# Noyuri Mima, BE, Ed.M., Ph.D.

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# PERSONAL STATEMENT

I am a professor, a dedicated creator and a founder in creating major and lasting institutions with a wide range of knowledge and expertise in computer science (CS), cognitive psychology, and education. The trigger for me to dive into this interdisciplinary field was in 1982 when, as a third-year CS undergraduate, I implemented the educational programming language 'Logo' for Japanese PCs, which became the first Logo running in Japanese. Since then I have focused on promoting learning, communication, and networking in science, technology, and art. I played a significant role in the establishment of a new public university in Hakodate, Hokkaido and a new national science museum in Tokyo. After their establishment, I was appointed as Professor at the university and Deputy Director at the museum. In addition, I have been PI leading a team on several research projects with national grants for scientific research over 15 years, and published specialized books for researchers, textbooks for college students and general books for elementary school to high school students. I was also an executive board member of Japan's public broadcasting corporation for three years after being appointed by the Prime Minister of Japan. I have additionally served as a member of several boards on national government policy making in education, science and technology, and managed several academic societies as a director on associated governing boards. I am also a founder of a local science festival in Hakodate, held annually since 2009. I was also the academic consultant for a team of a major Japanese company that was awarded the Grand Prize 2018 and the Prize for Excellence 2019, both of the Japan Toy Award (Educational Toy Division).

# **CURRENT POSITION**

Oct 2006 – present | Professor School of Systems Information Science, Future University Hakodate, Hokkaido, JAPAN Apr 2023 – present | Visiting Professor The University of Tokyo, Graduate School of Interdisciplinary Information Studies Oct 2023 – present | Council Member The Science Council of Japan

# EDUCATION

#### Apr 2005 - Mar 2010 | Ph.D. in Information Systems Science

The University of Electro-Communications Graduate School of Information Systems, Tokyo, JAPAN

Thesis Title: Design Research for Learning Environments Based on Collaborativity and Sociality of Learning

# Apr 1991 - Mar 1995 | Doctoral Course in Cognitive Psychology and Educational Technology

The University of Tokyo Graduate School of Education, Tokyo, JAPAN

**Apr 1988 - Mar 1991** | **Ed.M. in Cognitive Psychology and Educational Technology** The University of Tokyo Graduate School of Education, Tokyo, JAPAN

Sep 1985 - Jun 1986 | Ed.M. in Interactive Technology

Harvard University Graduate School of Education, Massachusetts, USA

Apr 1980 - Mar 1984 | Bachelor of Engineering in Department of Computer Science The University of Electro-Communications, Tokyo, JAPAN

# ACADEMIC AND PROFESSIONAL EXPERIENCE

#### Sep 2021 – Sep 2022 | Visiting Scholar

Center for Human-Compatible Artificial Intelligence, University of California, Berkeley, USA

# Jun 2013 - Jun 2016 | Governor of Executive Board (appointed by the Prime Minister of Japan)

NHK: Japan Broadcasting Corporation, Tokyo, JAPAN

Japan Broadcasting Corporation (Japanese: Nippon Hoso Kyokai : NHK) is Japan's national public broadcasting organization. NHK is an independent corporation chartered by the Japanese Broadcasting Act and primarily funded by license fees. The annual budget of NHK is subject to review and approval by the Diet of Japan. The Diet and the Prime Minister appoint the 12-member Board of Governors that oversees NHK.

#### Oct 2003 - Sep 2006 | Deputy Director of Research, Development, and Education

National Museum of Emerging Science and Innovation, Tokyo, JAPAN

The National Museum of Emerging Science and Innovation exhibits cutting-edge science and technology as a showcase of Japan's science and technology R&D. One of the roles of the museum is a place of public diplomacy; the former US President Obama has visited.

