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December 2021

# **TEACHING STRATEGIC MANAGEMENT BY TEACHING STRATEGIC THINKING**



Master Thesis

to obtain the academic degree of

Master of Science (MSc)

in the Master's Program

Management

## STATUTORY DECLARATION

I hereby declare that the thesis submitted is my own unaided work, that I have not used other than the sources indicated, and that all direct and indirect sources are acknowledged as references.

This printed thesis is identical with the electronic version submitted.

23.12.2021

Place, Date



Signature

## ACKNOWLEDGEMENT

Throughout the writing of this master thesis, I have received a great deal of support and assistance.

First and foremost, I would like to thank my supervisor, Mag.a Dr.in Sabine Reisinger, whose expertise in teaching strategic management as well as her endorsement in helping me to find a topic, that not only meets my interests but also fits my competencies, was invaluable. Your insightful feedback and support, not only while writing this thesis but through the whole time I had the pleasure to work with you, pushed me to grow personally as well as professionally. You allowed this thesis to be my own work, but still guided me in the right direction whenever I needed it.

I would also like to thank the whole institute of strategic management, who, with their experience, competence, and empathy, provided me with an inspiring environment that sharpened my thinking and helped me to think strategically.

Further, I would like to acknowledge my boyfriend, Andreas Mühleder, MSc. I want to thank you for your consistent support and understanding throughout my whole years of study as well as your proofreading of this thesis over and over again. Your kind words, valuable input and cracking jokes helped me to find my smile when times became too serious. You are always there for me.

In addition, I would also like to thank my family and friends whose love and encouragement kept me motivated and confident. Numerous stimulating discussions as well as your happy distractions helped me to rest my mind.

## EXECUTIVE SUMMARY

Contemporary business environments are driven by volatile, uncertain, complex, and ambiguous markets (Hamid 2019:1). Owing to the technological progress, the ever-growing globalization and changing geopolitics, as well as the increasing societal and environmental concerns, those changes have been getting more rapid as well as more intense in recent times (Bowen and Bowen 2016:2). The degree of modification turns out in a predominant turbulence companies are facing today, remarkably shaping the competitive landscape (Shin and Pérez-Nordtvedt 2020:2036). When facing this unstable and unpredictable environment, companies need to constantly be aware of the contradictory demands and conditions of the market, continually keeping the ultimate goal of sustaining a competitive advantage in mind (Sagiyeva et al. 2018:712). To deal with this complex and dynamic environment, companies need experienced as well as competent experts who are able to cope with ambiguity as well as approaching paradoxes. Those experts are strategists who not only come up with a predefined action plan, but rather include a holistic and also, adaptable style of thinking (Andersen and Rasmussen 2014; Okumus, Wong, and Altinay 2008). This raises the question on how students need to be educated in order to become such strategists. The key to success might be teaching strategic management by teaching not only tools and instruments, but rather teaching a strategic style of thinking.

The literature demonstrates that today, teaching strategic management is shaped by teaching theoretical concepts, including tools and instruments, rather than teaching procedural and metacognitive skills (Bailey, Ford, and Raelin 2014; Bell et al. 2018; Gosling and Mintzberg 2006; Grant and Baden-Fuller 2018; Hanney 2018; Lebrón et al. 2020; Moschieri and Santalo 2018). Leading researchers support the supposition that the originally intended Harvard Business School policy course is “*barely alive*” (Grant and Baden-Fuller 2018:324). Teaching strategic management currently, would not pay enough attention to adaptive and practical skills (David, David, and David 2021:6; Grant and Baden-Fuller 2018:324; Greiner, Bhambri, and Cummings 2003:403; Pfeffer and Fong 2004:84; Priem 2018:8) and thereby, would not meet the expectations and requirements cherished by companies (David et al. 2021:2).

As the procedural processes of strategic thinking exceed the competencies required for memorizing certain terms or theories, they often make conceptual knowledge obsolete and thus, increase the necessity of implicit knowledge (Grant and Baden-Fuller 2018:330). Caused by the fact that this sort of knowledge is deeply rooted in the minds of experts, it cannot explicitly be formalized. By distinguishing three different problems according to Neuweg (2005) – the explication problem, the instruction problem and the

modification problem – the difficulties shaping the limits of externalizing implicit knowledge are discussed. As the wearer of implicit knowledge may or may not be aware of the skills he or she withholds, implicit knowledge can only be demonstrated through specific actions (Grant and Baden-Fuller 2018:334; Polanyi 1966; Takeuchi and Nonaka 1995:9). Consequently, strategic thinking can only be acquired by individual experience (Grant and Baden-Fuller 2018:327). Hence, in the center of today's ongoing debate lies the discussion on how to transfer skills that cannot be verbalized in an explicit way.

By conducting a profound literature research, the main aim of this underlying thesis was to elaborate and discuss didactically relevant requirements and approaches by considering the implicit character of procedural and metacognitive knowledge and thus, teaching strategic management, not only by teaching conceptual and factual knowledge, but rather by teaching a strategic style of thinking. Therefore, this thesis starts with a detailed examination of the special character procedural and metacognitive knowledge withhold. Thereby focusing on the higher-level skills defined in the Taxonomy of Teaching by Bloom (1949-1953). Further, explaining the coherence to the competencies required to develop strategic thinking. By elaborating on the limits of externalization of implicit knowledge, the relevance of a necessary, yet not sufficient environment, needed to create a learning atmosphere that supports the acquisition of procedural and metacognitive knowledge, such as strategic thinking, is elucidated. Within this examination, basic framework conditions including the emotional learning ambiance, the connection and relationship between the teacher and the learner, as well as the active role of the learner him- or herself, will be described. Based on these findings, a situationally appropriate approach to convey the implicit know-how of strategic thinking, is compiled. Thereby, discussing the mimetic learning process (Chan 2020:181), that includes the observation and imitation of an expert (Bandura 1977; Kisfalvi and Oliver 2015; Mansoori 2017; Mládková 2012; Polanyi 1966; Ren and Ding 2010), the possibility to make own experiences by adjusting experiential learning (Finch et al. 2015; Greiner et al. 2003; Howard 2018; Kolb and Kolb 2017; Mansoori 2017; Marsick et al. 2006; Mintzberg 1994; Polanyi 1966; Ren and Ding 2010; Sloan 2020), and further learn from those experiences by deliberate practicing (Brinkmann 2012, 2021; Chan 2020; Norzailan, Yusof, and Othman 2015) as well as the given chance of reflecting on the made failures, directly in the situation (Anderson 2019; Bartelheim and Evans 1993; Bereiter 2002; Burhan-Horasanlı and Ortaçtepe 2016; Clarke and Hollingsworth 2002; Collier and Williams 2013; Convery 1998; Eraut 1995; Mackinnon 1987; Marcos and Tillema 2006; Munby and Russell 1989; Schön 1983; Schulman 1987; Sloan 2020).

With attempting to meet the requirements of the original capstone course, some teachers try to make their classes more integrative and experiential by including case studies into

the syllabi and thereby, try to teach the general by teaching the specific (Ernest 2006:75). Vice versa, other teachers tend to teach specific contents by demonstrating general rules that should be applied situationally adequate (Ernest 2006:74f). However, problems would become visible when inductive methods are taught in a deductive way (Bhardwaj et al. 2018:279). According to Ernest (2006:74) this would lead to the paradox situation, that, due to the lack of possibility to apply the rules to certain situations, the general might lose its general validity. The discussion leads to the assumption that implicit knowledge is best taught by giving the learners the chance to make their experiences and, thereby identify patterns out of the specific that, together, form the general. Characterized by arising from an incomplete set of observations and further developing to the most likely explanation for this set of observations, abductive learning (Tautila 2010) embraces the effectiveness of experiential learning, needed to acquire implicit knowledge. Thereby relying on the given situation at hand and combining it to form a pattern itself, leading to an overall goal. Ernest (2006:75) describes this process as the process of where learners capture the general by recognizing the underlying patterns in the specific. This requires the teacher to give the learner enough space for self-directed learning, while still being there if needed, and besides allowing them to learn out of failures by relying on reflection-in-action (Brinkmann 2012; Schön 1983).

Leading to the conclusion that acquiring the necessary competencies, needed to develop strategic thinking skills, is thus based on the acquisition of procedural and metacognitive knowledge, neither than on solely studying theoretical concepts and later applying those well learned tools and instruments to specific situations. Thereby, acquiring a not only based on trial-and-error knowledge, but a profound theoretically underpinned, yet practically experienced expertise, by combining inductive and deductive learning approaches, leading to an abductive way of teaching.

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# 1. Introduction

The aim of the introduction chapter is to give orientation as well as structure to this thesis. At the same time, it should also give meaning to the prevailing topic of teaching strategic thinking. By starting with a brief elaboration of the problem statement, the initial difficulty underlying this thesis, as well as the relevance of the current debate, is outlined. The discussion further leads to the research question, which is followed by a clarification of the overall aim and objectives. Within this chapter, the overarching ambition as well as its division into various sub-objectives is declared. Furthermore, the structure of the work is explained in order to give a better overview of the subsequent discussion. In this step, reference is also made to the procedure of the thesis.

## 1.1. Problem statement

Contemporary business environments in developed and developing countries are mainly defined by volatile, uncertain, complex and ambiguous (VUCA) markets (Hamid 2019:1). Those markets, where the degree of environmental modification is intense, can be perceived as high velocity markets, which are characterized by hyper competition, rapid change and continuous disruption (Shin and Pérez-Nordtvedt 2020:2036). According to Johansen and Euchner (2013:10), this predominant turbulence leads to a high uncertainty as well as fluidity. When facing this unstable and unpredictable environment, companies need to constantly be aware of the contradictory demands and conditions of the market. The environment, companies are facing today, speaking of developments such as the globalization, new emerging technologies and markets as well as an increased competition, is fostered through the influence of new knowledge used in the economy (Sagiyeva et al. 2018:712). Leading to a shift from a once dominant manufacturing-based economy to the emergence of the new knowledge-based economy (Abrami et al. 2008; Ahuna, Tinnesz, and Kiener 2014; Hamid 2019:1; Meepian 2013).

With reference to a study, conducted by Goncharenko and Gamarli (2020:39f), this contemporary knowledge-based economy is becoming, and in future will become, more and more reliant on intangible assets, including intellectual capacities syndicated by human capital, rather than on tangible and physical ones (Haldin-Herrgard 2000:357; Moisio 2018:3; Vinogradova, Nikoliuk, and Galimova 2020:5). Wasonga and Murphy (2006:154) support these findings by signifying: "*Knowledge has become the resource, rather than a resource of power and key to change*". Today, many scholars (Goncharenko and Gamarli 2020:39f; Howard 2018:2; Moisio 2018:8; Vinogradova et al. 2020:5) argue that through putting more emphasize on internal and intangible capabilities and assets, companies would get the chance to create unique resources and

competencies, which might help them to gain and maintain a competitive advantage. Drucker, already in 1991, stated that in order to be successful, companies would have to rely on intangible assets, such as intellectual capacities, more than on tangible ones (Drucker 1991). As the competition in the market grows, the discipline of strategic management gains more weight (Asobee 2021:69). It thus could help companies by improving their performance and reducing the risk of operation (Coccia 2020:2; Johansen and Euchner 2013:10f; Pogodina, Muzhzhavleva, and Udaltsova 2020).

The evolution, driven forward by the new knowledge-based economy, also came with major impacts on the education system (Howard 2018:2). Historically seen, one of the basic ideas behind strategic management was about making long-term decisions and plans, by identifying as well as allocating resources in order to realize those plans (Teece 1984:87). Though, McKinsey & Company indicated the difficulty that the contemporary VUCA environment is irreconcilable with what, traditionally seen, has been the basic idea behind strategic management and therefore, the main responsibility of strategists, already in 2014 (Birshan, Gibbs, and Strovink 2014:1). With regard to Fullan and Langworthy (2014:34) the new knowledge-based economy would urge for individuals who are able *“to create new ideas, new products, new solutions and new content”*. Thus today, the focus should be set on educating competent strategists, who not only come up with a predefined action plan, but rather include a holistic style of thinking into the strategy making process. Through observing opportunities and challenges from various perspectives, those people open the mindset of the companies and unite visions. Thereby, they constantly have a look on the bigger picture as well as its consequences (Birshan et al. 2014:1f; La Paz 2017:52ff). This raises the question on how future strategists can and should be educated and thereby prepared for a future, which is generally unclear. The key to success might be teaching strategic management by teaching not only tools and instruments, but rather teaching a strategic style of thinking, as strategists will need inter- as well as transdisciplinary qualifications in order to deal with the imminent changing and challenging developments (Andersen and Rasmussen 2014; Okumus et al. 2008). Teaching strategic management is an enduring process of refining critical thinking, which in the follows, leads to sound and judgmental human beings. According to the Organization for Economic Co-operation and Development (2019:3), the *“[...] society no longer rewards students just for what they know [...] but for what they can do with what they know”*.

The procedural process of strategic thinking exceeds the competence requirements of memorizing certain terms or theories. Those processes usually happen subconsciously and often without any intended effort. As the complexity of a task increases, so does the proportion of implicit knowledge needed to solve it (Neuweg 2000b:204). Implicit

knowledge refers to a kind of knowledge that cannot be explicitly formalized. It involves skills and abilities that can be demonstrated, but not verbalized. The wearer may or may not be aware of the skills he or she holds. This knowledge is deeply rooted in our heads and only becomes visible through specific courses of action. More precisely, it is through specific actions that our competencies can be expressed. The wearer of implicit knowledge does not focus on the underlying and action-guiding rules, but rather acts "*intuitively*" and "*automatically*" (Harteis, Billett, and Gruber 2020:158). To explain this more accurately: this knowledge is demonstrated when, for example, people sit down in a car and drive, without having understood the principle of an engine; when chefs cook magical dishes, without even weighing a single gram of salt; when dancers dance choreographies, without actively and consciously moving every single muscle, or when people react quick-witted in an argument, without having first worked out a whole construct of words. Those people often cannot describe why and how they know how to act and do something. Same applies for strategists, as they often withhold a knowledge that is highly context-specific and subjective (Grant and Baden-Fuller 2018:334; Takeuchi and Nonaka 1995:10). They simply withhold a particular awareness, which they are unable to verbalize (Takeuchi and Nonaka 1995:9). Consequently, in order to be able to pass on and convey the complex, procedural, implicit knowledge of strategic thinking, more is needed than just making this knowledge explicit.

Since the beginning of the 1980s, scientists and academics have been dealing with the issue of knowledge management, inter alia, with the question regarding the transfer of knowledge (Serenko et al. 2010:3). With reference to early systematic reviews, concerning knowledge management, the trend away from the information society towards the knowledge-based economy gives an idea that research in this field will continue to be rather more than less intensive in the future (Koç, Kurt, and Akbiyik 2019:893; Serenko et al. 2010:10f). It is therefore more than surprising that today there are hardly any comprehensive, theoretical overviews or meta-studies on conveying implicit knowledge, that can be found in scientific research (Chugh 2017:273; Haldin-Herrgard 2000:357; Sikombe and Phiri 2019:3). The existing literature (Cook and Brown 1999; Grant and Spender 1996; Greiner et al. 2003; Hedesstrom and Whitley 2000; Hildrum 2009; Kogut and Zander 2009; Mitchell, Harvey, and Wood 2021; Nelson and Winter 1982; Ray 2009; Takeuchi and Nonaka 1995; Tsoukas 2003) is primarily based on the concept of tacit knowledge coined by Polanyi (1966) (Oğuz and Şengün 2011:446). Remarkably, there is even little literature discourse on the burdens and obstacles that impede or even prevent the externalization of implicit knowledge. Same is true for precisely overcoming these. Only occasionally, one can find systematic approaches to discuss and overcome them (Schewe and Nienaber 2011:38f).

The necessity of dealing with the transmission of implicit knowledge is also, and above all, attributed as a central role in pedagogical aspects of teaching strategic management (Bell et al. 2018; Buckley 2018; Grant and Baden-Fuller 2018). When referring to Grant (2008:276), the goal of teaching strategic management thereby should not only be to transfer the knowledge from an expert to a novice, but rather to provide future strategists with the competencies to analyze complex situations in a way that they are able to make effective decisions in a situation-appropriate manner. The goal of strategic management teachers therefore would not only be to transfer their knowledge to the learners, but more to equip them with the competencies needed to react appropriately to problems that might arise.

## 1.2. Research goal and objectives

The overarching goal of this thesis is to elaborate and discuss didactically relevant requirements and approaches by considering the implicit character of procedural and metacognitive knowledge and thus, teaching strategic management, not only by teaching conceptual and factual knowledge, but rather by teaching a strategic style of thinking.

The following objectives have been formulated to achieve the overall goal of this work:

- Analyze existing theoretical concepts and empirical studies to assess the status quo of conveying the knowledge of strategists.
- Investigate on the difficulties and challenges, initiated by the prevailing state of art, concerning teaching strategic management.
- Determine the competencies, crucial for strategic thinking, based on existing literature and studies.
- Examine the influence of certain factors, such as the personal traits of the learner and the teacher, the external setup, the integration of theory and practice as well as reflection-in-action, on a successful teaching-learning activity.
- Elaborate a didactically relevant approach for conveying implicit knowledge, based on the compiled insights.

The objectives will be pursued by conversing the initial problem of transferring strategic thinking from an expert to a learner, by including the associated difficulties and requirements of explicating implicit knowledge based on prevailing theoretical concepts as well as empirical studies. Moreover, a concrete and didactically relevant approach for conveying strategic thinking to make the know-how, required for the sustainable safeguarding of knowledge, tangible and accessible to future strategists, will be discussed.

### 1.3. Procedure

The underlying master thesis starts with a brief introduction into the topic by conversing the initial problem of teaching strategic management. Thereby the associated difficulties as well as requirements of explicating strategic thinking in a teaching setting, are explained. Further, the overall goal of the thesis as well as the specific objectives to reach this goal are outlined. By presenting the procedure of literature acquisition and processing in chapter 2, the methodology for this thesis will be described. The following chapter 3 starts by giving a status quo on how teaching strategic management developed over the years. Thereby also elaborating on the debate that is currently taking place. Also in chapter 3, today's challenge of teaching strategic thinking is discussed. For this, a possible solution is presented right afterwards. In the next chapter, chapter 4, the theoretical concepts of different types of knowledge are described. Based on this, the Taxonomy of Teaching by Bloom is theoretically clarified and further linked to the competencies required to develop strategic thinking. By declaring the limits of externalization of implicit knowledge, the importance of a necessary, yet not sufficient environment needed to develop a learning atmosphere that supports the acquisition of procedural and metacognitive learning, such as strategic thinking, is elucidated. Further, when explaining situationally appropriate learning approaches in chapter 5, the mimetic learning process, including the necessary reflection-in-action needed to enhance double-loop learning, will be outlined. The following chapter 6 decisively deliberates an approach that sums up the before gained insights by illustrating a didactically relevant implementation. Finally, chapter 7 draws on a fully comprehensive conclusion.



Figure 1: Rough sequence

## 2. Methodology

In order to reach the formulated objectives and answer the research question, a well-defined procedural method was elaborated in advance. The following chapter explains the methodological approach on which this master thesis is grounded. It contains a detailed description of the literature research, by defining inclusion as well as exclusion criteria, and describing the comprehensive search strategy. For the purpose of reaching the underlying objectives of this thesis, a semantic literature review of secondary data was conducted.

Johnston (2014:619) refers to the secondary data analysis as an “*analysis for data that was collected by someone else for another primary purpose*”. Thereby meaning that through conducting such analysis, the researcher is able to employ the same basic research principles to another research topic. The research method would resolute in the underlying research question as well as the specified objectives, highly depending on the way of how the researcher “*collects, analyzes, and interprets the data in the study*” (Creswell, 2009 cited by Johnston 2014:620). The analysis of secondary data is a systematic method that includes procedural and assessing steps, consisting of three phases that are:

1. “*Development of the research question(s)*”
2. *Identification of the dataset*
3. *Evaluation of the dataset*” (Johnston 2014:620).

The literature review used in this paper was conducted following Johnston's (2014) three-step process. In a first step, the research question was defined. The selection was based on personal interest as well as the topicality and the changing research streams of this subject. This was followed by an examination of the definition of relevant keywords and search terms. Based on the selected search terms, two basic research disciplines emerged. On the one hand, an economic stream with a focus on strategic management and on the other hand, the pedagogical stream, which refers to the didactical teaching of strategic thinking. Finally, the relevant databases were selected on the basis of these findings. This was then followed by a methodical screening of the prevailing literature. This investigation is based on a matured search strategy, which is explained in the following sub-chapter. As a last step the central findings of the literature research were noted.

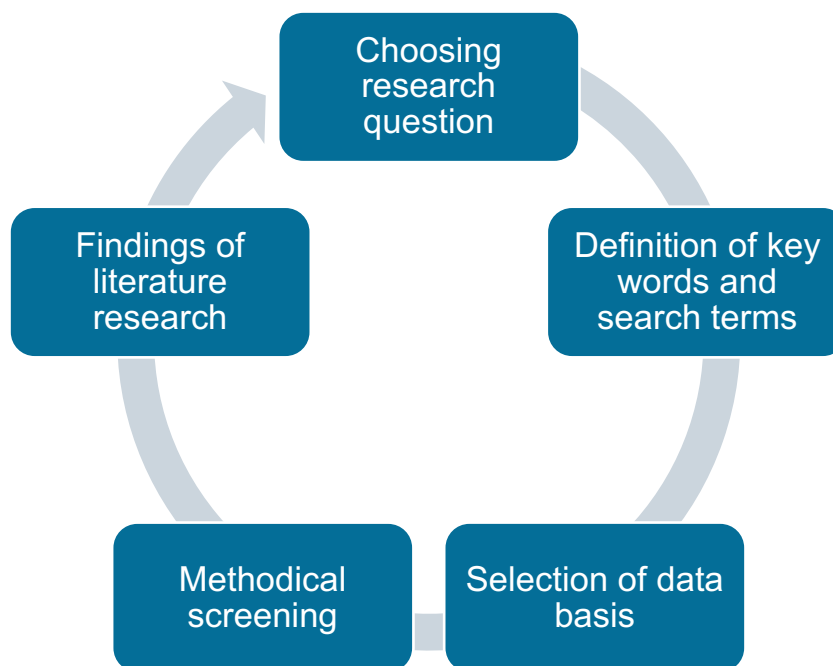


Figure 2: Process of literature research based on Johnston 2014:620

## 2.1. Search strategy

Beginning with an elaboration of the status quo of teaching strategic thinking, an in-depth literature research of significant areas was conducted. Table 1 lists the search terms and keywords that were used for the literature research. By conducting a comprehensive brainstorming and using the German dictionary "*duden.de*", German synonyms were examined. A similar approach was completed for English terms and key words. Therefore, the online dictionary "*dict.cc*" was used as a main source in terms of searching for similar words in English.

Table 1: Key words and search terms

English search terms	German search terms	Truncation
<b>Teaching strategic management</b>	Strategisches Management lehren	Strategisches AND Management AND lehren Strategisches+Management+lehren
<b>Studying strategic management</b>	Strategisches Management lernen	Strategisches AND Management AND lernen Strategisches+Management+lernen
<b>Implicit knowledge tacit knowledge</b>	Implizites Wissen	Implizites AND Wissen Implizites+Wissen
<b>Conveying implicit knowledge</b>	Implizites Wissen vermitteln	Implizites AND Wissen AND vermitteln Implizites+Wissen+vermitteln

English search terms	German search terms	Truncation
<b>Conveying tacit knowledge</b>		
<b>Teaching implicit knowledge</b> <b>Teaching tacit knowledge</b>	Implizites Wissen lehren	Implizites AND Wissen AND lehren Implizites+Wissen+lehren
<b>Studying implicit knowledge</b> <b>Studying tacit knowledge</b>	Implizites Wissen lernen	Implizites AND Wissen AND lernen Implizites+Wissen+lernen
<b>Teaching strategic thinking</b>	Strategisches Denken lehren	Strategisches AND Denken AND lehren Strategisches+Denken+lehren
<b>Learning strategic thinking</b>	Strategisches Denken lernen	Strategisches AND Denken AND lernen Strategisches+Denken+lernen
<b>How to think strategically</b> <b>Strategic thinking</b>	Wie man strategisch denkt Strategisch denken	Strategisch AND denken Strategisch+denken Strategisches AND Denken Strategisches+Denken
<b>Teaching critical thinking</b>	Kritisches Denken lehren	Kritisches AND Denken AND lehren Kritisches+Denken+lehren
<b>Learning critical thinking</b>	Kritisches Denken lernen	Kritisches AND Denken AND lernen Kritisches+Denken+lernen
<b>How to think critically</b> <b>Critical thinking</b>	Wie man kritisch denkt Kritisch denken	Kritisch AND denken Kritisch+denken Kritisches AND Denken Kritisches+Denken
<b>How to become a strategist</b>	Wie wird man ein Stratege? Wie wird man eine Strategin?	Become AND strategist Become+strategist
<b>What makes a good strategist</b>	Was macht einen guten Strategen aus? Was macht eine gute Strategin aus?	Good AND strategist Good+strategist Competent AND strategist competent+strategist Qualified AND strategist Qualified+strategist



After the search terms were specified, they were prepared for the literature research. For this purpose, the words were truncated. Afterwards, matching terms were searched for in the databases. The key words and boolean operators ("AND", "OR" and "NOT") were then used to search the databases "EBSCOhost", "Emerald Insight", "SAGE Journals Online", "WISO" as well as "ERIC", "BASE", "ProHaBil" and "Science Direct" for the desired papers and studies. Additionally, the search engine "google scholar" was used in order to search for grey literature. The boolean operators ("AND", "OR") have been adapted to google standards ("+", "|"). Since google scholar did not offer any limitation in terms of article and study type, the search was sometimes extended to include the term "*systematic review*". Furthermore, a hand search in reference lists of found articles was carried out. By doing so other researchers of the field were discovered.

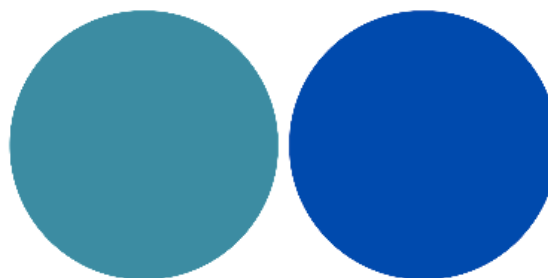
The following illustration shows the used truncation of the boolean operator "AND" on the example of the search term strategic thinking in contrast to an excluded search using the boolean operator "OR".

**strategic AND thinking**



retrieves items that contain both terms

**strategic OR thinking**



retrieves items that contain either term

The following Figure 3 serves as an example to illustrate the process of this analysis. For this purpose, the database "WISO" was searched using the search term "teaching+strategic+management". As truncation the operator "+" was used in order to narrow down the abundance of results. Through this search, a total number of 1,370 articles was found within 0.31 seconds. The strategy was applied to the other databases, presenting the following outcomes.

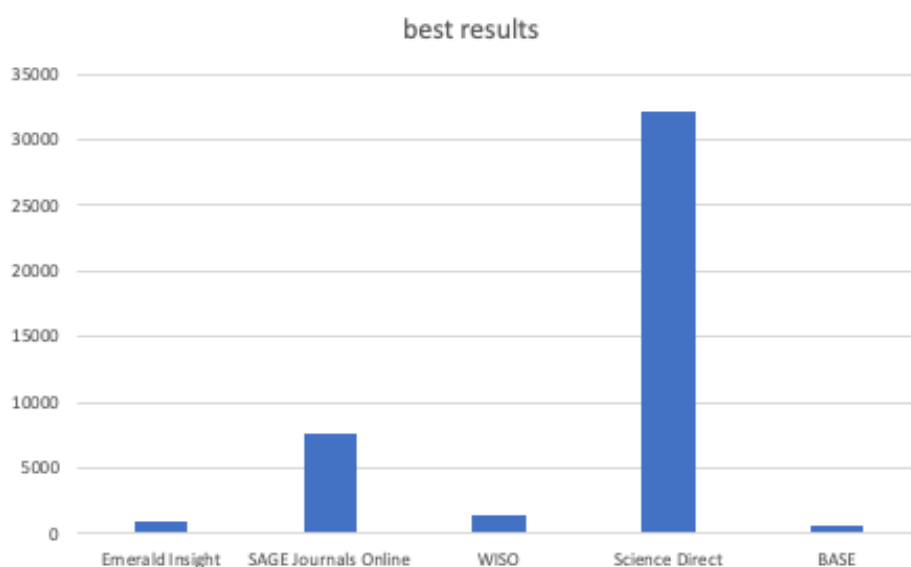


Figure 3: Demonstration of best data basis search results

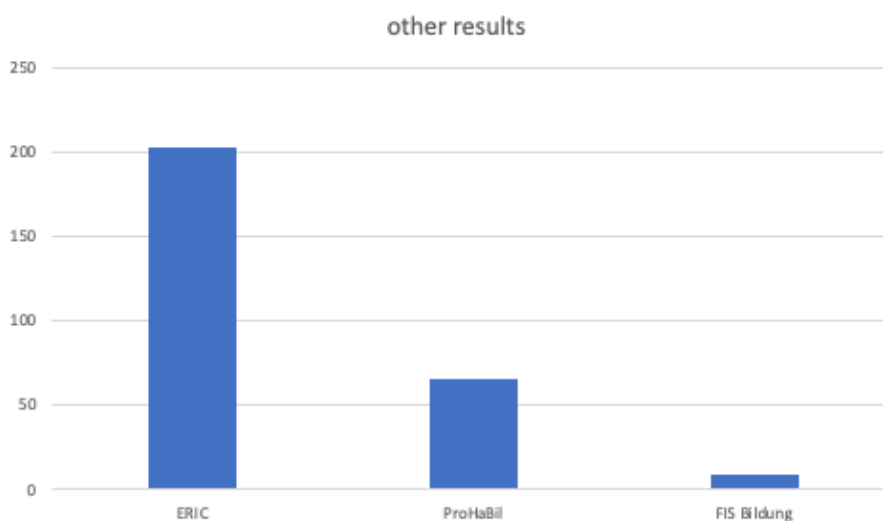


Figure 4: Demonstration of other data basis search results

The identified literature includes scientific articles and studies, books, book chapters, conference proceedings as well as reports and newspaper articles. Since journals represent the bulk of the literature used for this thesis, they will be discussed in more detail below. Therefore, the used ranking websites, utilized to identify relevant journals, are declared briefly as follows.

