

SchoolNet2002

# E - Learning

2003. 2. 24

(<http://media.inhatc.ac.kr>)

- e-Learning
- e-Learning
- e-Learning
- e-Learning
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- ADL SCORM
- SIF
- e-Learning

## e-Learning

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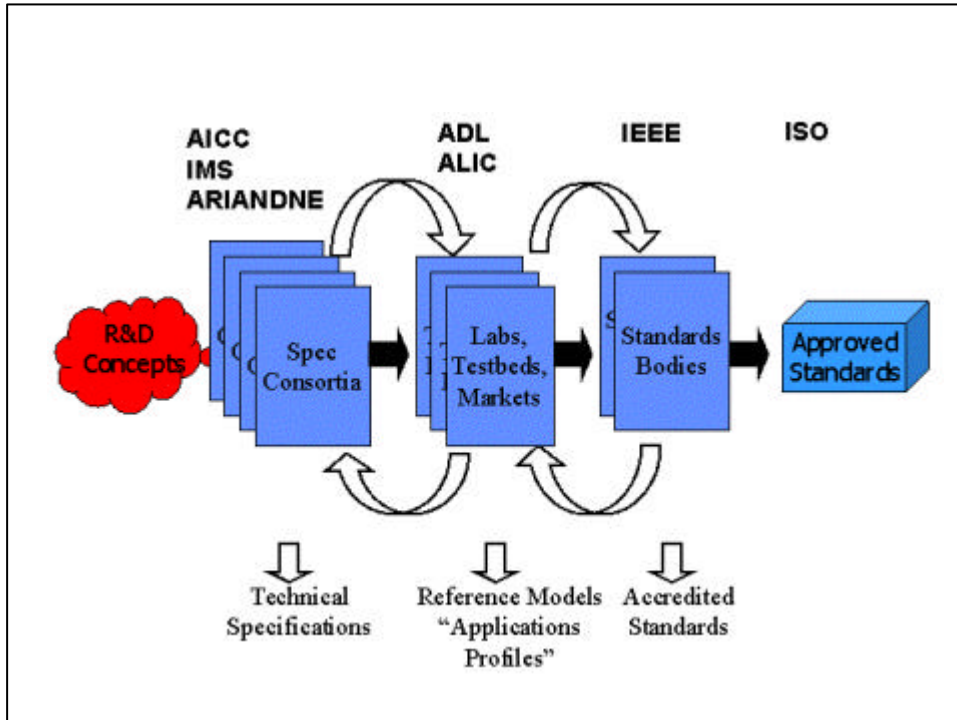
## e-Learning

- e-Learning
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- e-Learning
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  - 가 : ,
  - 가 ) (
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  - ) (
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## e-Learning

- “ ”
- e-Learning
- e-Learning
  - Interoperability : , ,
  - Reusability: : 가
  - Manageability :
  - Accessibility : 가 LMS ,
  - Durability :

- Metadata :
  - Ex)
  - Dublin core, IEEE LOM(Learning Object Metadata)
- Interoperability: , 가
  - Ex) IP, Postscript
- 가
  - Ex) MIME( )
  - , , , ,



- (Specifications) , 가
- AICC (Aviation Industry CBT Committee) : 1988 , / 가 , LMS
- IMS : 1997 EduCom NLII가 , , 가 , , ,
- ARIADNE (Alliance of Remote Instructional Authorung and Distribution Networks for Europe) : 1996 1 , ,
- Dublin Core : 1995 5 OCLC(Online Computer Library Center) NCSA . 15 1999 8

