Economics and Pedagogy of Early Childhood Education

October 2019 > June 2020

EXECUTIVE PROGRAM
A new program in
Innovative Early Childhood Education

A program engaged with today’s most renowned and innovative educational approaches.

Built on the strength of our international lecturers from the United States, Scandinavia, and beyond.

Based on the expertise of the Graduate School of Management and Economics, University of Geneva.

Direction

- **Prof. Salvatore di Falco**, Geneva School of Economics and Management (GSEM), University of Geneva
- **Paola Trigari**, International Educational Consultant; GSEM, University of Geneva

Scientific Committee

- **Giovanni Ferro-Luzzi**, GSEM, University of Geneva
- **José Ramirez**, University of Applied Sciences and Arts (HES-SO) Geneva
- **Jaya Krishnakumar**, GSEM, University of Geneva
- **Domenico Tabasso**, University of Essex, UK

Coordination

**Paola Trigari**, International Educational Consultant; GSEM, University of Geneva
The program provides participants with the tools they need to implement the most innovative educational approaches.

Participants will learn to integrate design thinking, visible thinking, project work, outdoor-natural classrooms, forest school strategies, digital tools, and technology, constructivism, the principles of the Reggio Emilia approach, and learning through play as promoted by the LEGO foundation. They will gain tools to design and assess educational programs, to integrate research into the classroom, and to build laboratory-schools.

We discuss Design Thinking and Visible Thinking, launched by Stanford and Harvard University respectively, and practiced in education throughout the world. Design Thinking fosters a new pedagogical mindset – one that allows participants to become innovators, problem solvers, thinkers, and doers. Our discussion will equip them with strategies to produce student-centered schools, where professionals design thoughtful programs. Visible thinking and the practice in video analysis will enable participants to implement project-based curricula and to make children’s thinking visible. Video analysis is a powerful tool for developing new capacities through self-reflective practices, and for integrating research.

We investigate The Returns from Early Childhood Education, studied by economists including the Nobel Laureate professor J. Heckman. Participants will gain a deep understanding of interventions in early childhood education: how to bring research to schools, how to meaningfully and reliably measure the effects of changes in their educational policies, and how to productively assess and design interventions. We discuss the strategies for promoting capacity development and investments in early childhood education.

We delve into the world-renowned Reggio Emilia approach to education. Participants will acquire the tools needed to adapt this approach to their local contexts. They will engage with concepts, practices, strategies, and
long term investigations in both 0-3 and 3-6 education: how to create meaningful spaces for competent children, make full use of vibrant materials, integrate photos, media, and other forms of documentation, and center children as the protagonists and active creators of their own learning. We focus on the concept of Progettazione, a flexible, and research-based approach in designing the learning experiences. We delve into the strategies for observing, documenting, and listening closely to the processes of children’s inquiry; reflecting on observations to sustain and re-ignite the children’s interest; planning meaningful provocations that enable children to test their theories as related to their inquiry. We explore the role of the teachers as researchers.

We explore Outdoor-Natural Classes and Forest Schools. Participants will leave this discussion equipped to transform a school’s outdoor environment into a "nature classroom", and to implement effective outdoor education. We cover Project-Based Learning and strategies for implementing a comprehensive socio-constructive, project-based approach. Participants will learn how to sustain long-term, in-depth investigations, how to stretch children’s thinking and keep them actively engaged, and how to involve them in authentic, inquiry-based learning and thinking.

We investigate the role of Innovative Interactive Technology and Digital Environments in promoting the children’s inquiry-based thinking. Digital tools are reshaping how educators teach young children and how we think about learning. Interactive Digital tools are used in every leading-cutting edge world progressive preschool, e.g., interactive smart boards, probes; STEM (Science Technology Engineering and Mathematics) is a priority in Early Childhood Education; FabLab Maker Spaces in schools, small-scale workshops offering digital fabrication (3D printing, lasers, robotics) have spread globally. Early learners have significant – and highly untapped – potential for understanding abstract concepts and reasoning in sophisticated ways. Research has shown that technology offers powerful support for conceptual science learning in the early grades. We use the National Science Foundation-funded Sensing Science
through Modeling Matter (Grant No. DRL-1621299) dynamic apps and technology-enriched activities that use models and probes to help kindergarten students develop an understanding of the states of matter and phase changes. We explore multiple possible early childhood digital tools and learning environments designed at the Concord Consortium (concord.org).

