Chapter 11
Gifted School Activities With DropTalk, Parent–Teacher Notebook, and SmileNote for Students With Disabilities

Takamitsu Aoki
National Institute of Special Needs Education, Japan

Susumu Nakamura
School for the Mentally Challenged at Otsuka, University of Tsukuba, Japan

Noriko Nakagawa
Kyoto University of Education Attached Special Support School, Japan

Shoko Inoue
Ito Elementary School, Matue, Japan

Ryoichi Ishitobi
School for the Mentally Challenged at Otsuka, University of Tsukuba, Japan

Makoto Kinoshita
HMDT Co., Ltd., Japan

Masayuki Yamashita
UNI-TY Inc., Japan

Shigeru Ikuta
https://orcid.org/0000-0001-5065-190X
Otsuma Women's University, Japan

ABSTRACT

Three programs, DropTalk, Parent-Teacher Notebook, and SmileNote, were developed by teachers at schools for special needs education to help students with various disabilities, in collaboration with businesses supportive of students with disabilities. DropTalk was developed to help students with nonverbal communication by using Pictogram and text overlaid with voice/sound. A digital-based Parent-Teacher Notebook was developed to share the valuable data on each student between their home and school. The shared data are effectively used to build up individual support plans. SmileNote was developed to help students with nonverbal communication disabilities present their wills, hopes, and desires to the classmates and others. In this chapter, the aims and valuable functions in three software applications are described in detail, and self-made contents created with the software and gifted school activities conducted at several schools for special needs education are depicted.

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INTRODUCTION

In Japan, there are 1,141 schools for special needs in education; 143,379 students are enrolled and nearly 84,600 teachers work in these schools (Statistics Japan, 2018). Outside of these schools for special needs education, most of the special-needs children are taught in regular schools. There are three methods of assistance in Japanese public schools that vary according to the severity of the children's disabilities. The lowest-need group is taught within regular classes at public schools. The next approach is the resource room system, which such special needs students attend to several times a week for special instructions. These classes are for children with speech or language impairment, autism, emotional disturbance, visual or hearing impairment, attention deficit/hyperactivity disorder, or learning disabilities. The third method is including special needs education classes in public schools. Around 62% of schools run such lessons, which are limited to eight students per class. These classes are for children with relatively mild intellectual or physical/motor disabilities, autism/emotional disturbance, or health, visual, hearing or speech/language impairment (Kawano, 2016). The Ministry of Education, Culture, Sports, Science and Technology—Japan (2016) pointed out that about 6.5% of all the students at regular public schools have some kind of learning difficulties; however, some of the teachers usually feel that *more than* 6.5% of all the students in their class have some kind of learning difficulties.

The schoolteachers especially at schools for special needs education have been creating self-made teaching aids and materials for students with disabilities by using woodworking and metalworking for daily lessons. Each student with disabilities has different hopes, needs, and desires, and a unique learning history. Therefore, the teachers at schools for special needs education suggest that a teaching aid and specific materials suitable for one student may not serve another student. Each student with a disability may need individual self-made teaching aids and materials. Thus, software and tools that are cheaper than the commercial ones and more user-friendly might be indispensable means for schoolteachers to create their own content for each student in their classes.

Most schools have now many tablet-PCs like iPad in the classroom, and the teachers always examine a valuable and effective use to remove students' difficulties by using the tablets. One of the available uses might be as an assistive tool to support the students having nonverbal communication, ambiguous pronunciation, and reading difficulties. In the present paper, three software applications, DropTalk (2019), Parent-Teacher Notebook (2019), and SmileNote (2019) available on tablet PCs like iPad, developed by schoolteachers in collaboration with local businesses are described in detail; gifted and talented school activities by using these software applications are also introduced.

BACKGROUND

Teachers – especially at schools for special needs education – face the fact that the software and tools do not fit the needs of all of their students. Then, the teachers always have to update their knowledge to solve new faced problems. Even if teachers could discover new, effective software and tools that might solve these problems, they may not buy them because they may be expensive. Although many school teachers might abandon the attempt to solve these problems, some may try to develop new software and tools themselves.