Case-method teaching: advantages and disadvantages in organizational training

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Abstract

Purpose – The purpose of this paper is to introduce case-method teaching (CMT), its advantages and disadvantages for the process of organizational training within organizations, as well as to compare its advantages and disadvantages with current training methods.

Design/methodology/approach – The authors applied a systematic literature review to define, identify and compare CMT with current methods.

Findings – In CMT, participants get involved with real-world challenges from an action perspective instead of analyzing them from a distance. Also, different reactions of the participants to the same challenge aid instructors to identify the individual differences of participants toward the challenge. Although CMT is still not considered as a popular organizational training method, the advantages of CMT may encourage organizational instructors to further apply it. Improving the long-term memory, enhancing the quality of decision making and understanding the individual differences of individuals are the advantages of CMT.

Research limitations/implications – A lack of sufficient empirical researchers and the high cost of conducting this method may prevent practitioners to apply it.

Originality/value – The review suggested that CMT is able to bring dilemmas from the real world into training settings. Also, it helps organizations to identify the individual reactions before they make a decision.

Keywords Advantages and disadvantages, Case-method teaching, Organizational training

Paper type Literature review

An introduction on case-method teaching (CMT)

Active teaching is a crucial element of learning in the twenty-first century (Sharafi *et al.*, 2016; Tello *et al.*, 2016). This type of teaching stimulates trainees to employ a more dynamic role in learning of the educational content and materials used. In this method, participants are actively engaged in the learning process by performing meaningful learning activities such as those exercises that are extracted from the learning program. One of the key differences between this kind of teaching and traditional teaching is the activity rate of the participants in the process of learning. In traditional teaching, the participants passively receive information from the lecturer while this information might not satisfy their real needs and they may feel that the training is boring and useless (Prince, 2004; Eison, 2010;

Wandberg *et al.*, 2011). In reaction to the disadvantages of the traditional methods, new teaching methods such as CMT have been developed. Although there is still no agreement about the origins of CMT, some researchers stated that it was preliminarily used by the Law School of Harvard University in 1870 (Shugan, 2006), and by the French Institutions at the beginning of the twentieth century (Tripathy, 2009).

CMT is an active teaching technique with the potential to enhance the quality and quantity of an individual's learning (Razali and Zainal, 2013). CMT initially referred to the description of a real situation of an event and contained episodes of practice, a slice of life, a story designed and presented as study material, and an exercise as a puzzle or a problem (Barnes *et al.*, 1994). More recently, CMT is characterized as a type of active instructor-guided teaching, which emphasizes the importance of discussion-based learning (Razali and Zainal, 2013). CMT introduces complicated, obscure real world or fabricated cases (scenarios) into an educational setting in which a protagonist is encountered with a significant decision (Razali and Zainal, 2013; Liubchenko, 2016).

CMT has the potential to immerse participants into realistic managerial situations in order to detect how they make decisions while having incomplete information, time constraints and conflicting goals. It also enriches each hour of learning through adding more examples and experiences within the process of learning. The enriched environment stimulates participants to think more deeply and to present their opinions more freely. In this method, not only the instructor is able to see how participants react differently to a challenge/problem, but also it helps participants to see how their points of view vary concerning different organizational issues. This helps participants increase their learning and have fun too. As such, a large body of studies has demonstrated the positive impact of CMT on a wide range of academic and educational outcomes. For example, CMT promotes academic performance (Schunk *et al.*, 2012), critical thinking (Bowe *et al.*, 2009), motivation to participate in class activities (Murray-Nseula, 2012), self-efficacy (Yalcinkaya *et al.*, 2012) and oral and written communication skills among students (Bonney, 2015). These studies represent the importance of CMT in academic settings; however, less is known about the application of CMT within organizations. CMT can be considered an important asset to organizations because it can train employees to more efficiently deal with the challenges of their organizational roles. As such, the first aim of this paper is to discuss CMT, its advantages and disadvantages in the organizational training process. In this regard, recent studies show that the classical teaching methods such as instructor-based teaching or trainee-based teaching carry limitations. One of the major limitations of these methods is that they ignore the individual differences of the participants within the learning process (Hoyt and Lee, 2002; Gregory and Chapman, 2012). The individuals' differences include the interests and needs of participants to the educational materials and their different learning styles. Therefore, we need to look for a more specific teaching method to reduce the limitations of previous training methods. In CMT, successful instructors simultaneously manage content and process more rigorously and learn to balance planning and spontaneity. In practice, they pursue opportunities and "teachable moments" that emerge throughout the discussion, and deftly guide trainees toward discovery and learning on multiple levels (Christensen Center for Teaching and Learning, 2017).