The program includes experts from both Europe and the US – speakers who are influential not only in those countries, but also in China, Japan, Singapore, and Latin America. The *international component* allows participants to engage with a diverse set of educational realities. They will gain unique perspectives and practical strategies relevant to all contexts – from local schools to foreign educational systems.
Speakers

- **Diego Adame**, Initiatives Lead, Learning through Play in Early Childhood, LEGO Foundation, Denmark
- **Pietro Biroli**, Assistant Professor, Department of Economics, University of Zurich, Switzerland
- **Caterina Calsamiglia**, ICREA Research Professor at Barcelona IPEG, Spain
- **Giacomo De Giorgi**, Professor of Economics, GSEM, University of Geneva, Switzerland
- **Daniela Del Boca**, Professor of Economics, University of Turin, Italy
- **Tiziana Filippini**, Pedagogista, Reggio Children, Italy
- **Costas Meghir**, Professor of Economics, Yale University, New Haven, Connecticut, US
- **Carolyn Staudt**, Senior Scientist, curriculum and professional development designer, The Concord Consortium, Massachusetts, US
- **Paola Trigari**, International Educational Consultant; GSEM, University of Geneva, Switzerland
- **Peter Worth**, Stanford University design school, CA, US; former co-Director School Retool
- **Monica Yudron**, Ed.D. Director of Programs and Strategy, Saul Zaentz Early Education Initiative, Harvard Graduate School of Education, Harvard University, Cambridge, Massachusetts
- **Devon Young**, K12 Lab Program Manager and Learning Experience Designer, Stanford Design School, Stanford University, California, US
Audience

- Professional working with children, student and teacher
- Teacher and director of preschools, primary schools and international schools
- Educational consultant and pedagogical coordinator
- International institution and NGO’s: professional working on educational best practices, designing national and international educational programs and training onsite teachers in developing countries
- International student and professional

Objectives

- Build a deep understanding of the most innovative education and to apply to any context
- Obtain a unique international perspective: through experts instructions from the USA to the Scandinavian countries
- Obtain a multidisciplinary understanding of education – pedagogy, neuroscience, psychology and economics
- Learn to integrate project-based learning, constructivism and visible thinking, design thinking for education, outdoor education and forest school practices, digital learning and technology, the Reggio Emilia approach and learning through play as promoted by the LEGO Foundation
- Become an innovator and problem seeker-solver along with the children
- Build strategies for onsite training, capacity development and investments in early childhood education
- Acquire expertise to assess and design interventions and educational programs
Learning Methods

- Interactive workshops
- Videos presentations
- Direct and deep dive experiences
- Hands on work
- Small group work in collaboration with participants and experts
- Actual case studies presented and discussed

Program Structure

- The program is organized in 6 modules (3 days per module). It involves 18 days, 144 hours of direct onsite class time
- Participants attending the full program will be granted a diploma, corresponding to 18 ETCS credits
- Participants can attend: Individual modules, Combinations of modules
Program

Module 1

Children Thinking Made Visible
Video Analysis – Documentation – Constructivism

October 9, 10, 11, 2019

Jamie M. Broadhead

Visible thinking and video recording

Discussion and practice of video analysis as one of the most effective tool for designing project based curricula, comprehensive interventions and educational models.

A tool for supporting capacity development through self reflective practices

- To make children's thinking visible and engage in research
- To adopt reflective practices and help children reflect on their own thinking
- To understand the children's constructive learning
- To re-launch their theories within a constructivist project oriented education
Building brain architecture through play (Part 1)
Reggio Emilia approach to Education (Part 2)

December 4, 5, 6, 2019

Diego Adame, Tiziana Filippini

- Building Brain Architecture through Play (Diego Adame, LEGO Foundation)

The LEGO foundation supports learning through play worldwide. Playful learning empowers children to become inquisitive, engaged, resilient, lifelong learners. Evidence shows how playful experiences promote the children’s holistic development. During this interactive and hands-on course, Diego Adame – Initiatives Lead, Learning through Play in Early Childhood, LEGO Foundation, Denmark – discusses the importance of play for children’s holistic development. We explore the science of early childhood and the importance of building core skills through play. We reflect on research and approaches from the LEGO Foundation, and its global academic partners on the benefits of play and effective approaches to facilitate play experiences with young children.

- The Reggio Emilia approach to Education and Progettazione (Tiziana Filippini, Reggio Children)

At the forefront of education, the world-renown Reggio Emilia approach to early childhood education has spread throughout the US, Europe, Australia, Canada, Latina America and Japan. We discuss its concepts, practices, and strategies through photos, videos, and documentation. We focus on the concept of Progettazione, a flexible approach in designing the learning experiences. We delve into the strategies for observing, documenting, and listening closely to the processes of children’s inquiry; reflecting on observations to sustain and re-ignite the children’s interest; planning meaningful provocations that enable children to test their theories as related to their inquiry. We explore the role of the teachers as researchers.
Module 3 | Design Thinking, Innovation and Empathy in Early Childhood and Primary Education
January 22, 23, 24, 2020
Peter Worth, Devon Young
Innovators, problem seekers, thinkers and doers. Design Thinking is a methodology to affect change in teams and organizations and foster a culture of innovation. When applied to schools, Design Thinking provokes educators to shift their roles, and helps schools to be more student-centered. Design Thinking is widely implemented by the most innovative Preschools and Primary schools in California and throughout the United States. This project-based curriculum emphasizes inquiry, empathy, imagination, design, innovation, art integration, and collaborative learning.

