

～Survey results on ICT in the school for educators who downloaded learning resources from DAI website～

Computer programming and tablets: 47.9% think it is “helpful to develop self-motivated study and problem solving skills”

～54.9% do not believe computer programming should be mandatory in elementary schools～

TOKYO, Japan (January 12, 2017) – Digital Arts Inc. (headquartered in Chiyoda-ku, Tokyo, Japan; CEO: Toshio Dogu; “Digital Arts”; Code 2326), a provider of information security software, conducted a survey (71 valid responses) on ICT in schools for educators who have downloaded cyber morale learning resources from Digital Arts’ website.

This survey aims to understand how teachers and educators perceive the 2020 education initiatives driven by the Ministry of Education, Culture, Sports, Science and Technology, which includes offering mandatory computer programming classes in elementary schools, introducing digital textbooks, and having one tablet device per student available in all schools. This survey was conducted to school personnel, board of education, and educators involved with cyber morale education, who have downloaded free resources from the Digital Arts website.

Computer programming and tablets in elementary schools

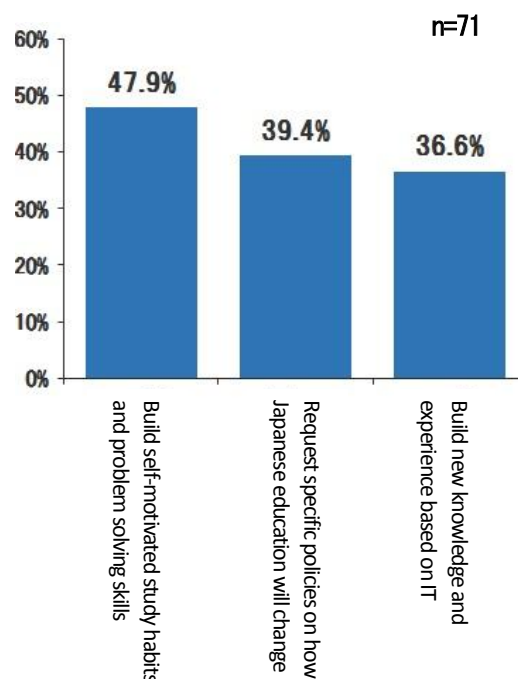
- 47.9% “is hopeful to develop self-motivated study habits and problem solving skills”, 39.4% “wants to know specific policies and plans on how education in Japan will change”, and 36.6% “has expectations that utilizing IT would help to gain new knowledge and experience”.
- 54.9% views mandatory computer programming courses in elementary schools to be “unnecessary”, while 45.1% said it would be “necessary”.

Utilizing ICT devices and ICT lessons

- Among the survey participants who work in schools and education boards (n=56), 48.2% are currently “using tablets”, 33.9% are “not using tablets” and 17.9 are “considering future use”.
- Among the survey participants who work in schools and education boards (n=56), 28.6% “conduct computer programming classes”, 51.8% “do not offer computer programming classes” and 19.6% are “considering to offer computer programming classes”.

Necessary skills for students

- In response to “what experiences should students actively pursue before going out into the world?” 94.4% answered “proactive communication”, 80.3% said “presentations/speaking in front of audience”, 73.2% said “extensive reading”, and 71.8% answered “take part in discussions”.
- When asked for skills students need when they go out into the world, 40.8% answered “interpersonal skills”, 39.4% said “communication skills” and 36.6% answered “cognitive thinking”.



Comments on introducing computer programming and tablets

【Survey Overview】

Polled: Educators who downloaded cyber morale resources from Digital Arts website
 Survey period: November 9-30, 2016
 Survey method: Internet
 Valid response: 71 samples

PRESS RELEASE

The most popular response for what the schools expect by introducing computer programming classes and tablets was “develop self-motivated study habits and problem solving skills (47.9%)”. However, 54.9% thought it was “not necessary” to offer computer programming classes in Elementary schools (45.1% thought it “is necessary”), showing that the majority had negative responses towards offering computer programming as part of the school curriculum. The reasons for “it is necessary [to conduct computer programming classes]” were that “students can learn to think independently and build problem solving skills” and “build logical thinking skills”. On the other hand, those who answered “it is not necessary [to conduct computer programming classes]” said “there are other subjects that should take precedence” and “[computer programming] should be offered as an elective based on student qualifications”.

In the schools, 48.2% are currently “using tablets”, however only 28.6% “offer computer programming classes”. This shows that while tablet use in the classroom is gradually penetrating, most schools are behind in introducing computer programming classes as part of their school curriculum.

When asked what they hope the students to actively experience, popular responses centered on building communication skills, such as “proactive communication (94.4%)”, “presentations/speaking in front of audience (80.3%)”, and “take part in discussions (71.8%)”. On the other hand, the survey depicted that ICT-related skills are not regarded as critical skills, such as “active use of the internet (14.1%)” and “learn computer programming (11.3%)”. In response to the ongoing educational reform utilizing ICT, some teachers commented that “students should build an awareness that ICT devices are only tools” and “students also need to learn [cyber] knowledge and morale”.

In summary, the readiness of ICT in the classrooms seem to vary between schools and while educators are hopeful of the positive effects of computer programming and tablets in the classrooms, many still believe that the educational foundation should remain in the traditional core areas, such as “cognitive thinking”, “building relationships”, communication”, and “expressing oneself”, and ICT-related skills of “ability to use tablets” and “logical thinking through computer programming” should be an addition to the solid basis of developing a healthy being.

Digital Arts continues to perform regular surveys on ICTs in the classroom to understand the required ICT environments in the schools and the importance of cyber literacy in order to drive and realize a safe and secure ICT environment for our future leaders.

■ **About Digital Arts Inc.** <http://www.daj.jp/en/>

Digital Arts, Inc. is a provider of information security products with a unique patented web filtering technology at its core. It plan, develops, sells and supports internet security products on its own, while also delivering added value as the first Japanese manufacturer to launch a web filtering software in the industry. Digital Arts is highly recognized for its most comprehensive domestic web filtering database and its unique filtering technology patented in 27 countries and regions around the world. Digital Arts has become the top domestic supplier of web filter software i-FILTER (corporate and public-sectors), i-FILTER for Consumer, and i-FILTER Browser & Cloud. Other product lineup includes m-FILTER, a gateway email security software for corporations, m-FILTER MailAdviser, a client email anti-misdelivery software, D-SPA, a secure proxy appliance solution, and FinalCode, the ultimate password-less file encryption and tracking solution.

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