

Designing and Implementing Experiential Learning Course

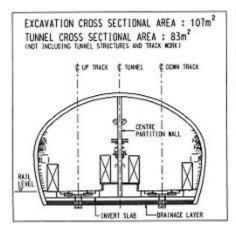
PROJECT MINGDE

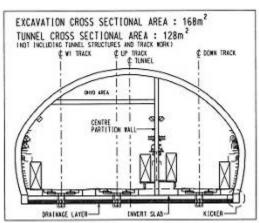
明德工程

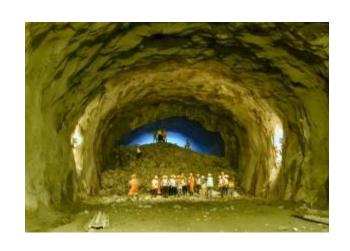
L G Tham 谭国焕 Department of Civil Engineering 土木系

CIVIL ENGINEERING PROFESSION

土木工程专业的特点







THEORY 理论

PRACTICE 实践

DESIGN 设计

 \longleftrightarrow

CONSTRUCTION 施工

INTEGRATE 结合为一体?

EXPERIENTIAL LEARNING

体验实习

- Industrial Training in Summer Semester (since 1914) 工业实习
 - at least 8 weeks 不少于8个星期
 - attach to engineering firms 到本专业的公司上班
- ・ Engineering Design & Communication (ED&C) (since 1997) 工程设计及交流
 - a project-based course for two semesters in 2nd Year 在第二学年开设,持续两个学期,围绕工程项目
 - internal and external (industrial) tutors 由校内外专业人士指导
- · Inter-Disciplinary Design Project (IDDP) (since 2002) 综合设计项目
 - a project-based course for two semesters in 3rd Year 在第三学年开设,持续两个学期,围绕工程项目
 - professional tutors in different disciplines (architecture, building services) 由不同专业(如建筑和设备等)的专业人士共同指导

Bringing the real project into classroom vice versa Bringing the classroom into the project 将真实工程带入课堂里 将课堂开设在项目之中







Project 项目

Funding 资金

Construction cost 建筑费用 Expenses of the students/staff 师生差旅去费

Timing and Scale 项目期限及规模
Integration with the curriculum 与课程结合

Liability and Responsibility 责任
Students/Parents 学生家长
Stakeholders 持份者

明德工程 —— 体验实习的平台



Projects managed by students working as a team
以大学生助建小组名义运作

- Led by a Project Manager 项目经理统筹
- Supervised by professional alumni and teaching staff 教师和校友工程师担任导师
- Coordinated by senior students and graduates 资深组员和毕业生担任联络员
- Design, tender, construction, management and supervision 全程参与设计、招标、施工、管理 到验收 _<u>»</u>
- Credit bearing and non-credit bearing 修學分/不修學分









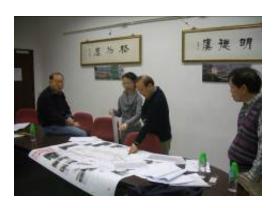
明德工程 —— 体验实习的平台

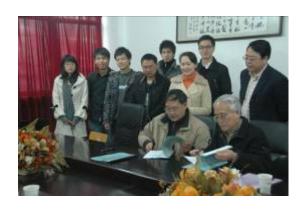
Assessment

工作考评

- Scheme design accepted by stakeholders 设计方案要被持份者接受
- Detail design approved by regulatory bodies 施工图和计算书要经设计院审查批准
- Construction quality scrutinized by government officials 施工质量要经政府质检部门验收
- Project completion within budget (cost and time) 工程要按计划和资金预算完成







明德工程 —— 体验实习的平台

Integration with curriculum

与本科课程互动和结合

| Mingde Projects 明德工程 | Year | Curriculum 本科课程 |
|--|----------------------|---|
| Mingde Building 明德楼 Design 设计 Construction 施工 | 2004 2005 | Industrial Training工业实习 Industrial Training工业实习 |
| Gewu Building 格物楼 Design 设计 Construction 施工 | 2006 2007 | IDDP 综合设计项目 |
| ZD Kindergarten 正东街幼儿园 Scheme Design 方案 Detailed Design 设计 Tender & Construction 招标和施工 | 2008 2009 2010 | IDDP 综合设计项目 Industrial Training工业实习 Industrial Training工业实习 |

明德工程 —— 体验实习的平台

 Through planning, design, management of construction and until completion of a real project, students gain a sense of ownership and satisfaction of the project 通过规划,设计,建设管理,直到完成一个真实的项目, 学生能拥有该项目而自豪

 Improvement in communication skill when meeting with people from different social and cultural backgrounds

