Nordic Centre in India and GINTL India Present

21 APRIL 2022 | 12 PM EEST | 2:30 PM IST

Reforming Teacher Education in the 21st century, part 2: Exchanging Research and Practices between India and Finland

NORDIC CENTRE IN INDIA

GINTL

Spark cycles of learning for quality education

GLOBAL INNOVATION NETWORK FOR TEACHING AND LEARNING

Programme

Moderator: Director Christabel Royan, Nordic Centre in India, New Delhi, India

12:00PM EEST/ 2:30PM IST OPENING WORDS BY DIRECTOR CHRISTABEL ROYAN, NCI

12:00PM EEST/ 2:30PM IST PRESENTATIONS, PART 1

Dr. Hannele Cantell, Associate Professor (Title of Docent), University Lecturer, University of Helsinki, Finland
Sustainability education: what kind of knowledge and actions are needed for sustainable living and future

Ms. Kinnari Pandya, Assistant Professor, School of Education, Azim Premji University, India
Understanding Teacher Development: A glimpse of studies undertaken by Azim Premji University

Ms. Myrto Kyriazopoulou, Doctoral Researcher, University of Jyväskylä, Finland
Emotional Intelligence in teacher education: Relations to teacher self-efficacy in a cross-cultural setting and motivation for choosing teaching career

Dr. Radhika Menon, Associate Professor, Mata Sundri College for Women, University of Delhi, India.
Gender concerns in Teacher Education

Dr. Poonam Sharma, Assistant Professor, Tata Institute of Social Sciences, India
Centre for Excellence in Teacher Education, Tata Institute of Social Sciences, India

Professor Yukti Sharma, Central Institute of Education, Delhi University

12:40PM-1:00PM EEST / 3:10-3:30PM IST DISCUSSION, PART 1

Programme

1:00-1:40PM EEST/ 3:30-4:10PM IST PRESENTATIONS, PART 2

Professor Chellamani Kathirkamanathan, Pondicherry University, India
Neuro Science and Education

Dr. Eila Burns, Senior Researcher, JAMK University of Applied Sciences, Finland
Overview of Innovative Learning Research at JAMK

Ms. Julia Renko, Course Coordinator at Sustainable Global Technologies Programme, Aalto University, Finland
The role of problem-based learning (PBL) in integrating sustainability to engineering education

Dr. Gunjan Sharma, Assistant Professor, Ambedkar University Delhi, India
Reforming and Regulating Teacher Education in India: Implications for Universities

Dr. Laura Helle, University Research Fellow, Adjunct Professor, University of Turku, Finland

Does radical student-centered instruction actually work? A comparison of two types of business curricula

Professor Mikko Ruohonen & Gururaj Mahajan, Research Coordinator, Tampere University, Finland
Research on University Relationships building for Smart Agriculture and Entrepreneurship (SAE) education (UR for SAE education)

Dr. Jyoti Raina, Associate Professor & Dr. Parul Karla, Assistant Professor, Gargi College, India
Development of contextualised regulatory frameworks of initial teacher education

1:40PM-2:00PM EEST / 4:10PM-4:30PM IST DISCUSSION, PART 2

2:00 PM EEST / 4:30PM IST END OF EVENT

Sustainability education: what kind of knowledge and actions are needed for sustainable living and future

