

TRACEY TOKUHAMA-ESPINOSA, Ph.D.



NAME: TRACEY NOEL TOKUHAMA-ESPINOSA

PLACE OF BIRTH: Arcadia, California, USA

EMAIL: tracey.tokuhama@gmail.com

LANGUAGES: Native English (C2); Native Spanish (C1-C2); Intermediate German (B1); Intermediate French (B1); Advanced Beginner Japanese (A2).

HIGH SCHOOL: Berkeley High School, Berkeley, California, USA, 1982

UNIVERSITY STUDIES:

Boston University, Boston, Massachusetts, USA--
B.A., 1986 en International Relations, *magna cum laude*
with distinction.

Boston University, Boston, Massachusetts, USA--B.S.,
1986 en Communications and Public Relations, *magna cum laude*.

Harvard University, Cambridge, Massachusetts, USA –
Ed.M, 1987. International Educational. Studies focused on
comparative educational systems around the world, the
concept of intelligence, and a Master’s thesis on
Educational Philanthropy: “*Philanthropy and Education: A Case
Study of Rafiq Hariri in Lebanon*”. Graduated with distinction.

Capella University, Minneapolis, Minnesota, EEUU –
Ph.D., 2008. Doctoral thesis on the emerging discipline of
Mind, Brain, and Education science (the intersection
between neuroscience, education, and psychology): “*The
Scientifically Substantiated Art of Teaching: A Study in the
Development of Standards in the New Academic Field of
Neuroeducation (Mind, Brain, and Education Science)*”. Straight
“A” average.

DEGREES: B.A., B.S., Ed.M., Ph.D.

CURRENT WORK: Professor, Harvard University Extension School. (2012-
presente). Course: “The Neuroscience of Learning: An
introduction to Mind, Brain, Health and Education”.

Educational researcher and Affiliated Professor with the
Latin American Social Science Research Faculty (Facultad

Latinoamericana de Investigación en Ciencias Sociales (FLACSO) in Quito. (2015-present). Course: “Políticas Educativas” (Educational Policy).

President of *Connections: The Learning Sciences Platform* which provides evidence-based research tools for teachers in English and Spanish.

Associate Editor of Nature Partner Journal *Science of Learning*.

WORK EXPERIENCE:

Founding Dean and Research Professor at the Universidad de las Américas, Quito, Ecuador (2014-2015).

Member of the OECD (Organisation for Economic Co-operation and Development) Expert Panel charged with making recommendations on Teachers New Pedagogical Knowledge based in the addition of technology and cognitive neuroscience in teacher education. (Feb 2013-2017).

Fulltime Professor and Director of the Teaching and Learning Institute (Instituto de Enseñanza y Aprendizaje), the university’s educational research division, and the teacher training program for over a decade (2003-2013). Also Director of the Online Learning Department 2010-2013.

International consultant with governments, NGOs, and public and private educational institutions in 32 countries (2008-presente).

Invited Professor, University of Chile, Faculty of Medicine (oct 2013/oct 2015).

Invited Professor, University College of London (Summer 2013).

Invited Professor, University of Khon Kaen, Thailand (Summer 2012).

Invited Professor, University of Jönköping, Suecia (2010)

INTERNATIONAL PUBLICATIONS

Books

- Tokuhama-Espinosa, T. (en preparación). *The Five Pillars: Neuroconstructivist foundations for learning*. New York, NY: W. W. Norton.
- Tokuhama-Espinosa, T. (en preparación). *Neuromyths*. New York, NY: W.W. Norton.
- Tokuhama-Espinosa, T. (2014). *Making classrooms better: 50 practical applications of Mind, Brain, and Education science*. New York: W.W. Norton. ISBN-10: 0393708136 | ISBN-13: 978-0393708134.
- Tokuhama-Espinosa, T. (2011). *Mind, Brain, and Education Science: The new brain-based education*. New York: W.W. Norton. ISBN-10: 9780393706079
- Tokuhama-Espinosa, T. (2010). *Applying Mind, Brain, and Education Science in the classroom*. New York: Columbia University Teachers College Press. ISBN-10: 0807750336
- Tokuhama-Espinosa, T. (2008). *Living languages: Multilingualism across the lifespan*. Westport, CT: Greenwood. ISBN-10: 9780275999124
- Tokuhama-Espinosa, T. (2003). *The multilingual mind: Issues discussed by, for, and about people living with many languages*. Westport, CT: Praeger Press. ISBN-10: 0897899199
- Tokuhama-Espinosa, T. (2000). *Raising multilingual children*. Westport, CT: Greenwood. ISBN-10: 0897897501

