

MOOC-based course to credit course in CNMOOC

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The MOOC Office of Shanghai Jiao Tong University



Contents

- Traditional Classroom teaching in SJTU
- From traditional classroom teaching to MOOC
- Credit MOOC Course in CNMOOC
- From MOOC to Flipped Classroom

Zoology Curriculum

NO	Course Number	Course Title	type	Credit	Hours	Term	Remark
1	MA005	Advanced Mathematics (C)	required	3	54	1	
2	EN001	College English (1)	required	4	72	1	
3	TS008	Veterinary medicine	optional	2	36	3	1 in 2
4	TS012	Animal immunity	optional	2	36	3	1 in 2

Courses

Program of the department of Mathematics

id	course id	Course name	type	credit s	perio d		No. of stude nts
1	MA005	Advanced Mathematics (C)	requir ed	3	54	50	1200
1	MA006	Advanced Mathematics (D)	requir ed	3	54	50	1200

The plan of workload, arrangements and resources

Teaching Plan

Course plan of School of Agriculture and Biology

id	Course id	Course name	depar tment	type	credit	perio d	seme ster	No. of stude nts
3	TS008	Veterinary medicine	AGRI	optio nal	2	36	3	10
4	TS012	Animal immunity	AGRI	optio nal	2	36	3	10

The pressure of professional courses

Traditional Teaching class



- The capacity of the course is limited by the teachers not by the students' demands
- Teaching effect is not assessed

Traditional Classroom



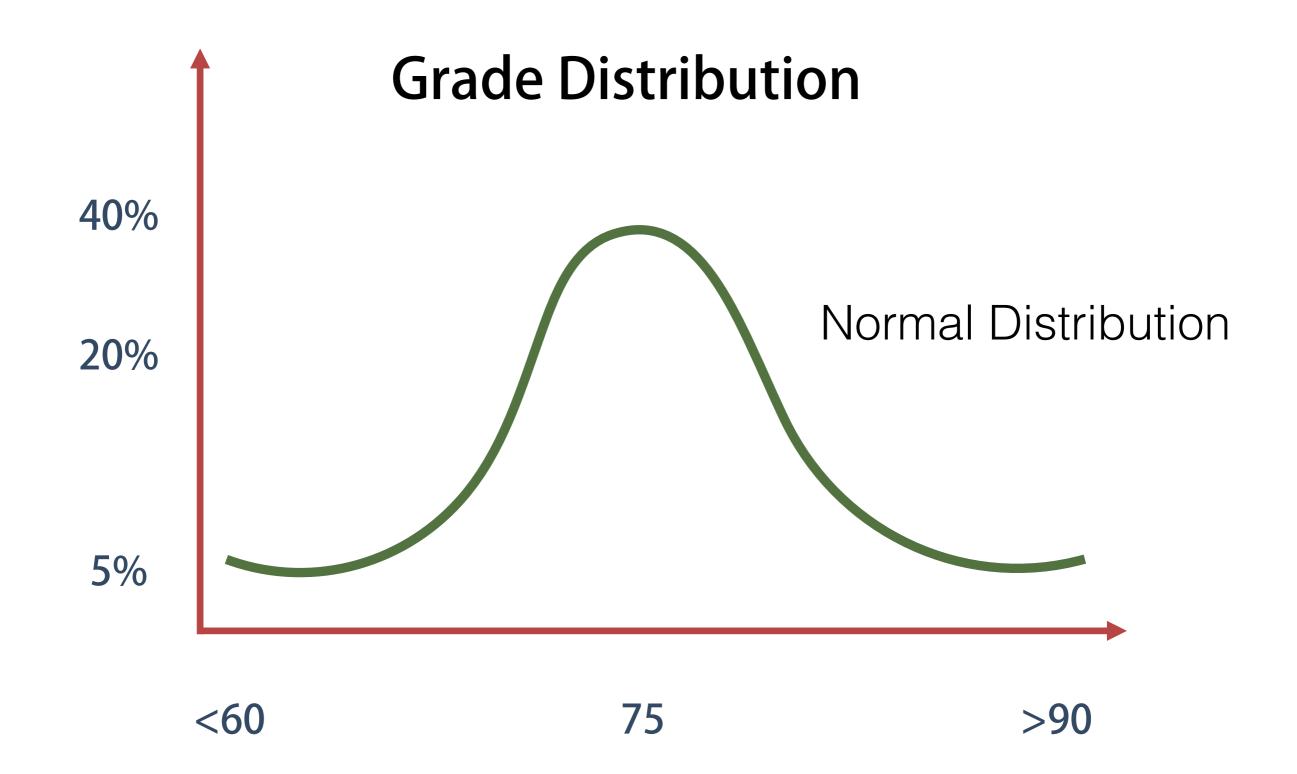
Traditional classroom teaching does not work effectively: most students play their mobile phones instead of focusing on class.