### Verband der Hochschullehrer für Betriebswirtschaft e.V. (VHB)

The 2,800 members of the VHB, founded in 1921, are currently engaged in scientific work in the field of business administration. The overarching goal is the further development and promotion of business administration as a scientifically relevant, timely and future-oriented discipline. As a platform for scientific discourse, the VHB shows itself to be a network that promotes young researchers in disciplines beyond business administration (VHB 2021).

VHB uses the JOURQUAL3 ranking method to rank journals relevant to business administration. The rankings are based on the member's judgements. Currently there are more than 64,000 evaluations included in these rankings. Only if a journal receives more than 25 evaluations, a ranking is published. Currently, the listing includes 651 journals. The categories are as follows: A+, A, B, C, D, E. Intermediate categories such as A/B, B/C or C/D are also possible, if the rating basis results in an average value exactly between two categories. As a survey-based ranking, which is carried out online, the scientific level of the articles as well as the scientific requirements of the review process are considered. The ranking is based on the JOURQUAL index value, which is the weighted mean value of the evaluations of article level and reviewer requirements. Article level and reviewer requirements are weighted equally ( $a=0.5$ ;  $b=0.5$ ). If there are less than ten evaluations with evaluation experience, the weighting factor is adjusted. Since it is assumed that expertise is proportional to the validity of the evaluation, an expert factor (between 1 and 5) is also calculated. This expert factor is measured, using the indicator "number of journals a person has already published", "number of publications in top journals" and "number of publications in international journals". The index values calculated in this way, are finally transferred to the previously mentioned rating categories (VHB 2021). This is done on the basis of a calculated point value:

Table 2: VHB Rating calculated point value boundaries by VHB 2021

Rating	Calculated point value boundary
<b>A+</b>	$\geq 9$
<b>A</b>	$\geq 8$ and $< 9$
<b>B</b>	$\geq 7$ and $< 8$
<b>C</b>	$\geq 6$ and $< 7$
<b>D</b>	$\geq 5$ and $< 6$
<b>E</b>	$< 5$

### SCImago Institution Rankings (SCImagoir)

The evaluation at SCImago is based on academic and research-related indicators, which include three different approaches. These approaches are “research performance”, “innovation output” and “societal impact” (measured by their visibility on the internet). The SCImago score is based on a value between 0 and 100. The lower the score, the better the result. The ranking results are calculated by including the years up to the last two years before the list is published. For example, for the calculation of a ranking in the year 2021, the years 2015-2019 are approached. However, to be included in the ranking list, at least 100 works must have been published in the SCOPUS database. The journals then are divided into quartiles from 1 to 4. The best quartile (Q1) is made up of those journals that perform comparatively best based on the “overall indicator”, the “research factor”, the “innovation factor” and the “societal factor”. This is measured with the SJR (SCImago Journal Rank) which is an index of weighted citations per article, metered over a period of three years. Q1 is defined as having an SJR in the top 25% journals within at least one of the assigned subdisciplines. Important to note is that the ranking can differ according to the viewed subdiscipline (SCImagoir 2021).

The articles and studies stem from journals that are listed as follows. The rating of SCImagoir was focused on the categories “*Applied Psychology*”, “*Business and International Management*”, “*Business, Management and Accounting*”, “*Communication*”, “*Cultural Studies*”, “*Development*”, “*Development and Educational Psychology*”, “*Economics and Econometrics*”, “*Economics, Econometrics and Finance*”, “*Education*”, “*Leadership and Management*”, “*Management Science and Operations Research*”, “*Marketing*”, “*Multidisciplinary*”, “*Organizational Behavior and Human Resource Management*”, “*Psychology*”, “*Research and Theory*”, “*Social Psychology*”, “*Social Sciences*”, “*Sociology and Political Science*” and “*Strategy and Management*”, as those sub-disciplines are closely linked to the phenomena of teaching strategic thinking, because they either deal with pedagogical and societal changes and developments, or deliberate management and leadership studies.

Table 3: List of used journals

Journal	Ranking	Number of retrieved articles
Academy of Management Learning and Education	Q1 (B)	11
Academy of Management Review	Q1 (A+)	3
Academy of Strategic Management Journal	Q2	1
Administrative Science Quarterly	Q1 (A+)	1
Adult Learning	Q3	1

Journal	Ranking	Number of retrieved articles
Advances in Economic, Business and Management Research	n.r.	1
Advances in Developing Human Resources	Q3	1
Advances in Social Science, Education and Human Research	n.r.	1
Advances in Strategic Management	Q1 (C)	1
American Journal of Computer Science and Engineering	Q2	1
American Psychologist	Q1	1
Annual Review of Psychology	Q1	1
Asian Social Science	Q3	1
Business Administration and Management	n.r.	1
Business Horizons	Q1 (C)	2
California Management Review	Q1 (B)	2
Cambridge Journal of Education	Q1	1
Cognitive Psychology	Q1	1
Computers and Education	Q1	1
Curriculum Inquiry	Q1	2
Developments in Business Simulation and Experiential Learning	n.r.	1
Educational Action Research	Q2	1
Education Canada	n.r.	1
Education and Culture	Q4	2
Education and Mind	Q2	1
Educational Psychologist	Q1	1
Education Psychology Interactive	n.r.	1
Education and Training	Q1	2
Educational Research Review	Q1	1
Evaluation/Reflection	n.r.	1
Education Sciences	Q2	1
Educational Studies in Mathematics	Q1	2
Emotion in Education	n.r.	1
English Teaching and Learning	Q2	1
Entrepreneurship and Sustainability Issues	n.r.	3
Erziehungswissenschaften	Q2	1

Journal	Ranking	Number of retrieved articles
European Management Journal	Q1 (B)	1
Global Journal of Business Research	Q1	1
Higher Education in Europe	n.r.	1
Higher Education Research & Development	Q1	1
Higher Education Studies	n.r.	1
Human Resource Development Review	Q2	2
IEEE Transactions on Knowledge and Data Engineering	Q1	1
Indian Journal of Educational Studies	n.r.	1
Industry and Innovation	Q1 (B)	1
Innovations in Education and Teaching International	Q1	1
Interdisciplinary Journal of Problem-Based Learning	Q1	1
International Education	Q1	1
International Education Studies	n.r.	1
International Business Review	Q1 (B)	1
International Education and Culture Studies	n.r.	1
International Journal of e-Education, e-Business, e-Management and e-Learning	n.r.	1
International Journal of Education and Learning Systems	n.r.	2
International Journal of Educational Management	Q2	1
International Journal of Entrepreneurial Behavior and Research	Q1 (C)	1
International Journal of Humanities and Social Science	n.r.	1
International Journal of Information Management	Q1 (C)	2
International Journal of Management Education	Q2	4
International Journal of Management Reviews	Q1 (B)	4
International Journal of Nusantara Islam	n.r.	1
International Journal of Project Management	Q1 (C)	1
International Journal of Teaching and Learning in Higher Education	Q4	4
International Journal of Technology Management	Q2 (C)	1
International Negotiation	Q2	1
International Review of Management and Marketing	n.r.	1
International Small Business Journal	Q1 (C)	1

Journal	Ranking	Number of retrieved articles
IT Professional	Q2	1
Journal of Accounting, Finance and Business Studies	n.r.	1
Journal of Advanced Management Science	n.r.	1
Journal of American Statistical Association	Q1	1
Journal of Basic and Applied Scientific Research	n.r.	1
Journal für Betriebswirtschaft	n.r.	1
Journal of Business & Economics Research	n.r.	1
Journal of Business and Management Sciences	n.r.	1
Journal of Business Research	Q1 (B)	1
Journal of Business Strategy	Q2 (C)	1
Journal of Cleaner Production	Q1 (B)	1
Journal of Documentation	Q1	1
Journal of Educational and Behavioral Statistics	Q1	1
Journal of General Management	Q3 (C)	1
Journal of Higher Education Theory and Practice	n.r.	2
Journal of Hospitality and Tourism Education	Q2	1
Journal of Human Resources Management and Labor Studies	n.r.	1
Journal of Industrial Engineering and Management	Q2	1
Journal of Industrial Teacher Education	n.r.	1
Journal of Innovation and Entrepreneurship	Q3	1
Journal of Intellectual Capital	Q1 (C)	1
Journal of Intelligence Studies in Business	Q2	1
Journal of Instructional Pedagogies	n.r.	1
Journal of Knowledge Management	Q1 (C)	8
Journal of Management	Q1 (A)	1
Journal of Management Education	Q1 (B)	10
Journal of Management Development	Q1	3
Journal of Management Inquiry	Q1 (B)	4
Journal of Management Research	A+	1
Journal of Management Studies	Q1 (A)	4
Journal of Managerial Psychology	Q1 (B)	1

Journal	Ranking	Number of retrieved articles
Journal of Marketing Education	Q1	2
Journal of Nursing Management	Q1	1
Journal of Nursing Scholarship	Q1	1
Journal of Personal Selling and Sales	Q1	1
Journal of Small Business Strategy	Q2 (C)	1
Journal of Special Education	Q1	1
Journal of Strategy and Management	Q2 (C)	2
Journal of Teaching in Travel and Tourism	Q3	1
Journal of University Teaching and Learning Practice	Q3	1
Knowledge in Organization	Q2	1
Learning Organization	Q2	1
Leadership & Organization Development Journal	Q1	3
Leadership Quarterly	Q1	1
Long Range Planning	Q1 (B)	2
Management Decision	Q1 (C)	3
<b>Management Learning</b>	<b>Q1 (B)</b>	<b>5</b>
McKinsey Quarterly	Q3	1
Mind, Brain, and Education	Q2	1
Minerva	Q1	1
Motivation and Emotion	Q1	1
Nurse Education Today	Q1	1
Organization Science	Q1 (A+)	4
Organization Studies	Q1 (A)	1
Procedia Computer Science	n.r.	1
Procedia - Social and Behavioral Sciences	n.r.	2
Psychological Review	Q1	1
Public Relations Inquiry	Q1	1
Qualitative and Quantitative Methods in Libraries	n.r.	1
Research in Higher Education	Q1	1
Research in Organizational Behavior	Q1 (B)	1
Research Technology Management	Q1 (C)	1



Journal	Ranking	Number of retrieved articles
Review of Educational Research	Q1	1
Science Education	Q1	1
Sloan Management Review	Q1	2
Small Business Economics	Q1 (B)	1
South Asia Journal of Multidisciplinary Studies	n.r.	1
Strategy and Leadership	Q3 (C)	1
<b>Strategic Management Journal</b>	<b>Q1 (A)</b>	<b>10</b>
Strategic Organization	Q1 (B)	1
Studies in Higher Education	Q1	1
Studies in Science Education	Q1	1
Teachers College Record	Q1	1
Technological Forecasting and Social Change	Q1 (B)	1
Teaching in Higher Education	Q1	4
Teaching and Learning Journal	n.r.	1
Technology, Pedagogy and Education	Q1	1
<b>Teaching and Teacher Education</b>	<b>Q1</b>	<b>8</b>
The scientific heritage	n.r.	1
Theory into Practice	Q2	1
Thinking Skills and Creativity	Q1	2
Universal Journal of Management	n.r.	1
Unterrichtswissenschaften	Q3	1
World	n.r.	1
Zeitschrift für Berufs- und Wirtschaftspädagogik	n.r.	2
Zeitschrift für Pädagogik	Q4	1
<b>Total number of journal articles</b>		<b>246</b>

The journal from which the most articles have been retrieved are again stated below with their official journal ranking according to “vhbonline.org” as well as “scimagoir.com”. As the most articles used for this thesis, were retrieved from, among others, the Academy of Management Learning and Education, this journal will serve as an example to demonstrate how the ranking turned out.

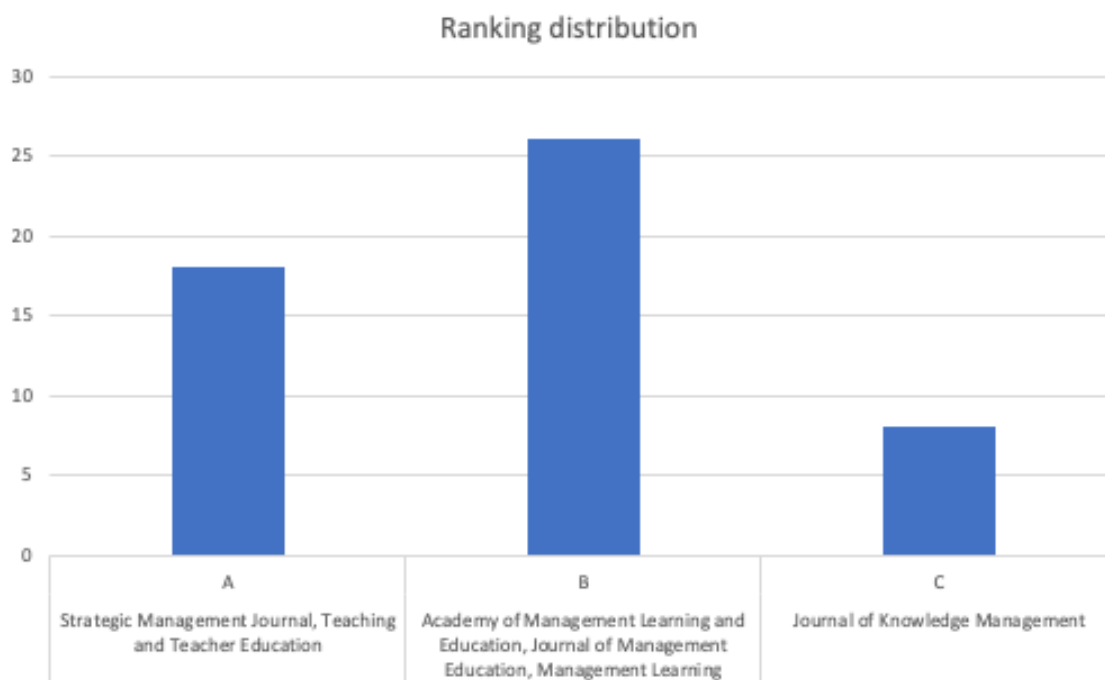


Figure 5: Ranking distribution of most used journals

In this way, a total number of 246 articles and studies were identified as relevant for use. Those journals were incorporated by a methodical screening method, e.g., reviewing the abstracts, followed by a brief cross-reading of all articles. They were selected for use if the following criteria was met:

1. Strategic thinking was a central topic.
2. Teaching strategic management or strategic thinking was a central topic.
3. Any instrument of teaching strategic management/strategic thinking or management at all was mentioned.
4. Teaching implicit knowledge was a central topic.
5. Any instrument of teaching implicit knowledge was mentioned.

The chosen articles were then admitted for full-text screening. The same procedure was carried out with books, book chapters, newspaper articles as well as reports and conference proceedings.

Table 4: Distribution of Literature types

Type	Total
Journal articles	246
Books/book chapters	59
Other (Newspaper articles, reports, conference proceedings)	30
<b>Total</b>	<b>335</b>

## 2.2. Limitations of the literature research

With the intention of focusing the abundance of scientific texts on the topic of teaching strategic thinking on the research question, the inclusion and exclusion criteria, shown in Figure 4, were formulated.

Table 5: In- and exclusion criteria for literature research

Inclusion criteria	Exclusion criteria
adult teaching settings (FH, University students, seminars, human resource development)	online-only settings
English language	closed source (if not accessible via institutional login)
German language	

In addition to the above defined inclusion and exclusion criteria, limits, in order to refine the search, are formulated. The following time related restrictions were set:

1. Solitary market developments of the past ten years were considered.
2. Teaching methods were constrained to the profoundly used methods in the past five years.
3. No timely restrictions in terms of basic and elementary literature in order to investigate on the historical development as well as definitions were set.

### 3. Teaching strategic management – a status quo

The following chapter deals with the status quo and the involved challenges of teaching strategic management. For this purpose, a profound literature research was conducted.

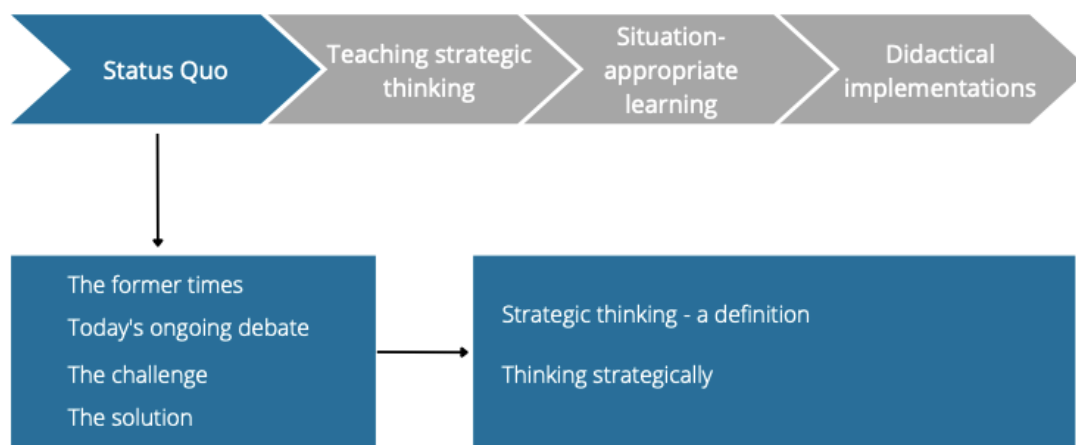


Figure 6: Sequence - Status quo

Education systems and pedagogical approaches have changed vastly over the last decade. Standards, curriculums and teaching-learning settings are currently shifting not only in the United States, Canada and New Zealand, but also in Europe (Howard 2018:1). This happened, not only in the light of the COVID-19 pandemic, but also beforehand, due to the increase in importance of societal and environmental issues affecting business activities (Bell et al. 2018:233). Moreover, technological developments have shaped today's markets in a way that urges for adaption. Though, the corona virus, once again, has exposed emerging liabilities in education systems around the world. The shutdown of companies as well as educational institutions have demonstrated that the society needs flexible and resilient apprenticeship, as we are facing an unpredictable future (Ali 2020:16f). Subconsciously, the education style of teaching strategic management over the years went through a restructuring too, including diverse stages of progress as well as different perspectives on how to reach the desired modifications (Howard 2018:1). By starting from a model which was deeply rooted in the past, it turned paths and ended up in a model that, today, is profoundly focused on the future.

### 3.1. The former times of teaching strategic management

Today's strategic management classes can be seen as an offspring of the former business policy course, traditionally established at Harvard University Business School in the year 1912, by Roland Christensen and Kenneth Andrews (Grant and Baden-Fuller 2018:323; Greiner et al. 2003:402). The original course was taught by executives coming into class in order to discuss various practical issues, which were currently relevant in their companies, with the students. Those issues were related to strategic, plant as well as personnel problems (Greiner et al. 2003:402). Developed as a sequence of case studies, the basic idea behind those courses was to teach students in situation-adequate and practically relevant planning activities within the circular way of a complete performance, that still allows corrective actions (Grant and Baden-Fuller 2018:323). The concept of general management became present during World War II. The Harvard Business School developed a training program, including the so called "*administrative point of view*" (Greiner et al. 2003:402f). Later, in 1946, the end of World War II came with a revision of the current course. Determined by a faculty vote, the popular business policy course was born. This course had a major influence on similar courses at other business schools these times (Greiner et al. 2003:403).

It was not until the late 1950s when strategic management became acknowledged as a crucial constituent of business school programs (Jasper and Crossan 2012:838f). Responsible for this were reports, published by the Ford Foundation and the Carnegie Foundation. The original reports about the university-level business education called for the necessity of an integrative "*capstone course*", within which students should be provided with cross- and interdisciplinary competencies across various business fields, such as marketing, finance and accounting (Maritz, Birmingham, and Chen 2016:553). The underlying goal of this claim was to develop a course that allows students to gain a holistic view and wholesome perspective on the various functions of a business as well as the interactions connecting them. The course content was focused on the whole company and thus, was recognized as the course in which "*it all comes together*" (Greiner et al. 2003:403). Rather than explicitly telling students in which area or sub-area a problem occurs, students should be equipped with the competencies to address complex and ambiguous problems in an effective way on their own. Thereby, they should be able to identify and choose the right strategic tool or instrument needed to tackle and furthermore solve the problem (Priem 2018:11; Maritz et al. 2016:553). The course was mainly told by experienced senior faculty members (Greiner et al. 2003:403). Basically, the idea behind the capstone course withholds the function of providing students with a selection of skills and tools, which they, by incorporating and employing notions and methods, will need to execute strategic planning (David et al. 2021:2). Another major

shift in the perception and understanding of strategic management research was when Harvard professor Alfred Chandler (1962) published his book "*Strategy and Structure: Chapters in the History of the Industrial Enterprise*". Within this publication he gave significant nudges towards the relevance of a consistent integration between organizational structure and a company's strategy, in order to ensure a strong and competitive company performance (Bracker 1980:220f; Pederzini and David 2016:217).

With the increasing interest in the research field of strategic management, a substitute for teaching business strategy was offered. The rise in this discipline provided an alternate that clearly focused on a formulation of strategy profoundly based on theoretically and empirically validated concepts that demonstrated the interrelation between a company's undertaken actions and the resulting performance outcomes (Grant and Baden-Fuller 2018:323). The consequence was an everlasting debate, regarding the pedagogically and didactically right way of teaching strategic management. On the one hand, representatives of the conventional Harvard Business School capstone course plead for a traditional education, focusing on the development of "*general management skills*", and on the other hand, voices were getting louder to rather teach analytical tools and instruments (Grant and Baden-Fuller 2018:323). Advocates of the latter endorse a more theoretically based approach instead of an "*integrative practice-based experience*", which would set the focus on intellectual and behavioral relevant skills (Grant and Baden-Fuller 2018:324). The conflict came to a head between the 1980s and 1990s, when the original business policy course was replaced by Michael Porters course "*Competitive Strategy: Techniques for Analyzing Industries and Competitors*" in the Harvard Business School. With this replacement as well as with the publication of Henry Mintzberg's "*The structuring of Organization*", the subject of strategic management was shifted by a new paradigm (Abreu Pederzini 2016:218; Bracker 1980:221; Jasper and Crossan 2012:839). Ever since, the debate has continued in well-known journals and forums such as the "*Academy of Management Journal*" and the "*Strategic Management Society*" (Grant and Baden-Fuller 2018:323).

### 3.2. Today's ongoing debate of teaching strategic management

The capstone courses, initially intended on creating a learning environment, in which students can integrate their already existing disciplinary knowledge, later on became the source for today's strategic management courses. Thus, similarly as in former times, teaching strategic management aims at providing an integration of various topics among complex issues in different business fields (Bell et al. 2018:235). Inspired by the idea of the original Harvard Business School capstone course, the focus lies on the incorporative teaching of dissimilar subjects. Even today, strategy courses bet on the integrative function of the original capstone course, yet, we owe it the constant efforts of strategy scholars, such as D'Aveni, Dagnino, and Smith (2010), dipping on the frequent changes in business, that today's strategic management courses additionally include loads of tools and instruments that help students to gain a better experience on attempting future difficulties (Priem 2018:11).

Shaped by its historical past, today, teaching strategic management is often characterized by teaching models and theories, rather than teaching behavioral skills (Bailey et al. 2014; Bell et al. 2018; Gosling and Mintzberg 2006; Grant and Baden-Fuller 2018; Hanney 2018; Lebrón et al. 2020; Moschieri and Santalo 2018). According to Greiner et al. (2003:404) the original capstone course became more and more focused on research, while at the same time neglecting teaching. This shift in course content, away from the original capstone course, towards a more theoretically accentuated approach, according to David et al. (2021:1), led to the advancement of a strategic management course "*that too often fails to impart practical competencies to graduating students*". Bell et al. (2018:233) accordingly, argue that today's strategic management courses are currently under criticism as they are accused of teaching only tools and concepts and not paying enough attention to timeliness and adaptation. They also underline that voices, regarding the efficiency of strategic management education, became louder (Bell et al. 2018:233). These concerns were also reflected in the special issue of the "*Academy of Management Learning and Education Journal*" (AMLE) in September 2018, in which the authors encouraged a less theoretical, but more practically based education approach of strategic management (David et al. 2021:2). Moschieri and Santalo (2018:5) mention that some scholars, such as Whitley (1988) and Dutson, Todd, Magleby & Sorensen (1997), would demand an advance in the effectiveness of solutions by including more practical know-how and "*case-based content*" in the classroom. According to Moschieri and Santalo (2018:4f) the business community would believe, that by teaching exclusively conceptual and theory-based models, one would "*damage*" students. Furthermore, in contrast to other institutions that would have a similar teaching field; if one relies on the knowledge and its practical implications to be imparted, strategic

management courses would often fail to teach skills relevant for the practical future of students. Whether it is about preparing them to be future leaders, or educating them to gather a good corporate job (Moschieri and Santalo 2018:4f). Correspondingly, Grant and Baden-Fuller (2018:324) follow this view. They state that the traditional Harvard Business School policy course would be “*barely alive*” and that most business schools would merely teach strategy based on “*theory and analysis*” (Grant and Baden-Fuller 2018:324). Greiner, Bhambri, and Cummings (2003:402) also contend and criticize that strategy courses nowadays, would not include the interdisciplinary thought that was intended by the original Harvard Business School capstone course in the very beginning. When following Greiner et al. (2003:402) the integrative learning-by-doing approach today, would be “*no much less in vogue*” and thus, would be replaced with theoretical inputs that scratch on the edge of explicit knowledge (Greiner et al. 2003:405). As a consequence of this demands, the call for a more practically based approach to course design grew louder (Moschieri and Santalo 2018:5).

These concerns oppose the idea of Mintzberg’s (2004 cited by David et al. 2021:2) theory-based strategy course, which promotes an approach that contradicts the tools and frameworks actually used in practice. Buckley (2018:3) underlines Mintzberg’s (2004) idea by stating that “*the prevailing form of strategy teaching is under-theorized*”. Thereby, he refers to the lack of differentiation between dissimilar firms and their decision-making processes, corporate culture, and governance (Buckley 2018:3). He believes that, if the focus is set on a theory-based teaching, the quality of strategic management teaching and education would be increased. A theory-based teaching in strategy courses would help strategists with an appropriate selection and choice of case studies and thereby, aid as a “*guide to managerial action*” (Buckley 2018:3).

The different opinions presented mean that the current discourse is highly controversial, and difficulties related to the pedagogical aspects of teaching strategic management are therefore inevitable.



### 3.3. The challenge of teaching strategic management

Though, the complexity and ambiguity companies are facing today, indicate that practical skills, rather than theories, would be crucial in order to pass on the vibe, stemming from the environment and thereby, helping the company to stay competitive (Augier, Shariq, and Thanning Vendel 2001; David et al. 2021:2). Subsequently, the tasks of managers have become steadily more complex too in the recent decades. Moreover, due to the globalization, the competitive situation in many sectors has become internationalized and intensified. By conducting a major literature review with analyzing a total number of 141 articles, Kyove et al. (2021) accentuated that, while some sectors show strong growth tendencies, others find themselves in stagnating or even declining developments. New developments in the field of information and communication technologies as well as changed or shortened product life-cycles, challenge companies with completely new tasks (Kyove et al. 2021:216).

