

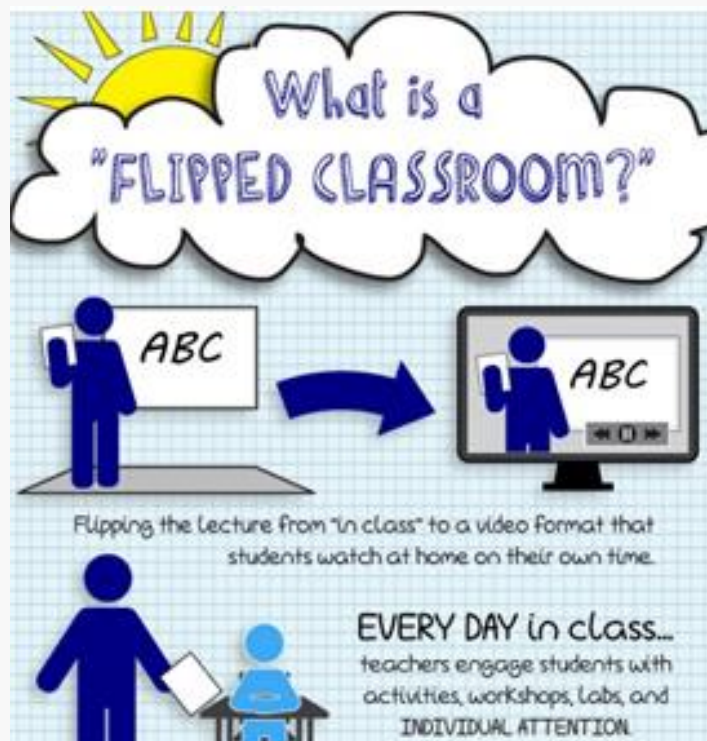
# 翻转课堂本土化过程中 存在的问题和解决策略

常州市教育科学研究院 蒯超英  
2017年1月4日 Melbourne , Australia



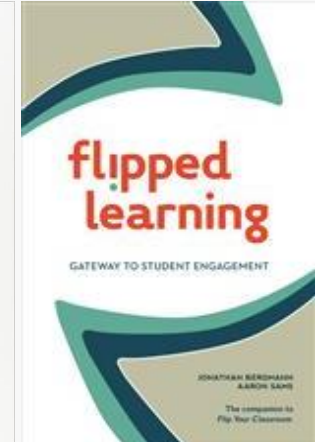
# 分享的主要内容

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1. 翻转课堂的缘起和其原创者
2. 翻转课堂“翻转”了什么？
3. 本土化中的问题和解决策略
4. 提升翻转课堂有效性的建议

# 1.1 起源于美国山区高中的翻转课堂



## FLIPPED CLASSROOM MODEL

### Outside-of-class

Components traditionally delivered in-class—such as lectures—are delivered outside-of-class via web-based materials like:

- Videos
- Demonstrations and tutorials
- Simulations and games

### BENEFIT

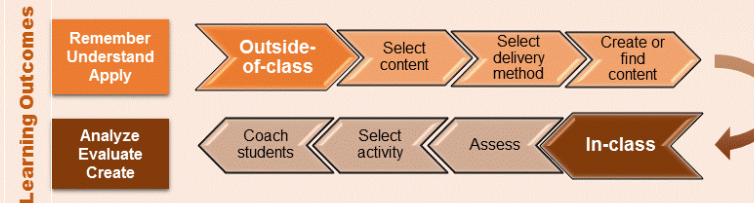
Provides faculty with more time in-class to work with individual students and allows students to master content at their own pace







### In-class

In-class time is used for deeper engagement with content, while the instructor provides guidance, through:

- Collaborative projects
- Individual and group problem-solving
- Peer-based learning activities

## FLIPPED CLASS DESIGN PROCESS




OLD (Before the Flip)		NEW (After the Flip)
 Students read over materials	BEFORE CLASS	 Students complete interactive learning module
 Students listen to a lecture	DURING CLASS	 Students practice applying key concepts with feedback
 Students attempt the homework	AFTER CLASS	 Students check understanding and extend learning to more complex tasks

# 1.2 翻转课堂的原创者：Aaron and Bergman

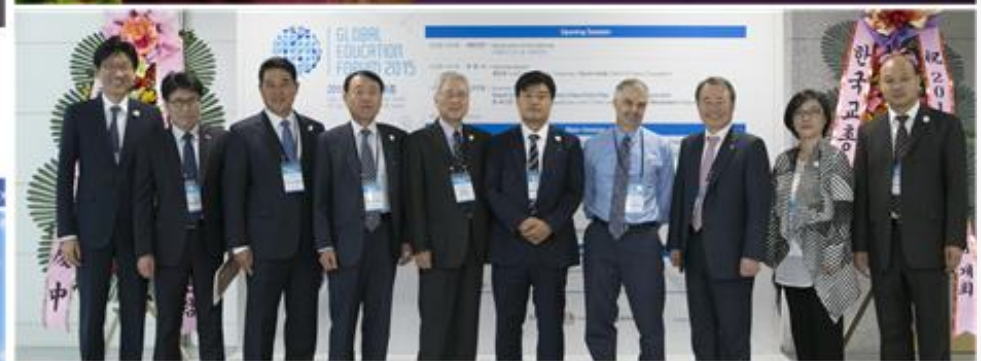


Curriculum Development Course at a Glance  
Planning for 6<sup>th</sup> Grade Science



Colorado 21 <sup>st</sup> Century Skills		
		
Critical Thinking and Reasoning: <i>Thinking Deeply, Thinking Differently</i>		
Information Literacy: <i>Untangling the Web</i>		
Collaboration: <i>Working Together, Learning Together</i>		
Self-Direction: <i>Own Your Learning</i>		
Invention: <i>Creating Solutions</i>		
Reading & Writing Standards for Literacy in Science and Technical Subjects 6 - 12		
<b>Reading Standards</b>		
<ul style="list-style-type: none"><li>• Key Ideas &amp; Details</li><li>• Craft And Structure</li><li>• Integration of Knowledge and Ideas</li><li>• Range of Reading and Levels of Text Complexity</li></ul>		
<b>Writing Standards</b>		
<ul style="list-style-type: none"><li>• Text Types &amp; Purposes</li><li>• Production and Distribution of Writing</li><li>• Research to Construct and Present Knowledge</li><li>• Range of Writing</li></ul>		
Unit Titles	Length of Unit/Contact Hours	Unit Number/Sequence
Changing Environments	4-6 weeks	1
Water	4-6 weeks	2
Building Blocks of Life	4-6 weeks	3
Environmental Systems	4-6 weeks	4