Traditional Classroom



- The students sit far from the teacher and talk to each other
- Classroom teaching become just formalism not interaction and study

Traditional Classroom



Seats and Grade Distribution



Classroom teaching in SJTU

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Classroom Video

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研究的情
上海交通大學
定义:设X是一集合, d(x, y)是X×X到R
  的映射,满足:
(1) 对任意x, y \in X, 有d(x, y) \ge 0, 且
  d(x, y)=0当且仅当x=y;
(2)对任意x, y∈X, 有d(x, y)=d(y, x);
(3)对任意x, y∈X, 有
  d(x, z) \leq d(x, y) + d(y, z),
则称d(x,y)是X上的距离。
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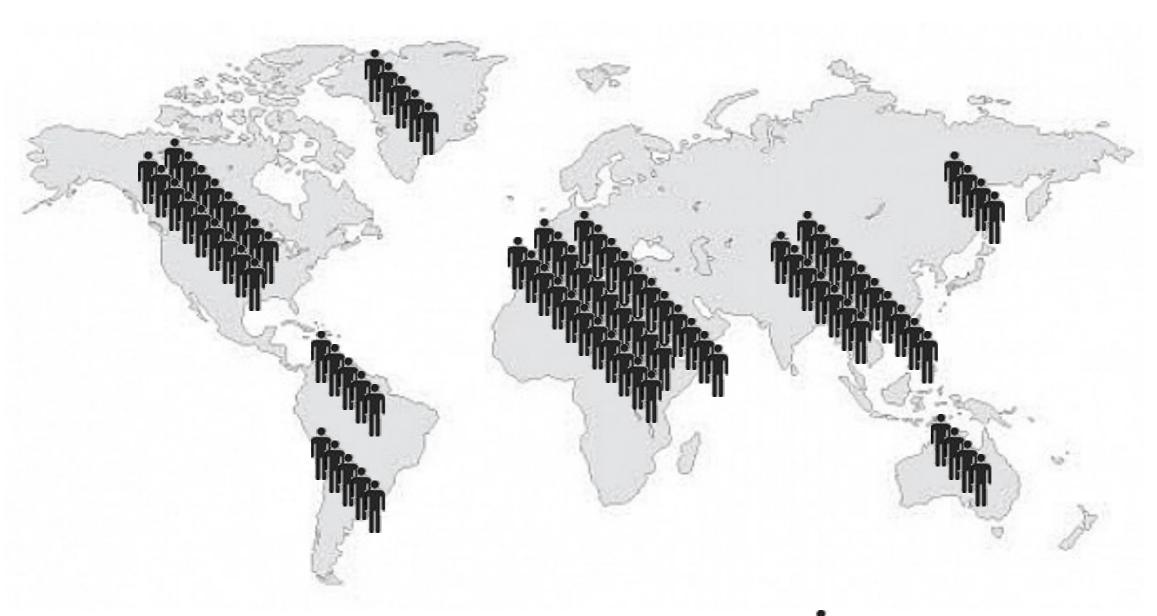
45 minitues Traditional Classroom Teaching make student boring

MOOC Course Video



Break up material into thematic segments of 8 to 15 minutes.

