ACTIVITY SCHEME AND ACTIVITY STATUS OF AEN-WG2 IN 2005

[PROPAGATION PROMOTION OF SCORM CONTENT ASSESSOR SYSTEM]

WG2 activity vision

☐ Activity vision

■ The e-Learning content (platform) that is sharable   based on an open standard architecture and does not depend on real time language is to develop.

■ The study of e-Learning content compatibility in Asian territories under multi-language environment is performed.

☐ Activity scope

- ■ [SCORM content assessor qualification system] proposed from Japan is to review (already done).

- ■ SCORM2004 correspondence of SCORM content assessor system (new)

- ■ Support of human resource upbringing for SCORM content assessor

☐ Activity scope

- ■ Propagation promotion of qualification system

- ■ Propagation of multi-language content development schemer

- ■ Definition and development of study model and content schemer under multi-language environment　(already done)

- ■ Development of support tool for preparation of multi-language content

WG2 activity target in last year

1. Possibility study of Asian evolution of SCORM content assessor system proposed from Japan

2. Preparation of SCORM content assessor upbringing   material (e-Learning content)

3. Validation development of multi-language content (tool) based on multi-language content development schemer

4. Evaluation of multi-language development schemer, meta-data and study model

Activity summery in last year

- Maintenance of the interoperability base of Japanese e- Learning was progressed from both system and content.

- The SCORM content assessor system is highlighted from Asian countries (isexpected).

- In order to maintain the interoperability base, an optimization of issue solution by differences of maturities such as IT infrastructure under its background, promotion organization, etc. is required.

Activity summery in last year

- ☐ In order to tackle with IT and study environments being changed, continuous review is required in the future.

- ☐ Even the base maintenance can be provided, in order to be effectively and efficiently used for true study and work, the separated R & D is required.

- ☐ Confirmation by validation content for multi-language content model

Activity target of this year

- Propagation of SCORM content assessor system
  - Promotion of propagation measure by differences of maturity
  - To supply the SCORM content assessor upbringing materials to Asian countries
- Upbringing promotion of SCORM content assessor
  - Skill requirement needed for SCORM content assessor
  - Utilization of SCORM content assessor upbringing materials in Japan
- Review of SCORM2004 assessor system
  - Preparation and review of SCORM2004 assessor upbringing materials

Activity status of this year

Evolution of SCORM content assessor upbringing materials (developed in last year) in Japan and other countries

Free e-Learning services for AEN countries and Japan will be starting on December by new content presentation site* in the AEN portal site.

Activity status of this year

◆ Description of SCORM content assessor training content (standard study time: 10 hours)

- SCORM content assessor system
- SCORM1.2 standard overview
- Explanation materials of SCORM1.2 standard compatibility check tool (multibyte compatible version)
- Supplemental explanation of SCORM1.2 based on cases of interoperability failure
- Supplemental explanation of SCORM1.2 based on cases of interoperability failure

Note: Overview of content presentation site

Both contents of SCORM1.2 and SCORM2004 are operable

To supply by free ASP service

Scheduled service content

Content for SCORM content assessor training (for SCORM1.2)

SCORM2004 sample content

Content for SCORM2004 compatible assessor training (demonstration version)

Domestic propagation of SCORM content assessor system

Upbringing of SCORM content assessor qualifier
 … 36 persons (total 50)

Expansion of SCORM validation content
 …15 products (total 28)

Session of assessor institutes (twice) and community conferences (twice)

Information exchange for the SCORM content assessor regarding validated LMS products will be executing (sponsored by eLC and

once/product/month)

Execution of interoperability check testing for products validated by e-Learning Consortium Japan

The interoperability between validated LMS product and validated content product (15 products in total) was confirmed.

- As the result, <u>interoperability failure did not occur</u> and an effectiveness for interoperability of SCORM content assessor validation system was able to confirm.

- This effectiveness will be appealed in Japan and other countries in future, and the effectiveness of assessor system will be emphasized.

Questionnaire investigation related to SCORM content assessor system
\<Investigation concerned\>

50 SCORM assessor qualifiers were requested to answer questionnaire and 37 qualifiers of them replied.

The for purpose of circulation have ever been developed with SCORM correspondence.

50% is "Yes", and

was SCORM validation applied? 5 qualifiers are "Yes", and 5 qualifiers is "willing to apply".

Utmost reason that does not apply the validation is "Issue of cost".

Questionnaire investigation related to SCORM content assessor system
<Investigation concerned>

The ratio of SCORM compliance content number that occupies in the content prepared for circulation purpose is 44% (This is simple average). 40% is "Yes", and other 40% is "content Unknown". 13% of them is willing to apply the validation, and 73% is "Unknown", and 13% is "Not willing to apply).

9 persons have performed interoperability with other company products, and most of them has experienced interoperability with several companies, and the occurrence ratio of interoperability failure is 25%.

