Success Factors for Teaching Museum Studies in the Digital Age: Insights Into *museOn* | *weiterbildung & netzwerk*^{*}

Teaching of classics before and during the COVID-19 crisis

A short survey among students from several German universities, attending various subjects in ancient studies, reveals a uniform picture of basic teaching of classics before the COVID-19 crisis: the conventional combination of lecture, seminar, and exercise is the most common format. Lectures and seminars follow a routinely repetitive structure and focus on the auditory and visual teaching of content. Students work on a seminar topic by analysing more specific subtopics in self-study (acquisition, investigation activities) and presenting their results in lecture form, followed by producing a written record. Digitally supported forms of teaching are almost completely avoided.

Some core competencies of humanities work are addressed: critical questioning of research opinions and facts through their evaluation, scientific writing, discussion, and presentation. So-called future skills, as postulated by Stifterverband in cooperation with McKinsey, such as problem-solving, creativity, collaboration, digital interaction, and learning, are neglected. As a result, students are insufficiently prepared for their future scientific practice, and even less for a job in a professional environment. Do traditional teaching formats achieve the best possible learning outcome? How can digital teaching and learning formats help us to gear study programs toward competence?

Since the beginning of the COVID-19 crisis, lecturers have been forced to switch entirely to digital teaching within a few weeks. This has presented them with numerous challenges, ranging from technical difficulties – lacking knowledge of digital formats, methods, and tools – to a fundamental scepticism about digital formats. Quite often, attempts have been made to 'translate' the same type of 'traditional' teaching on a 1:1 ratio into the virtual world, which has led to a certain amount of frustration among students and lecturers and, in some cases, the desire to return to the status quo as soon

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as possible. Not only in view of pandemic-driven needs, but especially in view of the potential and added values of digital teaching and learning formats, the focus needs to shift back toward the didactically effective planning, designing, and teaching of courses.

Project background: objectives, target group, programme structure

By funding *museOn* | *weiterbildung & netzwerk*,¹ the Federal Ministry of Education and Research (BMBF) has been supporting the establishment of an academic continuing-education programme for the museum and cultural sector since 2014. It is part of the programme 'Aufstieg durch Bildung: Offene Hochschulen' (running from October 2014 to July 2020). The project *museOn* pursues two goals: On the one hand, the development of further education courses is intended to support a targeted professionalisation of museums and their staff. On the other hand, the development of a museum of the future is to be promoted through an ongoing discourse among an emerging network of museum experts.

Accordingly, the target group includes people who work in various areas of museums and cultural institutions, from volunteers and service personnel to museum directors, with very heterogeneous prior knowledge and professional experience, regionally scattered throughout the German-speaking world, with highly specific needs and interests in continuing education.

The *museOn* curriculum is therefore designed as a small-scale modular buildingblock system, based on the main tasks of museums: collecting, exhibiting, mediating/ educating, managing, and marketing (Fig. 1).

The courses focus on highly relevant and pressing topics (e.g. sustainability management, digital strategies, and heritage interpretation), but also on basic topics such as public relations, exhibition planning, and curating. The modules can be studied as individual courses or cumulatively as a Certificate of Advanced Studies (CAS) or a Diploma of Advanced Studies (DAS) with/accredited by/under the auspices of Swissuni.² The programme is designed in such a way that by allowing the participants to choose flexibly from more than 50 courses, they can tailor their own further education to their level of knowledge and interests as well as to their professional and private situation. In addition to their work, participants dedicate approximately five hours per week over a period of five weeks to a topic, mainly online, in a mentored group setting. The courses have been developed with the professional support of museum experts and scientists.

¹ https://www.museon.uni-freiburg.de/ (last accessed May 27, 2021).

² http://www.swissuni.ch/(last accessed May 27, 2021).



Fig. 1: museOn curriculum: building block system.

Since 2016, a total of 380 students have participated in 160 courses in both test and regular study operations. The majority of students have consecutively completed several courses; among them, almost 120 have obtained a CAS degree and nearly 20 have even earned a DAS degree. The number of dropouts is extremely low – especially compared to pure online formats such as MOOCs. A total of 70 experts, 12 e-tutors, and the *museOn* team (about 8 part-time staff) have been involved in developing and conducting the courses throughout the entire project phase.

Didactic design

Courses through *museOn* are designed in a blended-learning format. This means that most of the course (80–100%) can be studied online on the digital-learning platform.³ Mostly asynchronous phases are interconnected with synchronous contact periods with the entire group, either independent of location via web conference and/or at a museum as a place of observation and action in a laboratory-like setting.