# 1.3 Aaron and Bergman 目前在做什​​么？

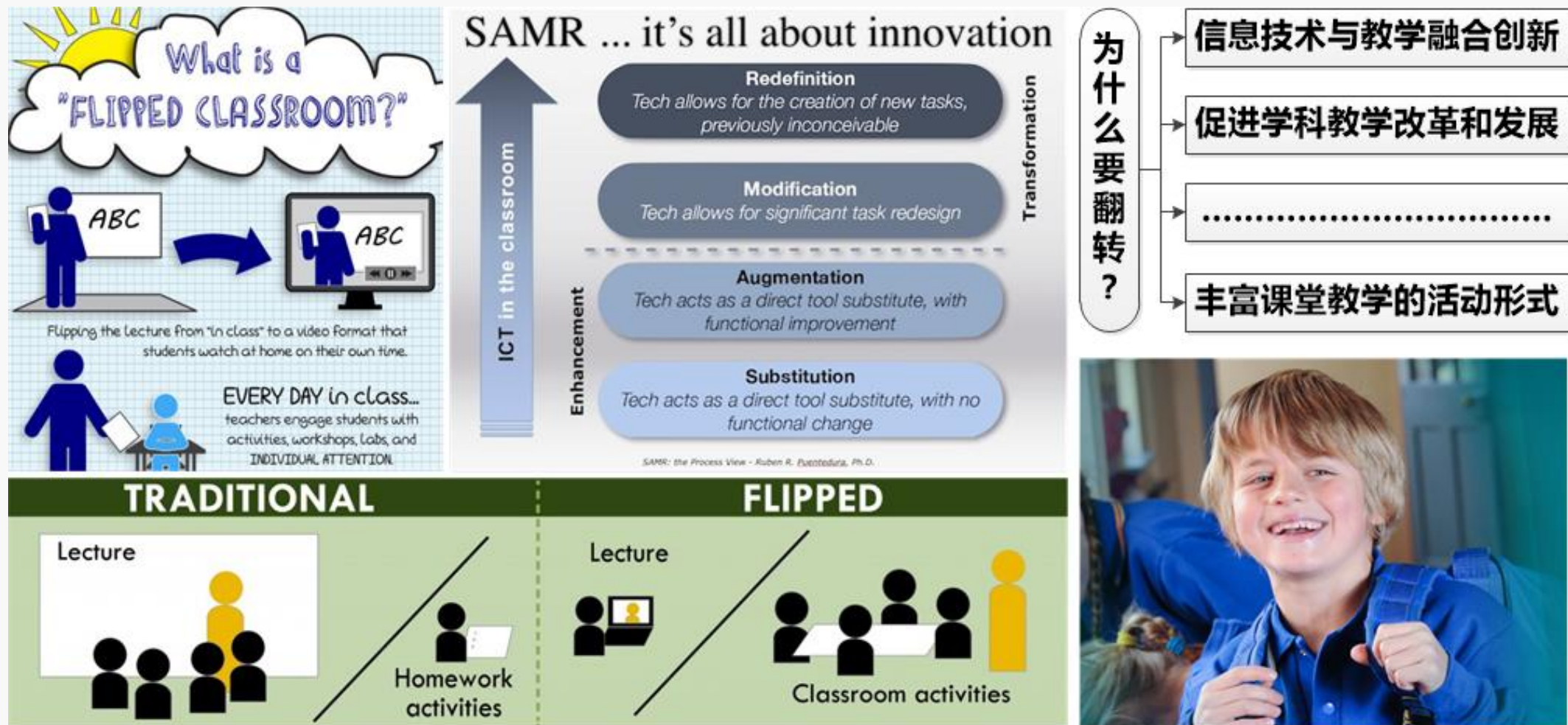


## The Gift of Identity

19 DEC 2016 · JON BERGMANN · BLOG, FLIPCLASS, STUDENT VOICE · 0

I fundamentally believe that people operate out of identity. They live their lives out of their deepest sense of self. I contrast *identity* with a list of "do's" and "don't's". Trying to motivate kids (students, or your own children) with a list of rules may lead to compliance, but not to lifelong success. Too often we discipline kids to modify their behavior instead of examining the root-cause of poor behavior. At their root, bad choices are a symptom of a broken belief system.

# 思考：我们为什么对翻转课堂有兴趣？



## 2.1 学校教学改革和发展的走向：个性化学习



**BRIDGE 234 to excellence**

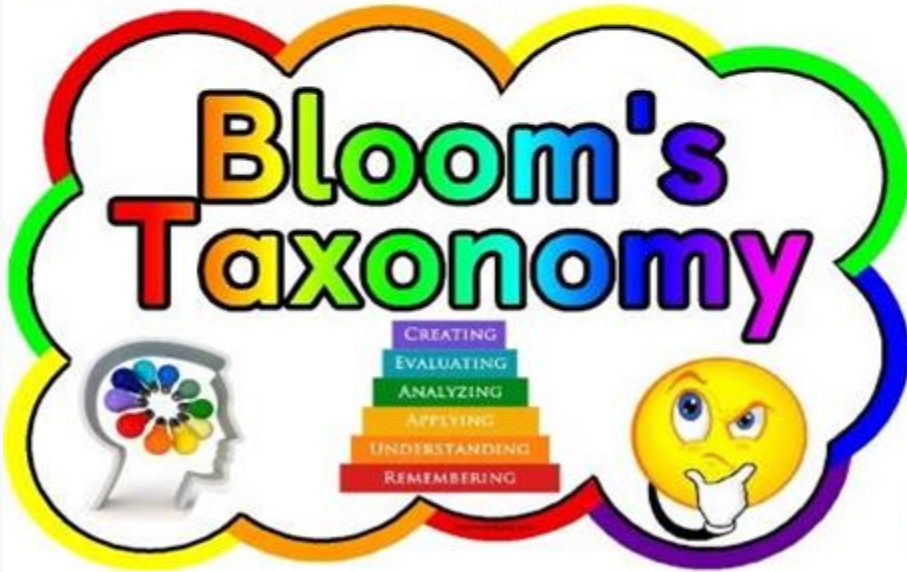
**Personalization. Passion. Community. Safety.**

Our new strategic plan is designed to **BRIDGE** our strong tradition of excellence with the changing needs of our students in the 21st century.

Year 1 (2013-2014)	Year 2 (2014-2015)	Year 3 (2015-2016)	Year 4 (2016-2017)	Year 5 (2017-2018)
<b>Setting the Foundation</b> Much work is being done to develop new, modern curriculum to prepare students for an ever-changing world.	<b>Building the Structure</b> We're implementing new programs, further developing our staff, and introducing exciting new opportunities for students, including elementary world language and art/design. Students and families are beginning to see and feel our new vision as it comes to life.	<b>Adding the Details</b> With a modern new curriculum in place and extensive teacher training underway, more focus is placed on developing students' passions and meeting their individual social, emotional and health needs. The community is taking ownership of our schools and becoming more involved in educating and supporting our students.	<b>Putting On the Finishing Touches</b> Our focus is now on developing personalized learning plans for each student, which take into account their individual needs, goals, passions and strengths. We're working closely with parents to support students' academic, social, emotional and health needs.	<b>Traveling Our New Bridge</b> We're evaluating what's working well and celebrating the successes of the previous four years.

A photograph of a female teacher with long brown hair, wearing a blue top and a black cardigan, sitting on the floor in a library and reading a book to a group of young children. The children are sitting around her, looking at the book. Bookshelves filled with books are in the background.

