

# Authoring Adaptive Hypermedia and IMS Learning Design: A possible understanding?

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# Outline

- Motivation
- Issues
- Conclusion

# Motivation

- Adaptive Educational Hypermedia (AEH) and IMS Learning Design (IMS LD) are different disciplines, and at present, there is little shared knowledge between them.
- goal is the same: create the best possible environment for a learner to perform his/her learning activities in.
- issue of differences and similarities in AEH (especially, in Authoring thereof), and IMS LD

# LAOS

- Domain model
- Goal and Constraints model
- Presentation model
- User model
- Adaptation model

# Adaptation Model: LAG

- Adaptation assembly language
- Adaptation language
- Adaptation strategies

## IMS LD

- Level A: basic structure: activities & roles
- Level B: properties, conditions, calculations, global elements and a monitoring service
- Level C: notifications

## LAOS at work:

- Players:
  - AHA!, WHURLE, Blackboard
- Authoring:
  - MOT, LAG language, LAG-XLS
- Engines:
  - AHA!, WHURLE, Blackboard

## IMS LD at work:

- **Players:**
  - Reload project, CopperCore, Sled
- **Authoring:**
  - Reload project, CopperAuthor
- **Engines:**
  - netUniversité, CopperCore



## Roles LAOS

- Author of DM / GM/ PM/ UM/ AM
- Manager of Authoring environment (less developed)
- User (Learner/ Buyer, etc.) of Product
- Manager of Learning environment (less developed)

## Roles IMS LD

- Author
- Manager
- Player

# Lifecycle LAOS

- Authoring DM, GM, PM, UM, AM
- Converting
- Playing

## Lifecycle IMS LD

- Modelling
- publishing
- playing

# Mutual benefits

- LAOS (most AEH authoring models) don't provide for explicit multiple roles for authors and learners (5 roles but: pedagogical rooting -> technical).
- IMS LD can benefit from a more explicit formulation of the adaptive behavior borrowed from LAOS, and especially, LAG
- IMS LD is believed to benefit from a clear distinction between LO contents and LO behavior (i.e., allowing the same object to behave differently in different settings; allowing pedagogical strategies to be exchanged the same way learning objects are)

Questions ... ?