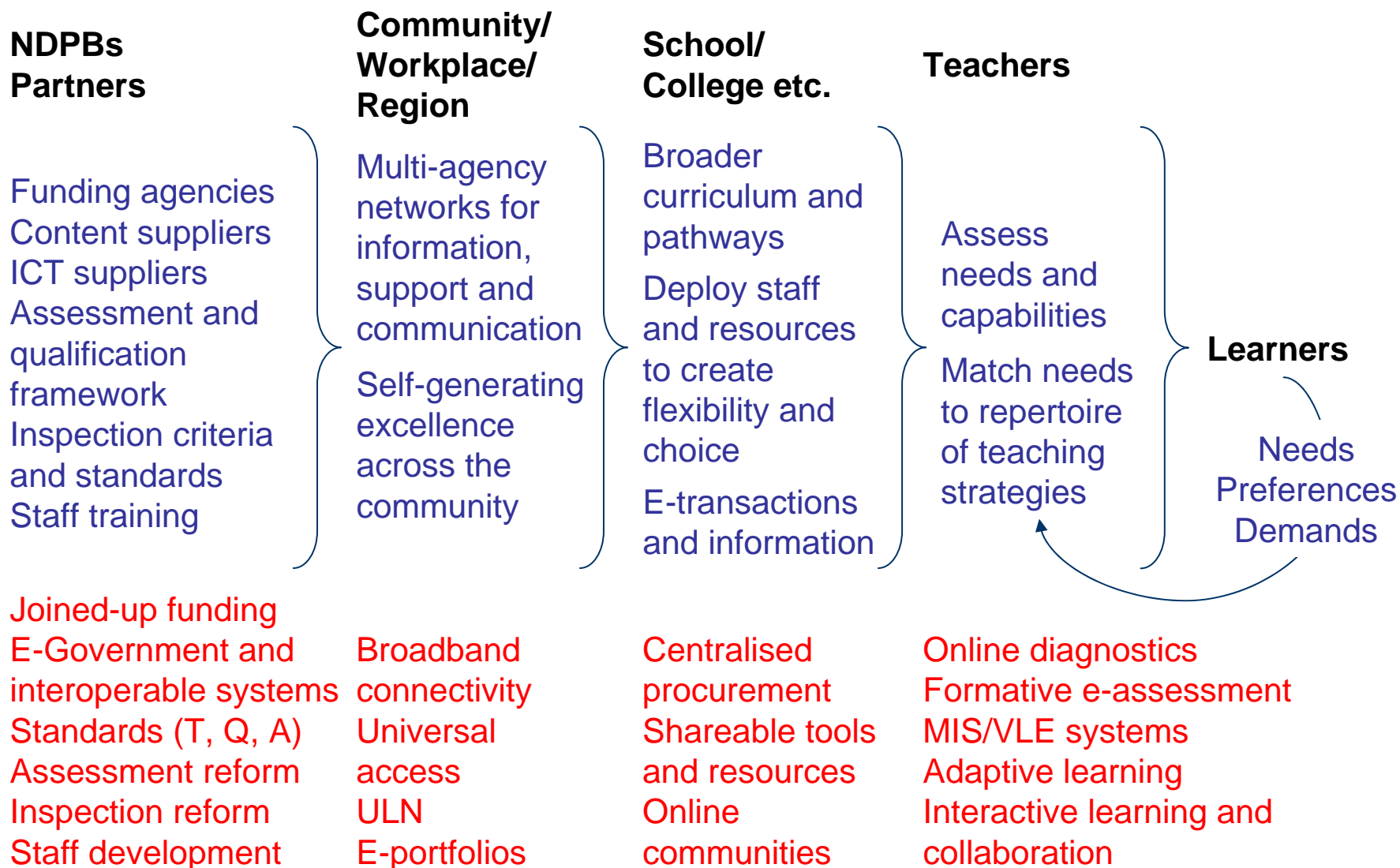
Local, sector-based standards and practices

