# A.4 Community-based Service-Learning and Digital Media – A Teaching Practice Report on a Flipped-Classroom-based Crowdfunding Course for Social Pedagogues

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### Abstract

This teaching practice report looks ahead to the learning experiences of students relating to the use of digital media and their collaborative knowledge work within a service-learning project. This project takes into account the increasing digitalisation in higher education, in particular, its didacticmethodical, technological, and organisational implementation, as well as their integration into appropriate learning management systems. Undergraduate students initiated a crowdfunding campaign for young people aged between 12 and 18 in a rural town under the authors' direction in the bachelor's degree program "Social Pedagogics and Management" at a University of Applied Science in the Free State of Saxony, Germany. The two-semester course included a flipped classroom concept linked to a community-based learning approach that not only allowed for development of students' digital literacy skills and a deepening of their theoretical knowledge in the field of alternative financing possibilities in human service organisations but also helped to enhance students' social engagement. In this context, the learning management system ILIAS provided not only an appropriate digital knowledge architecture for the service-learning project but also offered a wide range of eLearning opportunities, a platform for multi-local project work, and the documentation of ePortfolios. This practice report aims at a short description of the teaching project itself, its implementation, and the results of the mentioned learning scenario and will conclude by summarising how the quality of technology-enhanced higher education pedagogy could be improved in future.

**Keywords**: Community-based Learning, Crowdfunding, Flipped Classroom, Learning Management Systems, LMS, ILIAS, Human Service Management, Technology-Enhanced Learning

# 1 The Teaching Project – An Overview

Prospective social workers should not only acquire significant knowledge and systematic expertise in their field of studies but also need to be qualified to solve practical problems and to develop concepts for professional practice. Even though students can gain the competencies mentioned above in various social work degree programs in the Free State of Saxony (Germany), they often lack sufficient social work management expertise when taking on new jobs in the middle and higher management in human service organisations. While reflective practices in the different curricula mainly focus on the preparation, mentoring, and debriefing of mandatory internships and work experiences, social work management is only addressed in passing. The teaching project presented here represents an innovation in the current bachelor's degree program of "Social Pedagogics and Management." It not only allows for a theory-practice transfer in the context of alternative forms of financing and for promoting students' social engagement but also supports problembased learning and the acquisition of digital literacy skills. In parallel to the teaching project, the author conducted a scholarship of teaching and learning (SoTL) research project (Arnold 2019) that analysed the question of how digital media can stimulate students' "problem-solving" (cf. Csapó & Funke 2017) in service-learning courses. To summarise, the underlying teaching project integrates the following components:

- Didactic Approach: The teaching concept "Community-based Service-Learning" provides the theoretical basis for this teaching project.
   Accordingly, learners gain new knowledge and expertise not only about ways of alternative financing of human service organisations and apply different methods but also acquire social, communicative, and self-competencies within and outside the classroom in conjunction with social engagement (e.g., Guo et al. 2016; Jia et al. 2018).
- *Practical Orientation*: Generally, crowdfunding can be understood as an alternative way to *fund* innovative ideas, initiatives, or projects where a large number of individual donors *(crowd)* provide the necessary finances. In the literature, we can find various forms of crowdfunding: donation-based crowdfunding, reward-based crowdfunding, as well as lending- and equity-based crowd-investing (Beck 2012, p. 15). So far, research has focused too little on the link between donors' real-world experiences and "Civic Crowdfunding" platforms (cf. Stiver et al. 2015).
- Digital Skills: A flipped classroom concept (e.g., Handke 2015) that was
  implemented through the learning management system ILIAS aims at
  the acquisition of application-oriented knowledge and of "digital literacy
  skills" (Buckingham 2010) alike. Additionally, ILIAS provided an
  appropriate communication platform for the multi-local project work and

the documentation of the students' learning experiences in the form of ePortfolios. For example, Bouwmeester et al. (2019) and other evaluations have shown that – compared to traditional teaching approaches – flipped classroom scenarios do insufficiently or not at all increase the objectively measurable learning success in standardised assessments, although learners value the individual learning process higher and more effective due to the fact that exam preparation has moved forward into class.

