



KONICA MINOLTA

## News Release

# Konica Minolta's Learning e-Portal System for its tomoLinks Learning Support Service is among the First in Japan to Meet MEXT's Learning Log Data Handling Policy

Tokyo (November 29, 2022) – Konica Minolta, Inc. (Konica Minolta) is pleased to announce that the company will start accepting applications for its learning e-portal service (Teacher x AI Assistant) to be launched officially in the spring of 2023 as part of its tomoLinks® learning support service for the education industry. The tomoLinks Teacher x AI Assistant service is among the first learning e-portal systems to meet the learning log data handling policy issued by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in November 2022. This service can be used for various purposes, including assessing the English-speaking skills of junior high school students in the National Survey on Academic Achievements and Learning Conditions to be conducted by MEXT in April 2023.

In Japan, the GIGA School Program launched by MEXT is **tomoLinks** under way, which aims to provide each student with a computer and build an Internet-enabled environment in schools for high-speed high-volume data transmission. Under this program, many schools are introducing ICT to accelerate digital transformation (DX). Konica Minolta has continued to support teachers and students in using information devices for educational purposes by offering the Tomogaku co-learning and distance-learning service and AI-based teaching-efficiency analysis service via tomoLinks to some schools and education boards on a pilot basis. Already, many schools have begun using ICT as a standard educational tool, and it is expected that education data will be effectively used to improve the quality of education.

Konica Minolta has been developing “tomoLinks Teacher x AI Assistant,” the latest service offered via tomoLinks. This learning e-portal system offers learning options that are best suited to individual students based on an analysis of all learning data, including the results of tests and drills provided by their respective schools.

With the pioneering “tomoLinks Teacher x AI Assistant” service, Konica Minolta enables data to be handled safely and securely in compliance with the learning log data handling policy of MEXT, ahead of its competitors. This service can run on MEXCBT\*1, a computer based testing (CBT) system of MEXT, and thus can be used for assessing the English-speaking skills of junior high school students in the National Survey on Academic Achievements and Learning Conditions to be introduced in April 2023. Konica Minolta is determined to contribute to enhancing education in Japan further by leveraging its cutting-edge technologies in its core fields, including AI and data science.

\*1: MEXCBT is a public CBT platform developed and provided by MEXT, which enables students to study and assess their understanding online at home or school using worksheets created by national, prefectural or municipal organizations.

## **Values of the “tomoLinks Teacher x AI Assistant” Service**

### **1. Ensuring safe and secure handling of learning data of students**

The “tomoLinks Teacher x AI Assistant” service deals with data of teaching tools and tests adopted by individual schools, as well as the results of CBT including the National Survey on Academic Achievements conducted on all students in Japan. To ensure that such data is handled safely and securely, MEXT decided not to allow learning log data to be stored in learning e-portals in its FY2023 National Survey on Academic Achievements and Learning Conditions and announced this decision on November 11, 2022. In addition, some education boards expressed serious concern over the possibility of such data stored in learning e-portals being inappropriately used, and strongly requested Konica Minolta to develop a new data handling policy to ensure the safety and security of data. In response, Konica Minolta promptly drew up a strict data management policy, which includes prohibiting the use of personal data for app development and any other commercial purposes, and deleting personal data if requested by an education board or student’s family and upon cancellation of the service. This policy will remain in effect beyond FY2023. The terms of use of other learning e-portal systems stipulate that learning data of students can be used for business purposes by private companies or their affiliates, and that requests to delete learning data cannot be met; such policies are of concern to education boards. Unlike these systems, Konica Minolta’s system helps protect personal data, and thus can be used safely.

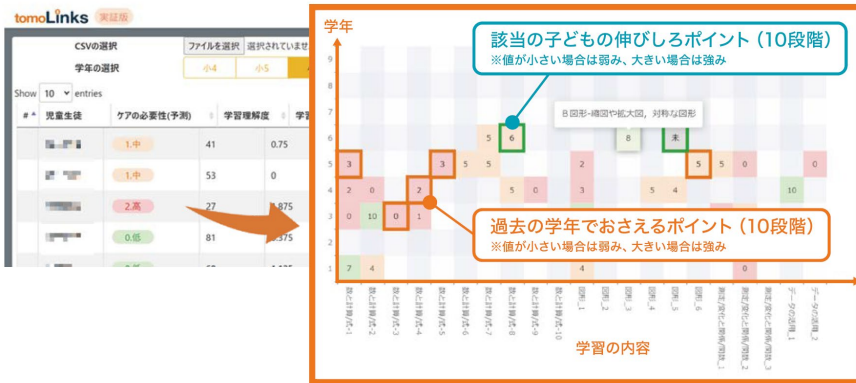
### **2. Offering learning options best suited to individual students through multifaceted analysis of a wide range of learning data**

