

Using Continuous Competency-Based Assessment as a Success Support Service in Higher Education

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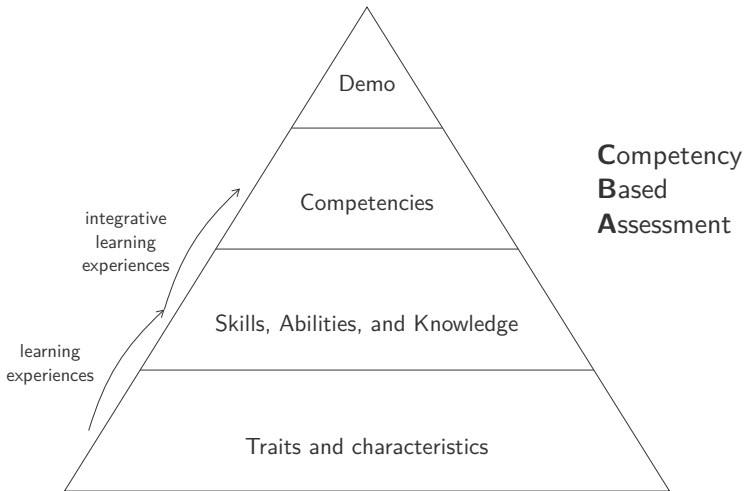
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Context and Motivations

- **Better support** students from education at staggered hours
 - Help them reconcile their studies with their personal life
 - Offer them enough autonomy to organise their time
 - Lead and help students towards success
- **Integrate success support service** within the course

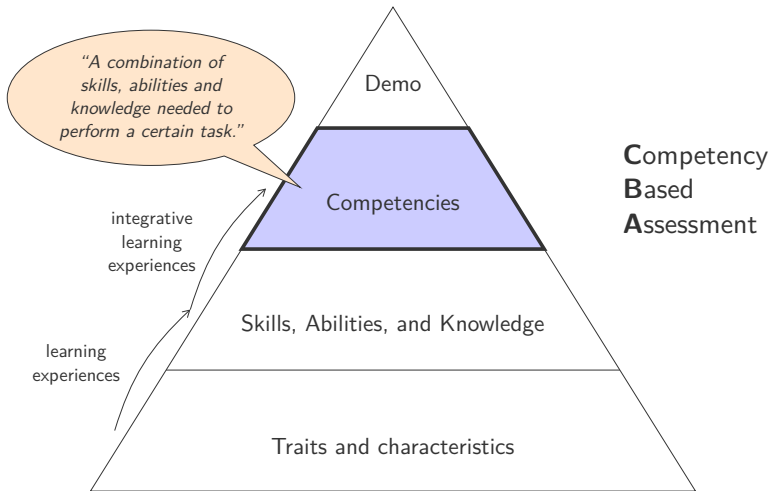
These students do not have time for additional remedial sessions

Conceptual Learning Model



R. A. Voorhees, "Competency-based learning models: A necessary future," *New directions for institutional research*, vol. 2001, no. 110, pp. 5713, 2011.

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Proposed Approach (1)

- Development of a **pragmatic continuous CBA** approach

With benefits for both teachers and students

- **Assessment with tasks** inspired by future professional ones

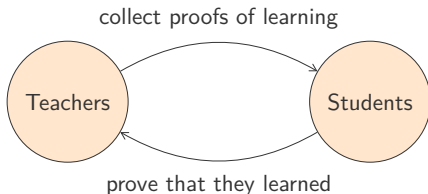
The evaluation process must make sense to students

- Trade numerical grades for **competency stars**

Measure whether competencies have been acquired and how well

Proposed Approach (2)