The second aim of this paper is to introduce CMT as a tool to address the limitations of previous methods. This aim will be discussed in more detail in the next section. We structure this paper based on the following sections: first, we talk about the research method of this study. Then, we describe the theoretical foundation of CMT. Next, we discuss how CMT can be used to compensate for the limitations of other teaching methods in educational programs within the organizations. Then, we will discuss how to run a CMT within an organization. We will follow this with a discussion of the advantages and disadvantages of using CMT for organizations and we will end up with conclusions and suggestions for the future.
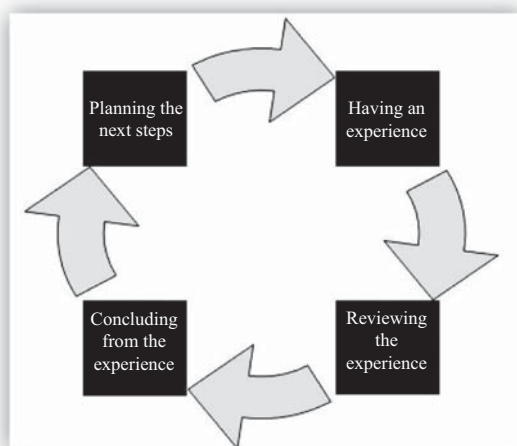
Research method of this study

We applied a systematic literature review to identify, define and compare CMT with current methods. In this regard, we searched in the databases of PsycINFO, ScienceDirect and Google Scholar using keywords of CMT, learning cycle theory, organizational training and individual differences. In all, we obtained 153 relevant articles from PsycINFO, 101 articles from ScienceDirect and 840 articles from Google Scholar. After we further reviewed these articles and set additional filters, we chose 39 final articles which contained most relevant information regarding the CMT and developed following sections.

Theoretical foundation of CMT

CMT is mainly based upon the learning cycle theory developed by Kolb (1984) and improved by Honey and Mumford (1992). According to this theory, an efficient learning is achieved through a four continuous cycling stages process (Honey and Mumford, 1992): experiencing stage: learners should have some activities to increase their experiences; reviewing stage: learners should think about what has happened, or think about the available problem, and reflect its outcomes; concluding stage: learners should analyze and synthesize the information of previous stages to draw some conclusions and generalize it; and planning stage: learners should test observations, reflections and subsequent conclusions and look for new ideas that can be applied to the problem and decide what to do in the future. Figure 1 shows the diagram of a learning cycle based on the learning cycle theory.

CMT can be modeled in a similar way using learning cycle theory (Burgoyne and Mumford, 2001). In CMT, instructors teach trainees on a main subject related to their job position through: presenting information about relevant cases or requesting participants to play the role of those cases (containing some elements of experiencing and reviewing stages); facilitating a discussion among trainees to analyze these cases, and to reach a conclusion about the main subject (containing some elements of the concluding stage); encouraging trainees to review those findings that they gained in the previous stages and to decide on what to do in the future as a next relevant subject (containing some elements of planning stage); and restarting the same cycle for studying another subject related to their job position (Burgoyne and Mumford, 2001; Beckisheva et al., 2015; Yun et al., 2016). As an example, imagine that an occupational health psychologist intends to train

Source: Honey and Mumford (1992)

employees on "What the positive stress is in the workplace?" According to the aforementioned steps, the instructor could arrange the following stages:

(1) Instructor describes the condition of a case very briefly. For example, this case could be a manager who has positive stress in his workplace. Instructor helps trainees to share their information and experiences of similar cases (experiencing and reviewing stages).

(2) Instructor opens a discussion among trainees to measure the understanding of the trainees of this case. The instructor encourages trainees to draw a conclusion about the concept of positive stress (concluding stage).

(3) Instructor encourages the trainees to review their conclusions and present their ideas about a relevant subject such as "if positive stress is good so how can we increase positive stress?" (planning stage).

