Core Research Area: *Ubiquitous & Mobile Technology and Learning*

Research project proposals produced by the experts of the 4th STELLAR Delphi round

265. **Ubiquitous & Mobile Technology and Learning**  
**Group: Researcher**  
**Project title**  
Mobile Virtual and Remote Labs  
**Project description**  
Improve the technology and pedagogy of accessing labs via mobile devices.  
**Project partners**  
Any experienced partners in Europe.  
**Project justification**  
Wide use of the mobile technology amongst young generations at low cost.

266. **Ubiquitous & Mobile Technology and Learning**  
**Group: Researcher**  
**Project title**  
Learning and Working as a social and continuous process  
**Project description**  
How could we combine learning at school and at workplace, everytime and everywhere?  
How could we adapt the learning processes and the learning spaces to user needs (learners, tutors, workers, ...)?  
**Project partners**  
LSRI (Nottingham), Exact Learning (Italy), Institute of educational technology, LICEF (Québec), etc.  
**Project justification**  
As mobile devices' usage and internet access everywhere and everytime are growing up "everyday", more and more people are using their smartphone, tablet, etc. all day. Our society is more and more a knowledge society in which people, institutions and industry need to acquire new knowledge and know-how fastly and everytime. Innovation and creativity are a key issues for companies and society.

267. **Ubiquitous & Mobile Technology and Learning**  
**Group: Researcher**  
**Project title**  
Mobile Augmented Reality Learning Project  
**Project description**  
- How could Pedagogical style be changed using mobile AR technology?  
- How do users’ learning behaviors change using mobile AR technology?  
- Will mobile AR learning can shorten digital divide?  
**Project partners**  
MIT, U of Wisconsin at Madison, University of Colombo  
**Project justification**  
Mobile augmented reality technology is the coming emerging technology. It will affect the current ways to communicate virtual world and real world.
268. **Ubiquitous & Mobile Technology and Learning**  
**Group:** Researcher  
**Project title**  
smart, digitally-enhanced city that make people smart  
**Project description**  
how should we integrate ubiquitous mobile technologies in our every day living environments to make individuals (and community as a whole) smarter  
**Project partners**  
-  
**Project justification**  
-  

269. **Ubiquitous & Mobile Technology and Learning**  
**Group:** Researcher  
**Project title**  
Mobilizing Knowledge in Society  
**Project description**  
How can ubiquitous technologies really improve knowledge creation and sharing among all members of a society - young and old, uneducated and educated, mobile and house-bound?  
**Project partners**  
Telcos, governments, educational institutions.  
**Project justification**  
Information and knowledge sharing have been transformed by the internet but most people still regard their computer as a tool to 'look things up', and to do their shopping and banking etc. With ubiquitous technologies, learning could be integrated with life and could literally be 'passed around', from person to person, reaching those who are currently excluded. But current tools and mindsets don't yet make this possible.  

270. **Ubiquitous & Mobile Technology and Learning**  
**Group:** Researcher  
**Project title**  
mobile support vs mobile learning  
**Project description**  
When we go mobile, is it learning or support? How are we using mobile devices? How are they most compelling?  
How do we build mobile learning and support into formal learning experiences?  
**Project partners**  
govt, univ, corporate too  
**Project justification**  
many developing countries lack PC penetration. What they have is phones. Let's use them.  

271. **Ubiquitous & Mobile Technology and Learning**  
**Group:** Researcher  
**Project title**  
Unified content authoring for e- and m- learning  
**Project description**  
1. What are the most effective and efficient ways to organize content authoring for diverse mobile devices with different formats and traditional e-learning?  
2. How to use most effectively the differences between m-learning and e-learning in content authoring?
Nowadays mobile devices are becoming more and more powerful and widespread, but these devices are different - different capabilities, different screen sizes, and this presents a challenge to learning materials design. We have to look for unified ways to develop learning materials so they could be used effectively on great variety of mobile devices and in traditional e-learning systems, and it must be simple enough to be accessible by teachers and students.

272. **Ubiquitous & Mobile Technology and Learning**

*Project title*
Mobile and 3D technologies for contextual and pervasive learning

*Project description*
See justification.

*Project partners*
Nottingham, Wolverhampton

*Project justification*
Recent longitudinal studies in medical education reveal that 3D visualization has produced significantly better learning and patient diagnostic outcomes (49% in Emory Univ study on breast cancer detection modules). Leveraging this in a lower cost, more readily available mobile platform could lead to significant cost savings, medical outcomes and learning outcomes.

