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# O

## An innovative website for teachers and students

LINGI2255 Software engineering project

Louvain-la-Neuve – 20 september 2017

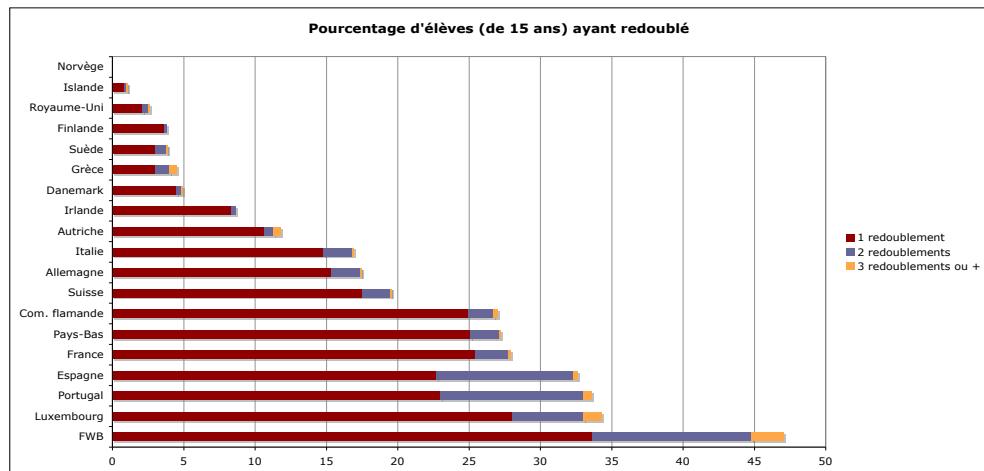
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## Grade repetition is high in Belgium



Source: OCDE, PISA survey 2012

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## Oscar is a website

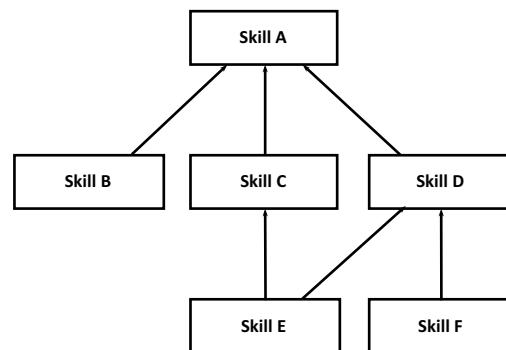
Oscar aims to provide the following functions:

- skill assessment,
- skill overview and progress follow-up,
- learning support,
- teaching support.

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## Dependency links between skills are not linear

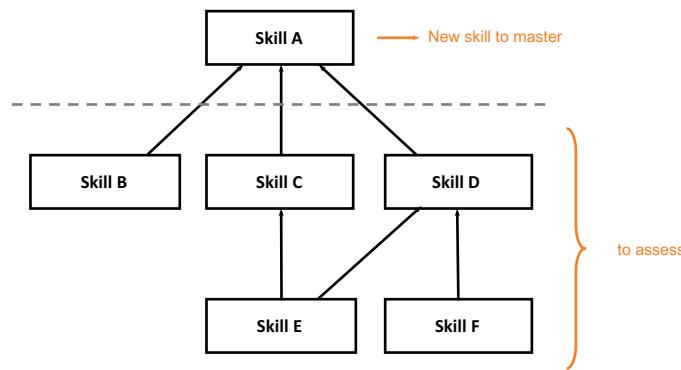


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## Why would we identify these links anyway?

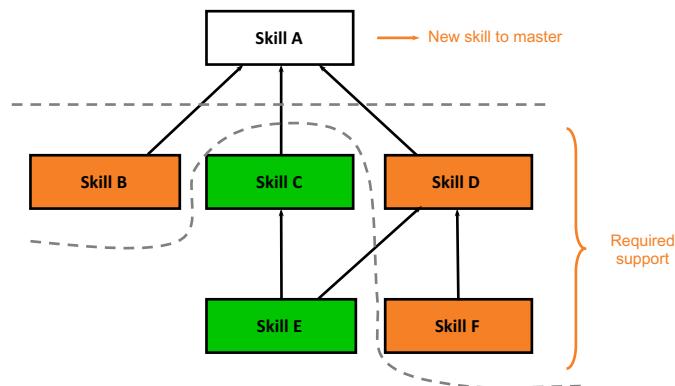
Purpose 1: assessing prerequisites



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## Why would we identify these links anyway?

