# 1. PERSONAL DETAILS AND DATE OF CV

• Surname: Sointu

• Given names: Erkko Tapio

• Researcher identifier: 0000-0003-4001-7264 (ORCID)

• Date of CV: October 17, 2020

#### 2. DEGREES

• May 22<sup>nd</sup> 2014, PhD (Education), special education (major), University of Eastern Finland (UEF).

- June 27th 2008, Master of Education, special education (major), University of Joensuu
- → Contact information for both degrees: UEF, Yliopistokatu 2, 80100 Joensuu, tel. +358 (0)294 45 111
- July 1<sup>st</sup> 2020, Title of Docent, University of Lapland (ULA), Faculty of Education. Yliopistonkatu 8, 96300 Rovaniemi, tel. 016 341 341.

# 3. OTHER EDUCATION AND TRAINING, QUALIFICATIONS AND SKILLS

- Applied quantitative analysis with programs SPSS, Mplus, Winsteps (psychometrics, analysis of cross-sectional and longitudinal data, structural equation modeling, Rasch analysis).
- Large-scale research data management.

#### 4. LANGUAGE SKILLS

• Mother tongue: Finnish.

• Other languages: Strong English, moderate Swedish.

#### 5. CURRENT EMPLOYMENT

• June 1<sup>st</sup> 2019, Assistant Professor (Fin. yliopistotutkija, tenure track) of Learning and Novel Teaching Methods Development, UEF/Joensuu, Special Education/School of Educational Sciences and Psychology, 1.6.2019– (16 months).

#### Fields of research

- o Higher education and basic education learning and teaching.
- o Special education, emotional and behavioral functioning of students, strength-based assessment.
- o Use of technology and attitudes towards using technology in teacher education.

# 6. PREVIOUS WORK EXPERIENCE

- Postdoctoral researcher (tenure track), UEF, Special Education /Learning in Interactive Environments (LINE) research area, School of Educational Sciences and Psychology, 1.4.2016–31.5.2019 (38 months), Joensuu.
- Postdoctoral researcher fellow, 1.1.2015–31.3.2016, UEF-wide fellowships (competitive), School of Applied Educational Science and Teacher Education/LINE, 1.1.2015–31.3.2016 (15 months), Joensuu.
- Postdoctoral researcher, UEF, PREP21-project (Academy of Finland), School of Applied Educational Science and Teacher Education, 1.8.2014–31.12.2014 (5 months), Savonlinna.
- Early stage researcher, UEF, Joensuu campus, ISKE and ProKoulu –projects, School of Educational Sciences and Psychology, 1.8.2013–31.7.2014 (12 months).
- Grant researcher, funded by UEF Philosophical Faculty, doctoral dissertation work, 1.5.–31.7.2013 (3 months).
- Grant researcher, funded by Finnish Cultural Foundation, doctoral dissertation work, 1.8.2012—30.4.2013 (9 months).
- Early stage researcher, UEF, Joensuu campus, ISKE-project, School of Educational Sciences and Psychology, 1.5.2010–31.7.2012 (27 months).

• Grant researcher, funded by University of Joensuu/UEF Competence Center of Pedagogical Well-Being, doctoral dissertation work, 1.8.2009–30.4.2010 (9 months).

- Special education teacher (grades 7–9), Joensuu Municipality, 8.8.2008–30.5.2009 (10 months).
- Earlier teacher, academic assistant and other work experience information provided on request.