In the course of time, the values of society, and thus also those of employees and managers, have altered – diversity and the speed of change are increasing tremendously (Sruk 2020:101). Companies face a significant more complex world today than they did a few decades ago. This is because their environment has become increasingly interconnected and dynamic. As a result, the future is becoming less and less predictable. Forthcoming environmental and business situations are not clearly foreseeable, and actions can no longer be justified in a simple causal relationship (Kyove et al. 2021:216; Tolstyakova and Batyrova 2020:371). Thus, a company's strategic management is, because of the turbulent corporate and environmental circumstances, confronted with complex problems, including decisions and actions that affect many different factors, which are interconnected and interactively interwoven, and as well effect the company over long periods of time (Hitt, Arregle, and Holmes 2021; Ioannis and Belias 2020:39). Strategic decisions influence not only factors such as market shares, costs, and production capacities, but also technologies, the company's image, and the company's entire distribution network. As a result, those decisions are related to various management instruments (Hauser, Eggers, and Guldenberg 2020:777). Consequently, one of the main challenges of strategists is to identify capabilities of the company that allow and enable it to act competitive in a rapidly changing environment (Ioannis and Belias 2020:39). Companies would need to recognize their "*individual dynamic capabilities*", through solidly deciding and judging about their steadiness and permanency as well as their bearing on the competitiveness in the market (Buckley 2018:6). Dynamic capabilities thereby can be sensed by the definition of Teece (2015, as cited in Buckley 2018:5): "*Dynamic capabilities are the firm's ability to integrate, build*

*and reconfigure internal and external resources to address and shape rapidly changing business environments”.*

Maintained by the fact that companies cherish skills that can be used in practice, David et al. (2021:2) support the opinion that strategic management courses need to be rethought and revised, in the sense of making them more practically relevant. By doing so, students should develop skills that companies “*actually utilize in formulating, implementing, and evaluating strategies*” (David et al. 2021:2). Recruiters would, according to Greiner et al. (2003:403), tend to seek for students who would be able to make profound strategic decisions and further also execute them. Pfeffer and Fong (2004:84) note that the skills and competencies taught in strategic management classes would not meet the expectations of practical business requirements of employers. Business schools would ideally, prepare students for their future jobs. Still, the skills taught in strategic management courses would not be in line with what David et al. (2021:6) call “*employability skills*”. Those would include the knowledge over actually used tools, concepts and techniques (David et al. 2021:6), which could also be described as “*functional level business skills*” that aid future strategists with the planning of a strategy and the analysis of various cases (David et al. 2021:2). They argue this statement with the fact that big companies often only search for keywords that match the job description, when reading a resume of an applicant. If those keywords cannot easily be found in the resume it would be more than unlikely that this person’s resume would get an initial review. This would lead to the fact that students, not being taught in special employability skills, would have a competitive disadvantage over those who have been prepared with these skills (David et al. 2021:6). Additionally, David et al. (2021:1) state that students often would not be equipped with skills that meet the requirements of employers, when it comes to decision-making. They, correspondingly, attribute this development to the increasingly theory driven strategy courses. Greiner et al. (2003:404) further elaborate that students, which lack of adequate strategy formulation and implementation skills, would not be equipped with the skills needed to undertake senior level positions. Grant and Baden-Fuller (2018:324), although they agree that strategic management courses are theory driven, argue that most “*core courses in strategic management*” would already “*espouse the development of management skills*”. For example by including case studies, discussions, simulation games, group exercises or group projects (Grant and Baden-Fuller 2018:324). The assumption that strategic management courses would purely be built on a theoretical base would be deceptive. Grant and Baden-Fuller (2018:324), relating to a review of learning objectives stated in the syllabi of strategic management classes, found that despite the still dominant theoretical contents, additional objectives regarding integrative and synthesizing knowledge and skills, which

aim at generating critical thinking as well as addressing societal and ethical matters and other personal skills, were present in the syllabi as well (Grant and Baden-Fuller 2018:324). Greiner et al. (2003:402) refute this argument by maintaining that case discussions, even if deployed in classroom, often would be guided by the teacher in order to confirm one special theory. This would deprive the discussion of its opinion-forming character by prescribing a certain line, which the students would have to follow (Greiner et al. 2003:402). According to Bell et al. (2018:234), by conducting case studies, educators would tend to teach their students answers to predefined questions, rather than letting them formulate the questions themselves. However, if they would teach their students to find questions, not answers, the students would be equipped with the ability to be strategist theorists themselves and, within this specific case, would make teaching theory obsolete (Bell et al. 2018).

By bringing another relevant problem into matter, Bhardwaj et al. (2018:279) denote to the difficulties that come up when teachers incline to teach content, intended to be taught inductively, in a deductive way. They call this problem “*plunging in bias*”. The “*plunging in bias*” describes the distortion of a situation (e.g., problem) of simply not understanding a problem before trying to solve it (Bhardwaj et al. 2018:279). Sloan (2020:47f) correspondingly picks up on this theme, noting that we often rush to try to solve a problem before we even understand if it is really a problem relevant to us. This intricacy was also highlighted by Augier et al. (2001:128). When thinking of case studies, students would often be confronted with a pre-selected case, which the teacher has, based on his or her individual interests, chosen and considered as appropriate. Within the case study, the initial problem would already be presented and prepared. The students only task would be to analyze the case in detail, and afterwards answer the predefined question. Thereby, it would be possible for them to draw a conclusion, even if they do not understand the actual problem (Augier et al. 2001:128). One way to address this obstacle would be to involve the students in the assemblage of the case study (Buckley 2018:322). Therefore, students would need to be able to make proper strategic decisions and think critically. Simple conceptual knowledge of theories and concepts would not be sufficient in order to diagnose strategic problems, generate and select among strategic options, and further implement a strategy (Grant and Baden-Fuller 2018). Conceptual knowledge requires to be enhanced by supplementary skills that foster critical thinking and decision-making (Bell et al. 2018:238). Grant and Baden-Fuller (2018:322) propose that “*the overarching goal of the core strategic management course should be to enhance students’ competences in making and executing strategic decisions*”. Another, and more substantial way would be to initially teach students how to formulate problems on their own. Schön (1983:40) claims that problems in the real business world, would not

simply present themselves to the strategists. He underscores the significance of being able to construct problems from the information given. Hence, the students would need to be able to “*make sense of an uncertain situation that initially makes no sense*” (Schön 1983:40). Kieffer and Astor (2017:40 cited by Bhardwaj et al. 2018:280) postulate that this non-existent competency of problem formulation, is the “*single most underrated skill in all of management practice*”. This statement is supported by the results of a survey with 106 C-suite executives, including public as well as private sectors in 17 countries (Bhardwaj et al. 2018:280). Within this study one key outcome was that 85% of the C-suite executives stated that people in their organizations lack problem diagnosing skills. At the same time 87% think that exactly this leads to disadvantages in the sense of substantial costs on their organization (Bhardwaj et al. 2018:280). By analyzing several business school syllabi, Bhardwaj et al. (2018:293) found that only 3% of them included methods or frameworks which aim at teaching students on how to understand and further frame strategic problems. This result would demonstrate that pedagogy does not deal enough with these central contents; in any case, less than with the teaching of theoretical and abstract contents. Bhardwaj et al. (2018:293) argue that framing a problem, however, is a challenging task which often leads to diverse outcomes, yet if it is done well, it would move the focus of attention away from a “*checklist approach*” towards the ability of choosing and later applying strategic concepts that fit well to solve the problem at hand. When confronted with a volatile, uncertain, complex, and ambiguous environment the task even gets harder, while at the same time, exactly this environment is increasing its importance. Bhardwaj et al. (2018:270) see problem framing as a central task, which requires interactive skills and competencies (Bhardwaj et al. 2018:279). The relevance increases with the increase in complexity of the task. Especially non-routine, new and unfamiliar situations would require such skills and competencies (Bhardwaj et al. 2018:280). Priem (2018:4f) underlines this argument and adds the significance of the immense influence of institutional factors, affecting the difficulties of teaching strategic management (Bell et al. 2018).

Nevertheless, Grant and Baden-Fuller (2018:322) agree that the current form of strategic management courses prevents students from gaining practically relevant skills that aid them with making profound strategic decisions as they do not teach them how to select formal decision tools, neither to deploy them. The outlined aspects were also addressed by Greiner et al. (2003:406) who discussed why top business schools focus so much on theory-based teaching, while obviously practice requires different, more integrative and behavioral, skills. They make sense of this by keeping in mind that research is strongly emphasized by scholars in the field of strategic management. Yet, they give credit to the strong academic footing of strategic management research, they still are of the opinion

that this “*should not be transferred to the classroom experience*” (Greiner et al. 2003:406).

According to David et al. (2021:3), management would include practical implications in a sense of doing, rather than being an intellectual pursuit consisting of conceptual knowledge (David et al. 2021:3). They argue that to step back on the original thought of the integrative Harvard Business School capstone course, teachers of strategic management courses would need to teach their students “*how to do strategic planning*” instead of teaching them theoretical concepts that they think are the most significant ones (David et al. 2021:5). It would be important to equip students with the skills to decide by themselves which theories seem relevant, and which do not; thus it would be important to encourage them to think critically. Huitt (1998) defined critical thinking as follows: “*The disciplined mental activity of evaluating arguments or propositions and making judgments that can guide the development of beliefs and taking actions*”. Several other scholars too (McMillan 1987; Nold 2017; Shim and Walczak 2012) identified critical thinking as being a central objective for education. And yet, most graduates indicate significant deficits in the for modern workplaces necessary critical thinking skills (Nold 2017:17). More than in other disciplines, teachers of strategic management courses would have the chance to provide students with these competencies and thereby, give them the opportunity to find the “*right questions rather than the right answers*” (Bell et al. 2018:322). Priem (2018:12) admits that, even if theoretical knowledge would be an important foundation in order to develop critical thinking skills, still, the most time-consuming aspect would be the discussion and experiential learning process. Even if theory would be necessary to enhance practical skills, “*theory must not be an end itself*” (David et al. 2021:6). Theory would be helpful, when used in a way that it enables students to decide on which factors to consider in their decision-making process, but it would not enable students to do strategic planning themselves (David et al. 2021:6). Donaldson (2002, as cited in David et al. 2021:6) states that theory teaching should not consume the lion’s share of time in classroom teaching, as it would not help the management to “*manage better*”. According to Bell et al. (2018:233), in order to formulate and implement strategies at an effective level, students would rather need decision-making quality. Nevertheless, they argue that students nowadays would not be able to deal with the vagueness characterizing today’s business world. Priem (2018:8) claims that, owed to a lack of experience, students often simply would not have a satisfactory long view needed to deal with the unescapable change in the environment. Yet, recent results from a standardized test of reasoning ability at colleges across the United States showed that “*at more than half of schools, at least a third of seniors were unable to make a cohesive argument*” (Belkin 2017). The art of teaching strategic management leads to

graduates that, even if being prodigious when it comes to the terms of owning conceptual knowledge, lack of skills demanded by corporate recruiters. Pfeffer and Sutton (1999) call this occurrence the “*knowing-doing gap*”. Greiner et al. (2003:404) further outline, that some “*managers tend to know too much and do too little, resulting in smart plans and ideas that rarely get implemented*”. Those knowledge-based skills would help them with getting jobs as the good grades, acquired through writing and saying smart things, would aid them with talking smart; though, it would not aid them with acting smart (Greiner et al. 2003:404).

It is therefore even more important to prepare learners at an early stage for these complex and ambiguous situations in which they will have to find their way later on. Students need to be trained to become qualified and competent strategists, who not only have a specialized knowledge about relevant tools and instruments, but above all are able to select, use and interpret the outcomes in a qualified manner and conclusively, reflect critically on their performed actions (Bell et al. 2018, Bhardwaj et al. 2018, Grant and Baden-Fuller 2018, Knight 1921 or Rumelt 2011). Reasons underpinning the importance of teaching strategic management in business schools were stated by Priem (2018:6). He argues that there would be four fundamental reasons highlighting the significance. Starting with the fact that there would be many students which, when ending their undergraduate or MBA education, would have deficits in basic business disciplines and would not be able to think critically (Priem 2018:6). Moreover, many students would not be able to adapt business functions in non to little complex situations. This would, later on, lead to problems when those students were asked to integrate a company’s overall business strategy (Priem 2018:6). Additionally, many tools, developed by strategy scholars, would not be taught in business school. Students would then lack of knowledge about these tools, which, when referring to Priem (2018:6), could be very useful in practice. Lastly, and most importantly for Priem (2018:6), teaching should be an uplifting process of enlightening student’s ability of thinking critically. By doing so, students should be educated to become judgmental human beings. Priem (2018:6) sees this aim, as a to-strive-for-goal of every professor and student in any discipline.

The diversity and complexity of the still ongoing debate of how to teach strategy in a right way, on the one hand, leads some scholars (Durand, Grant, and Madsen 2017; Hambrick 2004) to the conclusion that the discipline of teaching strategic management relies too much on the future and furthermore, is “*overly fragmented*” (Priem 2018:6). On the other hand, some scholars believe that exactly this ongoing debate feeds the diversity of the discipline, and thereby leads to further productive ideas (Priem 2018:6). According to Priem (2018:8) “*it gives the discipline vitality, but also may contribute to incomplete research exploration of the many existing strategy paradigms and to a continual churn*”

*of passing ‘fads and fashions’, driven by both researchers and managers needs for the elusive something new” (Priem 2018:8).*

However, despite on whether this discussion leads to a more productive research or not, it for sure leads to problems and obstacles in teaching strategic management (Priem 2018:7). One of the primary problems is claimed by David et al. (2021:2). They state that, even though concerns about this development are brought on to surface, there would be no suggestions on how to change it. They remark that in none of the nine articles published in the special issue of the Academy of Management Learning and Education Journal, proposals were made on how strategic planning should be conducted in a company, certainly not about on how this should be taught in strategic management courses (David et al. 2021:2). Moschieri and Santalo (2018:5) contend that, whatever approach strategic management teachers would be likely to follow, it should be aligned to teach students on how to make proper decisions in a world that withholds complex and unpredictable circumstances (Moschieri and Santalo 2018:5). Strategic decisions could never be viewed in isolation. They rather would be complementary. Greiner et al. (2003:324) state that *“strategy is about combining activities”* and thus, includes numerous decisions, which define the company’s overall position. They need to be able to handle incomplete information in order to deal spontaneously with multifaceted strategic problems (Greiner et al. 2003:408). This leads to the assertion that strategic management competency is more than simply remembering theoretical tools and instruments (Grant and Baden-Fuller 2018:332). Bell et al. (2018:233f) state that it would be from utmost importance that students begin to understand the *“how”* of strategic management and thereby, subconsciously learn to deal with the ambiguity and complexity, in a rather implicit than explicit way. The same request was indicated by Fullan and Langworthy (2014). They note that *“education needs to be radically rethought”* and that an orientation away from the *“what”* towards the *“how”* would be *“urgently required”* (Fullan and Langworthy 2014:1). Albert and Grzeda (2015:654) denote that critic has been strong on claiming that strategic management education needs to accentuate more effectively the *“how”* of strategic management, since decision-making would be the *“key to effective strategy formulation and implementation”*. Consequently, to bring up competent as well as qualified strategists, who are able to cope with the upcoming challenges and changes, educational and pedagogical approaches have to be rethought and revised.

### 3.4. Strategic management competencies - The solution?

For enlightening the deeply rooted understanding behind theories and concepts, Greiner et al. (2003:408) propose an “*overarching concept*”. This concept mainly consists of two parts. The first part embraces the development of a “*strategic mindset*”, including knowledge about the strategy, in more detail its formulization, enactment, changing character and development as well as developing a holistic view on it. The second part concerns the applied level of abilities. This means analytical and behavioral skills on the conceptual level, that help students to deal with incomplete and ambiguous information, when facing complex strategic problems as well as the commitment of themselves to the company’s strategic direction (Greiner et al. 2003:408). Priem (2018:24) says that what would be from utmost importance, is to advance students critical thinking skills. This can be achieved through putting theoretical concepts into action. The course content in strategic management courses often would combine the acquisition of knowledge with predefined action plans. What would be important to note is that this must not be confused with a simple description of practical know-how, but rather shall be seen as a “*guide to future action*” (Buckley 2018:35). Buckley (2018:35) demonstrates this by stating that “*theoretical formulations can be presented as ‘if X then Y.’*” He continues by elaborating this modest statement with “*if management makes the following decisions, then these consequences will ensue*” (Buckley 2018:35). In the subject of strategic management, this “*guide to future action*”, in many cases, would withhold an implicit character (Buckley 2018:35). In order to transfer the know-how to students, teachers would need to ensure to provide a learning environment, in which the theoretical knowledge could be tested empirically. Thereby, it would be important to put the developed strategies into action. However, this often does not happen within the classroom, as it would be too costly and additionally, may end “*disastrous if the strategy is untested*” (Buckley 2018:35). Thus, an a priori analysis of the strategy, likewise performed in war gaming, would be needed (Asprey, 1993 cited by Buckley 2018:35). As the complex and uncertain environment surrounding strategic decisions makes it unreasonable to only use logical tools, students would need to be equipped with additional skills (Grant and Baden-Fuller 2018:322).

The pedagogic way of preparing an accurate strategic management course that allows students to not only transfer conceptual knowledge, but to indeed apply their knowledge in business practice, would be “*best implemented by the application of theory to real world situations*” (Buckley 2018:36). Analogously to Bell et al. (2018:233f), who speak out for teaching students to understand the “*how*” of strategic management, Buckley (2018:37) advocates for directing students center of attention to the “*how, where and*



*when questions*". By including interactive teaching methods, such as case studies, the *"guide to action"* could be pursued (Priem 2018).

The importance of developing interactive skills and competencies, that do not rely on explicit theories and concepts, raises the question of what exactly needs to be taught to future strategists. According to Grant and Baden-Fuller (2018:322), the main goal of teaching strategic management would be to provide students with the competencies that allow them to formulate strategic options and execute strategic decisions. Therefore, students would need to develop skills that, when confronted with ambiguous situations, enable them to make analytical judgments (Greiner et al. 2003:403). A survey, conducted by the American Association of University Professors (AAC&U 2011), including 433 institutions of higher learning, revealed that 95% of the interviewed chief academic officers named critical thinking as one of the most decisive skills for students. Furthermore, 81% of employers would be likable to expect universities to focus more on developing critical thinking skills (AAC&U 2011). Bell et al. (2018:233) correspondingly denote the ability to make and implement strategic decisions as the *"key to effective strategy formulation and implementation"*. Furthermore, Bell et al. (2018:233) add that, for future strategists, in order to cope with the upcoming paradoxes, stemming from a volatile, uncertain, complex and ambiguous environment, it would be important to develop problem-solving skills as well as critical thinking. Decoding equivocal information and data into something that can be interpreted, too, seems to be a competency that has to be developed in order to be able to identify profitable opportunities (Grant and Baden-Fuller 2018:326; Buckley 2018:29). Greiner et al. (2003:407) congruently indicate relevance to the aspect of making sense of ambiguous situations. They argue that often there would be less time to systematically gather information; adding, that many decisions need to include different stakeholders and therefore motivate them, so that everybody moves in the same direction (Greiner et al. 2003:407).

Consequently, based on the existing literature, one can say that we need to teach future strategists how to formulate problems and make strategic decisions that lead the company to a competitive advantage, by using critical thinking and including environmental and situational factors. These skills, which need to be taught, could also be referred to as strategic management competencies. Howard (2018:5) thereby notes that the term *"competencies"* could be seen as a more inclusive one than the term *"skills"*. Competencies would include skills, but also *"encompass knowledge, habits and dispositions"* (Howard 2018:5). The acquired competencies direct the focus on a *"how to"* approach. They can be illustrated through, as for example, imagine a surfer on the ocean. The surfer could never stay on the board if he or she simply recalls and applies theoretically learned rules. Each wave is different, depending on the direction or strength

of the wind, surrounding ships or boats, the depth of the sea and many other environmental influences and circumstances. However, a good surfer still needs to know some basic rules, such as how to fall properly without getting hurt or the “*right of way rule*”, where the surfer being closest to the wave and thus, having the longest potential ride, owns the priority for the wave. This means that one cannot stay competitive if only applying theoretical plans. There are too many uncertainties that influence the further course of action. For sure, playing the game requires at some point an awareness of the rules, mainly because theoretical tools and instruments might provide an organizing structure (Grant and Baden-Fuller 2018:327), but staying in the game demands experience and the ability to develop and adapt continuously. Meaning that the application of strategic issues urges for cognitive skills, such as

*“judgment and prioritizing issues, choosing among analytical tools, and interpreting predictions, insight into complex causal interactions and intuition in recognizing patterns and anticipating changes”* (Grant and Baden-Fuller 2018:327).

It thus requires strategic thinking.

### **3.4.1. Strategic thinking – a definition**

*“Defining strategic thinking is still a work in progress in academic literature.”*

(Bouhali et al. 2015:75)

While much of the existing literature disagrees on how to define strategic thinking, it largely agrees on how to delineate the term from other concepts. Bonn (2001:63) argues that one major problem in strategic thinking literature would be the continuous confusion and synonymous use of the notions strategic thinking, strategic planning, and strategic management. Sloan (2020:48) accordingly remarks, that the concept of strategic thinking would be widely “*overused, misused, and under-defined*”.

One of the best known and most widely used definitions stems from Mintzberg (1994). Mintzberg's (1994:107) definition of strategic thinking is primarily based on the differentiation between strategic planning and strategic thinking. He describes strategic thinking as being a mental synthesis process. This process would, through focusing on observation and creative skills, generate a concrete epiphany for the company (Mintzberg 1994:107). Similarly, Heracleous (1998:482) states that strategic thinking must not be mixed up with the concept of strategic planning. He argues that strategic thinking would be about creative and deviating thought processes, while strategic planning would rather refer to more analytical thought processes (Heracleous 1998:481). Mintzberg (1994:108) also embraces skills such as “*inductive thinking*”, “*intuition*” and “*lateral thinking*”, denoting to the term of synthesis and including creative thinking rather

than analysis. He debates that planning would be more about subdividing an overall goal into little steps, analyzing those steps and further formalizing them, so that they can be applied in a routinized way (Mintzberg 1994:108). In her book “*Learning to think strategically*” Sloan (2020), decades later, takes up the differentiation between strategic planning and strategic thinking and attempts to represent the contrasts in a tabular form.

Table 6: Differences between strategic planning and strategic thinking by Sloan (2020:28)

Factor	Strategic Planning	Strategic Thinking
Intent	Focus on solution Generate answers	Focus on problem Suspend solutions Test for the real and right problem
Concept	A “product” – the plan Analytical, logical, rational Linear, sequential, metrics Conducive to formal learning Thrives on predictability Definitive, conclusive Resolution Convergent	A “process” – renewable Re-creative, generative, adaptable Continuous, ongoing Anytime/anyplace/anyone Conducive to informal learning Insight, innovation, ideas Thrives on tension, incongruency Iterative Divergent
Key dimensions	Financial	Broad based, financial, innovative, sustainable, social contribution, individual development, integrity
Anchor	Singular, exclusive Economics	Multiple, inclusive Economics, sociology, history, politics, culture, science, arts, humanities
Formulation	Exclusive Executive committee Corporate management team VPs Business unit heads	Inclusive Corporate management teams “Pipeline” of strategists Involvement – across, up, and down
Analysis	Quantitative Neutral Fixed, static Objective	Qualitative and quantitative Subjective and objective Relationship-based Dynamic Contextual Subjective and objective

Table 6 shows the various contrasts between strategic planning and strategic thinking in a well laid form. Thereby including the overall intention of the different perceptions, the concept at hand, the therein contained key dimensions, the anchor roots, the formulation style as well as the category of analysis. Sloan (2020:28), with that table, wanted to demonstrate not only the divergencies of the two distinct concepts, but also the possibilities of complementation that they withhold. She, herself, defined strategic thinking as being a concept focused on problems, rather than solutions. Moreover, she claims that strategic thinking would comprise both, a creative as well as a critical component (Sloan 2020:47f).

Other authors define strategic thinking without being bound by the concept of strategic planning. Yorks and Nicolaides (2013:5) for example reason that strategic thinking would allow to develop the individual capacities that enable it to participate in the sense-making process of strategic learning. This process, according to Mezirow (1991 cited by Casey and Goldman 2010:174), would demand the ability to reflect critically and thereby, contest existing conventions and worldviews. Dionisio (2017:45) argues that strategic thinking would be the mental process, needed to develop a strategy. By reflecting on prior strategies pursued by the company, and thereby focusing on the issue itself, strategic thinking would help with the development of new strategies. Looking at the definition of Horwath (2015 cited by Asobee 2021:68f), strategic thinking is defined as the automatically occurring cognitive process in which insightful knowledge is used to achieve a sustainable competitive advantage. Bouhali et al. (2015:77), more subtle, see strategic thinking as the simple process of *“thinking about planning”*. They claim that a competitive advantage could only be accomplished if the organization sets long term goals and strives to achieve those goals by developing and implementing plans. Eternally considering how to allocate resources. Casey and Goldman (2010:170), in their definition, focus on the ways to acquire strategic thinking. Thereby, they describe the process as being interactive as well as being based on experiential learning. Furthermore, they remark that the individual as well as the organizational factors would matter within this process (Casey and Goldman 2010:170). By including a more comprehensive perspective into the definition, Bonn (2001:63f) postulates that with including distinctive approaches and views, strategic thinking would be a process of assessing a problem holistically. Thus, devising on how certain problems are connected and inter-connected to each other. Bonn (2001:64) contends that it would be crucial to distance oneself from the situation, in order to keep the overall goal in perspective. By affirming the definition of Liedtka (2000:21) another divergent explanation is added to the smorgasbord. She defines strategic thinking by denoting to it as being from synthetic nature. Thereby, meaning that strategic thinking would urge for internal alignment. Strategic thinking would require the *“ability to understand and integrate across levels and elements, both horizontal and vertical, and to align strategies across those levels”* (Liedtka 2000:21). She further maintains that strategic planning would follow strategic thinking, thereby, drawing a line to what Ansoff (1965 cited by Dionisio 2017:46) said when asserting that strategy could be applied inside the planning process of the organization.

The various different definitions demonstrate the gap of strategic thinking literature, inclined by a deficiency in understanding the concept (Bonn 2001; Casey and Goldman 2010; Dionisio 2017:45). Bonn (2005:337) highlights that a more comprehensive

research in the field of strategic thinking, would contribute to draw “a more realistic picture of strategic decision-makers” as well as decision-making. In order to make the differences of the numerous definitions more clear, Bouhali et al. (2015:75), classified them into four categories: the “How Approach”, the “What-How Approach”, the “What-Why-How Approach” and the “Why-What-How Approach”.

Table 7: Approaches of defining strategic thinking by Bouhali et al. (2015:77)

Approach	Control-Chaos Continuum
How	Control Chaos
What-How	Control Chaos
What-Why-How	Influence Chaos
Why-What-How	Embrace Chaos

While the “How Approach” focuses on definitions concentrating on the mere strategic planning process, the “What How Approach” distillates more on becoming apparent of what will be done by taking the actual issues within the predominant context into account, and further elaborate specific plans as well as systems allowing to observe the whole process, to assure that what is done, is done correctly. Though, both of those two approaches, by setting objectives and deliberately trying to achieve them through methodical planning processes, try to control the chaos stemming from the environment (Bouhali et al. 2015:75f). Conversely, the “What-Why-How Approach” relies on building future oriented plans by keeping the *what’s* and *why’s* in mind. This would require strategists to include expert inquiry as well as a detailed elaboration on where they are and where they want to go. By trying to handle the upcoming challenges, this approach aims at influencing the chaos. Therefore, a vision, based on legitimate assumptions, is needed (Bouhali et al. 2015:76). By referring to the fact that strategic thinking would “*not always work in linear, methodical ways*”, Bouhali et al. (2015:76) emphasize to the last approach: the “Why-What-How Approach”. Thereby, mentioning that strategic thinking urges for flexible and agile structures, when being confronted with complex and ambiguous situations (Bouhali et al. 2015:76). Facing the current innovation-driven and hastily changing environment, the “Why-What-How Approach” would fit best, as according to Bouhali et al. (2015:77), this approach would embrace chaos.

The main purpose of strategic thinking is to guarantee that the deeply rooted meaning and perseverance are dispersed through the whole organization. Assuring those suitable strategies can be developed to fulfill the overall goal of the organization. Nuntamanop, Kauranen, and Igel (2013:243) assume that strategic thinking would excessively

contribute to the business performance of a company. Goldman, Scott, and Follman (2015:155) outline that strategic thinking would be crucial in order to set and follow a specific direction. Thus, implicating that strategic thinking is closely linked to strategic leadership. Indeed, strategic thinking was defined as a leadership competency by U.S. Internal Revenue Service. Thereby, including a national as well as a global perspective. Alluding on the development of a holistic view, which enables strategists to take a broader and also future oriented perspective into account (Bouhali et al. 2015:75). However, the current volatile, uncertain, complex and ambiguous environment raises the need for a strategic style of thinking (Asobee 2021:69).