MOOC Classroom

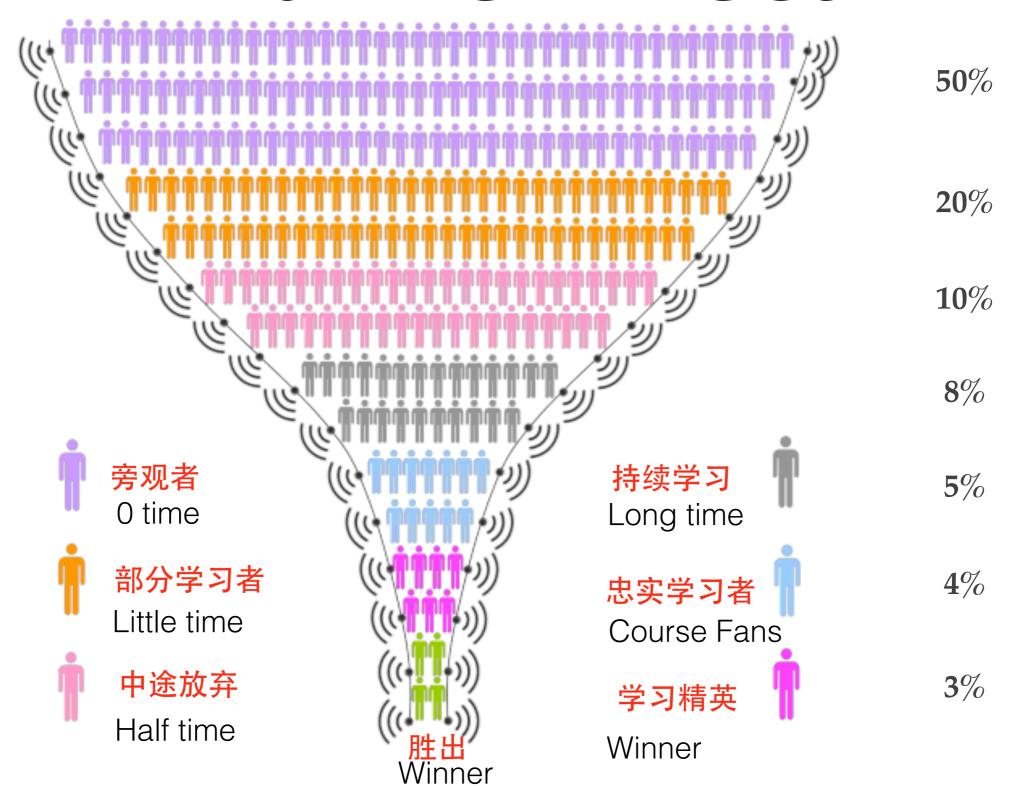


MOOC Learners from world

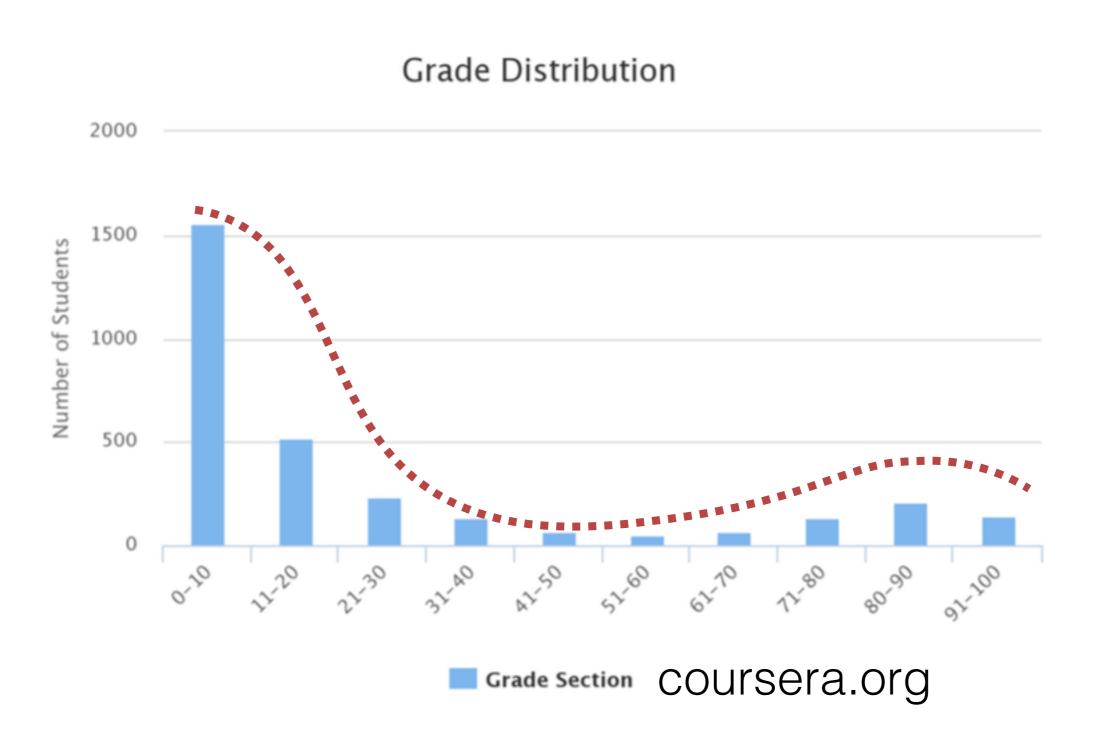