# 8. RESEARCH FUNDING AS WELL AS LEADERSHIP AND SUPERVISION

# **Research funding**

- Funding for professor research visit (Matthew C. Lambert) to UEF/Joensuu, 2021, research funding, Joensuun yliopiston tukisäätiö, 15 000 €, principal investigator (PI), main author of the application.
- Utilization of learning analytics in the various educational levels for supporting self-regulated learning (OAHOT) project 2020-2022, research funding, Business Finland, 1 200 000 €, work package leader and one of the main authors of application, PI Dr. Laura Hirsto.
- Flip & Learn student research at Tampere University (TAU), 2019-2021, research funding, TAU and UEF, 54 000 €, PI of student research and main author of the application, consortium PI's Mari Murtonen/Petri Nokelainen.
- TUVET/KTVA//#Paraskoulu project aiming to develop research founded collaborative and strength-based support with students, caregivers and university practice school, 2019-2020, research funding, Finnish National Agency for Education, CO-PI and CO-author of the application, 25 000 €, another CO-PI Dr. Aino Äikäs.
- Fulbright Specialist Program (Dr. C. Cutucache) visit to UEF/Joensuu, 2019, research funding, Fulbright Finland, (est.) 8 000 €, PI, main applicant.
- Flipped Learning (FL) evidence-based developmental project aiming to improve digi-pedagogical skills of university teachers, 2017-2019, grant, Finnish Ministry of Education and Culture, consortium PI at UEF and one of the main authors of the application, 847 000 €, Leader Dr. Riitta Pyykkö (UTU).
- Funding for professor delegation visit from the US/University of Nebrska at Omaha to UEF/Joensuu, 2016, research funding, Joensuun yliopiston tukisäätiö, 1000 €, PI, main applicant.
- Fulbright Specialist Program (Dr. M.C. Lambert) visit to UEF/Joensuu, 2016, research funding, Council for International Exchange (CIES) / The Fulbright Center, (est.) 8 000 €, PI, main applicant (joint application of UEF/ University of Jyväskylä).
- Digiopetuksen valmiudet (DIVA) -hanke [Readiness for Digi Learning -project], 2015, UEF, research funding, 30 000 €, one author of application, PI Dr. Teemu Valtonen.
- Fulbright Center Travel Grant for Research Collaboration, 2015, research funding, Finland-US Educational Exchange Commission (The Fulbright Center Board), 1 330 €, PI and main applicant.
- Postdoctoral researcher exchange travel grant to the USA, 2014, research funding, University of Nebraska-Lincoln, (est.) 3 750 \$, one of the main author of the application and PI.
- Grant for doctoral studies, 2013, research funding, UEF/Philosophical Faculty, 4 350 €, PI, main applicant.
- Research collaboration travel grant to the US with PhD supervisor, 2012, research funding, University of Nebraska-Lincoln, (est.) 5 000 \$.
- Grant for doctoral studies, 2010, research funding, Finnish Cultural Foundation, 14 000 €, PI, main applicant.
- Grant for doctoral studies, 2009, research funding, University of Joensuu/UEF Competence Center of Pedagogical Well-Being, 13 500 €, PI and main applicant.

### 9. RESEARCH OUTPUT

• Total number of publications 54: 27 peer reviewed scientific articles (A1), one review article (A2), two peer reviewed book sections (A3), Nine peer reviewed conference proceeding articles (A4), four unrefereed scientific journal articles (B1), two book sections (B2), three edited conference proceedings or special issues of journal (C2), one article in a professional book (D2), two developmental or research report (D4), one textbook, professional manual (D5), one popularized monograph (E2), one audiovisual material (I1). For detailed information, please see List of Publications.