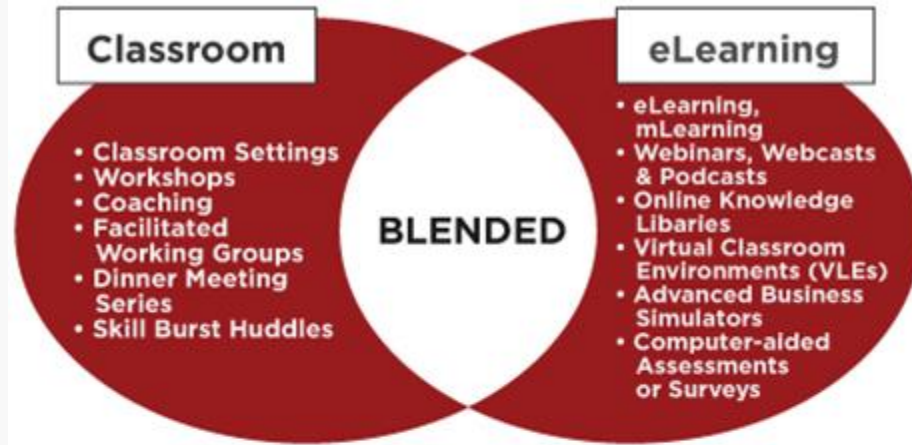
# 2.2 基于课堂教学的个性化学习理论：掌握学习



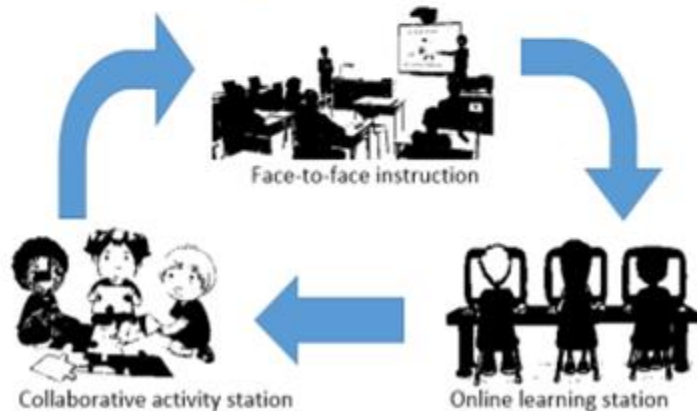
	时间	掌握程度
传统教学	常量	变量
掌握学习	变量	常量



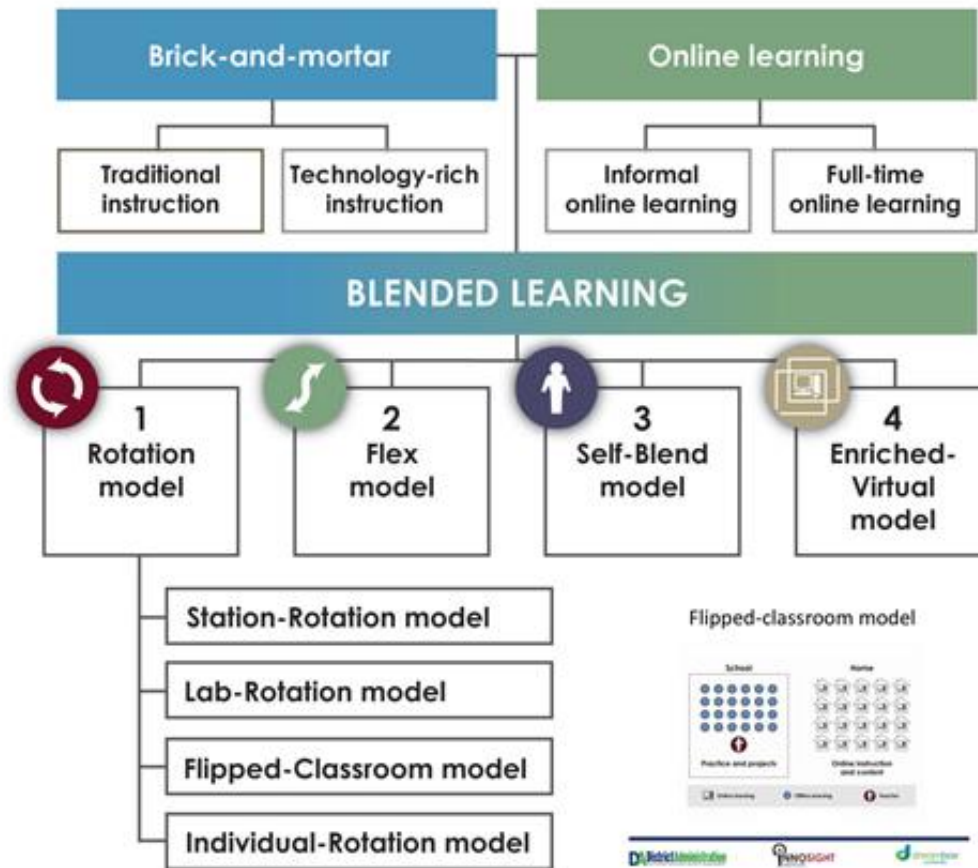
## 2.3 学生学习时间成了变量，教学活动如何组织？



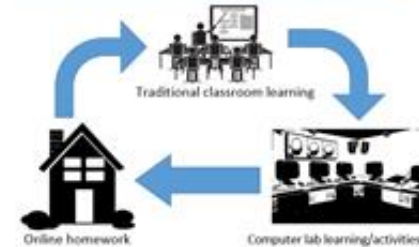
Blended Learning Model: Station Rotation



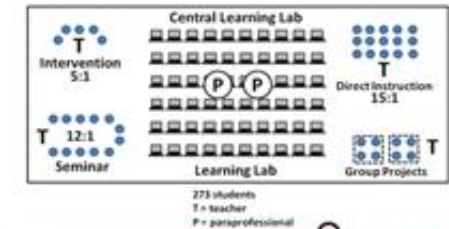
## 2.4 混合学习模型 ( Blended Learning Models )



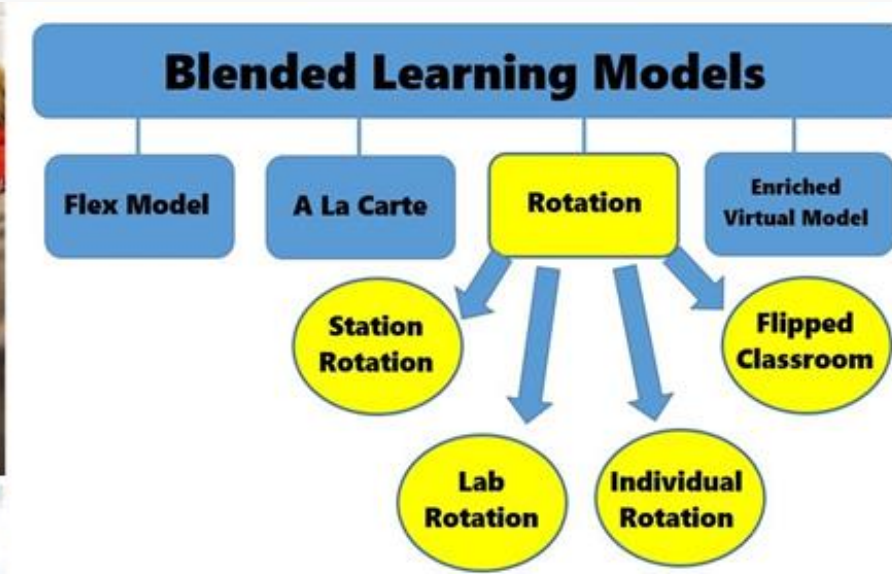
Blended Learning Model: Lab Rotation



Individual-rotation model: Carpe Diem



## 2.5 翻转课堂是混合学习的一种类型



**4 signs you have a real flipped classroom**

You've recorded your lectures so your students can learn from them at home. But that's only the first step on the path to a flipped classroom. The magic starts when you use that extra class time for deep learning. Here are four telltale signs you're doing it right.

- 1. Students get hands-on.**  
The best use for your newfound class time? Project-based learning! When students get hands-on, they're more likely to enjoy and retain what they learn.
- 2. You like each other.**  
More class time means more time to build meaningful relationships. Talk to students about what they're into and ask for their input on classroom rules.
- 3. It's all about them.**  
Personalize learning activities to fit students' diverse learning styles. Let them do a hands-on demonstration instead of an essay, for example.
- 4. They're passionate about what they're learning.**  
For students to deeply understand content, they need to care about it. Let them choose project topics while you guide the application, analysis and creativity.

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# 思考：翻转课堂“翻转”了什么？

## The Flipped Classroom

### THE TRADITIONAL CLASSROOM

Teacher's role: Sage on stage



### THE FLIPPED CLASSROOM

Teacher's role: guide on the side

- Students watch lectures at home at their own pace, communicating with peers and teachers via online discussions
- Concept engagement takes place in the classroom with the help of the instructor



