

Appendix 2. CURRICULUM VITAE

CV



Jari Metsämuuronen,
RN, PhD, Adjunct Professor
Associate Professor

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1. NAME	Mr. Metsämuuronen, Jari Olavi
DATE	2017-08-01
2. DATE OF BIRTH	17.12.1962
PLACE OF BIRTH	Helsingin Maalaiskunta
NATIONALITY	Finnish
ADDRESS	Korsontie 18 B 7, 01450, Vantaa, Finland
3. EDUCATION	<ul style="list-style-type: none"> - Title of Adjunct Professor 1999 - Doctor of Education (PhD) 1995 - Degree Studies in Statistics 1993 - Master of Education (MA) 1991 - Registered Nurse (RN) 1985
4. OTHER TRAINING	<ul style="list-style-type: none"> - Degree studies in Theology and in Biblical languages 2009 – 2011 - Studies in University Pedagogics 2008 - Course of International Development Co-operation, (Ministry for Foreign Affairs) 2001 - Studies in Futurology 1997
5. LANGUAGE & DEGREE OF PROFICIENCY	<ul style="list-style-type: none"> - Finnish (native) - English (good, CEFR B2 or higher) - Swedish (fair, level required for a non-native civil servant) - Biblical Hebrew (CEFR level A2.2 “Developing Basic Proficiency” in Reading BH)
6. CURRENT EMPLOYER	
FROM: 1.8.2017	TO: continuing NLA University College, Bergen, Norway
POSITION HELD	Associate Professor
DESCRIPTION OF DUTIES	Specific duties in teaching quantitative methodology
SIDE POSTS & AFFILIATIONS	<ul style="list-style-type: none"> - Adjunct professor in Helsinki University (1999 on) - Company: International Methelp Oy (in Finland) (2001 on) - Company: International Methelp Nepal Pvt. Ltd. (in Nepal) (2013 on)
7. PREVIOUS EMPLOYERS	
FROM: 15.5.2014	TO: 30.7.2017 Finnish Education Evaluation Centre – FINEEC (3 years)
POSITION HELD	- Senior Researcher/Senior Evaluation Specialist (Permanent post)
DESCRIPTION OF DUTIES	<ul style="list-style-type: none"> - Project manager/Senior Psychometrician/Internal Consultant - Responsible for collecting and analyzing National Assessment data sets, especially responsible for samples, test construction and item banking, advanced analysis of the data, and reporting the results - Development of Evaluation and Assessment Methodology - Educating the project managers to test theory and item writing as well as