Approved technical and quality standards cross-sector

Localised procurement practices

Central framework for ICT infrastructure services

# The 'Personalisation' delivery chain



**Critical dependencies to be addressed by the Strategy**

## Critical uncertainties facing e-learning → the Edinburgh Scenarios



### Acceptance and adoption of technology in society

High acceptance  
Widespread adoption  
Technology empowers  
Aligns with human needs  
Driven by society

Partial acceptance  
Patchy adoption  
Technology frustrates  
Runs counter to needs  
Driven by technology



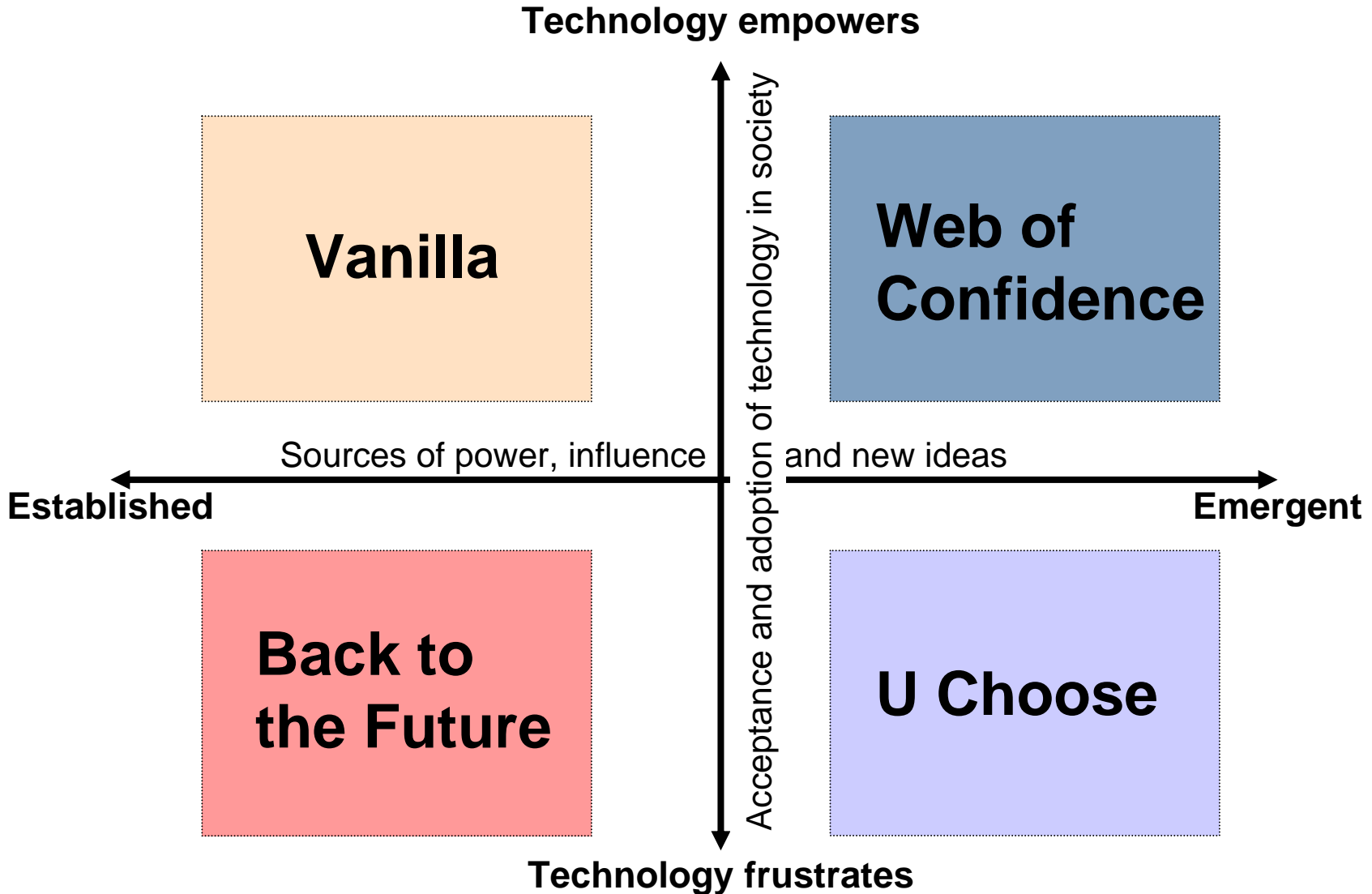
### Sources of power, influence and new ideas