SOURCE: Knewton

DESERET NEWS GRAPHIC

班级授课制度

学生学习内容

学科教学目标

不变

变化

面向每个学生

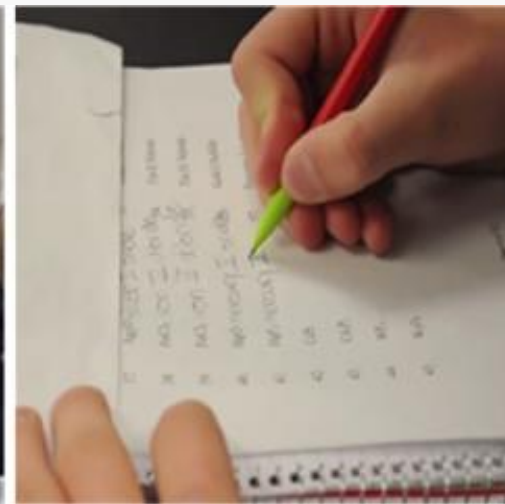
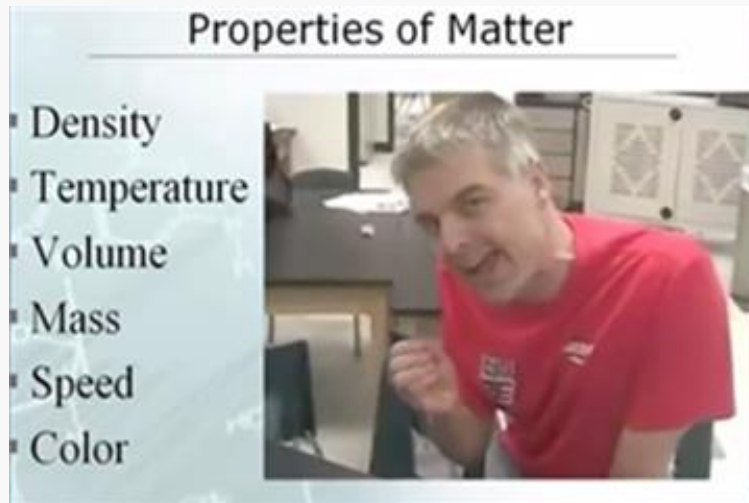
目标分段实现

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ICT在翻转课堂具体实施过程中究竟起什么作用？



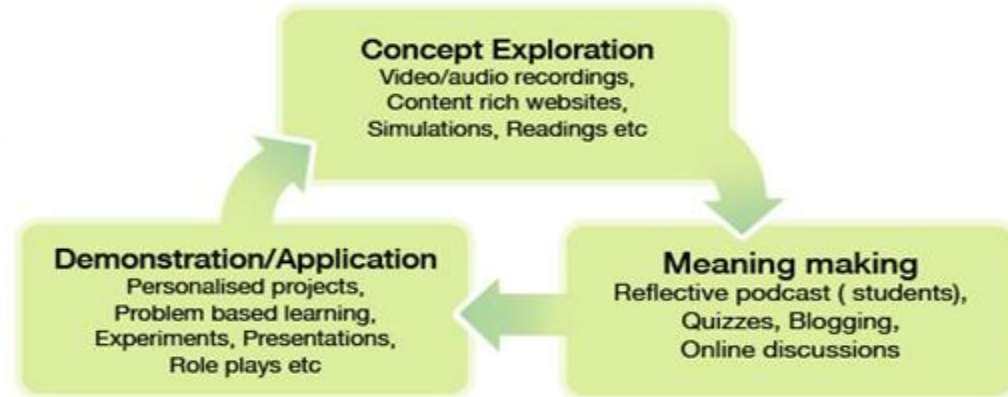
# 3.1 Aaron and Bergman是如何实施翻转课堂的



传统课堂		翻转课堂	
活动	时间	活动	时间
热身活动	5m	热身活动	5m
学生作业问题梳理	20m	教学视频学习检查	10m
讲授新知	30-40m	个性化学习，针对性教学	75m
个性化学习，针对性教学	20-35m		



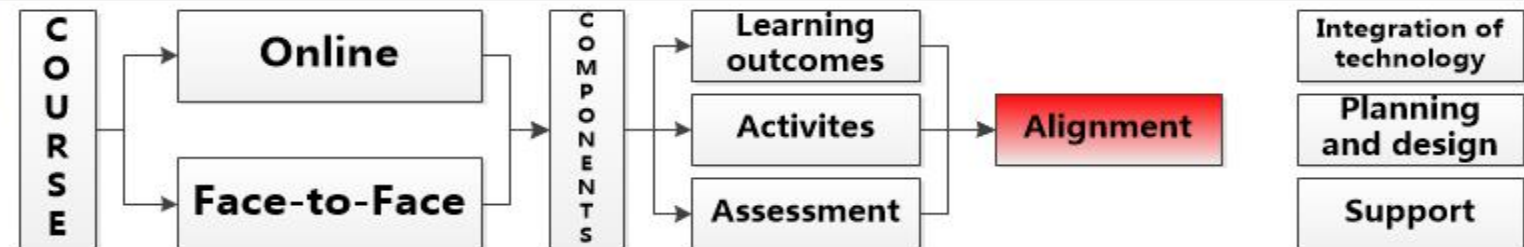
## 3.2 国外翻转课堂研究情况：以昆士兰大学为例



### How do I get started?

The flipped classroom is a blended learning model that requires more than dividing a course into face-to-face and online components. Boud and Prosser (2002) recommend that effective blended learning environments take a learning design approach which looks at the learning goals and aligns them with teaching and learning activities and assessment. This ensures the integration and appropriate use of technology.

<http://www.uq.edu.au/teach/flipped-classroom/what-is-fc.html>



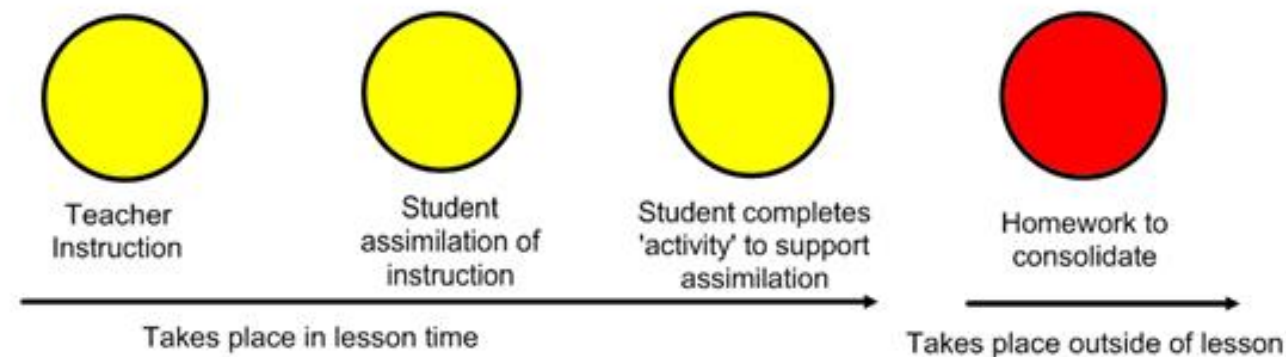
Key elements of the flipped classroom include

# 3.3 “成功” 不能简单地 “复制”

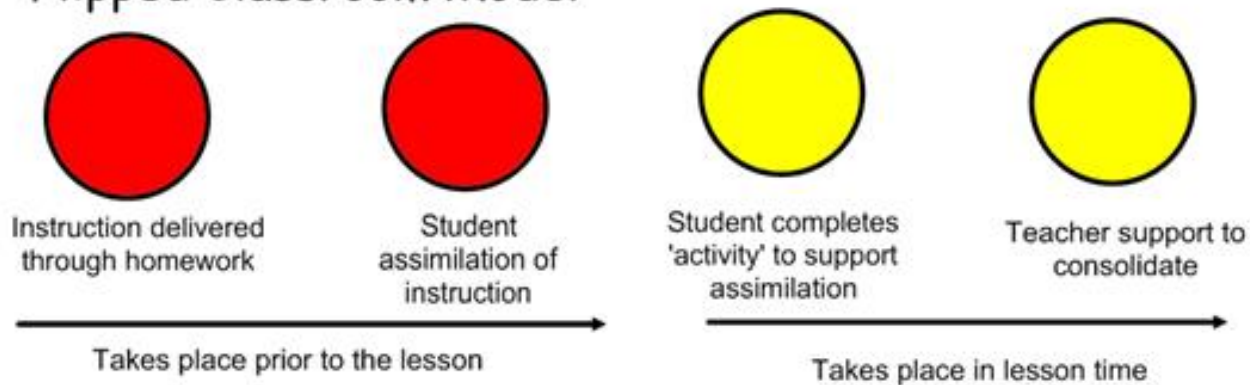


## 3.4 翻转课堂本土化需解决的问题：学习主动性

### Traditional Model



### Flipped Classroom Model



### Knowledge Acquisition



### Knowledge Construction



## 3.5 组织学生有效开展自主学习的策略：家长督促

### Bloom's taxonomy and the flipped classroom



Enabling us to spend more class time at the upper end of the taxonomy, with tasks that ask students to apply, analyse, evaluate, and create