273. **Ubiquitous & Mobile Technology and Learning**

*Project title*
Influence of Mobile Educational Gaming in student interest and learning

*Project description*
This research aims to establish the benefits of educational gaming on mobile devices and its influence in student motivation and learning outcomes. The research would use data from different student groups, comparing results across standardized tests.

*Project partners*
Mobile Educational Game developers
High and mid-education schools

*Project justification*
The effects of mobile educational gaming should be noticeable enough by 2020 as for us to be able to establish its influence in the learning process and as a motivational tool for learning.

274. **Ubiquitous & Mobile Technology and Learning**

*Project title*
URL: Ubiquitous Reality Related Learning

*Project description*
identify problem based real world learning scenarios for informal learning
develop mobile TEL-technologies for supporting learners in those scenarios
analyze the possible benefit of this educational concept for learners
identify the relation between these informal learning and formal learning
identify the new role of educators in those learning scenarios
develop concepts and technologies for contextualized support for personalized learning
apply those concepts of learning in the area of workplace learning

*Project partners*
On the one hand side we have to state an increasing access to mobile technologies (bandwidth, digital media on mobile devices, availability) and an integration of entertainment and educational opportunities (edutainment). On the other hand side informal and non-formal learning gets more important in relation to formal education in traditional institutions. These fundamental changes in society demands research omn relevant aspect of this processes in order to support them and to foster digital inclusion.

275. Ubiquitous & Mobile Technology and Learning Group: Researcher
Project title
scale, equity & sustainability
Project description
what are equitable business models to deliver scaled sustained mobile and contextual; what are the relationships between stakeholders; how is changed catalysed; what is the nature of evidence for different stakeholders
Project partners
social science; corporate (networks, publishers etc); officials
Project justification
mobile & contextual learning currently characterised by small scale fixed term projects

276. Ubiquitous & Mobile Technology and Learning Group: Researcher
Project title
Mobile Learning in the K-12 Setting
Project description
How can mobile technologies be used to support learning in the K-12 setting?
Project partners
Universities and K-12 school systems
Project justification
All of the above.

277. Ubiquitous & Mobile Technology and Learning Group: Researcher
Project title
The Effects of Using Mobile Devices in Elementary Classrooms. iPads and Learning Apps.
Project description
Do they improve learning? Is student engagement improved? What types of assessments will measure this?
Project partners
Wright State University
K-12 Public Education Institution in US
Foreign University
Foreign K-12 Institution
Project justification
Because of the emergence of affordable mobile devices, education has access to them. Learners are more familiar with mobile devices at a younger age. Cloud computing is making access to affordable resources.

278. Ubiquitous & Mobile Technology and Learning Group: Researcher
Project title
Use interface for mobile learning
Project description
1. What is the most effective graphical interface for mobile learning?
2. How to build dynamic interface to cater for learners individual needs?
The mobile learning system must have the intelligence to adapt the interface and content to meet the learner needs.
Project partners
- Research universities
- Software developers
- Mobile devices manufacturers
Project justification
Adapting the interface and content to meet the learner needs and characteristics will make the learning process more efficient. They will be no wasting of students time; hence, benefiting society. Also, the learning process will take advantage of the power of the computing device.

279. Ubiquitous & Mobile Technology and Learning Group: Researcher
Project title
Fostering the links between learning contexts
Project description
How can we ensure that hands-on learning experiences can be leveraged to support abstraction? How can we facilitate the transitions between different contexts of learning? How can we bring teachers into the overall design of the learning activities and support technology adoption?
Project partners
Research groups and schools (not very sure what is required...)
Project justification
The wide spread proliferation of mobile technologies and the instrumentation of diverse locations (for example, museums, archaeological sites) allow the creation of rich content that can be easily assessed on the spot. However, it remains a challenge to create learning activities that go beyond the fun factor and are effectively integrated into schools curricula. Furthermore, there are still technological challenges concerning the possible customization of local resources to the needs of a particular group of learners (for example, how to level the content in a public space to different learners?).

280. Ubiquitous & Mobile Technology and Learning Group: Researcher
Project title
Learning everywhere
Project description
Mobiles, handled devices and Internet allow educational practitioners to think about new learning spaces and practices. The classroom is not the unique space where learners can improve their knowledge and skills. The current technology enables to support the learning of students everywhere and everytime. It is important that educational practitioners and technicians discuss about how to take profit of technology in order to create enhanced learning spaces.
Project partners
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**Project justification**
The current digital natives are used to mobile phones, Internet and handled devices. They need to participate in the learning process, and the traditional classroom is not the unique space where they can learn.

