



#### A Share Learning Framework for Innovation Education: Improving Creative Thinking Capability from Daily Life

Zhiwei Yu<sup>a</sup>, Rajan Alex<sup>b</sup>

<sup>a</sup>Management School, Ningbo Institute of Technology, Zhejiang University, Ningbo, China nityzw@gmail.com

<sup>b</sup>School of Engineering and Computer Science, West Texas A&M University, Conyon, TX 79015, USA





- Introduction
- Literature Review
- The Share Learning Framework for Innovation Education
- The Process of Share Learning for Innovation Education
- Case Study
- Conclusions
- Acknowledgements





# Introduction

- Creativity through lifelong learning is recognized both as a driver for innovation and as a key factor for the development of personal, occupational, entrepreneurial and social competences, and the well-being of all individuals in society.
- Innovation is regarded as an elite education for a selected group of so-called talents and aiming at innovating new products or applying for patents.
- A share learning framework for innovation education based on daily life was proposed.





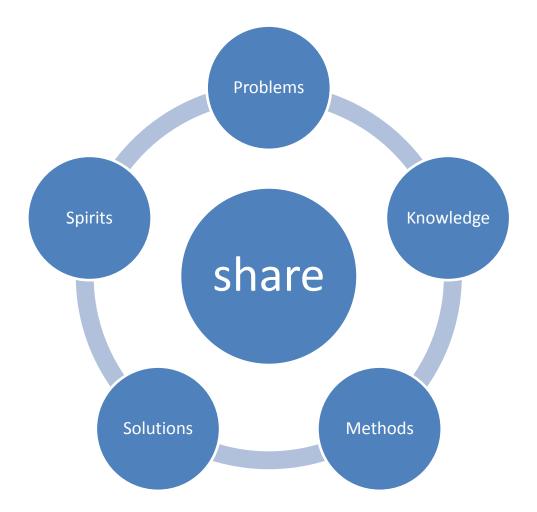
# **Literature Review**

- Recognized and operational models for innovation education are still rare.
- Some universities reply on out-of-class activities such as joining competitions, publishing articles and applying for patents, etc. which seems to treat innovation education as a luxurious opportunity for a few selected students. (Sun, 2011)
- Jingye Ren (2014) advocated Share Learning as a kind of philosophy and ideology, but no practicable teaching method was put forward.



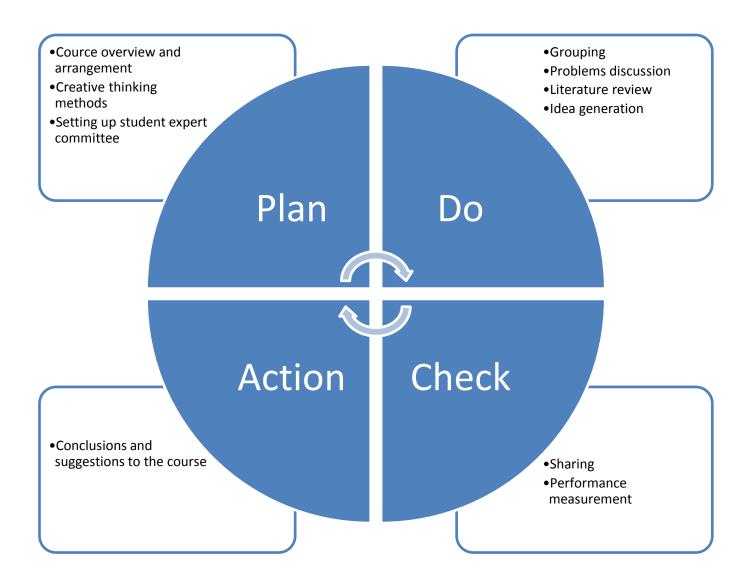


#### The Share Learning Framework for Innovation Education





#### The Process of Share Learning for Innovation Education









#### **Case Study**

Weeks	Contents
1	Course overview and arrangement
2	How to set up a student expert committee; knowing the problems in students' thinking;
3-8	How to improve students' thinking; how to collect problems in daily life.
9	Discussing on sharing contest with student expert committee.
10-15	Sharing contest.
16	Discussing on the benefits and improvements.





Year	Class size	Groups
2010	83	20
2010	74	18
2011	77	19
2011	81	20
2012	84	21
2012	70	17
2014	122	24
2014	51	17





Traditional	Share learning
Teacher-centered instruction	Student-centered instruction learning
Isolated work	Collaborative work
Information delivery	Information exchange
Passive response	Active/exploratory/inquire-based learning
Reactive response	Proactive/planned response
Single-path progression	Multipath progression





### Conclusions

- The process of share learning was presented to guide the share learning method's implementation.
- The five changes and barriers were analyzed by author's four-year application.
- How to adapt this share learning framework to different courses, how to better measure the effect of students and how to overcome the share barriers even some ethic problems will be the main challenges in the future.





# Acknowledgements

- the National Natural Science Foundation of China (#71271191, #71071151 and #70871111)
- the Scientific Research Project (#Y201122111), Education Department of Zhejiang Province
- the Scientific Research Project (#2014SCG204), Zhejiang Research Institute of Education Science
- the Education Science Planning Project (#YGH040), Ningbo Education Bureau.





# Thank you!