UCHIDA

# U chidayoko Institute for Education Research

## 内田洋行 教育総合研究所

https://ueric.uchida.co.jp/

What is the Uchidayoko Institute for Education Research?

The Uchidayoko Institute for Education Research is a research organization in the education field with a long track record of educational survey, research and development. Its activities are aimed at drawing up a grand design for the education of the next generation, supporting "the creation of good schools, good education, and good lessons."



## Survey Research

We are commissioned by central and local governments and academic institutions and bodies to conduct survey research on various education-related topics. Furthermore, as our own autonomous projects we conduct educational research

with universities and other research institutions.





## Promotion of Educational Administration

We utilize a broad range of knowledge and experience to provide local governments and educational institutions with consulting and advisory support for addressing

on-site issues such as the application of ICT equipment and the setting of educational indicators for future education.







## Data Analytics

Local governments and schools typically possess massive amounts of data spanning such categories as educational achievement, physical development, living conditions. We provide educational staff with training and other related services to help them fully utilize such data.

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## Creation of Education Communities

We host various educational seminars related to education, events and lectures including New the Education Expo educational seminar and exhibition, and plan and operate

an education community website, "Manabinoba.com" aimed at teachers, educators and parents/guardians.



Example of Survey Research Projects We conduct various research study projects which contribute to the development of better education and educational environments with respect to fostering the young people who will lead the next generation. Specifically, we are commissioned by central and local governments, and research institutions and bodies to conduct educationrelated projects and implement joint research study in tandem with universities.



## Methodologies for the Collaborative Usage of Educational Administrative Data and Learning Data

Research Study toward the Configuration of a Support Model for Next-generation Schools (2017-18)

Outline

We survey and categorize the requirements and methodologies of systems to support efforts to improve educational quality. Directing our attention to the integrated school affairs support systems, we look beyond attempts to simply digitize relating documentation and instead focus on the "visualization" of the learning process by combining educational administration data with learning data such as students' learning history and learning records.



School Active Lea

Case Studies: A Compilation of Various Learning Spaces to Support Qualitative Transformations in Higher Education

Project commissioned by MEXT (2015)

#### Outline

Survey of development of various learning spaces to support qualitative transformations in education

With regards to learning spaces to support qualitative transformations in education, we survey facilities in all their variety -- including active learning spaces, learning commons and lecture theaters -- at universities in Japan and overseas, compile a number of particularly instructive cases, analyze issues pertaining to the educational effectiveness of such facilities, and discuss points to their planning and preparation.



## Procurement, Installation and Security of Cloud Environments at Schools

Research Study into ICT Environmental Configuration Centered on Cloud Access at Educational Sites (2015)

#### Outline

We extract issues pertaining to the provision of ICT environments (centered on cloud access) at educational sites and, accordingly, prepare three types of guidebooks: one pertaining to the "procurement" of products/ services necessary to the configuration of a cloud environment, one to "procedures for information security," and one to "installation." Based on these, we also provide a compilation of cloud configuration patterns and of methods for resolving the varying problems/issues typically encountered by practitioners.



### National Assessment of Academic Ability: Lower Secondary School Students' Learning Status with regards to Four English Language Proficiencies: Listening, Reading, Writing, Speaking

National Assessment of Academic Ability 2018 (Preliminary Survey of Lower Secondary School English Instruction) (2017-18)

Outline

We conducted a preliminary survey to facility a subsequent survey of lower secondary school English language education to be conducted within the 2019 National Assessment of Academic Ability. Tested were four proficiencies: listening, reading, writing and speaking. A set proportion of the test was carried out within school computer classrooms or similar facilities, with questions given by computer and verbal responses recorded onsite (Computer-Based Testing – CBT).



## Survey of Computer-based Testing (CBT) Implementation within High School/University Articulation Reforms

Pretest Survey/research for the Basic Upper Secondary School Learning Proficiency Test (tentative name) (2016)

Pretest survey/research for Basic Diagnostics for Upper Secondary School Students (2017)

#### Outline

We conducted a CBT survey and a PBT relating to the three subjects of Japanese, mathematics and English at twelve participating research schools in 2016. We conducted CBT at eight schools in 2017. Testing was carried out either online or by means of USB memory sticks within each school's ICT environment.





# Survey of CBT (computer-based testing) within the Survey on Information Utilization Skills

Study of the Future of the Survey on Information Utilization Skills (2017)

Outline

With regards to information utilization skills, which are defined as fundamental competency for learning in The National Curriculum Standards, we consider a framework within which to conduct CBT for students at the elementary, lower secondary, upper secondary school students.