### 3.4.2. Thinking strategically

Strategic management competencies foster our ability to think and act strategically. Grant and Baden-Fuller (2018:325) see the main challenge in specifying the required knowledge needed to educate students in a way, that they develop strategic management competencies.

When referring to Mintzberg (1994), the substance of making a strategy is strategic thinking. This process would be based on “*intuition*” as well as “*creativity*” (Grant and Baden-Fuller 2018:325). Grant and Baden-Fuller (2018:322) made an effort revealing cognitive and behavioral skills needed, in order to develop strategic management competencies. By breaking down the strategy process into four main stages (namely “*situation appraisal and diagnosis*”, “*strategic option generation*”, “*strategic choice*”, and “*strategy implementation*”), they identified skills, necessary to develop strategic management competencies and further strategic thinking. Those skills are: “*judgment*”, “*insight*”, “*intuition*”, “*creativity*” as well as “*social and communicative skills*” (Grant and Baden-Fuller 2018:322). Comparably, Bhardwaj et al. (2018:270), named interactive skills and competencies such as “*thinking*”, “*insight*” and “*judgment*” as fundamental skills for strategic thinking and problem framing (Bhardwaj et al. 2018:280). Sloan (2020:48) too, offers a set of competencies needed if one wants to develop strategic thinking. Also pointing out overlaps with the competencies proposed by Grant and Baden-Fuller (2018). Comparable to Grant and Baden-Fuller (2018), she mentions intuition, creativity as well as the capability to think critically and reflectively as important components (Sloan 2020:48). According to Norzailan, Yusof, and Othman (2015:66) strategic management competencies similarly, would entail creative thinking skills as well as the ability to sense opportunities as well as threats in the environment. Hereby they refer to the ability of intuition (Norzailan et al. 2015:67). They also highlight that strategy making would be a process that requires negotiation skills. Thus, communication would be from utmost importance (Norzailan et al. 2015:66).

Bell et al. (2018:233) equally signify that, in order to develop critical and creative thinking, “*problem solving skills*” would be from utmost importance. The same relevance would be devoted to the ability to include various perspectives and take different cultural aspects into account (Bell et al. 2018). Knight (1921), rather than naming reasoned knowledge, said that “*judgment*”, “*common sense*” and “*intuition*” would make the basis for decision-making. Correspondingly, Rumelt (2011, cited by Grant and Baden-Fuller 2018:325), 30 years later, indicated that “*to generate strategy, one must put aside the comfort and security of pure deduction and launch into the murkier waters of induction, analogy, judgment, and insight*”. Howard (2018:9), when investigating on skills required for 21<sup>st</sup> century learning, agrees that “*creativity*” and “*problem-solving*” are part of the most central skills. He additionally names “*deep understanding*” and “*communication*” as being one of the most crucial skills, recommended by the National Commission on Excellence already in Education in 1983, but still being up-to-date (Howard 2018:2). 21<sup>st</sup> century education reports and agencies would nearly all approve that “*the four C’s*”, namely “*critical thinking, communication, collaboration and creative problem solving*” would still be vital (Howard 2018:3). Furthermore, learning today, would be about creating connections (Howard 2018:6), being “*creative, innovative and entrepreneurial problem solvers*”, and thereby contributing to the “*good of society*” (Howard 2018:10).

As already elaborated in the sub-chapter “*Strategic management competencies - The solution?*”, critical thinking as well as problem solving skills are crucial skills to teach in strategic management courses in order to develop strategists who are able to deal with the upcoming challenges and changes in the business world. To develop them, those skills have to be disaggregated to make them more tangible. This has been done by several researchers such as Bell et al. (2018), Bhardwaj et al. (2018), Grant and Baden-Fuller (2018), Knight (1921) and Rumelt (2011). Though, Grant and Baden-Fuller (2018:332) argue that the before called five core skills, namely judgment, insight, intuition, creativity as well as social and communicative skills would comprise capabilities such as “*critical thinking, general management perspective, sensitivity to ethical issues, [the] ability to integrate different themes of management teaching and [the] ability to negotiate*”. Yet, they suggest that those skills should not be seen as substitutes for each other (Grant and Baden-Fuller 2018:332).

Thus, in the following, the competencies needed to build strategic thinking, consequently being the ones, which should be taught in strategic management courses – more than simply teaching tools and instruments – will be discussed.

### **Judgement and critical thinking:**

Firstly, Grant and Baden-Fuller (2018:328) denote to the ability of judgment. In their definition, they refer to Knight (1921), who describes judgement as the ability to make decisions when objective knowledge is not available. Knight (1921) signifies the ability to make adequate judgements by remarking the environment and evaluating the competencies of others. Grant and Baden-Fuller also refer to Barnard (1938, cited by Grant and Baden-Fuller 2018:328), who sees judgment as an substantial requirement for leadership in order to examine and develop three different, but fundamental, systems of knowing (physical, personal and social knowing). Judgmental abilities are needed when it comes to prioritizing certain issues and choosing the right theoretical tools and frameworks. Moreover, in order to understand causal linkages and its means of interactions, theoretical examinations need to be supplemented by individual judgment, that goes beyond a solid understanding of causality (Grant and Baden-Fuller 2018:329). To describe it more comprehensively: judgment is about taking a perspective above all else and thus, applying a holistic view. It is about discussing and analyzing different strategic options to, based on them, make profound decisions. Thereby, it would be important to pay attention to ethical and social matters as well, as these issues would have gained vast reputation over the recent years when executing strategic decisions (Bose, Saha, and Abeysekera 2020:455f). The ability to sense ethical and societal issues is thereby from utmost importance. As the environment becomes more complex, the relevance of judgement increases (Grant and Baden-Fuller 2018:328). Bhardwaj et al. (2018:279) denote to Beal (1988 cited by Bhardwaj et al. 2018:279) when outlining the challenging aspect of including various environmental issues when framing a problem. They mention that there would exist several ways to frame one specific problem and that each way leads to a certain outcome, which distinguishes from the others (Bhardwaj et al. 2018:279). Since, in a first step, a problem needs to be recognized as such, it is substantial to learn how to frame problems. Moreover, problems within a company need to be ordered, not only by relevance but also by urgency. Thereby, judgment is required to a large extent (Bhardwaj et al. 2018:287).

Supporting the findings, revealed by the study of the AAC&U (2011), that demonstrated the importance of critical thinking skills (see chapter "*Strategic management competencies - The solution?*"), the Future of Jobs survey, carried out and published by the World Economic Forum (2020:36), showed that analytical and critical thinking skills are also included in the upper top 15 skills for the year 2025. The inclusion and following processing of multiple sources and information can be seen as a vital basis for making decisions (Grant and Baden-Fuller 2018:327). More than simply applying conceptual knowledge, judgment requires "*knowing how*", rather than "*knowing what*" (Grant and



Baden-Fuller 2018:329). However, the state of sound judgment, Priem (2018:5) admits, would neither be reached by himself nor by most of his students; even if there would be unlimited course time available.

Closely related to the skill of judgment is the ability to think critically (D'Alessio, Avolio, and Charles 2019:177). Critical thinking can endorse judgment and thus, make students become independent thinkers (Angriawan 2017:10). Scriven and Paul (1987 cited by Angriawan 2017:11) refer to critical thinking as the process that "*actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action*". Similarly, Angriawan (2017:11) highlights the importance of building skills to make strategic decisions, based on a profound understanding of the situation as well as an inclusion of alternative perceptions. Ennis (1993 cited by Angriawan 2017:11) defined critical thinking with the words "*the reasoned and reflexive thinking that focuses on deciding what to believe and what to do*". Angriawan (2017:10) sees critical thinking as being one of the most respected goals of post-secondary education. In terms of teaching strategic management, critical thinking would be essential in order to cope with the complexity of the content and the cognitive requirements (Angriawan 2017:10). Considering the diverse definitions of critical thinking by assessing seven critical thinking frameworks, Liu, Frankel, and Roohr (2014) were able to categorize mutual elements linking the assorted definitions. The ability of critical thinking comprises the identification, analyzation, synthetization as well as the evaluation of information in order to execute effective decisions (Nold 2017:17). Alwehaibi (2012:195) concludes that critical thinking would not only be about acquiring knowledge, but rather to make sense of new information.

Thus, critical thinking could be seen as "*a set of capabilities*" providing students with the abilities to argue in a reasonable and informed way, producing inductions as well as deductions and furthermore, draw upon concrete and thought-through conclusions (D'Alessio et al. 2019:277). D'Alessio et al. (2019:276) describe the ability to think independently as being one of the most useful skills when facing a complex and ambiguous environment. They add that, by outweighing problems as well as by including informed decision-making, solving them, would be vital in order to meet the expectations of the business world. Leading to an extensive quantity of research in the field of critical thinking (D'Alessio et al. 2019:277).

### **Insight and including various perspectives:**

In addition to judgment and critical thinking skills, Bhardwaj et al. (2018) also call on insight and the inclusion of various perspectives (Bhardwaj et al. 2018:295). Insight, just like judgment, is needed in order to frame problems. Grant and Baden-Fuller (2018:329), when talking about insight, refer to the “*notion of inner sight*”. With that they want to express the examination of deeply rooted phenomenon or artifacts. It thereby would become obvious “*when a person suddenly reinterprets a stimulus, situation or event to produce a nonobvious, nondominant interpretation*” (Grant and Baden-Fuller 2018:329). For example, one could imagine a teacher explaining something complex to a student. In the first moment the students often feel as if they are not able to understand anything the teacher is explaining. By observing their mimics, one can clearly see that this is the case. Nonetheless, sometimes through considerable effort, sometimes through the intervention of other students and sometimes through changing the way and method of explaining, suddenly one can clearly see how the students begin to understand. Kounios and Beeman (2014:133) signify that insight would never happen without the inclusion of emotional aspects. When the learner begins to understand, this process would be accompanied by a highly positive surprise (Kounios and Beeman 2014:133). The relevance of insight gets visible when thinking of causal roots and trigger events of specific strategic situations. When judgments aids with choosing among alternatives, insight is needed to recognize how certain events affect systematic developments (Grant and Baden-Fuller 2018:328). Thereby it is important to include various perspectives. This would help strategists by making sense out of the complexity that comes with the modern business world. Leading the strategist to understand the interwoven connections and relationships (Gilbert 2013 cited by Albert and Grzeda 2015:662).

Insight often is viewed as an impulsive and subconscious process, when in fact, it can be accelerated by deliberate cognitive activities (Grant and Baden-Fuller 2018:329). While one could be aware of non-conscious processes within his or her mind, one could never be aware of the fundamental tacit processes. When thinking of insight, specific thoughts or ideas may seem to appear spontaneously, but in fact remain an illusion. By simply demonstrating an indirect awareness, the perception of thoughts is deceived (Brock 2015:127). Brock (2015:127), accordingly mentions, that by learning insightful thinking, one might outplay the problem of not being able to convey implicit knowledge. Implicit knowledge cannot be studied in an explicit way. However, one could study the stimulus on the conscious thought. Brock (2015:127), thereby draws an analogy to physics. He argues that, yet physicians would not be able to directly observe black holes, they still are able to study their interactions with the surrounding material (Chow 2008 cited by Brock 2015:127). Insight would form a process, that when brought into action,

could interact with conscious thinking. Thus, meaning that insight can be described as an “*explicit awareness of novel relations that arrives with apparent suddenness but with little conscious awareness of processing*” (Brock 2015:127). Rumelt (2011:17) states: “*An insightful framing of a competitive situation can create whole new patterns of advantage and weakness*”. He further describes that “*the most powerful strategies*” would “*arise from such game-changing insights*” (Rumelt 2011:17).

### **Intuition and common sense:**

Today’s modern society mainly tends to rely on explicit and rational decision-making rather than on intuitive and subjective decision-making (Hodgkinson and Rousseau 2009; Lamond and Thompson 2000). This assessment was first brought up by Albert Einstein. He (1879-1955, cited by Okoli and Watt 2018:1123), under widespread assumption, stated: “*The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honours the servant and has forgotten the gift*”. Today, the topic of intuitive decision-making is widely controversial in scientific research, as not all intuition is valuable. Its valency depends mainly on the expertise and experience of the decision-maker (Grant and Baden-Fuller 2018:329). Some scholars (Dana and Dawes 2004; Kahneman 2003; Tversky and Kahneman 1973) argue that intuitive decision-making is vulnerable to cognitive distortions and biases. Okoli and Watt (2018:1125) formulate: “*The quality of people’s intuition is therefore only as good as the experience(s) upon which it was built*”. Indeed, when experts in a certain field make intuitive decisions, they rather rely on their perception instead of rational reasoning (Grant and Baden-Fuller 2018:329). For example, when thinking of gymnastics, the gymnasts often close their eyes when performing the most fabulous acrobatics. One can observe similar happenings when looking at dancers, chess players or cooks (Haldin-Herrgard 2000:358). All these people are focused on their actions, but at the same time do not think about every single sub-step of their activity while acting. Intuition or common sense are characterized by their pace of appearance and operational capability. In contrast to rational reasoning, intuition and common sense do not follow a logical and linear structure. Once performed, intuitive actions cannot be reconstructed or explained ex post (Calabretta, Gemser, and Wijnberg 2017:366). Sloan (2020:110) calls this ability “*expertise*”. She mentions that expertise would allow individuals to reinterpret and classify situations in a very fast way. Thus, enabling the individuals with the capabilities to become aware of the relevant contents as well as the content that can be neglected (Sloan 2020:110).

Since intuition and common sense heavily rely on experience (Sloan 2020:168) and are developed through collected memories about certain situations and the successful (or

non-successful) performed activities within these situations, they can only be developed in situations that are familiar to the experts (Grant and Baden-Fuller 2018:329). Yet, intuitive decision-making requires little to no information processing and thus, makes it possible to include various reasons in the decision-making process (Okoli and Watt 2018:1124). Sloan (2020:168) alleged: "*Intuition is a natural outgrowth of experience and a vital component of learning to think strategically.*" By referring to Klein (2003), Sloan (2020:168) argues that individuals who cannot trust their own intuition would be less effective when making strategic decisions. Intuitive decision-making would be preferable in situations with high pressure of time, high uncertainty, and high complexity (Calabretta et al. 2017:367; Singhal and Singh 2015:39). Okoli and Watt (2018:1124) indicate that intuitive decision-making based on common sense, would often happen because in the past, individuals learned without "*knowing when, how or where such learning took place*". The learning then would have taken place implicitly, as the integration and procession of information would have resulted in "*knowing without knowing how*" (Okoli and Watt 2018:1124). One could imagine intuitive decision-making as the mechanism where people call on their subconscious mind and automatically integrate or link a contemporary problem to different patterns, stowed in one's memory. The new problem then is projected to the stored patterns, and a "*message of wisdom*" is sent to the individual. The "*message of wisdom*" expresses itself through feelings, widely known as the "*inner voice*" (Okoli and Watt 2018:1124).

The topic of intuition and common sense, within the discipline of strategic management, lacks profound research (Singhal and Singh 2015:39). When following the opinions from Cabantous and Gond (2011) and Callon, Lascoumes, and Barthe (2009), the main focus of management literature relies on rational decision-making processes. Though, Grant and Baden-Fuller (2018:323) argue that the literature, related to intuition in strategic decision-making, would rely on simplicity and thus, would not comprehend the complex and ambiguous situations in real world strategic decision-making. Individuals would prefer following highly systematic approaches that consist of linear procedures (i.e., rational), rather than following intuitive approaches (Elbanna 2006; Schwenk 1995). Though, Sloan (2020:110) also mentions the threat of becoming too confident with one's own expertise would lead to become blind in terms of certain aspects. Meaning that individuals then would tend to oversee relevant issues or ignore potential opportunities. It would thus, "*give us a false sense of knowing*" (Sloan 2020:110). However, she argues that the widely believed assumption, that intuition is driven by emotions, would be wrong. She refers to the above stated explanation that intuition rather deprives from prior made experience, and thus, should not be seen as an "*irrational process*" (Sloan 2020:168). By citing a Japanese finance executive she interviewed, who stated that individuals

should not “*try to separate your feelings from your thinking*”, she wants to draw attention to the distinction between informed and uninformed gut feelings (Sloan 2020:169f). Informed gut feelings would exclude impulsive reactions but include profoundly made decisions based on intuition (Sloan 2020:170). Sloan (2020:188) emphasizes that intuition can be both, a guide, and an early warning system. Intuition enables us to sense the smallest changes before they become visible. In addition, intuition allows strategists to make decisions based on little information. Without this ability, strategists would spend lots of time analyzing information not being relevant for the outcome of a decision. An experience-based informed intuition would help strategists to recognize patterns within a pile of information and data (Sloan 2020:188).

However, the impact of the environment must not be underestimated. In novel situations that come with great uncertainty, creative skills are likely to be more valuable than intuition (Grant and Baden-Fuller 2018:329). Though, intuition would thereby be able to foster creative cognitions, needed to strive for new solutions (Claxton 1998; Hodgkinson and Rousseau 2009).

### **Creativity:**

Strategic management literature widely deliberates the strategy making process as being from fundamental creative nature. A creative mind comprises skills such as elaborating on several solutions for a specific problem as well as building connections and sensing irregularities (Amabile 1986; Mintzberg 1994). Per widespread definition, creativity thereby is often associated with the creation of something new (Amabile 1986; Woodman, Sawyer, and Griffin 1993). Though, one has to distinguish the term creativity from the term innovation. Creativity could be seen as the “*idea generation component of the innovation process*” (Dewett 2004:157). When considering that creativity is a crucial driver for innovation (Woodman et al. 1993), and innovation in turn helps to sustain a competitive advantage, this perception could not be denied (Tidd 2001).

Creativity is also often understood as the ability to think “*outside the box*”. Despite this widely accepted assumption, Grant and Baden-Fuller (2018:330) view creativity as nothing that is spontaneously, but rather as a developed skill that, through “*analogous thinking and social interaction*” (Grant and Baden-Fuller 2018:330), could be obtained. Contrary, Howard (2018:8) signifies that creativity would heavily rely on imagination and experimentation. He states that creativity would often appear “*mysteriously when least expected*” and that creativity could never be forced. However, he admits that the setting has to be supportive in order to enhance creativity (Howard 2018:9). Bonn (2001:68) highlights that creating an environment, in which everybody is cheered to strive for new innovative ideas, would be a challenging task for managers. Amabile (1986:79) implies

that this challenge could be overcome by stimulating one's intrinsic motivation, rather than stimulating the extrinsic motivational factors. This assumption was also underlined by Robinson and Stern (1997:59), as they proposed that creativity is fostered by the "*desire to work on something for its own sake*". İşcan and Karabey (2007 cited by Kula and Naktiyok 2021:55) explain creativity as something that, especially when dealing with new problems, can help to precisely overcome these; making creativity a fundamental principle of strategic thinking (Kamangar et al. 2013:549). By integrating multiple sources into the problem-solving process, creative skills are perceived as key elements when it comes to make strategic decisions (Amabile 1986; Mintzberg 1994). Deemed from an organizational perspective, creativity can be described as something that creates diverse connections between different business ideas and thus, existentially contributes to the continual subsistence of the company. Through questioning common concepts and recombining new particles by drawing connections between different issues that in a first place seem unconnected, creativity could help with sustaining a competitive advantage for the corporation. Creativity, thus would be crucial in order to develop strategic options that aid the company with pursuing the overall goal (Bonn 2001; Grant and Baden-Fuller 2018; Robbins and Coulter 2012). Therefore, strategists would need to tackle their own worldviews, that often comes in a tacit way. Reflecting on the own mental models would induce strategists to challenge existing core beliefs. This ability of being able to recognize the real value of an idea would distinguish strategists from good strategists (Bonn 2001:65). Research has shown that creative skills significantly can contribute to the organizations overall success (Amabile 1986; Baer, Oldham, and Cummings 2003:69; Takeuchi and Nonaka 1995). While a company's environment is rapidly changing and gets more and more competitive these days, creative skills become a main source of opportunities. Mintzberg (1994) sees creativity as being a substantial skill, needed to develop strategic thinking, thereby making the teaching of creativity skills decisive.

### **Social and communicative skills:**

One important skill that aids with creating a creative environment is communication (Bonn 2001:68). The increasingly networked business world urges for changes in the qualities and competencies of human capital. Globalization and liberalization have changed the needs of the corporate sector (Abdullah, Hanafiah, and Hashim 2013:95). Especially under complex and uncertain circumstances it is important that all members of an organization develop a mutual understanding of the ambiguous situation. They rapidly need to agree on how to proceed as the environment is characterized by uncertainty and ambiguity (Grant and Baden-Fuller 2018:330). According to Gilbert (2013 cited by Albert and Grzeda 2015:662), those holistic and complex situations,

require a collaborative inquiry of students. The whole process, thereby would be known as “*sense-making*” (Grant and Baden-Fuller 2018:330). Kelvin-Iloafu (2016:93) argues that, as communication denotes to the concept of sharing and sharing “*implies co-operating*”, communication would be a social activity. Nnamseh (2009, 116 cited by Kelvin-Iloafu 2016:93) perceives communication as being the all-embracing bond, spun through the transmission of feelings, knowledge and experience. Strategic management, more than other disciplines, is a social process (Andersson 2020:262; Sloan 2020:54) and therefore, additional to a theoretical understanding of the business, requires social and communicative skills (Abdullah et al. 2013:95; Grant and Baden-Fuller 2018:330). Those skills include “*the ability to share knowledge, convey meaning, persuade, provide instructions, listen, and understand*” (Grant and Baden-Fuller 2018:330). Moreover, through developing social and communicative skills, strategist’s senses for social awareness would be sharpened. Meaning that they develop social intelligence, including soft skills such as “*empathy, attunement, and social cognition, and social facility, and concern*” (Grant and Baden-Fuller 2018:330). Kelvin-Iloafu (2016:95) recognized, that communication does not only rely on what is said, but more on how it is said as well as on how it is perceived. She highlights the importance of feedback, that confirms the one wanting to communicate something, that the message was received and understood in the way it was intended to be received (Kelvin-Iloafu 2016:95). Being socially intelligent thereby, would be useful when transferring knowledge and skills that aim at providing the receiver with the skills needed to obtain strategic tasks (Kelvin-Iloafu 2016:95). Studies revealed that, in order to achieve long term strategic goals, communication would be a crucial component (Kelvin-Iloafu 2016:98). Leading Kelvin-Iloafu (2016:98) to the conclusion that “*communication is an essential tool for the strategic management of organization*”. Social and communicative skills, by nurturing social interaction between different members of the organization, besides, foster judgment and creativity (Grant and Baden-Fuller 2018:328).

The relevance of strategic management is evident in complex environments. Strategists are therefore required to be multi-skilled personalities (Richardson 1995:40). The previously described skills and competencies form the basis of strategic thinking, as they are crucial for developing critical thinking and problem-solving skills, needed to develop and deploy profound strategic decisions in today’s VUCA world. Strategists thereby also need to be able to use these skills in a flexible way, in order to adapt to the ever-changing environment (Sloan 2020:50). Strategic management competencies thus, play a crucial role in whether a strategic decision will be successful or not. Therefore, it is more than surprising that exactly these competencies, nowadays, seem to be forgotten when teaching strategic management.

## 4. Teaching strategic thinking

Even if one could identify someone who owns strategic management competencies and thus, is able to think strategically, there would still be a not inconsiderable gap in the strategic management literature, as we still would not know how these individuals learned what they are now able to do (Sloan 2020:2). Thus, the following chapter deals with the theoretical and practical background, underlying the implications of teaching strategic thinking. In a first step, the initial problem of teaching knowledge, that relies on procedural and metacognitive skills, will be discussed. Furthermore, this chapter outlines relevant, yet not sufficient requirements for teaching strategic thinking.

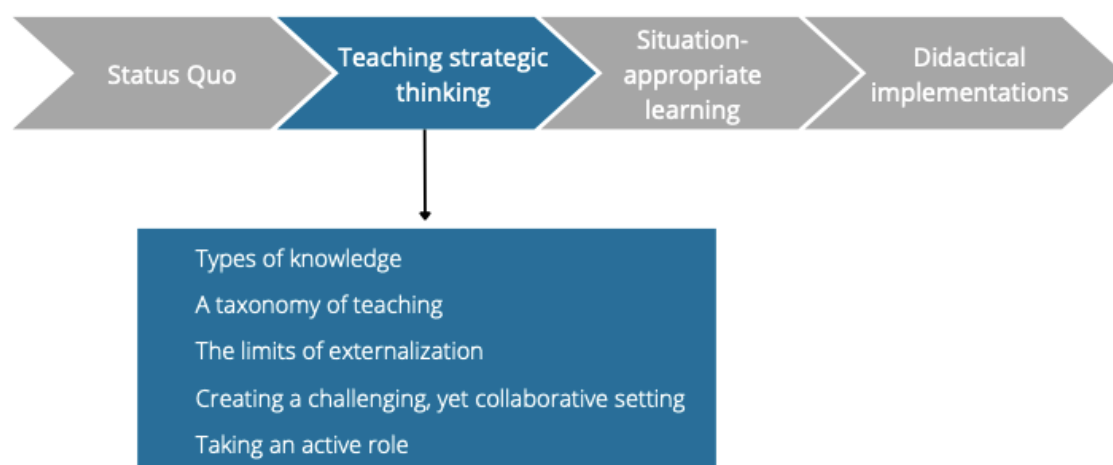


Figure 7: Sequence - Teaching strategic thinking

Sloan (2020:3) argues that, based on her experience made in the consulting area and in teaching strategic management to graduate MBA and doctoral students, she recognized that most strategy consultants, as well as university teachers, would miss out on determining the type of knowledge they are confronted with when teaching strategic thinking before beginning to teach. She continues that teaching strategic thinking would be a non-linear process, that differs from the traditional way of teaching merely theoretical content (Sloan 2020:3).

As a consequence of the preceding discussion, the procedural and metacognitive skills, inquired when teaching strategic thinking, include implicit rather than explicit knowledge, as they cannot be taught in a formalized way (Takeuchi and Nonaka 1995:9). Strategic thinking thus requires procedural processes that transcend the competencies needed for conceptual knowledge. These processes, however, typically happen subconsciously, without any intended effort. Sloan (2020:170) describes them as happening in the everyday life, expressing themselves through “*spontaneous and intuitive thinking*”. Schön (1983:49) contends that “*often we cannot say what it is that we know*”. Complex,



uncertain, and ambiguous situations frequently make conceptual knowledge obsolete and thereby increase the necessity of implicit knowledge. The role implicit knowledge plays in teaching strategic management would often be undervalued, or even ignored (Sloan 2020:170). Characteristically for implicit knowledge is the fact that, although it can be demonstrated, it is not possible to verbalize it, since the wearer must not be aware of the skills he or she withholds. Sloan (2020:170) accordingly, denotes that “*when we try to describe it, we often find ourselves at a loss*”. The knowledge and competencies required, only become visible through the performance of context-specific actions, based on subjective intuition (Grant and Baden-Fuller 2018:334; Harteis, Billett, and Gruber 2020:158; Takeuchi and Nonaka 1995:10). By demonstrating what we call “*know-how*”, implicit knowledge would become evident. Though implicit knowledge thereby, would not entail the know-how inclined in certain rules or plans, rather it would be a kind of “*knowing in the action*” (Sloan 2020:171). Implicit knowledge, and thus strategic thinking, would be activated through “*feelings and affective responses*”, just “*like a sixth sense*” (Sloan 2020:171). Schön (1983:49) outlines that the ability of knowing thereby would lie in the action itself. This would demonstrate what Polanyi (1966:4) once stated: “*That we can know more than we can tell*”.