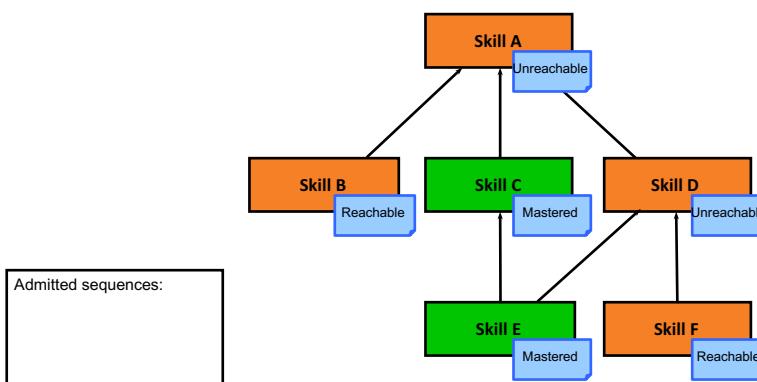
Purpose 2: provide the appropriate support to students



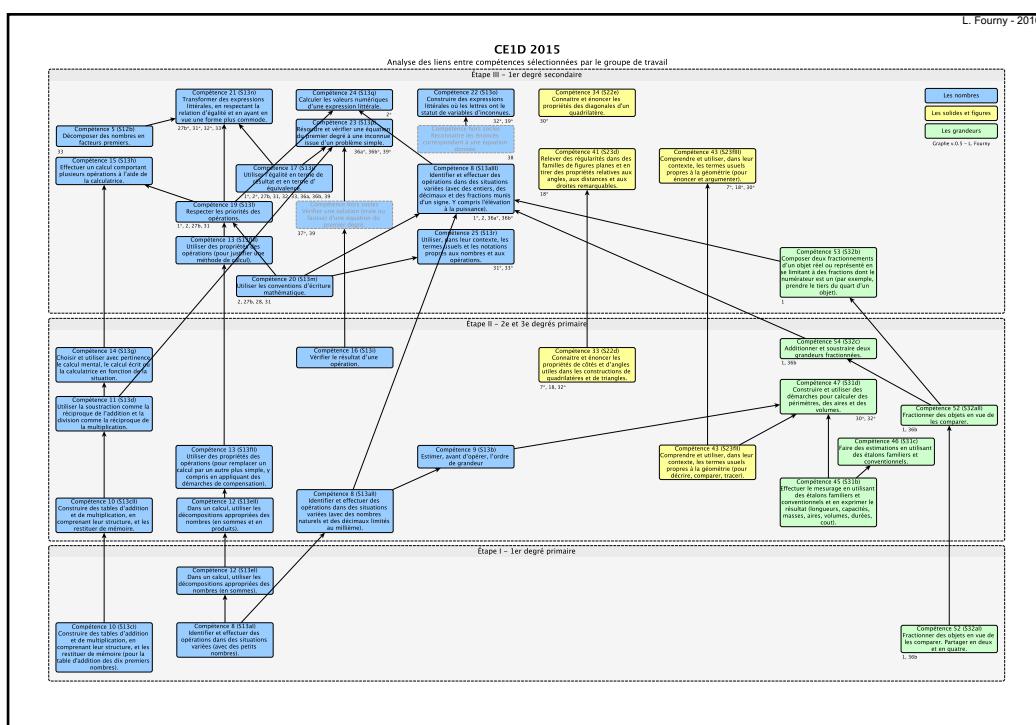