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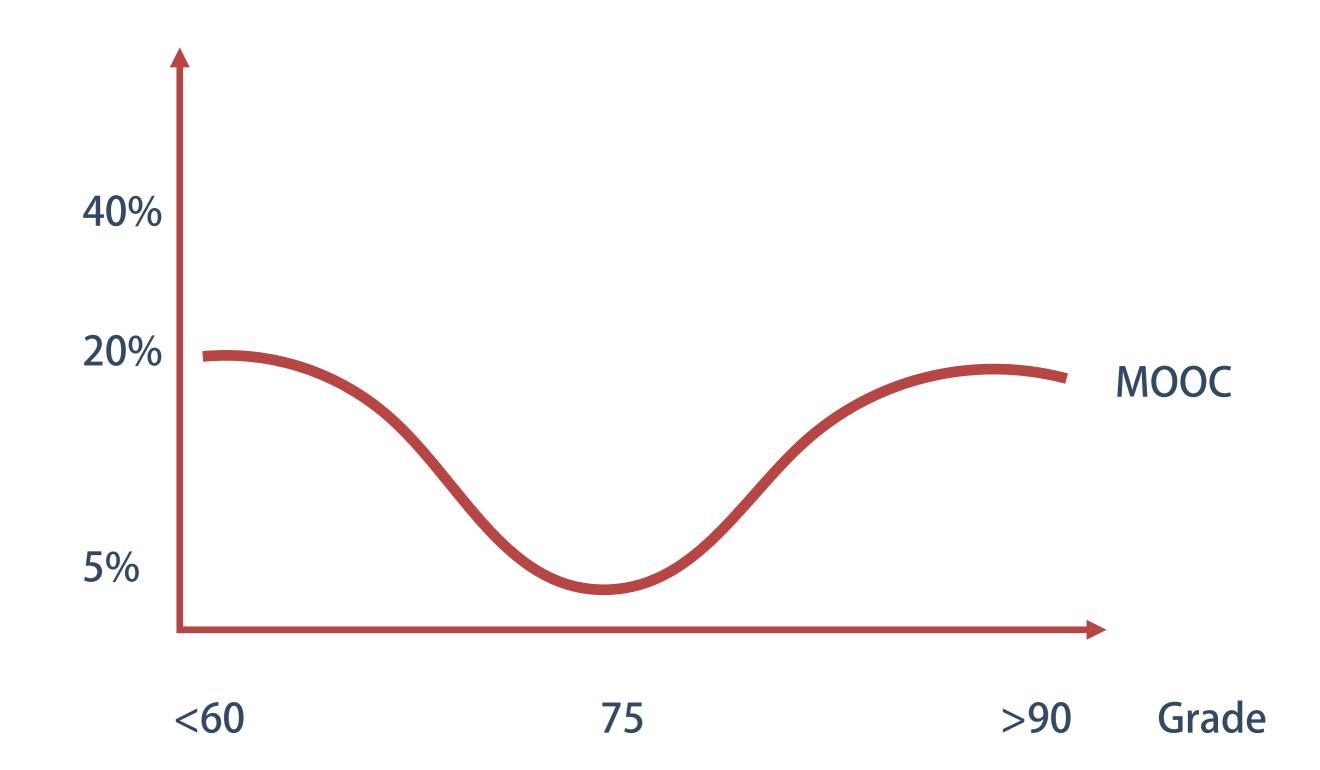
Funnel Effect