DR. HANNELE CANTELL, ASSOCIATE PROFESSOR
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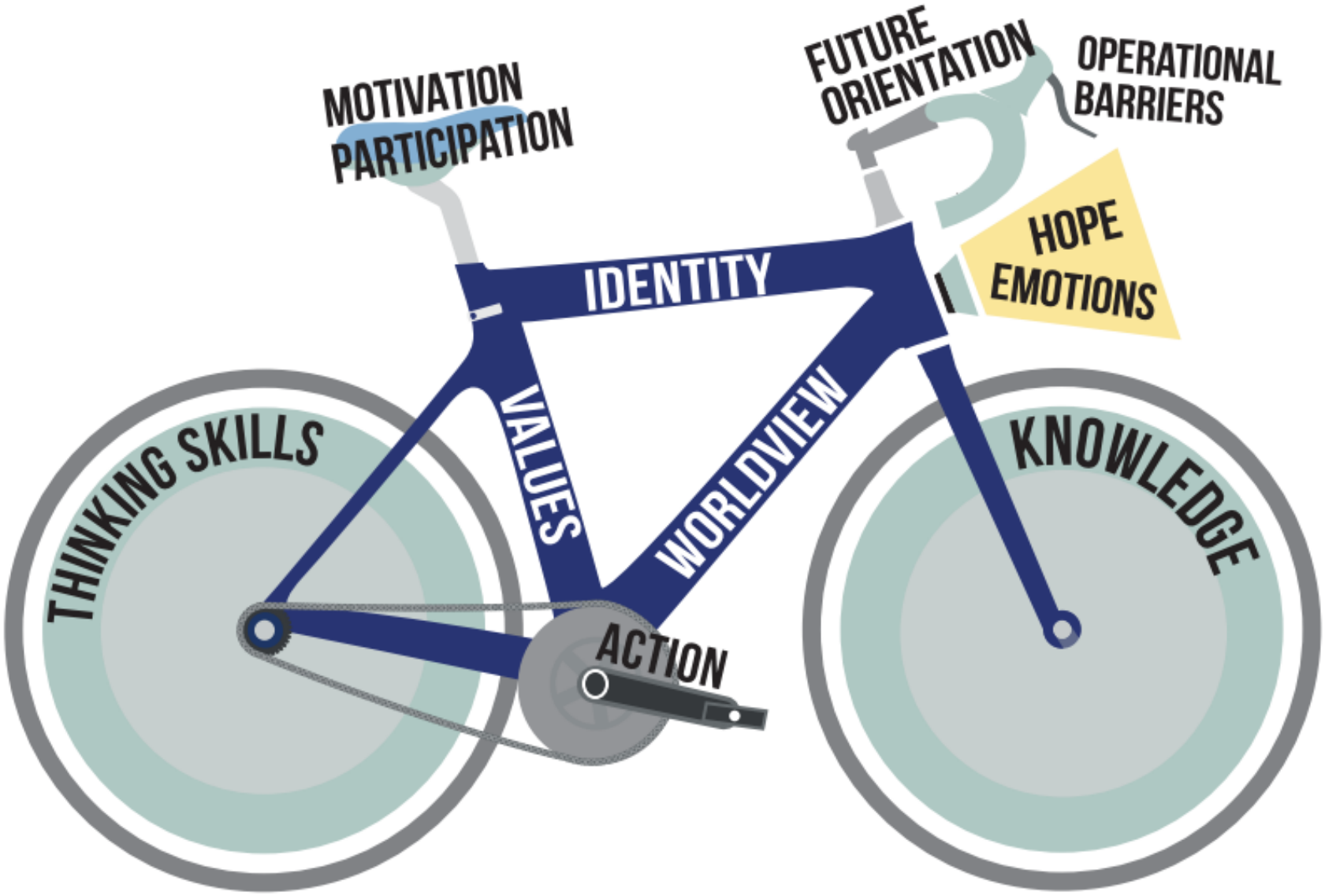
UNIVERSITY OF HELSINKI, FINLAND



Cantell, Hannele. Tolppanen, Sakari. Aarnio-Linnanvuori, Essi. Lehtonen, Anna. (2019). Bicycle model on climate change education: presenting and evaluating a model. *Environmental education research, 25* (5) , 717-731. https://doi.org/10.1080/13504622.2019.1570487

The need of global sustainability –> new goals for education and bildung

Agenda 2030

Respecting and cherishing nature

Ecosocial thinking

Multi/cross-disciplinary knowledge

Transformative thinking (systemic, future, strategic, values thinking)

Posthumanism

To be satisfied with less (and less consuming)

Compassion, empathy, kindness, respect

Dialogue skills

Tolerance for uncertainty, life skills

Zest for life

Participation, agency

Prevention of marginalization

Equality and equity (understanding post-colonialism and privileges -> antiracism education)

Key words: teacher professional development, continuous teacher professional development, post-independence India teacher education, teaching about teaching, policy analysis, voices of teachers, voluntary teacher forums, teacher learning centres, early years teacher professional development

UNDERSTANDING TEACHER DEVELOPMENT: A GLIMPSE OF STUDIES UNDERTAKEN BY AZIM PREMJI UNIVERSITY AND FOUNDATION

Kinnari Pandya, Assistant Professor, Azim Premji University
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In-service Teacher Education - Studies on Field

- Evolution of Cluster-level Monthly Meetings as a Forum for Continuous Professional Development of Teachers Experiences from Uttarakhand (2017)
  https://apfstatic.s3.ap-south-1.amazonaws.com/s3fs-public/Cluster%20monthly%20meetings%20-%20Uttarakhand.pdf?9e_TJMMdM.G_JwaueT50P9Ex8SqxQzSA

- Role of Voluntary Teacher Forums (VTFs) in Continuous Teacher Professional Development in India: Experiences from Rajasthan, Karnataka and Puducherry (2017)
  http://publications.azimpremjifoundation.org/15/

- Starting And Sustaining Voluntary Teacher Forums Experience From Tonk, Rajasthan
  https://azimpremjiuniversity.edu.in/field-studies-in-education/starting-and-sustaining-voluntary-teacher-forums

- Setting Up Teacher Learning Centres. Experiences From Some Districts Of Chhattisgarh, Karnataka, And Rajasthan

- Neglecting Support for Teacher: Bane of our Public Education System (in Issues in Education Volume 1)
  https://cdn.azimpremjiuniversity.edu.in/apuc3/media/publications/Issues_in_Education_Vol_1.pdf

Pre-service Teacher Education

1. Srinivasan Rajashree
   Pre-service teachers' moral beliefs about the work of teaching (2016)

2. Banerjee Rakhi
   Studying "Mathematical Knowledge for Teaching" among teachers in elementary grades (2020)
3. Sharad Sure
   Understanding beliefs and practices of Mathematics Teachers (upcoming)

4. Project Teach TE – Srinivasan Rajashree (in progress)

- Project TeachTE aims to enhance professionalism of teacher educators by supporting the development of teacher educators in their professional practice through collaboration amongst teacher educators, research and education.

