Open platform for adaptive recommended learning

EdReNe, December 10, 2012
info: paul.westeneng@lopexs.com
Recommendation set-up

prerequisite

hierarchy

learning goals

learning objects

1

2

3

4

5

donderdag 20 december 12
Recommendation set-up

- Learning objects
- Learning goals
- Prerequisite
- Hierarchy
- Learning path

- 1
- 2
- 3
- 4
- 5

Donderdag 20 december 12
Recommendation set-up

- Prerequisite
- Learning goals
- Active learning path
- Learning objects

Recommendation set-up
Recommendation set-up

- Learning objects linked to learning goals linked to learning goal linked to learning goal linked to learning goal

Learning path

Prerequisite hierarchy

Active learning path
Recommendation set-up

- Learning objects
- Learning goals
- Prerequisite hierarchy
- Active learning path
- Profile set-up

Profiles:
- Profile student A
- Profile student B
- Profile student C
- Profile student D

Learning objects:
- Linked to learning goal

Donderdag 20 december 12
Recommendation set-up

- **prerequisite**
- **hierarchy**
- **learning goals**
- **profiles**
- **learning objects**

**learning objects**
- **profile student A**
- **profile student B**
- **profile student C**
- **profile student D**

**learning path**

**active**

**profiles**
- **student B**
- **student A**
- **student C**
- **student D**

Recommendation set-up: 

- **donderdag 20 december 12**
Login page for student and teacher

Contains information about the school and the program.

De leerling centraal


Lees meer »
Tight integration with the school authentication server.

School administers login name and password combinations.
Central dashboard shown in a browser on a tablet.

Every tile opens a different application.

In this demo the logged in person is both student and teacher, while in the normal situation both groups have access to different tiles.

Example: A teacher can check the progress of a group of students, while a student can only monitor his/her own progress.
In “My progress” a student checks his progress on Biology.

Half of the curriculum is done. The quality level at which the student works is high. The amount of time spent on this subject is also high visualized by a large sphere.
Expanding the learning objective one level deeper shows the student’s progress on lower learning objectives of Biology.

Every learning objective is described on the dimensions Progress, Time spent, Quality level and Trend.
Using the dashboard the students navigates to Biology.
This page shows what the student should do and had done to achieve the learning objectives for Biology.

Upper right corner: six new learning objects for the student. A learning object can be a text, a video, an assignment, a test.

Lower right: learning objects that the student worked on recently.

Upper left: learning objectives that the student works on.
The student chooses the Toet-anch-amon assignment.
Example of a question that is part of the chosen assignment.
After submitting the answers, the student receives immediate feedback on the quality of the answers.
The student sees the Toet-and-amon assignments has moves to the time line below.
The teacher navigates to the scoring app ("Nakijkwerk") that is used to monitor and score student work.
The teacher sees all the answers student have given.

The teacher sees that the students only worked on 1 of the 3 questions for the Toet-anch-amon assignment.
Part 1 of the assignment was answered correctly.
Because the teacher knows that the student knows all the answers, the teacher overrules the system and marks the other questions as ‘correct’.

Now the student has three correct answers for this assignment.
The teacher navigates to Progress to see the progress of a group of students.
The teacher sees that a student does very good on a certain learning objective ("Stamboom voor één menselijke eigenschap ontwerpen"): progress 72%, level high and trend stable.

Based on this observation the teacher decides to give the student a pass for this learning objective and makes it green.
Switching back to the work panel of the student: The pass given by the teacher means that marked learning objective is removed and learning objects for this objective are no longer recommended.
Student opens ‘Student trend’.
Alternative way of visualising progress of a student.

Every sphere is a subject, e.g. Biology and Math. The line in the middle is the minimum achievement level. Above the line is ok, below is bad.

The size of the sphere is the amount of time the student has spent on a subject. Larger sphere: more time spent.
Teacher opens the Student monitor.
Overview of students in a class.
The profile of a student can be changed by the teacher. In this example the level of learning objects is changed for one student.

By changing 1-10 into R-1 the student is recommended a different set of learning objects for a specific learning objective.
The learning objects “Haarkleur” and “Vogelstamboom” are now replaced by “Sinaasappel kruising” and “Fenotype”.

These exercises fit the changes in the student’s profile.
Some issues

• We are using IEEE-LOM, but many learning objects contain only poor and incomplete metadata.

• We expect that IEEE-LOM is not sufficient for optimal support of adaptive recommended learning.