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Abstract

In the field of management science and business administration, the case method is gaining ground in research as well as in teaching. Case studies are used on the one hand as an exploratory research approach and on the other hand as a problem-based teaching approach. However, we find that case research and case teaching remain unchained in management study programs and propose to close this gap. We identify an untapped potential of boosting the case method by integrating case-based research and teaching into a discovery and learning journey of applied science. It is suggested to embed the integrated case method in the ecosystem of universities thereby enhancing and intensifying the knowledge transfer between business and higher educational sector and better achieving learning objectives in higher education and in turn embedding the university in the ecosystem. As a result, this approach enables the development of a high level of contextual intelligence and thus helps to avoid the fallacies of teaching based on uniform theoretical content.

Key Words

Case method, case research, case teaching, higher education, flipped classroom, learning journey, management education, knowledge transfer, contextual intelligence

1 Introduction to the Case Method in Management Education

In the field of management research, a case study is an "empirical method that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident" (Yin 2018, p. 15). The objective of the case method is to identify the patterns and understand the causes of the identified issues. The case study inquiry copes with the technically distinctive situation, in which there will be many more variables of interest than data points; relies on multiple sources of evidence, with data needing to converge in a triangulating fashion; and benefits from the prior development of theoretical propositions to guide data collection and analysis. Thus, the case method is a predominantly qualitative research approach containing quantitative instruments such as cross-classified tables and analyses, as well as sampling protocols when the unit of analysis is, e.g., a complex organization (cp. Gill 2011).

In field management education and teaching, the essence of a case study, the central tendency among all types of case study is that it tries to illuminate a decision or a set of decisions, namely: why they were taken, how they were implemented, and with what result (Schramm 1971; Yin 2018). "A 'teaching' case study is a description of a situation, or an account of a sequence of events, commonly involving a decision, an opportunity, a challenge or a problem faced by a person, or the management of an organization, raises issues for discussion and analysis in the search for a solution" (Heath, 1998, p. 11). The case method is a participatory, discussionbased way of learning where students gain skills in critical thinking, communication, and group dynamics, and develop competences in problemsolving, decision-making, willingness to develop and change, and acting ethically, as well as, depending on the case assignment, team and project management skills (Bruner 2002; Christensen et al. 1991). Therefore, the case method contributes to the competence framework for higher education in line with the European Qualifications Framework (cf. EQF 2008). Hence, the focus of the case method in higher education is predominantly on case-based teaching. However, we understand learning in a holistic way, comprising research and teaching, both of which are equally important in competence and skill development. Thus, this paper explores

both sides of the method and attempts to integrate them for improving the competence and skill development of students.

Compared to other forms of research, the case method is a predominantly qualitative and exploratory research approach. In the field of teaching, the case method consequently presents a problem-based approach that involves multiple levels of complexity and conflict, and requires students to apply management theories or concepts, as well as to learn about its limitations and necessary adaptations to a specific problem, often in ambiguous contexts.

Having classified the case method as predominantly qualitative in research and teaching, we position the case method with respect to other methods in a center position within the portfolio of qualitative and quantitative research and teaching methods (cf. Figure 1).

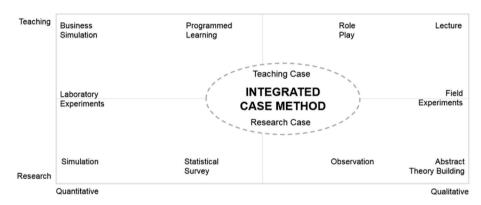


Fig. 1: Case method in research and teaching. Source: own illustration.

Qualitative research comprises manifold forms, e.g., abstract theory building, field experiments, or observations, which fall outside the case method paradigm. Quantitative research predominantly comprises analyses concerned with the mathematical derivation, description, and analysis of methods of obtaining numerical solutions such as statistical surveys and simulations of laboratory experiments. Teaching methods range from quantitative business simulations and program learning up to qualitative role-playing, e.g., for negotiation training and lectures for conveying management theories and concepts.