5. Upcoming projects:

- Professional Practice model in pre-service teacher education programme– what does it take to prepare student teachers
- Understanding the role of cooperating/mentor teachers as teacher educators

Books, Chapters and Papers

1. (In press) Edited Volume by Pandya Kinnari, Shastri Jigisha and Datta Vrinda. '*Redefining the Early Childhood Profession in India: Practices and Potential', Orient BlackSwan, India*

Work by Rajashree Srinivasan, Teacher Educator and Faculty of Child Development

1. Teacher Education in post-independent India (Ongoing)
2. Working paper series: Professional Education of Prospective Teachers: A Study of five Countries (Ongoing)
3. Towards understanding the work of teacher education professoriate in India: Higher Education for the Future, 1–14, 2018
4. Teacher Educator Professionalism in India. 2021. In Building Teacher Quality in India: Examining Policy Frameworks and Implementation Outcomes International Perspectives on Education and Society, Volume 41, 63–80. Emerald Publishing Limited
5. Listening to voices of teachers through Dewey's ideas. In The Contemporary Relevance of John Dewey's Theories on Teaching and Learning; Deweyan Perspectives on Standardisation, Accountability and Assessment in Education. Edited Volume(2022). *JuliAnna Ávila, AG Rud, Leonard Waks, Emer Ring*

Please write to us for any clarification

Azim Premji University

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- SharadSure - sharad.sure@apu.edu.in

THANKYOU!

Intervention study

Emotional Intelligence (trait & ability)

JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

Cross-cultural

Main topic: Emotional Intelligence in teacher education

Motivation for teaching career

Myrto Kyriazopoulou, Doctoral Researcher, Phd Candidate

Teacher self-efficacy

JYVÄSKYLÄN YLIOPISTO 2022

Research project

1) Emotional intelligence in Greek teacher education: Findings from a short intervention

2) Emotional Intelligence and Teacher Self-Efficacy of teacher education students: A cross-cultural study in Finland and Greece

3) Emotional Intelligence in Finnish teacher education: Relations with motivation for choosing teaching career

Why Emotional Intelligence?

- Well-being
- Self-awareness
- Effective teaching
- Teaching satisfaction
- Enhancing relationships

Research In Education : Mapping The Major Themes and Areas

Presenters : Professor Yukti Sharma
Ms. Bharti, Ph.D. Scholar

Department of Education, University of Delhi, India

India – Land of Diversity

- Total of 121 languages and 270 mother tongues. The 22 languages specified in the Eighth Schedule to the Constitution of India.
- 1,108 castes across 28
- 744 tribes across 22 states
- 69% Rural population
- 31% Urban population
- Top 10% of the population earns 57% of the national income.

