Gifted Education and One Case Solution through E-Learning in Japan

Masahiro Nagai
Tokyo Metropolitan University, Japan

Noriyuki Matsunami
Nishi-Tokyo Shi Sakae Elementary School, Japan

EXECUTIVE SUMMARY

Japanese parents are genuinely concerned about their children's education, especially if the latter display exceptional abilities. Such parents also believe that the public education system insufficiently nurtures their gifted children's potential. Consequently, parents frequently enroll their children in private schools and afterschool programs at cram schools (juku), which feature accelerated, condensed curriculums. Juku have subsequently prospered, with approximately 37.8% of Japanese sixth grade students attending one (Ministry of Education, Culture, Sports, Science, & Technology in Japan, 2008). Public schools have noted juku students' excellent examination results and begun hiring juku instructors (Kuroishi, 2009). Unfortunately, equally gifted, but poor, students cannot afford to enroll in these institutions (Mimiduka, 2009). Therefore, the authors propose implementing an e-learning system, granting students affordable access to supplemental learning opportunities. Herein, they discuss the state of Japanese gifted education before highlighting e-learning's effectiveness in this context based on practical educational research at a Tokyo elementary school.

Figure 1. International comparison of compulsory education years (Central Council for Education, 2006)
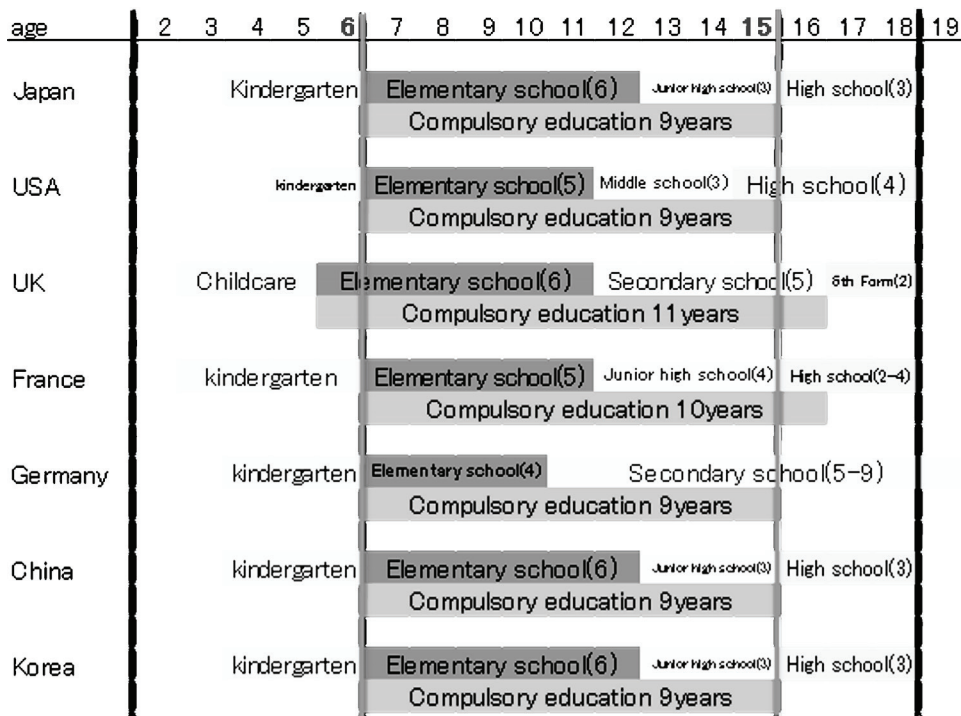
ORGANIZATION BACKGROUND

As is shown in Figure 1, Japan has adopted a nine-year compulsory educational system, during which time students attend public schools free of charge. From an international perspective, many countries likewise have compulsory education for children aged from 6 to 15 years, and in this respect, Japan is no different from many other countries (Central Council for Education, 2006) (Figure 1).

Unlike other countries, Japan has not adopted a grade-skipping system within the framework of compulsory education nor does it have a system adapted to the special needs of gifted students. On the completion of compulsory education, for the most part, Japanese students sit a selective examination to continue to high school. High schools provide general and specialist education for students who have completed compulsory education, and students must complete three years of education to graduate from high school (Ministry of Education, Culture, Sports, Science and Technology [MEXT], 2005) (Figure 2). The percentage of students continuing

Related Content

Computation of OLAP Data Cubes
Amin A. Abdulghani (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 286-292).*
www.irma-international.org/chapter/computation-olap-data-cubes/10834

Rough Sets and Data Mining
Jerzy W. Grzymala-Busseand Wojciech Ziarko (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1696-1701).*
www.irma-international.org/chapter/rough-sets-data-mining/11046

Compression-Based Data Mining
Eamonn Keogh, Li Keoghand John C. Handley (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 278-285).*
www.irma-international.org/chapter/compression-based-data-mining/10833

Imprecise Data and the Data Mining Process
Marvin L. Brownand John F. Kros (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 999-1005).*
www.irma-international.org/chapter/imprecise-data-data-mining-process/10943

Tabu Search for Variable Selection in Classification
Silvia Casado Yustaand Joaquín Pacheco Bonrostro (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1909-1915).*
www.irma-international.org/chapter/tabu-search-variable-selection-classification/11080