Chapters in Books

- Ansari, D., König, J., Leask, M. & Tokuhama-Espinosa, T. (2017). Developmental cognitive neuroscience: Implications for teachers' pedagogical knowledge. In S. Guerrero (Ed.) *Pedagogical knowledge and the changing nature of the teaching profession*. Paris, France: OECD Publications.
<http://dx.doi.org/10.1787/9789264270695-en>
- Tokuhama-Espinosa, T. (2015). Celebrating the complexity and multidimensionality of “quality” in education: Toward a new process of choosing indicators that measure in ways that better reflect context. In *World Education Research Association (WERA) Yearbook* (pp.114-159). New York, NY: Routledge.
- Tokuhama-Espinosa, T. (2013). What is the relationship between growing up bilingual and executive functions. In K. Nemeth's *Young dual language learners: A guide for PK-3 leaders*. Philadelphia, PA: Caslon.

Articles

- Tokuhama-Espinosa, (in press). The science in the art of teaching: Using Mind, Brain, and Education to dispel neuromyths and improve education. *Naure Neuroscience x(x)*, xx.
- Tokuhama-Espinosa, T. (in preparation). *The brain, technology and the social Darwinism of universities*.
- Tokuhama-Espinosa, T. (in preparationn). *Second international Delphi Panel on Mind, Brain, and Education Science:*

What has changed 10 years later? DOI: 10.13140/RG.2.2.14259.22560

(https://www.researchgate.net/publication/315779095_Delphi_Panel_on_Mind_Brain_and_Education_2016_RESULTS)

- Tokuhamas-Espinosa, T. (2013). What neuroscience tells us about learning foreign languages. *New Routes Magazine*, 52 (Brazil).
- Tokuhamas-Espinosa, T. (2012). What neuroscience says about personalized learning. *Educational Leadership*, 69(5). (Alexandria, VA: ASCD)
- Tokuhamas-Espinosa, T. (2011). Why Mind, Brain, and Education science is the new "brain-based" education. *New Horizons for Education*, 9(1). Johns Hopkins University School of Education.
- Tokuhamas-Espinosa, T. (2011). Who knows most about learning? Or, Why the brain isn't talked about in schools. *New Horizons for Education*, 9(1). Johns Hopkins University School of Education.
- Tokuhamas-Espinosa, T. (2011). What Mind, Brain, and Education can do for teaching. *New Horizons for Education*, 9(1). Johns Hopkins University School of Education.
- Tokuhamas-Espinosa, T. (2011). A brief history of the science of learning Part 1 (3500B.C.E-1970 C.E.). *New Horizons for Education*, 9(1). Johns Hopkins University School of Education.
- Tokuhamas-Espinosa, T. (2011). A brief history of the science of learning Part 2 (1970s-present). *New Horizons for Education*, 9(1). Johns Hopkins University School of Education.
- Tokuhamas-Espinosa, T. (2009). Facts and myths about the brain and learning. *Learning Landscape: Viewpoints from Learning Experts*. Johns Hopkins University School of Education.

Published Consultancies

- Tokuhamas-Espinosa, T. & Rivera, M. (2013). *Estudio del arte sobre conciencia fonológica en lenguaje preescolar: El cerebro y fracaso escolar*. Contractado y publicado por el Gobierno Costa Rica, y el System for Integration for Central American CECC/SICA.
- Tokuhamas-Espinosa, T. & Rivera, M. (2013). *Procesamiento inicial matemático y el fracaso escolar*. Contractado y publicado por el Gobierno Costa Rica, y el System for Integration for Central American CECC/SICA.
- Barnette, E. & Tokuhamas-Espinosa, T. (2013). *The International Baccalaureate in Ecuador: Implications for quality education? Investigación sobre la implementación del Bachillerato Internacional en los colegios fiscales del Ecuador 2013*. Bethesda, MD: International Baccalaureate Research Office.