Conventional  
Institutionalized  
Centralized  
Established

Self-organized  
Diffused  
Decentralized  
Emergent

Source: eLearn International, 2004

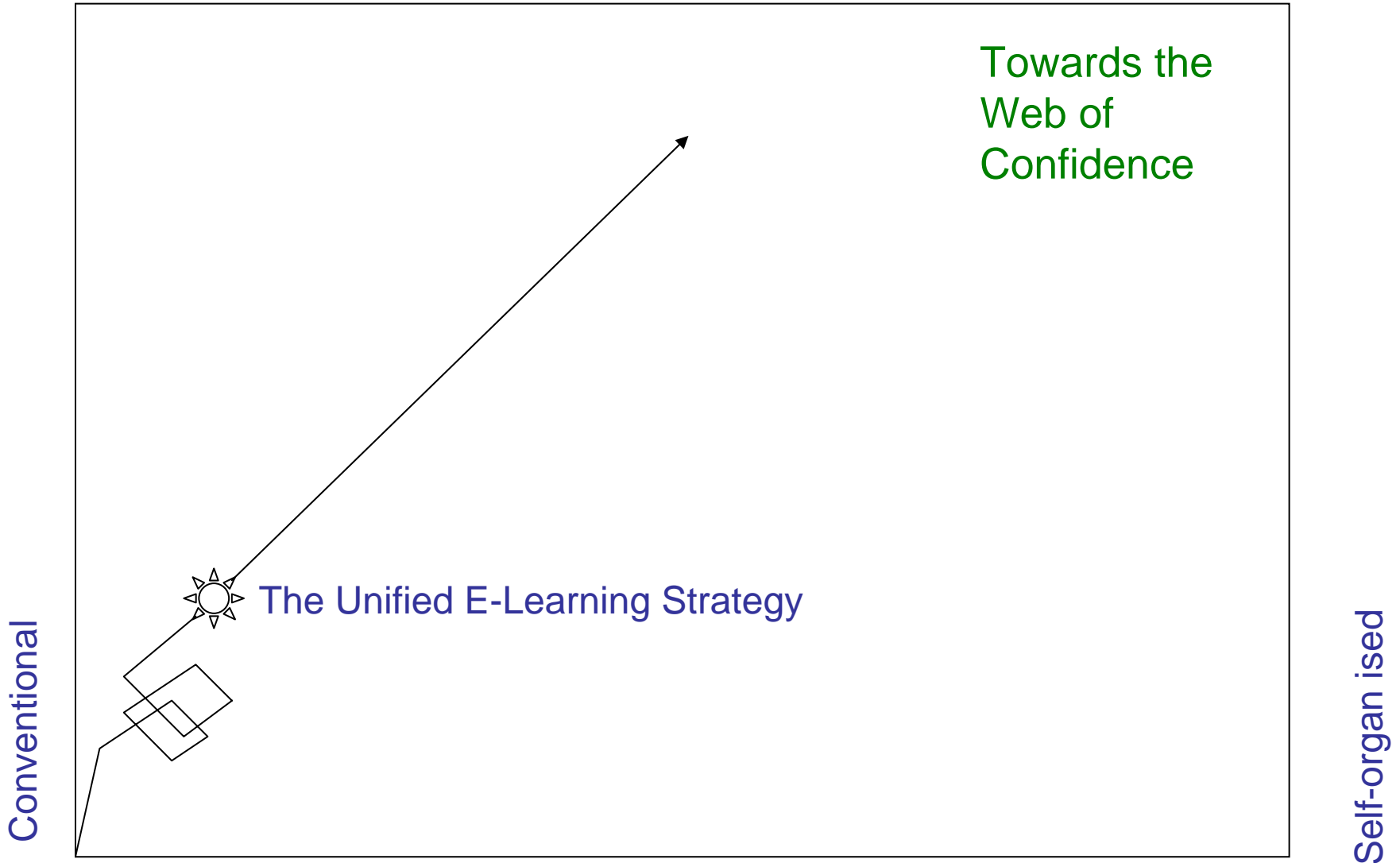
Combining the uncertainties gives us the following matrix...



