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# Action learning for change management in digital transformation

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## KEYWORDS

action learning, change management, higher education, teaching, digital transformation

## 1 Introduction and objectives

Digital transformation is not only a technological endeavor but affects the whole organization, such as a company or non-profit organization (Tabrizi et al., 2019). Technologies such as artificial intelligence, data science, and cloud computing are relevant (Sebastian et al., 2017) but rather enable improvements (Vogelsang et al., 2019; Pasqual et al., 2023). Real benefits can only be achieved by new business models or innovative products that will change the way value is created in a company (Matt et al., 2015). As this also implies structural changes, succeeding in such a journey requires skills and competencies in conducting changes in an organization.

Courses on digital transformation at university aim to prepare students to lead organization changes from both technological and management perspectives. However, there are some challenges in teaching change management, as the topic and the consequences of change in a corporate environment are still quite abstract for students. Whilst individual students manage personal changes in their lives, challenges in a large organization are hard to tell by just using words. Change projects, including a digital transformation aimed at revolutionizing a company's business model, alter the organizational structure, impact people and their careers, and may cause uncertainty (Kotter, 2012).

The paper presents a case study on applying action learning (AL) to simulate the situation during a change and how to facilitate a change. The objective, therefore, is to let students experience changes in organizations in order to develop a better understanding of the need for and how to deal with resistance from employees or stakeholders during a digital transformation.

## 2 Action learning for sustainability in education

AL, an experienced-based learning method, is described as learning by doing, collaborating, sharing ideas, lifelong learning, and reflecting on practice (Zuber-Skerrit, 2002, p. 114). It focusses on taking action on important issues or problems (Hauser et al., 2023, p. 117). In addition, it is “a framework for a group of people to learn and develop through open and trusting interaction” (Pedler et al., 2005 in Hauser et al., 2023, p. 116). The basis of AL is the concept of *question*. By asking questions, AL becomes a social process in which a lot of people start to learn with and from each other, and a learning community comes into being (Revans, 1982, p. 66, 69, 70).

Sustainable education, such as AL, is a cultural shift in how education and learning are understood (Sterling, 2008, p. 65). If the method is applied in higher education, it changes the learning and teaching culture. Whilst the main objective remains knowledge transfer, experience and soft skills become more important, including planning and organizing the learning process. AL can be used as a method to encourage students to be more independent.

An AL project starts with a specific real-world problem for which a simple solution is not readily available, and lecturers provide guidance throughout the learning process. Addressing the problem that confronts participants necessitates a decision-making process within the group. In this project, the primary objective is to make knowledge from the lecture permanently available in the students' minds and also to motivate them to learn more independently, reflect, and think critically. The achievement of the objective is supposed to be determined during oral exams at the end of the semester.

### 3 Case study

The postgraduate course on business information systems at the Frankfurt University of Applied Sciences (Germany) has a focus on digital transformation. A dedicated module on strategic process management teaches methods and tools for optimizing processes during a transformation, including change management. Whilst teaching, it became clear that most students have never experienced a significant corporate change, making it difficult for them to assess the necessity for facilitating such a change and dealing with resistance from employees or stakeholders. The class was therefore running into the danger of just learning words by heart (written in textbooks on change management) but never understanding what being part of such a change feels like. Hence, the teachers introduced one session using AL to achieve sustainability in learning by experiencing change. The second author, who is the professor in charge, has no active role during the AL training session and is deliberately not in the room since he is examining and grading the students and assumes that it could hinder the training's success. As the examining and grading person, the assumption is that it could hinder the training. The professor is therefore the facilitator of the learning process (Robertson and Heckroodt, 2022, p. 81). The first author accompanies the process as a participant and takes on the role of observer. Two external facilitators guide the students through the training.

This training has integrated work and learning, which is the basis of AL (Maltiba and Marsick, 2008 in Cho and Egan, 2009, p. 441). The learning success was due to the systematic approach of this AL session as well as to the guidance of the trainers. Learning from experience does need structure; otherwise, it can be inefficient (Zuber-Skerrit, 2002, p. 115).