改善与来自不同社会和文化背景的人沟通的技巧

 Promotion of teamwork and multidisciplinary cooperation

促进团队协作和跨 学科的协作



















INGDE PROJECTS: A PLATFORM FOR EXPERIENTIAL LEARNING 明德工程——体验实习的平台

Mingde Building 明德楼 24 students 组员 才

8 visits 次访问

Gewu Building 格物楼 访问团

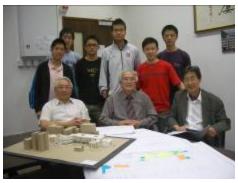
50 students 组员

10 visits 次

Zhengdong 正东街幼儿园 200 students 组员 25 visits 次访 问团







明德工程 —— 体验实习的平台

ON-GOING PROJECTS





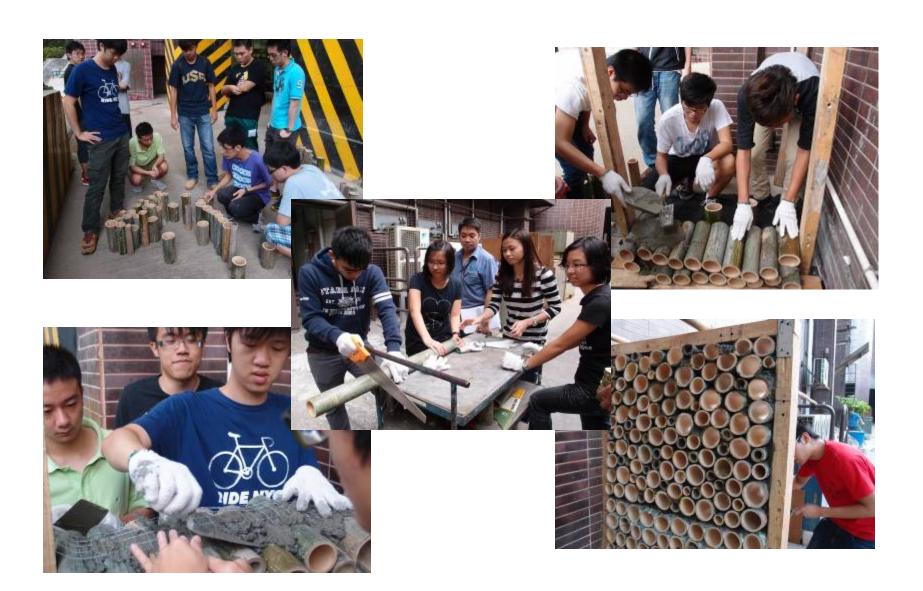


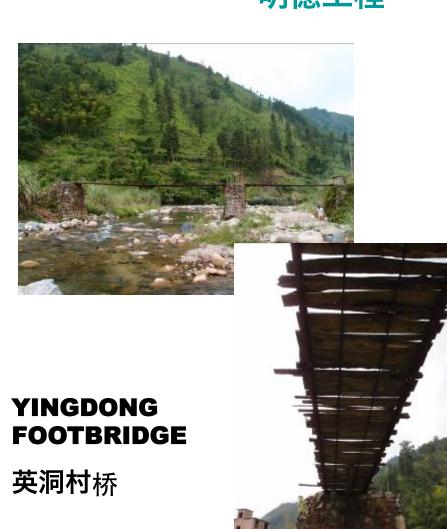






明德工程 —— 体验实习的平台







MINGDE PROJECTS: A PLATFORM FOR EXPERIENTIAL LEARNING

明德工程——体验实习的平台

CHALLENGES 挑战

Sustainability 可持续性

- Projects 项目
- Support of charity foundations and alumni 校友和慈善基金源源不断的支持
- **■** Support of the University 大学的支持
- Integration of "CURRICULUM" WITH "CO-CURRICULUM" 课程与义务工作相结合

明德工程 —— 体验实习的平台

CHALLENGES 挑战





SAFETY

安全

建设项目环境影响登记表 STREET CHIEF IS

MHIM MAYSDUIL

BREED LESS - BROKESS



2009-02-09



BUREAUCRACY

官僚





-MASTER PLAN-CENT HIDE WERE OF CENTS AND RECEPTED.

LOCAL PROJECT

本地工程

Project Mingde also wish to provide schooling opportunities for the children in distant and less fortunate regions in China.

Through proper learning and training at schools, we hope that local students can recognize their talents and potentials leading to a brilliant and fruitful future.

明德工程希望为山區孩子提供教育机会。通过在校学习和培训,孩子們认识到自己的天赋和潜力爭取辉煌的和富有成果的未来。



明德工程 —— 体验实习的平台

Internal 校内

Mr. P.K.K. Lee Professor L.G. Tham Professor A.K.H. Kwan

Dr. R.K.L. Su

Dr. D.J. Guo

Dr. Y.P. Huang

Dr. A.H.K Law.

Dr. G.C.H. Wong

External 校外

Professor C.F. Lee Dr. Nicolas S.Y.Yeung

Donor 赞助人

Activist Association
Mr. Alan W. K. Wong
Mr. James Chiu
Lee Hysan Foundation &
Dr. K.S. Louie
Operation Concern Ltd &
Professor P.C. Leung

Consultant 顾问

Architect Alex C. W. Lui Architect Vinco S. H. Mung Architect Joseph M.K. Tang

Engineer Tom T.Y. Ho
E&M Engineer Daniel P.C. Chan
Quantity Surveyor Peter Y.Y. Ng
Contract Advisor Andy Y.B. Lee
Site Supervision S. Chan
Engineer (China) M. Wang



SITE RECONNAISANCE

现场**考**查

ENGAGEMENT OF STAKEHOLDERS 与持份者交流





明德工程 —— 体验实习的平台



DESIGN PHASE

设计



明德工程 —— 体验实习的平台

SITE SUPERVISION

监理







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庆祝



大浪下里小学明德楼竣工典礼

明德工程 —— 体验实习的平台

DONOR 捐助者

- PRIVATE DONOR 个人捐助者
- NON-GOVERNMENT ORGANIZATION 非政府组织
- FOUNDATIONS 基金
- ALUMNI AND FRIENDS 校友



明德工程 —— 体验实习的平台

PROJECT MINGDE明德工程

- STUDENTS 学生
- STAFF 老师
- ALUMNI & FRIENDS (ENGINEERS; ARCHITECTS;
 QUANTITY SURVEYORS) 校友



明德工程 —— 体验实习的平台

STAKEHOLDERS 持份者

- SCHOOL: TEACHER/PARENT 师生
- LOCAL COMMUNITY 当地人氏组织
- LOCAL GOVERNMENT 当地政府
- NON-GOVERNMENT ORGANIZATION 非政府组织