#### Developing Systematic Methods to Foster Information Literacy, and Classification of ICT Supports for Proactive, Interactive and Authentic Learning

Educational Promotion Project by Utilizing ICT

Survey Research on the Promotion of Informatization in Education (2016) Project to promote the next-generation of Informatized education (Empirical Research to foster information literacy) (2017)



## Curriculum management models to

#### Outline

We conceptually arranged systematic methods and curriculum management to foster information literacy which are defined as fundamental competencies in learning in the National Curriculum Standards. We also arranged ICT utilization methods and qualitative assessments of learning processes within various school subjects.



#### Edit of a Guidebook for the Practices and Dissemination of Remote Joint Lessons in Areas of Dwindling Population

Survey Research on Maintaining/enhancing the Quality of Education by ICT-based Remote Learning(2017)



#### Outline

In order to resolve the educational challenges of small schools in areas of dwindling population, we conducted remote joint lessons over a comparatively long period by using ICT (specifically, remote conference systems) to bring together geographically separated schools. We edited a guidebook for remote learning introduction to disseminate the results of these projects.

#### Project Assess of Acar of Acar vernment Abil

## Preparation, Delivery, Collection, Marking and the Aggregate / Analysis for Tests of Local Government Investigations

Lower Secondary School Challenge Test (Osaka Prefecture) (2016-18)

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70,000 students per school year level took the tests Implemented in January for 1st and 2nd-year lower secondary school students, and in June for 3rd-year students Carried out over two months from test implementation to results presentation Outline We prepared, distributed, collected and marked test papers for the Osaka Prefectural Challenge Test directed at 1st through 3rdyear public lower secondary school students within Osaka Prefecture.

1st-year students: Japanese, mathematics, English 2nd and 3rd-year students: Japanese, mathematics, social studies, science, English

## Project Learning Utilization of Active Learning ICT Active Learning

## Pioneering Practices and Assessments of "New Learning" by Utilizing ICT

Survey Research on the Promotion of Education Utilizing ICT (2014-16)



#### Outline

We classified methods of ICT utilization to promote "New Learning" via school/school or school/home linkages and conducted an empirical research of performance and other learning assessments.

 
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 Utilization of
 Assessment

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## Survey Research on Individual Data Anonymization

Survey Research on the Analysis of Specialized Issues by Utilizing Academic Ability Survey (2017)

#### Outline

In order to facilitate the use of National Assessment of Academic Ability data for research purposes and to promote evidence-based policy formulation, we oversaw technical study/data creation regarding the anonymization of individual data. The anonymized data thus produced will be lent to researchers after the press conference by MEXT.

Public use data (simulation personal information; aggregated spreadsheet data that contains no personal information) is currently downloadable from the MEXT website.



## Configuration/operation of a Cloud-based Self-study Learning Management System

Configuration of "Learning Support System for Every Child" for the Kanagawa Prefecture (2017)



#### Outline

We configured and operated a system for tracking the learning situation for individual elementary schoolchildren. It allows the students to select items for attention on his or her own volition; inputs mark/ score; and keeps track of overall progress. It is intended to support children in their efforts to establish self-study habits and PDCA cycling toward the retention of basic knowledge and skills.

## int Research Curriculum Utilization of ICT Active Learnin

## Proposal of Teaching Techniques and ICT Utilization for proactive, interactive and authentic learning

Research on Concrete Competency Aspects of Educational Development under the New National Curriculum Standards and on Instruction Methods. (2016-17)

Outline

With an eye to lesson design for proactive, interactive and authentic learning, we mapped "views on lesson enhancement" and "teaching techniques" for differing stages on the learning process based partly on documents from the Central Council for Education. Also, we proposed ICT activities that we consider effective for each technique.



### Advanced Cognitive Science and Education Practice (joint research with Keio Research Institute at SFC)

Research into Advanced Cognitive Science and Education Practice (from 2013)



We conduct research activities to reveal concrete process and shape of inquiry based learning. These activities include workshops and hands-on experiences with educators and cognitive science researchers from Japan and around the world.

## Promotion of Educational Administration

We provide a variety of consulting services to address the issues and concerns of local government officials and educational institutions for future education. These include such areas as active learning practices (proactive, interactive and authentic learning) and the promotion of informatization of education.

#### Research School

Active Learning

## Research Survey on School Leaders and Development of Teacher Training Program

Teacher Training

Survey on Mid-level Leaders and school managers toward the Era of Active Learning; Development of Training Programs based on Survey Feedback (2016-17)



Outline

We conducted a survey of midlevel leaders and school managers to determine the situation in which they currently work and to identify experiences useful for enhancing work ability. Based on the survey results, we developed a "card game" type training program later applied to official training under the Yokohama City Board of Education.



