Pre-service Teacher Education In China

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Outline

- Where Pre-service teachers are trained
- Curriculum
- Teaching Practice
- National Certificate Test
Where Pre-service Teachers are Trained

Three levels of Normal University

**National level**, financially supported by MOE. In total six such normal universities and most of the graduates will work in high quality senior secondary school *(Top 10-15)*.

**Provincial level**, financially supported by department of Education in the province and most of the graduates will work in senior secondary school *(Top 30)*.

**City level**, financially supported by department of Education in the province and most of the graduates will work in junior secondary school.
Where Secondary School Teachers are Trained

Primary School (6 years)

Junior Secondary (3 years)

Senior Secondary (3 years)

At Grade 11:
- Science
- Social Science

Senior Secondary Graduates (science)

Science related subject Faculties at Normal University
- Mathematics, physics, chemistry, biology...

Senior Secondary Graduates (social science)

Social Science related subject Faculties at Normal University
- Chinese language, English, History...

Uni. Entrance Test

Training period: 4 years
Typical School Working Culture

<table>
<thead>
<tr>
<th>Subject</th>
<th>Working load</th>
<th>Teaching hours a day (One lesson: 45 Mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics, Chinese, English</td>
<td>2 classes students at a same grade</td>
<td>Average: 2-3 lessons</td>
</tr>
<tr>
<td>Physics, Chemistry</td>
<td>3-5 classes students at a same grade</td>
<td>Average: 3 lessons</td>
</tr>
<tr>
<td>Biology, History, Geography</td>
<td>5- more classes students at a same grade</td>
<td>Average: 3 lessons</td>
</tr>
</tbody>
</table>
Typical School Working Culture
Primary school teachers are mainly trained at Faculty of Education or School of Elementary Education at normal universities:

Five categories:
- All subjects
- Chinese language
- Mathematics
- English
- Science
- ...
Curriculum

A national centralized curriculum system

- General education course
- Subject related courses
- Teaching skills related courses
Curriculum

Year 4
CK, PCK, Teaching practice

Year 3
CK and PCK

Year 1-2
CK and GPK
Curriculum-Mathematics

Mathematics courses


Curriculum - Mathematics

Mathematical education courses (Year 3-4)

Compulsory courses:
Introduction to Mathematical Education Theory, Teaching Design for Secondary School Mathematics;

Elective courses:
Curriculum - Mathematics

Mathematical education courses (Year 3-4)

Curriculum-Physics

Physics courses


Selective courses: Solid-State Physics, Computational Physics, Nonlinear Dynamics, Analog Electronic Circuits and experiments, Fundamentals of Sensors, Principle & Interface Technique of Micro-computer, Semiconductor Physics and Apparatus, Electromagnetic Waves, Physical Detection Principles and Techniques, ...
Curriculum-Physics

Physics education courses (Year 3-4)

Compulsory courses:
Introduction to Physics Education Theory, Teaching Design for Secondary School Physics;

Selective courses:
Introduction to Physics Curriculum Standards and Textbooks, History of Physics, Secondary School Physics Experiments, Problem Solving in Secondary school Physics, Competition Physics (IMO related Physics),...
Curriculum

“if you want to give students a cup of water, you need to have a bucket of water”
Curriculum

How schools in China choose teachers

Stage 1
- Submit application
- Interview organized by the school

Stage 2
- Paper-and-pencil examination (CK)
- 10 minutes teaching

Stage 3
- Classroom teaching
Curriculum

Teaching skill training courses

- General Pedagogy, Psychology (Year 2)
- Teaching Skills Practice (Year 3)
Curriculum

Teaching skill - training courses

Teaching Skills Practice— Micro-level of teaching
Teaching Practice

Two – Four Months (end of Year 3 or beginning of Year 4)

But may only have the chance to teach less than 10 lessons (45 minutes/lesson)

Two mentors: one university professor supervises around 20 pre-service teachers; and one experienced school teacher in the school supervises 2–3 pre-service teachers
Teaching Practice
National Certificate Test

Officially started in the whole country: 2015

Four categories:

-- Kindergarten level
-- Primary school level (Grade 1-6)
-- Junior secondary school level (Grade 7-9)
-- Senior secondary school level (Grade 10-12)
National Certificate Test

Two stages:

- Paper-and-pencil test
- Interview
National Certificate Test-knowledge test

Three main subjects:

-- Comprehensive quality (professional ideas, law of education, professional ethics of teachers, general ability)

-- Educational knowledge and ability (GPK) (General educational knowledge and principles, pedagogy, learning psychology, cognition development of students, and curriculum theory)

-- Subject knowledge and skills (CK+PCK) (Subject knowledge, curriculum knowledge, subject educational knowledge, teaching skills)
National Certificate Test-knowledge test

Construct of the test for (CK+PCK)

<table>
<thead>
<tr>
<th>Subject knowledge</th>
<th>41%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum knowledge</td>
<td>18%</td>
</tr>
<tr>
<td>Subject pedagogical knowledge</td>
<td>8%</td>
</tr>
<tr>
<td>Subject teaching skills</td>
<td>33%</td>
</tr>
</tbody>
</table>
National Certificate Test-Interview

Three stages

- **Lesson plan**: 20 minutes
- **Teaching**: 10 minutes
- **Q & A**: 10 minutes
一、考题回顾

1. 题目：奇函数
   当函数 f(x) = x 时，取不同区间内任意一个 x，都有 f(−x) = −x = −f(x)，这时我们称函数 f(x) = x 为奇函数。
   一般地，对于函数 f(x) 的定义域内任意一个 x，都有 f(−x) = −f(x)。那么函数 f(x) 就叫做奇函数 (odd function)。

2. 问题要求：
   (1) 理解函数 f(x) 的函数图象特点；
   (2) 描述函数 f(x) 的函数图象变化；
   (3) 列表 10 分钟内完成作图。

二考题解析

高中数学《奇函数》主要教学过程及板书设计
What Makes a Qualified Teacher in China

- Mandarin Certificate
- National Certificate Test
- A University degree (Pass all the courses)
Chinese teachers mostly improve their teaching skills or expertise after their graduation, that is, in schools. Many ways (like schooled based mentor-mentee) will be used by every school to help newly graduate teachers to improve their teaching abilities.
Pre-service Teacher Education in Ethnic Areas

Ethnic Universities (like Tibet University, Inner Mongolia Normal University, ...) will train pre-service teachers for ethnic areas with local language.
Thanks!