Source: eLearn International, 2004

Technology empowers

'The Edinburgh Scenarios' – the story so far...

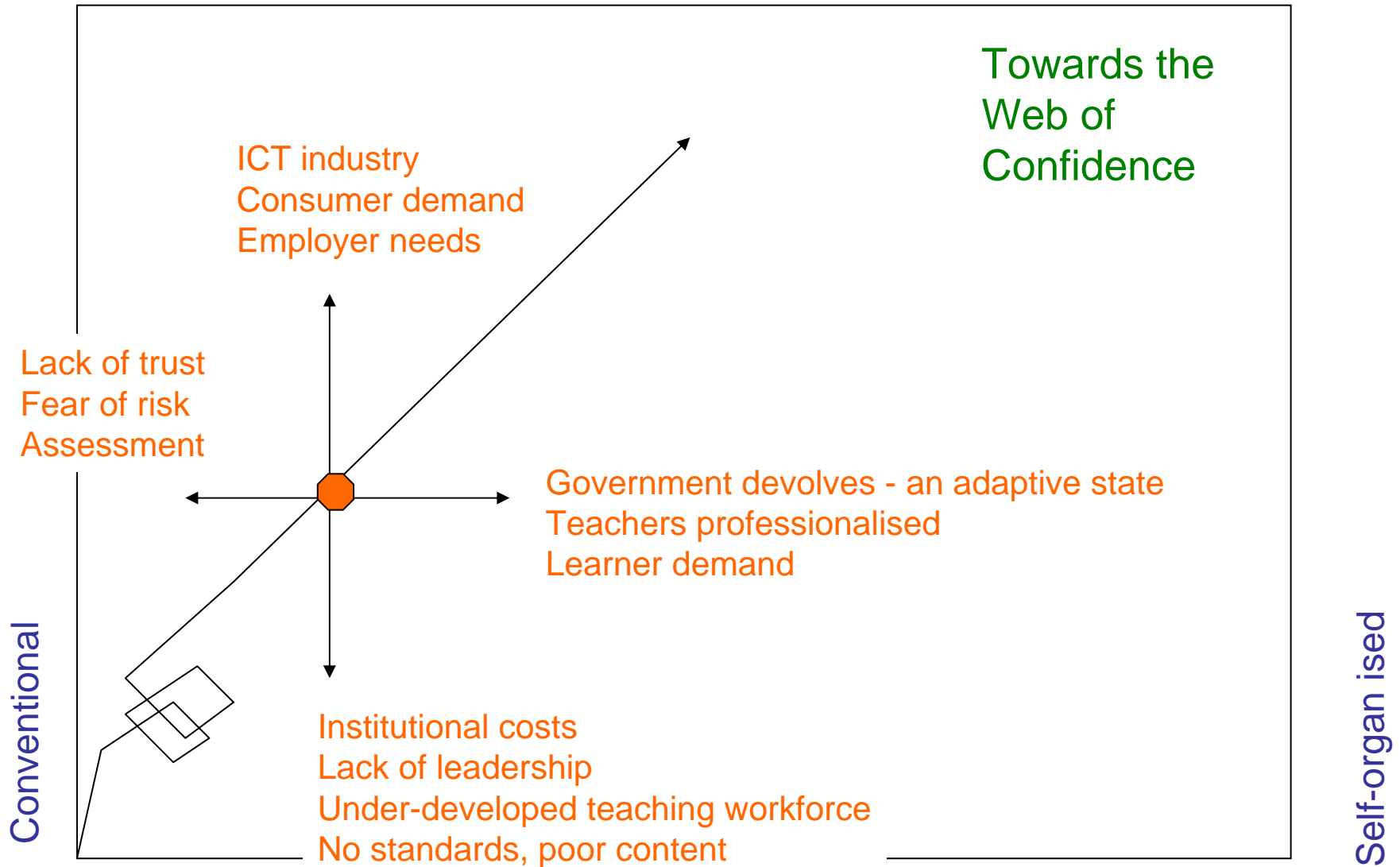


Technology frustrates

... can we accelerate progress?