This paper will next outline the framework of the teaching project and its implementation before we will conclude by summarising how the quality of technology-enhanced higher education pedagogy could be improved.

# 2 Implementation of the Teaching Project

The project was part of the two-semester in-depth teaching module "Management Accounting and Financing of Human Service Organisations" in the bachelor's degree program "Social Pedagogics and Management" at a University of Applied Sciences in the Free State of Saxony in the academic year 2018/19. The project involved 11 students (seven female and four male) aged from 21 to 35. After learners acquired in the first semester basic knowledge of finances and accounting in the social economy, they had to apply this particular knowledge and gained new practical skills and experiences in the service learning-course in the second semester. Students have been cooperating with a group of highly committed young people aged from 12 to 18 who initiated a café for youths ("Schülercafé") in a rural town as well as with various other stakeholders such as a citizens' initiative, social workers, representatives from the city administration, and the city council. The students developed together with those youths guidelines for reward-based crowdfunding and created a website for a future campaign that they have presented publicly.

Accompanying the project, the learning platform ILIAS offered a wide range of eLearning opportunities and a digital platform for multi-local project work. A specific flipped classroom concept adapted to learning environments in management education allowed for a shift of relevant teaching content into the class sessions (cf. Findlay-Thompson & Mombourquette 2014). Through the use of digital media (e.g., eLectures, glossaries, wikis, self-study assignments, podcasts, digital lecture notes and project documents), students received aid during their independent, individual, and decentralised learning process before and after each meeting. All in-class sessions were organised as workshops and provided a learning space for discussions and the application of the knowledge about crowdfunding acquired before the project as well as provided a space for interactions and group work for collaborative learning.

# 3 Outlook – Experiences Through the Use of Digital Media

Due to the limited space of this paper, only a few conclusions will be drawn from the experiences gained in the teaching project's implementation and through the use of digital media (for more details see Arnold 2019):

- Flipped Classroom and ILIAS as digital learning platform: In general, while a majority of students committed themselves to the intensive self-study exercises (e.g., interactive quizzes, forum posts, glossaries) after the eLectures, the other part of students used the learning management platform in contrast only as a "reference book" and "file repository". Additionally, students launched a WhatsApp group during the project to be able to communicate with each other and with the youths much more agile.
- ePortfolios: In the individual portfolios posted on ILIAS, students generated different sets of at least five artefacts (e.g., photos, flipcharts, project plans, campaign plans, podcasts). Furthermore, the portfolios included reflections on the individual learning process and critical incidents of crucial situations during the project. A majority of students acquainted themselves autonomously with the portfolio technique on ILIAS. All students were provided with open educational resources such as video tutorials and received a live demonstration on this digital platform.

Future research will need to deepen the discussion on how students' learning can be supported in more immersive teaching and learning arrangements and through the use of digital media in service-learning courses (e.g., Holdener et al. 2016), how learners utilise emotionally, cognitively, and socially technology-enhanced learning opportunities in higher education, and how such settings are related to students' academic success and learning motivation (e.g., Dunn & Kennedy 2019). Last, but not least, it needs to be evaluated how a transfer between theory and practice could be promoted through the use of digital learning material and within relevant fields of work (e.g., Randi & Corno 2007).

### Literature

Arnold, M. (2019). Problem-based Learning in Higher Education Service Learning: Implications for Theory-Practice-Transfer. In Universidad del País Vasco, & RED-U (Eds.), Exploring new fields through the scholarship of teaching and learning. Proceedings of 3rd EuroSoTL Conference June 13–14, 2019 (pp. 603–613). Bilbao: Universidad del País Vasco. <a href="https://www.ehu.eus/documents/8301386/10560621/Actas-EuroSoTL-Conference-2019.pdf/1a7d5867-e222-4aab-6f92-a7948f1fbd67">https://www.ehu.eus/documents/8301386/10560621/Actas-EuroSoTL-Conference-2019.pdf/1a7d5867-e222-4aab-6f92-a7948f1fbd67</a> [13/09/19].