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281. Ubiquitous & Mobile Technology and Learning  
*Group: Researcher*

**Project title**
Personal Educational Tools (PETS) to Enhance Learning

**Project description**
When students have their own personal learning device, do they take more ownership of their learning?

**Project partners**
elementary and middle school
university researchers
personal learning device company
software or ap company

**Project justification**
Many students today have grown up with their own Gameboy, cell phone, etc. and are comfortable with the access of information at their fingertips. School environments lag behind in allowing students to use these common devices for learning. In fact they are often banned from school environments. Finding ways to utilize devices (like cell phones) that students may already have is leveraging technology for learning in a positive way.

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282. Ubiquitous & Mobile Technology and Learning  
*Group: Researcher*

**Project title**
Ubiquitous Computing in Schools

**Project description**
How are 1-to-1 computing programs justified by schools?  
How does a 1-to-1 computing program best impact schools?  
How are teachers prepared to implement ubiquitous computing?  
How is the effectiveness of a 1-to-1 computing program determined?  
And, how are 1-to-1 computing programs sustained?

**Project partners**
Various k-12 schools in my region

**Project justification**
Increasingly, school districts are beginning to implement 1-to-1 computing programs. Some schools choose laptops, netbooks, or even more mobile devices like iPads or other tablet computers. I have grown interested in learning why school districts feel the need to purchase ubiquitous computing and how they implement these programs once a decision has been made. When bond issues are proposed or when voters are given a choice they often approve 1-to-1 programs in schools, yet I do not believe that most voters fully understand research behind these programs. Phrases like, "21st century skills" are bantered about as a big part of the rationale behind wanting ubiquitous computing, yet even these terms are nebulous and change from person to person. I would like to understand this phenomena better. I want to compare various ubiquitous computing programs to learn what works, what does not work, and why components of ubiquitous computing are success or not.

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283. Ubiquitous & Mobile Technology and Learning  
*Group: Researcher*

**Project title**
Helping parents and children learn together

**Project description**

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STELLAR Delphi Study - research project proposals by the experts of the 4th STELLAR Delphi round for the Core Research Area *Ubiquitous and Mobile Technology and Learning*
Ubiquitous and mobile technology and learning. Can we help parents and children to learn together? Is micro-tutoring effective (3 min sessions between parents and children using some helpful resource)? Is it a habit that can be adopted easily and maintained?

**Project partners**
Schools, parent groups, universities

**Project justification**
ubiquitous and mobile technology is everywhere. If we can help parents and their children to build a habit of learning together - when they have a moment together (standing in line, waiting for dinner, waiting at the laundrymat) perhaps we can lift the literacy of both parents and students.

**284. Ubiquitous & Mobile Technology and Learning**

**Group: Researcher**

**Project title**
Using Mobile Technology to Create the iClassroom

**Project description**
Do mobile devices promote individualized learning?
Does the use of mobile device increase time on learning tasks?
Does the use of mobile devices increase the number of learning activities a student engages in over the course of a day, week, month, year?
Over time, will the number of device increase in schools? Will they become accepted as part of the teaching environment?

**Project partners**
Business providing mobile devices,
University to provide research guidance
Local school districts

**Project justification**
If the devices provide a more efficient or more effective means of delivering a variety of learning experiences, they students will be able to access and acquire even more information. This could potential change how education is being implemented in the classroom.

**285. Ubiquitous & Mobile Technology and Learning**

**Group: Researcher**

**Project title**
Tell me know

**Project description**
How having information available at any time and any place can lead to real learning?
This project is focused on searching strategies for empowering the continuous and ubiquity of technology. One possible track is to make users more self-direct and aware of what they need and why. Theoretical concepts that should be taken in consideration are meta-cognition, self-direct learning, intentional learning, linking formal and informal learning.

**Project partners**
University and research centres to define protocols of data collection and analysis.
Schools, youth clubs and families as place where to collect data.
I would propose observational data; shadowing and field notes; interviews and users stories

**Project justification**
Diffusion of technology is unstoppable. Prohibition or inhibition is not an adequate answer. Society and research have to find positive ways to use it. Youngsters have the right to be exposed to good models of using technology. They cannot be left alone.
Suggesting powerful way of using the available technology can also lead to new technological development

**286. Ubiquitous & Mobile Technology and Learning**

**Group: Researcher**

STELLAR Delphi Study - research project proposals by the experts of the 4th STELLAR Delphi round for the Core Research Area *Ubiquitous and Mobile Technology and Learning*
**Project title**
Learning a Different Culture by Tourists: how can Mobile Technology support Informal and Formal Learning?