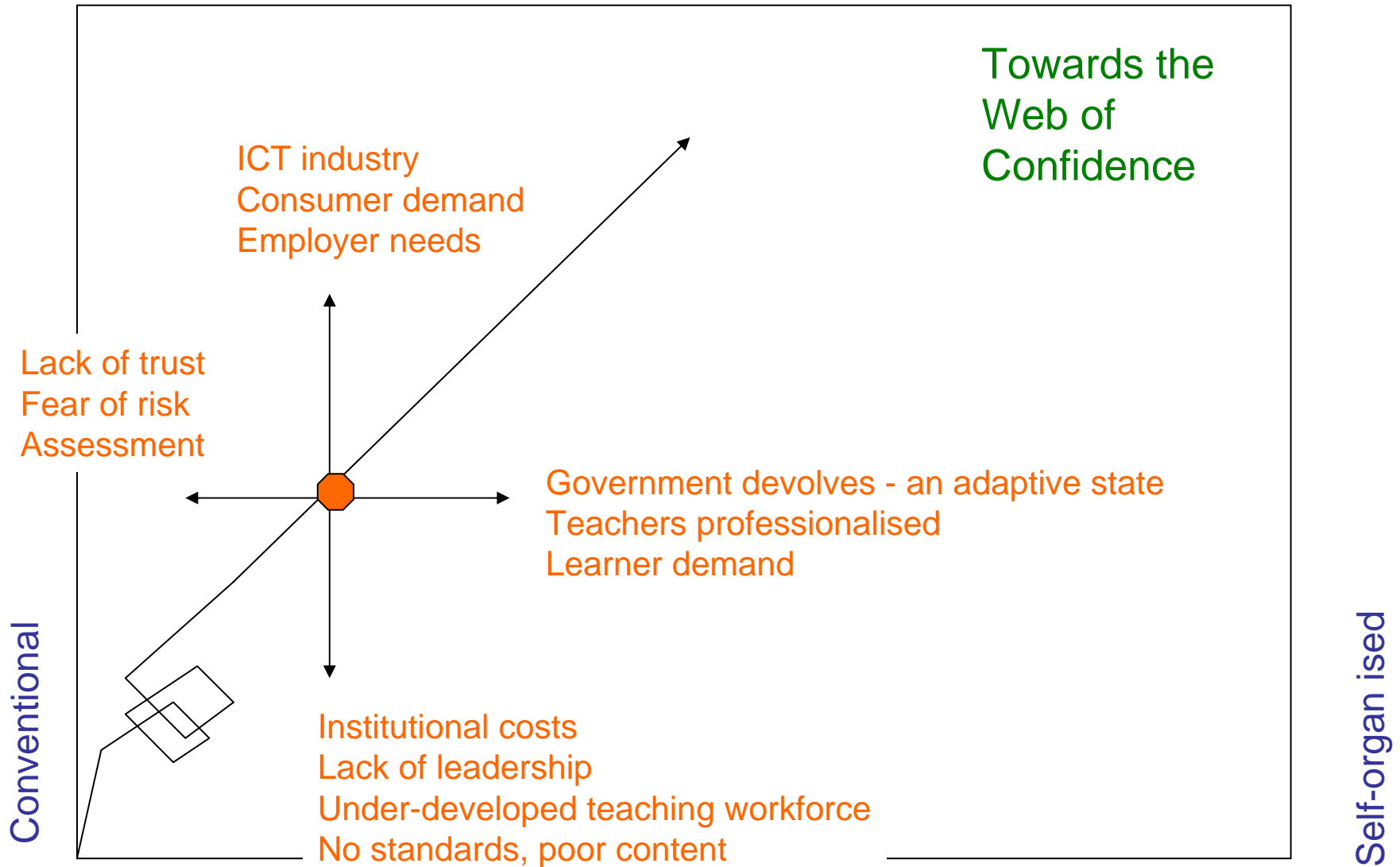
Technology empowers

## Brakes and Drivers - what are they?



Technology empowers

Brakes and Drivers - how are we progressing?