This cycle can be re-started from the first stage by studying the next relevant issue in the planning stage (for more complex examples see: Brooke, 2006; Bowe *et al.*, 2009; Jianli, 2012; Beckisheva *et al.*, 2015). Indeed, instructors try to engage the trainees in a continuous learning cycle and transform inactive learners into active learners. Burgoyne and Mumford (2001) claimed that where the participants of a CMT program do not initially understand the subject of their program, they still can share their experiences and information with each other or they still can learn about the subject by participating in activities such as role playing. The learning cycle theory provides a solid theoretical foundation on how CMT can enhance the training process within organizations (Honey and Mumford, 1992).

Influence of individual differences on CMT

The demographic and psychological characteristics of individuals distinguish one individual from another. Individual differences refer to the extent and type of distinctions among individuals on some of the significant psychological factors. Individual differences are essential when we tend to explain how individuals differ in their behavior. We can study individual differences in factors such as personality, intelligence, memory or learning. Many of a learner's personal characteristics can affect how he or she learns (Revelle *et al.*, 2011). The study of individual differences among learners can aid educators design instructions that better match each learner's needs. As such, it is important to consider the individual differences when CMT is used to transfer the educational materials from an instructor to a trainee (Nazimuddin, 2015). We introduce two classical teaching methods to compare its ability in paying attention to these differences compared to CMT. According to De la Sablonnière *et al.* (2009), we refer to two classical teaching methods. First, instructor centered, which introduce the instructor as the main source of knowledge, expecting from the learners to follow the directions and information of their instructor. Second, learner centered which emphasize the needs and the abilities of the learners, placing the instructor in the role of a facilitator, rather than simply imparting knowledge.

Both methods have their own limitations. Instructor-centered methods mainly neglect the active role of learners in learning, while learner-centered methods mainly neglect the learning role of instructors (Yun *et al.*, 2016). Besides, it seems that the instructor-centered methods oversee the individual differences of learners including their learning styles, personality and motivation (Gregory and Chapman, 2012). In contrast, the learner-centered methods oversee the same individual differences among instructors (such as their teaching style or work personality) (Hoyt and Lee, 2002). Although these limitations are related to the individuals in an academic setting, similar limitations can also be assumed when individuals work in an organizational setting. CMT, as a modern training

method, compensates for the limitation of the aforementioned methods in the ignorance of individual differences. In this respect, Yun *et al.* (2016) stated that the main practical value of CMT is its flexibility (without focusing exclusively on either instructors or learners) in matching the teaching styles of instructors with the individual aspects of learners.

Use of CMT within organization

CMT instructors use cases because they believe that learners learn more when they are involved with the cases. They learn from the cases to formulate the real problems and make difficult decisions under the conditions of uncertainty. In this procedure, learners simultaneously discover (or construct) a body of knowledge and master life learning skills (Golich, 2000). Although the literature shows that CMT has been widely used in educational settings, it has rarely been applied in organizational training. As such, we propose to show how CMT can be used in organizational learning using following steps.

Step 1: providing prerequisites
Instructors should determine some key aspects of a subject before they use this method. This helps learners to improve their learning from the educational materials. This includes deciding on the topic of an educational course, its goals and cases related to the educational materials, sufficient knowledge about different dimensions of the cases, preparing questions in advance and predicting where learners may run into problems (Garvin, 2003).

Step 2: preparing trainees
Instructors should have a preparation program for their trainees before they select and arrange the cases for teaching (Schwartz, 2007). For example, instructors directly help and instruct trainees, set aside many blank and blind spots for trainees to explore.

Step 3: selection and arrangement of the cases
This step contains considerations on the topic of cases such as: if they should be simple or complex; if the cases contain a small or large amount of knowledge; if trainees are unfamiliar/familiar with the cases; and if the cases are true or made-up (Yun *et al.*, 2016).

Step 4: presentation and analysis of the cases
This step contains considerations about how to present the cases in a variety of ways, including textual form, oral form, situational simulation, video, etc. The different forms of presentation should be compatible with the nature of the case (Bowe *et al.*, 2009). The process of running a CMT program is displayed in Figure 2.