Macro-context : Regional Diversity

Socio-cultural, Linguistic and Economic Diversity

Micro – context : Intra-regional

Caste, Tribal communities

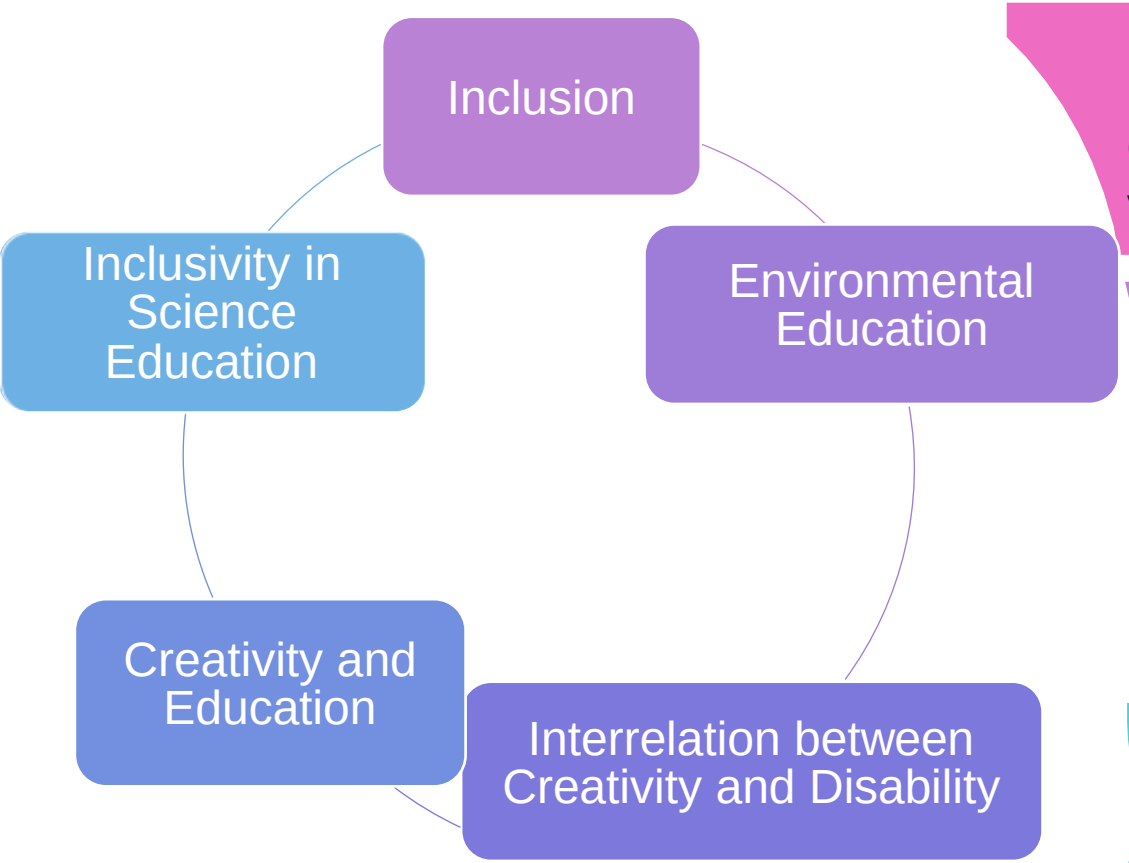
Aim of Research

Education from holistic perspective

Engagement with Knowledge

Sociological, Psychological, Pedagogical level..

Specialized and Super-specialized Areas of Research



Research aims towards developing research aptitude and understanding about education, by critically revisiting the existing discourses, educational policies and practices in varied contexts.

Specialized Areas of Research : Research in Sociology of Education, Psychology of Education, Pedagogy, Teacher Education, Early Childhood Education.

Super-specialized Areas –Diversity and Inclusion, Marginalization, Creativity, Gifted Education, Education and Democracy, Environmental Education.

Emerging areas of research involve developing contemporary ideas about Inclusion in Higher Education, Pedagogy in Higher education, Identity Formation and Idea of Masculinity in Learners with Disability, Critically Looking at the Role of Technology in Education

A Glimpse Of Some Of The Themes Undertaken For Research : Accomplished and Ongoing

1. Inclusion

a. To critically understand the educational experiences of students coming from disadvantaged sections.

b. A study to critically understand policies on inclusion in India in comparison to policies on inclusion in America.

c. To deconstruct the concept of inclusion in educational system with respect to the educational experiences of individuals belonging to ethnic group. It focus on those realms of inclusion which play potentially critical role in invisible and unnoticed extinction of ethnic communities.

2. Inclusivity in Science Education

To engage students with special needs in science classrooms by developing an inclusive STEM module.

3. Environmental Education

Environmental Education in the light of Sustainable Development Goals- Emphasis on investigating the Environmental Education program/courses of India and Finland.

4. Creativity and Education

a. An Exploratory Study of the Scientific Creativity Amongst School Children

b. Role of Creativity in Education for Sustainable Development -How creative abilities and thinking can facilitate in resolution of existing issues and challenges in India and in other countries as well.

5. Inter-relation between Creativity and Disability

Creativity Amongst Children with Special Needs: An Exploratory study - Exploring the idea of creativity among children with disability and how it got nurtured in them.

Neuroscience and Education

Prof.K.Chellamani
Dean
School of Education

Pondicherry University
Puducherry- 605014
India(IN)

RATIONALE

The importance of an active exchange of research between scientists from neuroscience, cognitive science, educational science and the practice of education has been felt to understand learning in the classroom

Centre for Educational Research and Innovation (CERI),OECD (2002)

'Brain and Learning committee' in 2003(Netherlands Organization for Scientific Research & Ministry of Education, Culture and Science)

Cancel

Understanding the brain : The birth of a Learning Science(2007

Brain Lessons' (Jolles et al., 2006) and its earlier version 'Learning to know the Brain' (Jolles et al., 2005

- Report of the German Ministry of Education (Stern, Grabner, & Schumacher, 2006)

- International Mind, Brain and Education – IMBES (Harvard University)

NEURAL CONNECTION OF LEARNING

THE PROCESS

HEBBS LAW OFLEARNING

Neural pathways are critical networks in the brain – fire together and then wire together when we learn new information

CORTICAL REGION – THE GEM

In learning functions of the cortical regions differ according to the different subjects and the method of instructions

- Neuroscience results do not dictate curricular development; rather, they require creative application by designers to synthesize the results into appropriate curricula.