**Project description**
Tourists visiting foreign countries, whose culture is distant from their own, may find in mobile technologies an important support to increase their cultural awareness and understanding.

I would study the impact of different technologies / fruition settings on cultural awareness and understanding especially when visiting developing countries

**Project partners**

mine
Tim Umwin
Ulrike Gretzel
Catholic University of Mozambique Faculty of Tourism Management and Information Technology

**Project justification**
Tourism at large accounts for more than 10% UE GDP
It can help reduce digital divide and promote peace and intercultural understanding
Informal learning in Tourism is of the utmost importance
No extensive/experimental studies already done on this

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**287. Ubiquitous & Mobile Technology and Learning**

**Group: Researcher**

**Project title**
Pervasive Learning in Healthcare: Forecasting the Future of Learning within an Age of Ubiquitous Communication in Healthcare and Medicine

**Project description**
What are the human factors "contributing" to the up-take of ubiquitous and mobile learning within healthcare and medicine?
What are the human factors "limiting" to the up-take of ubiquitous and mobile learning within healthcare and medicine?
Are lesser developed regions more likely to adopt and adapt to current and emerging ubiquitous and mobile learning cultures within healthcare and medicine?
Will ubiquitous and mobile learning scenarios increase access to healthcare and medicine?

**Project partners**
NIH National Institutes of Health (USA)
NHS National Health Services (UK)
CDC Center for Disease Control (USA)
Various Medical Schools in Africa, South-America, Eastern Europe and Asia

**Project justification**
- To extend the corpus of research within the field of mobile learning;
- To develop innovative methods to observe behaviors surrounding current and emerging communication cultures;
- To conduct a mixed-methodological study which provides a solid forecast of individual and collaborative learning cultures influenced by ubiquitous computing / communications based upon ethnographic research;
- To chronicle and present seven years of ethnographic field research observing the changes in communication and learning cultures;
- To help inform policy makers of current and emerging trends in ubiquitous communication and pervasive learning cultures and scenarios

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**288. Ubiquitous & Mobile Technology and Learning**

**Group: Researcher**

**Project title**
microethnography

**STELLAR Delphi Study - research project proposals by the experts of the 4th STELLAR Delphi round for the Core Research Area Ubiquitous and Mobile Technology and Learning**
Project description
How can ubiquitous and mobile technologies facilitate cultural research by students ‘in the field’, i.e. capturing video, textual, photographic and audio data for critical and creative analysis of lived everyday culture

Project partners
Department of Screen Media and Journalism & Digital Cultures Research Centre, University of the West of England, Bristol, UK

Project justification
Though initially rooted in the concerns and methods of media and cultural studies, this research would offer technical, organisational, analytical and epistemological resources to any other discipline that either requires students to undertake fieldwork, or that might wish to encourage distributed and multimedia learning.

289. Ubiquitous & Mobile Technology and Learning
Group: Researcher

Project title

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Project description
Imaging a world where you have always all information perfectly matching the context and the intended usage; e.g. long description about a artefact in a museum, short information about (local) bus schedules if in a hurry, ... The amount, kind, media, ... is automatically adapted to the surrounding and situation, based on profiles, previous behaviour, friends nearby (eg. aligning intereststo meet for sightseeing or joined lunch in a restaurant favoured by all)

Research questions:
1) What are the implications if we would have all these information with us at all time? Does it improve our quality of life? And even more important: Do we still learn or do we rely on the technology. Are we able to keep information about schedules, routes, or art objects; or do we forget about it even faster in comparision to traditional media (printed schedule, reading books). What happens if we do not have the technique (failure of network?). In 10 years, we might depend on mobile computer so much, that other information is not available anymore (printed schedules, signs for important buildings, maps)? What aobut the non “digital people”; do we loose contact to them?

Project partners
The team should have:
- practical partner (e.g. mobile provider for enhanced technology)
- psychology institute
- trend researcher
- information systems engineers

Project justification
The speed of IT is scaring, we increase our frequence regarding requests to Wikipedia, Google, Online Dictionaries, .... and forget to use methods that work without electronic. Is research and society to keep up the speed or do we lack the usability of new devices and enhanced funtionality. In a research project, it should be investigated in real-world scenarios where people have to fulfill tasks und various conditions.