The “tomoLinks Teacher x AI Assistant” service can analyze students’ learning conditions based on digital drills and various other tests and worksheets\*2. The service can also be used with original tests of local governments and schools as well as with data on students’home learning environment, thus helping teachers offer learning support better tailored to the needs of individual students. This service was introduced on a pilot basis in Minoh City in Osaka Prefecture, where the learning conditions of individual students were analyzed based on nine years’ worth of data of academic achievements and home learning environment surveys involving 13,000 students, with appropriate measures taken to protect personal data. As a result, it was proven that the service effectively provides better guidance to students to help them achieve the growth that would be expected from the data.

\*2: Some teaching tools are currently under development.

▼ 一覧画面

▼ 詳細画面



### 3. Developing and offering analysis AI models optimized for individual education boards and schools

The analysis AI model used with the “tomoLinks Teacher x AI Assistant” service is not a fixed model, but is optimized individually for each education board and school. This enables learning support to be provided in line with the specific educational policies of local communities and schools, and tailored to school-wide learning conditions. The service not only helps teachers draw up lesson plans, but also offers useful information for local governments and schools to make decisions on educational policies.

The screenshot shows the 'おすすめプリント一覧' (Recommended Printout List) for a student in the 1st grade. The table lists various printouts with their titles, types, and due dates.

番号	学年	目次	プリント名	プリントの種類	ドリル名	プリント取組目安期間
1	小1ねんせい	1. かぞえてみよう	かぞえてみよう	ドリルプリント	おなじなかまはいくつ	令和4年11月21日 ~ 令和4年11月27日
2	小1ねんせい	3. たしざん、ひきざん	たしざん	かくにんプリント		令和4年11月21日 ~ 令和4年11月27日
3	小1ねんせい	5. 一のくらい、十のくらい	十のくらい	ドリルプリント	十のくらい (2)	令和4年11月21日 ~ 令和4年11月27日
4	小2年生	8. 時間の単位	時計をよもう	かくにんプリント		令和4年11月28日 ~ 令和4年12月4日
5	小2年生	9. 表やグラフ	同じものをあつめて表をつくろう	かくにんプリント		令和4年11月28日 ~ 令和4年12月4日
6	小2年生	6. 長さやかさの単位	棒の長さをはかろう	ドリルプリント	長さの たんい・2	令和4年11月28日 ~ 令和4年12月4日
7	小2年生	7. かけ算	10倍 100倍 1000倍	ドリルプリント	10倍 100倍の計算	令和4年12月5日

### 4. Offering teaching tools tailored to a wider range of learning needs through extensive partnerships with educational companies

The “tomoLinks Teacher x AI Assistant” service helps improve learning efficiency by analyzing the learning achievements of individual students. Currently, the service can be used with the teaching tools shown below, with many more to follow soon. As an open learning e-portal, the “tomoLinks Teacher x AI Assistant” service will provide a learning environment better suited to each student by expanding its partnerships with companies offering teaching tools and various educational services.

- Tokyo Shoseki: Mondai Database Tablet Drill, Standard Academic Achievement Survey
- Zoshindo-Jukenkenkyusha: Jiyu-jizai series, and others
- Cosmotopia Japan: Minna-no-gakushu Club®

### Schedule for “tomoLinks Teacher x AI Assistant” Service Rollout

In November, Konica Minolta started accepting applications for the “tomoLinks Teacher x AI Assistant” service for the FY2023 National Survey on Academic Achievements and Learning Conditions. The company will roll out the service as follows.

#### **November 2022**

Start accepting applications for the service for assessing the English-speaking skills of junior high school students in the National Survey on Academic Achievements and Learning Conditions scheduled for April 2023.

#### **February 2023**

Begin offering the service for assessing the English-speaking skills of junior high school students in the National Survey on Academic Achievements and Learning Conditions scheduled for April 2023.