- Internally and externally triggered emotions modulate information processing in brain regions that mediate various cognitive functions, focusing on perception and attention, learning and memory, decision making and social cognition.

IMPORTANCE OF TEACHING AND LEARNING

The wiring and firing rate of neurons differ according to the method of teaching and learning

THOUGHTS HAVE PROFOUND ACTIONS OVER THE BODY

It is important for educational researchers to understand the methods and ways of thinking in neuroscience.

- Practice of Neuro-psychological and cognitive neuroscience based teaching is needed for learning.
- Teachers must know the biological basis of consciousness and mental processes by which we perceive, act, learn and remember.

- Therefore, it is important for researchers to move from laboratory studies to classroom context..

NEUROSCIENCE AND LEARNING HAS A MUTUAL RELATIONSHIP

NEUROSCIENCE AND EDUCATION

IMPACTFUL RESEARCHES

Developing Higher Order Cognitive Skills in Teaching and Learning Process Among Pre-service Student Teachers

Synergizing Neuro-Educational Principles And Metalinguistic Perspectives On Devloping Listening Skill

Constructing Reflective Portfolios on Evaluating Learning Process Among Post-Graduation Students in Education

Utilization of Think-Aloud Protocol and Portfolio Writing on Enhancing Cognitive Competence on Writing

Fostering Student-Teachers' Competencies in Thinking and Reading Through Comprehension Monitoring Training

Portfolio Writing: A Reflective Strategy on Enhancing Learning Core Courses in Teacher Education Programme

Effect of Psycholinguistic Principles on Developing Word Recognition Skill Among Upper Primary Students

Efficacy of Psycholinguistic Intervention and Metacognition on RC Among High School Entrants

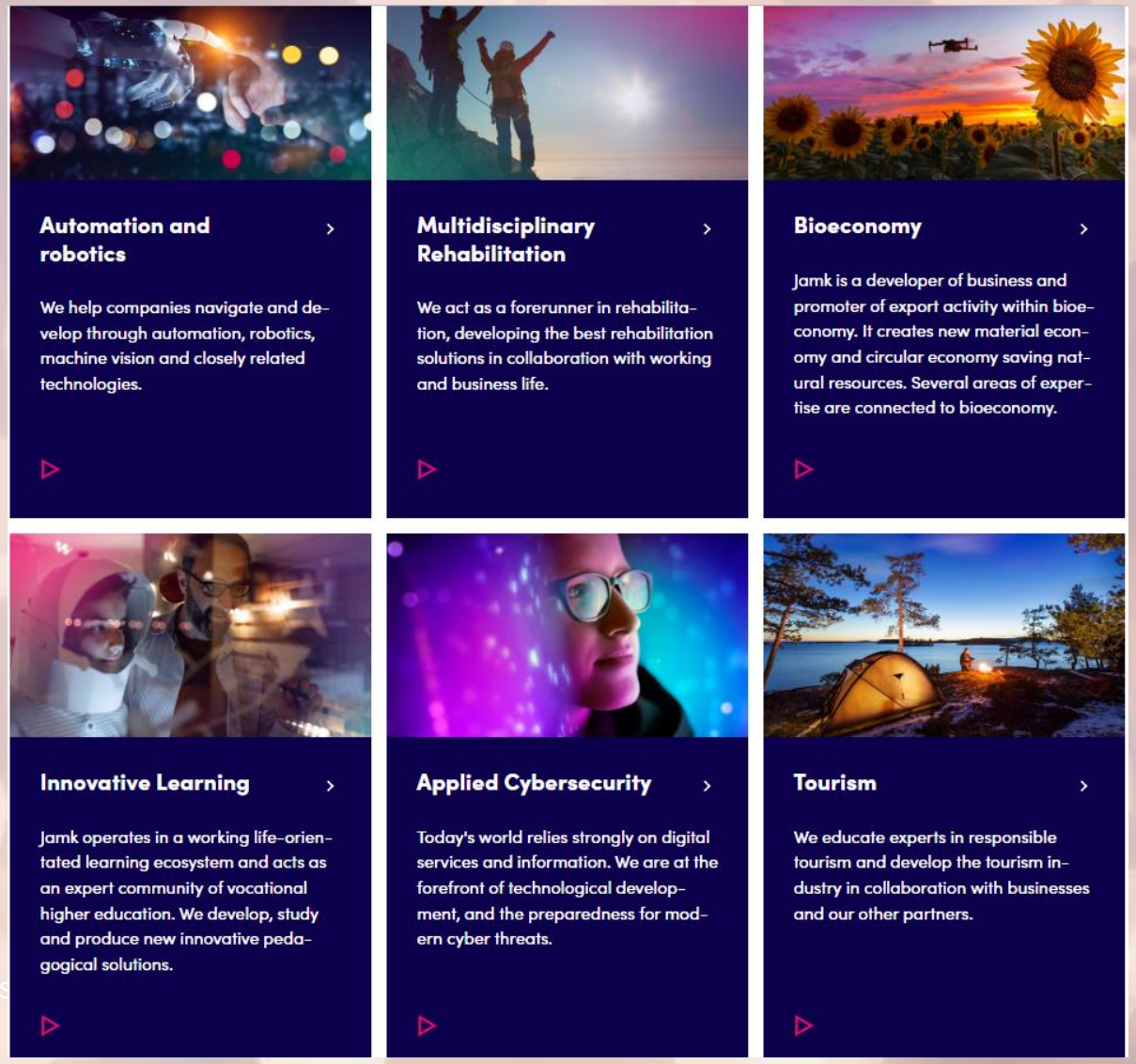
Effect of Neurocognitive Modelling on Self-Regulation towards Developing Teacher Competencies Among B.Ed Student-Teachers