# • Selected 10 publications:

- 1. Valtonen, T., **Sointu, E.**, Kukkonen, J., Hoang, N., Mäkitalo, K., Häkkinen, P., Järvelä, S., Näykki, P., Virtanen, A., Pöntinen, S., Kontkanen, E., Tondeur, J. (2019). Examining pre-service teachers' TPACK as evolving knowledge domains: A longitudinal approach. *Journal of Computer Assisted Learning*, 25(4), 491-502.
- 2. Hyypiä, M.<sup>1</sup>, **Sointu, E.<sup>1</sup>**, Hirsto, L., & Valtonen, T. (2019). Key components of learning environments in creating a positive flipped classroom course experience. *International Journal of Learning, Teaching and Educational Research*, 18(13), 61–86. <sup>1</sup>Two first authors with equal contribution
- 3. **Sointu, E.**, Valtonen, T., Hirsto, L., Kankaanpää, J., Saarelainen, M., Mäkitalo, K., Smits, A. & Manninen, J. (2019). Teachers as users of ICT from the student perspective in higher education flipped classroom classes. *Semianr.net International Journal of Media, Technology & Life-long Learning*, 15(1), 1-15.
- 4. Lambert, M.C., **Sointu, E.T.**, & Epstein, M.H. (2019). A Comprehensive Review of International Research Using the Behavioral and Emotional Rating Scale. *International Journal of School and Educational Psychology*, 7(3), 215-226.
- Henriksen, D., Henderson, M., Creely, E., Ceretkova, S., Černochová, M., Sendova, E., Sointu, E.T., Tienken, C.H (2018). Creativity and Technology in Education: An International Perspective. *Technology, Knowledge and Learning*, 23(3), 409-424.
- 6. Tusa, N. \*, **Sointu, E.** \*, Kastarinen, H., Valtonen, T., Kaasinen, A., Hirsto, L., ... & Mäntyselkä, P. (2018). Medical certificate education: controlled study between lectures and flipped classroom. *BMC Medical Education*, *18*(1), 243–248. \*The paper has two first authors with equal contributions
- 7. **Sointu, E.T.,** Valtonen, T., Cutucache, C., Kukkonen, J., Lambert, M.C., & Mäkitalo-Siegl, K. (2017). Differences in preservice teachers' readiness to use ICT in education and development of TPACK. In P. Resta & S. Smith (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2017* (pp. 2462-2469). Chesapeake, VA: AACE.
- 8. Valtonen, T., **Sointu, E.T.**, Kukkonen, J., Häkkinen, P., Järvelä, S., Ahonen, A., ... & Mäkitalo-Siegl, K. (2017). Insights into Finnish first-year pre-service teachers' perceptions of their 21st century skills. *Education and Information Technologies*, 22(5), 2055–2069
- 9. **Sointu, E. T.**, Savolainen, H., Lappalainen, K., & Lambert, M. C. (2017). Longitudinal associations of student–teacher relationships and behavioral and emotional strengths on academic achievement. *Educational Psychology*, 37(4), 457–467.
- Valtonen, T., Sointu, E., Kukkonen, J., Kontkanen, S., Lambert, M.C., & Mäkitalo-Siegl, K. (2017). TPACK Updated to Measure Pre-Service Teachers' 21st Century Skills. *Australasian Journal of Educational Technology*, 33(3), 15–31.

# 10. RESEARCH SUPERVISION AND LEADERSHIP EXPERIENCE

#### **Supervision**

- Second supervisor of three and third supervisor in one doctoral dissertation works.
- Supervised 18 master theses, currently advisor in four master theses.
- Currently two project researchers, several research assistants.

# Leadership in research work

- Work package leader of OAHOT project 2020-2020.
- CO-PI of TUVET/KTVA//#Paraskoulu project 2019-2020.
- Sub-group (i.e., lake) leader and member of steering group of UEF strategic Learning in Digitalized Society (DIGS) Research Community 2019—.
- Consortium PI at UEF of the FL project, 2017–2019.
- Research leader and coordinator: UEF learning environments development, Ameba-research team, 2016-2020.
- Vice-leader of the ICT in education research/development group (TOTY), TOTY is a part of UEF's strategic research area called Learning in Interactive Environments (LINE), 2015–2019.
- Leading project data analysis and data management at UEF (as part of postdoctoral researcher work) in PREP21 –project 2014-2017.

### 11. TEACHING MERITS

# Pedagogical training and competence

- Special education teacher, classroom teacher (M. Ed., 60 ETCS), higher ed. teacher and educator.
- Qualified teacher in both basic education and higher education.