	research methods
FROM: 1.8.1998	TO: 15.5.2014 The Finnish National Board of Education (FNBE) (17 years)
POSITION HELD DESCRIPTION OF DUTIES	<ul style="list-style-type: none"> - Project manager/Senior Psychometrician/Internal Consultant (permanent post) - Responsible for collecting and analysing National Assessment data sets, especially responsible for samples, test construction and item banking, and Advanced analysis of data - Developing Assessment Methodology - Interim National Project Manager in OECD PIAAC project (2008) - Responsible for Future aspects for Finnish Educational Sector; NPM in OECD Schooling for Tomorrow project (2006 - 2008) - Duty to give courses to the staff of the Assessment Department (statistics and methodology) - Courses: <ul style="list-style-type: none"> • Basics of Methodology • Basics of Statistical Description • Basics of Statistical Inference • Basics of Qualitative Research • SPSS for Beginner Researcher • Basics of Test Theory and Item Banking • Basics of Multivariate Analysis • Basics of Non-parametric Methods • Basics of Experimental Research
FROM: 15.5.2013	TO: 28.2.2014 The World Bank (10 months)
POSITION HELD DESCRIPTION OF DUTIES	<ul style="list-style-type: none"> - International Consultant - Consulting and educating staff of Nepali MoE in Student assessment, item analysis, data analysis and future issues. - Establish an international levelled student assessment unit In Nepal - Consulting Chile in assessing the psychometric properties of the national test for teacher's education, <i>Prueba</i>.
FROM: 28.3.2011	TO: 15.9.2012 International Methelp Oy (18 months)
POSITION HELD DESCRIPTION OF DUTIES	<ul style="list-style-type: none"> - International Consultant - Consulting and educating staff of Nepali MoE in Student assessment, item analysis, data analysis and future issues. - Establish an international levelled student assessment unit
FROM: 29.6.2008	31.8.2009 Finnish Consulting Group (FCG) (1 + 1 months)
POSITION HELD DESCRIPTION OF DUTIES	<ul style="list-style-type: none"> - International Consultant - Consulting and educating staff of Palestinian MoE in Student assessment, item analysis, data analysis and future issues
FROM: 29.1.2005	TO: 15.10.2005 FIDA International (2 weeks)
POSITION HELD AND DESCRIPTION OF DUTIES	<ul style="list-style-type: none"> - International Consultant - Consulting and educating local leaders in the area of future oriented strategic planning in East Africa (Kenya and Ethiopia)
FROM: 1.3.2002	TO: 31.12.2002 FTP International (9 months)
POSITION HELD AND DESCRIPTION OF DUTIES	<ul style="list-style-type: none"> - International Consultant - Consulting Sri Lankan MoE for test construction and item banking - Educating the staff of MoE/NETS for assessment methodology
7B. COUNTRIES OF WORK EXPERIENCE	<ul style="list-style-type: none"> - Nepal 2015: Short term consultant (1 month) in the Ministry of Education in developing Criterion-referenced assessment system - Chile 2014: Short term consultant (2 months) as a Specialist of Item Banking and Test Construction 2013–2014 - Nepal 2010–2014: Long-term consultant (3+ years) in the Ministry of Education in establishing a student assessment unit

	<ul style="list-style-type: none"> - Israel 2009: Short-term consultant/lecturer in Rothberg International School, Israel, Bible translators' course - Palestine 2008–2009: Short term consultant (1 + 1 months) as a Specialist of Item Banking and Test Construction - Kenya and Ethiopia 2005: Short term consultant (3 weeks) as a specialist for Futures studies and strategic planning - Sri Lanka 2002: Long-term consultant (9 months) as a Specialist of Item Banking and Test Construction
<p>8. EXPERIENCES IN MANAGING and LEADING the PROJECT</p>	<ul style="list-style-type: none"> - Participated in 73 national level assessment- and evaluation project as the project manager, writer or the methodological supervisor either as the main statistician or consulting statistician - Project manager in the National Assessment projects <ul style="list-style-type: none"> o Digital leap – digitalizing the student achievement assessment (2015–2016) o Assessment of the achievement of Mathematics at the secondary education (High School & Vocational Education & Training) (2015–2016) o Development of the mathematical skills and attitudes – grades 3 – 6 -9 (2012–2013) o Language learning with repeated testing sessions; an intervention study in University of Helsinki (2009–2010) o Development of the mathematical skills and attitudes – grades 3 to 6 (2009–2010) o Interim National Project Manager in OECD PIAAC project (2008) o Responsible for Future aspects for Finnish Educational Sector in FNBE; National Project Manager in OECD Schooling for Tomorrow project (2006–2008) o Changes in the achievement and attitudes in Mother tongue in Finnish- and in Swedish languages of lower secondary education pupils (2005–2006) o Teachers ready for Information Society – The Final evaluation of OPE.FI project (2005) o Self-assessment tools for Schools (2004) - Project manager in the International settings <ul style="list-style-type: none"> o Editing and publishing three-volume handbook of research methods with SAGE publication (2012–2016) o Establishing a national Evaluation and Assessment unit in the Ministry of Education in Nepal (2011–2014) o Establishing a school-wise feedback system for the national assessment results in Palestine (2008–2009) o Establishing item banks for the national assessment department in Sri Lanka (2002) - Leading and participating a multi-disciplinary projects with post-doc researchers <ul style="list-style-type: none"> o Students achievement and Indoor quality (FNBE, THL, Aalto university 2011, 2016) o Explaining the longitudinal change in Mathematics achievement and attitudes (FNBE, NMI, University of Tampere, University of Helsinki 2010, 2013, 2016) - Supervising the students <ul style="list-style-type: none"> o 4 students at the Master's Level (2006, 2011), 5 students at the doctoral level (2005, 2010, 2014, 2015, 2016) o innumerable number unofficial consultations in Finland and abroad o several methodological courses for the doctoral level from 2005 on o several methodological courses for the basic level from 1995 on