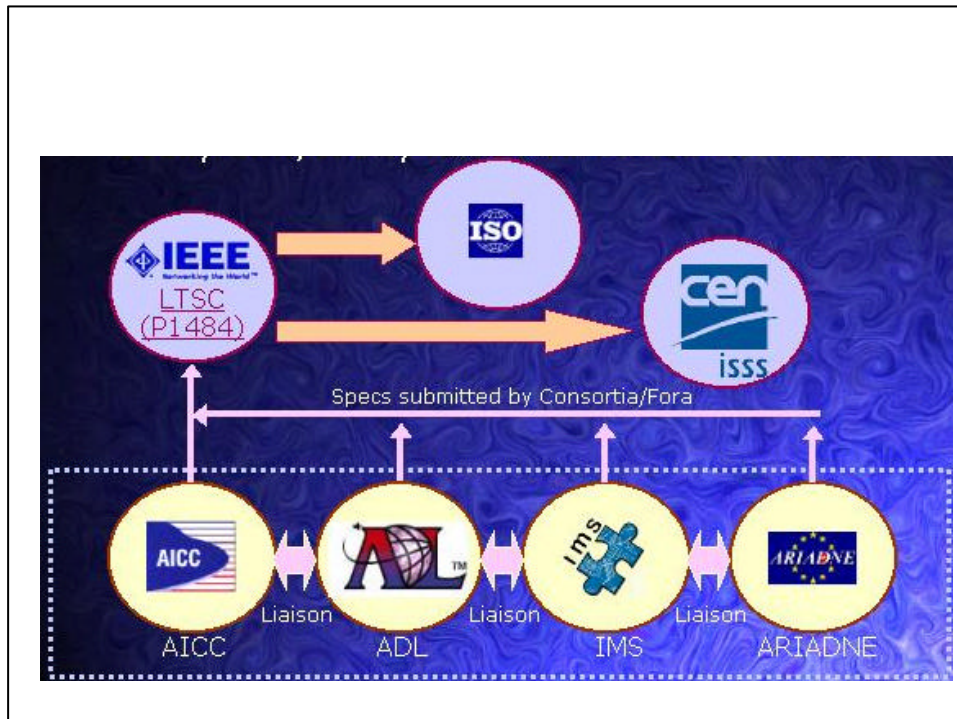
(Implementation Reference Model)

Specification 가

Model

- ADL(Advanced Distributed Learning) : 1997  
SCORM(Sharable Content Object Reference Model) ,  
XML 가 e-Learning 가
- PROMTEUS(PROMoting Multimedia Access to Education and Training in Europe Society) : 1998

- (Accredited Standard)  
가
- IEEE LTSC(Learning Technology Standards Committee) : 1996 ,  
,5 ( , , ),  
(LOM) IMS, ARIADNE, GESTALT, AICC
- CEN(European commission for standardization)/ISSS(Information Society Standardization Systems)/LT(Learning Technology workshop) : 1999 3 ,
- (Approved Standard)  
ISO/IEC JTC1/SC36(Joint Technology Committee 1/ Standard Committee36) : ,  
, 2000 3 (2002 7)  
가 )



## 가

- Canada : CanCore
- Australia : Australia IMS + DEST
- Netherlands : OUNL
- Japan : eLC(e-Learning Consortium) +ALIC
- Singapore : ECC
- AEN(Asia e-Learning Network) : 2001

13

- Korea : KoreaCore(KELIA+KALiC) : e-Learning

- 2002 4 e-Learning
- e-Learning , , 가
- 2002 10 e-Learning (<http://www.elts.org>)
  - 1 (~2003 6 ) :
  - 2 :
  - 3 :
- : ( ), ( )
- 2002 11 e-Learning Korea
  - ( )
  -

- 
- XML LCMS
  - , , ,
- 2002 7
- SCORM
  - Content Metadata Generating&Authoring System
  - XML based Content Repository
  - Courseware Authoring&Content Management System(CAM Sys.)
  - Adaptive Learning Managemnt Systems(a -LMS)
  - Adaptive Learning Performance Support System(ALPS Sys.)
  - Wire & Wireless Internet based Environments
  - Contents Search & Retrieve Engine

- 
- e-Learning
  -
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- SCORM1.3
  - Collaborative Learning                      KMS
  - LCMS                      API                      T-CMS
  - Context LCMS

- (KERIS)
- - 2002    3                      (15                      )
  - 2002    5
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  - ( )
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  - 2002    10                      ,                      ,                      ,
- - 2001    7
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## ADL SCORM

ADL (Advanced Distributed Learning )

- 1997 11 DoD (Department of Defences)  
가 (<http://www.adlnet.org>)

- : Online learning open architecture  
e-Learning

- : ,
- ,
- .