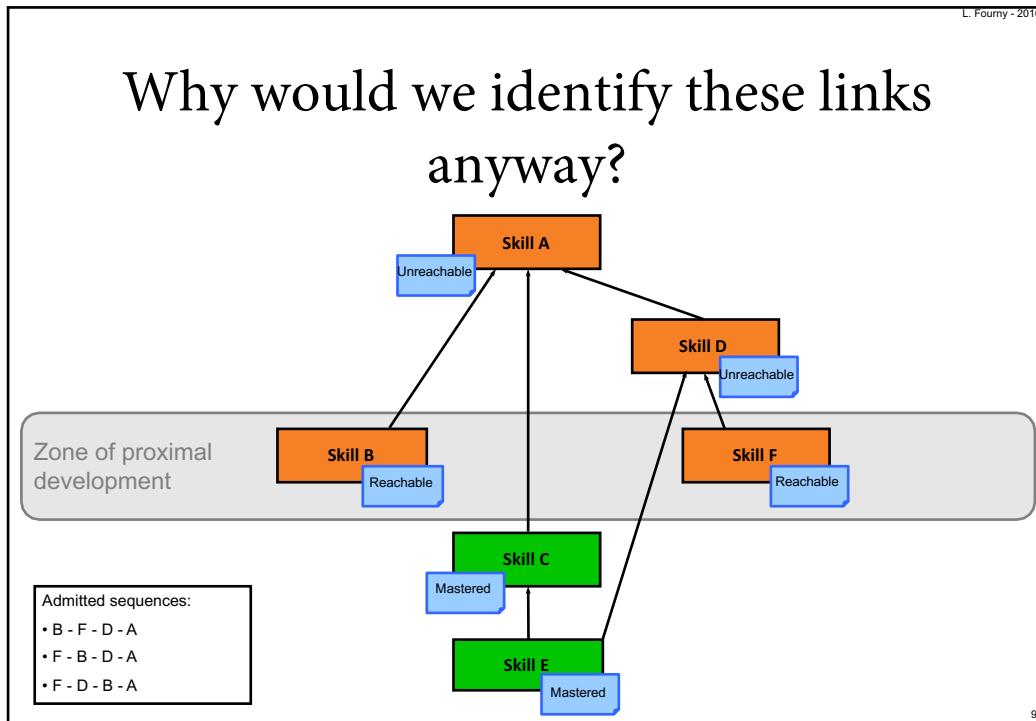
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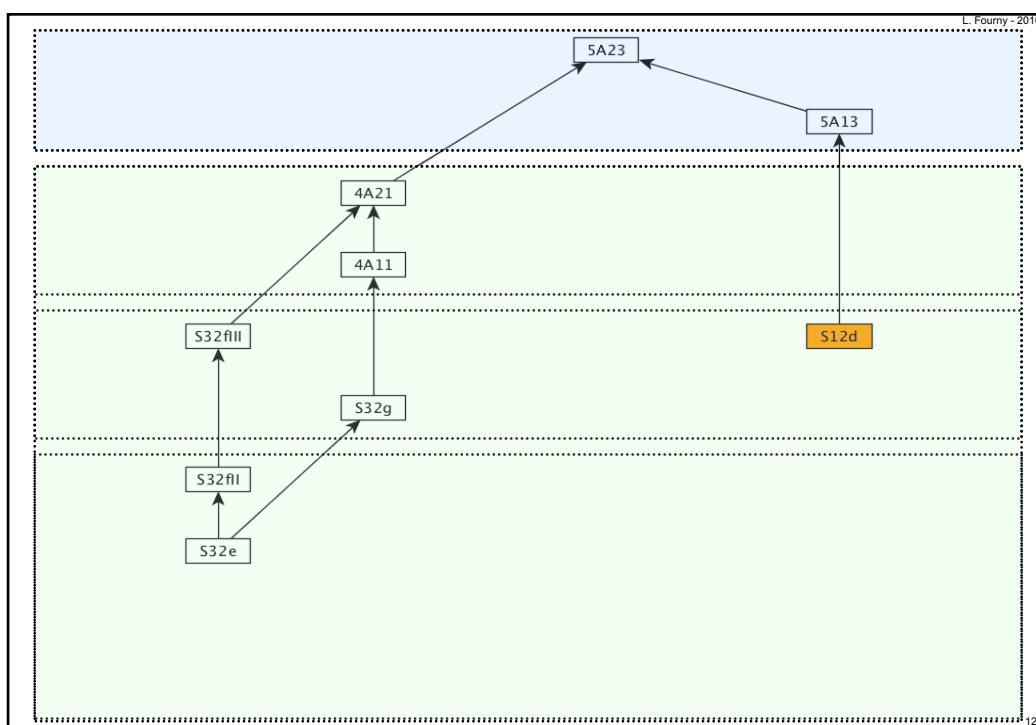