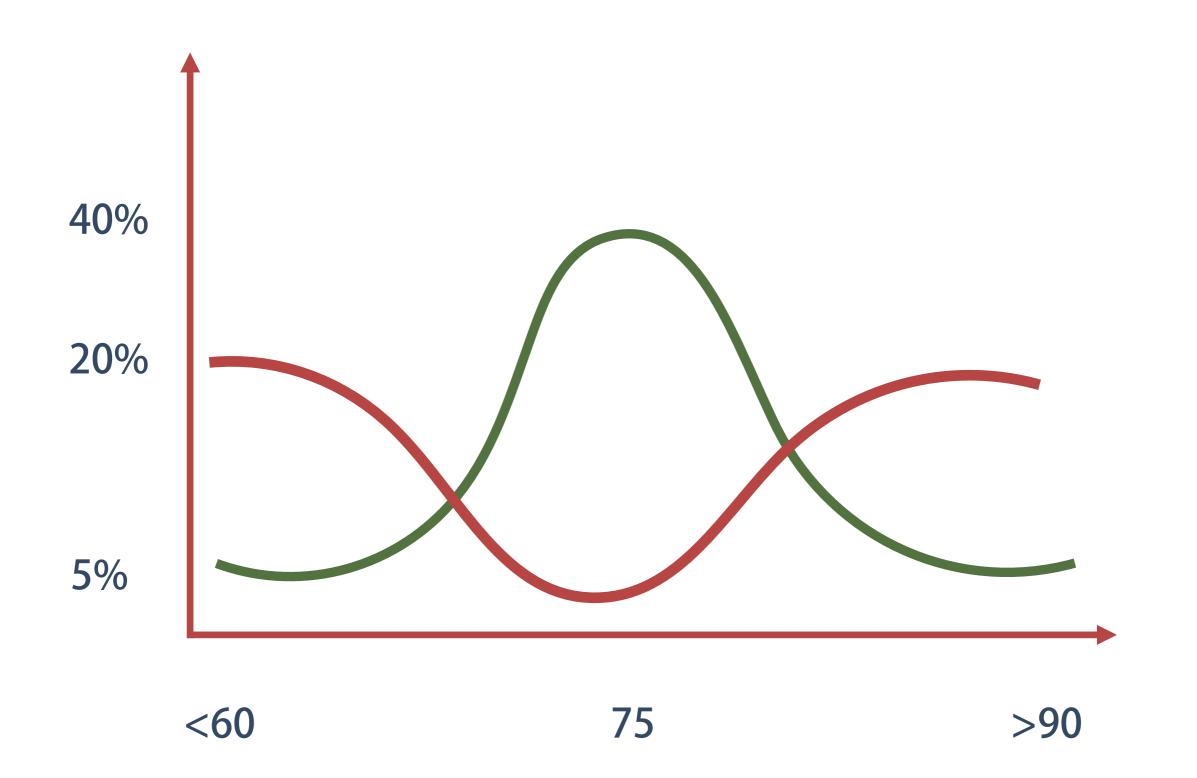
Grade distribution of traditional Chinese medicine and culture



MOOC: Abnormal Distribution



Traditional Classroom Vs MOOC Classroom



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More than 400 universities and 200K students from China