9. TEACHING EXPERIENCES	<ul style="list-style-type: none"> - Pedagogical studies of 160 study points (Classroom teacher) + further studies (1991) - Teacher of Nursing 1995–1996 - Given courses in Methodology from 1995 on in different Universities, Polytechnics, and organizations - Participating a course of University Pedagogics 2008 in Helsinki University - Developing training material in a book format from 2001 on – the latest in three volumes with SAGE publication 2012–2016. Textbooks used in 26 different domains of science in almost all universities in Finland. - Daily base hands-on training in research methods and assessment methodology 2011–2014 in Nepal including capacity building within the Ministry of Education, World Bank and Asian Development Bank - Developing new ways of language learning – Conducting experimental project in the University of Helsinki - Supervising the students <ul style="list-style-type: none"> o Four supervised theses at the Master’s Level (2005, 2006), five at the doctoral level (2005, 2010, 2014, 2015, 2016), and numerous consultations and participation in writing articles o several methodological courses for the doctoral level from 2005 on o several methodological courses for the masters and college level from 1995 on
10. NOTIFICATIONS	<ul style="list-style-type: none"> - Several grants from the Finnish Association of Non-fiction Writers from 2001 on - Grant of the Public Information 2007
11. OTHER SCIENTIFIC OR ACADEMIC MERITS	<ul style="list-style-type: none"> - Adjunct Professor (Doz.) from 1999 on - International Consultant for World Bank 2013 - Member of Finnish Future Studies Society 1997– - Member of The Finnish Association of Non-fiction Writers, 2001– - Editor of <i>FUTURA</i> journal of Finnish Futures Studies Society 1998 – 2000 - Member of Association of Docents in University of Helsinki 2000– - Referee in several journals (Methodological expert)
12. EFFECTIVENESS OF SCIENTIFIC CONTRIBUTION	<ul style="list-style-type: none"> - 120 publications - h index in Google Scholar 19 - Citations in Google Scholar 7383 (31.7.2017) - h index in ResearchGate 6 - Top <i>h</i> cited publications according to ResearchGate: <ul style="list-style-type: none"> o Fågelholm M, Stigman S, Huisman T & Metsämuuronen J (2007). Physical fitness in adolescents with normal weight and overweight. <i>Scandinavian Journal of Medicine and Science in Sports</i>, 18(2), 162–170. http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0838.2007.00685.x/abstract o Haverinen-Shaughnessy U, Turunen M, Metsämuuronen J, Palonen J, Putus T, Kurnitski J, Shaughnessy R (2011). Sixth Grade Pupils’ Health and Performance and Indoor Environmental Quality in Finnish School Buildings. <i>British Journal of Educational Research</i>, 2(1), 4 –58. o Metsämuuronen J (2012). Challenges of the Fennema-Sherman Test in the International Comparisons. <i>International Journal of Psychological Studies</i>, 4(3) September, 1–22. http://www.ccsenet.org/journal/index.php/ijps/article/view/16904/12480. o Metsämuuronen J (2012). Comparison of Mental Structures of Eighth-Graders in Different Countries on the basis of Fennema-Sherman test. <i>International Journal of Psychological Studies</i>, 4(4) December, 1–17. http://www.ccsenet.org/journal/index.php/ijps/article/view/17305/14331. o Metsämuuronen J, Svedlin R & Ilic J (2012). Change in Pupils’ and

MERITS in
PRODUCING and
SHARING research
DATASETS

Students' Attitudes toward School as a Function of Age – A Finnish Perspective. *Journal of Educational and Psychological Development*, 2(2) November, 134–151.

