

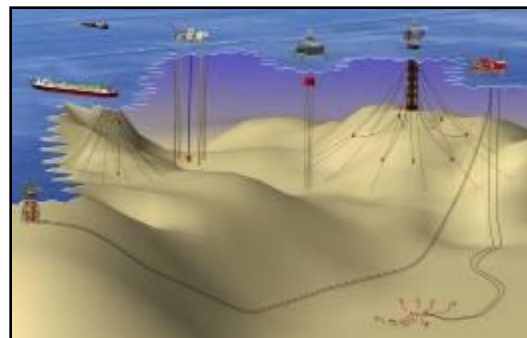


望前驱之英华卓萃，应后起之努力追踪

# 第二届全国高校茅以升班经验交流会

天津大学

2010.10.27





## 汇报内容

- 一、茅以升班开设的指导思想
- 二、具体实施
- 三、实施效果
- 四、主要问题



## 一、天津大学茅以升班指导思想

- ▶ 天津大学工程教育改革以探索与实践“工程创新人才培养体系”为龙头
- ▶ 以“注重综合素质、强化能力培养、完善知识结构”为指导
- ▶ 制定了涵盖素质、能力、知识3维度24要素的“工程创新人才基本要求大纲”
- ▶ 构建了以“素质提升系统(QS)”、“能力强化系统(AS)”、“知识优化系统(KS)”为主体，以“工程创新环境支撑平台(EIE)”为保障的EI-QAKE工程创新人才培养体系



## 二、具体实施

- ▶ 茅以升班于07年10月起筹建，08年5月正式成立。
- ▶ 到目前已经有五个年级，每年级2个班共291人。
- ▶ 茅以升班以传承茅以升精神实践建筑工程领域拔尖创新人才培养为目标，从知识传授、能力培养、素质提高三方面实施综合培养。



## 二、具体实施

- ▶ 茅以升班**课程体系**是在现有课程体系以及国内外相关行业人才培养课程体系基础上，广泛研讨征求行业专家、专业教授、教学研究者意见。
- ▶ 深入研究建筑工程领域相关行业发展以及人才成长需求，以提高学生终生竞争力为目标，以实施厚基础、宽口径培养为目标确定并不断改善的。新的课程体系打破学科界限，强化数学力学基础，强化工程实践。



## 二、具体实施

- ▶ 同时，课程体系的实施伴随着教学方法的改革，对于茅以升班分别实施了讨论式教学、学生自主研究型教学、重视学习过程的平时考核制度等
- ▶ 在强化学习的同时，茅以升班注重能力的培养与素质提高。学校首先为茅以升班开设了诚信教育课、工程概论课等课程。



## 三、实施效果

- ▶ 茅以升班的实践大大提高了学生培养质量，使得茅班学生从知识、能力、素质三方面均有很大提高，已经全面超越同期其他学生。
- ▶ 目前茅以升班学生已基本上扭转了只注重考试成绩不关心学习效果、只着眼毕业不关注成长的学习误区，全方位提高自己，积极参与科研与社会实践