#### Aug 2001 - Mar 2002 | Visiting Scholar

Media Laboratory, Massachusetts Institute of Technology, Massachusetts, USA

#### Apr 2000 – Sep 2003 | Professor

School of Systems Information Science, Future University Hakodate, Hokkaido, JAPAN

#### Sep 1998 - Mar 2000 | Associate Professor of Cognitive Science

Faculty of Liberal Arts, Saitama University, Saitama, JAPAN

Aug 1998 (four weeks) | International Fellow

Center for Technology in Learning, SRI International, California, USA

Apr 1998 - Aug 1998 | Associate Professor of Informatics Education Faculty of Education, Kawamura Gakuen Woman's University, Chiba, JAPAN Apr 1995 - Mar 1998 | Full-time Lecturer of Informatics Education Faculty of Education, Kawamura Gakuen Woman's University, Chiba, JAPAN

Apr 1990 - Mar 1994 | Teaching and Technical Assistant

Tokyo International University, Saitama, JAPAN

#### Aug 1984 - Sep 1985 | Education Specialist

Education Department, Digital Equipment Corporation Japan, Tokyo, JAPAN

# **BOOKS and CHAPTERS (SELECTED)**

- Mima, N. Life and Computational Thinking. In H. Nakashima and K. Hirata (Eds.) What is Computational Thinking? : Think Like Computer Scientists, pp.125-149, Future University Hakodate Press, 176 pages, 2022, (Japanese).
- **Mima, N.** Living in the Age of Al: Creativity and Empathy for Designing the Future, Iwanamishoten, 216 pages, 2021, (Japanese).
- **Mima, N.** and Tominaga, A. (Eds.) Design of "Project Learning" to Create the Future, Future University Hakodate Press, 196 pages, 2018, (Japanese).
- **Mima, N.** The Challenge for Higher Education Reform in Japan by Seven Samurai. In S. Cheung et al. (Eds.) Blended Learning: Enhancing Learning Success. ICBL 2018. Lecture Notes in Computer Science, vol 10949, pp.3-16, Springer, 460 pages, 2018, (English).
- Suzuki, K. and **Mima, N.** (Eds.) Learning Design Manual: Instructional Design to Become an "Adult," Kitaohjishobo, 248 pages, 2018, (Japanese).
- Mima, N. and Ito, T. (Supervisors of translation to Japanese) Creating Self-Regulated Learners: Strategies to Strengthen Students' Self-Awareness and Learning Skills, Kitaohjishobo, 224 pages, 2017, (Japanese) (Original work by Nilson, L. B. published in 2013 by Stylus Pub Llc).
- **Mima, N.** Lifelong Learning Facilities and Informal Learning. In Y. Yamauchi and M. Yamada (Eds.), Informal Learning, pp.17-38, Minervashobo, 183 pages, 2016, (Japanese).
- **Mima, N.** Graphical Science Wonder Book Series vol.1(48 pages) vol.2(36 pages), vol.3(44 pages), Gakken Educational Press, 2015, (Japanese). Translated to Taiwanese in 2016 and to Vietnamese in 2018.
- **Mima, N.** An Encouragement of RIKEJO-ish Life, Iwanamishoten, 240 pages, 2012, (Japanese).
- Mima, N. The Challenge of Showing and Discussing the Unknown. In M. Claessens (Ed.), Communicating European Research 2005, pp.121-127, Springer, 248 pages, 2007, (English).

- **Mima, N.** and Yamauchi, Y. Designing Learning Environments: Space, Activity, and Community, University of Tokyo Press, 233 pages, 2005, (Japanese).
- Mima, N. On-line Technology Isn't Enough: Transforming the Teacher-Student Learning Process. In J. Bachnik (Ed.), Roadblocks on the Information Highway: Institutional Barriers to the IT Revolution in Japanese Education (in their Studies of Modern Japan Series), pp.265-279, Lexington Books, 354 pages, 2003, (English).
- **Mima, N.** The Children of the Wonder-Box Network: Scientists Come to the Classroom over the Net, JustSystems, 260 pages, 1997, (Japanese).