Dissertation

- Tokuhamas-Espinosa, T. (2008 Jul). *The scientifically substantiated art of teaching: A study in the development of standards in the new academic field of neuroeducation (Mind, Brain, and Education Science)*. Dissertation (PhD), Capella University, Minnesota. AAT 3310716.

Paper Presentations

- Tokuhamas-Espinosa, T. (Oct 2016). *You can't get apples from a pear tree* (keynote); "Creating a personalized professional development program to enhance 21st century skills" (workshop); "Evidence-based teaching in multilingual classrooms" (workshop). Keynote paper presented at Korea TESOL

Annual Conference, Seoul, Corea del Sur (published in KOTESOL Journal)

Tokuhamas-Espinosa, T. (Sept 2015). *One way neuroscience can improve pre-literacy and early math*. Paper presented at the World Education Research Association (WERA) Focal Meeting Corvinus University, World Education Research Association Annual Conference, Budapest, Hungary.

Tokuhamas-Espinosa, T. Rivera, M., Tobar, C., Solano, I., Proaño, S., Tirira, M. & Merino, I. (Nov 2013). *International indicators of quality education: How economic status, units of analysis and culture can influence country choices of key quality indicators in education*. Paper presented at the World Education Research Association (WERA) Focal Meeting and 12th National Conference on Educational Research, Guanajuato, Mexico, 18-22 November 2013. Published in *WERA Yearbook 2015*.

Tokuhamas-Espinosa, T. Boston, MA (Nov 2010). *The Scientifically Substantiated Art of Teaching: The Ten Key Factors That Influence Multilingualism*. Papers presented at the Learning and the Brain Conference, Harvard-MIT. Published in Conference Abstracts.

Tokuhamas-Espinosa, T. (Mar 2010). *The scientifically substantiated art of teaching*. Paper presented at the Association for Curriculum and Supervision Development (ASCD). San Antonio, TX, USA.

Tokuhamas-Espinosa, T. (Apr 2009). *The scientifically substantiated art of teaching: A study in the development of standards in the new academic field of neuroeducation (Mind, Brain and Education Science)*. Doctoral thesis findings presented at the American Educational Research Association (AERA). San Diego, CA. Dissertation published by ProQuest.

ECUADORIAN PUBLICATIONS

Books

Tokuhamas-Espinosa, T. (2016). Análisis y consenso en la construcción participativa del perfil del bachiller ecuatoriano. En Fortalecimiento de la calidad educativa a través del ajuste de la progresión de los estándares de aprendizaje y ajuste del currículo del Ministerio de Educación de Ecuador. Quito, Ecuador: Organización de Estados Iberoamericanos y el Ministerio de Educación de Ecuador.

Tokuhamas-Espinosa, T. (2015). *El perfil ecuatoriano: Desde la educación hacia la sociedad*. Quito, Ecuador: Ministerio de Educación del Ecuador con financiamiento de la OEI.

Tokuhamas-Espinosa, T. (2014). *La educación de antes y ahora*. Quito, Ecuador: Universidad de las Américas.

Chapters in Books

Tokuhamas-Espinosa, T. (2016). Conexiones con la calidad educativa. En A. Arellano (ED.), *Hacia una sociedad educadora: Propuestas para el debate* (pp.80-111). Quito, Ecuador y Ottawa, Canada: Grupo FARO y la Iniciativa Think Tank.

Tokuhamas-Espinosa, T. (2011). *El cerebro, las emociones y la toma de decisiones*. In N. Jaramillo, *La otra P: Fundamentos de publicidad*. Quito: Exel Impresores Gráficos, Cía. Ltda.

Articles

Tokuhamas-Espinosa, T. (2013 sept). Museos interactivos de ciencias: cómo despertar la curiosidad natural

de los niños por la ciencia y la tecnología. *Para el Aula*, 15-16.

Tokuhamas-Espinosa, T. & Bramwell, D. (2010 nov). *La educación ambiental y el desarrollo sostenible para niños*. *Polémika*, 2(5), 1-9.

Tokuhamas-Espinosa, T. & Bramwell, D. (2009). El ciudadano ideal: ¿conocemos la definición de “educación de calidad”? *Polémika*, 2(1), 112-123.

Published Consultancies

Tokuhamas-Espinosa, T. & Lasso, M.D. (2011 ago). *La elaboración de un programa híbrido de doctorados (PhD) en el Ecuador, expandido a incluir programas no híbridos*. Quito: Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación (SENESCYT).