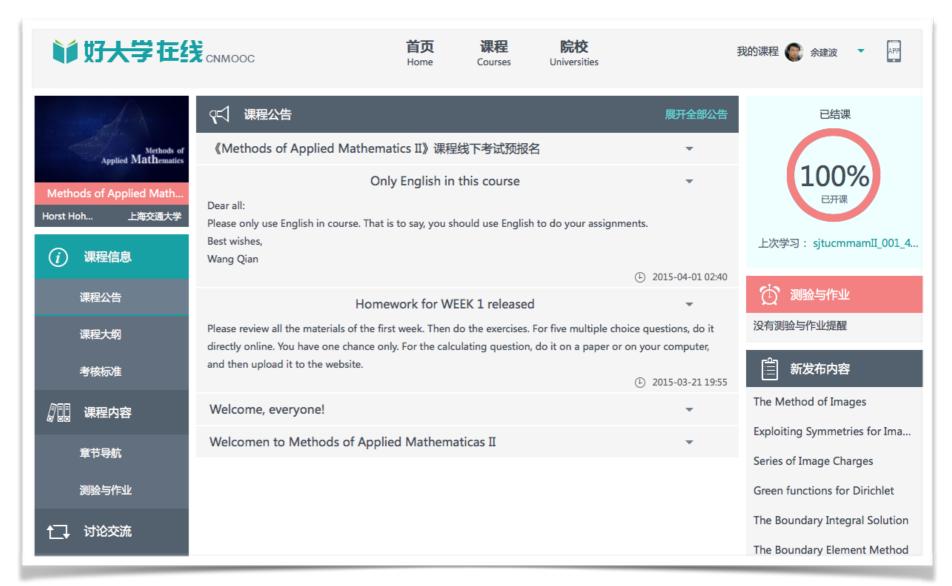




Online Learning

Online Forum

Online Test



Video Case study

Online discussion Interactive Group discussion PBL

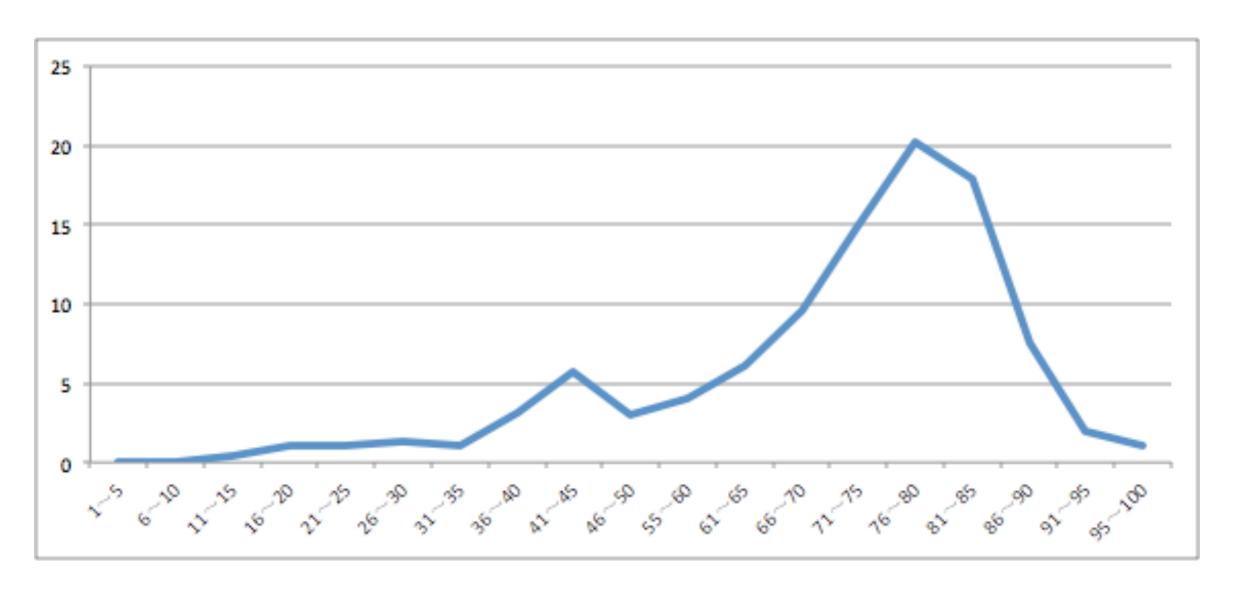
Flipped Classroom
Offline teaching