The didactic design is built upon on a constructivist understanding of education and focuses on problem- and task-based learning with a high emphasis on practice

³ FRAMAS - Freiburger Akademie für Museums-, Ausstellungs- und Sammlungswissen *museOn | weiterbildung & netzwerk* (Hrsg.), Wissenschaftliche Weiterbildung für die Museumswelt. Didaktisches Design (Freiburg 2017), https://www.museon.unifreiburg.de/wp-content/uploads/2017/05/museOn-Heft-03_03-2017-Didaktisches-Design.pdf (last accessed May 27, 2021).



Fig. 2: Didactic design.

transfer. With the help of expert input, interactive reflection, discussion, and advice the participants can acquire new knowledge based on problems from their everyday work. Meaningful and relevant tasks enable the transfer of new insights into practice (Fig. 2).

Participants of the course 'Exhibition Planning' are, for example, given the task to submit a plan for a real or fictitious small-scale special exhibition, combined with a presentation or written conceptualisation for their fellow students. To accomplish their tasks, students use various multimedia resources such as e-lectures, interactive videos, texts, or learning modules as well as real-life materials. Depending on the learning goal of the task, they work either alone, in tandems, or in small groups using the various communication and collaboration tools available, such as an Etherpad on ILIAS or a whiteboard in a synchronous web meeting. Self-directed learning is key, but in each course the students are intensively accompanied and supported by a tandem consisting of a subject-matter expert and an e-tutor throughout the fiveweek period.

Example: 'Objects and Knowledge'

In order to illustrate how our courses are structured, the following example provides insight into one of the theoretical courses, called 'Objects and Knowledge' (conducted by Prof. Dr. Ralf von den Hoff and Antje-Sophie Menschner, M.A.).⁴ Artefacts, objects, and things convey knowledge in museums and exhibitions, or generate knowledge. They are therefore of central importance for curators. The aim of the course is, on the one hand, to raise awareness of the various field of the meaning of objects. On the other hand, sensitivity is cultivated/deepened for different forms of the use of this knowledge,

⁴ For a detailed course description cf. https://www.museon.uni-freiburg.de/weiterbilden/kurse-termine/ausstellen#6 (last accessed May 27, 2021).

specifically in the exhibition context. Therefore, the course reflects the interactions between the way objects are handled in museum presentations and the knowledge that is conveyed to visitors about the objects through the methods of staging chosen.

For this purpose, the students read various texts and discuss essential terms in small groups with the help of an Etherpad, a tool that can be used synchronously and asynchronously. As soon as the students agree on a definition, it is transferred to a glossary that can eventually be printed and used as a basis for further work.

The second part of the course is about selecting objects and analysing their different meanings in a blog post on ILIAS that can be commented on by fellow students. Again, small teams develop two concepts for each object to demonstrate how it could be exhibited in a museum. For a blue jug, for example, the development of two proposals suggests entirely different approaches to the object. In an online meeting, the participants discuss the different proposals and approaches to the object.

Success factors in continuing education

Since 2016, the *museOn* programme has been regularly and extensively evaluated both quantitatively and qualitatively at course and programme level. The statements of participants, subject-matter experts, and e-tutors are triangulated and feed into the process of continuous quality improvement.

At the end of 2019, a comprehensive survey was carried out among 24 CAS graduates. The specific aim of the survey was to assess the sustainability of the programme and the transfer success and longer-term effects of participation for the professional situations of the graduates.

The quality of the CAS programme was rated good or very good by 87.5% of the graduates. From the graduates' point of view, the CAS programme is particularly suitable for career starters. Reasons given for recommendation included the high degree of flexibility and diversity, the up-to-dateness and relevance of the topics, the possibility of gaining insight into other museum areas, and expanding competence as well as networking and exchange.

In addition, the expansion of professional, methodological and digital skills, and the linking of theory and practice play a particular role for the participants. According to the survey results, the vast majority of participants were able to expand digital and non-digital key competences as listed here.

In terms of practice transfer, most of the participants were able to integrate their study contents into their professional activities, use them as a starting point for developing new ideas, and adapt them to different situations. Most of those surveyed found their participation in the continuing-education programme beneficial for their career

development. As a result of their participation, graduates feel more confident in their working environment and indicate that their work quality has improved. The majority are more satisfied with their work.