Operationalizing emotive cognition strategies on enhancing meaningful learning among B.ed. student-teachers

Effectiveness of EmotionEffectiveness of Emotional Regulation Strategies on Focussed Attention Towards Academic Achievement of Secondary School students

Overview of research at JAMK University of Applied Sciences, Jyväskylä, Finland

Dr Eila Burns,
Senior Researcher,
School of Professional Teacher Education, JAMK



Corner Stones of Research in Innovative Learning

Practice-based & applied research approach, multi-method

Strong working-life orientation and digitalisation in education and learning

Investigations into changes in the teaching profession and factors influencing the entire learning ecosystem

Research activities implement the competence for competitiveness mission

Research in Innovative Learning | JAMK University of Applied Sciences - JAMK

Currently four research focus areas

Learning and teaching in digital learning environments	Emerging technologies and vocational pedagogy	Vocational pedagogy and learning ecosystems	Evolving vocational teacherhood
• Study on HEI teachers' competences for 21st century pedagogy in Nepal (21st CS Nepal) • Study on how to apply educator's value beliefs and pedagogical philosophies in online courses (Dig-IT, Europe)	• Study on developing online internship in a field of Tourism (ON-IT, Europe) • Research on developing self-regulation skills in teaching practice by using simulations online (SimReg, Finland)	• Study on capacity building for modernizing TVET pedagogy in Ethiopia (MOPEDE) • Follow-up study on curriculum renewal at JAMK (Finland)	• Investigation into VET teachers' digi-pedagogical competences (SHOW-VET, Europe) • Study on teacher educators' emotional agency and interaction skills in digital environments (TOVE, Finland)

Happy to collaborate!
Contact us

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Policy Framing and Enactment in Teacher Preparation for Improving Quality: Implications for Education's University Project

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Conceptions of Quality in Teacher Education (TE): Global & National Policies

- Quality of teachers & teacher preparation are assumed to be central strategies for enhancing an economy's ability to compete globally.

- Multiple & contested conceptions of quality in TE – embedded within & between different documents - both global education development frameworks & national policies.

- These conceptions lead to different models for 'achieving' quality in TE: qualifications, standards, competencies, regulation of outcomes or of inputs, monitoring & evaluation.

- Analysing global education frameworks and national policies to infer meanings, modes & models of quality in TE:
  - Global governance of teachers using NPM approach that frame national policy agenda
  - Contradictions in the national TE policy recommendations as the local needs and global aspirations are prioritised
  - Enactment of these policies in regulatory and curricular documents and institutional contexts

Policy and Regulatory Problems of TE in India

- India has followed a centralised regulatory model focused on inputs – along with a qualifications approach to regulate entry into teaching profession and of teacher educators

- Problems of current regulatory model (Sharma 2019, 2021):
  - Despite centralised, prescriptive and rigid regulation over the years quality issues have exacerbated (92% of TE in private sector and poor quality)
  - Challenges for innovation and location of TE in Universities
  - Undercut by politics on identity of teacher education vis-à-vis education studies: reflected in regulatory shifts in location, duration, content and entry in the domain