<http://www.ccsenet.org/journal/index.php/jedp/article/view/20578/13500>

- **Metsämuuronen J (Ed.) (2013)**. Perusopetuksen matematiikan oppimistulosten pitkittäisarviointi vuosina 2005–2012. [Longitudinal analysis of the Mathematical Achievement in the Compulsory Education in 2005–2012.] Koulutuksen seurantaraportit 2013:4. Opetushallitus. Tampere: Juvenes Print – Suomen Yliopistopaino Oy.

- **Metsämuuronen J, Kuosa T & Laukkanen R (2013)**. Sustainable leadership and future-oriented decision making in the educational governance – A Finnish case. *International Journal of Educational Management*, 27(4).

<http://www.emeraldinsight.com/journals.htm?articleid=17083274>

Slotte S, Sääkslahti A, Metsämuuronen J, & Rintala P (2014).

Fundamental movement skill proficiency and body composition measured by dual energy X-ray absorptiometry in eight-year-old. *Early Child Development and Care*, DOI:

<http://dx.doi.org/10.1080/03004430.2014.936428>

http://www.tandfonline.com/doi/abs/10.1080/03004430.2014.936428#.VeE9_4LovIV

MERITS in
UTILIZING the
RESEARCH
RESULTS

Datasets produced by me are in a semi-wide use in the academic world either in articles or doctoral and master's theses. The tens of datasets concerning the student achievement are openly usable by request. Some of the articles and thesis using these datasets are:

Tuohilampi L (2016). Deepening mathematics related affect research into social and cultural: Decline, measurement and significance of students' multi-level affect in Finland and Chile. Doctoral thesis. University of Helsinki, Faculty of Behavioural Sciences, Department of Teacher Education. <http://hdl.handle.net/10138/160159>. Retrieved from

<https://helda.helsinki.fi/bitstream/handle/10138/160159/Deepenin.pdf?sequence=1>.

Toyinbo O, Shaughnessy R, Turunen M, Putus T, Metsämuuronen J, Kurenitski J, & Haverinen-Saughnessy U (2016). Building characteristics, indoor environment quality, and mathematics achievement in Finnish elementary schools. *Building and Environment*, 104, 114–121. DOI: <http://dx.doi.org/10.1016/j.buildenv.2016.04.030>.

Metsämuuronen J & Tuohilampi L (2014). Changes in Achievement in and Attitude toward Mathematics of the Finnish Children from Grade 0 to 9—A Longitudinal Study. *Journal of Educational and Developmental Psychology*, 4(2), 145–169. <http://www.ccsenet.org/journal/index.php/jedp/article/view/36185>.

Hannula MS, Bofah E, Tuohilampi L & Metsämuuronen J (2014). A longitudinal Analysis of the Relationship between mathematics-related affect and achievement in Finland. Proceedings of the Joint Meeting of PME 38 and PME-NA 36, Vancouver; 07/2014

Heikinaro-Johansson, P., Palomäki, S., & McEvoy, E. (2014). Embracing Change and Increasing Physical Activity in Finnish Schools. In M.-K. Chin, & C. R. Edginton (Eds.), *Physical Education and Health : Global Perspectives and Best Practice* (pp. 163-175). Urbana, IL: Sagamore Publishing.

Räsänen P & Närhi V (2013). Heikkojen oppijoiden koulupolku. In J Metsämuuronen (toim.), *Matematiikan oppimistulosten pitkittäisseuranta vuosina 2005–2012*. Koulutuksen seurantaraportti 2013:4. Opetushallitus. Helsinki: Edita Prima Oy. ss 173–230.

Tuohilampi L & Hannula MS (2013). Matematiikkaan liittyvien asenteiden kehitys sekä asenteiden ja osaamisen välinen vuorovaikutus 3., 6. ja 9. luokalla. Teoksessa J Metsämuuronen (toim.), *Perusopetuksen matematiikan oppimistulosten*

pitkittäisarviointi vuosina 2005–2012. Koulutuksen seurantaraportit 2013:4. Opetushallitus. Tampere: Juvenes Print – Suomen Yliopistopaino Oy. ss. 231–252.