In comparison with other research and teaching methods, case studies are more flexible and responsive to the respective environment in which they are embedded. This is associated with the exploratory philosophy of the case method in contrast with rigid-theory testing that is frequently advocated in research method classes and textbooks. Hence, an appropriate research philosophy based on the case method must take into account the complexity of the underlying object in its environment. As will be further elaborated, we see the particular value of the method outlined in this paper in extending the case study method to an integrated environmental perception, analysis, processing, and reflection approach involving all relevant actors in a specific regional ecosystem of transfer between higher education institutions, business organizations, and multiple other regional actors, e.g., business development agencies.

This is our understanding of creating and developing contextual intelligence based on grounded learning, as introduced in the next sections (Mosca and Howard, 1997; Schwarz, 1985; Kutz, 2008; Khanna, 2014; de Haan-Cao 2020). We call this approach the "integrated case method". In our view, teachers from multiple business and management disciplines will be trained to complete the whole cycle of conducting case research in real-life business and will transfer research insights into case teaching. This includes close contact with business and is embedded in the regional business ecosystem to develop practice-oriented teaching knowledge to relevant stakeholders of higher education institutions.

In the next sections, we try to develop the ingredients necessary to become part of a fully-fledged "integrated case method". To this end, in the first step, we take a narrower view of the process of developing, writing, and teaching cases itself, i.e., the procedure developing cases without taking a broader view on the specific context this procedure is applied to. We call this the "process model" of the "integrated case method". In this context, we first advocate a process of inductive learning based on self-created case studies with the active involvement of students in all process phases, i.e., case research, case writing, and case teaching. In this respect, reference is given to the grounded learning approach, where the learning activity is based on personal involvement. We argue that the active involvement of students, especially in the case writing phase, offers the opportunity to

systematically integrate the specific needs and perspectives of students into real business cases studies. The second integral ingredient of the process model is the so-called "case-based learning journey". The learning journey concept is an approach to design a teaching framework with multiple touchpoints and interactive events across different phases of a case-based curriculum. This includes in-class and out-of-class elements of procedural learning. The most important element is that in a case-based curriculum, a series of case studies should complement each other and support intensive discussions on conflicting management theories and business practices. The third proposed major ingredient of the process model is the "flipped classroom" vision of case-based learning. We propose designing a teaching approach where students are introduced to the learning material before class. Lecture time will then be used to deepen the understanding of theory through discussions with peers and problem-solving activities, facilitated by teachers.

After the discussion of integral parts of the "process model" of the "integrated case method", we will broaden our view to the contextual environment of a higher education institution. This especially refers to the aims and value contributions of the European CAse Study Alliance (ECASA) project. The business ecosystem matters for developing the contextual intelligence necessary to cope with challenges of real-life business. Trying to apply management practices uniformly seems to be one of the major pitfalls in modern business societies. Societal conditions and institutions differ immensely from place to place. This does not only include conditions of economic development, but of institutional character, physical geography, educational norms, language, and culture (cf. Khanna, 2014; Voigt, 2019). For this reason, in Section 3, we develop a wheel of circular knowledge transfer as a further integral part of the "integrated case method" to ensure that the business ecosystem is recognized in a case-based curriculum of higher education institutions.

2. Grounded Learning Integrates Case Research and Case Teaching

The conventional use of pre-written case studies in case-based education is a widely practiced approach in management education. Several studies have analyzed the benefits and shortcomings of case studies as a

pedagogical technique (cf. Christensen and Hansen, 1987). The benefits are the immersion of students into a complex, messy, and context-specific situation (cf. Shulman, 1992), stimulating personal reflection, emphasizing introspection, and the development of professional knowledge through the activation of analytical thinking (cf. Kleinfeld, 1992) on the one hand, and decision-making abilities through walking in the shoes of management in the case study on the other hand. The shortcomings are an oversimplifying "best practice" thinking, showing a deficiency in theoretical background or research competence (cf. McKeachie, 1994; Mayo and Nohria, 2005; Khanna, 2014) and a too narrow perspective on a few existing thought patterns and models of a number of big companies (cf. Argyris 1977, 2002).

After balancing the pros and cons of case method in teaching, the vast majority of scholars and students take a clear stance in favor of case teaching. However, faculty members concerned with the development of study programs cannot overlook the detriments of the case method. To this end, new pedagogical techniques are being developed. Kirby et al. (2010) identified that case writing performed by students serves as an effective pedagogical technique. For this reason, writing one's own context-based case studies by integrating students in the case writing process forms a central anchor of the "integrated case method". This might range from support of students in case research and writing, up to the writing of cases by students. The case writing assignments for students are integrated into a strategic management course: "In a nutshell, students work throughout the study term writing their own case study. Depending on the size and level of the class, this can be done independently or in small groups. Students select a business situation that interests them, find out as much as they can about the situation, the specific company, its industry and its external environment, and conduct a thorough analysis of the issues" (Kirby et al., 2010, p. 200).