Both from the many evaluations carried out and from the experience gained during the development and delivery of more than 50 courses, a number of factors have proven to be crucial for the learning outcomes of the participants:

- At programme level, the high degree of modularity enables flexible and learnercentred studying.
- Study contents are relevant to individual professional goals, are up-to-date, and are dynamically adaptable.
- Competence orientation, including all levels of Bloom's taxonomy,⁵ as well as identified future skills, constructively aligned with learning activities and assessment formats, are crucial for learning success. Theory-practice transfer is ensured through problem- and task-based learning.
- The didactic design is based on a constructivist understanding of education, in which learning from and with each other in learning communities is encouraged.
- The learning setting is designed in such a way that teaching and learning activities are coherently arranged in face-to-face and online phases, and the chosen mix of methods, media, and social forms is beneficial for learning.
- Lecturers are prepared for their changing role and requirements in a blendedlearning setting, with expert authors and teachers as learning initiators and coaches and e-tutors as learning facilitators.

Conclusions for basic university education

Based upon the key factors identified for learning success in a comprehensive digital continuing-education programme, a number of benefits can be deduced for teaching, study, and even research in classics, and these are considered below.

At present, depending on the size of the institute, prospective antiquities scholars have little opportunity to influence their profile within their specialisation, for example by choosing seminar topics that interest them, due to the very limited number of seminars available. If, for instance, students had access to additional recorded lectures from their own institute or from others, they could more easily acquire fundamental knowledge in subjects that their study programme does not offer.

⁵ Anderson, Krathwohl 2001, 67-68.

Digital formats can facilitate learning for ALL types and learners and significantly increase the range of learning activities, encompassing not only acquisition but also investigation, discussion, collaboration, practice, and production. Through the use of multimedia tasks and tools, various senses are addressed, and students can study the material at their own pace. As a result, different thought processes are triggered, and long-term memory retention is supported. Multimedia also allows for creative learning outcomes such as videos, podcasts, presentations, and virtual exhibitions, i.e. learner-generated content that can be shared with others and re-used by others. E-portfolios can serve purposes of reflection and synthesis.

Flipping the classroom by shifting acquisition activities into a preparatory online selflearning phase gives room for joint in-depth discussions. Alternatively, a discussion in the seminar room, which is restricted by attention and time pressure, can be continued online.

At the same time, skills that will be beneficial for students in their professional lives, such as digital interaction and collaborative working, are trained incidentally. This is particularly important in classical studies, where few elements prepare students for their professional future. Yet in order to maintain its attractiveness as a subject, classics must not turn a blind eye to students' employability. Digital skills are already required in a variety of future professions, whether in museums, publishing houses, or in teaching.

Despite these obvious benefits, when attempting to establish a comprehensive and consistent approach to digital teaching and learning in basic humanities, existing framework conditions have to be taken into account, and a number of challenges will have to be tackled, as considered below.

While for participants in a continuing-education program, the priority of their studies very often ranks third after work and private life, for students, studying is their main occupation. As canonical study programs for students are geographically and chronologically tied to accommodate teaching staff and certain infrastructure (university), the advantages of digital teaching to study independently of time and place are not relevant. Meeting on campus during the day is not only easier but also socially more rewarding. As soon as digital-learning units are fixed in the examination regulations, it must be ensured that every student has the necessary equipment at their disposal. Can that be demanded from students with financially weaker backgrounds, or can universities be made responsible for providing the equipment needed?

In contrast to students of today's generation, who as so-called digital natives are basically familiar with using digital devices, tools, and structures in personal contexts, teaching staff may be less digitally fluent. Due to the rather high age demographics among university professors, many are hardly familiar with the potential of digital formats and tools, and usually lack digital-learning concepts and ideas about appropriate tasks beyond uploading documents. Accordingly, their attitude toward digital-teaching methods often remains sceptical, and they regard traditional classroom teaching as the only true form of teaching. To develop skills and to convey the added value of digital or blended learning and teaching formats among lecturers, special training programmes are needed.

In addition, tightly knit examination regulations often leave little space to accommodate smaller learning modules or alternative forms of assessment in the curriculum. If relaxation of the examination regulations cannot be achieved, the only option is to force the digital-learning tasks into this corset.

Moreover, subject-specific conventions determine research practice: archaeological research still seems to be strongly influenced by individual protagonists, institutes, and regions, trying to differentiate themselves through their expertise, which secures jobs, legitimises research positions, and builds their recognition among colleagues. Behind this lies a collective research habitus. These conventions, which can be found not only in research but also in teaching, are well established and can only be changed slowly. It is therefore crucial that digital formats are used in a targeted and structured manner. Improvable elements from the traditional classroom should be replaced synergistically with digital elements and formats. It is not a question of either classroom or digital teaching. It is a question of how to sensibly unite the two.

However, even if considerable adaptation at different levels is required to successfully implement digital teaching, the effort is worthwhile in view of better educated students who can survive in the job market of the future, in view of lecturers who themselves continue to learn, and in view of an entire research discipline that can also ensure its quality nationwide, make content sustainably available, and network more easily.

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