가



## ADL SCORM

SCORM

- Sharable Content Object Reference Model
- ADL (accessibility, interoperability, Reusability, Durability, Adaptability, Affordability) Reference Model

- , , (Web ) , 가

- AICC IMS, IEEE, ARIADNE
- 가 WEB

- e - Learning (de facto standard)

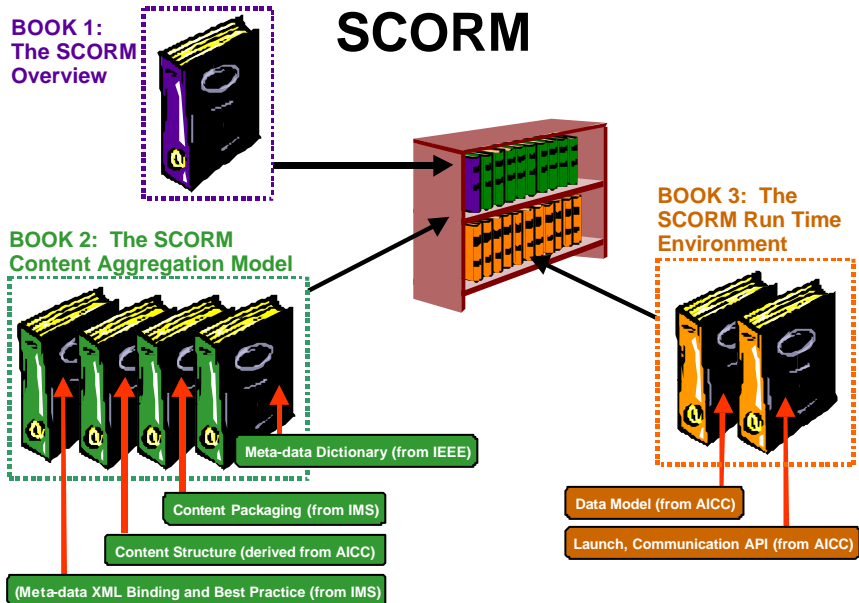
- 2000 1 1.0, 2001 10 version 1.2 , V 1.3
- 2002 12 Plugfest7(contents sequencing, certification)
- 2003 2 12 SCORM certification LMS(WebMentor)