Students viewing video content prior to lessons allow us to shift the lower levels of Bloom's taxonomy out of the class

**NZPETeacher**  
Flipped classroom videos



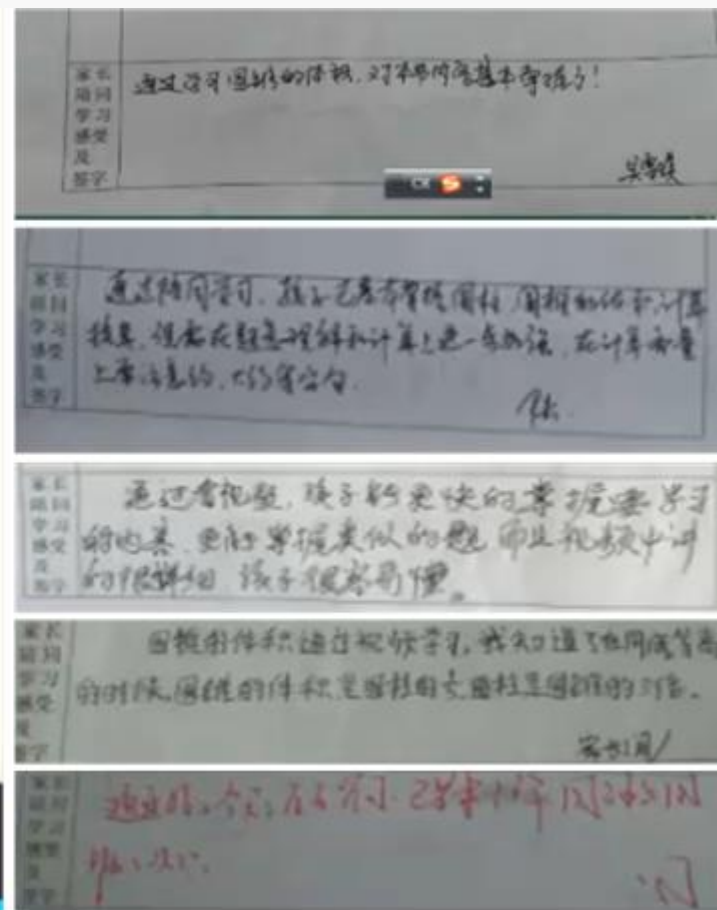
[nzpeteacher@gmail.com](mailto:nzpeteacher@gmail.com)



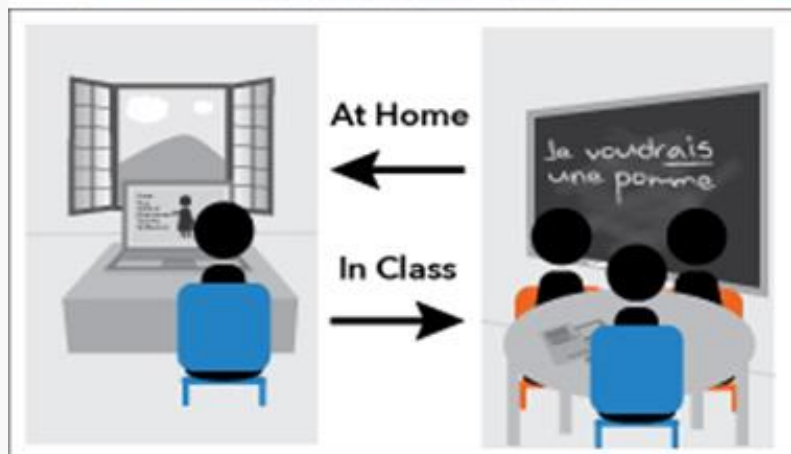
[nzpeteacher.com](http://nzpeteacher.com)



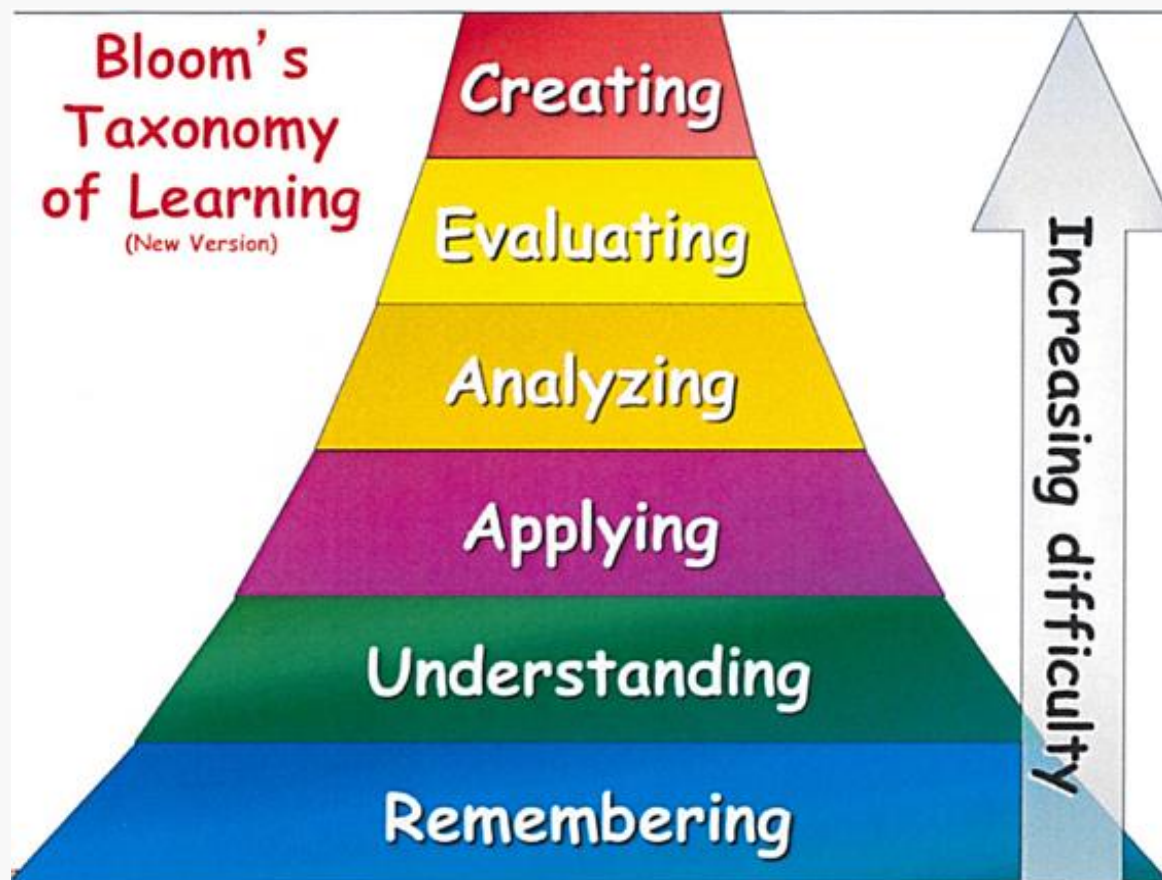
[@NZPETeacher](https://twitter.com/NZPETeacher)



