The First International Forum on Makers and Education and

The Inauguration of Tsinghua Makers' Day

第一届国际创客与教育论坛暨"清华创客日"启动活动

"Innovative Educational Practices Shaping the Future of University"

"创新教育实践塑造大学未来"

Tsinghua University, Beijing. Nov. 29, 2014

北京 清华大学 2014 年 11 月 29 日

Context: Tsinghua Makers' Day

Tsinghua University is embracing many technology-driven educational practices. We believe that Open Source Movement, Creative Commons-like content licensing protocols, and Internet of Things are already shaping the future of education in an accelerated fashion. Working with global educational innovators, we have implemented Massive Open Online Courses (MOOC), Flipped Classroom operations, Hackers in Residence Program, and student-run Hackathons. We consider these educational innovators as hackers and makers of future education. These people are capable of utilizing not only technologies, but also capable of addressing social needs and formulating pragmatic educational practices. As these Hackers/Makers continue to push the envelop of educational practices, we decided to mark the last Saturday of every November as Tsinghua Makers' Day (创客日).

论坛背景：清华创客日

清华大学在教学实践中越来越多地采用前沿科技驱动的教学方法。我们相信，诸如开源运动、物联网、知识共享（Creative Commons）及其他各类内容版权协议等这些技术或方法，正以越来越快的速度改变着教育的未来。我们在同全球教育创新人士的合作下，已经将大规模开放在线课程、翻转课堂、驻校创客、学生自发组织的创客马拉松等学习活动或方法带到了校园。我们认为，这些教育创新者，如同未来教育的"创客"。这些人士不仅善用科技，还熟知如何应对社会需求，形成有效的、实用的教育实践方法。随着这些创客不断推进教育的发展，我们决定将每年十一月最后一个周六，定为"清华创客日"。

Topic: Innovative Educational Practices Shaping the Future of University

In this conference, we would like to discuss the whether Maker Movement would or wouldn't change the future of education. If it will change education, why and how would the changes become sustainable? Then, we would also ask the question when, how soon, and what specific sets of circumstances would these changes become dominant in the future of educational practices. We welcome all participants to share their ideas on the digital platform, and we will have many leading personalities in the Maker community to respond to various voices.

The key sub-topics include, but not limited to:

- **What kind of technological and societal resources, and government policies can be recombined to produce positive impacts on education?**
- **Whether and how digital technologies and open source movements are going to affect the way we manage Learning Outcomes?**
- **How and what aspects of hacker/maker culture may have a stronger role in shaping the culture of universities and educational practices?**
- **Will hackathon and other similar activities change the way we conduct existing teaching practice?**
- **How to utilize fragmented human resource and make online interactions to help organize collaborative learning experience?**

主题：创新教育实践塑造大学未来

在本届论坛上，我们首先希望探讨创客运动是否会改变教育的未来。如果创客会对教育产生影响，为何这些影响需要持续下去，以及如何使其形成持续性发展。进一步我们希望讨论何时、多快，以及在怎样的特定条件下，这些改变会在未来教育实践中占据主导地位。我们欢迎所有论坛参与者首先通过数字论坛分享各自观点。我们会邀请创客界领先人士参与讨论，与各方观点进行交锋。

论坛主要议题包括，但不限于：

- 哪些技术资源、社会资源、政府政策等，可以通过重组，对教育产生积极影响？
- 数字化技术、开源运动是否会影响我们管理学习成效及效果的方式？将怎样影响？
- 创客文化将以何形式、在何方面，对未来大学文化的塑造及教育实践的开展产生更为重要的作用？
- 创客马拉松及其他相似的活动，是否会改变目前常见的教育实践方式？
- 如何利用碎片化的人力资源、通过互联网进行互动、开展协同学习？

Time and Venue

14:30 – 17:00, November 29, 2014
Multi-function Room 11-203, ROHM Building, Dept. Electronics Eng.