Tokuhamas-Espinosa, T. (2011 julio). *El diseño de un programa innovador que combine características lúdicas y académicas para la motivación de la ciencia y la tecnología en la sociedad ecuatoriana, con especial atención a niños y jóvenes*. Quito: Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación (SENESCYT).

PREAL, Grupo FARO, Fundación Ecuador. (2010). *Informe de progreso educativo Ecuador 2010*. Investigadoras principales: Tracey Tokuhama- Espinosa y Daniela Bramwell. Washington, DC: PREAL.

Tokuhamas-Espinosa, T. (2010 sept). Comentario sobre “Los desafíos de la educación básica en el siglo XXI de Juan Carlos Tedesco”. Quito: Comisión Europea.

Tokuhamas-Espinosa, T. & Bramwell, D. (2009). *Un nuevo modelo del Bachillerato para América Latina*. Estudio por el Ministerio de Educación del Ecuador.

Tokuhamas-Espinosa, T., Ramia, N., Bramwell, D. (2009). *Mapeo y análisis de consistencia de las políticas, programas y proyectos del Plan Decenal de Educación y definición de indicadores y competencias para la formulación de un sistema de seguimiento ciudadano*. Estudio contratado por Grupo FARO. Quito: Grupo FARO.

Tokuhamas-Espinosa, T., Creamer, M., & Hernández, L. (2006). *Fundamentos de la educación de adultos en Ecuador: Explicación de la metodología del nuevo programa de alfabetización hasta décimo de básica*. Quito: Ecuador: Ministerio de Educación y Cultura de Ecuador.

PEER REVIEWER (articles)

Articles reviewed for the following journals between August 2011-August 2016: *American Educational Research Association* (conference proposals)

1. *Language and Cognition*
2. *International Mind, Brain, and Education Journal*
3. *International Journal of Humor Research*
4. *PLOS Biology*
5. *Mind, Brain, and Education*
6. *AERA Open*

PEER REVIEWER (books)

Books reviewed for the following publishers

1. *Considering trilingual education* (Feb 2011; *Routledge*)
2. *Operationalising and measuring language dominance* (Feb 2012; *Cambridge University Press*)
3. *Notes on Teaching* (Mar 2011; *Creative Press*)

ASSOCIATIONS AND SOCIETY MEMBERSHIPS

- American Educational Research Association (**AERA**)
- International, Mind, Brain, and Education Society (**IMBES**)
- World Educational Research Association (**WERA**).
- Miembro fundadora de **The Learning Sciences**.
- Miembro fundadora de la Red de Facultades Educativas de la Universidad Ecuatoriana (**Red Facultades de Educación**).
- Miembro fundadora del International Forum of Researchers in Education (**IFORE**).
- Society For Neuroscience (**SFN**).

INVITED SPEAKER (Workshops, Presentations, Keynotes) 2016-2017

Seoul, South Korea (2017 May). “Neuromyths”: JCALT and Korea TESOL Annual Conference.

London, Uited Kingdom (2017 May). “Thought on Teachers’ New Formation and Professional Development”: UNESCO Teacher Education conference.

Santiago de Chile, Chile (2017 Apr). “La ciencia en el arte de enseñar”: Seminario Conferencias de Certificación para Docentes.

Abu Dhabi, United Arab Emirates (2017 Mar) “The Science in the Art of Teaching: Using Mind, Brain, and Education to Dispel Neuromyths and Improve Education” (keynote); “The Multilingual Brain”: International Conference on Educational Neuroscience, Emirates College for Advanced Education.

Honolulu, Hawaii (2017 Feb) “The Science in the Art of Teaching” (keynote); “Neuromyths”; “Emotions and the Mind-Body Connections”; “Differentiation and Inclusion”; “Learner Autonomy: Learning How to Learn”: Punahou School

Honolulu, Hawaii (2017 Feb) “Game Changing Elements in 21st Century Schools: Technology and Neuroscience in the Classroom”: Campbell Public High School and School Leaders from 17 public schools.

Madrid, Spain (2016 Nov) “La profesión más importante en la sociedad”; 50 Mejores Prácticas en la Enseñanza”: Facultad de Educación, Universidad SEK-Universidad Camilo José Cela

Geneva, Switzerland (2016 Nov) “Raising Multilingual Children” Know-It-All Parents.

