

## Call for Contributions

**1. Inform the Chair:** with the Title of your Contribution

**2. Submission URL:**

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=BUSTECH+2018+Special>

Please select Track Preference as **TEL TSA**

### Special track

## **TEL TSA: Technology Enhanced Learning: Theories, Systems, and Applications**

Chairs and Coordinators:

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along with

**BUSTECH 2018**, The Eighth International Conference on Business Intelligence and Technology

<http://www.iaria.org/conferences2018/BUSTECH18.html>

Technology Enhanced Learning (TEL) comprises a variety of innovative ICT solutions to deal with numerous evolving educational challenges. These challenges include improving the experience of learners, academics, and institutions; providing an adaptive, effective, and personalized learning to every learner, managing and meeting the users' requirements, to mention but a few. Overcoming these challenges can empower learners and consequently the overall society, and contribute to improving the community quality of life. Utilizing ICT in education, or in another word TEL, can facilitate efficient e-learning models where technology helps learners to build their own advanced critical thinking capabilities. It also facilitates new ways of learning such as connectivism, community of practice, and social based learning. Moreover, technology provides a solid ground, where learning communities can test their conceptualization of pedagogy and extend this conceptualization to accommodate new learners' requirements/feedback. Furthermore, TEL offers significant benefits to disadvantaged learners such as disabled or those who suffer from cognitive disorder.

Despite the great potential shown above and the recent innovations in TEL domain, much development is needed to ensure better learning experience for everyone and to bridge the gap in the TEL state of the art. Effective TEL models, tools, and framework conceive learning as a complex process that includes various activities and interactions between different roles to achieve certain goals in a continuously evolving environment. This requires capturing the context and using advanced knowledge representation and management techniques. Also, due to the dynamic nature of learning process, TEL models should possess a high level of agility, where different abstraction levels are used thorough the Model Driven Engineering approaches. From technology perspective, the possibility of realization of TEL is being enabled by various Artificial Intelligence technologies, theories, and techniques (e.g., Machine Learning, Data Mining, Semantic Web, Big Data, and Learning Analytics), which can be used to customize the learner's e-learning process, predict her performance, recommend learning activities, and so on. Other distributed computing models such as Cloud Computing and Service Orientation allow further flexibility so that e-learning scenarios/processes can be enacted/orchestrated using a series of web services. Finally, the substantive rise of adopting TEL software systems in real life scenarios (e.g., academic organizations, lifelong learning, formal/informal learning, etc.) necessitates these TEL software systems to be properly architected using various Enterprise Architecture concepts, standards, and framework such as TOGAF. This improves TEL software systems integrity, interoperability, co-existence, and flexibility. This special track invites original research papers providing insights into TEL software systems, requirements, processes, and frameworks.

## Topics include, but not limited to:

- Big Data in Technology Enhanced Learning
- Enterprise Architecture and Technology Enhanced Learning
- Technology Enhanced Learning Systems Modelling, Architecture, and Integration
- Model Driven Engineering in TEL
- TEL applications in the context of Internet of Things
- Process-based Technology Enhanced Learning Systems
- Massive Open Online Courses (MOOCs)/Open Education Resources (OER)
- Serious Games, Edutainment, and Game-based Education
- Smart and Mobile Learning Environments
- Affective learning (e.g., learner emotions, engagement, and motivation)
- Requirement Engineering/Management in the context of Technology Enhanced Learning
- Service-Oriented Computing in Technology Enhanced Learning (e.g., SOA-enabled e-learning systems, service identifications, service discovery, etc.)
- Semantic Web and Knowledge-based Technology Enhanced Learning Systems.
- Contextualization, Adaptation, Personalization, or User Modeling in Technology Enhanced Learning.
- Cloud-based Technology Enhanced Learning Systems
- Virtual/Augmented Reality, Wearable, Pervasive, and Immersive Educational Technology.
- Pedagogical models and theories underpinning Technology Enhanced Learning Systems (e.g., behaviorism, connectivism, Self-regulated, social/collaborative e-learning models)
- Learning Design standards and approaches
- Technology Enhanced Learning Systems orchestration/enactment (e.g., web services and semantic web)
- Assessment and Evaluation in Technology Enhanced Learning.
- Technology Enhanced Learning Recommender Systems
- Technology Enhanced Learning Regulations, policies, and models for Technology Enhanced Learning
- Technology Enhanced Learning Security and Privacy
- Learning analytics
- Technology Enhanced Learning applications in various domains (e.g., health education, lifelong/vocational learning, etc.)
- Accessibility in Technology Enhanced Learning

Submissions that offer position statements, theoretical and industrial perspectives, lessons learned, comparisons, evaluations and technical contributions to TELTSA are also welcome.

## Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on [www.iaia.org](http://www.iaia.org)]
- Presentations: slide only [slide-deck posted on [www.iaia.org](http://www.iaia.org)]
- Demos: two pages [posted on [www.iaia.org](http://www.iaia.org)]

## Important Datelines

- Inform the Chair: As soon as you decided to contribute
- Submission: Nov 3, 2017
- Notification: Dec 3, 2017
- Registration: Dec 17, 2017
- Camera ready: Jan 15, 2018

## **Paper Format**

- See: <http://www.aria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.aria.org/editorialrules.html>

## **Publications**

- Extended versions of selected papers will be published in IARIA Journals: <http://www.ariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

## **Paper Submission**

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## **Registration**

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.aria.org/registration.html>

## **Contact**

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