时间及地点

2014 年 11 月 29 日，14:30-17:00
北京市清华大学罗姆楼（电子工程系）11 层 203 多功能厅

Host

Office of Academic Affairs, Tsinghua University

Co-Hosts

Fundamental Industry Training Center, i-Center
Department of Industrial Engineering, Toyhouse
Academy of Art and Design, D-Lab

Co-Organizers

Institute of Urban Visual Order, Academy of Art and Design
Journal of 'Modern Educational Technology', Information Technology Center, Tsinghua University
THU Maker Space Student Club
TEDxTHU Student Club

Support

Administrative Committee of Zhongguancun Science Park

主办方

清华大学教务处

承办方

基础工业训练中心 i-Center、清华大学工业工程系 Toyhouse、清华大学美术学院 D-Lab

协办方

美术学院 城市视觉规划研究所、信息化技术中心 《现代教育技术》杂志、清华创客空间社团、TEDxTHU 协会

支持

中关村科技园区管理委员会

Invited Keynote Speakers (Tentative)

Forum Host: Ben Koo, professor of Industrial Engineering, founder of Toyhouse Studio and Extreme Learning Process: 'Project Recombination'

Mitch Altman, Founder of the Hackerspace Movement: '**Real Education Today, for the Future of All**'

Luis Felipe, Harvard Berkman Internet and Society Center, will share an anthropologist's view of Hacker/Maker Community: '**Hacking as Transformative Experience**'

Fan Xiang, Professor of Arts, data visualization: '**Peep at Art School through the Visualization**'

Zhiyong Fu, Maker Activities and Service Design: '**Creativity through maker experiences and design thinking**'

Lin Zhang, Professor of Electronics Engineering: '**What are we talking about when we are talking about innovation education?**'

Luping Xu, Founder of Open Fiesta

Hao Wang, Maker/Entrepreneur, Founder of Association of Innovation: '**Self Confidence is the Foundation of Innovation**'

Benjamin Bacon, NYU Shanghai, running Hackerspaces in Shanghai

Jianxin Yang, associate professor in Fundamental Industry Training Center: 'Tsinghua Hackerspace: i-Center'

Gao Jian, Associate Dean of School of Economic and Management, Tsinghua University: 'Exploring method of entrepreneurship'

特邀演讲嘉宾（拟定）

论坛主持 顾学雍（Ben Koo），工业工程系。Toyhouse Studio、XLP 极限学习过程创始人：Project Recombination

米奇•奥特曼（Mitch Altman），创客空间运动发起人，被创客界称为"创客教父"：Real Education Today, for the Future of All

路易斯•费利佩（Luis Felipe R. Murillo），哈佛大学伯克曼英特网与社会中心，人类学角度看创客文化：Hacking as Transformative Experience

向帆，美术学院：Peep at Art School through the Visualization

付志勇，美术学院，创客活动与服务设计：Creativity through maker experiences and design thinking

张林，电子工程系：What are we talking about when we are talking about innovation education?

徐芦平，CNMM，猫头鹰实验室创始人：Make open innovation network towards university x.o

王昊，创客兼创业者，创新社 AOI 创始人之一：Self Confidence is the Foundation of Innovation

本杰明•贝肯（Benjamin Bacon），上海纽约大学教授，创客空间组织者：Makers + Design Education

杨建新，基础工业训练中心：Tsinghua Maker Space: i-Center

高建，清华大学经济管理学院副院长：Exploring method of entrepreneurship

International Forum: Kicking Off Tsinghua Makers' Day

To kickoff Makers' Day, we have invited a number of international Makers to participate in an open forum. This forum will enable participants to communicate and share information digitally and in a physical venue. The digital forum will be held at the following URL:

"http://toyhouse.cc"

The physical forum will be held on campus at ROHM Building, Electronic Engineering Department of Tsinghua University.