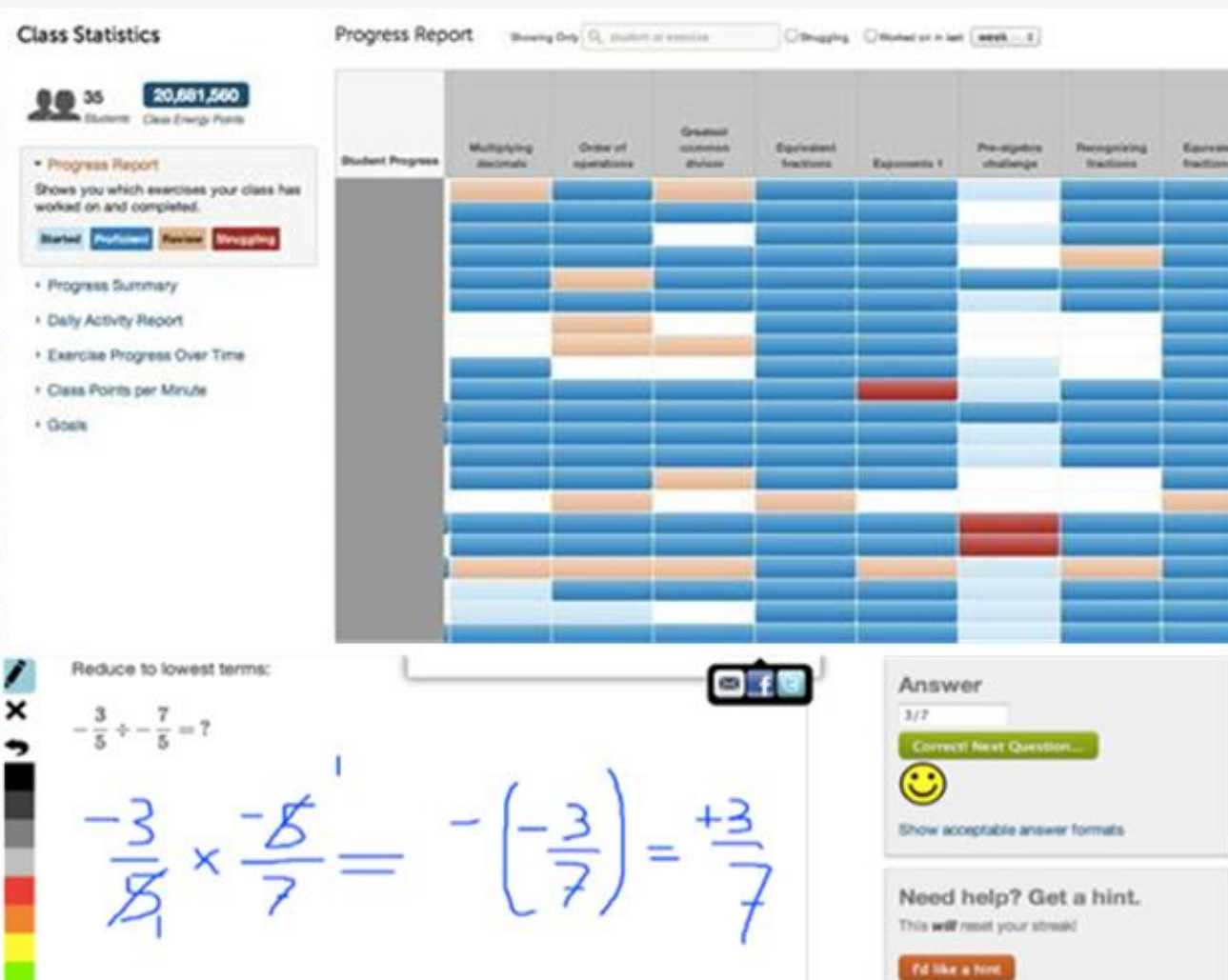
## 3.6 组织学生有效开展自主学习的策略：合作探究



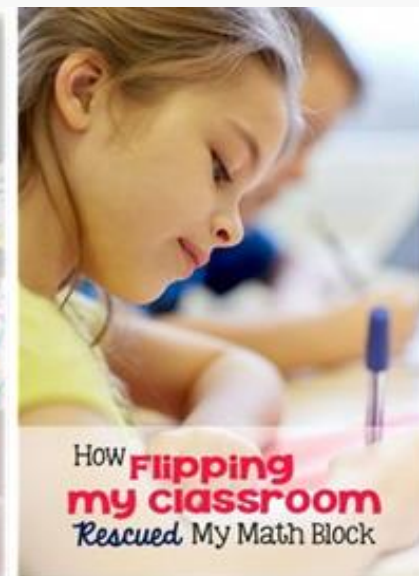
## 3.7 翻转课堂本土化需解决的问题：学习反馈



## 3.8 利用反馈系统了解学生自主学习情况



# 思考：翻转课堂和“预习+授课”的区别是什么？



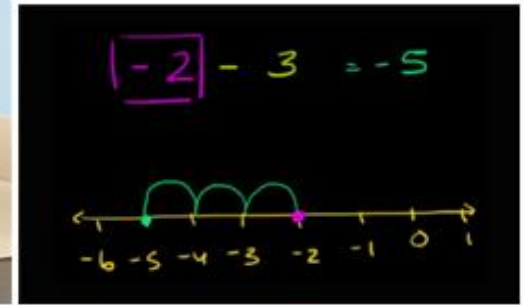
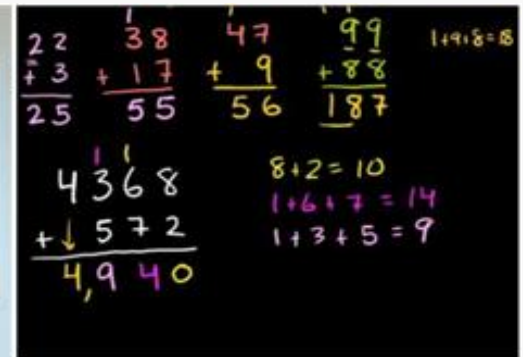
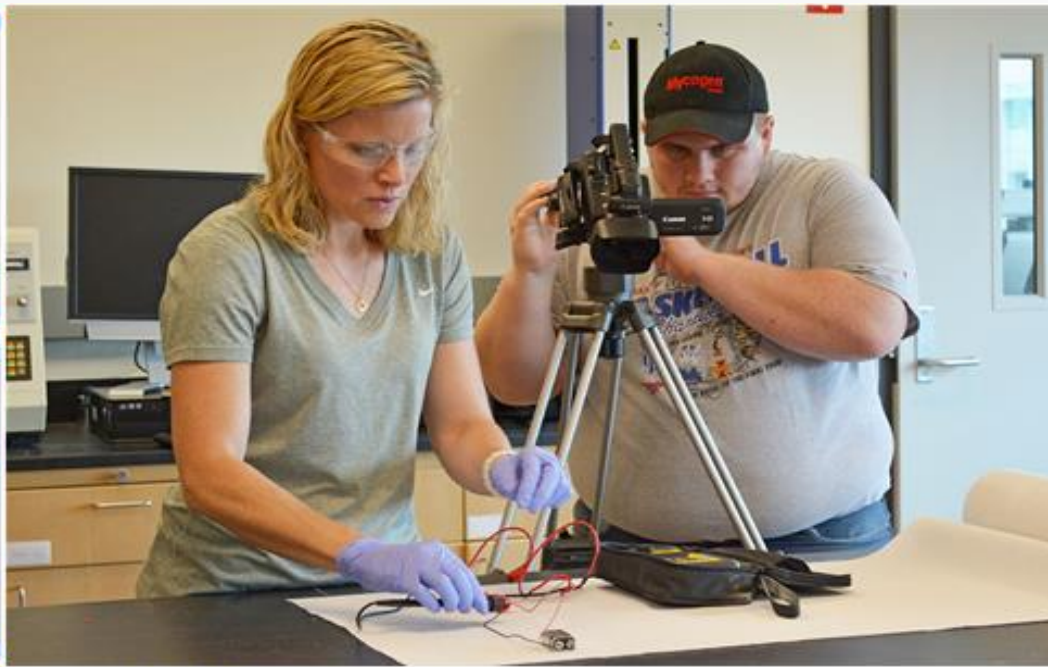
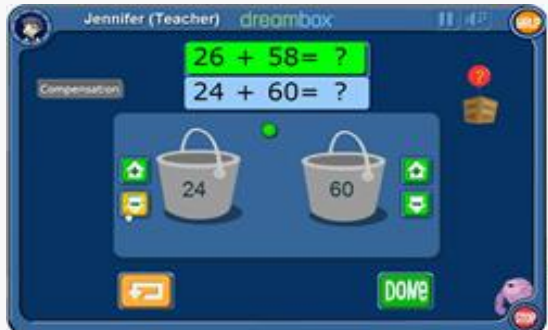
Flipped Classroom

