Promoting the teaching reform of Colleges with "MOOC+SPOCs+Flipping Classroom"

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Outlines

• Higher Education : Three gaps for the quality Improvement

• Road map for promoting the teaching reform of Colleges

• 1+M+N: MOOC+SPOCs+Flipped Classroom--a New teaching mode

• Implementation & Impacts
Higher Education: Three gaps for the quality Improvement

Gap 1
Difficult for Curriculum/Course innovation.
Curriculum/Course renew not in time.

Gap 2
Difficult for teacher.
Lack of high level teachers.

Gap 3
Difficult to reach the good effect of learning.

New Course

- New knowledge.
- Thinking and Ability.
- Cross-knowledge domain integration.
- Multidisciplinary.
- Knowledge penetration.

Existing Course
Road map for promoting the teaching reform of Colleges

Objectives
- Course innovation
- Improve the quality
- Education fairness

Massive + Different levels & Features

1+N: one teacher to multi students

1+M+N: one MOOC teacher, to multi SPOC teachers from multi colleges, to multi group of students

How to Teach:
- Goog sequence of thought, Simulation, Visualization

How to Learn:
- Online Course + Flipped Classroom

Construction Resources for teachers & students

MOOC + SPOC: for Public and for Undergraduate

Multi forms such as Teach & Review by Students, Discussion and debate, Intensive exercise, et al.

Large-scale teaching reform in Other universities

Course Opened

Open Online

Construction of MOOC

Using MOOC

Large-scale MOOC + SPOCs + Flipped Classroom implementation

Innovation of teaching form

5-7

Large-scale teaching reform in Harbin Institute of Technology

Cross regional, cross colleges/universities, large-scale teaching reform

Open Course Localization

Innovation of teaching methods

Course innovation

New Curriculum, New Course

Student-centered

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Large-scale MOOC + SPOCs + Flipped Classroom implementation

Innovation of learning methods

How to Learn: Online Course + Flipped Classroom

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Large-scale teaching reform in Harbin Institute of Technology

Cross regional, cross colleges/universities, large-scale teaching reform

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1+M+N: MOOC+SPOCs+Flipped Classroom
--a New teaching mode

High Level

Localization

Multi-Channel Learning

Interaction, initiative and depth

MOOC
High quality course

SPOC -A univ.
Local course

SPOC -B univ.

Textbook

Courseware

Video/Audio.

Exercises online

Discussion online

Learning From different channel.

Learning From SPOC

Learning From MOOC

SPOC

MOOC

Teach & Review by Students

Discussion & Debate

Lecture by Teacher

Learning From SPOC

To Classroom
Implementation & Impacts

Harbin Institute of Technology
- 135 Course projects for MOOC construction.
- 70 MOOCs opened online.
- 23 MOOCs awarded as National level MOOC.
- 30 Courses implement “MOOC+SPOCs+Flipped Classroom”
- More than 150 SPOC terms.

Typical courses: 《College Computer-Introduction to computational thinking》
- More than 510,000 registered.
- More than 80,000 undergraduates from more than 40 universities in 1 MOOC term.
- More than 400,000 posts & replies in one MOOC term.
- More than 40,000 favourable comments.
- Awarded as National-level MOOC.
- Got many awards from the 3rd party.
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Thank You!

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