#### Learning Environments/classroom Practices Using ICT Equipment (joint research with Elementary School attached to University of Tsukuba)

Joint Research on the "Classrooms of the Future" (from 2013) Joint Research on the "Science Rooms of the Future" (from 2016)





"Classroom of the future

#### Outline

We conduct research on learning environments and classroom practices within the "classroom of the future" and the "science room of the future," facilities provided with such innovations as interactive whiteboards, tablet computers for each student, digital microscopes and other ICT equipment.

#### missioned Learning V Local Environment Active Learning

## Planning Support for Promoting Informatization of Education

Planning Support for the Phase II Program to promote informatization of education in Kawasaki City (2016)



and organized information and other materials necessary for planning

**Data Analytics** 

We gather a variety of data from local governments and schools, arrange, categorize and subject it to specialized analyses. We also provide training in data analytics for teachers, the people who best know the students and how they are doing.



## Survey Data Analysis and **Utilization Support Services**

We provide solutions to allow school officials to themselves analyze data and identify current conditions and challenge, or to allow board of education to better apply the results of the Assessment of Academic Ability to educational policy assessment.

#### Workshops for the Analysis of Academic Teacher Training Ability Survey Results

We host teacher trainings including collaborative workshops on analysis that utilize active learning techniques at which front-line teachers can utilize survey results to explore such issues as "what can we do to enhance the qualities/capabilities of children at our school?" or "what sort of improvements should we make to our teaching?"

#### Track records by 2017:

Official training by board of education (5 times); In-school training (12 times); Publicly advertised events (3 times).





#### Statistical Analysis Survey Data Analysis Consulting

We provide consulting services on how to interpret survey results from a professional viewpoint, how to form and verify hypotheses using statistical methods.

Track records by 2017 (partial list):

Survey Work pertaining to a Specialized Analysis of Issues with Data from Educational Achievement, Physical Development and Home Environment Surveys (Yokosuka City);

Analysis pertaining to the National Assessment of Academic Ability as relates to functional enhancement at the Osaka City Education Center; Analysis of Results of the National Assessment of Academic Ability (Himeji

Analysis of Results of the National Assessment of Academic Ability (Izumiotsu City)



## Creation of Education Communities

We organize and conduct educational seminars and forums for everyone involved in education at academic institutions, on the front lines of education, in government ministries and agencies, and in the industrial world, etc., to collaboratively explore and shape the education of today and tomorrow, as well as plan and operate an education community website.

## 教育カンファレンス

## New Education Expo

These educational seminars and exhibitions have been held since 1995. Together with introducing leading efforts and implementation examples to researchers and educational practitioners active nationwide, the event also presents the very latest learning environments and educational equipment, providing a forum for exploring the education of tomorrow.



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## Community website

## ● 学びの場.com

学びの場 (Manabinoba).com" is a website for the benefit of educators, parents/guardians and everyone else who is interested in education. In support of "good schools, good education and good lessons," the site is intended to provides all manner of useful information on such varied topics as advanced teaching methods, new educational materials, and innovative school activities/experiments.

It also provides access to reports on latest surveys, studies, demonstration projects and research results by Institute researchers and explanatory articles on educational trends.







**Apply Participate** 

www.manabinoba.com

## Future Class Room.

Uchidayoko has established "Future Class Room<sup>®</sup>" (where people can actually experience the ICT in education) in two locations—Tokyo and Osaka.

The "Future Class Room<sup>®</sup>" is a learning space for the future designed from a children's perspective by Uchidayoko, which has been watching the education field alongside school teachers, government officials, and children for more than 65 years.

The "Future Class Room<sup>®</sup>" generates new value through the cooperative creativity of visitors to the Room based on the latest technologies, design, and contents, such as practical experience and verification using cutting-edge ICT environments, and other practical experience in flexible learning environments.

## Visit our Future Class Room® (reservation required)

Come and visit our Future Class Room®. A reservation is required; you can <u>make yours online</u> with the reservation form below.

#### [Reservation website]

https://www.uchida.co.jp/company/showroom/futureclassroom/index.html \* Inquiries are processed from 9:00 to 17:00 on normal business days (excluding national holidays, year-end holidays and summer vacation days).



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For inquiries: First Planning Section; Tel. 03(5634)6397

## Scene of visitors utilizing the Ubiquitous Cooperative Creation Square: CANVAS

The Ubiquitous Cooperative Creation Square: CANVAS is an interactive multipurpose space that fuses contents with the Future Class Room<sup>®</sup> and other spaces proposed by Uchidayoko. CANVAS is used as a forum for everyone involved in education to think about education and learning environments going forward. Furthermore, there are schools that, rather than utilizing the space itself, have actually incorporated the concept into their activities.