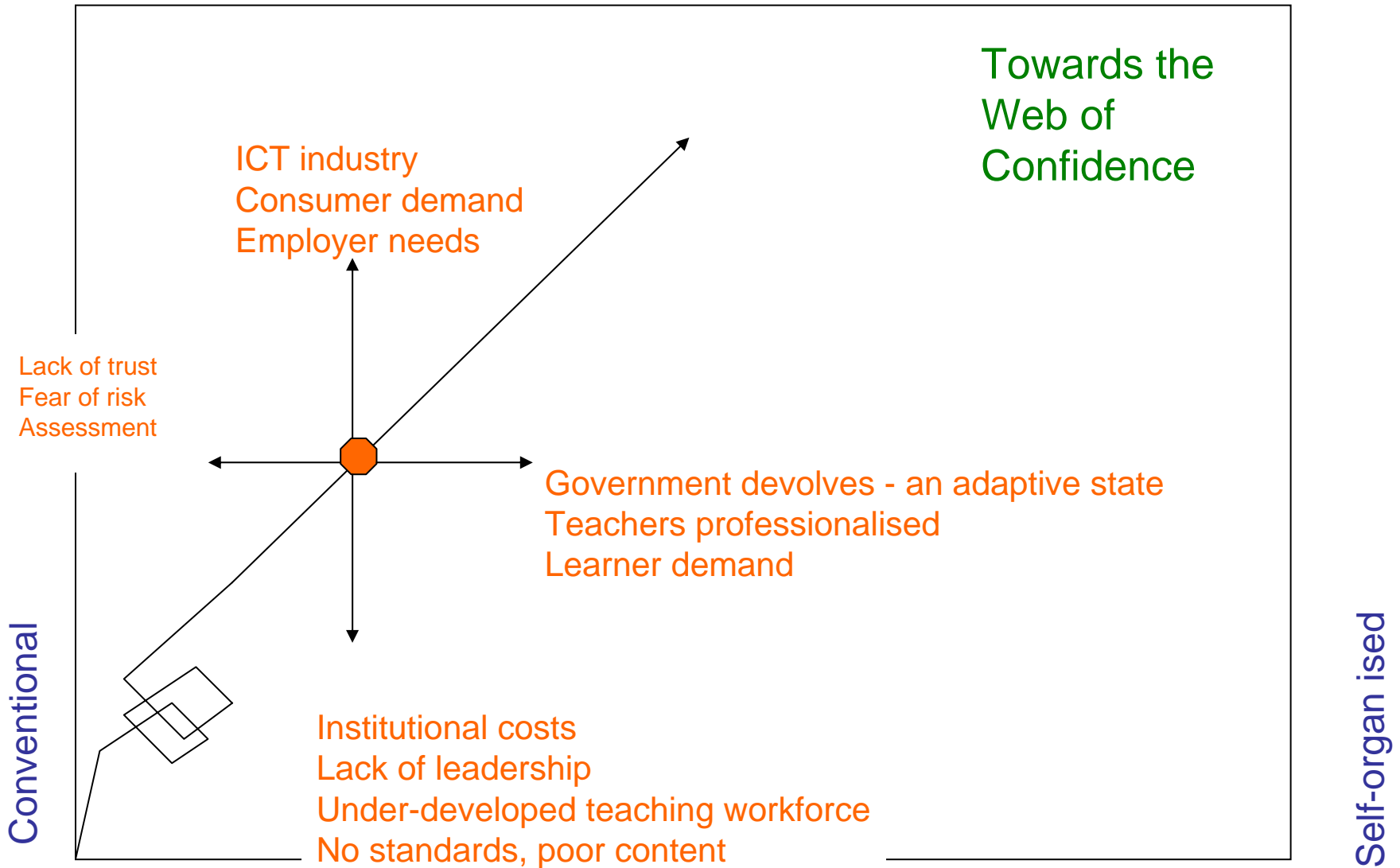


Technology frustrates

Self-organised