国际论坛：清华创客日发布

为推动清华创客日的启动，我们邀请了一批国际创客参与本次开放式论坛。参与者可以通过数字化在线平台进行交流，并在现场同国际创客进行面对面的互动。数字平台请访问：

"http://toyhouse.cc"

现场论坛将在清华大学罗姆楼（电子工程系）11 层多功能厅举办。

Meeting in Person: Flipped Conference

To ensure communication effectiveness on the first Makers' Day, we cooked up a conference format called 'Flipped Conference', with 3 stages

- **Pre-meeting: Video-based online speech review**
  One-week ahead of the Forum, all forum participants will **register with digital identities** on a

public website (toyhouse.cc).

Invited "Expert" panelists will reveal their key concepts with **short-videos** posted on the public website.

There will a number of invited "**Challengers**" who will study the content and **post questions** to the online discussion forum. Each Challenger has at most one minute to present their questions. They are also allowed to show their questions using whatever media during that one minute.

The host of forum will **review the questions** and decide which 7 challengers will be given the chance to raise their questions during the forum.

- **Within-meeting: Topic-oriented question and answer**

During the Forum, each "Expert" panelist will be given a 5-minute slot to present his or her ideas. Following the speech, the speaker will respond to at least one Challenger's prepared question. Then, after at most 9 minutes of interactions, the MC will move to the next "Expert" panelist.

- **Post-meeting: continued interaction with interest**

Host of the forum will keep the online platform open so that all participants could review the content before and during the forum. They could continue on topic of great interest to them.

创客面对面：翻转会议

为了增强首届创客日上交流的有效性，我们设计了一种新的会议组织形式，"翻转会议"，包含三个阶段：

- **会前：基于视频的演讲内容在线讨论**

论坛前一周时间内，参与者将通过在线平台注册**数字身份**，地址为 http://toyhouse.cc "特邀创客" 将通过**在线平台**公布演讲主题及纲要。

众多"挑战者"将阅览演讲内容，并将问题或观点发布在网站论坛上。每位挑战者可以录制最长 **1 分钟的视频**进行提问。问题也可采用任何其他长度 1 分钟以内的形式呈现。论坛主持将**考察问题的质量**，并选出 7 个问题参与现场论坛讨论。

- **会中：围绕主题的问答环节**

在论坛现场，每位"特邀创客"将在五分钟的时间内，阐述自己对论坛主题的观点。随后，演讲者将回答至少一个挑战者准备的问题。在九分钟的互动环节之后，论坛主持将请出下一位演讲者。

- **会后：兴趣浓厚的持续互动**

论坛将通过在线平台持续开放，参与者将可以回顾论坛内容，并根据自己的兴趣延续话题的讨论。

Input/output of Speakers/Challengers

Speakers: Name, photo, bio, title of presentation, one-line slogan, presentation slides
Challengers: Name, photo, bio, question

演讲者/挑战者的输入/输出

演讲者提供：姓名、照片、个人简介、演讲题目、演讲口号、幻灯片
挑战者提供：姓名、照片、个人简介、问题或观点

Pre-forum Discussion: Open, with insight, digitally tracked

Time	Topic	Content	Venue
Nov. 21-26	Breakout Discussion	Top Makers and Tsinghua Students meet-ups	Toyhouse Studio (Shunde Bld. 410)
Nov. 23-26	Keynote Speeches	5-min Keynote speech video abstracts are released and being commented.	http://toyhouse.cc (online)
Nov. 24-27	Questions Review	1-min Keynote questions will be reviewed and selected	Toyhouse Studio and http://toyhouse.cc
Nov. 28	Question release	7 challengers are selected and final questions are released to the public	http://toyhouse.cc (online)
Nov. 29	Forum	Discussion will be compiled and demonstrated on Forum with more interaction	ROHM Bld. 11-203

会前讨论：开放、深入探讨、数字记录

时间	环节	内容	平台
11 月 21 日-26 日	分论坛	顶尖创客与清华学生主题研讨	Toyhouse 工作室（清华舜德楼北 410）
11 月 23 日-26 日	主题演讲	主题演讲内容在线发布，讨论	http://toyhouse.cc（在线平台）
11 月 24 日-27 日	问题研讨	1 分钟提问筛选	Toyhouse 及 http://toyhouse.cc
11 月 28 日	问题发布	7 位提问者及问题公布	http://toyhouse.cc
11 月 29 日	现场论坛	会前讨论汇总并发布，现场延续讨论	罗姆楼 11-203 多功能厅