Module 5 | Forest Schools and Outdoor Nature Programs
March 11, 12, 13, 2020
Markos Zangas-Tsakiris
Forest schools and outdoor learning. The Scandinavian tradition of using nature and outdoor environment as a learning resource. Full immersion in the outdoors; active hands-on learning experiences in a natural environment that promotes self-esteem, co-operation, and risk-taking. Built on the children's natural instinct to explore the world through active and physical interactions. Built on the need to take risks: the foundation of learning, confidence and autonomy.
An interactive hands-on course to equip the participants
- With the tools to transform a school's outdoor environment into a "nature classroom".
- With the skills to implement effective outdoor education.
Participants will have the opportunity to learn through an outdoor experience.
**Module 4**

**The Project approach**
February 19, 20, 21, 2020

**Paola Trigari**

The Project approach is a pedagogy that fosters the children’s acquisition of knowledge by engaging them in long term real-life investigations. A meaningful learning, building on the children’s innate drive to explore; enabling them to research, problem-solve, innovate, and to become active shapers of their worlds.

This course provides theory and practice on implementing Inquiry-based Project Work through the lens of the Social Constructivism.

An interactive course giving strategies to sustain in-depth investigations, to stretch the student’s thinking and reflection, to keep them engaged and to involve them in authentic, inquiry based learning.

Applied discussion of each strategy is accompanied by actual examples of long term investigations from European and American project-based social-constructivists schools. Case-studies are shown through images and videos for the participants to actively connect to the investigations discussed.

We focus on the impact of peer learning on cognitive development and how this can be promoted through group project work. We refer to the neo-piagetian social constructivism, its theory and applied researches on peers learning.

We practice video analysis to re-launch project work and the children’s inquiry-based learning.

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**Module 6**

**Digital Learning**
May 6, 7, 8, 2020

**Nathan Kimball, Carolyn Staudt**

Early learners have significant – and highly untapped – potential for understanding abstract concepts and reasoning in sophisticated ways. Research has shown that technology offers powerful support for conceptual science learning in the early grades. During this interactive
workshop we use the National Science Foundation-funded Sensing Science through Modeling Matter (Grant No. DRL-1621299) dynamic apps and technology-enriched activities that use models and probes to help kindergarten students develop an understanding of the states of matter and phase changes. The last day of the workshop will be filled with other possible early childhood digital tools and learning environments designed at the Concord Consortium (concord.org).

The Economics of Early Childhood Education
June 3, 4, 5, 2020
Pietro Biroli, Caterina Calsamiglia, Giacomo De Giorgi, Daniela Del Boca, Maria Elena Ortega Hesles, Monica Yudron

We provide the tools to design and to effectively measure interventions: any education program needs a sound technical design as well as a good monitoring, evaluation and learning (MEL) plan. This course will equip participants with the basic tools to design education programs at the school, regional or state level, and to create a MEL plan that can be incorporated into their common activities. The participants will put in practice the tools learned using a case study.

We analyze selected interventions around the world, focusing on a number of early childhood interventions in the United States, Latin and Central America. For example discussion of Professor James J. Heckman’s, Nobel Prize, and his team from Chicago work. We address potential inequality in familial and educational environments of young children; also discuss projects involving the famous Abecedarian and Perry Preschool Projects, as well as many others. We will cover the impact on Cognitive and non-cognitive Skills. The focus is on a deep understanding of interventions in early childhood education; discussing the current evidence on returns to investments in education, and its impact on the importance of early childhood education, versus higher education, for a variety of adult incomes.
Assesments
Each module will be assessed through in class group works and/or case studies and/or written reflections and/or presentations. Students will be given information on the exact details of assessments for the modules and other educational activities at the start of the program.

Diploma Awarded
Participants who pass the assessment requirements and successfully complete 6 modules will be awarded the Certificate of Advanced Studies (CAS) in Economics and Pedagogy of Early Childhood Education by the Geneva School of Economics and Management (GSEM) of the University of Geneva. The diploma corresponds to 18 ECTS, equivalent to 540 teaching hours of which 144 of direct class time.
Practical Information

Admission Criteria

- A university (or master’s degree or qualification deemed to be equivalent); or diploma/university degree from a university of applied sciences, or a qualification deemed equivalent; and
- Three years’ experience in the field concerned.

For applicants who do not satisfy the above criteria, the Direction reserves the right to accept applications.

Application are on a rolling basis until the slots in the program are filled. Online (or pdf to be downloaded) on www.unige.ch/formcont/cours/CASearlychildhood

Fees

- CHF 7,200.- for the CAS (6 modules)
- CHF 1,500.- per individual module (3 days)
- CHF 1,350.- per multiple modules (2 to 5 modules)

Schedule

- 9h00-18h00
- 1 hour lunch break
- 2 breaks of 15 minutes both in the morning and the afternoon

Location

University of Geneva, Uni Mail, 40 Bd du Pont-d’Arve – 1211 Geneva 4

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