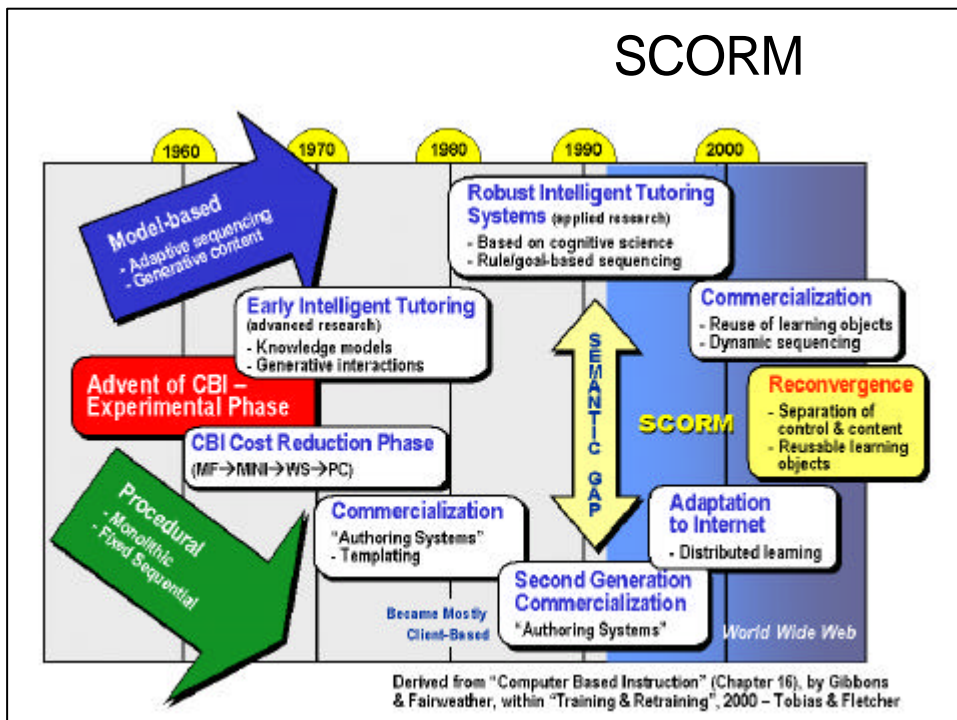
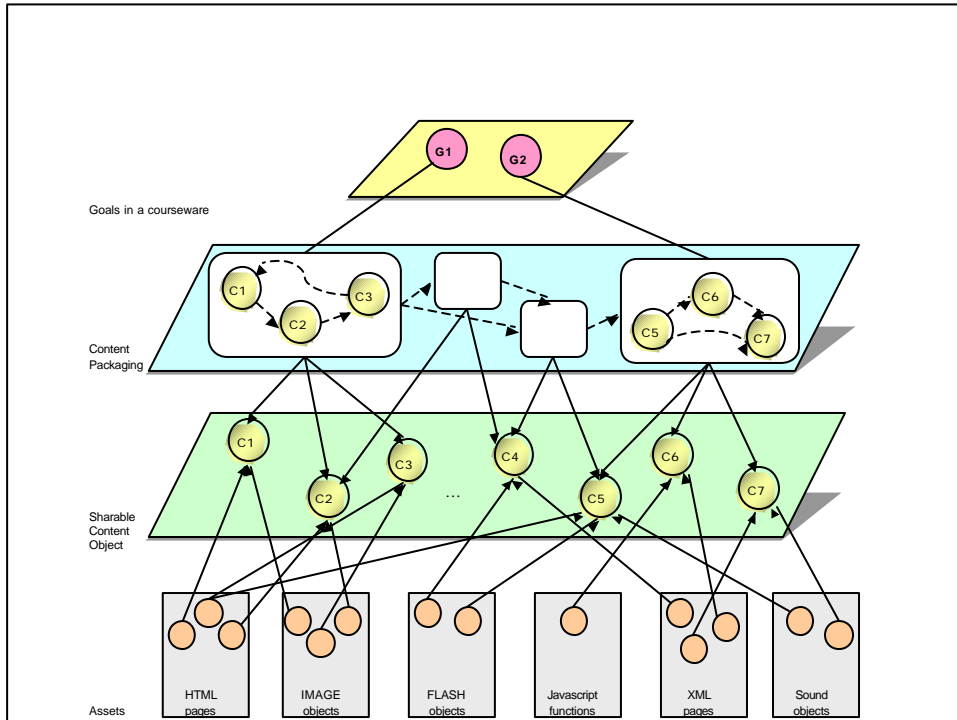
# SCORM