Each of these subsections is accompanied by a written guidance or a supplementary video. As Figure 2 shows, the CMT program has a specific running structure that allows instructors to pre-screen each step before moving to a next step. Also, the flexible structure aids instructors to look at the educational material from a trainee point of view. In addition to this, the specific running structure considers both characteristics of the instructors and the trainees simultaneously. According to Damrongpanit and Reungtragul (2013), an
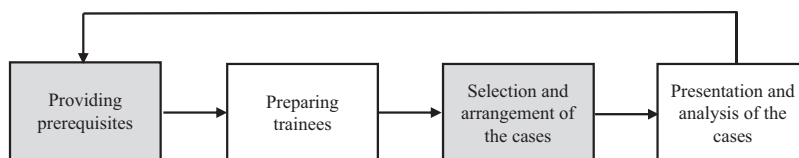
Sources: Bowe *et al.* (2009) and Yun *et al.* (2016)

efficient learning in the instructor-centered methods mostly requires a class in which an instructor acts with a direct lecture-based style and a trainee act with a theorist learning style (Honey and Mumford, 1992; Renau Renau, 2016). In contrast, an efficient learning in the trainee-centered methods often requires a class in which an instructor has a cooperative teaching style and a trainee follows a realistic learning style (Damrongpanit and Reungtragul, 2013). Yet et al. (2013) believed that both of these teaching methods have some limitations: in the instructor-centered method, instructors with direct instruction style find it almost impossible to improve the learning rate of trainees who follow a realistic learning style; and in the trainee-centered method, the learning rate of trainees with theorist learning styles often cannot be improved by the instructor who follows a lecture-based style. CMT is able to fill this gap by employing its specific running structure in which both characteristics of instructors and trainees are considered important elements of a learning process. This means that CMT needs to determine the teaching style of an instructor and learning style of a trainee before the program begins. As such, this flexibility can help instructors to personalize their teaching style (e.g. direct instructors with theorist trainees or cooperative instructors with realistic trainees) to a particular trainee or group before they begin it. This feature enables instructors to choose appropriate tools and cases for their course as well as to improve the learning rate of the trainees. For example, instructors using lecture-based style may want to apply a verbal and auditory content/tool to enhance the learning rate of their theorist trainees. On the contrary, cooperative instructors may use some analytical materials to promote the learning rate of their realistic trainees.

As an example, imagine a situation in which an instructor uses CMT to train staff on "stress management." The instructor may encourage trainees to state their ideas on the term of "stress management," guide them to get enough knowledge about the term (e.g. introducing them resources such as books and articles), introduce them cases in which the staff reduced their stress (e.g. the method of Mr X faced with a stressful issue; the method of Mr Y, in solving his managerial conflict) and analyze the reasons for the ability/inability of cases to cope with the stress through brainstorming. For example, Mr X may have positive interpretation on stressful issues and Mr Y perhaps is optimist facing the conflict.

Advantages and disadvantages of CMT for organizations

CMT provides noticeable advantages for employees and organizations at both the personal and organizational levels. At the personal level, learners "do" the work of the discipline by engaging in the selected cases and applying the concepts, techniques and methods of that discipline rather than merely watching or reading how the things are done by others (Kleinfeld, 1990). Thereby, tacit knowledge and skills can be trained. Also, case-related discussions charge the circumstances of education with additional energy and excitement and provide an opportunity in which learners can work with a wide range of evidence and information by which they can improve their ability in applying theories, vocabularies and methods during the learning course (Roberts and Ryrie, 2014). It also prepares participants to encounter inexperienced situations, to learn about the complexity of these situations, to learn how they can apply their previous knowledge and problem-solving skills in such situations, to work together effectively and to connect learning material with reality (Gray et al., 2006; Watson and Sutton, 2012). CMT contributes to study the individual differences of participants based on their demographic and psychological characteristics leading to explore the learning differences of participants. All these advantages could happen in the process of implementation of CMT in a training program. This attention aids learners to follow the educational materials actively and at a greater depth, rather than a situation in which participants are only passive recipients of knowledge (Kleinfeld, 1990; Gray et al., 2006; Watson and Sutton, 2012; Austin and Sonneville, 2013; Roberts and Ryrie, 2014). At the organizational level, CMT enables organizations to empower their staff through the practice of

real-world challenges, to compare the competitive potential of their organization with other organizations, to visualize the challenges and opportunities ahead of their organization, to explore solutions for unexpected problems and to benefit from the participation of professional employees in their decision making.