# Approved teaching demonstrations

- Title of docent teaching demonstration with distinction, ULA, 12.6.2020, grade outstanding.
- Assistant professor position, Faculty of Behavioral Sciences, University of Helsinki, 16.9.2015 grade very good.

### **Involvement curriculum planning**

- Research-based higher education pedagogical development 2015-2020 with Flipped approach, https://www3.uef.fi/en/web/flippaus at UEF and with UTU, JYU, UNIARTS, TAU.
- Development project of UEF learning environments/Flipped Classroom project 2016-2017.
- Teacher in charge of quantitative research methods 2 course. Tasks of this new English course included planning, creating interactive learning platform, use of new pedagogical approaches (video lectures, distance learning, Flipped Classroom) and running the course since 2014—.
- Planning/implementing courses with Fulbright specialist Matthew C. lambert: Intervention and Longitudinal Research in Educational Sciences (1 ETCS), Applied Psychometrics for Assessment Development (1 ECTS).
- Planning/implementing course: Reading and writing for international articles (3 ECTS), 2013.
- Planning and teaching a course as a part of post-graduate studies: Introduction to special education (3 ECTS) for UEF international exchange students, 2010–2012.

### **Development of teaching methods**

• Received (est.) 39 000 € funding for research-based development of teaching and learning

#### 12. AWARDS AND HONORS

- Nomination for European Association for Research on Learning and Instruction (EARLI) Erik De
  Corte award to recognize an early career and promising scholar in the field of Learning and Instruction
  26.6.2019 (three shortlisted nominees), EARLI.
- European Association for Practitioner Research on Improving Learning (EAPRIL) Best Research and Practice Project Award 2018. Sointu, Hirsto, Kankaanpää et al. (2018), Flipping Finland.
- Interactive Technology in Education (ITK) 2018 High-class and innovative research award 2018. Sointu, E., Valtonen, T., Mäkitalo, K., Hirsto, L., Manninen, J., Kankaanpää J., & Saarelainen, M. (2018). The development of ICT and pedagogical skills of teachers in Flipped Classroom courses, student perspective.

• Two Top Downloaded Papers 2018-2019 at Journal of Computer Assisted Learning and British Journal of Educational Technology (co-author).

- SITE 2017 Outstanding Paper Award (full paper): Sointu, E.T., Valtonen, T., Cutucache, C., Kukkonen, J., Lambert, M.C., & Mäkitalo-Siegl, K. (2017). Differences in preservice teachers' readiness to use ICT in education and development of TPACK. In P. Resta & S. Smith (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2017 (pp. 2462-2469). Chesapeake, VA: AACE.
- SITE 2016 Outstanding Poster Award, second place: Valtonen, T. Sointu, E., Mäkitalo-Siegl, K., Häkkinen, P., Järvelä, S., Ahonen, A.K., Näykki, Kukkonen, J., Isohätälä, J. & Pöysä-Tarhonen, J. (2016). PREP21 Preparing teacher students for 21st century learning practices.
- ECER 2014 Poster Award: Mäkitalo-Siegl, K., Häkkinen, P., Järvelä, S., Ahonen, A.K., Näykki, P., Valtonen, T. & Sointu, E. (2014). Preparing teacher students for 21st century learning practices. Ways of thinking and working.