Technology empowers

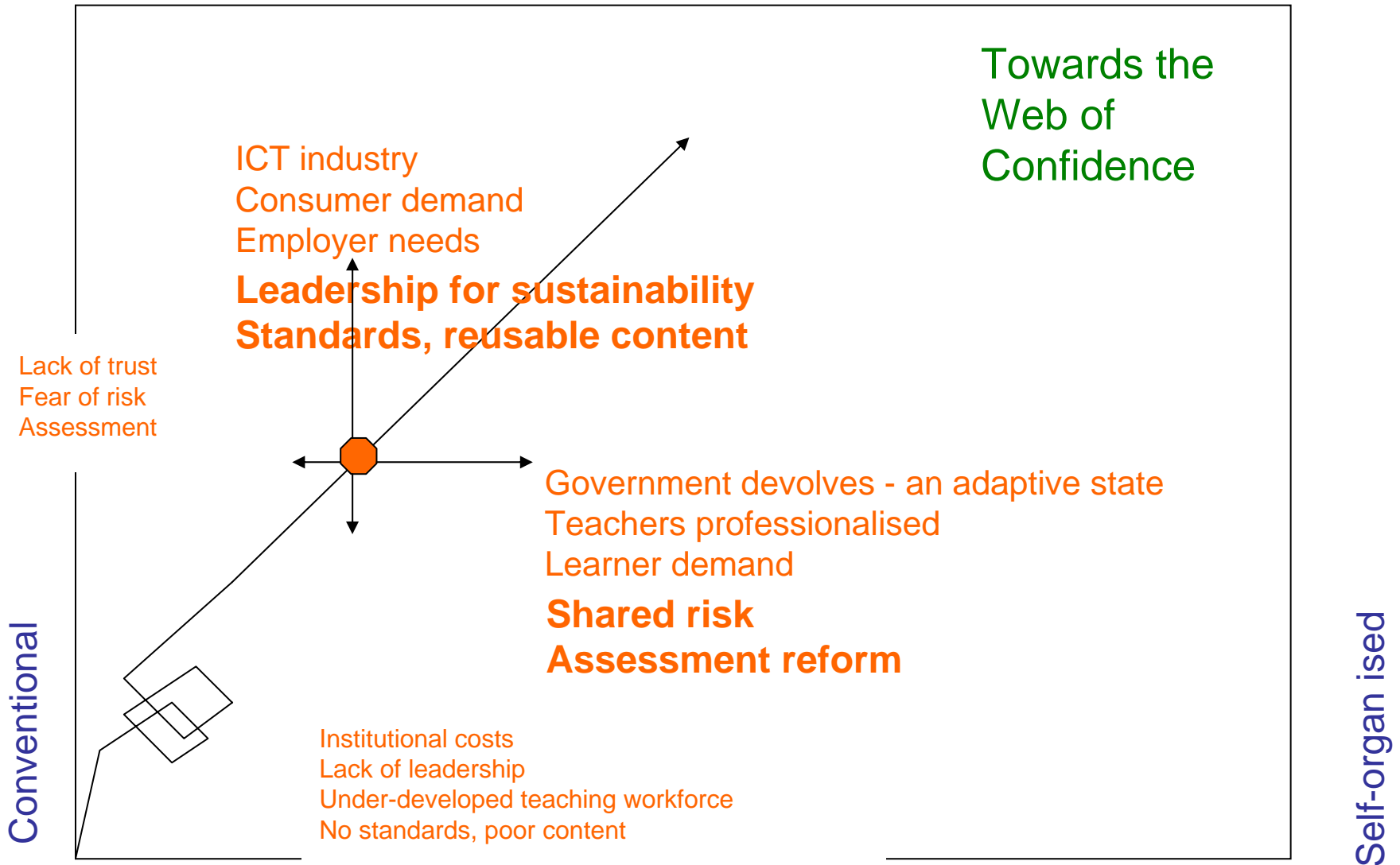
If we reduce the brakes...