#### CONFERENCE PRESENTATIONS and ACADEMIC PAPERS (SELECTED)

- **KEYNOTE** "The Potential of Local Science Festivals for a Sustainable Society", 2018 Science and You, International Conference on Science Communication, China National Convention Center, Beijing, CHINA, September 2018, (English).
- **KEYNOTE** "The Challenge for Higher Education Reform in Japan by Seven Samurai," International Conference on Blended Learning, Kansai University, Osaka, JAPAN, July 2018, (English).
- **PRESENTATION** "Innovation of Industry Structure" in session of What Can We Create: the Future of Intelligence in Diverse Fields, Nobel Prize Dialogue Tokyo 2017, the Future of Intelligence, Tokyo International Forum, Tokyo, JAPAN, February 2017, (English).
- **PRESENTATION** "An Encouragement of RIKEJO-ish Life" in TEDxSapporo 2014, Hokkaido, JAPAN, July 2014, (Japanese).
- **PRESENTATION** "A Design of Future Learning" in TEDxKids@Tokyo 2011, Tokyo, JAPAN, October 2011, (Japanese).
- ACADEMIC PAPER Mima, N. and Watanabe, M. "The Potential of Local Science Festivals: the Hakodate International Science Festival as a Case Study," Science Communication, vol.10, no.2(2020), pp.80-88, (Japanese).
- ACADEMIC PAPER Mima, N. "Medical Personnel Training as Society Integrates Artificial Intelligence and Robots," Japan Journal of Health Professional Development, vol. 7, no.1(2020), pp.1-6, (Japanese).
- **ACADEMIC PAPER** Mima, N. "From Educational Use of Computers to the Learning Transformation," Information Processing Society of Japan Transactions on Computers and Education, vol.5, no.3(2019), pp.1-9, (Japanese).
- ACADEMIC PAPER The Potential of Local Science Festivals for a Sustainable Society: A Case Study of the Hakodate International Science Festival, Conference Journal of 2018 Science and You, International Conference on Science Communication, pp.1-9, Tsinghua University Press, 2018, (English).
- ACADEMIC PAPER Mima, N. "Co-Creation of Social Value in Project Learning with Three-Way Satisfaction," Society of Seviceology, Journal of Serviceology, vol.4, no.2(2017),

pp.10-15, (Japanese).

#### **HONORS and RECOGNITIONS**

- Prize for Excellence in the Japan Toy Award 2019 Educational Toy Division, Japan Toy Association, Tokyo, JAPAN, 2019. (Role: Academic Consultant)
- Grand Prize in the Japan Toy Award 2018 Educational Toy Division, Japan Toy Association, Tokyo, JAPAN, 2018. (Role: Academic Consultant)
- Grand Prize in Photo Contest of "Public Building Day," Hokkaido Regional Development Bureau, Hokkaido, JAPAN, 2016.
- Science and Technology Prize 2014, the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology, Tokyo, JAPAN, 2014.

This prize recognizes the outstanding achievements in R&D, understanding and promotion of science and technology as "the Commendation for Education, Culture, Sports, Science and Technology by the Minister of Education, Culture, Sports, Science and Technology."

Master of Ceremony at Japan Prize Presentation of 2008, 2009, 2010, 2012, and 2013, The Japan Prize Foundation, Tokyo, JAPAN.

The award ceremony is annually conducted in April, presided over by Their Majesties the Emperor and Empress of Japan. The event is attended by notable figures including the Prime Minister, the Speaker of the House of Representatives, the President of the House of Councilors, the Chief Justice of the Supreme Court, and foreign ambassadors accredited to Japan. Additionally, approximately 1,000 distinguished guests comprising scholars, researchers, and representatives from political, business, and media sectors participate. The Master of Ceremony is a role designated to a distinguished female Japanese scientist.

- The 2013 UEC Distinguished Alumni Awards, Megurokai: Alumni Club of the University of Electro-Communications, Tokyo, JAPAN, 2013.
- Best Interactive Presentation, Conference of Interaction 2001, Information Processing Society of Japan, Tokyo, JAPAN, 2001.
- Outstanding Young Researcher of 1996, Japan Society for Educational Technology, Tokyo, JAPAN, 1997.
- Best Research Presentation and Paper of 1995, The 13th Annual Meeting of Japan Cognitive Science Society, Kyoto, JAPAN, 1996.
- Best Research Presentation and Paper of 1991, The 9th Auunual Meeting of Japan Cognitive Science Society, Tokyo, JAPAN, 1992.
- Prize for Excellence Research Paper of Logo, Laboratory of Industrial Engineering, Tokyo, JAPAN, 1988.