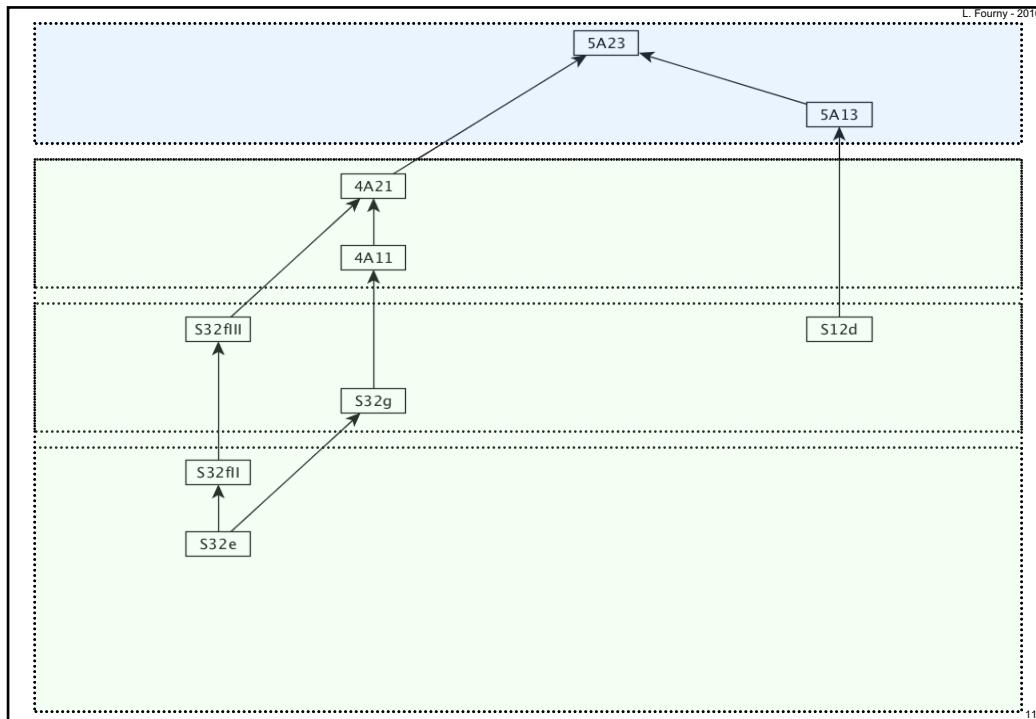
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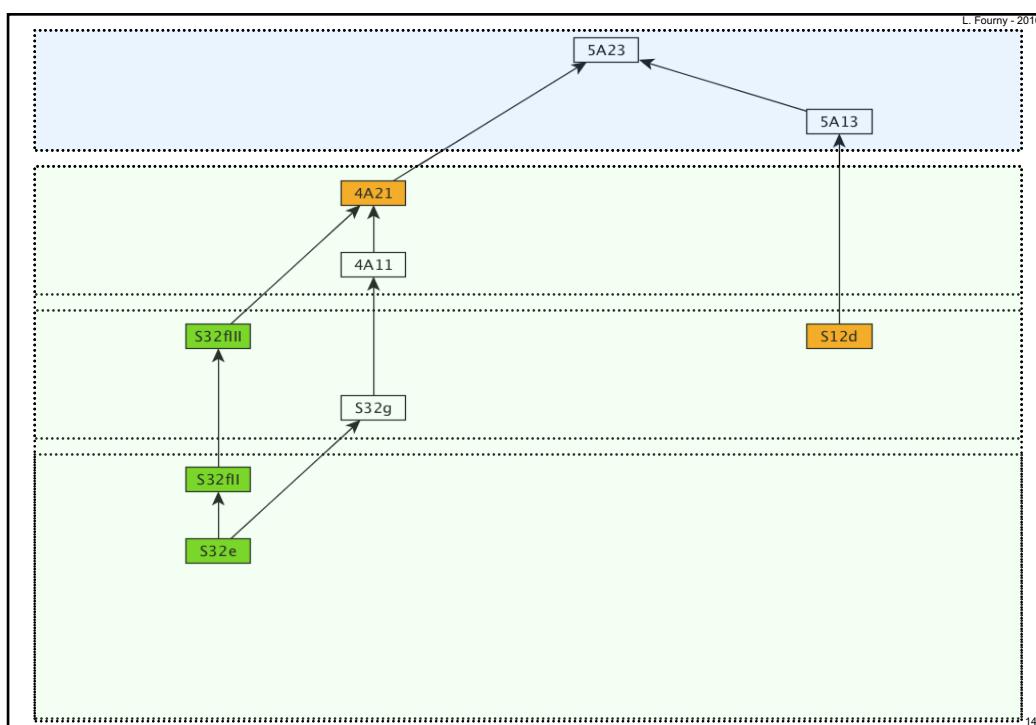