Neuweg (2015:24f) argues that often people's desired thinking would be based on the fact that every action performed in a professional context is guided by reflection and consciousness. The counterpart to this would be sheer behavior that completely lacks underlying thoughts that steer the behavior. Neither the one nor the other could do justice to having skills; neither routines nor entirely thought-through actions would represent what an expert is able to do (Neuweg 2005:561f). According to Neuweg (2005:562f) an expert's ability could be described through the term “*intuitively-improvised*” action. This would include actions that are thought about, merely considered, but not dissected. As an example, one could imagine a doctor who is seeing a patient and within seconds can diagnose his or her illness. The doctor might be focused on his or her job, but he or she does not think about every single step of the activity while doing it. Similarly, one can imagine a strategist being confronted with new competitors and immediately thinking of a specific market strategy to overcome the competition. According to Neuweg (2015:25) the experts would solely focus their attention on the action itself, instead of directing it to themselves or their thoughts. They simply would act, and thereby make this action look effortless, which is exactly what is widely admired about these people. People acting intuitively-improvising do not act this way by chance or even unintentionally, they act this way because they own the abilities to act this way. Polanyi (1966:18) notes that if someone tries to pronounce a word correctly, and thereby sets the focus too much on the world itself, will fail. Moreover, even in retrospection experts cannot verbalize

performed actions. Therefore experts, when asked to explain what they did and how they proceeded with a task, begin to construct a train of thoughts that, during the actual execution of the action, did not take place. Accordingly, one tries to justify the action and implant a set of rules in it, of which the action, originally, did not make use (Neuweg 2015:26f). Sloan (2020:172) claims that strategists, who are doing their job well, would be aware of such implicit knowledge structures within their thinking, as this pattern forming knowledge would be inquired in their day-to-day operations, when being confronted with strategic decisions. Good strategists would not be able to outline and describe the underlying rules behind their actions. As Sloan (2020:172) stated: *“The strategist operates automatically because of trusted intuition, due to a vast repertoire of successful experiences; but she also has the capacity to pause and critically reflect.”*

#### 4.1. Types of knowledge

Classifying knowledge has become a dominant attempt in research over centuries, concerning various fields. This has led to the fact that, today, there are numerous different classifications based on several disciplines (Antal 2000:36). However, in practice, one classification in particular has prevailed: the knowledge categories developed by Anderson and Krathwohl (1956), including four different types of knowledge: factual knowledge, conceptual knowledge, procedural knowledge and metacognitive knowledge.

Factual knowledge as well as conceptual knowledge can be perceived as surface-level knowledge, which is often referred to as reproduction and memorization learning. According to De Jong and Ferguson-Hessler (1996:107) this knowledge would be kept in reminiscence *“more or less as a copy of external information”*. Factual knowledge denotes to specific terminologies and facts (Anderson and Krathwohl 1956:42). This kind of information is typically learned through repetition and memorizing. Though, just because it is identified as superficial knowledge, does not mean it is not significant. Remembering facts and bringing them up can be relevant when it comes to a particular situation. For example, thinking of the marketing department trying to negotiate a higher budget. Those people better know *“the facts”* when pitching in front of the C-level. Conceptual knowledge is closely related to factual knowledge. It is about knowing the interrelations between the remembered facts and information and thus, exhibiting the bigger picture. Explicitly showing how the remembered facts and terminologies can be organized and structured in an eloquent means. It is about knowing classification and categorization systems, generalizations and whole theories or models (Anderson and Krathwohl 1956:42). It thereby fosters the understanding of specific concepts and their

interrelations. Only by decisive reflection and learning, this knowledge could be attained (Thamarasseri 2016:5).

Contrary to factual and conceptual knowledge, procedural and metacognitive knowledge are perceived as deep-level knowledge. Deep-level knowledge is characterized by requiring critical thinking and judgment. These types of knowledge are processed, structured, and stored in memory, ready at any time to be applied. They thereby include multiple perspectives and are used in a situation-appropriate way (De Jong and Ferguson-Hessler 1996:107). When transforming the “*knowing that*” (Anderson and Krathwohl 1956:41) of the superficial knowledge into a “*knowing how*” (Anderson and Krathwohl 1956:52), one receives procedural knowledge. Procedural knowledge comprises skills, techniques, and methods, rather than facts and terminologies. It is applied subjective- as well as situation-specific (Anderson and Krathwohl 1956:52; Antal 2000:36; Cohen and Bacdayan 1994:554). Procedural knowledge is needed to accomplish specific tasks. It is often referred to as a collection of certain strategies and skills (Thamarasseri 2016:5). For example, when watching a tennis professional playing a match. One could read hundreds of books and watch numerous tutorials in order to learn how to play tennis in such expertise way. However, one would not be able to perform just as good as the expert, as procedural knowledge requires practice. It entails several feedback-loops and listening to one’s mind and body: not only cognitive processes. When reflecting on failures or successful moments, one uses metacognitive knowledge (Hisyam Selamat and Choudrie 2004:130). Since this type of knowledge requires constant adaption to the situation as well as self-knowledge, it can be understood as strategic knowledge (Anderson and Krathwohl 1956:55).

Teaching curricula are based on the underlying thoughts of which specific knowledge should be taught and learned, as well as on how such teaching and learning could best be undertaken (Thamarasseri 2016:5). According to Thamarasseri (2016:5), the basic question that arises is: “*What knowledge is of most worth?*”. He suggests that the answer to this question might emerge through answering a fellow question of which competencies are considered to be crucial for students, in order to find their place in the professional life. Therefore, including the required

- “*needs of the economy for human resources,*
- *national or international ideas,*
- *the need for societal and cultural change or preservation,*
- *ameliorating pervasive distinctions of gender and race,*

- *the set of perennially essential and fundamental forms of knowledge and ways of thinking*” as well as
- *“the forms of a life that is most worth living.”* (Thamarasseri 2016:6).

Thamarasseri (2016:7) contends that teaching would be a complex act, that does not only rely on one type of knowledge but needs to include many kinds of knowledge. While some knowledge required would rely more on general rules and principles, others would be more precise and temporary. However, the different knowledge categories should never be perceived as being discrete entities, rather their boundaries would be vague and flowing (Thamarasseri 2016:8). He also highlights the significance of being able to assess on one’s own and personal learning experiences and thus metacognitive skills, crucial to enhance the other types of knowledge within the own learning process as well as the education system in general (Thamarasseri 2016:10).

The knowledge dimensions conceptual, factual, and procedural knowledge were included in the Taxonomy of Teaching developed by Bloom (1949-1953). This taxonomy represents a tabular framework that helps teachers to classify the expectations they have on students regarding what they need to learn in class. Later on, Anderson and Krathwohl (1956) revised the taxonomy by adding the fourth, the metacognitive dimension, to it. Thereby transforming the one-dimensional taxonomy into a two-dimensional one (Krathwohl 2002:2013). The revised taxonomy will be explained in more detail in the following chapter.

## 4.2. A Taxonomy of Teaching

The Taxonomy of Teaching, developed by Bloom (1949-1953) and later on revised by Anderson and Krathwohl (1956), has been extensively used within educational settings, regarding the planning of teaching lessons (Fisher 2010:72). Bloom distinguished between lower order and higher order cognitive skills. Lower order skills included remembering, understanding, and applying theoretical content. Higher order skills referred to analyzing, evaluating, and creating. Grant and Baden-Fuller (2018:324) linked their revealed cognitive and behavioral skills to the “*Taxonomy of Educational Objectives*” of Bloom (further developed by Anderson and Krathwohl, 1956).

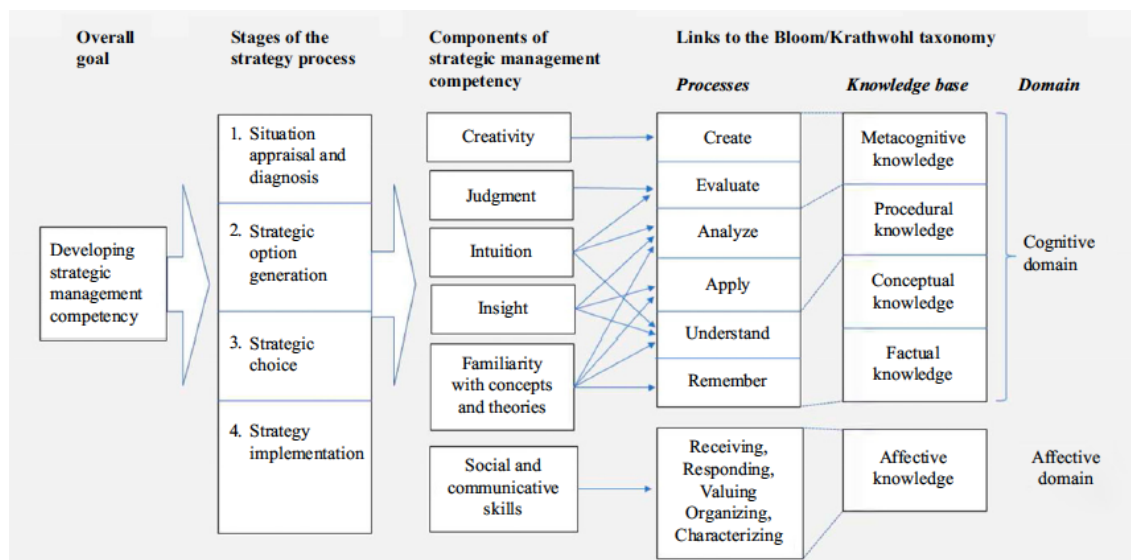


Figure 8: "Linking Strategic Management Competency to Bloom's Taxonomy of Educational Objectives" by Grant and Baden-Fuller (2018:326)

Considering the different types of knowledge as well as their individual features, the before called skills, judgment, insight, intuition, and creativity attach to the levels of procedural and metacognitive knowledge, more than on the factual and conceptual knowledge types. The four cognitive skills are therefore mainly related to the upper-level knowledge base of Bloom's Taxonomy Table. Those include analyzing, evaluating and creating (Grant and Baden-Fuller 2018:330). As a basis for understanding and furthermore applying, analyzing, evaluating, and creating, serves the familiarity with concepts and theories. Social and communicative skills thereby aid with receiving, responding, valuing, organizing, and characterizing information (Ren and Ding 2010:156). Those skills are crucial in order to convey information and make as well as execute profound strategic decisions, as these activities require the "ability to deal with our emotions, values, motivations, and attitudes" (Grant and Baden-Fuller 2018:331).

As already stated in the chapter "Types of knowledge", procedural and metacognitive knowledge is developed through different learning processes than those needed to obtain factual and conceptual knowledge (Grant and Baden-Fuller 2018:330). Bloom himself, according to Fisher (2010:73), was inspired by Piaget and Vygotsky, who advocated those skills regarding the thinking abilities would be developed by challenging the cognitive mind. Fisher (2010:73) underlined this assumption by citing a 10-year old boy who said "a good teacher makes you think... even when you don't want to". Though simply challenging students would never be sufficient, as strategic thinking contains more. Thereby raising the emphasize on developing self-awareness and intensive practice (Fisher 2010:73). In order to acquire procedural knowledge, students need to gain practical experience. They need to apply the before learned theoretical tools,

instruments, and concepts in a “*close-to-real-world*” situation that includes the complexity, uncertainty, and ambiguity of actual strategic situations (Grant and Baden-Fuller 2018:330). When urging to obtain metacognitive knowledge, there would be two main processes (Grant and Baden-Fuller 2018:331). The first one would develop metacognitive knowledge through reflecting on one’s own thoughts by analyzing and reviewing your own cognitive and intellectual processes. Thereby, the learner would need to reflect on patterns of success as well as on failures; always recognizing the feelings and emotions that were present during these situations (Grant and Baden-Fuller 2018:331). The second one includes interaction with others. Observation of others, engagement in dialogues and challenging discussions, in which one’s own worldview is tackled. This can lead to valuable inductions, in order to facilitate the development of insight, as it allows students to reflect on their intellectual processes while being right in them at the moment (Grant and Baden-Fuller 2018:331).

Nevertheless, it is through technical developments such as artificial intelligence, deep learning, and big data, that more and more often computers seem to develop an incredible ability to analyze data, draw valuable insights and make profound decisions. This development leads Grant and Baden-Fuller (2018:332) to raise the question if it would be possible to substitute the acquired cognitive skills, such as judgment, insight, intuition, and creativity, through conceptual knowledge. They underline their question with the example that today, computers are able to outperform the best chess players and continue by elaborating their question through adding that this might also be possible when it comes to strategic situations (Grant and Baden-Fuller 2018:331). Indeed, several scholars are dealing with this topic (Ansoff 1986; Duan, Edwards, and Dwivedi 2019; Holloway and Pearce 1982; Jarrahi 2018; El Sawy 1984; Spangler 1991; Sung 2008) and thereby making the research on this subject highly topical. However, Chernov, Chernova, and Komarova (2020:24), within their study, found that artificial intelligence lacks of skills such as “*abstract thinking*”, “*intuition*” and “*analysis of the context*”. These skills would predominantly become vital in situations where information is scarce and inconsistent. According to their study, the most effective way of making profound strategic decisions would be to combine artificial intelligence with qualified human beings. Another argument worth mentioning, is that machines cannot take responsibility for decisions. They thus conclude that cognitive knowledge cannot be substituted by conceptual knowledge and that the practice of using artificial intelligence in strategy development can only reach the status of being “*considered as a colleague*” (Chernov et al. 2020:25). Also Grant and Baden-Fuller (2018:331) conclude that tools and instruments, acquired through conceptual knowledge, might “*provide guidance*”, but could never substitute procedural and metacognitive knowledge. They denote the

importance of this cognition to the fact that teachers often would request conceptual solutions to solve pedagogical challenges (Grant and Baden-Fuller 2018:331). For example, teaching novices theoretically how to drive a car will not equip them with the necessary skills of driving it. Similarly, it is not sufficient to teach students about the theoretical concepts, tools, and instruments they could use to make strategic decisions, as this would not provide them with the required skills to execute them.

### 4.3. The limits of externalization

Though, teaching strategic thinking, as already discussed, requires the teaching of the unteachable implicit knowledge. One could divide the problem of externalizing implicit knowledge into three main parts (Neuweg 2005).

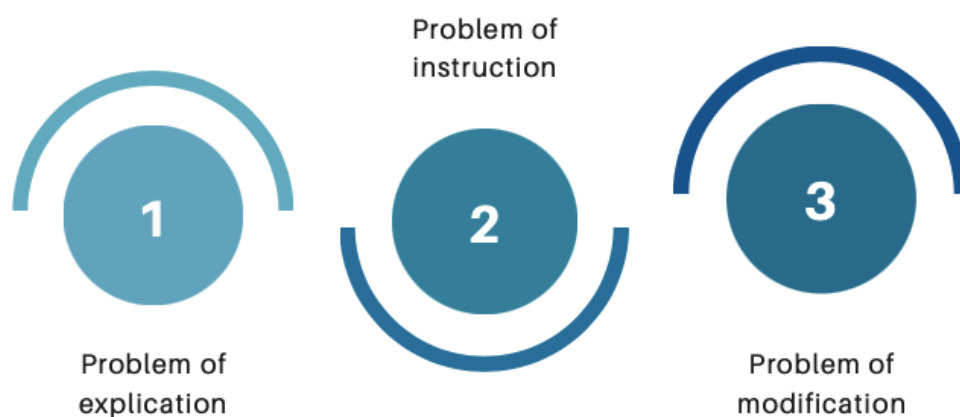


Figure 9: Limits of externalization by Neuweg (2005)

Starting with the problem of explication, which basically distinguishes between the knowledge, which the expert him- or herself cannot put into words (Mitchell et al. 2021:1; Mládková 2012:106; Ren and Ding 2010:155), and the knowledge that even a third person cannot verbalize. The second one would describe the situation, that even by observing an expert, one could not put into words how he or she acts (Neuweg 2005:563f). When referring to Neuweg (2015:30), one could recognize a real expert by the fact that if one were to ask him or her about a universally applicable rule, he or she would reply that it would always depend on the situation.

The next problem, leading to the fact that implicit knowledge cannot be verbalized, would be the instruction problem. This problem describes the circumstance, that even if one could verbalize the implicit knowledge, this would not be sufficient, as only knowing how to do something does not mean that one could actually do it. Knowledge is not automatically the path to ability, which only has to be followed for a sufficient amount of

time (Neuweg 2015:24). According to Whitehead (1929), knowledge which is not put into action, would be called inert knowledge. Thus, for example, someone might be a bad actor but a good teacher of acting. Someone might be a bad strategist, but a good teacher of strategic management. Neuweg (2015:30) calls this difficulty the subjectification problem, which results as a manifestation of the before called instruction problem. Thereby, one must distinguish between two appearances. On the one hand, the problem of instruction becomes deceptive, when knowledge does not proceed according to certain rules. This, for example, could be demonstrated through the case of artists, as painting a picture cannot be expressed in specific rules. On the other hand, there would also be knowledge that could be expressed on the basis of rules, but would still not be suitable for instructing it (Mitchell et al. 2021:4; Neuweg 2005:565f). Giving a physical explanation for swinging a hula-hoop might be possible. Yet, only knowing about centrifugal forces does not provide the learner with the ability to actually swing it. Teaching strategic thinking probably concerns both problems. On the one hand, teaching critical thinking and problem-solving skills do not follow certain rules, as the circumstances change every time the students have to apply those skills. On the other hand, teachers of strategic management can for sure teach their students how to apply specific tools and instruments. However, this will not be sufficient in real-world situations, as theoretically probed tools will never be able to display the complexity of the real-world (Mitchell et al. 2021:4). This leads to the problem, that even if people know how to react in a certain situation, they initially have to identify or recognize when the situation occurs (Neuweg 2015:32). One could say that an expert has to develop a sort of “*feeling*” (Haldin-Herrgard 2000:359; Ren and Ding 2010:155).

The last problem, distinguished by Neuweg (2005), is the problem of modification. If one assumes that an expert is able to make his or her knowledge explicit, and that the students are able to subjectivize this knowledge and finally use it situation-appropriate, then the question, as to whether the knowledge used, reflects the knowledge used by the expert, still arises (Mitchell et al. 2021:4). Neuweg (2005:569) signifies this problem as if the focus of attention would lie too much on the action and its sequence, the action itself could no longer be carried out. It is, as if one were to lecture, while constantly thinking about how to lecture correctly – thinking about the facial expressions, gestures, and pronunciation – this would make him or her fail the lecture. Consequently, this then would lead to the problem that the reflection makes the action impossible or at least impairs it to a large extent (Polanyi 1966:18). Some situations might require reflection, but sometimes reflection could also hinder the action. In this case, knowledge would be a hindrance, if one wants to be able to do something at any price (Neuweg 2015:37). The attempt of smiling naturally in a photo often ends in a contrived clenching of the



teeth, even for people with a, normally, very natural smile. The forced smile then also looks forced. Too much knowledge can also lead to a loss of flexibility. Someone always working according to predefined rules, will not be able to react to new situations (Neuweg 2015:37). Too much knowledge could also lead to a loss of qualification. If one takes away people's freedom to act independently, one would also take away their ability to do so. Highly standardized activities, such as working on an assembly line, lead those people operating the machine, to become a machine themselves; only following a mindless activity instead of a skillful one (Neuweg 2015:37).

Verbalizing implicit knowledge in the exact same way as verbalizing explicit knowledge is profoundly not possible (Haldin-Herrgard 2000:359). The externalization of implicit knowledge turns out to be much more complex. Therefore, it is necessary to emphasize on the burdens and barriers that arise with the externalization. This is because implicit knowledge is not subject to explicit rules or logics that would allow it to be explicated in the same way as explicit knowledge. Rather, the skills and abilities must be elaborated and reproduced (Ren and Ding 2010:155). Often the bearers of implicit knowledge are not able to articulate their skills verbally. Most of the time, they are not even aware of the process or structure of their action guiding skills. They mainly act based on experience and even in retrospect, are unable to reproduce their previous thoughts and actions in concrete terms; often because they did not take place in the situation itself (Ren and Ding 2010:155). The formalization of implicit knowledge, therefore always remains incomplete (Polanyi 1966:20). Under this premise, attempts can be made to pass on the implicit knowledge. The problem that arises from this, is that if experts cannot verbalize their knowledge, this also raises the question of how this knowledge can be communicated at all. Because of these reasons, pedagogical and educational approaches often reach their limits when it comes to convey the complex, procedural implicit knowledge of strategic thinking.

#### **4.4. Creating a challenging, yet collaborative setting**

One subconsciously relevant aspect of teaching implicit knowledge can be seen in designing an adequate learning environment and creating learning situations with reference to the individuality of the learner. As teaching strategic thinking is about teaching implicit knowledge, teachers of strategic management cannot simply convey the knowledge in a formal sense. Meaning, that the role of the teacher is dissimilar to other topics (Grant and Baden-Fuller 2018:335).

While many teachers claim to teach their students critical thinking skills, studies show otherwise. Most graduates would only insufficiently, or even not at all, possess these

skills after their graduation (Fisher 2011:1). This development could be attributed to teachers' lack of understanding of critical thinking skills. Paul, Elder, and Bartell (1997:19) have discovered that many teachers of strategic management only have an imprecise comprehension of what exactly critical thinking is. Furthermore, they argue that correspondingly, teachers would lack of teaching skills when it comes to teach critical thinking. Many other scholars, such as Bataineh and Alazzi (2009), Innabi and El Sheikh (2007) as well as Stapleton (2011), support these findings. Citing a study from Paul, Elder, and Bartell (1997:18), 89% of the surveyed teachers named critical thinking as being the primary objective of teaching. Yet, only 9% of those teachers included methods or approaches that foster critical thinking skills in their classroom (Paul et al. 1997:18). Though, Abrami et al. (2008) also found that it would be easily possible to improve this, by simply teaching teachers how to utilize and include methods that encourage critical thinking skills in students. In a first step it would be important that teachers are able to distinguish between the different learning goals of explicit and implicit knowledge (Grant and Baden-Fuller 2018:335). The main goal of teaching strategic thinking would be to provide students with “*a general map*” and guide them “*in a process of reflection and discovery through which cognitive and behavioral skills are cultivated*” (Grant and Baden-Fuller 2018:323). According to Neuweg (2000a:198), the goal of acquiring implicit knowledge is that the students learn how they can, should or need to react and act in certain situations. Merely conditioned learning, guided by the teacher, would not be conducive to reach this goal. Brinkmann (2012:404) argues that it would be a balancing act between self-leadership and external leadership, between independence and guidance, between freedom and concreteness.

Raising the fundamental question of who and how teachers of strategic management should be. If following Greiner et al. (2003:404), most faculty teachers of strategic management would be selected for their research expertise and content knowledge, and not for their teaching skills or their professional expertise. It would be very rare for future strategic management teachers to have gathered previous professional experience in this field as well (Greiner et al. 2003:404). Moschieri and Santalo (2018:3) vindicate this by the results of their study, in which they found a strong positive association between the total number of a professor's publications in peer-reviewed journals over a six-year period, and the student's evaluations; demonstrating that better researchers would also make better teachers (Moschieri and Santalo 2018:3). Grant and Baden-Fuller (2018:323) thereby nurture the problem that teachers, only having an academic background, would then teach something (i.e., strategic management competencies) which they, themselves, only retain to a restricted extent. Moschieri and Santalo (2018:5) exemplify that “*we cannot imagine a professor of surgery who has never seen a patient*

[...] and yet today's business schools are packed with intelligent, highly skilled faculty with little or no managerial experience". They hereby see the main problem in the circumstance that those teachers would not be able to identify crucial problems, as they would not possess the required skills to sense them. Moreover, they attribute them to not being able to examine long-term inferences of complex strategic decisions (Moschieri and Santalo 2018:5). Though Grant and Baden-Fuller (2018:336) argue that not being experienced in a certain field would not automatically indicate that one would not be suitable for teaching this specific field. As already alluded, teaching, by its means, requires different competencies than actual performing. This would be proof by respective evidence. Grant and Baden-Fuller (2018:336) bring up the examples of music teachers, who seldom are great musicians themselves, or football coaches, who do not play premier league football. Correspondingly, Greiner et al. (2003:404) argue that it is not necessary that teachers of strategic management also become experts in executing and implementing strategies, as the only expertise they need to acquire would be the expertise in teaching. Besides, according to Maritz et al. (2016:554), strategic management courses would often be taught by faculty members that lack pedagogical education. This would then lead the course content to be composed by either economic or organization-based theory and therefore teach one-dimensional analytical thinking rather than skills that would be obvious for future strategists. Resulting in the situation of where teachers of strategic management come up with diverse interpretations of what content needs to be taught, and followingly, how this content should be taught. The decision would mainly be based on personal preferences and individual characteristics (Greiner et al. 2003:407). The pedagogical training of teachers is often deserted. It usually resides in the fact that they have observed their own teachers beforehand, and in the follows teach a few courses by themselves. Most of them would not be aware of experiential teaching methods that go beyond case studies or frontal teaching (Greiner et al. 2003:416).

In a discipline full of new approaches and developments it is of great importance that teachers of strategic management continue to develop – both professionally and pedagogically (Priem 2018:4). Priem (2018:4) argues that it would not be sufficient to rely on frameworks and tools developed in the 1980s and 90s. He states that, when teachers strive to become a *"complete strategy teacher"*, they would need to admit that teaching is an ongoing process of continual development, which goals could never be reached. Priem (2018:10) signifies that this way would often be a long one, but the willingness to try new things as well as the confession of sometimes failing, will, at the end, lead the strategy teacher to discover his or her own strengths and further, uncover

his or her own pedagogical style (Priem 2018:10). By emphasizing the importance of life long learning processes, Priem (2018:4) adds:

*“Still, as in angling the satisfaction – and, sometimes the heartache – comes through constant process of learning for oneself and then guiding students toward possibly becoming lifelong learner themselves.”*

Nevertheless, there are certain competencies that all teachers of strategic management would need to incorporate. In order to experience, students need to feel free and confident to fail. Thus, one crucial component, strategy teachers need to entail, is to create an environment in which the students feel safe to actually make failures and try new things. Teachers of strategic management therefore need to build up trust before starting a course. This would be crucial in order to keep the students, especially the ones with introverted characteristics, involved (Grant and Baden-Fuller 2018; Kisfalvi and Oliver 2015). Teachers need to ensure a secure environment in which the students are able to discuss different views and perspectives, challenge each others opinions, defend their own and interact with each other to *“form a cohesive and multifaced understanding”* (Grant and Baden-Fuller 2018:334). Mintzberg, Ahlstrand & Lampel (1998 cited by Albert and Grzeda 2015:657) argue that teachers would need to allow students to make experiences that impact their thinking processes in a way that they develop better mental models. They contend that a simple application of tools and instruments would not form experiences (Mintzberg, Ahlstrand & Lampel 1998 cited by Albert and Grzeda 2015:657). Always considering to prepare the setting in a way that on the one hand, it is competitive, but on the other hand, it is collaborative as well. Fisher (2010:73) summarized the key findings of their research in three points. Firstly, teachers would need to challenge the learner in a cognitive way. Secondly, teachers would need to foster collaborative learning by developing an environment which permits dialogue. Thirdly, teachers would also need to guide students through developing metacognitive awareness. This could be done by, together with the learners, reviewing their thinking and learning processes (Fisher 2010:73). Similarly, Sloan (2020:275) digests that it would be crucial for teachers of strategic management to develop a learning setting that is conducive to strategic thinking. This could be done by creating an environment that on the one hand, offers information to support the cognitive processes in learning, thus providing the learning content with a clear differentiation between strategic thinking and strategic planning and on the other hand, develops a learning environment that is encouraging and supporting and thereby fosters critical, interactive as well as collaborative learning (Sloan 2020:275). Albert and Grzeda (2015:657) describe such learning environment as being favorable to develop critical thinking skills. Teachers of strategic management, therefore need to direct their students in a social and emotional, yet still challenging, setting. According to

Grant and Baden-Fuller (2018:334) the most successful teachers of strategic management would be the ones managing to create a encouraging environment, which also contains a challenging aspect. Martin (2018:2) supports this statement by stating that the most effective teachers would “*push their students beyond their comfort zones, but also provide support and encouragement*”. Matsuo (2015:455) also argues that challenging situations would furthermore, facilitate reflective skills, as those tasks being hard to solve and thus, would challenge the own thoughts, forcing the students to become creative.

This necessitates that they need to listen to their students, promote engagement and foster enactment as well as cognitive awareness (Grant and Baden-Fuller 2018:323). According to Grant and Baden-Fuller (2018:334), managing engagement would be one of the hardest challenges for strategic management teachers. They argue this with the fact that motivating students would include to meet their expectations and further strengthen them, through providing the students with incentives. Besides, the teachers would also need to create behavioral norms (Grant and Baden-Fuller 2018:334). Kisfalvi and Oliver (2015:721) denote the most crucial importance to the creation of a safe space for learning. Though, they claim that in research there would be no mutual understanding of what a safe space for learning looks like. Yet, the topic would be highly relevant in pedagogical discussion (Kisfalvi and Oliver 2015:721). Kisfalvi and Oliver (2015:722) rely on the definition of Winnicott’s (1965 cited by Kisfalvi and Oliver 2015:722) elaboration on safe spaces in the context of infancy and parent-child relationships. They adapted this definition to the context of education by referring to several authors such as Cartlidge (2011), Creme (2008), Hall & Zentgraf (2010) and Sinclair (2007). The definition relies on the initial perception of students feeling free to “*play*” in the classroom in order to, later on, move over to real world situations. The classroom atmosphere thereby would allow frustration, anger, fear and playfull discovery. They further outline that a safe space, though it should be encouraging, must not always be a place in which everybody feels comfortable, as it should nurture experimentation to enhance learning (Kisfalvi and Oliver 2015:722). To create such environment, the teacher would need to be a reflective person him- or herself. Without reflecting the own behavior, the teacher would not be capable of providing a learning environment that remains non-judgmental and mediates a feeling of being “*good enough*” (Kisfalvi and Oliver 2015:725). Furthermore, creating a learning environment that is highly customisable to the individual circumstances of the students, would require a certain degree of flexibility (Kisfalvi and Oliver 2015:725). Another crucial aspect in order to create a safe learning environment, would be to allow different opinions and thereby foster the student’s ability of judgment, which is considered as a necessary ability when developing strategic thinking skills (Kisfalvi and Oliver 2015:728).