A professional training company with experience in change management and personal development has been hired. Two trainers of this company prepared a curriculum on how to motivate change and also exposed the students to a tough situation. After the training, the students were asked to break a wooden board with their bare hands. Being shocked by this perspective, students listened to the trainers whilst they talked about facilitation as well as motivation and explained everything based on breaking the board.

The whole training took ~5 h, and at the end, each participant broke the board with their bare hands.

### 4 Findings and conclusion

In the pursuit of insights, data were collected through a combination of student observations, discussions, and reflective exchanges with the students. The master students were hesitant in the beginning as they were expecting a traditional lecture format but were met with quite a different setting: a circle of chairs, a flip chart instead of PowerPoint, and two instructors in the front who did not look familiar. The students were intimidated, unsure, and initially quiet. Over the course of the day, the students relaxed and participated. At first, they could not make the connection to their lecture. The trainers supported the students in building the bridge to change management in the work context. This guidance through the trainers was necessary. Students were encouraged to ask questions and think of examples from their professional contexts; if they did not have them, references to their personal lives or volunteer work should be made. By the end of the day, students were open, asking questions, exchanging knowledge and experience, loosening up, and having fun. As the students were also emotionally involved in the training (because of the challenge), they developed an empathic understanding of how employees feel when being subject to change. This is one of the intended results since AL has a "dual mission": people development and business impact (Cho and Egan, 2009, p. 441). They were able to experience transformation and change.

It was a functional decision not to include the examiner in the training because the observer also noticed that the students were somewhat restrained and sometimes looked at her. The observer was only known to the students from greetings, and she also had the feeling that this made some people feel inhibited. For this reason, the external trainers, who ensure confidentiality, were ideal. The participative observation could have influenced the students' later statements.

This case study is only transferable to a limited extent since it is very specific: it only includes postgraduate student from one-degree programme who mainly have done their undergraduates at the same university. In addition, for German universities, it is a rather smaller study group (10–16 students). Another special feature is the special background of the external trainers: business information specialists and instructors for Jiu-Jitsu both influence the case study/training.

At the end of the semester, the module was concluded with an oral exam. The second author had often encountered students in the past who were able to reproduce knowledge but had limited understanding of its meaning and had difficulty providing examples. This year, things were different: The students were able to give a lively account of change management based on the training and were able to substantiate the contents of the lecture with practical examples. The primary objective, as stated previously, can be seen as achieved, as almost all students were able to reflect on the challenges of the changes. One student struggled to explain reasons for resistance against changes in a company in the oral exam and just repeated words from the lecture slides. In this case, the professor switched back to the role of a learning companion

and encouraged the student to reflect on how they felt whilst being confronted with the wooden board challenge. Now the technical knowledge was connected to the emotional side, and struggles with changes were explained in a livelier way.

AL as an innovative teaching method not only has advantages but also disadvantages in higher education settings. The following disadvantages and how we have tried to mitigate them should be mentioned: Applying for AL is time-consuming, and it has to fit into the university's schedule. We met this challenge through early and transparent (semester) planning. For AL, the sessions were scheduled for a whole day, longer than the usual lecture and exercise slots in the timetable. To signal this change, the lecture room was arranged in a different seating format (seating circle), which suggested a different teaching method. The extended length of the day and the presence of external facilitators made it clear to students that this was not a typical lecture.

The case study makes the authors quite optimistic that AL could be integrated into the curriculum to gain more time for implementation and to enable a sustainable learning effect. Notably, certain factors have emerged as influential in promoting success in our case: the necessity of implementing AL in smaller group settings, the acquisition of external facilitators, the proactive scheduling of additional time slots within the semester plan, and the clear, advanced communication of these schedule adjustments to enable students to align their plans accordingly. Importantly, there was an active expression of interest from some students for more sessions of this nature. In the future, we are also planning to try out shorter formats to test whether AL could also be implemented in a regular course, i.e., 90 min.

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## Author contributions

AR: Conceptualization, Investigation, Project administration, Validation, Writing – original draft, Writing – review & editing. JJ: Conceptualization, Funding acquisition, Investigation, Project administration, Validation, Writing – original draft, Writing – review & editing.

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