



RESEARCH PROJECT INTO HOW JAPANESE SCHOOLS DEVELOP CRITICAL THINKING SKILLS - OCTOBER 2014

AIM OF PROJECT

Investigate what critical thinking is, and why it is key to improving performance in history, geography, science, maths and comprehension – in fact anything that requires using information and solving problems. Japan was second in the PISA international league table with an education system renowned for producing scientists, technicians and engineers. Osaka, not Tokyo, was selected as there was easier access to the schools.

CONTEXT

- Japan has a 'no challenge', compliant culture. Society based on 'respect', putting the group first, high standards of hygiene, longevity, fish diet, few allergies.
- Elementary school 6yrs -12yrs, High School 12yr-16yrs – April start of new school year.
- Children very independent – little supervision outdoor, they clean the school and serve school meals without adults.
- High parental expectations , vast amount of homework, many attend 'cram school' after school,
- Children show great resilience – some schools have no a/c or heating.
- Disciplined society, great respect for education. Children carry quite heavy back-packs (compulsory) to transport homework and textbooks. Consolidation tasks are done at home.
- Teachers – 4 yrs training, must move schools every few years, must visit home each new year in the Spring. Schools have workrooms rather than staffrooms.
- No Ofsted regime. No league tables amongst schools.
- Priorities for Japanese schools: Lesson Study (teacher training), learning English, integrating ICT and critical thinking.

FINDINGS

- children are encouraged to be **independent thinkers** and complete tasks alone before collaborating in groups – this is the reverse to what is usual practice here.
- **Staff** are trained through '**Lesson Study**' where good practice is observed and evaluated by colleagues from neighbouring schools.
- Children confidently demonstrate learning by '**taking the lesson**' at front of class.
- Most lessons begin with an **open question** on the board to stimulate thinking.
- **Homework is** well supported by parents.
- All Japanese children are taught **Chess** and other games based on **strategy**, both Japanese and western versions
- Prolific use of ICT, particularly **tablets, used** to capture and enhance their work.
- **High expectations** - bright children expected to go to University similar to UK public schools



OUTCOMES FOR OUR SCHOOL

We have organised the following:

- adjusted the **weekly teaching timetable** to increase the Literacy offer to enable an extra one hour of comprehension teaching.. We can push our higher ability children so that they can demonstrate higher order reading skills using inference, evidence and logic.
- Sept 2015 **Parents' Evening** presentation promoted the importance of '**brain play**' – boosting children's thinking skills through the power of games.
- Teachers trained to integrate activities to **stimulate**, and provide high quality experiences to enhance critical thinking as part of their planning.
- purchased material such as **Time to Think** and the **Let's Think** series of brainteaser books.
- **debates and quizzes** between the school Houses based on critical thinking
- **Parents Workshop** to show them how to teach traditional games themselves.
- **after school Chess club**, to develop strategizing, sharpening memory, concentration and self-discipline (and in America, research showed it improved IQ).
- published A 5-part series of booklets, **Ready Steady Think!** For teachers and parents.
- published **Ready Steady Think Together** booklet for parents on boosting brainpower.
- created *critical thinking staff library* including philosophy texts, picture books, assembly resources, poetry and riddles
- weekly **family brainteasers** each week are put up on electronic screens in the playground
- take part in the borough's **debating society** competition, 'Debatemate'
- **Japan Week** was held in the school in July 2015 in conjunction with the Japan Society
- **international links** - three Japanese professors from Osaka (Prof.Kihara is an expert on Lesson Study teacher training) visited Maryland in March 2015 and will visit again in March 2016.