Forum Agenda: Short, with insight, digitally tracked

| Time	Topic	Content	Venue	Note
1430-1500	Registration		罗姆楼	
1500-1515	Warm up	Theme video, report of 7-day discussion	11-203	
1515-1530	Opening	Introduction, Tsinghua Maker's Day Inauguration	11-203	Master of Conference: Ben Koo
1530-1610	Section 1	(5 min talk + 3 min prepared Q&A + 2 min impromptu Q) * 4	11-203	Each talk includes a keynote speech and a prepared question
1610-1620	Tea break	Free discussion	11-203	
1620-1700	Section 2	(5 min talk + 3 min prepared Q&A + 2 min impromptu Q) * 4	11-203	Each talk includes a keynote speech and a prepared question
1700-1715	Interactive	5 * 3 min impromptu Qs	11-203	WeChat Wall interaction
1715-1730	Closing	Conference executive report, Closing talk	11-203	Mr. Song Shu-Qiang, Ben Koo

会中讨论：简短、深入探讨、数字记录

时间	环节	内容	会场	备注
1430-1500	注册		罗姆楼	
1500-1515	暖场	主题视频，7 天会前研讨汇总报告	11-203	
1515-1530	开场	论坛简介，清华创客日发布仪式	11-203	论坛主持：顾学雍老师
1530-1610	上半场	4*（5 分钟演讲+5 分钟问答互动）	11-203	每个演讲后挑战者提问
1610-1620	茶歇	自由讨论	11-203	
1620-1700	下半场	4*（5 分钟演讲+5 分钟问答互动）	11-203	每个演讲后挑战者提问
1700-1715	互动	5 个 3 分钟现场提问	11-203	结合微信墙互动
1715-1730	闭幕	论坛总结报告，闭幕总结	11-203	宋述强老师、顾学雍老师

Stage logistics: Dynamic Roundtable
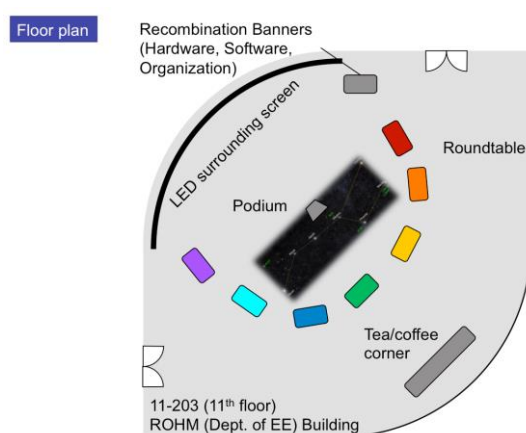
Venue floor plan
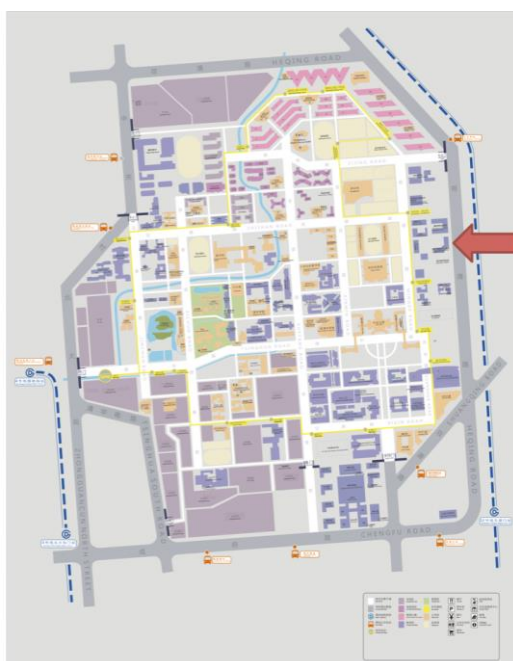
Campus map and venue location (电子工程系罗姆楼)