Integrating case writing into teaching is based on the theory of grounded learning (cf. Mosca and Howard, 1997; Schwarz, 1985). Grounded learning is essentially a process of learning inductively from interactive involvement with the phenomenon being studied (Smith and Williams, 2019). The learning activity is grounded due to the personal involvement of students providing them with a sense of "connectedness and continuity"

in a complex real-life business situation (cf. Senge, 1990). In this way, grounded learning is conceptually similar to the process of developing grounded theory in exploratory qualitative research. A theory is considered as "grounded" when it fits with reality, makes sense to everyone involved, provides intuitive generalization across similar circumstances, and allows some form of control over the phenomenon (cf. Glaser and Strauss, 1999).

A grounded learning approach comprises the following learning elements: (1) it is based in a real business context; (2) stimulates lateral thinking and transfer across different contexts; (3) integrates research methods, management theory, and business practice with an application focus; and (4) is clearly learner-centric (cf. Mosca and Howard 1997; Kirby et al., 2010).

According to Kirby et al. (2010), case writing represents an effective technique for conducting grounded learning in management education. It has been applied in management education successfully by the aforementioned authors thanks to giving students clear guideline for (1) selecting a business situation, (2) gathering information, (3) organizing information, (4) writing the case study, (5) writing teaching note and preparing teaching material, and (6) running the case with their fellow students.

The Center for Applied Studies and Education in Management (CASEM) tested and refined case writing as a grounded learning approach. Over a period of three years, we introduced Master's students and advanced Bachelor's students to case writing in several study programs and courses (International Management, Strategic Management, Global Brand Management, and Supply Chain Management) at three international European universities (University of Applied Sciences Dortmund, University of Cologne and HEC Paris). In total, 540 students in 15 management courses generated 150 case studies, teaching notes, and supplementary teaching material. In a competitive format, the best cases have been published in a teaching casebook (cf. Büchler and Decker 2017).

In further development of this approach, CASEM motivated students to write all cases based on their own primary research and not on secondary data from desk research sources anymore. This approach required (1) sophisticated research capabilities of the students and (2) sufficient

companies from the universities ecosystem willing to cooperate in case research. Consequently, CASEM bolstered students with the required qualitative research techniques and skills for data collection from various sources, such as expert interviews and data triangulation, which represent the methodological essence of case research. Thus, a methodological tutorial on case research has been integrated in all course modules to the end of improving the applied research capabilities of students and deepening the learning experience. From this perspective, we consider case writing as the missing link for integrating case research and case teaching. We consider it as crucial for competence development as it requires students to create and transfer insights from exploratory research into the conventional set of knowledge, theories, and models in teaching. Thereby, students develop a critical perspective, gain autonomy in thinking and judging, and finally reflect on the limitations and benefits of conventional theories and models (cf. Figure 2).

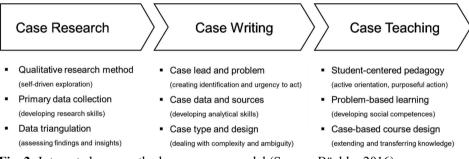


Fig. 2: Integrated case method as a process model (Source: Büchler 2016)

Course evaluations show the highest appreciation by students resulting in the development of a deeper understanding and competences as a result of students' stronger interest in their autonomously chosen case, as well as more intense identification with the case problem in contrast with pre-written cases. In addition, students are activated and stimulated to work-out alternative solutions to a case problem in teams when preparing the teaching note, thereby changing perspectives and discussing trade-offs with others at a higher level. Finally, they develop a sophisticated sense of ownership for achieving learning objectives and realizing relevant outcomes in class by inverting the roles of teacher and student.