In addition to the contextual circumstances that can be influenced by the teachers, there are also restrictions that have to be accepted as given. One of the most significant constraints, concerning the design and implementation of strategic management courses, is time. The factor time limiting the course in regard of scope as well as attainment level of course objectives (Grant and Baden-Fuller 2018:332). As the discipline of strategic management is expanding vastly in breadth as well as in depth, according to Grant and Baden-Fuller (2018:332), even teaching solely conceptual knowledge would be a challenge. Moreover, time restrictions also influence the ability of creating a safe learning environment (Kisfalvi and Oliver 2015:727). Given this major limitation, objectives need to be clarified in advance. Moreover, the objectives need to be consistent as well as realistically achievable (Grant and Baden-Fuller 2018:323).

#### 4.5. Taking an active role

In order to be able to learn what an expert is already able to do, students need to develop a basic foundation of motivation and trust. They need to emotionally and cognitively be engaged in the learning process by developing motivation in the sense of curiosity, and building up trust in the expert, in the sense of acceptance of his or her authority (Neuweg 2020b:363). According to Csikkszentmihalyi and Schiefele (1993), the cause-effect relationship between motivation and learning would seem relatively simple and logical in a theoretical context. Students who associate a positive feeling with the learning content would react inquisitively to it and thus, follow with greater attention. This determination was also made by several other scholars such as Sheehan, McDonald, and Spence (2009) as well as Spelman (2010). Though, it would be important that the students acquire the right type of motivation (Csikkszentmihalyi and Schiefele 1993:207) as only intrinsic motivation (i.e., motivation that comes from within), rather than extrinsic motivation (i.e., externally caused motivation), would be conducive. Intrinsic motivation would be effective as it would be accompanied by a feeling of self-determination. However, researchers have identified emotions in general to influence learning in a vast way (Immordino-Yang and Damasio 2011; Linnenbrink 2007). The positive emotions released from intrinsic motivation, would significantly contribute to the joy students feel while learning (Aspinwall 1998; Sheehan et al. 2009; Wingfield et al. 2002). Still, also extrinsic motivation could lead to a feeling of self-determination. When imagining a musician playing for money, this would not exclude self-determination. What would be more important, would be an inner feeling, the experience of a state of mind that makes the action itself to be the motivating force. Csikkszentmihalyi (1965, cited by Csikkszentmihalyi and Schiefele 1993:209) thereby speaks of "*the flow experience*". According to Csikkszentmihalyi and Schiefele (1993:209), the task would no longer be

motivating, if the action itself was completed. Meaning, that when the musician finishes to play, the playing itself would no longer be motivating, while during the play, the action itself was the motivating task. Thus, the motivation would lie in the action itself. Kolb and Kolb (2017:12) also describe this process, yet they refer to the term “*pure experience*”. They define this state of mind as a remedy between mind (thought) and physical world (thing). Both, thought and thing, would be experienced by the individual, hitherto, with unlike features. Thought, according to James (1904 cited by Kolb and Kolb 2017:12) would be perceived in the here-and-now, “*redoubled in reflection*”. He further outlines: “*As thing, the experience is extended; as thought, it occupies no space or place*” (James 1904 cited by Kolb and Kolb 2017:12)

As already explained in chapter “*Creating a challenging, yet collaborative setting*”, teachers need to give students enough space to experience and practice. They need to give them enough opportunities to guide themselves. This emphasizes that not only the apprentice has to trust the master, but also the master has to trust the apprentice to a certain extent (Brinkmann 2012:401). Grant and Baden-Fuller (2018:334) signify the importance of being emotionally and cognitively inquired in the learning process. They highlight the significance, especially in the context of teaching strategic management, as learning here would mainly be built on implicit knowledge and thus, require social connections and interactions between teachers and students. Hence, what would be crucial for the acquisition of strategic management competencies, would be an active engagement in critical and reflective thinking (Grant and Baden-Fuller 2018:334). This engagement and therefore acquisition of higher-level knowledge, would be primary based on the maturity and prior made experiences of the students. Grant and Baden-Fuller (2018:323) argue that there would be a significant correlation between the ability to cope with volatile, uncertain, complex, and ambiguous situations and the level of maturity and experience. This would be due to the fact that before made experiences would help students to recognize certain patterns and thus, their “*own cognitive conditioning and biases*” (Grant and Baden-Fuller 2018:323).

## 5. Situation-appropriate learning

As already elaborated in chapter “*Teaching strategic thinking*”, acquiring strategic management competencies is shaped by procedural and metacognitive skills, and thus, requires rather implicit than explicit knowledge. Strategists need to apply basic cognitive knowledge, such as tools and instruments, to real-world practical problems. As those problems are particularly complex and ambiguous the strategists need to refer to higher-level skills and knowledge, as stated in chapter “*Strategic management competencies - The solution?*”) (Grant and Baden-Fuller 2018:334). Though, many teachers claim to encourage students to mature procedural and metacognitive skills such as critical thinking, yet they still use theoretically-based instructive teaching methods, still focusing on lower-level conceptual knowledge and memorizing certain terms (Nold 2017:17). This chapter thus, deals with the situationally appropriate learning by relying on a practically relevant approach.

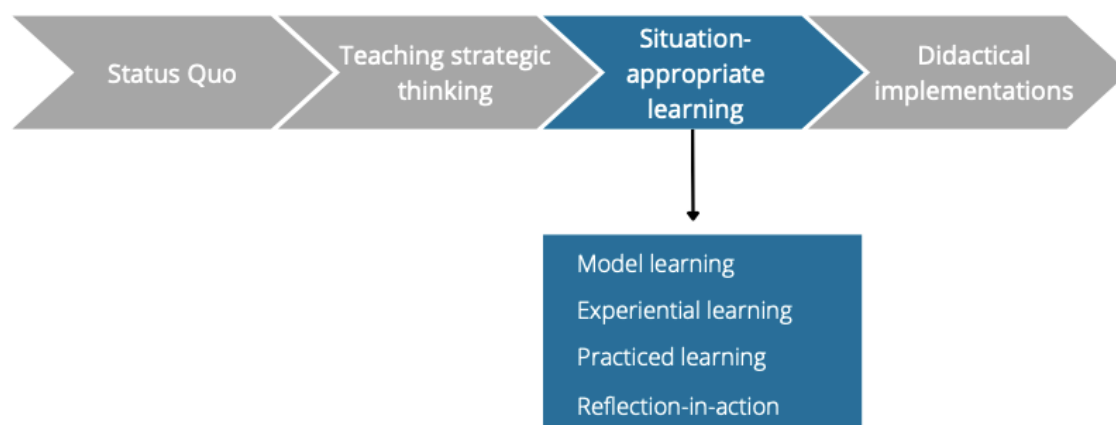


Figure 10: Sequence - Situation-appropriate learning

As discussed previously, the formalization of implicit knowledge is impossible and, according to Polanyi (1966) additionally, not desirable. Attempts to do so therefore will always remain incomplete. According to Ryle (1949, cited by Neuweg 2020b:349), an explication of rule-based knowledge would solitary show what a person already knows, but not how he or she got there. Rendering Neuweg (2015:37), it would be crucial that the ability, if its explication is possible, is subsequently subjectivized and in this sense also instructed and finally modified. Nevertheless, even then, it would hardly resemble expert knowledge. Learning-by-doing approaches are often perceived synonymously with the concept of training-on-the-job, applied in vocational training. Most occupational activities, especially highlighting manual activities, are hard to describe or even to instruct in a verbal way. Apprenticeships offer an environment in which the learner is able to



observe and imitate the expert, as well as independently apply activities. Chan (2020:181) calls this learning process “*mimetic learning*”.

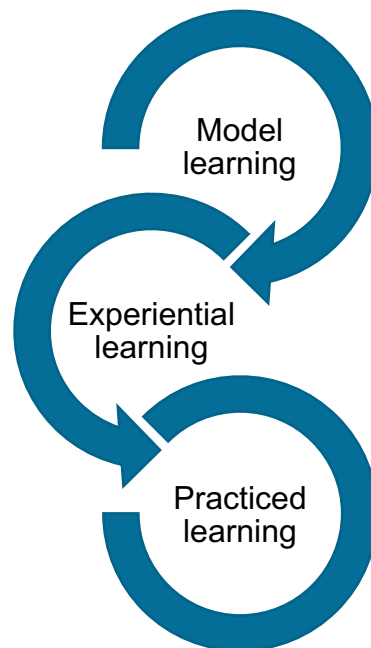


Figure 11: The mimetic learning process

Stimulated by constant feedback from the expert, the learning process, conducted by mimetic learning, would be suitable for revealing invisible skills (Chan 2020:181) and therefore, also for revealing skills that lead to strategic thinking. Chan (2020:181) adds that the learning process thereby would be nurtured through making mistakes.

## 5.1. Model learning

Learning often happens in a vicarious manner, where the learner models the expert (Kisfalvi and Oliver 2015:732).

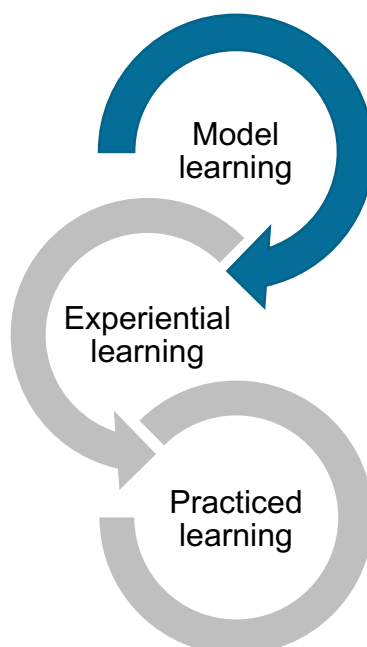


Figure 12: Model learning

By observing the actions performed by an expert, complex behaviors can be acquired (Mansoori 2017:813). Bandura (1977) even claims that students would be able to learn in a more efficient way through seeing others fail and succeed, than they would from making their own experiences. This would particularly be the case in situations that are volatile, uncertain, complex, and ambiguous. They even go as far as stating that “*all learning phenomena resulting from direct experiences*” (Bandura 1977:392) could be replaced by vicarious learning. Holcomb, Ireland, Holmes & Hitt (2009 cited by Mansoori 2017:813) support this assertion by demanding that in unfamiliar situations, vicarious learning would provide a faster as well as better access to acquiring skills. They argue this by referring to the opportunity stemming from vicarious learning, allowing the learner to focus his or her undivided attention on the observation, rather than having to balance observation and action at hand. Listening to the master and reflecting on his or her activities would impact the ways of acquiring implicit knowledge (Mansoori 2017:814). Similar attempts were stated by other early authors such as Polanyi (1966). Following his master-novice relationship, by observing and imitating an expert, the knowledge, impossible to verbalize, could be made visible (Mládková 2012:109; Ren and Ding 2010:156). Through emulating and imitating the “*master*”, the learner would intuitively learn what the expert is unable to verbalize but strives to convey (Neuweg 2015:37; Ren

and Ding 2010:156). Thereby, the action could be understood directly, without the need for an explicit explanation (Mládková 2012:109). Modelling would include on the one hand, the miming of the physical body language and on the other hand, the miming of actions such as when to communicate verbally and when to remain silent. The secondary type would foster understanding and empathy (Kisfalvi and Oliver 2015:732). The process of modelling happens through instinctive “*mindreading*” (Neuweg 2020b:356). Therefore, the learner needs to empathize with the expert. Social connections between expert and learner thus, are considered to play a central role (Kraus et al. 2017:13; Ren and Ding 2010:156). Grant and Baden-Fuller (2018:331) agree that when learners would have the opportunity to observe the reasoning process of experts to engage with others and are able to make their own reasoning processes while having their outcomes challenged by others, this would foster reflection and thereby enable the learners to obtain their own perceptions on a subject or matter. Accordingly, Howard (2018:2093) states that through observing experts, learners would be able to develop similar, yet independent and personal routines. Collier and Williams (2013:89) comparably view observation as being a central component of making effective learning experiences. With taking the individualistic learning processes and situations into account, the expert would support the learner by providing him or her with individual feedback. The given feedback, thereby, requires a constant adaption to the new learning conditions of the situation, as well as to the individual learning level of the novice. Hence, the expert needs to continuously reflect on his or her teaching skills and adapt them according to the situation. Meaning that he or she has to employ, what Schön (1983) called “*reflection in action*”. It would be from utmost importance to choose the right communication method at the right moment in order to meet the novice’s level of understanding. On the other hand, the learner would have to translate what he or she has observed, further subjectivize this knowledge and finally, also implement and experience it. Thereby, the holistic action would be in the spotlight of what is happening. By recognizing underlying patterns, the learner would be able to understand the overall goal of the action (Neuweg 2020b:359). Grant and Baden-Fuller (2018:326) support the perception that understanding the overall situation of the company is extremely important. They argue that discerning a holistic view would aid the strategist by improving the long run performance of the company (Grant and Baden-Fuller 2018:326).

As already elaborated in chapter “*The challenge of teaching strategic management*”, today’s strategic management courses are mainly characterized by teaching strategy through teaching theoretical inputs. Thereby, the transmission of knowledge often takes place in such way that the teacher externalizes his or her knowledge and subsequently, expects the learners to absorb the knowledge as well as to process it. This process of

imparting knowledge, however, is often aimed at nothing, as the learning process merely would take place after experiencing certain skills. Many skills only emerge from the interaction between several subjects, objects, and environmental conditions (Mládková 2012:109; Ren and Ding 2010:156). This often makes it difficult to pass on implicit knowledge. Thereby, the necessity of making one's own experiences is demonstrated. The experience, thereby would happen through observation, followed by imitation. The expert thus, would externalize the knowledge only by demonstrating it, as procedural and metacognitive skills cannot be verbalized through specific rules (Mládková 2012:109).

## 5.2. Experiential learning

As competencies, such as critical thinking or problem solving, only emerge from the interaction between several subjects, objects, and environmental conditions, it is often difficult to pass on implicit knowledge (Ren and Ding 2010:156). Polanyi (1966) points out that implicit knowledge can only be assimilated through making one's own experiences as well as through continuous practice.

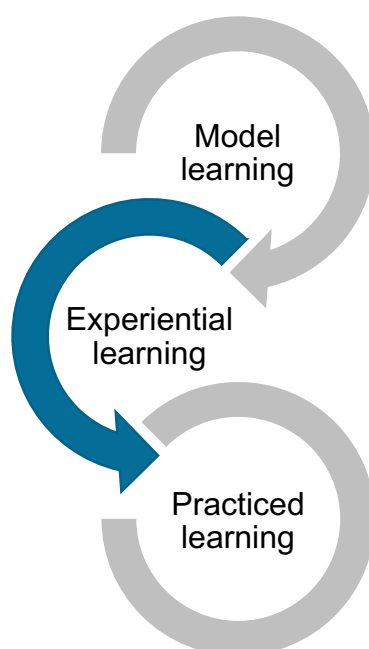


Figure 13: Experiential learning

Citing Mintzberg (1994), "*vision is unavailable to those who cannot "see" with their own eyes*". According to him, what makes a real strategist would be, that those people do not distance themselves from daily business, but rather grow through getting their "*hands dirty digging for ideas*". Thereby, they would be able to see the bigger picture, as even

big pictures would be “*painted with little strokes*” (Mintzberg 1994). Indeed, studies (Anand and Khanna 2000; Hayward 2002; Nerkar and Roberts 2004; Sampson 2005; Shaver, Mitchell, and Yeung 1997) prove that there is a strong linking between experience and performance, accrediting this outcome to experiential learning (Anand, Louis, and Ren 2016:1396). Correspondingly, Finch et al. (2015:24), by underlining their findings with several other authors (Andrews and Higson 2008; Chen, Donahue, and Klimoski 2004; Overton et al. 2009; Weeks et al. 2004), state that management skills, such as interpersonal skills and critical thinking, could only be developed through experience. Marsick et al. (2006:794f) perceive making experiences as the state of making sense out of specific situations happening in the everyday life. Sometimes there would be an interconnection between prior experiences and current experiences. By comparing patterns between those different experiences, the students would be able to make sense and give value to the situation (Sloan 2020:82). By developing an eight-phase model, Marsick et al. (2006:794f) draw on those learning processes happening through experience. Firstly, the individual would be facing a new experience and thus would need to frame it, based on prior experiences. Secondly, the new experience would need to be analyzed and thirdly, interpreted. As a next and fourth step, the individual would need to decide on how to solve the new experience and thereby fall back on already acquired skills. This then would lead to a solution, whose consequences need to be assessed right after. Leading the individual to the eight step of drawing further conclusions. The past experiences thereby influence the current thinking. In order to employ the prior made experiences to a new situation, one has to identify the gap between “*what we think we know and what is unknown*” (Sloan 2020:86). The advantage of drawing on past experience is that this experience already equips one with the technical expertise and understanding of certain relationships and connections (Sloan 2020:85). Experts automatically refer to their experience. Each experience is subjective, in a sense that it differs from individual to individual or even from time to time within the same individual, despite the assumption that the context stays the same. Every person captures different moments, feelings and features of a specific situation, making the experience highly individualistic (Sloan 2020:88). These perceptions are rooted in the early 1970s when educational institutions began to integrate experiential learning in the curricula and course programs. Experiential learning would, when referring to Mansoori (2017:814), make up a large part of individualistic learning and progress and is, thus best described as being the process of transforming experiences into knowledge by internalizing those experiences (Mansoori 2017:814).

Today, more and more institutions begin to adapt practices such as problem-based learning, action learning, adventure education, and simulation games. Experiential

learning allows students to witness the learning process first-hand. Keeton and Tate (1978 cited by Kolb and Kolb 2017:14) define experiential learning as a learning process *“in which the learner is directly in touch with the realities being studied”*. Katula & Threnhauser (1999 cited by Austin and Rust 2015:144) delineate experiential learning as the process of turning *“knowledge into know-how”*. McKeachie (2002 cited by Austin and Rust 2015:144) expresses his perception of experiential learning by declaring that it would include a comprehensive range of educational experiences. Similarly, Lee (2007 cited by Austin and Rust 2015:144) asserts that experiential learning would be a *“broad term referring to multiple programs and systems for providing students in educational institutions with work-based applied learning opportunities”*. Qualters (2010:95) describes experiential learning as the enablement of students to translate knowledge acquired in classroom *“into meaningful learning for their future”*.

However, Kolb and Kolb (2017:14) criticize the current available definitions of experiential learning as only including half of the learning cycle and thus, not being holistically. A learning cycle would be driven by acting and reflecting, as well as experiencing and conceptualization. Learners would need to pass every step, starting with experiencing, going through reflecting and thinking, ending in an acting stage (McCarthy 2010:93). Kolb and Kolb (2017:14) further argue, that there would be a gap between the academic discourse about experiential learning and the current practice, leading both to a bargain in terms of effectiveness. Hence, providing students with a more eloquent understanding of the contents taught in class would be crucial. This could be achieved through framing and identifying problems, searching for solutions, and thereby discussing, interacting, and reflecting on the learning content. This way students would have the chance to learn on a deeper level, as these learning situations would affect the core beliefs of learning as well as themselves; leading the learners to develop skills such as insight and judgment, and thereby, attributing to their personal awareness and improvement of critical thinking skills (Slavich and Zimbardo 2012:594). By examining the applications of experiential learning in higher education, Kolb (1984) developed the experiential learning theory (ELT), which provides the practice of experiential learning with a theoretical substance. Kolb (1984) developed the ELT with reference to several scholars, that are William James, John Dewey, Kurt Lewin, Jean Piaget, Lev Vygotsky, Cals Jung, Mary Parker Follett, Carl Rogers, and Paulo Freire. Those named scholars, since the 19<sup>th</sup> century, according to Kolb and Kolb (2017:10), gave experiential learning a significant position in their research on human learning. Kolb and Kolb (2017:11) industrialized the ELT as a holistic approach, drawing on prior made experiences. The creation of learning in the ELP model is based on its development (Finch et al. 2015:24). Individuals, thereby either step into the learning process in a

formal or informal way, entailing prior experiences that influence how they perceive and process new experiences. By reflecting on higher order learning skills, experiences are perceived individually by every person (Finch et al. 2015:24). Finch et al. (2015:24), by relying on Miettinen (1998), note that Kolb's (1984) holistic view on experiential learning would on the one hand, include a spontaneous aspect, in such way that it embraces emotions and deep-level learning, and on the other hand, also relies on rational thought. Altogether reflected as being an integrative process, and not just an outcome (Finch et al. 2015:24). The crucial effect emotions have on experiential learning will be discussed in chapter "*Reflection-in-action*".

Kolb's (1984) approach of experiential learning theory has also been criticized for exaggerating the individual learning process (Holman, Pavlica, and Thorpe 1997). Matsuo (2015:445) also condemns that Kolb's (1984) ELT model would fail to explain the factors enabling experiential learning. Moreover, Matsuo (2015:446) explains that experience would probably support all learning activities, yet it would not at any cost, result in learning (Beard & Wilson 2002 cited by Matsuo 2015:446). With that he wants to express the fact that every individual perceives experiences in a different way, hence also leading to different learning outcomes (Matsuo 2015:446).

Sloan (2020:81) distinguishes between the experiences made in the past and the experiences perceived in the sense of currently experiencing something. Brinkmann (2021:27) comparably, differentiates between having experiences and making experiences by citing Waldenfels (2009): "*Experience that one has unfolds its inventive power in the deviation from experiences that one already has*". Meaning that in order to have experiences, one must make experiences. Experiencing would, thereby merely be possible in connection with or in relation to another object or subject. When referring to Polanyi (1966:12), the general could only be registered in the light of the specific. Those current experiences, as Sloan (2020:82) names them, would either directly or indirectly influence the strategic thinking abilities of an individual. She outlines, that the individual would thereby be in constant connection with the environment, as through "*perceiving and responding to a situation, we draw on our previous experience and knowledge and attempt to frame or make sense of the situation in terms that we already know and feel*" (Sloan 2020:82). The process of experiential learning would be defined through the unique triangle consisting of the teacher, the student, and the subject matter. The subject thereby would be placed in the center, as it is perceived by both, the teacher and the learner. By going through the learning cycle, the teacher as well as the student receives information by experiencing the subject matter and reflecting, as well as conceptualizing the transformation process and drawing on the information acquired to change their perception of the new experience (Kolb and Kolb 2017:16). Accordingly, Sutherland and

Jelinek (2015:292) reason that experience would become experienced when the individual connects with the situation. This means, that by making sense out of the connection and the situation, meaning is given to the experience itself. Sutherland and Jelinek (2015:292) too, perceive experiential learning as a social process, influenced by as well as influencing others. Finch et al. (2015:24) signify that management teachers would need to offer their students learning opportunities to develop and apply critical thinking by assuring that the students are able to reflect on their experiences and emotions. Nonetheless, reflection should always be done carefully, as striving for perfection, would often result in a loss of motivation. Additionally, deliberately trying to acquire a skill might lead to the situation in which the character of implicit knowledge would get lost. A retrospect reflection would, as already explained beforehand in this thesis, then lead to the fact that one would try to reproduce thought processes that did not take place in the situation of the action itself (Neuweg 2015:27). Neuweg (2020a:20) describes the process of experiential learning as “*fluidity*”. Since experiences could not simply be passed on verbally, one has to make them by oneself in order to be able to feel them (Neuweg 2020b:312). Brinkmann (2021:22) adds to the discussion that when again, thinking of doctors, who withhold an enormous theoretical knowledge about specific diseases or chemical compositions of medications, nevertheless, when treating a patient, mainly rely on their experiential knowledge in order to extract something “*common and practicable*” from the abundance of information. Thereby, they would determine the general by looking at the specific (Brinkmann 2012:22).

By deriving from a complex and ambiguous character, the initially outlined competencies, judgment and critical thinking, insight and inclusion of various aspects, intuition and common sense, creativity, as well as social and communicative skills, require learning-by-doing (Grant and Baden-Fuller 2018:335). Thereby meaning, that the learning-teaching process, conducted by practice, will include trial and error (Greiner et al. 2003:403). However, failed strategies would also aid as a potential of learning (Moon and Ruona 2015:664). Learning would thus, be possible through making negative experiences. Brinkmann (2012:405) describes negative experiences as the “*productive underground of practicing and practice*”. By reflecting the things that went wrong or did not go optimally in the teaching process, teachers would need to reorganize themselves within the situation and strive for reflection-in-action (Neuweg 2020b:335; Schön 1983). Dewey (1938 cited by Sloan 2020:82) too, denotes that students would only be able to learn, if they are free to make mistakes. The problem-based learning approach of experiential learning would help students to deal with the emotional impact, originating from making failures (Shephard 2004 cited by Scott, Penaluna, and Thompson 2016:84).



Kolb and Kolb (2017:13) argue that today, experiential learning would often be used synonymously for exercises and games applied in classes. Indeed, Kolb and Kolb (2017:14) indicate that specific exercises could generate a good starting point for experiential learning. Though, experiential learning would be more, as it should be perceived as an integrative learning style rather than a single method (Kolb and Kolb 2017:13). Only integrating experiential methods into the course content was found as being not effective in enhancing students learning by Katula & Thenhauser (1999 cited by Austin and Rust 2015:144). Yet, integrating experiential learning such as apprenticeships or internships in the curricula, has been identified as being highly impactful in educational practice. These holistic inclusions of experiential learning would allow students to draw connections between the theoretically learned content and the real practice (Austin and Rust 2015:145). Simons et al. (2012:332), by conducting a multi-method study about learning outcomes including students currently performing an internship, found that all field supervisors as well as all students perceived the internship as being helpful in obtaining deep-level understanding of the before learnt course content. These findings have already been made by other scholars such as Eyler (2009). Moreover, studies (Victor 2013 cited by Austin and Rust 2015:145) show that experiential learning seems to have a long-term effect, as it helped students to develop critical thinking skills, collaborative skills, enhance creativity and develop self-competencies. Furthermore, the holistic approach of experiential learning was identified by Heinonen and Poikkijoki (2006:85f) to enhance student's ability to sense opportunities.

Learning-by-doing approaches, in general, would enjoy great recognition among research, as they would particularly be relevant to educational and pedagogical settings (Greiner et al. 2003:403). They emphasize on teaching competencies, needed to deal with complex situations, therefore lies on interactive ways of teaching. By analyzing strategic issues, formulating and discussing problems, listening to and communicating with others as well as defending and presenting own suggestions and solutions, students would learn the obligatory skills to develop strategic management competencies (Grant and Baden-Fuller 2018:335). Greiner et al. (2003:411) call on the importance of "*actual behavior*", in the sense of making real experiences and performing real actions, regarding real strategic issues (Greiner et al. 2003:412). The role of the learner in experiential learning remains active (McCarthy 2010:96). According to Kamangar et al. (2013:550), action-based learning would bear strategic thinking on all organizational levels. By addressing and framing problems with critical questions, profound strategies that include actions that enable strategists to solve those problems, could be defined (Kamangar et al. 2013:550). By doing so, students would adapt the ability of applying analytical procedures, such as deciding on whether an aspect within a specific situation

is perceived as critical or not. Furthermore, this would also include the ability to decide which tool or instrument should be used in a certain situation. Additionally, the ability of recognizing causal linkages by drawing on prior experiences would be developed as well. By applying these skills, students would be able to develop metacognitive knowledge, needed to grow strategic thinking. Thereby, students would learn to reflect on their own cognitive processes (Grant and Baden-Fuller 2018:333). Experiential approaches aid students by staying flexible, when being confronted with divergent situations. According to Howard (2018:10), experiential approaches would “*take advantage of the creativity of the life process*” as they would “*avoid dogmatic about what people ought to do*”. Howard (2018:9) outlines that experiential learning would give space to the development of alternative interpretations. Those interpretations often would tackle the worldviews and cultural beliefs in which the learner is living. Social and communicative skills would thereby be crucial, as the new requirements of learning would merely be interactive as well as dialogic (Ren and Ding 2010:156). By acquiring learning-by-doing approaches, the learner would be able to develop an “*experiential sense*” and consequently also obtain an awareness of the intercorrelations and interconnections that influence the environment (Howard 2018:9).

