

International Roundtable on the Future of Technology Education

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Australia

- The constitution makes states responsible for school education
- Recent agreement to develop an Australian Curriculum (AC) in Design and Technologies (DandT) and Digital Technologies (DT).
- States 'embed' the AC in their curriculum development.
- AC DandT includes Engineering, Food and Fibre production, Materials and Technologies
- AC Digital Technologies includes Coding, Systems and Networks
- AC Mandatory study to year 8 (13 years old)

- **New South Wales, Australia Technology curricula**
 - **K- year 6** Science and Technology ,
 - **years 7 and 8** Technology (DT and DandT integrated)
 - **Years 9 and 10**, Agricultural Technology, Design and Technology, Food Technology, Graphics Technology, Industrial Technology (including Engineering, Timber, Metal etc), Information and Software Technology, Marine and Aquaculture Technology, Textiles Technology and integrated STEM
 - **Years 11 and 12** (Matriculation), Agriculture, Design and Technology, Engineering Studies (since 1967), Food Technology, Industrial Technology, Information Processes and Technology, Software Design and Development, Textiles and Design
 - ALL subjects are project based, sTEem plus innovation focussed and include design thinking

Technology Education In Canada



Perspective from Manitoba

Different curriculums in each province.

Some similarities, but also some differences.

Different programs offered in different divisions and schools.

More traditional programs

Examples of programs

Woodworking

Graphic Arts

Metalworking

Digital Interactive Media

Engineering

Automotives

Film and Broadcasting



STEAM INTERVENTION

LET'S TURN THE SCHOOL INTO A MAD SCIENCE LAB. STORYTELLING & SCIENCE.



SCIENCE KITS

LOW-COST, STEAM READY AND EXTREMELY FUN.



STEAM LABS

EARLY SCIENTIFIC SKILLS PROGRAM.



SUMMER / WINTER CAMP

TRANSFORMING SCHOOLS INTO BIG LABS DURING SCHOOL BREAKS.



PROJECTS

DO YOU NEED SPECIFIC HELP WITH SCIENCE? LET'S TALK .



THiNKey

STEAM!

[HTTP://THINKEY.CL](http://thinkey.cl)

[INFO@THINKEY.CL](mailto:info@thinkey.cl)

SANTIAGO, CHILE



MAD SCIENCE SHOWS

ENGAGING SCIENCE SHOWS FOR ALL AGES.

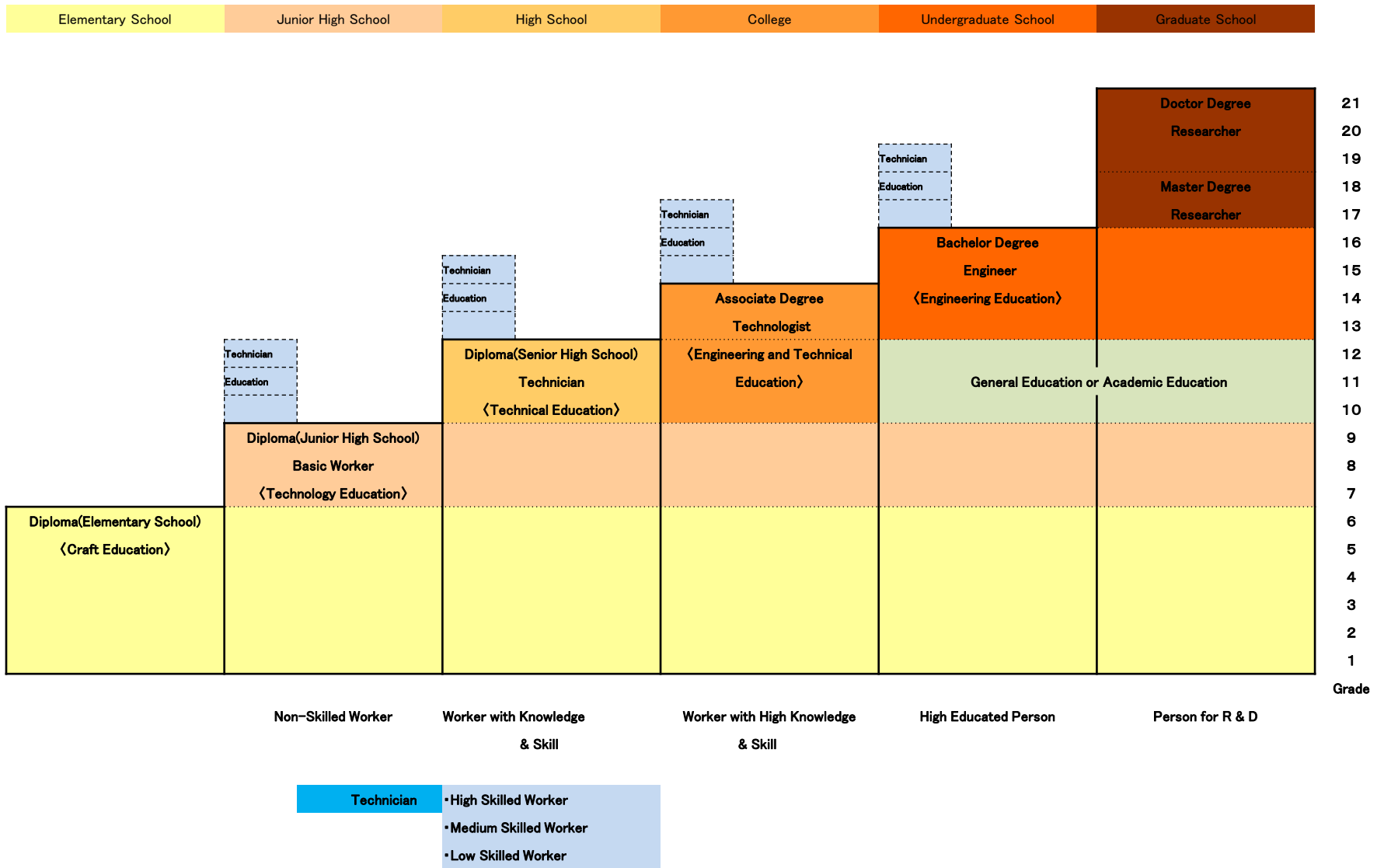


Figure Definition of the Term in Technological Field

Netherlands

- Compulsory Standards junior secondary education
 - Many schools merge with science education
- Compulsory Standards primary education
 - Many schools struggle
- STEM in upper secondary (elective)
 - Nature, Life Technology, Research & Design
- New STEM Standards for junior secondary education
 - Currently not yet introduced by government
 - Modelled after Next Generation of Science Standards (USA)
- Technology Education as separate subject in decline, STEM only possible future
 - Technology Teachers' Association merged with Science Teachers' Association

Technology Education in Scotland

1. Shaped since late 1800's by social, economic and political forces (Engineering & Craft)
2. Subject structures (The place of E, T and Design)
3. Discrete subject areas rather than integrated contexts across subject boundaries (CfE Reform and STEM risks/challenges)
4. Initial Teacher Education
5. Technology Education moving forward



International Exhibition
for Young Inventors

- Disaster Management
- Education and Recreation
- Food and Agriculture
- Green Technology
- Safety and Health
- Technology for Special Needs

2017 ITEEA Roundtable – Taiwan STEM and hands-on making contest

Chair Professor Jon-Chao Hong
National Taiwan Normal University



PowerTech

- Since 1999 ~ now
- Hand tools only
- Make & Compete in one day
- Based on STEAM



Tug-of-war →

← relay racing

