

Education Business

Looking ahead to 2030

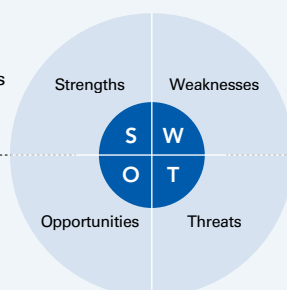
By keeping a constant eye on the future and continuing to provide products and services adapted to the diverse educational environments of the “new normal,” we will achieve continuous expansion of the hardware business and establish a unique position in the software business, thereby contributing to education worldwide.

OTA Shinji Executive Managing Officer, Senior General Manager,
Educational Business Unit



- Use of GAKUHAN activities to build strong connections with education ministries and teachers and to develop educational methods
- Majority share of scientific calculator market in 100 countries worldwide and top share market of electronic dictionary market in Japan
- World-class algebraic and arithmetic calculation engines
- Stable profit cycle based on fresh demand with the start of each academic year

- Accelerated introduction of ICT in the educational environment
- Digitalization of tests and learning materials
- Social environment that values problem-solving and thinking abilities
- Diversifying needs for hardware- and software-based educational tools
- Different approaches in different countries and regions to school reopening and operation after COVID-19



- Product and service development led by Head Office
- Uneven development of educator network in different countries

- Maturing of the Japanese market for electronic dictionaries
- Restriction on visiting educational institutions due to COVID-19
- Circulation of counterfeit products

Scientific calculator sales and targets

FYE 3/2022 (Result)

17.8 million units



FYE 3/2023 (Target)

23.8 million units

Comprehensive learning platform ClassPad.net Targets for number of users

FYE 3/2022 (Result)

16,000 people



FYE 3/2023 (Target)

200,000 people

We will continue contributing to education around the world by providing hardware and software compatible with all educational environments.

Background to strategy

The foundation of our Education Business is the strong connections that we have built up with education ministries and schoolteachers in many countries through our GAKUHAN activities. We have also established a stable profit cycle based on the fresh demand at the start of each academic year, a strength which has supported our business development. Moreover, our scientific calculators have a majority market share in 100 countries worldwide, while our electronic dictionaries have Japan's top market share. Above all, the market strength of the Education Business lies in the advanced range of world-class algebraic and arithmetic calculation engines that we have built up.

However, the market has recently seen intensified competition as Japan's mature market for electronic dictionaries faces the accelerating digitalization of the educational environment. Meanwhile, the demand for learning support content is expanding, and a worldwide shift in educational systems is emerging. This is the transition from group learning to “adaptive learning,” which is adjusted to the individual student's learning pace and strong and weak points. Our Education Business needs to accurately interpret these changes and respond with an effective strategy, maintaining a constant focus on the way forward.

Direction of medium- to long-term strategy

We will continue contributing to education worldwide by progressing with hardware, software, and combined strategies to support all educational environments. By synchronizing the scientific calculators and electronic dictionaries, which are our strength, with comprehensive apps for all subjects, we will pursue user-friendliness from the perspective of the educational frontline. We will also work to further upgrade the science and mathematics engines fitted in automatic scoring systems and electronic textbooks, as well as the arts-based content planned for the future, to enable their utilization in learning and examination environments.

In the process of implementing these strategies, we emphasize cyclical data use as an important feature. This means that data used by the customer is collected and stored and fed back to the customer to create a cyclical learning method. In addition, we will develop and supply equipment whose main application will be in adaptive learning, a global trend in learning and educational methodology that is set to become established in the near future. Through this, we will contribute to school education worldwide.

Hardware business strategy

In the scientific calculator business, we plan to successively ship a new model (New ClassWiz) to global markets.

As sales recover with the resumption of face-to-face teaching, we will accelerate the rollout of GAKUHAN activities particularly in emerging Asian countries, creating new demand in acquisition of examination approval and other areas. Additionally, to enhance our network of teachers providing recommendations, we will digitize our connections with teachers to continuously secure demand and gauge the ripple effect on the surroundings.