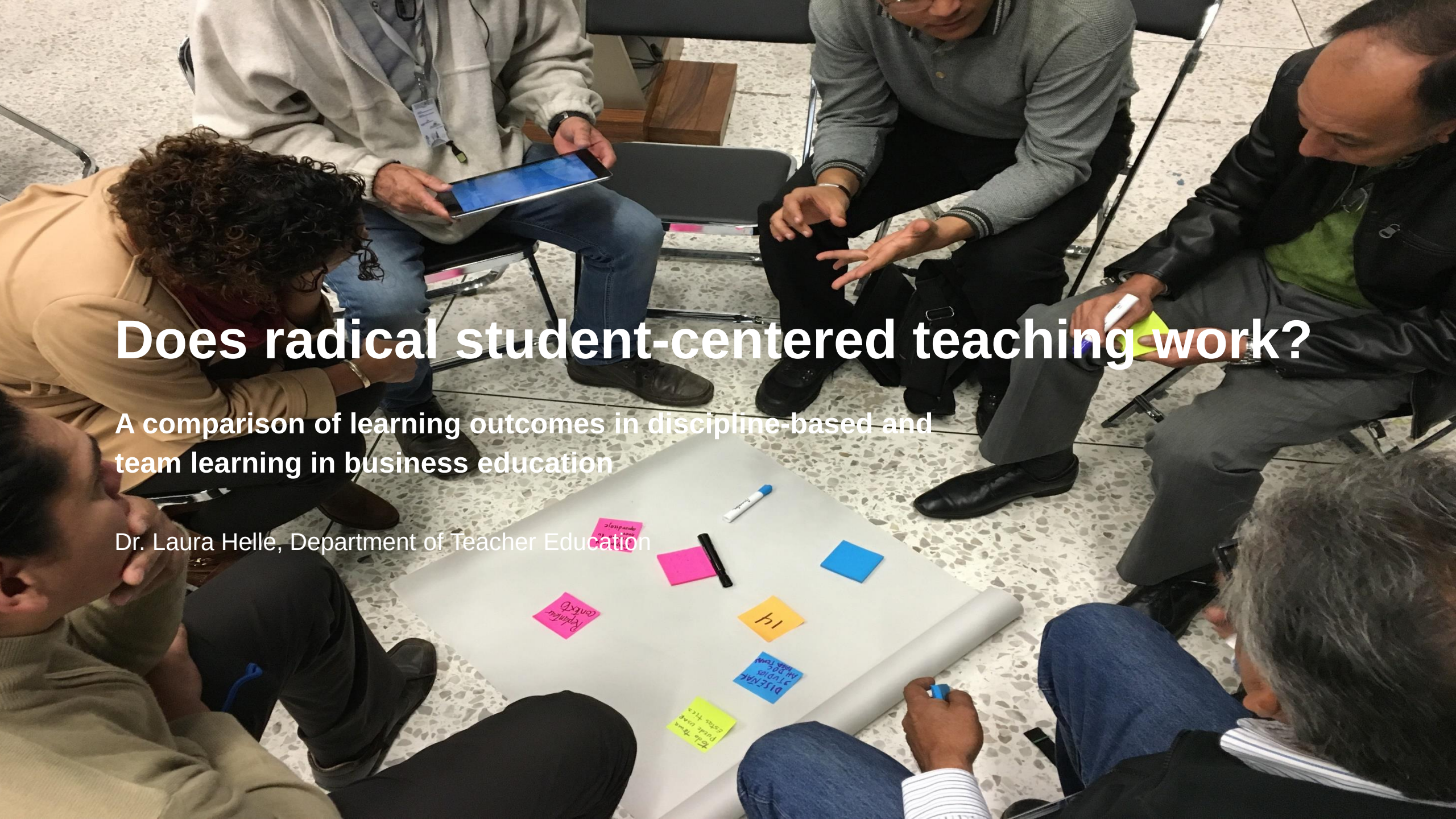
- With NEP 2020, the regulatory model is set to give way to an outcomes focused teacher standards model with university-based programmes: Tracking this shift, its interfaces with current model, and its implications for the departments of education

Teacher Education in University

- Large part of teacher education outside the university: The identity of TE in university as a praxis-based domain and not a scholarly field: Fault lines between practitioner and scholars

- While there is a policy agreement to locate TE in universities
  - The autonomy that a university space potentially offers is set off by stringent centralised regulatory regimes of TE – as these regimes change, the implications for universities will also change
  - University has its own regulatory contexts and politics – these are also set to change and will have a bearing on TE
  - The compulsion of negotiating with these two kinds of regulatory imaginations, impinges upon creative envisioning in teacher education

- What could be a way forward:
  - Alternative conceptions to achieve quality in TE: Community of practice, deregulation, decentralisation, professionalisation
  - Exploring decolonial perspective on teacher education quality rather than a globalised neo-liberal approach to quality
  - Understanding the role of universities in bridging TE research, policy, and practice gaps or rather fault lines



Does radical student-centered teaching work?