290. Ubiquitous & Mobile Technology and Learning
Group: Educator

Project title
Using the tools in front of you

Project description
How might the mobile devices you possess enhance your learning of science,...
How might applications developed for the device engage you in learning in the classroom
Have students and partners explore methods of using mobile devices in classroom setting to learn concepts and engage in learning

**Project partners**
Cell phone provider  
software provider for mobile device  
University educators in US and overseas

**Project justification**
The findings should provide educators and learner a new approach to using the devices that students bring to their classrooms. Reduce the off task moments in the classrooms and get students using the tools to learn and engage in the lesson rather than just texting a friend  
Educate students on ways to use tools to communicate with others and learn about facts/concepts with a tool in their own possession.

291. Ubiquitous & Mobile Technology and Learning  
**Group: Educator**

**Project title**
Creating a Connected Campus

**Project description**
Does giving every higher education student and faculty member a mobile connected device increase the number of learning opportunities for students? Do these increased learning opportunities translate into more learning?

**Project partners**
University, technology company.

**Project justification**
Student need to know how to use the wealth of knowledge that is available in their pockets today. They need to know how to collaborate with others both face-to-face and virtually to solve problems.

292. Ubiquitous & Mobile Technology and Learning  
**Group: Educator**

**Project title**
Enhancing learning through advanced technology

**Project description**
How much is technology able to enhance learning for each student /teacher under different conditions? Will students be more motivated in technology-enhanced learning? (and teachers in technology-enhanced teaching?) How does technology help to overcome the barriers of informal and formal learning? Will technology improve the results in both?

**Project partners**
a) teachers - students - associations,  
b) universities  
c) technological developers

**Project justification**
see above a) end-users  
b) research expertise  
c) producers

294. Ubiquitous & Mobile Technology and Learning  
**Group: Business Person**

**Project title**
Motel4All (mobile tech and learning 4 all)

**Project description**
Informal and personal learning is much more viable than ever before through viral and social distribution of information, content, and learning opportunities. New devices like the iPhone10 and iPad5 bring new ways of learning to a much wider public than we could have expected. Virtual reality, augmented reality, location based can be combined in a single tool for a personalised and
contextualised new learning immersive experience where free digital contents are automatically searched, edited and embedded real-time in the augmented world on the mobile device and made available for the other users.

**Project partners**
- Experts in AR
- Experts in virtual worlds
- Experts in data mining
- Experts in m-learning technology
- Industrial pilot(s)
- Academic pilot(s)

**Project justification**
- Large diffusion of high-performance mobile devices
- Involvement of the learner in the learning process
- Ubiquitous learning

295. **Ubiquitous & Mobile Technology and Learning**  
**Group: Business Person**  
**Project title**
Mobile learning for all!

**Project description**
Why ubiquitous & mobile learning is well adapted to the new students’ lifestyles?
Why mobile devices, and consequently mobile learning, will be so important in the future, as they already are in developing countries?
Why the development of ubiquitous & mobile technology and learning will have a positive impact on anyone (students, workers, every people), in any part of the world, for studies, for continuous education, for leisures...?

**Project partners**
- Research laboratories, Universities (learning and social departments), Communities of Practice (communities of teacher, of learners), User groups

**Project justification**
See above

296. **Ubiquitous & Mobile Technology and Learning**  
**Group: Business Person**  
**Project title**
Emerging countries educational platform

**Project description**
What can be taught through ubiquitous mobile terminals in emerging economies to the bottom or middle of the pyramid?
Can it be cost-effective (what is the business model)?
Can it fit the needs of local people?
What infrastructure is needed?
What content is needed?
Is it scalable?
Is it informal or formal or both?

**Project partners**
?

**Project justification**
Education is a major concern in developing parts of the world. Technology should be able to support a better level of education for all.

297. **Ubiquitous & Mobile Technology and Learning**  
**Group: Business Person**  
**Project title**
Continual learning

Project description
What would constitute a ‘continual learning partner’ experience look like? The goal is to ‘wizard of Oz’ the qualitative study of a continual learning experience by taking a small sample population, and tracking their activities via a mobile device that can serve as a channel for an individual to serve as a personal mentor. The tracks of this experience would be mined for clues, input, and subjective and objective effectiveness to create an initial suite of hypotheses to refine through more refined studies.