Elsewhere, to achieve expansion in the key ASEAN market, we are taking forward projects based on EDU-Port Japan* in collaboration with local education stakeholders to create demand, primarily in Indonesia and Thailand. In the electronic dictionary business, we will promote the introduction of customized models based on needs and enhance additional download content. In this way, we will expand the market by introducing a strategic model that adapts to the circumstances of individual schools.

* A project supporting the overseas rollout of Japanese-style education implemented by Japan's Ministry of Education, Culture, Sports, Science and Technology

Focus on the new educational environments of the pandemic and post-pandemic era

	Japan	Overseas
	<p>Expand based on sum total of hardware + (content) + software</p> <p>Up to FYE 3/2022 Future concept</p>	<p>Expand through hardware growth potential of new channels + software</p> <p>Up to FYE 3/2022 Future concept</p>
Hardware	Electronic dictionaries <ul style="list-style-type: none"> Promote introduction of needs-based customized models Enhance additional download content 	Scientific calculators <ul style="list-style-type: none"> Sales recovery with resumption of face-to-face teaching Create new demand through strengthening of GAKUHAN activities primarily in emerging Asian countries (examination approval/accelerated rollout)
Software	Learning platforms <ul style="list-style-type: none"> Launch provision of comprehensive learning platform ClassPad.net that supports six subjects in Japan's GIGA School Project Launch content provision for elementary and junior high schools and universities 	Learning platforms <ul style="list-style-type: none"> Start from support for German version of GIGA School Project (mathematics: calculation tools + e-learning) Worldwide rollout planned Future worldwide rollout planned for comprehensive learning platform ClassPad.net
Software	Automatic scoring business <ul style="list-style-type: none"> Supply automatic scoring engines to examination providers Real-life studies completed at two providers 	Promoting business in CBT*/digital textbook support <ul style="list-style-type: none"> United States: Create questions for proficiency tests/internal tests, provide automatic scoring engines Future rollout planned to other countries

* Computer-based testing

Software business strategy

We provide schools with ClassPad.net, a comprehensive online learning platform that supports the GIGA School Project operated by Japan's Ministry of Education, Culture, Sports, Science and Technology. A model of the platform that supports six high-school subjects was first introduced by more than 600 schools in a trial version with limited functionality. We are now progressing with the switchover to a commercial version. On April 28, 2022, we concluded an agreement with the Kochi Prefectural Board of Education on the provision of digital learning support at prefectural schools. The product is in use at some prefectural senior high and junior high schools (seven prefectural senior high schools and four affiliated junior high schools). Associated verification of the practical use of the information and communications technology (ICT) has been carried out. Looking ahead, to coincide with moves to resume the introduction of tablets at senior high schools, which had

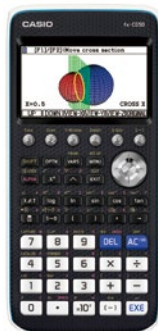
been delayed by the impact of the semiconductor shortage, we will promote switchover to the commercial version at schools that had introduced the trial version. Meanwhile, in July 2021 we started provision of ClassPad.net for Lenovo, and in April 2022 we launched content for elementary and junior high schools and universities. We are thus progressing with opening of new channels in the electronic education market based on our strengths.

Overseas development has begun with the rollout of mathematical calculation tools and e-learning to support the German version of the GIGA School Project. We plan worldwide rollout in parallel with ClassPad.net. We will also drive business projects supporting CBT and digital textbooks. Starting in the United States, we will launch question creation for proficiency tests and internal tests and provision of automatic scoring engines, with plans to roll out to other countries in the future.

Progress with a sustainable and stable hardware business



Scientific calculator
fx-991CW



Scientific calculator
fx-CG50



Electronic dictionary XD-SX4910WE

Using our strengths to open up the electronic education market



Official conclusion of the digital learning support agreement
with Kochi prefectural schools