Various cities, The Netherlands (2016 Nov). “Change Begins with Attitude” (keynote); “The Science in the Art of Teaching”; “Language, Multilingualism and School Effectiveness”: EP Nuffic, Dutch Government. Consultation with “integration schools”.

Bangkok, Thailand (2016 Oct). “Leadership for Change: What Hattie’s Research Indicates”; “How to Grow Neuroscience in the Schools”; “Raising Multilingual Children”: International School of Bangkok.

- Guadalajara, Mexico (2016 Oct).** “La ciencia en el arte de enseñar”; Enseñando en el salón multilingüe,” “El cerebro y multilingüismo”; “Los neuromitos”; “La formación docente en el siglo XXI”; “Evidence-based teaching in the multilingual classroom”: Tri-Association for American Schools.
- New Delhi, India (2016 Sept)** “Bold decisions, the brain and the digital age”; “Language Policies and International Schools”; “Teaching Multilingual Children using Evidence-Based Practice”: TAISI (Association of International Schools in India) Conference.
- Ribeiro Preto, Brazil (2016 Aug).** “The Science in the Art of Teaching”; Bilingualis, Myths and Executive Functions”; “How Executive Functions Are Enhanced by Bilingualism”: Aprender Crianca Brasil.
- Kamagawa, Japan (2016 Jun).** “Social Contagion and the Language Classroom” [via Skype]: JALT.
- York, Canada (2016 Apr).** “Teaching and Learning in the 21st Century” [webinar]: York University.
- Rotterdam, The Netherlands (2016 Apr)** “Game Changing Elements in 21st Century Schools”; “Risk and Protective Factors for Bilingual Education”; “When We Don’t Know We Are Teaching”; “Celebrations and Challenges for Bilingualism”; Ten Key Factors in Successful Bilingualism”: EP Nuffic Dutch Government.
- Rome, Italy (2016 Mar).** “Leadership: Bold decisions to change old paradigms about teaching in the digital age”; “School Language Policies: How Informed Choices Can Enhance Not Only Cultural Adaptation and Communication, but also Cognitive Potential”: European Council of International Schools.
- The Hague, The Netherlands (2016 Mar).** “Making Classrooms Better”: *Early English, Beyond Borders! Conference*, EP Nuffic Dutch Government.
- Various cities, The Netherlands (2016 Mar).** “Celebrations and Challenges for Early Childhood English Teachers: News from Neuroscience, Changing Educational Goals, and the Controversial Role of Technology in Language Instruction”: Holland Mini Conference Pilot Bilingual Primary Education in the Netherlands.
- Geneva, Switzerland (2016 Mar).** “Raising Multilingual Children”; “The Bilingual Edge”; “Reading and the Brain”: Proctor and Gamble.
- Geneva, Switzerland (2016 Mar).** “Raising Multilingual Children”: Know-It-All Parents.
- Paris, France (2016 Mar).** “Teaching Multilingual Children: Evidence-based practice”; “How Does Culture Change the Brain and What Does This Mean For Teachers?”; “The Bilingual Edge: Improved Thinking Thanks To Additional Languages”: ELSA Annual Teacher Development Day, “Teaching is Us!”
- Sydney, Australia (2016 Feb).** “Game Changing Elements in 21st Century Schools: The Role of Mind, Brain, and Education Educators”; “How Do You Measure Learning Progress?”: Mind, Brain, and Education conference, Pearsons Publication.

REFERENCES:

Helen Quinn, Ph.D., Professor, Stanford University (ret.), consultant for the Ecuadorian Government on the new Teacher University; quinn@slac.stanford.edu

Mary Helen Immordino-Yang, Ed.D., Professor, University of Southern California, Brain and Creativity Institute, Tel.: +001(213) 821-2969 immordin@usc.edu

Pilar Cabeza de Vaca, Director General of the Madeira School, Tel.: +001 (703)-556-8242
pcabezadevaca@madeira.org

Sonia Keller, Executive Directora de la Tri-Association of Schools; Tel.: +001 (843) 799-5754 skeller@tri-association.org

Carlos Montúfar, Ph.D., Rector de la Universidad San Francisco de Quito, Ecuador. Tel.: +593-(0)2-297-1700
cmontufar@usfq.edu.ec

More references available upon request.