- Beck, R. (2012). Crowdinvesting: Die Investition der Vielen. Düsseldorf: Amazon Distribution.
- Bouwmeester, R.A.M., de Kleijn, R.A.M., van den Berg, I.E.T., ten Cate, O.T.J., van Rijen, H.V.M., & Westerveld, H.E. (2019). Flipping the medical classroom: Effect on workload, interactivity, motivation and retention of knowledge. Computers and Education, 139, 118–128. <a href="https://doi.org/10.1016/j.compedu.2019.05.002">https://doi.org/10.1016/j.compedu.2019.05.002</a> [13/09/19].
- Buckingham D. (2010). Defining Digital Literacy. In Ben Bachmair (Hrsg.), Medienbildung in neuen Kulturräumen. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Csapó, B. & Funke, J. (2017). The Nature of Problem Solving: Using Research to Inspire 21st Century Learning. Paris: OECD Education Research and Innovation.
- Dunn, T.J. & Kennedy, M. (2019). Technology Enhanced Learning in higher education; motivations, engagement and academic achievement. Computers & Education, 137, 104–113. <a href="https://doi.org/10.1016/j.compedu.2019.04.004">https://doi.org/10.1016/j.compedu.2019.04.004</a> [13/09/19].
- Findlay-Thompson, S. & Mombourquette, P. (2014). Evaluation of a Flipped Classroom in an Undergraduate Business Course. Business Education & Accreditation 6(1), 63–71.
- Guo, F., Yao, M., Wang, C., Yan, W., & Zong, X. (2016). The Effects of Service Learning on Student Problem Solving: The Mediating Role of Classroom Engagement. Teaching of Psychology. <a href="https://doi.org/10.1177/0098628315620064">https://doi.org/10.1177/0098628315620064</a> [13/09/19].
- Handke, J. (2015). Digitalisierung der Hochschullehre. Welche Rolle spielt das Inverted Classroom Model dabei? In J. Haag, J. Weißenböck, W. Gruber, & C.F. Freisleben-Teutscher (Hrsg.), Neue Technologien Kollaboration Personalisierung. Beiträge zum 3. Tag der Lehre an der FH St. Pölten am 16. Oktober 2014. St. Pölten: Fachhochschule St. Pölten.
- Holdener, A., Bellanger, S., & Mohr, S. (2016). "Digitale Kompetenz" als hochschulweiter Bezugsrahmen in einem Strategieentwicklungsprozess.
  In J. Wachtler, M. Ebner, O. Gröblinger, M. Kopp, E. Bratengeyer, H.-P. Steinbacher, C. Freisleben-Teutscher, & C. Kapper (Hrsg.), Digitale Medien: Zusammenarbeit in der Bildung. Münster, New York: Waxmann Verlag.
- Jia, X., Jung, J., & Ottenbreit-Leftwich, A. (2018). Learning Technology Integration From a Service-Learning Project: Connecting Preservice Teachers to Real-World Problems. Journal of Experiential Education, 41(3), 261–276. https://doi.org/10.1177/1053825917738269 [13/09/19].

- Randi, J. & Corno, L. (2007). Theory into practice: A matter of transfer. Theory into practice, 46(4), 334–342. <a href="https://doi.org/10.1080/00405840701593923">https://doi.org/10.1080/00405840701593923</a> [13/09/19].
- Stiver, A., Barroca, L., Petre, M., Richards, M. & Roberts, D. (2015). Civic crowdfunding: how do offline communities engage online? Proceedings of the 2015 British HCI Conference, ACM, 37–45. <a href="https://dl.acm.org/citation.cfm?doid=2783446.2783585">https://dl.acm.org/citation.cfm?doid=2783446.2783585</a> [13/09/19].