Hannula M & Oksanen S (2013). Opettajamuuttujien yhteys osaamisen muutokseen. Teoksessa J Metsämuuronen (toim.), *Perusopetuksen matematiikan oppimistulosten pitkittäisarviointi vuosina 2005–2012*. Koulutuksen seurantaraportti 2013:4. Opetushallitus. Tampere: Juvenes Print – Suomen Yliopistopaino Oy. ss. 255–296.

Räsänen P, Närhi V & Aunio P (2010). Matematiikassa heikosti suoriutuvat oppilaat perusopetuksen 6. luokan alussa. Teoksessa EK Niemi & J Metsämuuronen (toim.), *Miten matematiikan taidot kehittyvät? Matematiikan oppimistulokset peruskoulun viidennen vuosiluokan jälkeen vuonna 2008*. Koulutuksen seurantaraportti 2010:2. Opetushallitus. Helsinki: Edita Prima Oy. ss. 165–204.

A new method for standards setting (3TTW) published in

Metsämuuronen J (2013). A New Method to Setting Standard for the Wide Range of Language Proficiency Levels. *International Education Research*, 1(1), <http://www.todayscience.org/IER/v1/Jari%20Metsamuuronen.pdf>

has been used in Finland in assessing the proficiency of Finnish for the Swedish speaking students (Metsämuuronen, 2010, see the list of references), Finnish as the Second language (Kuukka & Metsämuuronen, 2016), Mathematics in Vocational Education (Metsämuuronen, 2016; Metsämuuronen & Salonen, 2016), and Sustainable development in Vocational Education and training (Räkköläinen & Metsämuuronen, 2016). It has also been used in Nepal in assessing the national proficiency level in Nepali (Acharya, Metsämuuronen, & Adhikari, 2013; Metsämuuronen, Acharya, & Aryal, 2013; Acharya & Metsämuuronen, 2014), English (Metsämuuronen, 2014), as well as Mathematics and Science (ERO, 2015).

A suggestion for international standards for mathematics published in

Metsämuuronen J (2016). Challenges in the National Level Criterion-referenced assessment. *Nepalese Journal of Educational Assessment*, 1(1), 17 – 36.

and elaborated in

Metsämuuronen J (2017). Common Framework for Mathematics – Discussions of Possibilities to Develop a Set of General Standards for Assessing Proficiency in Mathematics. *IEJME – Mathematics Education* (Accepted)

The first research report in Nepalese students achievement level **Metsämuuronen J & Kafle BR (Eds) (2013)**. *Where Are We Now? Student achievement in Mathematics, Nepali and Social Studies in 2011*. Ministry of Education, Kathmandu, Nepal.

caused a strong movement in Nepal: A high level committee was established under the National Planning Commission to apply the suggestions given in the report into practice.

Some reports are used as a study material in teaching. One of these is **Metsämuuronen J (2000)**. *Maailma muuttuu – miten muuttuu sosiaali- ja terveysala*.

2. tarkistettu painos. Helsinki: Oy Edita Ab. [In Finnish] of the futures of the Social welfare and health care. This is used in many polytechnics in Nursing education.

Another is **Metsämuuronen J (Ed.) (2013)**. *Perusopetuksen matematiikan oppimistulosten pitkittäisarviointi vuosina 2005–2012*. [Longitudinal analysis of the Mathematical Achievement in the Compulsory Education in 2005–2012.] Koulutuksen seurantaraportit 2013:4. Opetushallitus. Tampere: Juvenes Print – Suomen Yliopistopaino Oy. <http://karvi.fi/app/uploads/2014/09/OPH-0113.pdf>. The latter is in use in teachers education in Helsinki University. Also, most of the Finnish research reports are keenly read by the teachers, teachers' educators and curriculum developers as well as the ministry officers.