Content Classification and Product Development
Key Topics

- LeYa’s experience – project LEAP 2.0
  - Content classification
  - Content management system
  - Digital product development
Context

- **100,000 digital resources**

- **250 products**
  - With different components (web, offline, app, teacher/student,..)
  - Textbook integrated

- **Content Classification**
  - Basic metadata
  - Textbook subject structure
Context

- LEAP: LeYa’s Ecosystem

Content and Product Management System

- Content Repository
  - Basic metadata
- Tests + Questions
  - Basic metadata
- Lessons
  - Basic metadata
- Product Builder/Management
  - Textbook structure
- Digital Rights and Distribution Management

Learning Platform and Products

- Learning Platforms and Products
  - On-line, off-line, web, APP
  - Teachers, Students, School
Objectives

- Digital product development
  - Develop new products based on content bank
  - Agile, efficient, flexible
  - Business oriented
Objectives

- **Content bank**
  - Improve content value
  - Context data classification
  - Easy product integration/repurpose
  - Integrated view
  - Contextual insights and search
  - Easy management and update
Objectives

- **System/Technology**
  - Improve LeYa’s system capabilities
  - Integration with existing modules
  - Flexibility: classifiers, structures, product creation
  - Efficiency: processes and resources
  - Scalable
Metadata and classification structures
### Classifiers Metadata

#### Educational
- Level
- Year
- Subject
- Type
- Keywords
- End user role
- Difficulty level
- Internal keywords
- (...)

#### General Identification
- Title
- Description
- Derived resource
- Master resource
- (...)

#### Technical
- Resource ID
- Catalogue ID
- Catalogue Name
- Filename
- Format
- Size
- Status
- Creation date
- Update date
- Created by
- (...)

#### Copyrights
- Copyrights restriction
- Copyrights Owner
- Limit Usage Date
- Type
- Author
- (...)

#### Product Usage
- Public repository
- Mobile design
- Product association
- (...)
- (...)

#### Content
- (...)
- (...)

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Note: The table and diagram represent various metadata categories for classifiers.
Classification structures

Course / Product Structure / Learning Objectives

100% Vida 6 - 20 Smart
- Processos vitais comuns aos seres vivos
- Trocas nutricionais entre o organismo e o meio: nos animais
- Trocas nutricionais entre o organismo e o meio: nas plantas
- Transmissão de vida: reprodução no ser humano
- Transmissão de vida: reprodução nas plantas
- Ações do meio e integridade do organismo
- Microorganismos
- Higiene e problemas sociais

Curriculum

- Matemática 7º ano
  - Números e Operações
    - Números racionais
  - Geometria e Medida
    - Alfabeto grego
    - Figuras geométricas
    - Paralelismo, congruência e semelhança
    - Medida
  - Funções, Sequências e Sucessões
    - Funções
  - Álgebra
    - Expressões algébricas
    - Raízes quadradas e cúbicas
    - Equações algébricas
  - Organização e Tratamento de Dados
    - Medidas de localização
Metadata and classification structures
Scope

System

- Structured Metadata Manager
- Integration with existing Modules
- Automatic Classification
- Search
- Repository generator (metadata based)

Content

- Classifiers Definition
- Curricular Structures Definition
- Content Classification (manual+automatic)
  - 2 phases

Product

- New Products Development
Approach

- Incremental project releases
- Agile development
- Priorities oriented to business value
- Standards alignment
- Team: Product, Content, Technology
- Process automation
Roadmap

Value Releases »

System ready for classification
Metadata Manager
Content Classified, Search
New Product
Curriculum content Alignment
New Product
New Product

Product

Mobile Student APP
Teacher Resource Bank
Student Training Tests

Content Metadata

Classifiers Definition
1st phase classification Classifiers
2nd phase classification Curriculum structures
Automatic Classification
Automatic Classification

System

Modules Integration
Metadata Manager
Search
Repository Generator
Results

- **System: LEAP 2.0**

Content and Product Management System

- Content Authoring Tools
  - Content Repository
  - Tests + Questions
  - Lessons
- Product Builder/Management
- Digital Rights and Distribution Management

Learning Platforms and Products

- Learning Platforms and Products
  - On-line, off-line, web, APP
  - Teachers, Students, School

- New Products

- Structured Metadata Manager
- Search
- Repository/Product Manager
Results

- Content: classified, searchable, reusable
Results

- New Products: Mobile Student APP
Results

- New Products: Student Training Tests
Results

- **New Products:** Teacher’s Resource Bank
Content Classification and Product Development

Network Meeting