3. Discussion of the Design for Case-Based Learning Concepts

3.1. Design of a Case-Based Learning Journey

The learning journey concept is a learner-centered approach to design a teaching framework with multiple touchpoints and interactive events across different phases of experience analogous to the customer journey concept from marketing (cf. Lemon and Verhoef 2016). A learning journey is a curated collection of learning content, both formal and informal, that can be used to acquire a pre-defined set of skills or can be achieve a specified learning outcome. Thus, a structured learning experience provides the learner with a framework and schedule covering different touchpoints across several learning channels and sources, both on- and off-line. Traditional learning journeys are pathways on established grounds, i.e., approved connections or bridges to allow learners to easily navigate through the course content of the so-called "known-knowns".

A case-based learning journey builds the learners' experience on a planned sequence of case studies and associated teaching material such as academic articles and book chapters and can encompass current social media channels from Twitter or ResearchGate. The case studies and teaching material are orchestrated for a maximum of stimulation of learners across different channels, e.g., on- and off-line, and locations, e.g., in- and out-of-class (cf. Figure 3).

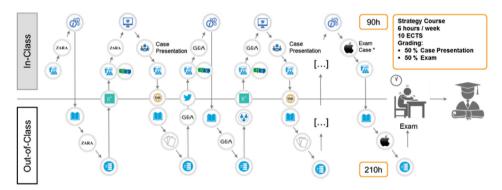


Fig 3: Case-based learning journey.

The case-based learning journey, as illustrated above and realized by business schools nowadays, aims at maximizing students' involvement and preparedness in-class by stimulating their curiousness and willingness to

learn. To this end, multiple channels with digital touchpoints such as Twitter, YouTube, and ResearchGate are integrated, as well as elements of gamification, such as quizzes. On Twitter, students are, for example, required to follow corporate accounts associated with case study assignments. On YouTube, students are, for example, asked to watch and summarize interviews with researchers on the channel of the strategic management society. On ResearchGate, students need to research for the latest publications, for example, for working papers on a specific topic.

However, the most important element of the case-based learning journey is the series of case studies complementing each other and supporting intensive discussions on conflicting management theories and business practices. Yet, most business schools use pre-written case studies and case teaching exclusively for case-based learning programs.

Integrating case research and case writing into the design of case-based learning journeys requires two major adjustments in pedagogy and course structure, which add key aspects to the list of skills and competencies typically taught via case studies provided at the beginning of this article, namely:

- 1. Case research competence, i.e., the basic application expertise of qualitative research instruments by the learners needs to be built. Thus, a research method training should prepare students with these essentials, and this should take place at the beginning of the course. Additionally, the course design should provide enough time in class for discovery-driven research, and discussions about results and alternative solutions for a specific case problem.
- 2. Case company involvement throughout the course requires sufficient time for students to visit company representatives, conduct expert interviews, and analyze the various data points as a basis for the case writing assignment. At the end of the course, the developed case should be tested in class and presented to the case company.

As a result, an integrated case-based learning journey inverts the tasks of students in- and out-of-class fundamentally by bringing open research

topics and problems to the class, and by exploring jointly these problems and staging discussions about alternative solutions. This leads to the further requirement of a flipped classroom.

3.2. Design of a Flipped Classroom for Case-Based Learning

Flipped learning is a pedagogical approach in which the conventional concept of classroom-based learning is inverted. Students are introduced to the learning material before class and are obliged to read and understand theoretical concepts themselves out of class. Classroom time is used to deepen the understanding of the theory through discussion with peers and problem-solving activities facilitated by teachers (cf. TED 2011). The flipped classroom intentionally shifts the learning journey from an instruction-centered one towards a learner-centered pedagogy, in which time in the classroom is used to create meaningful and unique learning opportunities (cp. Figure 4). Students explore contents, test their skills, and collaborate. Instructors provide counsel and orientation through one-on-one support when needed. The flipped setting establishes a dynamic context in which students are enabled to do their own research to obtain results. This approach attempts to bring the highest value of the knowledge and experience of professors to the discussion of content in class. Thus, the flipped classroom adds value to the face-to-face interaction between students and educators.

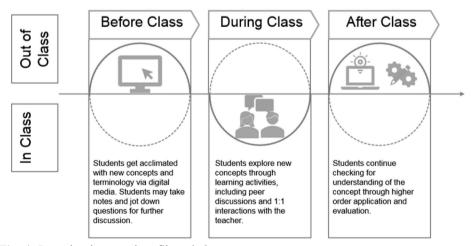


Fig. 4: Learning journey in a flipped classroom.