Technology frustrates

Technology empowers

If we reduce the brakes... and make them drivers...



Technology frustrates

- then we can accelerate progress



## For a **Unified e-Learning Strategy** Government must play its part in ~

Leading sustainable universal e-learning

Giving teachers design tools and networks to innovate

Making the education workforce e-learning proficient

Unifying learner support through joined-up systems

Modernised assessment – content, criteria, methods

Building a better e-learning market

Standards for shareable, quality content



# **Towards a Unified e-Learning Strategy**

## Consultation exercise and Responses

[www.dfes.gov.uk/elearningstrategy](http://www.dfes.gov.uk/elearningstrategy)

Diana Laurillard  
Head, e-Learning Strategy Unit

department for

**education and skills**

creating opportunity, releasing potential, achieving excellence

# The contribution of e-learning to the EARLY learner's journey

Support for transition  
between phases

Where will it get them?

Assessment data as feedback  
on progress

Diagnostics for learning  
disabilities

How do we know they've learned?

How will my  
child learn?

Interactive learning environments  
adapting to learning style and pace

How could my child  
study?

Multi-agency support via  
online collaboration

Internet links to study at home

What can I/my  
child learn?

Broad curriculum to engage learner interest  
Linking early skills to adult basic skills

Why should my child  
need to learn?

Personalised needs-benefits analysis for carers  
Online access to information on learning opportunities  
Access to advice and guidance on parenting



# The contribution of e-learning to the SCHOOL learner's journey

Support for transition  
within 14-19

Where will it get me?

Assessment data used  
as formative feedback  
on progress

How do we know I've learned?

How will I learn?

Interactive learning environments  
adapting to learning style and pace  
Active, creative learning tasks

How could I study?

More independent study, online  
collaboration, video-conferencing  
Internet links to study at home

What can I learn?

Broad curriculum to engage learner interest  
Virtual environments extend the classroom  
into the field or the workplace

Why should I learn?

Personalised needs-benefits analysis for qualifications - jobs  
Online access to information on learning opportunities  
Hyperlinks from interests to informal to formal learning



# The contribution of e-learning to the ADULT learner's journey

## Online job-hunting

Personalised needs analysis Where will it get me?  
E-portfolios assist transition

Online assessment on-demand, linked to units of just-in-time learning

How do we know I've learned?

How will I learn?

Motivating skill-learning environments adapting to learner's style and pace

How could I study?

Flexible study support via online access and collaboration

Internet links to study at home/work

What can I learn?

Partnerships offering personalised skills curriculum to engage learner interest

Why should I learn?

Personalised needs-benefits analysis for qualifications - jobs  
Online sites linking employer demand to learning opportunities  
Self-administered diagnostic tests on basic skills



# The Vision: E-learning personalises the learner's journey ~

Online needs analysis links qualifications to jobs Where will it get me?  
Access to information and guidance

Assessment on demand

Formative feedback

How do we know I've learned?

Progress

The e-learning offer to learners: the Learner's Community

- an 'end-to-end' interactive transactional system to take the learner from sceptical enquiry to fulfilment
- powered by the joined-up databases and information systems provided by DirectGov
- populated by learning and accreditation providers who offer e-learning products and services alongside traditional formats
- online learning materials, online assessment, access to other learners, mentors, tutors and experts

onments

e

t

OS

Online registration and funding transactions

Why should I learn?

Personalised diagnostics

Links to informal learning opportunities

Access to advice and guidance

~ at

Early years

School

Adult skills

HE