Through adapting the experiential learning cycle, implicit knowledge could be translated into explicit knowledge (Yeo and Marquardt 2009:87). Neuweg (2000a:201) postulates that implicit knowledge is knowledge exemplified to somebody with the ability to form a judgement. The learning process itself would therefore primarily be more a process of “*doing*”, then a process of observing and empathizing, and only finally a process of describing (Neuweg 2020b:363). Greiner et al. (2003:403) state that knowledge-in-action could never be attained simply through visiting lectures and studying readings. To demonstrate this, one could imagine a strategist working in a company for years and being confronted with several company specific circumstances, having to develop a market strategy. If this same strategist, equipped with all the skills to develop a competitive strategy, would change his or her current company and try to apply the same approach in the new company, this would probably not work out as the specific circumstances changed. Even if the initial task remains the same, the strategist mostly needs to adapt his or her strategy according to the new company and its specifics. He or she needs to adapt to the new situation, of which he or she will only be able to do, if enough experience and know-how to deal with such new situations has been gained. Meaning that our abilities to think strategically heavily rely on the experiences we make (Sloan 2020:81).

### 5.3. Practiced learning

The fundamental nature of some skills allows them to be learned by trying them out once. Other skills, however, require constant repetitive practice.

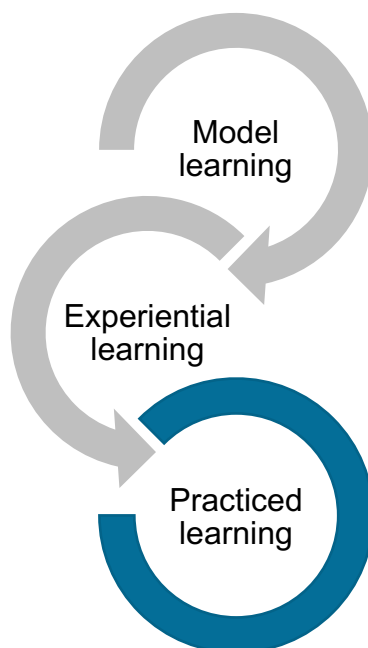


Figure 14: Practiced learning

Practice is usually necessary when someone does not yet claim to be able to do something. Norzailan et al. (2015:69) highlights the significance of deliberate practice when it comes to the acquisition of new skills and the development of competencies. While being closely interwoven with experiential learning (Norzailan et al. 2015:69), one has to experience that he or she is not able to do something before starting to practice it. Yet, practice is demanding activities which, according to Brinkmann (2012:395), “*require a high degree of perseverance, self-conquest and fault tolerance*”. However, practice must not mistakenly be confused with repetitive learning. Solitary through reflecting one’s own actions and thereby recognizing the potential for improvement within the context of the learning process, one could acquire procedural and metacognitive skills (Chan 2020:184). Though, what would be crucial is that practice must not lead to instrumental conditioning, as this would lead to the fact that, “*the intrinsic nature of the individuals experience of practice would be disregarded*” (Brinkmann 2012:401). Therefore, teachers of strategic management courses need to allow learners to make their own experiences, by letting them empathize with the situation and accordingly, giving them enough freedom to mature independently (Neuweg 2020b:359).

The process of practicing could be alienated into five alterations (Brinkmann 2012:401ff). The first step would be to break down the process of learning into separate parts. By doing so, the individual parts then should be separated from the whole. This would make the learning process of a complex topic easier, as the separated exercises could be practiced again and again and thereby, would be consolidated in a targeted way. This, consequently, would lead to an ultimate consolidation of the whole. By doing so, one must not forget to keep the whole picture in mind, in order to avoid what Neuweg (2020b:369) calls the “*didactical category error*”. Neuweg (2020b:369) also signifies the relevance of “*distal orientation*”. Indicating, that teachers would need to create a learning environment that on the one hand, could be considered distinct and isolated, and on the other hand, could respond on changing circumstances and the individual learning situations of the learners, while not disregarding the overall objective function. Isolating a specific task situation-appropriately would allow learners to make different experiences. The individual concretized and isolated contents need to be chosen by the teachers, as didactical reduction lies in their responsibility spheres (Weinberg 1999:129). By accepting the contents, chosen by the teacher, a power structure emerges. Learners need to surrender to the teachers and allow themselves to be guided by them. Polanyi (1966:61) notes that the learner needs to put trust in the teacher in order to empathize with the situation and experience skills. However, Brinkmann (2012:401) argues that it would be essential to leave room for independent development. The learners would need to learn to lead themselves, as if they were only to follow what the teachers tell them, the practice would lead to instrumental conditioning, which, as already mentioned, should be avoided. Additionally, learners would need to make negative experiences, as well as positive ones, as negative experiences significantly contribute to the learning process (Brinkmann 2012:401). Through allowing students to make mistakes and learn from them, the acquisition of competencies needed to mature strategic thinking skills would be endorsed (Norzailan et al. 2015:69).

Collier and Williams (2013:90) conclude that through framing observations made when modelling the expert, thereby including personal emotions and social interaction acquired through individual experience, and combining these perceptions with theoretical content, deliberate practice and reflection-in-action, expertise could be achieved. Meaning, that by applying mimetic learning in the sense of observing a situation, imitating the expert, and performing the action, learners would have the opportunity to make mistakes as well as experiences and thereby finally acquire skills through repeated, but not repetitive, practice, directly in the situational field.

## 5.4. Reflection-in-action

Teaching objectives are often formulated in a way that, in addition to technical knowledge, they also aim at a conscious and critical evaluation of certain actions or decisions. In imparting implicit knowledge, the learner must engage in the learning process and actively deal with his or her own learning experience. Reflection would thereby permit the learner to scrutinize his or her practices as well as underlying assumptions. Furthermore, it would enable the learner to recognize why these implicit practices might require to be reconsidered when being confronted with new situations (Convery 1998:198). In addition to motivation, confidence, constant practice as well as trial and error, what is practiced must therefore also be reflected upon, in order to learn from it. According to Schön (1983), otherwise the learning process would end after failed trials and thus, fail as a whole. In his book "*The Reflective Practitioner*", he argues that every practitioner will reach a point where the knowledge he or she has acquired so far is no longer useful. The experienced practitioner would finally solve the problem by analyzing and reflecting on the experienced situation; inter alia by finding out why the previous knowledge is not helpful in that situation.

The topic of reflection has been a passionately debated one in strategic management literature since the late 1980s and 90s (Anderson 2019; Bartelheim and Evans 1993; Bereiter 2002; Burhan-Horasanlı and Ortaçtepe 2016; Clarke and Hollingsworth 2002; Collier and Williams 2013; Convery 1998; Eraut 1995; Mackinnon 1987; Marcos and Tillema 2006; Munby and Russell 1989; Schulman 1987; Sloan 2020). By causing major contributes to the practice of learning (Moon 2013), reflection is perceived as being a central source of effective experiential learning (Boud, Keogh, and Walker 1985; Holland, Bringle, and Hatcher 1999). Reflection is seen as leading the way for bringing implicit knowledge to the surface (Smith, Meijer, and Kielly-coleman 2010:410f). The process of teaching, according to Eraut (1995:19), would encompass both, highly routinized techniques as well as a great deal of surprising content. The main idea behind integrating the topic of reflection in strategic management education (mainly by conducting qualitative studies) was, that through reflecting on their actions, teachers would be able to better understand their own activities, and thus offer new insights on the teaching practice (Anderson 2019; Marcos, Miguel, and Tillema 2009). Mezirow (1990 cited by Sloan 2020:91) specified that a critical evaluation would give meaning to the experiences made, thereby supporting three main functions. He distinguishes between reflection used to observe content ("*content reflection*"), reflection used to interrogate on the problem at hand ("*process reflection*"), and reflection used to assess one's belief systems that form the problem ("*premise reflection*"). The most crucial function would be that reflection would endorse former learning and validate one's values and beliefs. Reflection

helps individuals to question their existing belief systems and opinion forming worldviews (Mezirow 1990 cited by Sloan 2020:91).

In practice, teachers would often ask learners to write down their thoughts and feelings about the topic covered that day, right after the lesson. However, this would only be a superficial review (Collier and Williams 2013:89). According to Collier and Williams (2013:89), effective reflection should go deeper. Especially when it comes to multifaceted problems and situations, influenced by volatility, uncertainty, complexity as well as ambiguity, such as it is the case with strategic decisions (Sloan 2020:180). What would be important, according to Neuweg (2015:26f), is that the process of reflection is not understood as reconstructing an action that has already been completed, nor should it be understood as reflecting in the sense of intellectually distancing oneself and completely stepping out of the situation, but rather reflecting should be understood as a reflection during the action itself. The prevailing complex and ambiguous world would urge for concrete rather than general solutions. This is due to the fact that only relying on one plan for action would not be sufficient, as the situation on which the plan is based, would already change in the moment the plan is made. Meaning, that one could no longer put all prospect on one kind of knowledge (Convery 1998:198). Reflection would always remain hypothetical, if not supported by action. Those two processes should never be considered to stand alone. Action and reflection would always occur to happen at the same time (Watkins et al. 2018:21f). Schön (1983) exemplifies this with describing the situation of when a student is not able to understand a certain topic in a course. The teacher then cannot simply draw on a pool of theories and concepts, but must respond to the individual situation (Convery 1998:198). The major difference between reflection-on-action and reflection-in-action would be that reflection-in-action would always come with an instant and apprehensible burden (Sloan 2020:179). Matsuo (2015:446) names this process "*critical reflection*", extricating it from the process of sole "*reflection*". Kolb (1984) underlines that reflection is a compulsory requirement for learning from prior made experience. Reflection-in-action would indicate that individuals learn as they express and transpose strategic decisions (Sloan 2020:179). Thus, meaning actively perceiving the situation and immediately reacting to it. As already elaborated in chapter "*Model learning*", the master needs to respond to new learning circumstances and, thereby be able to constantly adapt the transmission of his or her knowledge to the new situation. Eraut (1995:19) contends that the classroom setting requires teachers to continuously evaluate the situation. Marcos et al. (2009:195) found that the reflective process, happening in teaching, would comprise two components, that are inextricably linked with each other: action and thought.

As one can see many authors were inquired in describing the reflective processes happening while teaching. These different descriptions, according to Sloan (2020:91), would sometimes be confusing. Schulman (1987) for example called on “*practical wisdom*”. Clarke and Hollingsworth (2002) denoted to “*pondered action*”. Bereiter (2002) called this kind of reflection the “*circumstantial understanding*”, and Leinhardt (1988 cited by Marcos et al. 2009:195) defined the reflective process as “*situational knowledge*”. What Argyris (1977) called as “*double-loop learning*”, Mezirow (1990 cited by Sloan 2020:91) has named “*critical reflective learning*”. The term, “*reflection-in-action*”, postulated by Schön (1983) is considered to have contributed the prime influence on the practical understanding (Beck and Kosnik 2001:217). Reflection-in-action is built on the fact that the teacher is in constant dialogue with the situation as well as the students. To make this more obvious: When thinking of a math teacher trying to explain something to the students. No matter how well prepared the teacher might be, as soon as he or she notices that the students are drifting and no longer know their way around, he or she needs to react immediately in the situation. This requires a reflection of one’s own actions and an adaption, while still being in the midst of the explanation process. It includes cognitive as well as behavioral skills and becomes visible in situations in which actions and decisions take place simultaneously and instinctively (Polanyi 1966; Schön 1983). Argyris (1977) concept of “*double loop learning*”, can be described in a similar way as the concept of “*reflection-in-action*” by Schön (1983). However, this is only possible if teachers have the competency to raise awareness. Tiarina and Rozimela (2017:229) state that it would be obligatory for teachers to be attentive while instructing students. Awareness-raising thereby, should be perceived in the sense of consideration, i.e., taking up the emotions of the learners, but not being emotionally affected. While scientific literature mainly focuses on cognitive and psychocritical processes of reflection, a few authors (Gendlin 1968; Norzailan et al. 2015; Yorks and Nicolaidis 2013) also endorse the relevance of emotions developed in experiential situations and later forming abilities. Norzailan et al. (2015:70) even claim that it is only through emotions that reflection would be incorporated. Rogers (1980 cited by Harvey, Coulson, and McMaugh 2016:6) brings in a holistic approach by arguing that experiential learning would require the “*whole person, visceral reactions and feelings as well as thoughts and words*”. A holistic approach would help with recognizing the role of “*feelings, other ways of knowing (intuitive, somatic), and the role of relationship with others*” (Taylor 2008 cited by Harvey et al. 2016:6). Teachers would, consequently, need to know their students as well as their current prerequisites (Harvey et al. 2016:8).

Studies, performed by Marcos and Tillema (2006), also concluded that the lowest common denominator of the different perceptions would be that the reflective process

would combine knowledge and action. Correspondingly, Schön (1983:208) proposed that “*research is an activity of practitioners*”. Marcos et al. (2009:195), later and similar as Kolb (1984) (see sub-chapter “*Experiential learning*”), called on this process of practical knowledge to be a circular one, following the steps of firstly, being confronted with a specific problem, secondly, planning the tasks that has to be done to tackle the problem, thirdly, becoming active and undertaking the action and lastly, reviewing the solution by assessing the outcome. Reflection would be a critical ability to transform experience into learning (Sloan 2020:91). Through contributing to the development of higher-level skills, such as critical thinking and problem solving, reflection equips students with the abilities demanded by professional practice (Harvey et al. 2016:7). However, by analyzing a study of Maclellan (2004), Marcos et al. (2009:196) identified that only 2% of 40 included teachers knew about this circular process. Though, they also cited a pre-post study of Butler et al. (2004) that showed that if teachers were trained in reflective practices, 70% of them would reflect on their actions by setting specific goals and assessing the outcomes later on.

Reflection-in-action relates to the metacognitive sphere of reasoning (Eraut 1995:15) as it draws on a self-regulated context of learning (Paris and Winograd 2003). Metacognition comprises the ability to think about one’s own thoughts (Fisher 2010:73). Marcos et al. (2009:194) relate to this as “*having a mental concept*”, which incorporates the ability to be aware of the own learning process; of “*what one knows*”, “*what one has learned*”, “*what one can and cannot do*”, and “*ways to improve one’s learning or achievement*” (Fisher 2010:73). Furthermore, metacognition would refer to skills allowing learners to frame problems and assess the processes conducted by the learner to solve the problem (Fisher 2010:73). Mackinnon (1987:138) declares that “*what they do in certain situations depends on what they see in those situations, namely the practical problems that they set and frame*”. By also including underlying beliefs, Marcos et al. (2009:194) denote to the non-superficial. Desautel (2009:2006f) reasons that reflecting one’s own thinking process would often make implicit knowledge, of which one is not aware, explicit. Rendering Fisher (2010:73), teachers would need to make sure that in class, there would be enough time to put such metacognitive skills into action.

Yet, the concept of reflection-in-action is widely welcomed in strategic management teaching literature, there is still critic raised by some scholars such as Roth, Lawless, and Masciotra (2001), who claim that this concept would not meet the core intention of teaching (Beck and Kosnik 2001:218). As an alternative they suggest their concept of “*Spielraum*”, also referred to as “*room-to-maneuver*”. They argue that their approach would be better suitable for the reality of teaching. With “*Spielraum*” they mean the ability of the teacher to occupy experiential space within the classroom, thereby relying on



rational constructs. In this way, they would be able to react to unpredictable developments. What bothers Roth et al. (2001) about Schön's (1983) understanding of situation-appropriate action is that he would ignore one central component: the restricted time. They state that teachers would rarely have enough time to sit down and reflect on what's happening, as they would be busy acting. These findings were also stated by Eraut (1995:14). He disputes that Schön (1983), in his elaboration of the concept of reflection-in-action, forgot to include the time variable. He argues that when time is restricted, decisions would require fast response and would not leave enough room for reflection. The focus would lie too much on tutoring settings, rather than on "*crowded settings like classrooms*" (Eraut 1995:9). In such situations, reflection would need to be perceived as a metacognitive process. If, however, the situation allows to take a short amount of time to analyze the situation, the reflective process would turn out differently, as the reflection would now not take place within the action anymore, but out of it (Eraut 1995:14). Decades later, Anderson (2019:14) similarly argues that "*Schön was not a classroom teacher, nor a teacher educator.*" He claims that Schön (1983) did not manage to entail the divergencies between a classroom and 1:1 teaching (Anderson 2019:14). Moreover, Roth et al. (2001:184) argue that the reflective process would be a pragmatic one, that aims at abstracting experience. When following Heidegger's (1967) view of teaching, who sees the process as a process of "*Dasein*" (i.e., being there), the process of teaching would syndicate the "*self and world into a single irreducible entity: being-in-the-world*" or as Beck and Kosnik (2001:218) translate it in a teaching context "*being-in-this-classroom to teach this subject matter to these children*". Meaning, that if teachers would be able to teach in a good way, they usually would not be able to reflect on the teaching activity. Roth et al. (2001) thus see it in the nature of attentive teaching, that teachers are not able to reflect. They argue that the notion of "*Dasein*" would include being ready to act immediately in the situation, without needing to cognitively plan the next steps. It would require teachers to "*be-in-the-moment*" and not rely on detached concepts, as if teachers would take their time, while being in the classroom, to detach concepts, the quality of their teaching would significantly suffer (Beck and Kosnik 2001:219).

While Beck and Kosnik (2001:220) appreciate the declarations of Roth et al. (2001), they still believe that situationally appropriate and adaptive teaching is not necessarily opposed to Schön's (1983) concept of reflection-in-action. They even go as far as to say that if someone wants to be an attentive teacher, he or she would be obligated to apply reflection-in-action. One thing that speaks in favor of this is that an instant reaction prevents the teacher from forgetting anything. Another point that is advantageous is the more realistic point of view. Teachers can improve their teaching skills immediately and

do not have to wait for a new opportunity in the next course session. Furthermore, one should not disregard the role model function. When learners see teachers correcting and adjusting themselves immediately in the situation, they often learn to do the same. In the field of strategic management, decisions often have to be revised and adapted in a very short time span. Showing learners how to react according to the situation consequently should be encouraged (Beck and Kosnik 2001:222). Demonstrating that Beck and Kosnik (2001) believe that reflection-in-action is not only feasible, but merely desirable. They add that reflective teaching would rather lead to a more than a less attentive teaching (Beck and Kosnik 2001:223).

Convery (1998:201) also expresses a critical view on Schön's (1983) concept of reflection-in-action. He criticizes Schön's (1983) concept for making teachers think that they have to constantly optimize themselves. As learning results out of making failures, being able to sense them and immediately reacting to them by adapting one's own behavior, Neuweg (2015:33) also argues that well performed actions do not necessarily need to be analyzed down to the smallest detail. There would be no ubiquitous need to justify why something went well. A conclusive analysis in retrospect would only lead to the outcome which Ryle (1949, cited by Neuweg 2020b:349) already criticized. It merely would show us what we are already able to do, but at the same time it does not help us to communicate this ability. Convery (1998:204) thereby accentuates that ascertaining subtle variances between reflection-in-action and reflection-on-action would sometimes be misplaced when finding oneself in a teaching context. He argues that sometimes it would not be effective to throw teachers off track with modernized terminology. This would only distract them from doing a good job and consequently, cost learners a good educational experience (Convery 1998:204).

Nevertheless, reflecting on a prior task, which is already experienced, can still be valuable. Albert and Grzeda (2015:652) argue that reflective thinking would lead to deep-level learning, which is needed to acquire higher-level skills. Referring to what Ernest (2006:75) indicated: Only through numerous examples strung together, it is possible for students to recognize a pattern and infer the general. The pattern thereby needs to be detected by the students themselves. Furthermore, Neuweg (2015:37) draws on the importance of the ability to control one's own learning process. It would be a balancing act to find the appropriate level of difficulty. The task should neither be too demanding, nor too easy. Over-simplification would lead to de-skilling and demotivation. Guided by curiosity, the human mind would be destined to constantly question existing achievements and try to surpass them (Neuweg 2015:37). Albert and Grzeda (2015:654) interpret that with the scientific shift, away from a merely theoretically based teaching content in strategic management, towards a more practically based one, attempts are

made to lead students to critical thinking skills by teaching them reflection skills. They, furthermore, outline that reflective thinking would lead companies to gather more opportunities by reconceptualizing difficulties and rearranging strategies. Reflection thereby would entrench information in greater consideration of conceptual theoretical content (Albert and Grzeda 2015:655). Yet, how much reflective skills contribute to deep-level learning would depend on the student's personal inquiry, his or her level of knowledge, as well as his or her willingness to truly reflect on the undertaken actions (Albert and Grzeda 2015:652; Entwistle 2008).

Education relies on the continual dialogue between the teacher and the students (Beck and Kosnik 2001:219f), including negotiations as well as discussions, thereby forming the character of teaching and raising the requirement of constant adaption while in the situation and thus, reflection-in-action. Reflection-in-action, if performed in a way mooted by Schön (1983), demonstrates itself in the more advanced form of "*knowing-in-action*". By "*knowing-in-action*" Schön (1983) means what Polanyi (1966) called "*tacit knowing*"; a state of where the knowing happens in the action itself and is exposed through spontaneous, yet skillful performances that verbally cannot not be explicated (Eraut 1995:10f). In more specific: the procedural processes acquired through practice. Thereby, meaning that through knowing-in-action an explicit awareness is raised, exhibiting one's procedural knowledge (Anderson 2019:2). Schön (1987:25) defines:

*"Our descriptions of knowing-in-action are always constructions. They are always attempts to put into explicit, symbolic form a kind of intelligence that begins by being tacit and spontaneous."*

He further outlines that the difference between reflection-in-action and knowing-in-action might be delicate (Schön 1987:29), though they are existent. The process of knowing-in-action only works well, as long as the situation does not necessitate the development of novel knowledge. Accordingly, meaning that, if the knowledge required has already been experienced and learned, the process of knowing-in-action will work well. However, what fosters the process of reflection-in-action are situations that are merely characterized by novel circumstances (Eraut 1995:11).

Sloan (2020:180) highlights the importance of reflection in strategic management practice. Strategic thinking would be embossed by volatile, uncertain, complex, and ambiguous situations and thus, would need to be perceived as a learning process itself. Denoting attention to the emotional dimension of learning and praising how this aspect effects strategic thinking would be essential in order to grow strategic thinking abilities (Sloan 2020:181). She examines that questioning the beliefs and worldviews underlying the processes guiding strategic thinking would be crucial in order to think critically about precisely those. She argues that by doing so, the process of thinking would slow down,

which would allow strategists to deviate the fundamental patterns. By framing problems in different ways, strategists would be able to broaden as well as deepen their visions (Sloan 2020:180). Through helping students to recognize solid connections between theoretical content and practical experience, reflection would be a central task in “*bridging the learning of theory with its authentic application beyond the classroom, achieving praxis*” (Harvey et al. 2016:9).

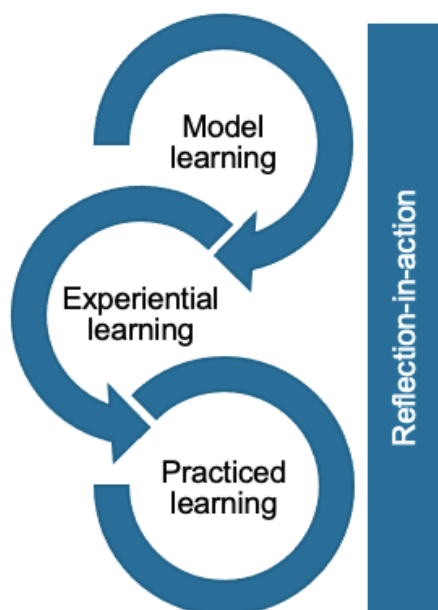


Figure 15: Reflection-in-action

By introducing the concept of reflection as a metacognitive process, applicable in novel and surprising situations, Schön (1983) finally found words to label something, that teachers all over the world were able to feel, but not to express (Eraut 1995:19). Reflection-in-action would draw on prior made experiences, felt emotions and underlying beliefs and values. Thereby, including various perspectives in the decision-making process (Norzailan et al. 2015:70). Though, Convery (1998:198) argues that Schön (1983) might propose a pleasant perspective of where teachers are aspired to go, yet he still would not offer ways to get there. Collier and Williams (2013:89) argue that the process of deeper reflection would be achieved by paying attention to three crucial components, that are: “*observation*”, “*personal relevance*” and “*connection*”. They remark the importance of considering all three components equally, as the combination would be a basic requirement to connect “*thinking*” with “*doing*” (Collier and Williams 2013:89), thereby confirming what has already been elaborated when outlining the mimetic learning process.

## 6. Didactical implementations

One enduring argument, already outlined in chapter “*Today’s ongoing debate of teaching strategic management*”, within the topic of teaching strategic management is the role of theory and practice, more precisely, their balance. The integration of theory and practice is, and has always been, a major concern for pedagogues. Finding a balance seems to be an almost impossible undertaking. For this the following chapter deals with the integration; better said, differentiation, between theory and practice, by also implying to a practical approach suitable for teaching strategic thinking in a way that urges for a theoretically underpinned expertise.

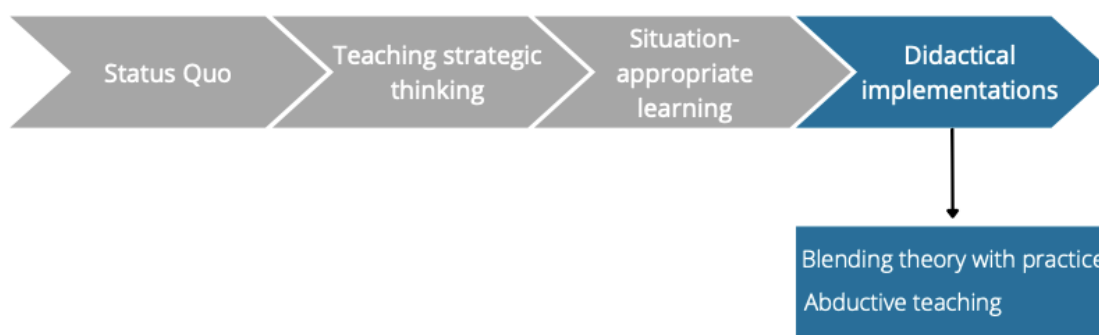


Figure 16: Sequence - Didactical implementations

While the theory acquisitive approach, enhanced by scholars such as Buckley (2018) or Mintzberg (1994), claims an inclusion and focus on theoretical contents, the practice-based approach, represented for example by Bell et al. (2018), Bower (2008), Grant and Baden-Fuller (2018) or Greiner et al. (2003), sets the emphasize on the development of innovative thinking skills (Bell et al. 2018:233). Grant (2008) for example maintains that when thinking of including more theoretical aspects in strategic management teaching, one central aspect leading to such debate would be the one about which theory should be included in the course content. Bell et al. (2018:234), accordingly state that there would be no mutual acknowledged theory of strategic management, making this question hard to clarify. Buckley (2018:39), however promotes the idea of including several theories into the course content, as this would improve the understanding of the process and structures behind theoretical approaches. He argues that for strategists it would be important to understand how and why organizations differ from each other (Buckley 2018:39). Buckley (2018:37) emphasizes the significance of creating a theoretical basis, before elaborating a case study. This would postulate the valid framework and help students by identifying restricting boundaries. Moreover, it would allow students to make sound judgments about the soundness of the approach (Buckley 2018:37). He complements this by admitting that the relationship between the theoretically based

content and the more practically based case study content would be very complex (Buckley 2018:31). He claims that theory could improve strategy teaching and education, though not by teaching a particular theory, but by teaching an understanding of the structure behind theories (Buckley 2018:39). Grant and Baden-Fuller (2018:326) dispute that theoretical concepts could be seen as a fundament needed to understand the “*superior or inferior performance*”. Yet, Grant and Baden-Fuller (2018:326) add, that in order to understand several causal linkages, students would need to deploy specific frameworks. This would help them with structuring the overall strategic situation into individual segments, and thus deliver a systematic image. Greiner et al. (2003:416) similarly contend that even if they do not fully demonize theoretical content in strategy teaching, they for sure prefer a more practically based one over a theoretically based course.

When thinking about teaching strategic thinking, one needs to remember that implicit knowledge cannot be verbalized by solely teaching theoretical content. However, conveying it does not have to come off without language. Solely concentrating on the process of demonstrating, while excluding verbalization, is also not an effective strategy. According to Polanyi (1966) language and subject matter are inseparably linked to each other. Thus, the learner may only understand the technical terminology when he or she experiences the corresponding practice. Therefore, the goal does not always have to be to achieve an ideal integration of theory and practice, as an ideal could also be reached by praising the divergencies between theoretical knowledge transfer and practical skills, in order to come closer to the goal of a teacher, according to Neuweg (2011:33), who can “*apply what he knows and justify what he does*”. Nevertheless, in order to achieve practical ability, professional practice would almost always be required (Neuweg 2020b:359). Grant and Baden-Fuller (2018:336) draw their conclusion by stating, that even though the core courses should be built on theoretical content, the focus should always be set on application. They nurture the importance of augmenting conceptual knowledge by procedural and metacognitive knowledge (Grant and Baden-Fuller 2018:336). The restrictions as well as the opportunities given by the field of strategic management could only be learned through embracing both, the theory and practice of a strategy. The implicit knowledge would require explicit attention (Grant and Baden-Fuller 2018:336). Thus, theory and practice are not always incompatible concepts. Effectively, in many cases they supplement each other (Buckley 2018:31).