A comparison of learning outcomes in discipline-based and team learning in business education

Dr. Laura Helle, Department of Teacher Education

Background and purpose

- Background: long-standing debate concerning the pros and cons of discipline-based business education versus experiential learning (Campbell, Heriot & Finney, 2006; Mintzberg, 2003)
- (Radical) team learning in higher education: three learning activities 1) student-selected readings, 2) mandatory dialogue sessions in a circle (e.g., 2 x 4 hrs / week) together with one´s team of 15 students and coach, and 3) real business projects
- Purpose: to assess student learning outcomes using an objective measure of domain-specific competence (JGU, 2014) in multiple sites all offering both types of curricula (discipline based and team learning)

Method and results

- Design: cross sectional field study involving three Finnish universities of applied science all offering both types of training
- Materials & procedures: students (n=218) at the end of their studies took a test of domain-specific competence and a test of general causality orientations; multilevel analysis procedure
- Result: no statistically significant difference in business knowledge, but the pattern of general study orientations was consistently more favorable in team learning
- Conclusion: longitudinal reseach is needed to determine whether team learning affects general causality orientations

TURUN YLIOPISTO

Tampere University

UNIVERSITY OF AGRICULTURAL SCIENCES DHARWAD

University of Agricultural Sciences, Dharwad (UASD) India & Tampere University (TAU) Finland

Research on University Relationships building for Smart Agriculture and Entrepreneurship (SAE) education (UR for SAE education)

Background; UR for SAE

- Based on a longitudinal collaboration with UASD and TAU since 2010.
- RuralVoice program paved the way for developing RDI activities for rural farmers i.e. services/learning by mobile phones in Karnataka state.
- Previous collaboration has created trusted relationships with these two universities and the stakeholders of them
- GINTL 2021: Hon'ble VC Dr. Mahadev B. Chetti has led (December 2021) a senior faculty group for the strategic one week excursion for UAS Dharwad to Finland and Tampere. They had a high level meeting with President Mari Walls and senior key persons of Tampere University. They reviewed the working environment, had stakeholders meetings and signing of a public MoU, meeting with key people of Natural Resources Institute Finland, LUKE and MTK The Central Union of Agricultural Producers and Forest Owners and other major agricultural development organizations
- The current collaboration phase launched is implemented with educational exchanges of faculty people and talented students starting Spring 2022.

Educational and Institutional Development

- UASD is collaborating with TAU to get the best global experience to faculty/students.
- Online/Onsite) Programme on " Smart Agriculture and Entrepreneurship" for B.Sc. Final Years Students of UAS Dharwa started on 19th April 2022.
- Program in 2 phases, 1. phase i.e. online mode TAU research coordinator at UAS Dharwad Campus), 2. phase students will have, Onsite Mode program at TAU starting later this Spring (May/June)
- The six senior members of UASD will visit Tampere University for exchange, knowledge building and professional meetings (May/June)
- 2nd phase is planned on institutional development backed up by both governments and funding ministries of collaborating universities. UASD is following their National Agricultural Higher Education Plan (NAHEP-IDP) and TAU has India strategy with GINTL and other global pilots, such as FICORE
- Looking forward to connect and enlarge networks of Nordic universities with NCI (Nordic Centre in India) and foster inter-Indian collaboration of HE institutes in the agriculture, such as UASD, IT institutes, such as IIT Dharwad, and business schools, such as IMI and MDI, in India.

- Looking forward to innovations of SAE teaching and learning!

Development of contextualized regulatory frameworks of initial teacher education

DRS. PARUL AND JYOTI RAINA

DEPARTMENT OF ELEMENTARY EDUCATION, GARGI COLLEGE (UNIVERSITY OF DELHI), SIRI FORT ROAD, NEW DELHI 110049

Policy-related recommendations

- all TEPs rest with university
- provisions be made for study of education as a discipline of study in higher education
- integrated, process model with core components and specialisation for all TEPs

21st century reforms

- NCFR 2005, NCFTE 2009, JVC 2012, NEP 2020
- centralized regulator NCTE has come out with regulatory norms and standards : 2005, 2007, 2009, 2014, 2018, and 2019
- regulatory frameworks still inadequately developed; remaining uninformed by research/empirical evidence

Regulation of teacher education

- is centralizing, prescriptive, standardized and universal.
- in contrast with Finland, it is not aligned with school education; heterogeneity of school system
- conceptual basis inadequately developed
- policy-development academic activism driven but with academic coalitions- largely dominated by the social scientists working in education.
- regulation needs to avoid regulatory policy-politics (Sharma,2021) by recovering unity between subsets teacher educator practitioners (neglected voice) and social scientists in education
- need to contextualize the regulatory framework based on new perspective of professional development characterised by a process, constructivist, variegated and contextual model viewing teaching as a professional activity & teacher as reflective practitioner (Villegas-Reimers, 2003:11)

Prioritising a research agenda

Direction: building an alternative regulatory framework which is not centralized or standardized but contextualized to accommodate diversity in TEP's and TIE's

Qualitative research study aimed at

- undertaking analyses of existing regulations
- delineating possible essential conceptual elements based on new perspective
- studying the notions of regulation and quality of teacher education of different members from both the subsets: teacher educators and social scientists
- integrating practice, research and policy of teacher education