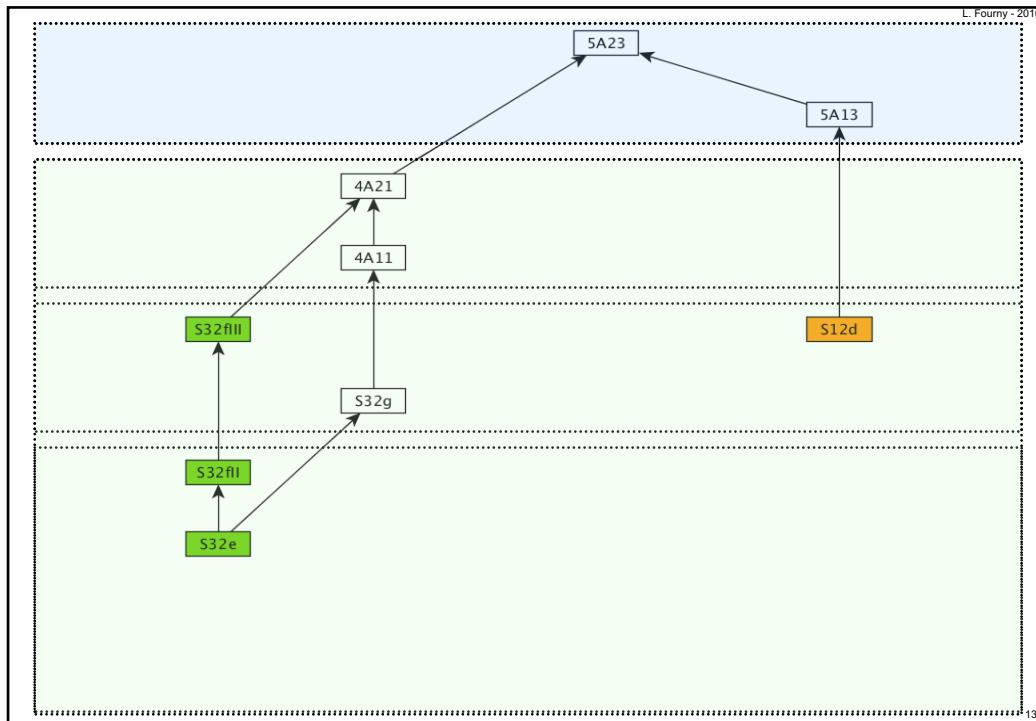
Purpose 3: distinguish between mastered skills, reachable skills and unreachable skills