## 6.1. Blending theory with practice

Albert and Grzeda (2015:656) reacted to this debate by developing a "*more effective pedagogical approach*". This approach was built on the perception that students, in order to acquire procedural and metacognitive knowledge, would need to be able to "*extract meaning, draw inferences, and apply the knowledge acquired through analysis of internal and external organizational dynamics toward achieving organizational objectives to arrive at effective strategic options*" (Albert and Grzeda 2015:656). Albert and Grzeda (2015:657) argue that the challenge thereby would be to create a learning setting, suitable and supportive for the progression of critical thinking skills. They criticize that strategic management teachers would mainly expect their students to integrate different learning outcomes from various courses. This approach, however, would ignore what Mintzberg, Ahlstrand and Lampel (1998 cited by Albert and Grzeda 2015:657) requested, as it would not draw on making experiences, and further would not affect the students' deeply rooted beliefs and thinking styles. Arguably, the mere utilization of tools and instruments would not form experiences (Albert and Grzeda 2015:657).

Albert and Grzeda (2015:657) demonstrated this statement by applying several tools and instruments, relevant in strategic management literature, to the Taxonomy of Teaching (see chapter "*A Taxonomy of Teaching*"). The intention of Albert and Grzeda (2015:657) was, that this table should serve teachers as a support system, when trying to integrate tools and instruments to the types of learning objectives in strategic management education, as it delivers an actual classification and evaluation framework, which can be used to demonstrate the alignment and efficacy of each tool.

**Table 1.** Examples of Classification of Strategic Management Tools Using Bloom's Taxonomy.

Examples of strategic management tools	Bloom's Taxonomy of objectives					
	Knowledge	Comprehension	Application <sup>a</sup>	Analysis <sup>a</sup>	Synthesis	Evaluation
Environment and capacities analysis tools						
SWOT, five forces, PESTEL, resources, and capabilities	✓	✓	✓			
KSF, driving forces, TOWS, SCORE, competitive/strategic group map	✓	✓	✓	✓	✓	
VRIO, A'WOT					✓	✓
Strategic identification and taxonomy tools						
Generic strategies (Porter, Mintzberg)	✓	✓	✓	✓		
Corporate strategies (growth matrix, portfolio, product life cycle)	✓	✓	✓	✓		
Functional strategies (value chain, change management, quality, leadership, etc.)	✓	✓	✓	✓		
Strategic options assessment tools						
Environment strategies, competitive advantage tests and fit			✓	✓	✓	✓
Defense vs. attack strategies			✓	✓	✓	✓
Blue ocean			✓	✓	✓	✓
Decision matrices			✓	✓	✓	✓
Impact analyses and "what if" scenarios			✓	✓	✓	✓
Implementation planning tools			✓	✓	✓	✓
Short-term vs. long-term strategies			✓	✓	✓	✓
Contingencies based on risk assessment			✓	✓	✓	✓

Note. SWOT = strengths, weaknesses, opportunities, and threats analysis; PESTEL = political, economic, social, and technological analysis; KSF = key success factors analysis; TOWS = threats, opportunities, weaknesses, and strengths matrices; SCORE = strengths, challenges, opportunities, responses, and effectiveness analysis; VRIO = value, rarity, imitability, and organization framework; A'WOT = a hybrid method combining the SWOT analysis and the Analytic Hierarchy Process.  
a. Pedagogical techniques such as simulations, case competitions, field or industry reports, and innovation-driven exercises may enhance understanding through application and more depth analysis.

Figure 17: Linking strategic tools and instruments to Bloom's Taxonomy of Teaching by Albert and Grzeda (2015:658)

As it can be seen in Figure 17, some tools and instruments do not rely on higher-order (i.e., procedural and metacognitive) skills such as analysis, synthesis and evaluation, while other tools and instruments may well seem to be suitable for teaching exactly these skills. Albert and Grzeda (2015:660) claim that students would feel far more confident in situations that refer to lower-level skills, as these skills are easier to obtain. This raises the importance of providing a learning environment in which students feel safe to make failures and learn from them (see chapter “*Creating a challenging, yet collaborative setting*”). Teaching students those tools and instruments intended on conveying higher-order skills, according to Albert and Grzeda (2015:662), would help them with developing actual higher-order skills such as critical thinking and problem solving, as the tools and instruments could be used as heuristics to simplify the decision-making process. Those theoretical contents thus, might aid strategists by assisting them with planning and further implementing experiential learning (Norzailan et al. 2015:67). Though, according to Norzailan et al. (2015:67), the use of those tools and instruments would never be able to “*substitute thinking*”.

The history of teaching strategic management is filled with discussions about the divergencies of theory and practice. Fiol and Lyles (1985) for example discuss the differentiation between lower-level and higher-level learning. While lower-level learning includes cognitive connotations that foster the learner with the ability to react to



incremental changes in situations, but at the same time lack of the ability to reflect on the reasons that underly those changes, higher-level learning seems to address exactly these fundamental causes. Higher-level learning thus, refers to changes in the ultimate norms and values and hence, nurtures a comprehensive understanding of causal associations and interconnections (Heracleous 1998:483). Senge (1990, cited by Chiva, Grandío, and Alegre 2010:114), when drawing on a similar distinction, names the difference between adaptive and generative learning. With adaptive learning Senge (1990, cited by Chiva, Grandío, and Alegre 2010:115) means the handling of already existing settings. Whereas generative learning requires creative skills that help with searching for new solutions and enables the learner to consider a given context from different perspectives (Heracleous 1998:483). In illuminating the nature of strategic thinking, Heracleous (1998:483) argues that strategic thinking would be constituted as double-loop learning. He thereby refers to the concept, already mentioned in chapter “*Reflection-in-action*” by Argyris (1977), who claims that double-loop learning would occur in situations that require trial and error. When the actor has to correct his or her behavior according to changing situational conditions and thereby change the course of action, double-loop learning would be prevalent. In contrast, single-loop learning would indeed also be able to change the course of action within a situation, but without disparagingly investigating on the principal variables of action (Heracleous 1998:483).

While all those concepts differ in their terminology, they all refer to the development of skills needed to cope with altering situations while still being in the midst of those situations. The ability to think strategically allows strategists to do exactly this. It enables them to question underlying assumptions and thus, can be referred to as double-loop learning (Heracleous 1998:484). This is because of the capacity of experiencing, the making of failures and learning from them through reflection-in-action, and further practicing by repeating the action, equipped with new knowledge.

## 6.2. Abductive teaching

Subsequently, leading to the question of how a class, created in such way to enhance strategic thinking, would look like? As already discussed (see chapter “*Creating a challenging, yet collaborative setting*” and chapter “*Taking an active role*”) the learning setting as well as the relationship between the teacher and students are crucial components for establishing such environment, yet those descriptions are not sufficient to create a learning environment suitable to make the implicit knowledge of strategic thinking conveyable.

The original Harvard Business course was intended on teaching strategic management in an inductive, rather than deductive way (see chapter “*The challenge of teaching strategic management*”). This was due to the assumption that companies comprise a unique character that cannot be generalized for teaching. By developing strategic thinking, as well as diagnostic skills, students were expected to learn through “*Socratic debate and exchange*” (Greiner et al. 2003:403). Nonetheless, Greiner et al. (2003:405) as well as Bell et al. (2018:234) argued, that today teaching strategic management often is guided by deductive approaches, as teachers would tend to guide students, even if not on purpose “*to answers that confirm the validity of concepts*”. Bhardwaj et al. (2018:279) delve even deeper into the subject by pointing out the widely acknowledged problem, already discussed earlier by Augier et al. (2001:128), of the “*plunging in bias*” (see chapter “*The challenge of teaching strategic management*”). Accordingly, Ernest (2006:74f) highlights the significant problem of imparting knowledge by general rules. Teachers would often tend to instruct general rules, and thereby would expect the students to adapt the acquired rules to specific situations. Though, this normally would lead to the problem that precisely this transfer process would be hindered. Ernest (2006:74) explains this phenomenon with the fact that instead of imparting application-oriented competencies, simple rules would be acquired. Due to the lack of possibility to apply the rules to specific situations, the general would lose its general validity (Ernest 2006:74), leading to the problem examined by the example of the surfer in chapter “*Strategic management competencies - The solution?*”. To communicate the content in an effective way, the general would need to be defined by concrete and illustrative examples. Ernest (2006:75), by speaking of “*teaching the general by teaching the specific*”, emphasizes that this would help students to recognize the basic and fundamental structure behind the general and thereby, register the underlying patterns contributing to the general. Polanyi (1966:29f), accordingly refers to the relevance of the self-identification of patterns. Meaning that, when referring back to a surfer, teaching him basic rules but letting him experience the positive outcome and failure of applying the rules. Neuweg (2005:571) indicates that a learner, not being able to draw a conclusion

out of an individual experience, something general out of somewhat special, knowing out of doing, and structure out of process, would not have learnt anything. When following the explications of Ernest (2006:75), the paradox would be exposed when the general is constituted by concrete examples (i.e., the specific). Though, the specific could only be derived from the general. By drawing a line to the topaze effect, postulated by Brousseau (1997), which described the phenomenon of where learning becomes even more difficult, the more the teacher tries to make learners understand what they need to learn. This is because the teachers then would do the cognitive work of learning and leave the students aside. Leading to the problem that the students themselves, do not actually learn something. They simply follow social signals. Ernest (2006:75) calls this not-gone-through-process “*meaning making*”.

Showing that several scholars see problems in teaching strategic management in a deductive way and claiming that teaching implicit knowledge, should focus on inductive teaching methods, rather than deductive structures. By working out the essentials through an exemplary concretization, the general could be made accessible by the means of the specific (Ernest 2006:75). Leading to the assumption that teaching implicit knowledge would be best taught by making individual experiences, and thereby identify patterns, forming the general and overall goal. As experiential practices are perceived as being neither deductive nor inductive, but abductive, Taatila (2010) embraces the effectiveness of experiential learning. Experiential learning could help students acquire skills, that are encased in an implicit cover (Awaysheh and Bonfiglio 2017:333). Many teachers thus, refer to methods such as case studies, simulation games, role plays and collaborative or integrative projects when trying to develop a learning environment that fosters abductive learning (Kolb and Kolb 2017:14). However, if case studies can be seen as adequate methods to teach strategic thinking would highly depend on the way how students engage with it. Only using case studies to show how theory works in action would not be sufficient, according to Grant and Baden-Fuller (2018:333). They claim that in order to develop strategic thinking skills, the given method needs to be complex, as well as ambiguous, just like real world problems are (Grant and Baden-Fuller 2018:333).

The mimetic learning process, discussed in chapter “*Situation-appropriate learning*”, fosters such abductive learning by enabling students to adapt the skills (judgment and critical thinking, insight, intuition, creativity as well as social and communicative skills) relevant for the attainment of strategic thinking. Acquiring social and communicative skills would be much easier in groups (Moon and Ruona 2015:665). Through observing others (e.g., the teachers, experts, or fellow students) the learners would be able to mime activities and behavior and thereby feel the experience themselves. These situational learning settings can be endorsed by including peer coaching activities in the teaching

agenda. The interaction with others also enhances creativity (Grant and Baden-Fuller 2018:335). This process could also be enriched by including theoretical knowledge over tools and instruments, which guide the students through their analogical mental processes. Grant and Baden-Fuller (2018:335) refer to this approach as “*blending explicit and implicit learning*”.

Insight and intuition might be best taught by enabling students to make their own experiences. According to Priem (2018:8) it would be necessary to try not to teach the whole content, but to focus on a specific experience and thereby provide the students with one strong memory that they will actually be able to remember up to five years later. This would be crucial, as those memories would equip students with an insightful understanding of strategic contents, which help them to make profound decisions in their professional life (Priem 2018:8). Grant and Baden-Fuller (2018:329) argue, that to acquire such complex competency as strategic thinking, students would need to have the chance to make experiences with similar or related problems. This would enable them to condense that experience into heuristics, which they then can apply to other situations (Grant and Baden-Fuller 2018:329).

As strategic thinking starts with problems, not with solutions, problem-based learning approaches would be conducive (Sloan 2020:47). Referring to Bhardwaj et al. (2018:281), problem-based learning would be appropriate to narrow down the gap between theory and practice. By using real-world problems as a starting point for teaching, problem-based learning methods would promote student’s ability to think critically in an indirect way (Bhardwaj et al. 2018:281). When implying such methods in class, it would be important to make sure that the given situation does not initially spell out the problem. Bhardwaj et al. (2018:282) argue that much of the in class used cases would only enable students to analyze given occasions and propose solutions to existing and stated problems. Though, this would not foster problem-solving skills. Judgment and critical thinking thus, are not developed through case studies that already come up with a predefined problem-oriented question. Giving students the chance to constitute the problem themselves by determining necessary elements and influential factors would be more appropriate, as this would include the task of framing a problem by analyzing the case and choosing the best option to solve it (Bhardwaj et al. 2018:282). Bhardwaj et al. (2018:282) thereby, highlight the distinction between identifying a problem and framing a problem. Problems that can be identified would be problems that are somewhere out there, waiting to be found. Problems that need to be framed, require the ability to sense certain aspects, elements, and issues that together result in a problem. Therefore, a specific method is needed. This entails a deliberate ability to connect those various influential factors. It thus requires judgment as well as insight (Bhardwaj et al. 2018:282).

Bhardwaj et al. (2018:282) argue: “*Different people can look at the same situation and frame the problem differently.*” While nearly all syllabi (96%), analyzed by Bhardwaj et al. (2018), provide for such methods, reality shows a completely different picture. Bhardwaj et al. (2018:282) found, that only 3% of the syllabi provide precise methods for framing problems.

Strategic thinking is a central competency that students need to acquire in order to be able to meet the requirements of the professional business life. Goldman et al. (2015:169) found that many top managers criticize their employees for not thinking strategically. Though, he also found that the employees argue this by not being “*at the table during strategic decision-making*” (Goldman et al. 2015:169). Clearly demonstrating that in order to be able to think strategically, one needs to get the chance to experience situations in which strategic thinking is needed. The probably most suitable way to solve this problem would be the completion of apprenticeships during study (Goldman et al. 2015:169). However, as not all syllabi can include mandatory apprenticeships, and not all students are capable of doing, often unpaid, apprenticeships during their free time, other solutions need to be discussed. As addressed in chapter “*Teaching strategic management – a status quo*”, the pedagogical approaches on teaching these skills through experiential methods are currently insufficient (Greiner et al. 2003:417). Many teachers would try to implement learning-by-doing approaches by simply adding case studies and discussions on the course description. This approach though, would “*miss out on valuable learning*”, which could only occur from what Greiner et al. (2003:411) call “*actual behavior*”. By meticulously having students research the origins of their discussion topics, this problem could be tackled. By dividing the memory process and consider alternative ways, the fractions that lead to the final outcome of a discussion might be identified. However, not only structured steps should be documented, but above all the feelings experienced in the process need to be recognized too. It would be important that this reflection does not take place after the process, but during the process (Neuweg 2020b:336f). Yet, what can be taught in class as well, is the ability to make failures and learn out of them.

Strategic thinking requires double-loop learning (see chapter “*Blending theory with practice*”). This is because of the students being able to make failures by experiencing (see chapter “*Experiential learning*”) and learn from them through reflection-in-action (see chapter “*Reflection-in-action*”), while further trying again by practicing (see chapter “*Practiced learning*”) over and over again (Heracleous 1998:483). Double-loop learning can only occur if students get the chance to reflect in the action, rather than on the action. Matsuo (2015:449f) argues that critical reflection would not necessarily be “*required for all types of experiential learning*”. They name learning types such as routine tasks to not

essentially demand reflection, yet reflection-in-action could also enhance this type of learning (Matsuo 2015:450). As Kolb (1984, cited by Finch et al. 2015:33) stated, that only by reflecting in the situation, students would be able to understand the experiences they made.

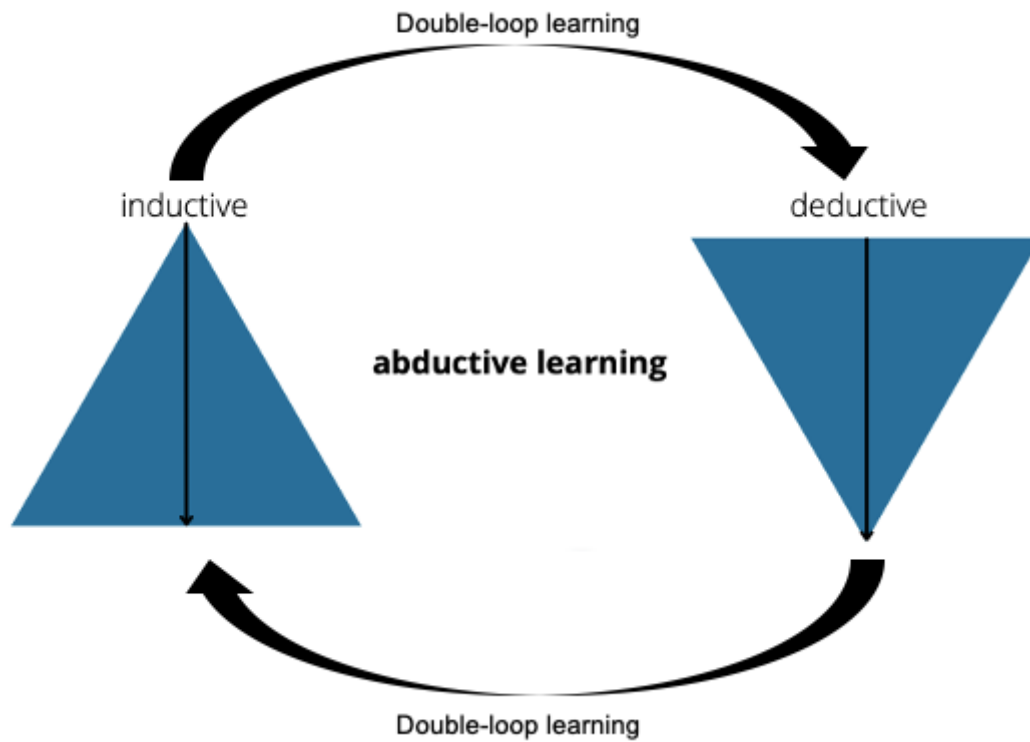


Figure 18: Abductive learning

## 7. Résumé

*“We are now living in unprecedented change.”*

(Priem 2018:7)

Today’s world is shaped by volatile, uncertain, complex, and ambiguous situations that urge for new approaches in addressing them (Andersen and Rasmussen 2014:270f; Bowen and Bowen 2016:2; Hamid 2019:1; Okumus et al. 2008:330f; Sagiyeva et al. 2018:712; Shin and Pérez-Nordtvedt 2020:2036). Strategists are encouraged to constantly adapt to these new situations. Therefore, they need to find different approaches to ever-changing problems. Consequently, it is crucial that strategists are equipped with the necessary competencies to master and overcome these challenges (Grant and Baden-Fuller 2018:330). Rather than being able to apply tools and instruments, it is relevant to develop critical thinking and problem-solving skills, thus develop a strategic style of thinking. Though, the historical past of teaching strategic management, led to the fact that today teaching strategic management is mainly characterized by teaching theoretical content, rather than preparing future strategists for the real demands of the business world (Bailey et al. 2014; Bell et al. 2018; Gosling and Mintzberg 2006; Grant and Baden-Fuller 2018; Hanney 2018; Lebrón et al. 2020; Moschieri and Santalo 2018). The original capstone course, according to Greiner et al. (2003:404), lost its focus and became more and more concentrated on research, while at the same time neglecting teaching. This shift in course content, away from the original capstone course, towards a more theoretically accentuated approach, according to David et al. (2021:1), led to the development of a strategic management course *“that too often fails to impart practical competencies to graduating students”*.

However, the changing demands of today’s business world put a new emphasize on the education systems and teachers of strategic management (Howard 2018:2). According to Grant and Baden-Fuller (2018:323) it would be exactly this complexity and ambiguity that longs for *“distinctive pedagogic needs of strategic management.”* Fullan and Langworthy (2014:2) argue that education systems in general would need to focus more on the *why*, rather than the *what* and *how*, as they would be already deliberated in detail in literature. Howard (2018:4) contents on this assertion and argues that the *why* would urge for the larger and overall purpose, and thereby address skills that equip learners with the ability *“to be life-long creative, connected problem solvers”*. He claims that it would be important for learners to adapt the ability to develop own visions. Though, teachers would need to encourage students to strive for those visions (Howard 2018:5). As strategic thinking requires the ability to come up with unorthodox ideas and include various perspectives when trying to solve a problem, one central skill would be creativity. According to Nathan (2015:364), the *“strategic thinker continually seeks to create*

*connections between people, ideas, and plans that others may fail to see*". Facione (2015:1f) similarly notes that if one teaches students how to make good decisions, one allows them *"to improve their own future and become contributing members of society"*. Grant and Baden-Fuller (2018:329), accordingly refer to Aristoteles concept of phronesis, when talking about the practical ability to adapt to a specific situation. Though, what makes a good strategist is not the ability to recall on diverse tools and instruments, yet this ability is also essential, but more to be able to think critically, as this allows students to make sound judgments, based on insight, intuition as well as creativity, while not neglecting social and communicative skills. By questioning the unquestioned, strategic thinkers would be able to see opportunities in fields where others see restrictions (Atsmon 2017). Strategic thinking thus, not only relies on conceptual knowledge, but rather refers to procedural and metacognitive knowledge and skills (Bailey et al. 2014; Bell et al. 2018; Gosling and Mintzberg 2006; Grant and Baden-Fuller 2018; Hanney 2018; Lebrón et al. 2020; Moschieri and Santalo 2018).

As procedural and metacognitive skills are implicit in their nature, and thus cannot explicitly be verbalized, it is crucial to put more emphasize on the burdens and barriers that arise through the externalization of implicit knowledge. Implicit knowledge is not subject to the rules or logics that would allow it to be explicated in the same way as explicit knowledge is (Sloan 2020:171). Rather, the skills and abilities have to be elaborated and reproduced again and again. The bearers of implicit knowledge are often not able to express their skills verbally. They sometimes even are not aware of the process or structure of their action skills themselves. They habitually act on the basis of experience and, even in retrospect, are not able to concretely reproduce their previous thoughts and actions; often because they did not take place in the situation itself (Grant and Baden-Fuller 2018:334; Polanyi 1966; Takeuchi and Nonaka 1995:9). This problem results from the non-verbalizability of implicit knowledge. If third parties are also unable to make the tacit knowledge explicit, this also results in non-formalizability (Neuweg 2005). Concrete practices then, cannot be described on the basis of explicit rules and patterns. Neuweg (2015:28) refers to this as the explication problem, which is followed by other problems, that are the subjectification problem, the instruction problem, and the problem of wanting something too much – the modification problem. Polanyi (1966:20) argues that this would be the reason why the formalization of implicit knowledge would always remain incomplete.

Strategic thinking skills, such as judgment and critical thinking, insight, intuition, creativity as well as social and communicative skills, are passed on through different approaches. Ernest (2006), as discussed in chapter *"Abductive teaching"*, refers to an inductive approach. In his opinion, learning that is based on teaching general rules and further



modifying this knowledge to be suitable for specific situations, would lead to problems if the teacher would present the general rules as being universally valid. He insists that it would be more suitable to let the learners develop the general by the means of specific situations. In this way, the learners would be able to explore the patterns behind the general all by themselves. Brinkmann (2012) also refers to this suggestion, by highlighting the importance of picking out parts of the whole through concretization and further isolation of modules that are finally to be practiced in a concrete manner. He refers to the considerations of Buck (2019), who also understands concrete examples as something that can be used in a demonstrative way (Brinkmann 2021:32). This would make it possible to determine concrete facts of a case. However, in order to avoid the didactic category error (Neuweg 2020b:108ff), the perception of the whole should not be neglected (Brinkmann 2012:401). Polanyi (1966:18) notes that an attempt to analyze and break down the whole into its individual parts can also be an obstacle or inhibition for the process of making things understandable. In this respect, an inductive approach would only be of temporary use. The direction of attention to the overall aim would be inevitable in order to be able to convey implicit knowledge in a rudimentary way. He points out that knowledge would be more than a mere addition of individual parts (Polanyi 1966, cited by Neuweg 2020b:368). Brinkmann (2012:401) accordingly argues that merely adding up individual parts would not be sufficient. Effectiveness would only be given if the acquisition of knowledge is linked to prior made experience and a new composition of the individual elements. According to Ernest (2006:75), the learners thereby would need to capture the general by recognizing underlying patterns in the specific. Neuweg (2020b:369) further elaborates that the learners would need to search for the configuration of the individual in order to recognize the general. The main objective of teachers of strategic management should not be to convey specific knowledge per pure conditioning, but to balance the course situation between self-directed and externally directed learning, between independent and guided learning, between freedom and concreteness (Brinkmann 2012:404).

Developing strategic thinking skills thus, requires more than simply studying theoretical concepts and applying well learned tools and instruments. Strategic thinking skills, such as judgment and critical thinking, insight, intuition, creativity as well as social and communicative skills, are fostered through the observation of an expert, the imitation of his or her behavior, the first-hand experience as well as the reflection-in-action. Through this so-called mimetic learning process, the learners would have the opportunity to observe and imitate the action, to make mistakes and thus also experiences, and finally learn skills through reflection and repeated practice directly in the situation. Thereby, acquiring a theoretically underpinned, yet practically experienced expertise, by

combining inductive and deductive learning approaches; leading to an abductive way of teaching. As a necessary prerequisite for a successful learning process, the learners would further need to be motivated and trustful to their teachers (Neuweg 2020b:366). This could be reached through the establishment of a challenging, yet collaborative working environment, that encourages students and fosters critical and therefore strategical thinking.

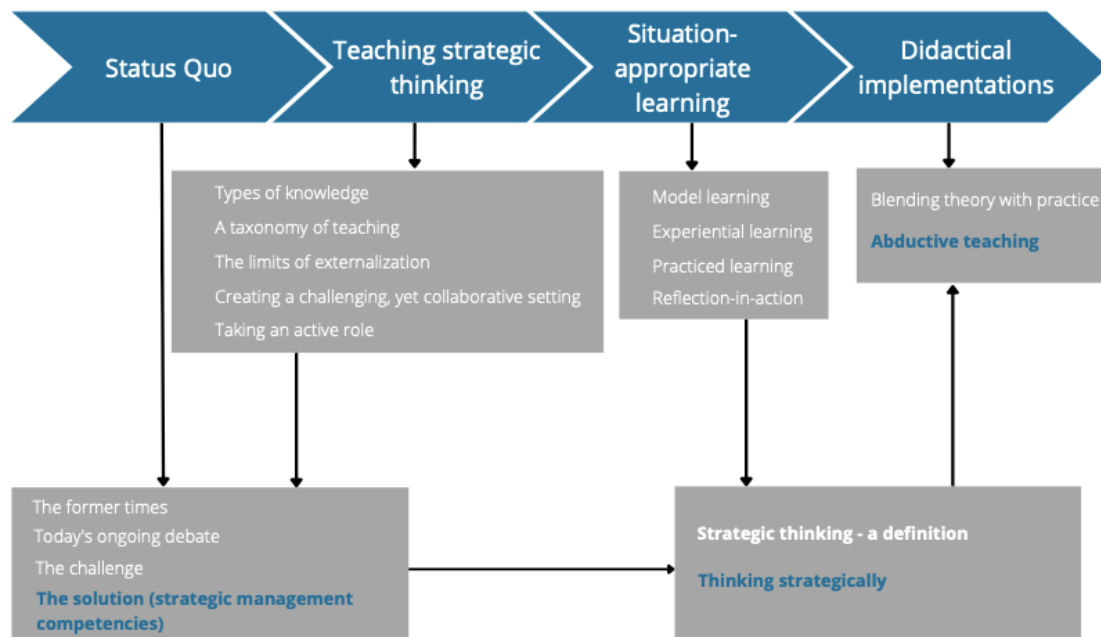


Figure 19: Closing the sequence

What methods might be used to implement the mimetic learning process in strategic management classes is a topic that urges for further research. What can be said is that the current status quo of used methods trying to teach strategic thinking through experiential methods is for sure insufficient and not expedient (see chapter “*Teaching strategic management – a status quo*”) (Greiner et al. 2003:417). The main goal to be achieved in future should therefore be to examine methods that meet the requirements of a mimetic learning process, while defying the difficulties of imparting implicit knowledge. All this while providing the necessary frameworks and conditions for learning processes that create a conducive, supportive, yet challenging learning environment. Teaching strategic management might turn out to be a challenge, though if done effectively, teaching strategic management will be “*immensely rewarding*” (Priem 2018:8).

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