### SOCIAL ACTIVITIES (SELECTED)

- Member of Council for Hokkaido Museum of Modern Art, Hokkaido Government, Hokkaido, JAPAN, 2017-2021.
- Member of Central Council for Education, Ministry of Education, Culture, Sports, Science and Technology, Tokyo, JAPAN, 2013-2019.
- Member of Council for Science and Technology, Ministry of Education, Culture, Sports, Science and Technology, Tokyo, JAPAN, 2013-2019.
- Member of Council for Science and Technology, Hokkaido Government, Hokkaido, JAPAN, 2008-2018.
- Director General of Science Support Hakodate, Hokkaido, JAPAN, 2008-present.
- Director of Nissan Global Foundation, Kanagawa, JAPAN, 2006-present.
- Member of Planning Committee for Establishing a National Center for Promoting Science and Technology, Japan Science and Technology Agency, Tokyo, Japan, 2000-2001.

The purpose of the committee is to plan the establishment of a new national science museum that exhibits cutting-edge science and technology to promote science and technology.

- Member of Planning Committee for Establishing a Hakodate Public University, City of Hakodate, Hokkaido, JAPAN, 1996-2000.
- Director of Japan Association for Mathematical Sciences, Tokyo, JAPAN, 1990-2022.

#### PROFESSIONAL MEMBERSHIPS

- Association for Educational Communications and Technology (AECT), Indiana, USA, 2018present.
- Information Processing Society of Japan (IPSJ), Tokyo, JAPAN, 1993-present.

Director, 2017-2019.

Japan Society for Educational Technology (JSET), Tokyo, JAPAN, 1991-present.

Vice President, 2017-2019, 2021-present; Director, 2001-2009, 2011-2019; Councilor, 2010-2011.

Japan Society for Science Education (JSSE), Tokyo, JAPAN, 2005-present.

Director, 2008-2012; Councilor, 2012-2014.

Japanese Association for Science Communication (JASC), Tokyo, JAPAN, 2013-present. Director, 2013-2014; Auditor, 2016-2023. Japanese Cognitive Science Society (JCSS), Tokyo, JAPAN, 1991-present.

Japanese Society for Information and Systems in Education (JSiSE), Tokyo, JAPAN, 2005present.

# **RESEARCH GRANTS (SELECTED RECENTE FOUR)**

**Title:** Formulation of New Competencies for Adults and Development of Methods to Promote Them Based on Regulated Learning

(Grant-in-Aid for Scientific Research (B), Japan Society for the Promotion of Science)

| Principal Investigator    | : Noyuri Mima                         |
|---------------------------|---------------------------------------|
| Number of Project Members | : 7                                   |
| Research Period           | : FY2022 – FY2025                     |
| Awarded Amount            | : 17,060,000 YEN (approx.150,000 USD) |
| Research Category         | : Educational Technology              |

**Title:** Building Design Principles of an Adult Learning Environment for Fostering Self-regulated Learners in the 21st Century

(Grant-in-Aid for Scientific Research (B), Japan Society for the Promotion of Science)

| Principal Investigator    | : Noyuri Mima                         |
|---------------------------|---------------------------------------|
| Number of Project Members | : 8                                   |
| Research Period           | : FY2018 – FY2021                     |
| Awarded Amount            | : 17,160,000 YEN (approx.160,000 USD) |
| Research Category         | : Educational Technology              |

**Title:** Building Three-Step Growth Model of University Students and Development of a Learning Support System

(Grant-in-Aid for Scientific Research (B), Japan Society for the Promotion of Science)

| Principal Investigator    | : Noyuri Mima                         |
|---------------------------|---------------------------------------|
| Number of Project Members | : 8                                   |
| Research Period           | : FY2015 – FY2017                     |
| Awarded Amount            | : 15,990,000 YEN (approx.149,000 USD) |
| Research Category         | : Educational Technology              |

**Title:** Development of an Integrated Learning Support System in Higher Education Incorporating a Peer Tutoring

(Grant-in-Aid for Scientific Research (B), Japan Society for the Promotion of Science)

| Principal Investigator    | : Noyuri Mima                         |
|---------------------------|---------------------------------------|
| Number of Project Members | : 6                                   |
| Research Period           | : FY2012 – FY2014                     |
| Awarded Amount            | : 18,590,000 YEN (approx.174,000 USD) |
| Research Category         | : Educational Technology              |