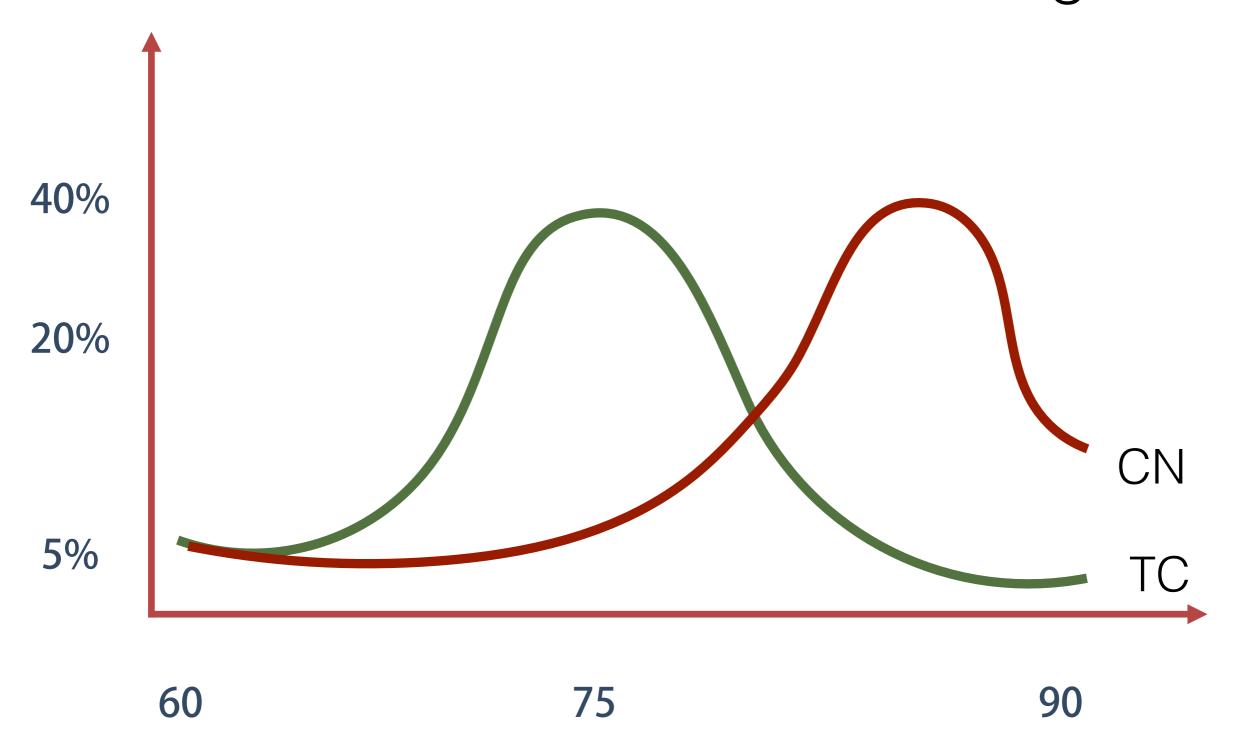


Practice Based Learning



Grade distribution of traditional Chinese medicine and culture of 2014 autumn

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Engineering Graphics in Traditional Classroom