Besides these advantages, the high cost, the time-consuming process of conducting this method and the limited number of empirical research may limit practitioners to apply it more broadly (Chen *et al.*, 2006). Moreover, to build an appropriate case, practitioners will need to dig in inside and outside the organization and take into consideration all the future goals and orientations of the organization which is time consuming. At the personal level, there is a probability of bias because of the demographic and psychological characteristics of the trainees. These biases might be more important when the trainees want to disclose their private information regarding a case or when the trainees are too shy to easily discuss a selected case. Additionally, trainees need to have high concentration and attention levels, strong listening and speaking skills, critical and analytical thinking in the whole process of the implementation of CMT. In doing so, they may experience fatigue, stress or concern during a CMT-based program. Therefore, we should be open to accept that not all employees may like or be suitable to participate in a CMT. This indicates that the voluntary element of participation should always remain as an important issue when we invite candidates to attend a CMT program. That is why we probably have to conduct a CMT using a selected sample, rather than a random sample. Otherwise, some ethical issues may arise which are not the concern of this paper.

Conclusion and outlook
We used a systematic literature review to define CMT and to figure out its potential advantages and disadvantages in organizational training. Our review suggests that compared to the traditional teaching methods, CMT can better visualize the opportunities and challenges ahead of an organization. Moreover, as our review suggested that there is a solid theoretical foundation, such as learning cycle theory, to develop a CMT for a particular target group or for a specific training program. To support these conclusions, we present the implications of CMT in two following classifications: theoretical implications and practical implications.

Theoretical implications
CMT can be suggested to those researchers who would like to substitute new teaching methods with traditional methods. This paper figured out new research gaps between these two teaching styles that can be filled by empirical and field studies. In this respect, researchers may want to investigate the extent to which the individual differences of participants or their pre-knowledge may influence a CMT compared to the traditional teaching methods. Also, further research is needed to identify how to develop an appropriate case for a CMT. Designing a mechanism to evaluate the effectiveness of the CMT would be another needed research area for researchers. This paper also provided theoretical explanations, extracted from the learning cycle theory, to support all stages of a CMT and to enrich the literature of CMT.

Practical implications
CMT can be suggested to those organizational practitioners who would like to apply a flexible and personalized way of teaching for their trainees. The practitioners can adjust their teaching style with the specific profile of the target trainees. This matching process not only facilitates the teaching process for the instructor but it can also help trainees learning the educational material with their preferred learning style, which in turn can also increase the learning rate of them. In addition, practitioners can benefit to teach

complex topics to their employees while they consider their individual differences toward the topics. CMT would be particularly an excellent choice for those times that an organization wants to make substantial changes to their structures but the organization is unable to predict how the employees may react to these changes. In other words, CMT upholds the predictability of organizations to prevent possible problems/challenges from arising by bringing those problems/challenges from a real-world situation into a training setting where trainees have enough time and energy to analyze these challenges. In addition to this, the sporadic reactions of employees and managers can be understood before they actually encounter the situations. Therefore, it is the features of CMT that increase the power of organizational decision makers to reduce the unpredictability aspect of events and the "know-do" gap. Moreover, the organizational decision makers will have a better understanding of the weaknesses and strengths of their employees when they are faced with such unpredictable events. Consequently, they can empower them before they face a real dilemma or problem. Providing this information by organizational practitioners helps organizational decision makers to make changes to the position of those employees who are unable to react efficiently to an expected threat or they may decide to hold some particular educational programs to improve these employees. Although until now the scientific evidence shows that CMT provides many advantages in facilitating the process of learning at the individual and organizational levels, we recommend that organizational practitioners be skeptical when they use it in practice. This can be understood due to some limitations of this method and indeed that is a major reason that we suggest CMT as a supplementary method in this paper.

Limitations of CMT

The first limitation can be related to the difference between the independent and supplementary teaching styles. Independent methods build upon rich literature and sufficient empirical research to support the whole processes (planning, implementation and evaluation) while supplementary methods, such as CMT, still need to be examined (particularly within an organizational context). Other reason is related to insufficient empirical evidence to evaluate the positive outcomes of CMT outside the teaching place. Besides, there are still challenges ahead of using CMT as a supplementary method. Some of those are: finding sensible topic-based cases to elucidate individual differences, the high cost of the implementation of this method, the education of organizational practitioners to teach based on CMT and the pre-knowledge of participants that may vary from one to another and lead to misunderstandings between practitioners and participants. In this paper, we did not have access to real examples of problematic cases/events to present within the text and that would be a limitation of our study. To reduce these limitations, we recommend the CMT instructors to advise the participants about the aims, materials and procedure of a CMT before they attend. This would facilitate dynamic and active discussions between the instructor and participants and promote the process of learning in a CMT.

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