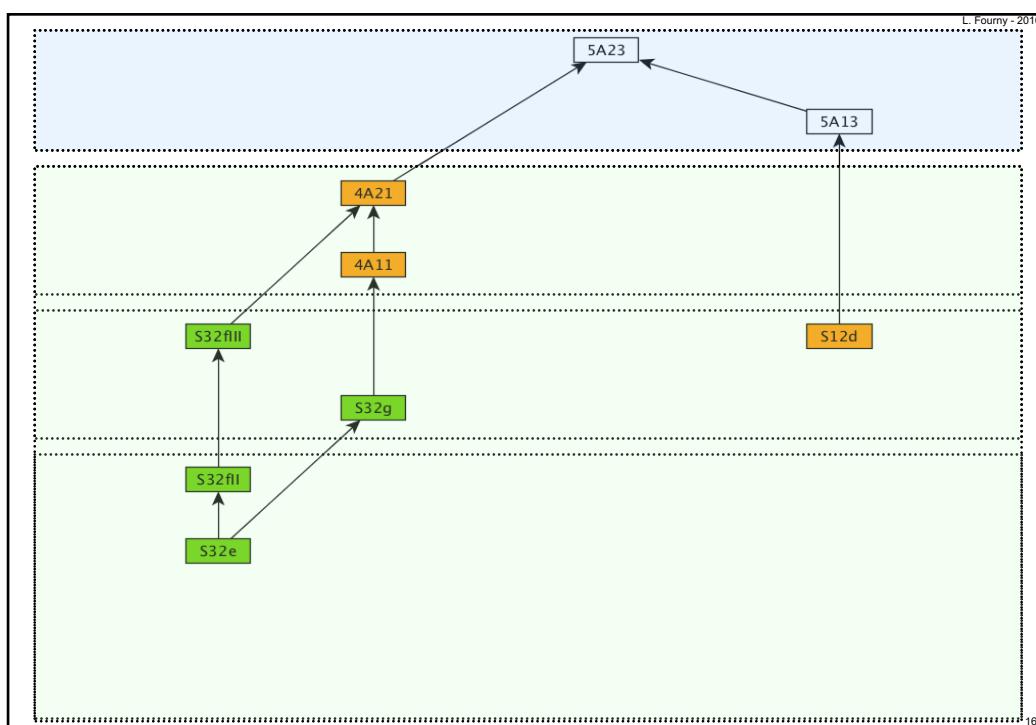
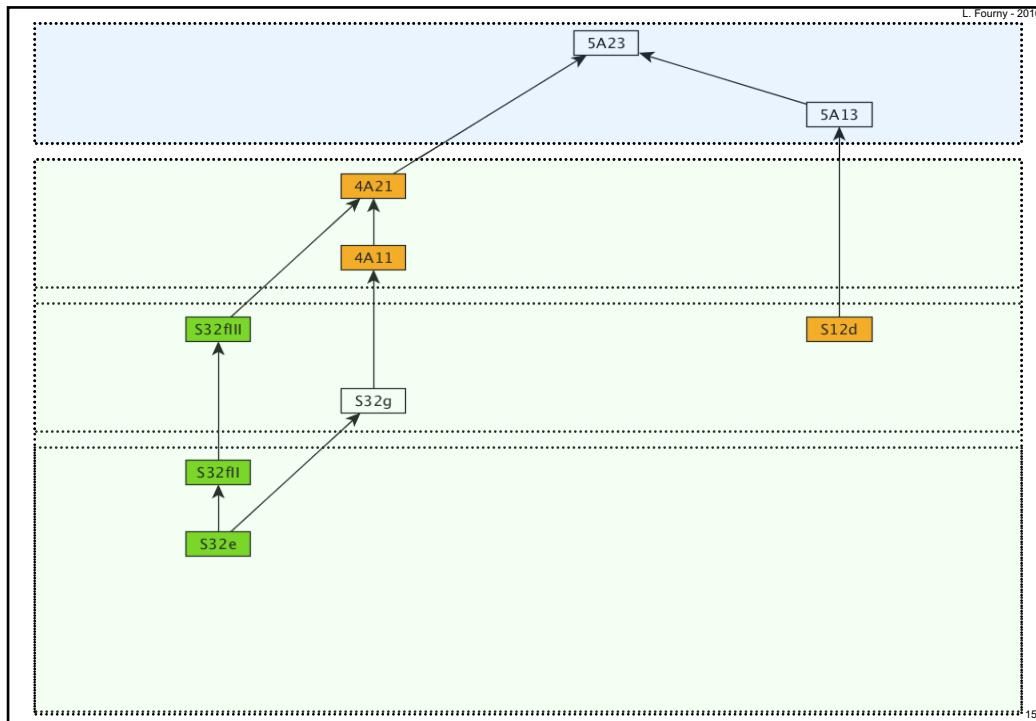