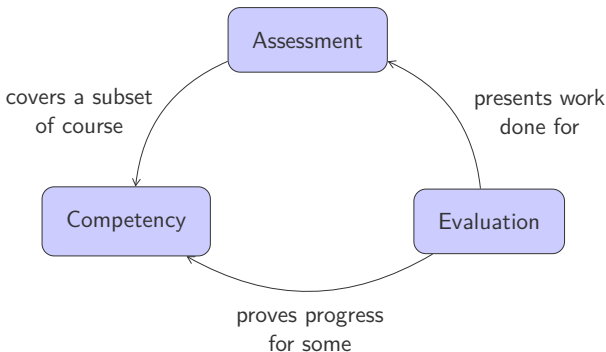
- Moving towards a **better assessment** process of students
 - Integrating evaluation as a part of the learning process
 - Better fitting with different students' learning profiles
 - Making it possible to take into account students' existing work
- **Reversing** the “traditional” assessment logic



Key Concepts (1)

- Combination of **three key concepts** in the proposed approach

Defining competencies and assessments, then taking evaluations



Key Concepts (2)

- Course objectives defined with **basic/advanced** competencies

Acquiring basic ones is mandatory to succeed the course

- List of **assessments** to cover all the competencies
 - Students choose the ones better fitting their learning profile
 - Several types of assessments: MCQ, quiz, project, interview...

- Students prove they master competencies with **evaluations**

Do not fail anymore, may just miss an opportunity to improve

TLCA Platform (1)

- Development of a **dedicated platform** to support the approach
Teachers and students can follow the progress all over the year

Introduction à la transmission d'information numérique

[Competencies](#)[Assessments](#)[Evaluations](#)[Progress](#)

Evaluate

Information

XXX

Sat Sep 18, 2021

10 evaluation(s)

Progress

100%
Basic

80%
Advanced

Basic

TC301 – Comprendre ce qu'est un signal numérique

★★★★★

TC310 – Comprendre le principe de la numérisation d'un signal analogique

★★★★★

Advanced

TC101 – Décrire un système comportant des transmissions d'information

★★★★★

TC190 – Comparer un signal analogique et un numérique

★★★★☆

TLCA Platform (2)

- Each **assessment** covers a subset of the course competencies

Several kinds of assessments: single take, incremental, phased...

Simple système avec transmission numérique

[Description](#)[Competencies](#)[Evaluations](#)[Statistics](#)

This assessment evaluates the following competencies:

- TC301 – Comprendre ce qu'est un signal numérique +1
- TC101 – Décrire un système comportant des transmissions d'information +2

[Add an evaluation](#)[Evaluations CSV](#)

Information

- Sébastien Combéfis
- Mission
- Incremental
- Open, Visible
- 14 evaluation(s)

Success Support Service

- The CBA approach for **individualisation and personnalisation**
Adaptation to the way of learning of students
- Using CBA approach continuously fosters **regular involvement**
Regular check of the progress and autonomy
- **Immediate feedback** and exchange opportunities
Opportunities for remediation, coaching and counseling

Experiment

- Digital transmission course with theory and practice parts

Eighteen third bachelor students at staggered times

- Strong and soft milestones have been defined

Hard to access practice part and soft with micro-courses

- Minimal **number of basic stars** to be obtained at point in time

	Theoretical part	Practical part
January	[70%; 100%]	0%
June	[70%; 100%]	100%
August	100%	100%

Results

- **Success rate** at the first hard milestone was good
 - 13 students directly obtained the 70% basic stars
 - 2 were too far to have them and directly failed the course
 - 3 were close and succeeded with a few more assessments
- **All the 16 students** succeeded the course in June
 - *“we know where we are and therefore how to work accordingly.”*
 - *“being able to steps to reach a minimum of 70% of basic competencies strongly motivates you to work to guarantee access to the essential modules”*
 - *“it’s reassuring to be able to manage your time and your work, you can really adapt your schedule.”*

Conclusion and Future Work

- Proposed CBA approach used continuously **can serve as a SSS**

No need to have remedial sessions aside, they are included

- Encouraging results with a **high success rate**

The majority of the students were lead towards success

- Several directions for **future work** are on their way

- Improving the platform to provide better support features
- Pursue the analysis of the impact of the approach on success