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### 三、实施效果

➤ 人生一征途耳，其长百年，我已走过十之七八，回首前尘，历历在目，崎岖多于平坦，忽深谷，忽洪涛，幸赖桥梁以渡。桥何名欤？曰奋斗。

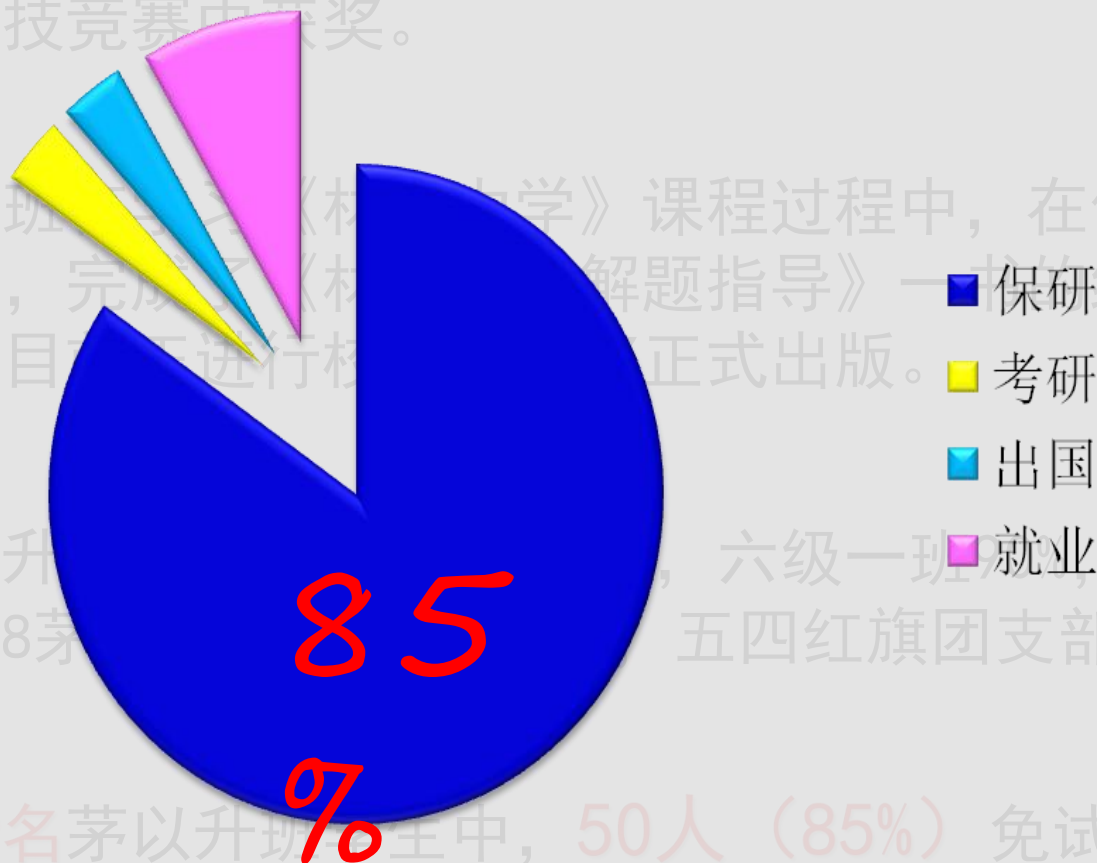




## 三、实施效果

- 目前茅以升班共申报成功国家大学生创新实验计划8项、天津大学校、院两级科技立项11项、32人次在市级以上学科、科技竞赛中获奖。

毕业去向



- 2008级茅班同学在《材料化学》课程过程中，在任课教师指导下，完成了《材料化学解题指导》一书编写工作，此书目前正在进行校审，即将正式出版。

- 08级茅以升班同学六级通过率93%，六级一班通过率93%，二班通过率93%。08茅班同学被评为五四红旗团支部标兵。

- 2006级59名茅以升班生中，50人（85%）免试攻读硕士研究生，考取研究生2人，出国留学2人，就业5人。



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天津大学首届茅以升班成员刘旭菲代表天津大学参加茅以升基金会第十七届颁奖大会，并发言。





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May 3, 2010

Ms. Jing Ding  
PO Box 820  
Tianjin University  
Tianjin 300072  
China

Dear Ms. Ding,

In recognition of your excellent academic record, we are pleased to offer you financial support while pursuing your of Philosophy degree program in the Environmental Fluid Mechanics and Hydrology area of the School of Civil and Environmental Engineering. For the 2010-11 academic year you will receive a College of Engineering Fellowship. The fellowship includes full tuition, student health insurance for 12 months, and an academic-year stipend in the amount of \$25,200. In subsequent years, you will be supported by either a teaching or research assistantship or fellowship. The assistantships also cover full tuition, health insurance, and an academic-year stipend (\$21,900 in 10-11).

There may also be an opportunity to obtain additional summer support by working on research projects if funds are available. We do not know the stipend amount for Summer 2011 yet, but stipends for Summer 2010 will be approximately \$8,203 for a 10-week period.

Renewal of financial support each semester is contingent upon academic performance constituting good standing in the graduate field, and a high standard of performance in terms of grades, level of courses taken, teaching ability and progress in research. The majority of students have no problems meeting these requirements. Therefore you should feel confident of receiving funding to see you through successful completion of your degree within three years.

If you applied for, and are successful in winning, an external fellowship, we hope you will accept it and notify us as soon as possible. An external fellowship will not replace our fellowship however it may be used to replace assistantship funding or to extend the number of years of support for your degree program. Cornell fellowships must be used during your first year of study and cannot be deferred.

Since Cornell University abides by the Council of Graduate Schools' *"Resolution Regarding Graduate Scholars, Fellows, Trainees, and Assistants,"* you are not obligated to notify us of

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your response to this offer before May 10, 2010. If you know your decision before that time however, earlier notification would be very much appreciated and helpful in making our plans for the coming year. Your decision must be in writing to me by e-mail ([cee\\_grad@cornell.edu](mailto:cee_grad@cornell.edu)). Also, as indicated in the original letter of admission you received, you must still respond to the offer of admission on line at <https://apply.embark.com/grad/cornell/response/25/> since this site is hooked into the Graduate School's admission system and is separate from the offer of financial aid.

If we can provide any further information, please do not hesitate to contact us. We hope you will accept this offer and look forward to having you join us in the Fall.

Sincerely,

James J. Bisogni, Jr.  
Director of Graduate Studies

JJB:tms

cc: Graduate School





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## 四、主要问题

- ▶ 茅以升班的实践为天津大学工程教育改革作了很好的试点，但在实践中也发现了一系列亟待解决的问题。一方面，实践工程教育改革需要大量的人力物力的投入；另一方面，改革的实施必须配合相关政策制度的支持。
- ▶ 以企业实践为例，安排学生顶岗实践必须增加经费的支撑，包括学生往来于企业与学校之间的路费、企业实习期间住宿费、企业导师指导工作劳务费等。
- ▶ 另外，学生实习对企业生产进度的影响、实习安全保障等问题也是能否推广实施的关键问题。



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