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**Mon empreinte Niveau 6e année transition (mathématiques générales)**

**UAA1: PROBABILITÉ**

Utiliser des simulations faites avec un outil informatique ou des données statistiques pour calculer des probabilités a posteriori

Utiliser des tableaux, des diagrammes, des arbres ou des formules de combinatoire pour calculer une probabilité a priori, y compris

**Compétences recommandées**

- Lier les différentes formes d'équations de plans
- Traiter un problème de géométrie dans l'espace
- Respecter les priorités des opérations.
- Dans une situation simple et concrète (tirage de cartes, jet de dés...), estimer la fréquence d'un

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**Compétence Respecter les priorités des opérations.**

S131

**Ressources de ma classe**

**Cours**

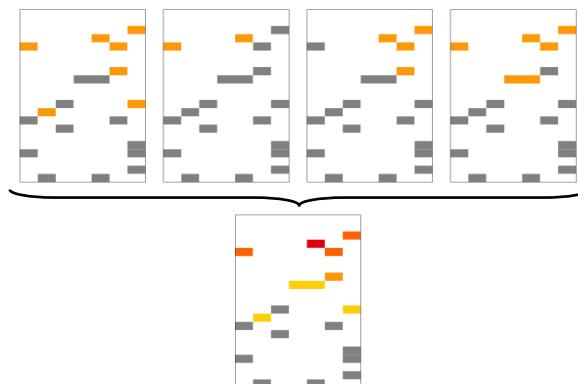
Videos KHANACADEMY

- Parenthèses
- Puissances
- Multiplications / Divis
- Additions / Soustractions

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## Some functional developments

- Synthesis within a classroom

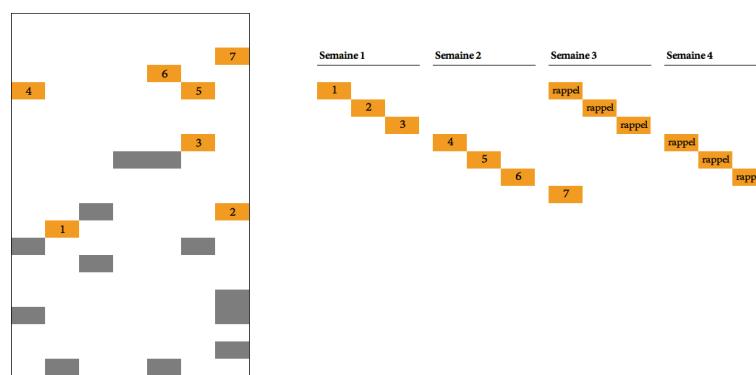


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## Some functional developments

- Work organisation



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## Some functional developments

- Automated creation of questions

Examples:

- 1) Fill in a proportionality table

Distance covered (m)	70	105	280	
Elapsed time (s)	20	30		90

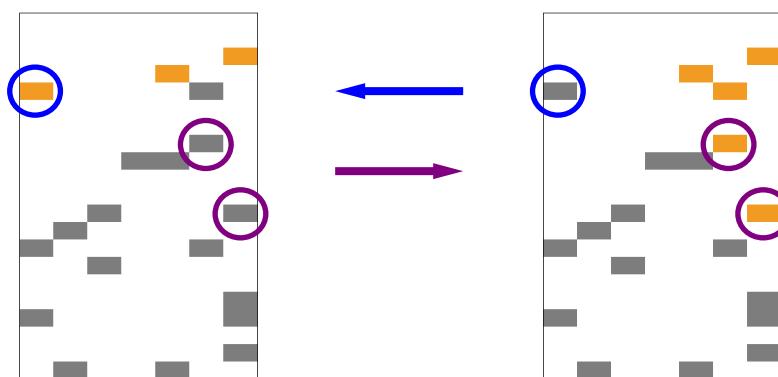
- 2) « Draw the equation line  $y=ax+b$  in the reference frame below »
- 3) « Calculate the perimeter of this circle »

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## Some functional developments

- Mutual support on unmastered skills



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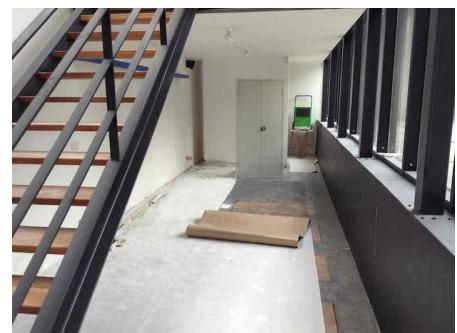
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## Some functional developments

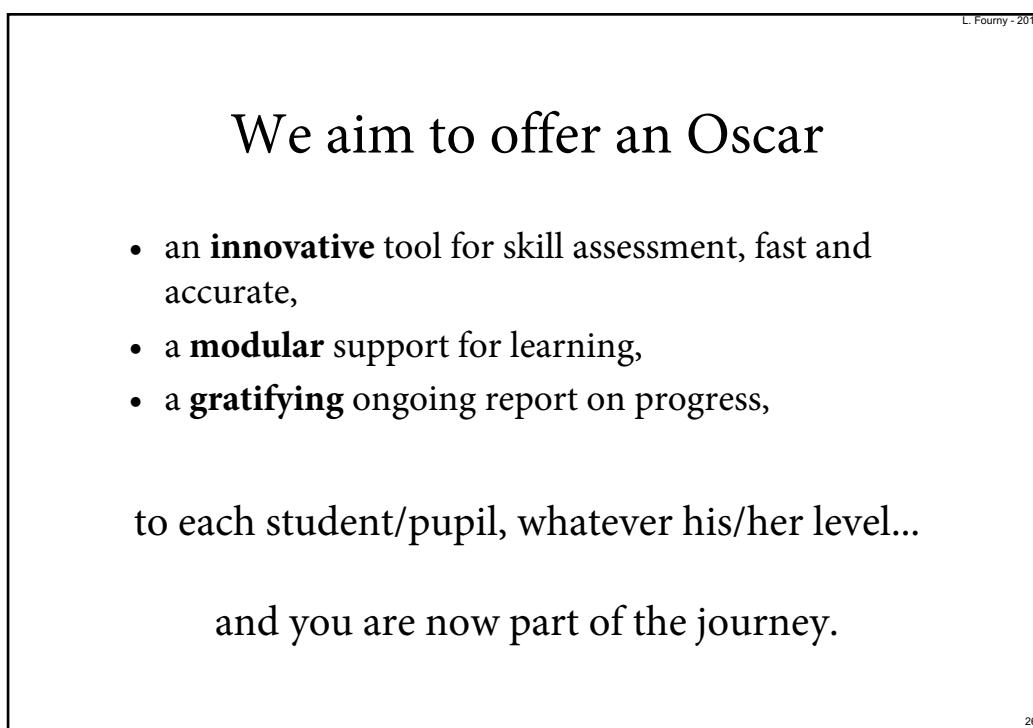
- Your idea to help students (and teachers)!

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?

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# Oscar

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<Https://lingi2255project.slack.com>

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