Name of the project
TICKLE - Technical and Socio-cultural Perspectives for Digitalization of Learning

Coordinating Institution
University of Tampere (UTA), FINLAND

Objectives of the project (as indicated in the project proposal)

The main objectives of the TICKLE project were:

1. A set of jointly organized courses in participating HEIs: these include summer schools, monsoon courses, and online courses on ICT4D, HCI4D (Human-Computer Interaction for Development) and MIL4C (Media and Information Literacy for socio-cultural Change).

2. A set of workshops and conferences which the common courses and seminars are planned. The workshops itself are educational forums, and in particular Ph.D. students will have an active role in workshops.

3. A set of seminars on the project topics. Seminars will arranged on same themes as workshops and common courses, but they have more open approach than these, and their key idea is to investigate and introduce the latest finding in the area. In addition, seminars will have a large public availability both among the network (including the associated members) and other HEIs interested in the same topics.

4. In addition to common courses, workshops, and seminars, TICKLE will be produce digital educational material and a model how to arrange such events in a networked environment. The work done during the project will result a digital guidebook, which will be distributed as an online course itself. This will allow utilization of the project results in different disciplines.

Achieved results and outcomes

The TICKLE activities involved directly 80 MSc- and PhD-students, and 20 staff members from partnering HEIs. It produced three courses and seminars and multiple workshops, and more than 30 new artefacts of digital educational content (presentations and videos) on the subject matter. In addition, TICKLE initiated ACM magazine articles and field trips, as well as joint project ideas for future work. The main outcomes of the TICKLE project are explained below:

1. Courses: Two courses on ICT4D (HCI4D) and MIL4C were conducted in 2016 and 2017 at the UTA summer schools. The courses were jointly organized and attended by several doctoral
students and professors from partnering HEIs in India. In addition, as expected, the courses created a digital material catalogue of over 30 artefacts that can be used in the future.

2. **Workshops/conferences:** Researchers, doctoral students, and professors presented and participated in several national (IndiaHCI, MICA conferences) and international (Interact) conferences held in India during the TICKLE project - IndiaHCI 2016, MICA 2017, Interact 2017. These conferences provided:
   - A way for students and experts in India to get to know Finnish research, researchers, experts, fields of interests, and potential opportunities for them to collaborate with teams in Finland.
   - A mechanism for students and professors from UTA to visit, experience, and interact with Indian experts and the India context, for cross-cultural collaborative projects, such as this one.
   - UTA researchers a way to be introduced to other international teams working within in the Indian context, and on similar cross-cultural collaborations. For instance, during the Interact conference, we conducted Fieldtrips with researchers not only from India, but from across the world.

3. **Seminar:** In the final TICKLE seminar, three Indian experts (MICA, IIT-G, and Conduent), one Indian doctoral student (IIT-G) and 27 students from UTA spent two days discussing the diversity of ICT4D and its applications to technology for higher education, designing for digitalization of learning, and supporting cross-cultural collaborations. The main idea was to investigate and introduce the latest finding in the areas of ML4C and HCI4D.

4. **Digital educational material:** as mentioned before, the courses and seminars produced digital educational material and a model how to arrange such events in a networked environment. This allows utilization of the project results in different disciplines.

### Activities carried out during the project

During the course of TICKLE, there were overall 12 student (5 Asia to Finland) and 7 professor/industry expert (4 Asia to Finland) exchanges between UTA and Indian HEI partners. The exchanges are divided into the following events:

- **Summer School Courses** at UTA
  - Workshop in Media Literacies: Film Literacy Education – August 2017

- **Workshops/conferences** in India
  - HCI4D: IndiaHCI Dec 2016
  - MICA Conference Jan 2017
  - Interact Mumbai Sep 2017
  - MICA Conference Jan 2018

- **Final Tickle Seminar:** Tampere Dec 2017
The courses, conference participations, and seminars, provided UTA researchers a platform to share their work, which in turn strengthened our international position in the respective research domain. It opened up opportunities for HEI staff and students to work together.

**Future developments, resulting from the project**

<table>
<thead>
<tr>
<th>In addition to the main aims of TICKLE set out in the project plan were – jointly organized courses, workshops, seminars and digital education materials from the fields of ICT4D, HCI4D and MIL4C - TICKLE was set up to strengthen strategic education and innovation work between the participating HEIs that will outlive the project. In that regard, there are two future developments resulting from the project:</th>
</tr>
</thead>
<tbody>
<tr>
<td>o The currently on-going activity regarding the workshop/field at the Interact 2017 Mumbai conference in which partnering HEIs submitted an experiential article to the prestigious ACM UX magazine. In Spring 2018, a research article to leading HCI journals is also being planned based on the Interact workshop/fieldtrip.</td>
</tr>
<tr>
<td>o The digital material created by professors and students as a part of the TICKLE courses and seminar, provide ready to use contextual cases for future courses on TICKLE themes-ICT4D/HCI4D and MIL4C, highlighting issues that deal with bilateral learning and innovation process to take place with Western and Asian participants.</td>
</tr>
<tr>
<td>o Some of the TICKLE partners applied for a collaborative research project to continue TICKLE work in research context.</td>
</tr>
</tbody>
</table>