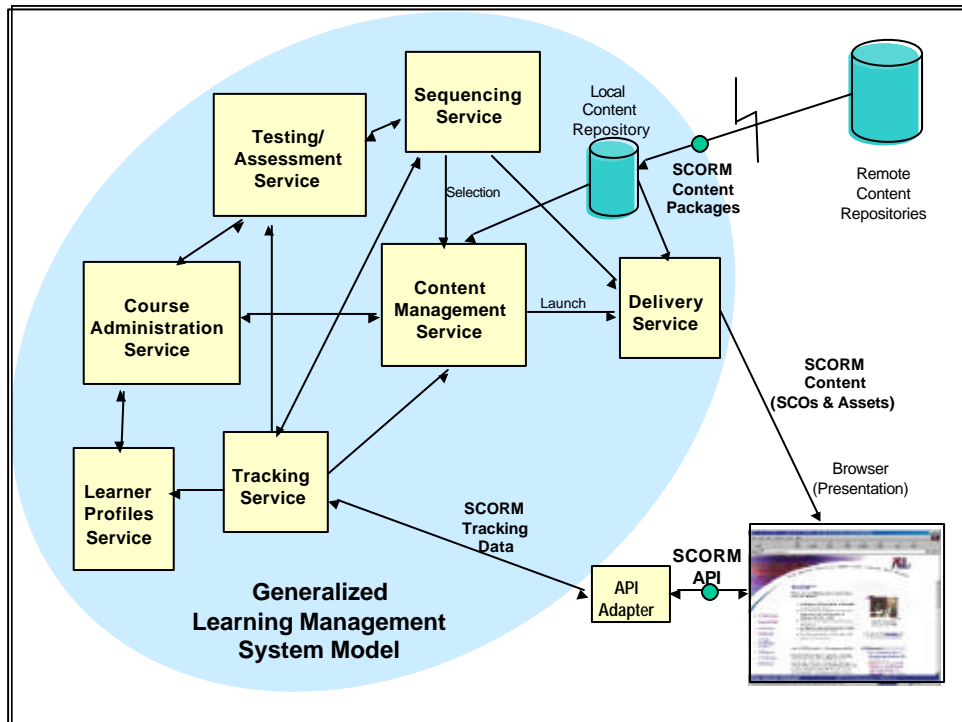
- - SCORM LMS                      LMS                      SCORM 가
  - - SCORM
  - - SCORM
  - - LMS가 Upgrade                      가
  - - : 30-60%
    - : 20-40%
    - : 30%
    - knowledge performance : 10-30%
- (source : Advanced Distributed Learning (ADL) Technical Working Group)

# SCORM

## SCORM







## SCORM

<http://www.recombo.com/>

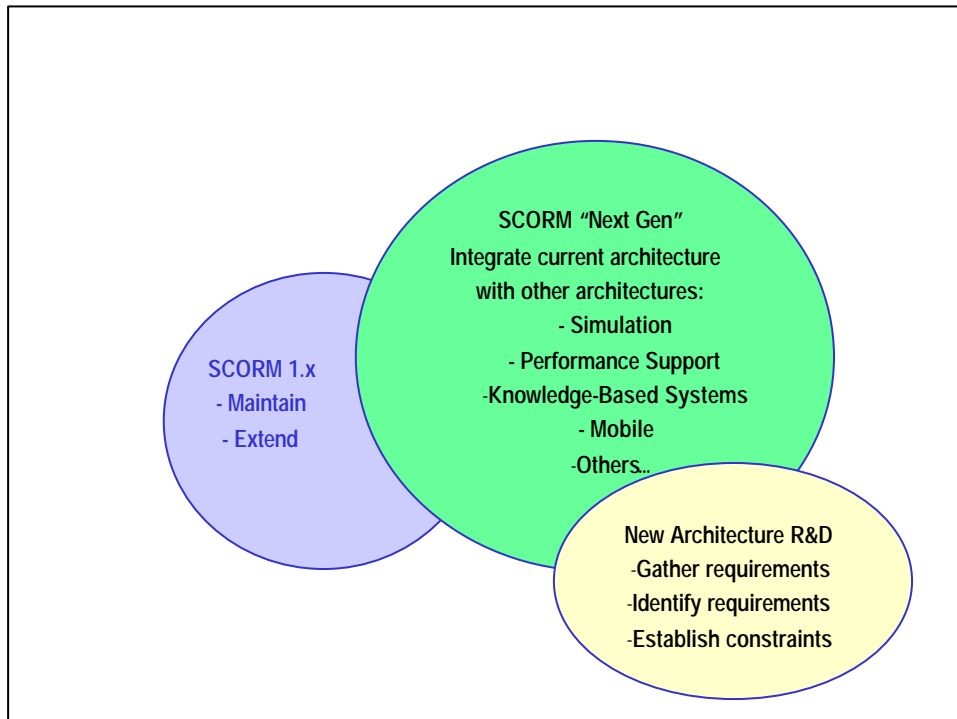
- Converter™ for PowerPoint®
- Converter™ for Word
- Custom Converter™ (Dreamweaver , FrontPage , HTML (including embedded Flash or Shockwave) , XML )