#### 13. OTHER ACADEMIC MERITS

- Pre-examiner of Kati Sormunen (University of Helsinki, 2020), Ottavia Trevisian (University of Padua, 2019) doctoral dissertation works.
- Member of Executive Committee of the EdMedia+Innovate Learning Conference 2017–2020.
- Member of steering group, *Strengthening pedagogical and digital instruction skills of higher education staff*, a key project of and funded by the Finnish Ministry of Education and Culture 2017–2019.
- Co-chair and coordinator of European research group of ICT in teacher education (EuroSITE), 2014—.
- Coordinator and co-chair of FERA ICT in teacher education sig-group, 2014–2019.
- Member of Association for the Advancement of Computing in Education (AACE), 2016–.
- Member of European Association for Research on Learning and Instruction (EARLI), 2015-.
- Member of European Association for Practitioner Research on Improving Learning (EAPRIL), 2018–.
- Member of Finnish Educational Research Association (FERA), 2011-.
- Member of editorial board: Journal of Educational Enquiry 2014–2019.
- Member of editorial board: Proceedings of EdMedia: World Conference on Educational Media and Technology. Amsterdam, Netherlands: AACE, 2018—.
- Member of UEF Digisparraajat [Digisupporters] and Learning environments development group at UEF 2019—.
- Peer reviewer in 14 different journals and in various conferences.
- Several conference and symposiums presentations, information available on request.
- Significant key note speeches and invited lectures
  - Sointu, E. (2020, June). Flipped UEF. Keynote speaker at University of Essex Education Conference, UK.
  - o Sointu, E. (2019, June). *Networking for you early career*. Invited speaker for Edmedia + Innovative Learning 2019 conference Emerging Scholar Stream, Amsterdam, The Netherlands.
  - o Sointu, E. (2019, May). *Käänteinen opetus korkeakoulussa* [Flipped Classroom in Higher Education]. Keynote speaker in University of Turku pedagogical conference, Turku, Finland.
  - Sointu, E. (2019, January). Miten käyttäytymisen ja tunteiden vahvuuksien tunnistaminen vaikuttaa koulunkäyntiin? [How behavioral and emotional strengths incluence on schooling?]. Invited speaker at EDUCA 2019, Helsinki, Finland.
  - o Sointu, E. (2019, January). *Future pedagogy. Shaping the future of education*. Invited speaker at ITEM, London, United Kingdom.
  - o Sointu, E. (2018, November). *Johtaminen hankkeessa. Noviisin näkökulmaa*. Keynote speaker at Digipeda seminar, Helsinki, Finland.

 Sointu, E., Hirsto, L., Valtonen, T., Saarelainen, M., Kankaanpää, J., Manninen, J., ... & Pekkarinen, V. (2018, November). *Flipping Finland*. Invited presentation for Best Research and Practice Project award at EAPRIL, Portoroz, Slovenia.

- o Sointu, E. & Smits, A. (2018, November). *European ICT in teacher Education*. Invited spotlight symposium at EAPRIL, Portoroz, Slovenia.
- o Sointu, E. (2017, August). *Student research in Flipped Classroom project*. Invited speaker at Flip-Camp, Rauma, Finland.
- o Valtonen, T. & Sointu, E. (2015, April). *Opettajaopiskelijoiden TVT -tietotaito ja -asenteet*. [Preservice teachers' ICT knowledge and attitudes]. Invited speakers at ITK, Hämeellinna, Finland.
- o Sointu, E., (2015, November). *Educational changes, education and educational research in Finland*. Keynote speaker in international educational seminar, Omaha, NE, USA.
- Chair of FERA pre-conference seminar and organizing committee of Enhancing digi-pedagogical skills of higher education staff and change of learning environments. November 20, 2019, Joensuu.
- Member of Organizing Committee and Programme Director of the International Symposium on New Issues in Teacher Education (ISNITE) 2016, Savonlinna, Finland.

#### 14. SCIENTIFIC AND SOCIETAL IMPACT

- Invited member of the EDUsummIT 2019 (UNESCO), Québec City, Canada, 29.9.-2.10.2019.
- Invited member of the EDUsummIT 2017 (UNESCO), Borovets, Bulgaria, 18.9.-20.9.2017.
- Advisor of higher education pedagogy development at the University of the Arts Helsinki 2019—.
- Peer reviewer, member of selection committees for the Fulbright Finland grant applications and educator for Fulbright Finland grantees 2016-2020.
- Research ethics, data protection and data management adviser for several projects 2015—.

### 15. OTHER MERITS

- Member of Philosophical Faculty's research and post-graduate studies committee 2010–2011.
- Finnish conscript (military) service 2002-03, reserve rank: second lieutenant.