Project partners
Wolverhampton U, IBM, Nottingham U, Open U (NL), Google, Freiburg

Project justification
The increasing presence of a continual computing adjunct offers a new model of learning; neither completely informal or formal, but a cross purpose design. However, we have little insight into how that might play out, and how it should. The potential, however, for having an intelligent and portable partner device that knows your learning goals, your context, and develops the individual through a ‘slow learning’ process offers powerful societal benefits by delivering learning at the right moment and over a much longer period of time.

298. Ubiquitous & Mobile Technology and Learning

Project title
ALTA: Ambient Learning Technology for All

Project description
Today technology is getting more and more powerful and cloud computing makes it available where and as needed. Tablet computers carry the computing and rendering power we couldn’t even imagine years ago. There is now increasing need of highly effective User Interactivity design, to embedded learning more and more in the context of use, transparng the backend complexity in favour of highly personalised learning experiences, adapting to the learner skills, competency gaps, media availability, location and time.

As games attract gamers, ambient learning will attract those with the holy spirit of continuous development. You just turn your device on and it gives you context sensitive information on what you need at that specific moment.

Ambient technology is here to embed technology in the surroundings using smart tags, visual tags, AR and mobile devices with location based detection, eventually roaming information across real and virtual worlds, between Your real learner identity and your virtual ego.

Ambient learning would be the ideal scenario in 10 years time enabling a student to get available at his real (or virtual) reach everything he needs to know, at the right time and moment, bundling advanced content profiling technologies, and context aware sensors, to deliver the right learning experience live, when needed and as much as needed. Informal learning happening whilst in the filed, to be then monitored and stored into personal portfolio systems, for the benefit of the ongoing curriculum; not an either or approach, not Informal vs formal nor published versus free, but a world of open standards and interoperability achievements bringing several systems to talk to each other, in a distributed cloud set up, for the benefit of learning personalization and individual development.

Project partners
Technology vendors in mobile, location and virtual worlds learning
Sensors and tagging technologists
Skills and Competency management researchers
Game playing experts

Project justification
Technology is getting too powerful but is still out of the reach of learning practitioners and learners.... Embedding learning experiences in the environment could become as easy as turning on a light bulb. You don't need to know all the value chain, interoperability issues and technology achievements which make electric light available in Your room possible. You just turn on the switch and enjoy it.

Electricity was the Ambient technology revolution making the Industrial society happen.

STELLAR Delphi Study - research project proposals by the experts of the 4th STELLAR Delphi round for the Core Research Area Ubiquitous and Mobile Technology and Learning
Now we need interdisciplinary project teams which may create the next big thing in Education: a creative invention making the Knowledge Society really at the reach of all.

299. **Ubiquitous & Mobile Technology and Learning**  
*Group: Policy-Maker*  
**Project title**  
Motivating students towards MST  
**Project description**  
What are effective ways of using built-in facilities of ultra-mobile devices (GSP, accelerometers, wifi, cameras, video, sound etc) to encourage creativity and student-centered collaborations in the areas of mathematics, science and technology?  
**Project partners**  
Teachers’ professional subject associations (ASE, ATM, CAS, DATA, MA) and partner HE (e.g. Bristol, Chichester, ULIE)  
**Project justification**  
Workplace and society needs

300. **Ubiquitous & Mobile Technology and Learning**  
*Group: Policy-Maker*  
**Project title**  
mobile technology on future HE Institutions  
**Project description**  
Enhance learning skills and overcome physical barriers  
Connect with SN, and contextual learning  
**Project partners**  
U. Aveiro (PT)  
U. Jyvaskyla (FI)  
U. Autónoma Madrid (ES)  
**Project justification**

293. **Ubiquitous & Mobile Technology and Learning**  
*Group: Educator*  
**Project title**  
Allowing TEL to keep pace with change in mobile technology  
**Project description**  
The pace of change in mobile devices is so rapid that no one can possibly predict where we will be in 10 years time. The mobile user interface is the critical factor in allowing the TEL experience to transfer from traditional high performance computers to mobile devices. Who is advising the manufacturers about the needs of education?  
**Project partners**  
There are so many pads and phones out there already, all with clunky user interfaces, based on finger gestures. A selection of hardware and software manufacturers should be consulted. How can TEL software titles be reborn on a mobile device with a meaningful interface? Should be demanding a stylus, and something akin to a right-click options menu?  
**Project justification**  
If mobile development is left entirely to the manufacturers’ whim, as at present, it seems unlikely that the education sector will get appropriate low cost devices for schools. The user interface will simply not cope with the demands, say, of accurate graphing tools.