<http://www.mindflash.com/>

- RapidTrain™
- The only e-learning product utilizing PowerPoint®, Word®, and Dreamweaver® to rapidly create, deliver, and track your organization's online training.
- RapidAuthor™
- The only SCORM authoring and conversion engine utilizing PowerPoint®, Word®, and Dreamweaver® to rapidly create online training for your enterprise LMS.

<http://www.easyprof.com>

EasyProf® combines a solid instructional design, logical action creation, powerful multimedia capabilities with a feature-rich student learning interface, all within a proven, user-friendly environment.



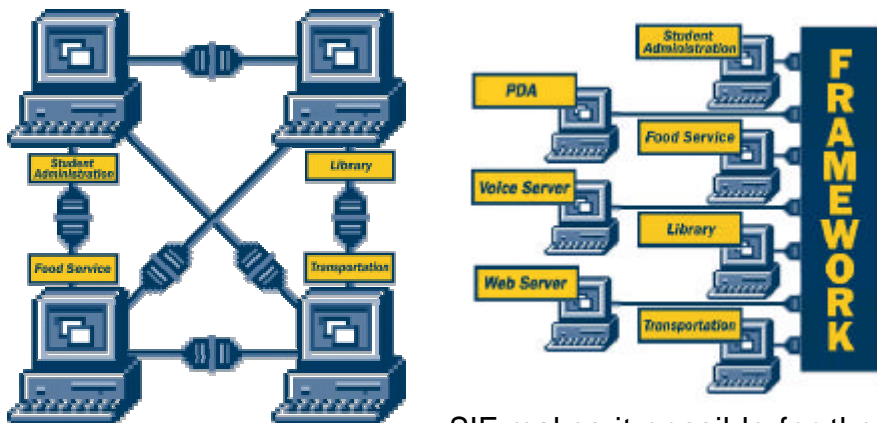
## SCORM

- W3C Semantic Web
  - A web of knowledge
  - Machine understandable
  - Adds extra metadata to a web page
  - XML bindings, RDF, DAML+OIL
- Potential for Learning?
  - Intelligent agent can adjust curriculum
  - Intelligent tutors can dynamically assemble learning objects
  - Content can self-adjust or be created
- Dreams
  - True profile based adaptive learning
  - Rethink the whole paradigm
  - Experience becomes part of the whole net
  - Marketing/adoption support of existing work

# SIF

- 1997
- SIF(School Interoperability Framework)
  - (K-12)
- - 가
  - 가
  - 가
  - 가
  - 가

# SIF



SIF makes it possible for them to communicate using a common interface and standard data formats.

# SIF

- - 
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  -
- SIF
  - CIRCA: Customer Involvement, Requirements, Communications and Accords
  - Compliance
  - Data Analysis and Reporting (includes subset Voice Telephony)
  - Food Services
  - Grade Book
  - Human Resources/Finance
  - Instructional Services
  - Infrastructure
  - Library Automation
  - Marketing
  - Student Information Systems
  - Transportation and Geographic Information

# SIF

- K-12
- 가
- SIF
- - ,
  - 
  - ,
- - TCP/IP, TLS, HTTP
  - ,
  - ,
  - XML

## e-Learning

- (SCORM )
- ( )
- 
- (Blended Learning)
- m-Learning(Mobile Learning)
- e-Learning
  - e-Learning( )
  - e-Learning ( / )

Q & A