Questionnaire investigation related to SCORM content assessor system
<Investigation concerned>

65% people have experienced to use the ADL test suite, however half of them has the issue of "Since message display is English, it is not easy to understand".

Frequent opinions as issue for installation of SCORM2004 standard
  1. Japanese version of SCORM2004 standard (95%)
  2. Content production know-how summary (86%)
  3. Manual guide for standard document (73%)
  4. Technical seminar meeting (73%)

SCORM2004 propagation support

Purpose

 Study of SCORM2004 compatible content preparation   technology

 SCORM compatible content development promotion

Execution description

Execution of course basic design of [Assessor training content for both SCORM 1.2 and 2004]

SCORM2004 propagation support

Design policy

[Content for SCORM content assessor training] that was developed in last year shall be possible to operate with SCROM2004.

The content shall be integrated in the feature of SCORM2004 (especially simple sequence

It shall be the content construction that can learn the knowledge of SCORM2004 required for SCORM2004 assessor. The SCORM2004 learning description is treated for time being as black box.

(Reference) Validation of SCORM compatible product by eLC

□ System background

- Each company's LMS and content have started to market.
- The interoperability failure has been invited.
- The interoperability failure lowers the reliability of e-Learning product, and will invade product propagation.

□ Failure solution

- eLC has determined to install the SCORM that is standard specification.
- The product compatible with the SCORM was to validate, and was to propagate in the market.

The interoperability failure was solved!

(Reference) Infrastructure maintenance that e-Learning can be safely used was nearly completed.

(Reference) Issue at WG2 international conference

- ☐ There is discrepancy of facts such as e-Learning propagation status, organization review regarding interoperability, etc.
- ☐ Even participants are interested in assessor system, debate level does not match.
- ☐ It is necessary to perform arrangement for step-by-step installation.
- ☐ The maturity model for establishing interoperability base shall be maintained, and the issue for establishing the base by maturity must be clarified.
- ☐ Proposal of interoperability maturity model

(Reference)
Maturity model for e-Learning interoperability

Phase	Step	Description
	Natural occurrence step	Regarding interoperability of e-Learning, each concerned people depending on each necessity are corresponding to
	Managed step	Regarding interoperability of e-Learning, the interoperability that LMS vendors and content vendors are corresponding as an organization has been discussed, and government or civilian organization and body for controlling have been established
	Defined step	Regarding interoperability of e-Learning, LMS product and technology for concerned standard establishment (SCORM, etc.) and interoperability have been accredited

(Reference)
Maturity model for e-Learning interoperability

Phase	Step	Description
	Quantitatively managed step	"Regarding interoperability of e-Learning, in the case any troubles relating to the interoperability that compatibility qualification relating to content integrally managed including LMS and content have occurred, the procedure for problem olution has been clarified"
	Optimized step	Regarding interoperability of e-Learning, the system that users can safely purchase and used has been maintained, and has been continuously improved.

(Reference)
Modeling of interoperability process

Phase	Phase name		Process
1	Natural occurrence step	P1-1	1Natural occurrence stepP1-1Regarding interoperability of e-Learning, issues have not been recognized except partial concerned persons
		P1-2	For the interoperability, individual customize and correspondence have been progressed
		P1-3	The issues of standardization for interoperability Have been recognized among partial concerned persons
2	Managed step	P2-1	Regarding interoperability of e-Learning, issues have been generally recognized by users, and education activity for the interoperability has been performed
		P2-2	LMS vendors (developing companies) exist, and have been reviewing or performing for standardization
		P2-3	Bodies regarding e-Learning and interoperability led by civil or government have been established

Modeling of interoperability process

Phase	Phase name		Process
3	Defined step	P3-1	Products complied with standard specification are available in the market
		P3-2	The standard specifications (SCORM, etc.) regarding interoperability of the LMS products are qualified
		P3-3	e-Learning content production companies exist, and have been reviewing or performing for standardization
4	Quantitatively managed step	P4-1	The interoperability of both LMS and content have been integrally performing
		P4-2	Technique and procedure for solution regarding interoperability failures have been socially clarified
		P4-3	Correspondence for reutilization of content development have been performed
5	Optimized step	P5-1	With leading by civilian, plan to resolve failures regarding the interoperability to market has been completed
		P5-2	R & D for the issue of new technology regarding interoperability have been performing in parallel
		P5-3	The system that evaluation and improvement regarding the e-Learning quality included users are performed has been established

Summary of WG2

1. SCORM, LMS and content operability studies should be continued with the participating community's cooperation.

2. Japanese Government has determined that this style of conference will be ended up, and with full unification and cooperation, low cost but high performance products should be created from next year.
Japanese Government and eLC Japan would, therefore, like to request you to have motivation and action to upgrade entire systems.