



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

e-Learning ~

a presentation to show
how teachers can save time,
save effort, and save money
by
recording small units of learning
and using electronic methods



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Quality Education

1991 self-evaluation
1998 regular multiple evaluations
2001 competitive ranking
2002 evaluation from outsiders

2006-7 ISO evaluation



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Quality Education

includes quality of ongoing research
and of faculty development FD -

teacher professionalism includes
attending conferences



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Quality Education

includes quality of learning
not only for rich elite
but equal access for all students

particularly the poor with low-cost
low-bandwidth computer



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

We need to standardize

Generally the students
are low-end users

while teachers and the institution
are high-end providers



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Teachers need to adopt
standard methods
so *all* students can access
learning from *all* sources

We have about two years until
I S O standardization
is applied to teaching



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Standard methods
mean quality assurance
and delivering teaching so
students can learn
at their own pace, in their own ways,
in their own time and place, and
participate in the
assessment process



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Naturally, mass education
and the four walls of the classroom
severely limit
student freedom in learning

Some improvements in
quality management can be made



e-Learning

Need to
Standardize

ISO 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

ISO ... standardization

ISO 9001 : 2000 specifies a
quality management system
for providing services and
for meeting regulatory requirements
(eg Section 508 open access)



e-Learning

Need to
Standardize

ISO 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

ISO ... standardization

ISO 9004 : 2000 extends 9001
to include continuous improvement
in effectiveness and efficiency
in teaching and learning quality,
and the satisfaction of all parties
(eg the students, & community)



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

ISO 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Japan is a key member -
the latest meeting March 2005
ISO /IEC JTC1 SC36
was held in Waseda University

Subcommittee 36 is working on
Information Technology for
Learning, Education, and Training



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

ISO 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Learning Object LO

An LO is a small self-contained
unit of content which takes
2 - 15 minutes to study and learn

It is tagged in a standard way,
then stored for sharing and re-use



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Learning Objects

Teachers can freely get LOs
and combine them in new ways
to make their own individualized
lessons to suit their students



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Re-use & e-Learning

Reusable Learning Objects RLOs
are ready-made chunks of learning

Guidelines are available to help
teachers make their own RLOs
in a standardized shareable design



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Standard Design

The Shareable Content Object
Reference Model SCORM
specifies standardization for
reusability and interoperability
of learning content



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Then the teacher or a
Learning Management System
gets information from the student
and finds the necessary RLO,
monitors the student's progress,
offers additional help, and
when the student is ready, finds
and delivers the next RLO



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

There are many
Learning Management Systems

eg Blackboard, WebCT, Angel,
Desire2Learn, Sakai, etc
some are free and open-source
eg Moodle



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Learning Management Systems

You can compare these easily,
and get free help how to use them



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Teachers can design courses
by combining up-to-date RLOs
in any way they wish -

With e-learning methods,
each student can learn at her
own pace and in her own way
to meet the learning goals
set by the school



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

There are already 1000s of RLOs
available free
in the whole range of
education and training



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Syllabus Design

Simple easy-to-use website design
can help the student progress
through the set syllabus



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Syllabus Design

A template is used
based on my four-stage
Instructional Design Model



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

for the Student . . .

- o individualized learning path
- o at her own level

for the Teacher . . .

- o no need to re-write every year
- o can focus on helping learner



e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Syllabus Design

Students can get free
up-to-date learning online

eg to learn French
reading, writing, speaking
and listening
and use class time to practise



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Syllabus Design

eg to learn French

[http://www.open-ed.net
french/home.html](http://www.open-ed.net/french/home.html)



Open Education Network

[http : // www . open - ed . net](http://www.open-ed.net)

e-Learning

Need to
Standardize

I S O 9000

Learning Objects

Re-use &
e-Learning

Syllabus Design

Thank you

Paul Kawachi

by the way, I am a Member of the
Learning Technology Standards Committee
<http://iceeltsc.org>