Before Class

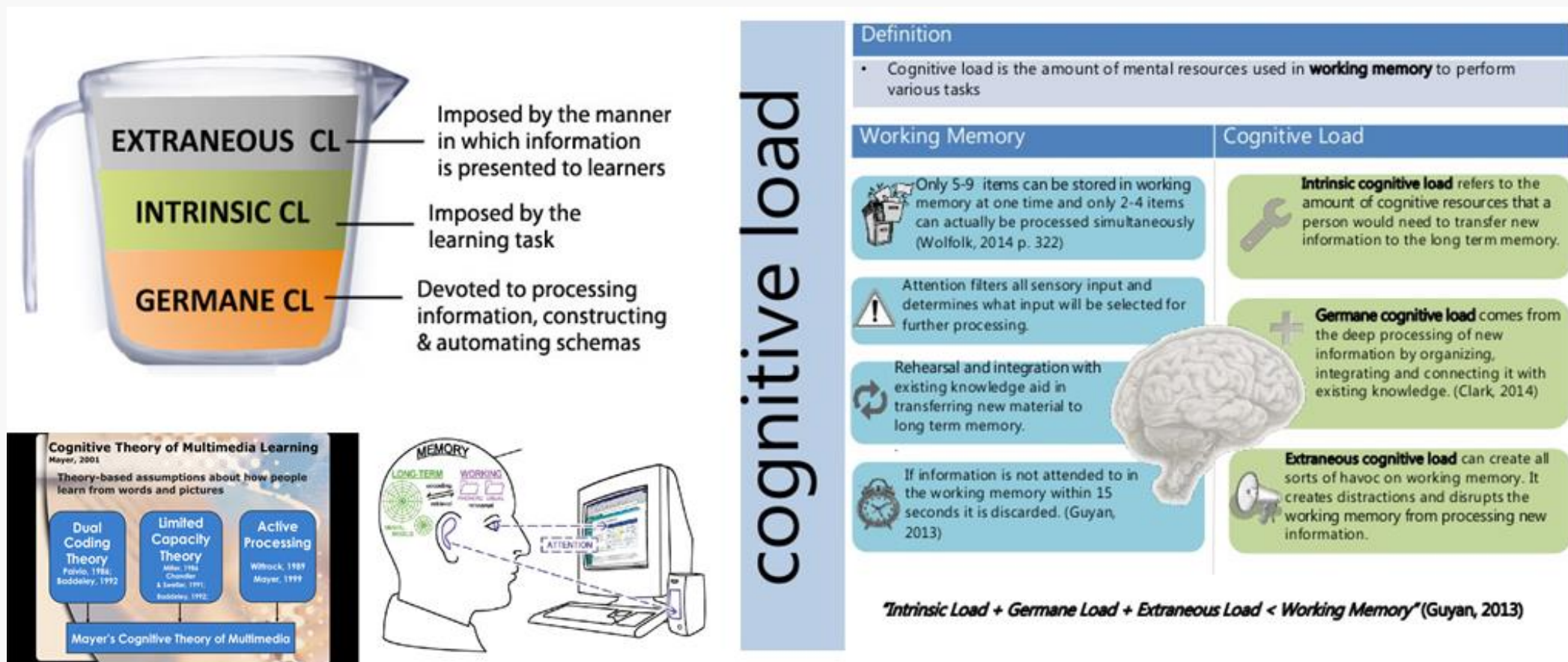
In the Class

After Class

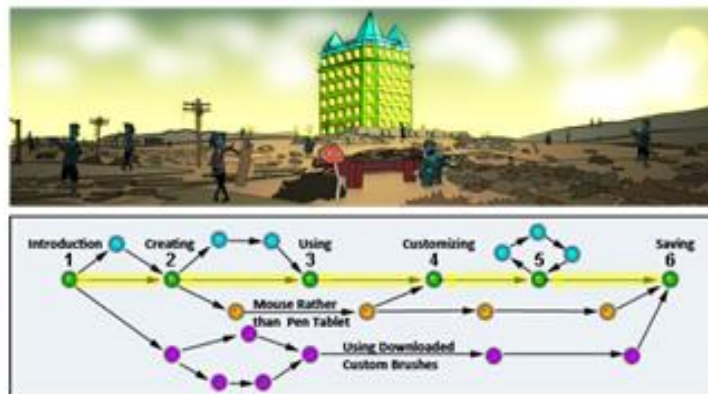
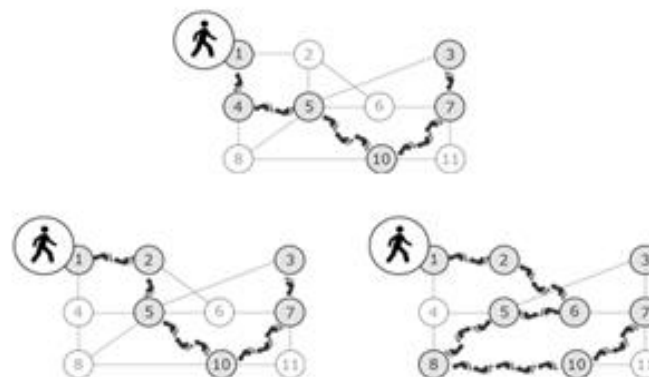
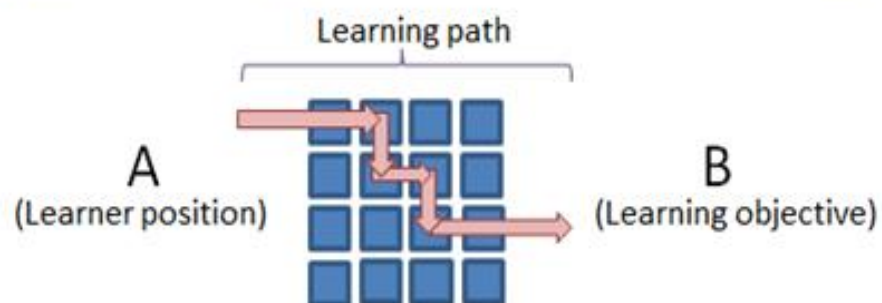
## 4.1 提升翻转课堂有效性建议：自主学习材料合适