## UCHIDA Uchidayoko Institute of Education Research

The Uchidayoko Institute of Education Research carries a wide variety of survey/research reports and data on our website. Also available are issues of Knowledge Report, our journal of articles, reports and other commentary maintained by Institute researchers and staff members There you can find information on the latest trends and concepts in education arranged by keyword or topic.



https://ueric.uchida.co.jp/ Uchidayoko Institute of Education Research

## History

Since the year 1998 the Institute has been commissioned to conduct various survey research projects including ICT utilization in education and the designing and examination of new educational models by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the Ministry of Internal Affairs and Communication (MIC) and other governmental bodies and educational institutions.

Main Survey Research Projects (excerpt from the left table)

### 0 1998

"Project to Promote ICT utilization in Education" (Informationtechnology Promotion Agency, Japan)

#### 0 2004

"Survey Research on the Transmission of Digital Contents (EduMart Verification Project)" (MIC)

#### 0 2005

"Survey Research on the Utilization/Effectiveness of Learning Materials/Equipment" (Japan Electrical Manufacturers' Association)

#### 0 2006

Establishment of the Institute

"Joint Research Project (UNIQUE 2006-2009)" (joint research with National Institute of Multimedia Education)

0 2008

"National Assessment of Academic Ability (lower secondary schools) 2008-2014" (MEXT)

"Development of Digital Textbooks for Elementary School English Teaching" (MEXT)

"Research Survey on One Tablet Terminal for Every Student" (joint research with Intel Corporation)

0 2009

"Industry-academia joint research (UT Project): 2009-2014" (joint research with Tamagawa University)

0 2010

"Participation in the Future School Promotion Project" (MIC)

2012

"Survey Research on the Status of Students' Information Utilization Skills" (MEXT)

2013

"Survey Research on Analysis of the Results of Learning Innovations" (MEXT)

### 0 2014

"Survey Research on the Status of Teacher Training in Universities" (MEXT)

"Survey Research on Preparing School Facilities at Unified Elementary and Lower Secondary Schools" (MEXT)

0 2015

"Survey Research on the Analysis of Specialized Issues using National Assessment of Academic Ability" (MEXT)

"Survey Research on Maintaining/enhancing the Quality of Education by ICT Utilization amid a Dwindling Population" (MEXT)

"Survey Research on the Construction of Learning Support Networks; Investigative Research on the Construction of School Affairs Support Systems; Investigative Research on the Utilization of Learning Record Data" (Japan Association for Promotion of Educational Technology)

"Collaborative project toward 'Creation of an Educational Environment for the Year 2020'" (Joint research with Gakken Holdings Co., Ltd.)

### 0 2016

"Curriculum Management Model for the Fostering of Information Literacy" (MEXT)

"Research on Concrete Quality/capability Aspects of Educational Development under new Courses of Study and on Guidance Methods" (joint research with Tohoku University)

"Survey on Mid-level Leaders and School Managers toward the Era of Active Learning; Development of Training Programs Based on Survey Feedback" (joint research with Yokohama National University)

"Lower Secondary School Challenge Test" (1st through 3rd year; Osaka Prefecture)

### 2017

"Survey Research on Evidence-based Improvement in Teaching" (MEXT)

"Study of the Future Form of the National Investigation on Information Literacy" (MEXT)

"Survey Research on ICT utilization toward Proactive, Interactive and Authentic learning" (MEXT)

"Preliminary Survey of English Language Preparation ahead a Lower Secondary School English Language Investigation within the 2019 National Assessment of Academic Ability" (MEXT)

"Pretest Survey/research for 'Basic Diagnostics for Upper Secondary School Students'" (MEXT)

"Dissemination of Japanese-style Education Using the Public-Private Collaborative Platform (EDU-Port Japan Project)" (MEXT)

"Analysis of Results of the National Assessment of Academic Ability" (Osaka City)

"Configuration of Learning Support System for Every Child" (Kanagawa Prefecture)

### 0 2018

"National Assessment of Academic Ability (lower secondary schools) 2019" (MEXT)

"Survey Research on the Analysis of Specialized Issues using National Assessment of Academic Ability" (MEXT)

"Empirical Research on the Introduction of Remote Education Systems" (MEXT)

"Empirical Research on Introductions of Integrated School Affairs Support Systems" (MEXT)

"Survey Research on Evidence-based Improvement in Teaching Guidance, Etc." (MEXT)

"Study of the Future Form of the National Investigation on Information Literacy" (MEXT)

"Survey Research on Evidence-based Curriculum Management and School Improvement" (joint research with Yokohama National University)

"Maintenance and Operation of Learning Support System for Every Child" (Kanagawa Prefecture)

"Data Entry/processing for the 2018 National Assessment of Academic Ability" (Yokohama City)

and many more