Shaking Fan

Engineering Graphics in CNMOOC



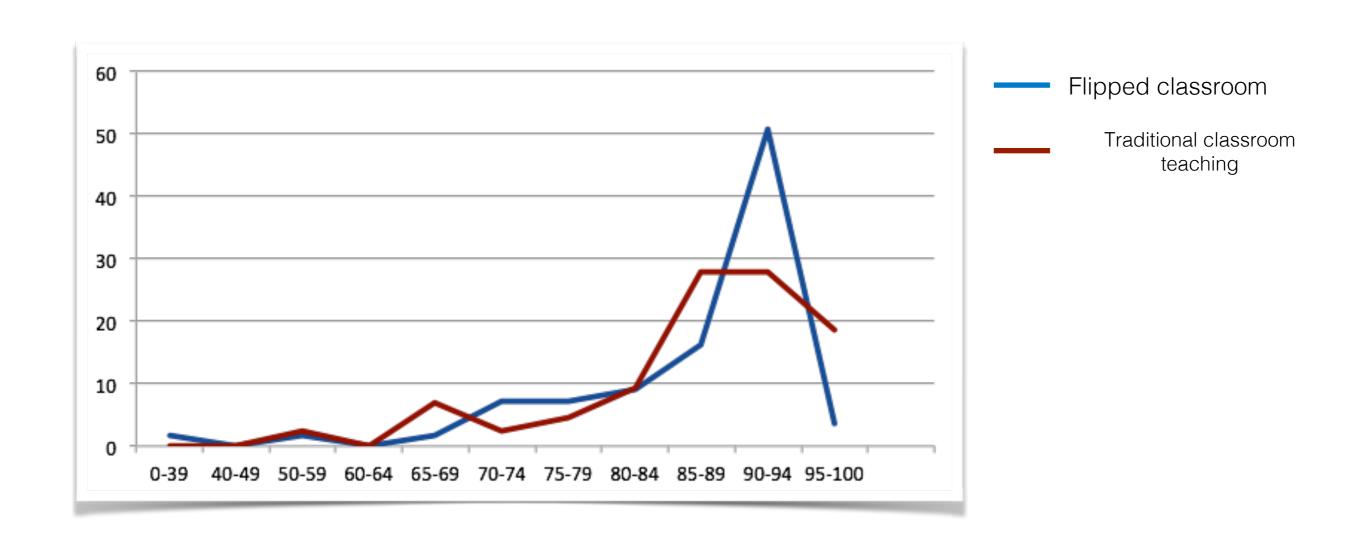
Easy to study for online learners

From MOOC to Flipped Classroom

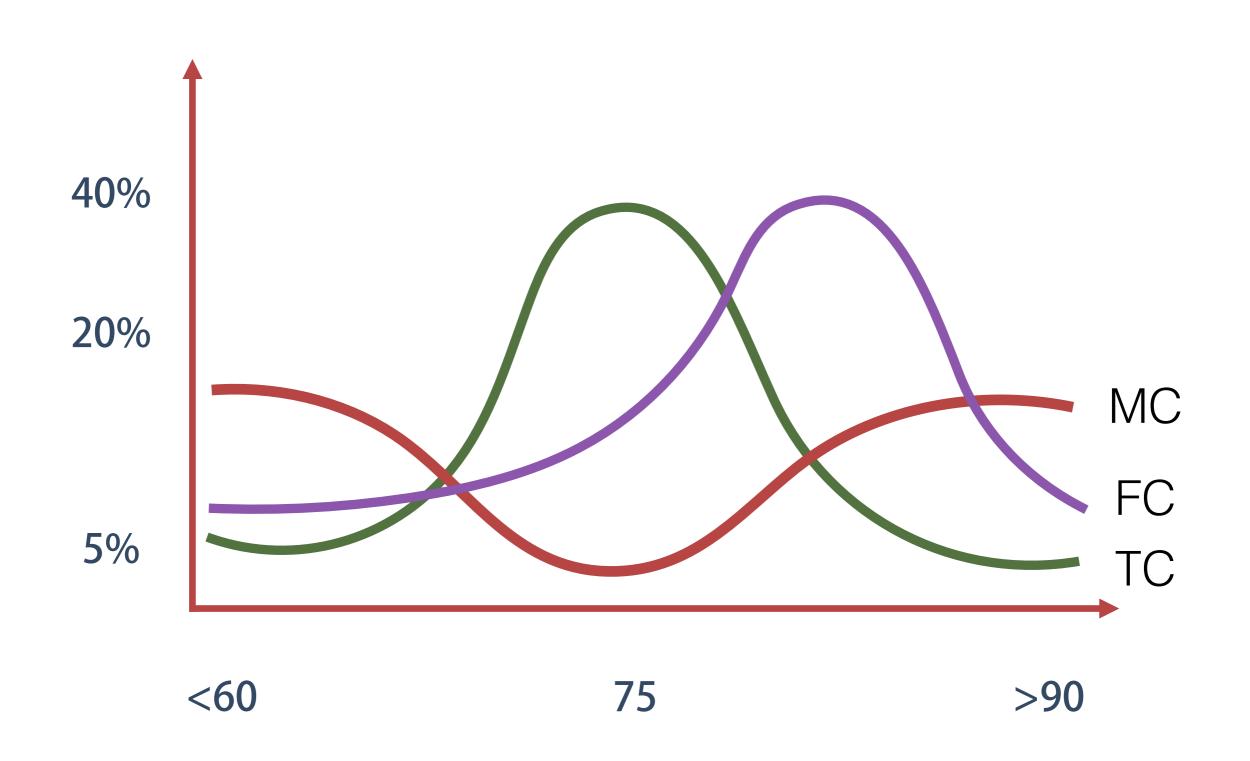


After online video study on CNMOOC SPOC site Problem Based Learning in Flipped Classroom

From traditional classroom teaching to flipped classroom



The Grade Distribution from Different Teaching and Learning Mode



Thanks ibyu@sjtu.edu.cn