#### **April 2023**

Begin distributing worksheets for MEXCBT, a CBT system of MEXT, and offering the learning-history analysis service.

#### **August 2023 and beyond**

Begin offering teaching tools based on the analysis of students' learning history, and launch the learning plan management service.

\*The names of the products shown above are registered trademarks or trademarks of the respective companies.

#### **For More Information**

tomoLinks website (Japanese): <https://tomolinks.konicaminolta.jp/>

## Attachment

### About tomoLinks

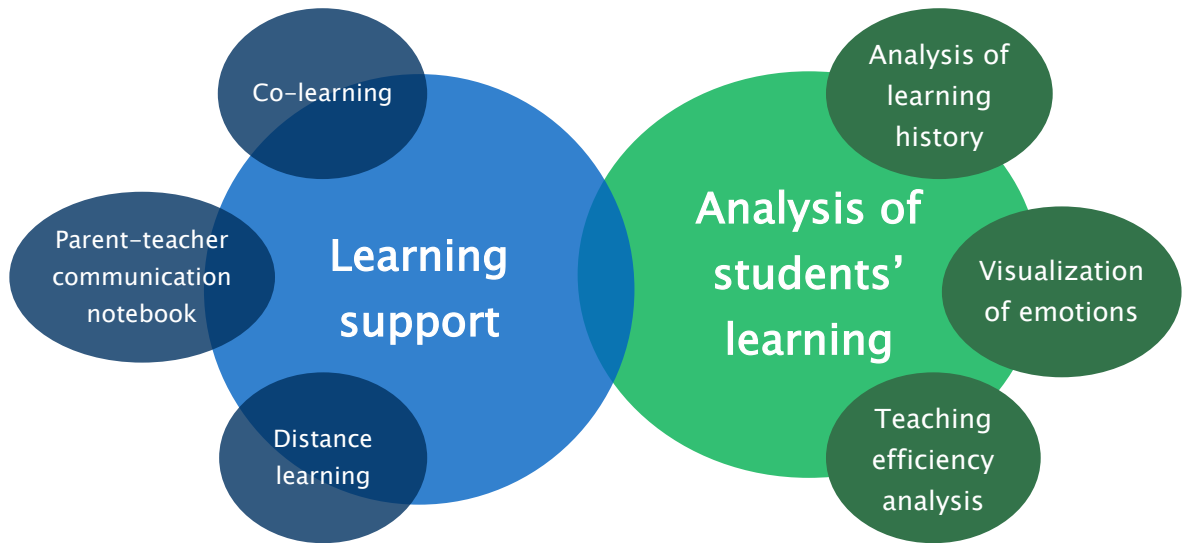
Konica Minolta's tomoLinks learning support system originates from the company's service to support DX in school education. Konica Minolta started developing the system in 2019 as part of MEXT's project to pilot the use of advanced technologies in schools, and has since been upgrading the system in response to the requests of teachers, while helping to solve problems in school settings.

The tomoLinks system offers two kinds of services—learning support and analysis of students' learning—by visualizing the individual characteristics and academic achievements of students that have been difficult to grasp. With Konica Minolta's state-of-the-art image processing and optical technologies, the system can visualize the learning conditions of each student and parent-teacher communications, thus meeting teachers' desire to "see." The system has already been introduced to elementary and junior high schools in Minoh City in Osaka Prefecture on a pilot basis.

### Features

- **Improving the way teachers work through DX in schools**
  - The system helps to promote DX in schools by digitizing parent-teacher communication notebooks and worksheets.
  - Online parent-teacher communication notebooks help speed up interaction between teachers and parents.
- **Making lessons more engaging and easily accessible by anyone from anywhere**
  - Multimedia teaching tools enhance interactive communications between teachers and students and help improve learning efficiency.
  - The distance learning service is helpful for students who refuse to go to school or who are hospitalized.
- **Making learning a fun experience with AI-based individually-tailored study plan**
  - AI-based analysis of the learning conditions of each student enables personalized instruction.
  - By recording how students are feeling and visualizing their emotions, teachers can quickly detect and act on bullying.
- **Improving teaching ability by scientific behavioral analysis**
  - The service helps teachers to improve their teaching ability by using objective data gathered through analyzing their teaching practices.

# tomoLinks



###