

EUROPEAN FIRST YEAR EXPERIENCE CONFERENCE 2018

Thanks to the STELA Erasmus+ project (“STELA Project” 2017) Successful Transition from secondary to higher education using Learning Analytics, we explored how learning analytics can be to support the first-year experience. **Learning analytics (LA)** is “the measurement, collection, analysis, and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs” (Ferguson 2012). The objectives of learning analytics are manifold, from identification of at-risk students over predictive analytics to the personalization of learning content and contexts, to support teachers, students, study advisors, etc. (Verbert et al. 2012) . **Learning dashboards** typically capture and visualize traces of learning activities, in order to promote awareness, reflection and sense-making, and to enable learners to define goals and track progress towards these goals (Verbert et al. 2014).

The focus of the project is mainly on **student-facing learning dashboards** that provide students with **feedback** on their **first-year experience**. All developments are focused on **scalability** (e.g. meaning that they focus on data that is readily available in a typical higher education program) and **transferability** (i.e. that other higher education institutions could adopt or adapt the solutions for their contexts). In the workshop we will elaborate on the dashboards for **on-campus use in traditional higher education programs**. The learning dashboards use a variety of data such as interactions on the virtual learning environment, grade data, library visits, learning and studying skills, and class attendance.

Within the project there were three main approaches. Firstly, Nottingham Trent University (United Kingdom), who was already using student dashboard from an external provider, investigated how this dashboard can be integrated within university practices. Secondly, KU Leuven (Belgium) developed student-facing dashboards from scratch as there were no prior Learning Analytics dashboards available (Tom Broos, Verbert, et al. 2017; T. Broos et al. 2017; Tom Broos, Verbert, and De Laet 2018; Tom Broos, Peeters, et al. 2017). Thirdly, TU Delft transferred the LA dashboards developed by KU Leuven to challenge the transferability and scalability.

The workshop has three main goals:

1. **Familiarizing attendants with Learning Analytics for supporting first-year students** by showing four real-life examples from the deployed dashboards
2. Discussing the **ethics of the dashboards and their use in the practice of supporting first-year students**. (staff involvement, training).
3. The **impact of the learning dashboards**:
 - a. Presenting the measured impact on student satisfaction, student success, and retention.
 - b. Discussing the expected impact of learning dashboards, how it can be measured and maximized.
4. The **acceptance of dashboards**:
 - a. Presenting the experience in using co-creation and stakeholder involvement for maximizing acceptance by study advisors,
 - b. Discussing other strategies for maximizing acceptance.

Broos, T., L. Peeters, K. Verbert, C. Van Soom, G. Langie, and T. De Laet. 2017. *Dashboard for Actionable Feedback on Learning Skills: Scalability and Usefulness. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*. Vol. 10296 LNCS. doi:10.1007/978-3-319-58515-4_18.

Broos, Tom, Laurie; Peeters, Katrien Verbert, Carolien Van Soom, Greet Langie, and Tinne De Laet. 2017. “Small Data as a Conversation Starter for Learning Analytics: Exam Results Dashboard for First-Year Students in Higher Education.” *Journal of Research in Innovative Teaching & Learning* minor revi.

- Broos, Tom, Katrien Verbert, and Tinne De Laet. 2018. "Multi-Institutional Positioning Test Feedback Dashboard for Aspiring Students ." In *Submitted to the LAK 2018 Conference*.
- Broos, Tom, Katrien Verbert, Carolien Vansoom, Greet Langie, and Tinne De Laet. 2017. "Dashboard for Actionable Feedback on Learning Skills: How Learner Profile Affects Use." In *Springer Lecture Notes in Computer Science (LNCS) Series. (Proceedings of the ECTEL 2017 Conference; ARTEL Workshop)*, to be published.
- Ferguson, R. 2012. "Learning Analytics: Drivers, Developments and Challenges." *International Journal of Technology Enhanced Learning* 4 (5/6): 304–317. doi:10.1504/IJTEL.2012.051816.
- "STELA Project." 2017. 2015. <http://stela-project.eu/>.
- Verbert, Katrien, Sten Govaerts, Erik Duval, Jose Luis Santos, Frans Van Assche, Gonzalo Parra, and Joris Klerkx. 2014. "Learning Dashboards: An Overview and Future Research Opportunities." *Personal and Ubiquitous Computing* 18 (6). Springer London: 1499–1514. doi:10.1007/s00779-013-0751-2.
- Verbert, Katrien, Nikos Manouselis, Hendrik Drachsler, and Erik Duval. 2012. "Dataset-Driven Research to Support Learning and Knowledge Analytics." *Educational Technology & Society* 15: 133–48.

Main message of the session: “After this session the participant will know/have experienced/have gained...”

- The pros and cons of a learning analytics dashboard deployed at KU Leuven to support the live interaction between student advisor and first-year student.
- The future challenges of the use of learning analytics to support the first-year experience.

Keywords: every presentation will be categorized according to some keywords. Please check the box of the keywords applicable to your session. The keywords are based on interesting EFYE-topics for this conference.

- Active learning
- Belonging (socially, academic)
- Big Data
- Commuter (or local) students
- Counselling
- Curriculum
- Health and well-being
- Induction (Orientation)
- Institutional development
- International students
- Language (academic)
- Learning communities
- Library
- Parents
- Pastoral Care
- Peer mentoring

- Physical spaces
- Research on FYE
- Residential students
- Retention
- Service learning/volunteering
- Social cohesion
- Student diversity
- Student finance
- Student perspective
- Students as partners
- Study Skills
- Social Media
- Technology
- Transition from school/college to HE
- Transition to second year
- Work and study

Data Protection: The information you supply on this form will be stored in paper and/or electronic format for the purposes of conference administration. Additionally, speaker biographies, abstracts and summaries of sessions/posters may be published in delegate packs and on the EFYE 2016 website.