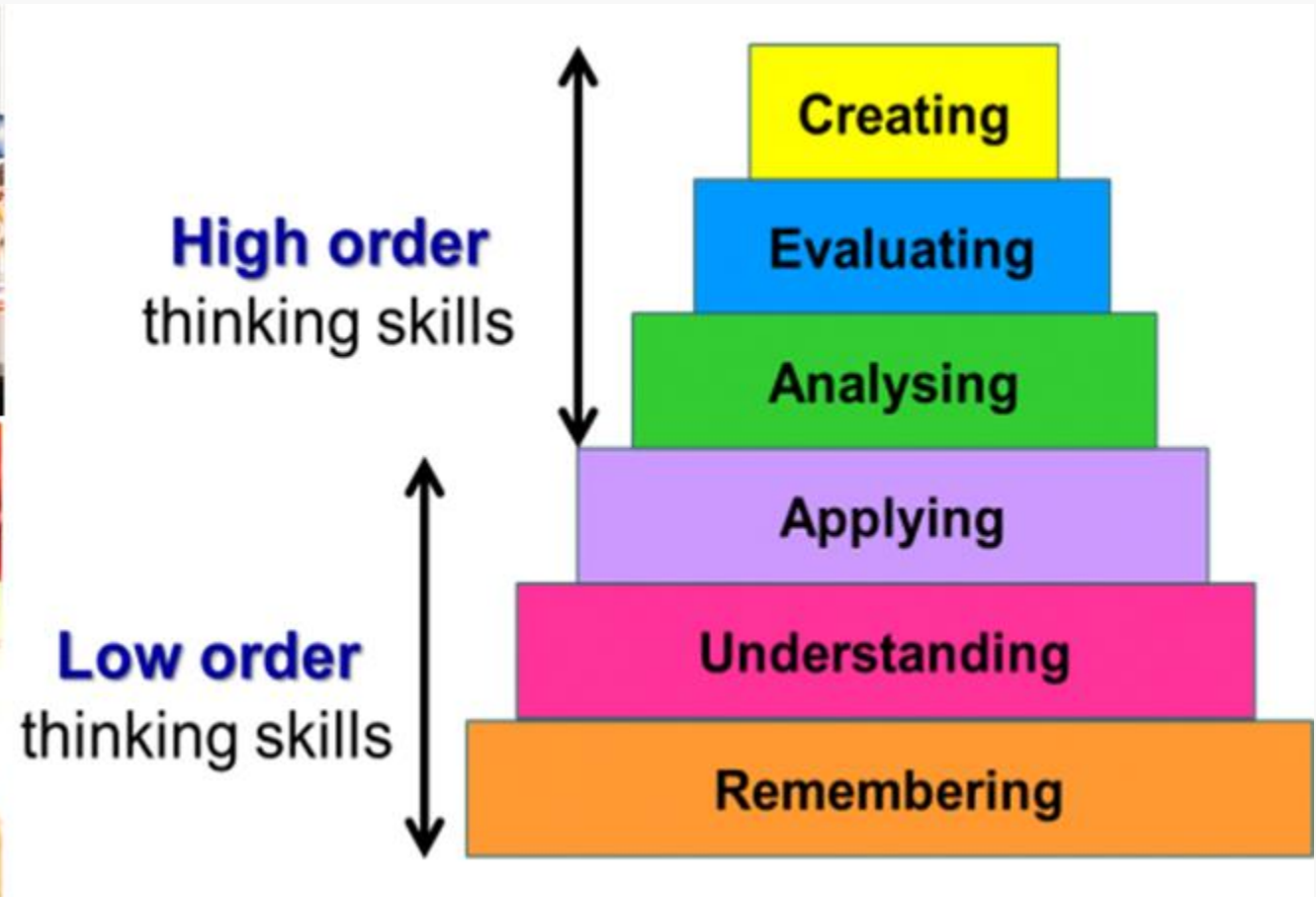
## 4.2 提升翻转课堂有效性建议：认知负荷平衡



## 4.3 提升翻转课堂有效性建议：指引学习路径



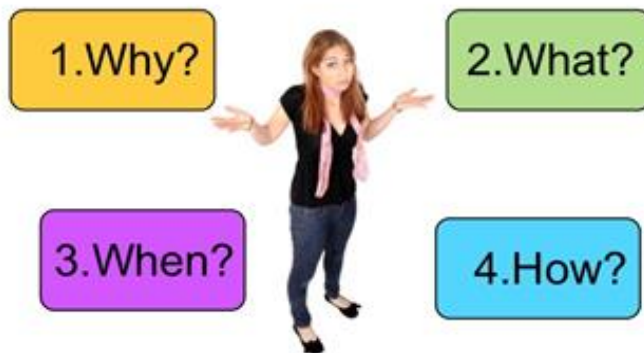
## 4.4 提升翻转课堂有效性建议：针对性教学



## 4.5 提升翻转课堂有效性建议：考虑一致性问题



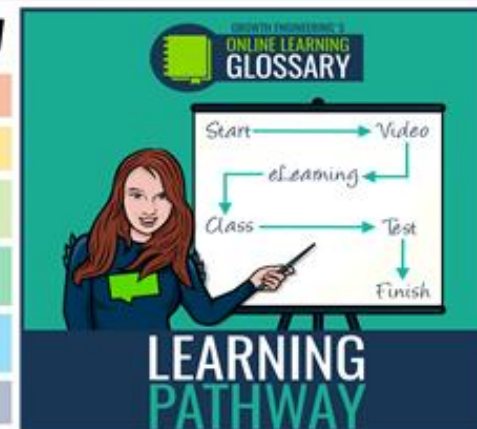
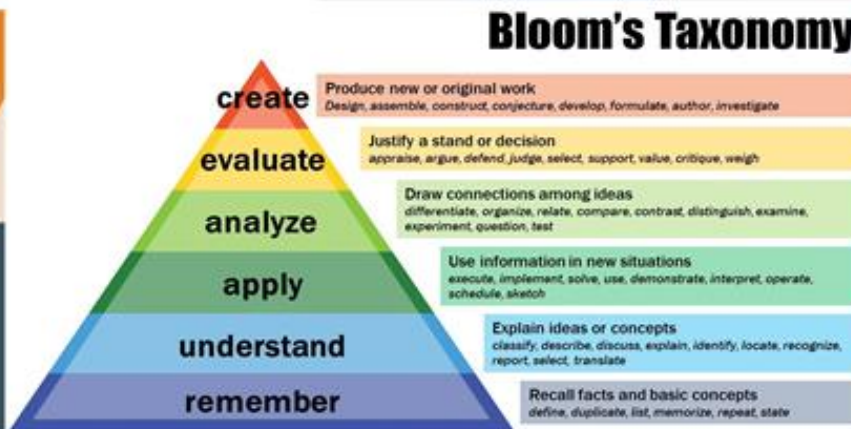
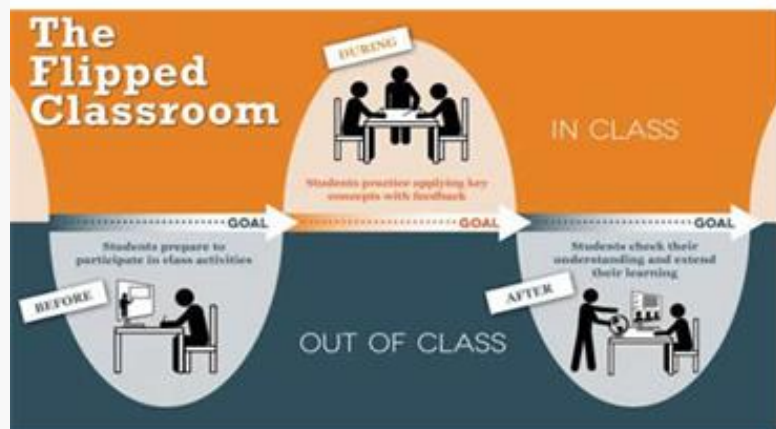
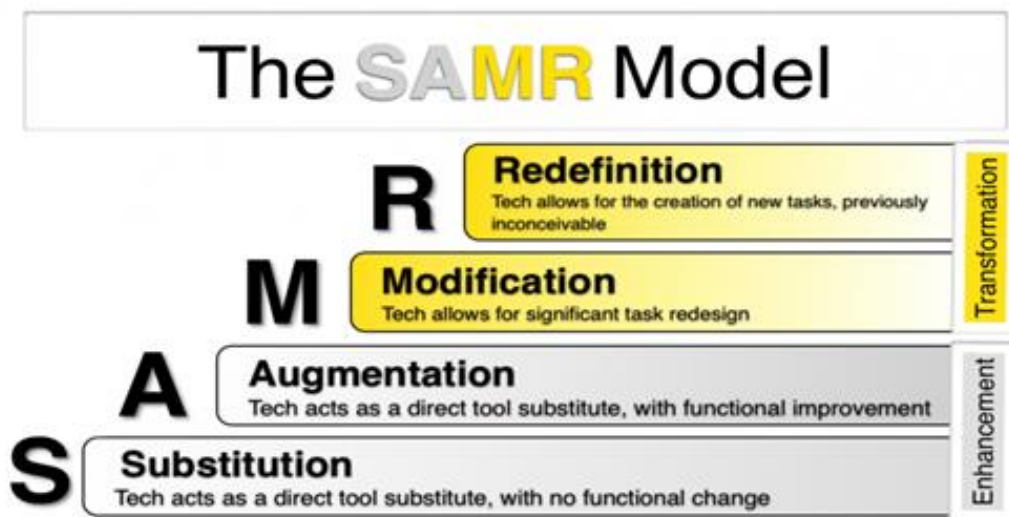
Assessment for Learning



Constructive Alignment (CA)



# 思考：实施翻转课堂需要怎么样的技术支持？



**Thanks**