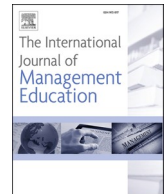




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Strategic challenges as a learning vehicle in executive education

Harwin de Vries^{a,*}, Jens Meyer^b, LukN. Van Wassenhove^c, Nana von Bernuth^b^a Rotterdam School of Management, CEDEP, Rotterdam, the Netherlands^b CEDEP, Fontainebleau, France^c INSEAD, Technology and Operations Management, CEDEP, Fontainebleau, France

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ABSTRACT

In 2014, CEDEP (Centre Européen d'Éducation Permanente) redesigned its General Management Program (GMP). In an effort to improve alignment of learning formats with adult learning principles, GMP decided to drop classical case studies and center learning around strategic challenges (SCs) participants face. This article discusses this novel approach, its conceptual foundations, the challenges faced during implementation, and corresponding recommendations.

1. Introduction

Executive education is a multi-billion dollar industry. However, satisfaction with leadership development programs is low (Feser et al., 2017; Gurdjian et al., 2014; Mabey & Gray, 2001). In a recent survey of 500 executives, only 11% strongly agreed leadership development interventions achieve and sustain the desired results (Feser et al., 2017). Gurdjian et al. (2014) suggest this is due to a lack of customization of development programs and failure to combine leadership development with working on real projects (i.e., learning by doing). Open-enrollment programs in particular have been criticized for this. Though they have several major advantages over customized in-company programs (Crotty & Soule, 1997; Moldoveanu & Narayandas, 2018), they struggle to meet participant demand for tailored content (Conger & Xin, 2000; Suutari & Viitala, 2008) and “are not aimed at building organization-specific collaborative, communicative, and cooperative capital, or company-specific skill bases” (Moldoveanu & Narayandas, 2018).

CEDEP's General Management Program (GMP) also struggled. GMP is an open-enrollment leadership development program for “high energy and high potential accomplished senior managers and executives” (CEDEP, 2019). In 2014, extensive surveys and a series of 5 workshops with clients taught CEDEP that its learning contents and formats were weakly aligned with needs. For example, the program tasked participants to work on case studies, a common approach for leadership education. Participants complained that they were often far from their everyday reality.

GMP then decided to try something different: to bring participants' business reality into the classroom by centering the program around core *strategic challenges* (SCs) participants or their businesses face. During the program, participants share, discuss, and work on their SC. They do so in close collaboration with other participants, coaches, and professors. Participants are continuously tasked to incorporate theories, concepts, and tools conveyed during the program. The SC thereby serves as a learning vehicle, but also enables participants to have a direct, tangible impact with their learnings. This way, the new GMP reaps the benefits open-enrollment programs can offer, such as learning from participants from different industries and companies and access to renowned faculty with “legitimate

* Corresponding author.

E-mail addresses: harwin.devries@rsm.nl (H. de Vries), jens.meyer@cedep.fr (J. Meyer), luk.van-wassenhove@insead.edu (LukN. Van Wassenhove), nana.vonbernuth@cedep.fr (N. von Bernuth).

expertise” and pedagogical tools in key functional disciplines. At the same time, it provides a customized learning journey.

Though combining formal management training with “learning by doing” is not completely new (see Kuhn & Marsick, 2005; Revans, 1971; Smith, 2001), it is highly underleveraged by business schools, particularly so in open-enrollment programs (Conger & Xin, 2000; Doh & Stumpf, 2007; Tushman et al., 2007). Therefore, little is known about “what works” and what are major implementation challenges. This article discusses the learning approach CEDEP implemented (section 2), its conceptual foundations (section 3), the challenges faced during implementation (section 4), the impact of the program (section 5), and general design recommendations (section 6). Acknowledging that other perspectives are possible (e.g., institutional, faculty, quality assurance), we analyze the approach from the participants’ perspective: how it impacts them and their company. We thereby add to the discussion on how to better align learning formats in open-enrollment programs with participant needs. Our results suggest that the learning approach, when adequately implemented, equips participants with a *methodology* to tackle strategic challenges in general, substantially impacts their companies, and serves as a *vehicle* to concretize and apply program contents.

2. Strategic challenges as a red thread

GMP consists of two modules, P1 and P2, lasting 11 days each. P2 takes place 3–4 months after P1. Before coming to CEDEP, each participant submits a one-page description of his/her Strategic Challenge, a core strategic issue the participant or company is facing.

Such SC typically deals with two of the four challenges included in the so-called ESOP framework: Environment - Strategy - Organization - People. The first is about understanding the Environment/Ecosystem – what is going on in the world outside the company? The second deals with synchronizing Strategy with this Environment/Ecosystem. Organization relates to aligning the Strategy with the way to work together and People to making people fit the Organization and support the strategy.

Instead of working on finding solutions, P1 starts by asking participants to take several steps back. What is the “real” problem we are trying to solve? What is the ecosystem in which the challenge lives? This phase is meant to prevent participants from tackling symptoms rather than searching for root causes. Peers and professors challenge participants to broaden their view, to question the obvious, and to unlearn flawed assumptions (cf. Kuhn & Marsick, 2005). For example, the description of each SC is being challenged (N-B., not assessed) during so-called “Insight Fairs”. Peers fire questions at the corresponding participant, who is not allowed to give answers. This avoids jumping to premature conclusions and “often beget[s] novel – even transformative – insights” (Gregersen, 2018). After this phase of *divergence*, participants set out to *converge* again towards the end of P1, by reframing, redefining, and rewriting their challenges. Equipped with their redefined challenge, participants are then tasked to apply their learnings and to work on several experiments or “probes” to drive their SC forward during the months in-between the two program modules. Buddy Group calls of 2–3 participants help them sustain the momentum during this phase.

Module P2 starts with a reflection on the difficulties encountered and the progress made on the SC during the months between both modules. I.e., after confrontation of their ideas and experiments with business reality. *Moving a SC forward* is challenging and learning how to tackle such challenges is the focus of the remainder of the module. Like in P1, participants are required to internalize course contents and apply them to their SC. Dedicated sessions make participants reflect upon their SC again, individually as well as in small groups, and apply what they are learning. The objective of this whole “divergence - convergence - moving a SC forward journey” is to help participants develop essential leadership capabilities and to provide tools and a process they can apply to similar challenges in the future. Appendix B provides an example SC, the “divergence convergence - moving a SC forward journey” the participant went through, and how this was shaped by course contents.

3. Conceptual foundations

The introduction and operationalization of SCs in the program was inspired by a variety of concepts, tools, and theories.

Adult learning theory. Extensive research supports that adults tend to learn in a rather different way than children and adolescents. Adults typically need to know why they are learning something, want to learn things that are of immediate relevance, and are looking for practical, problem-centered approaches to learning (cf. Knowles, 1973; Knowles et al., 2012).

Each of these drivers of learning was considered when GMP was centered around participants’ SCs. Maximizing relevance, as was concluded, is not only a matter of selecting the right contents. Contents had to be linked to participants’ business reality. The new GMP therefore constantly asks participants to apply learnings to their own SC. This way, general tools and concepts become concrete. At the same time, working on, reflecting on, and applying contents to SCs presents a practical, problem-centered approach to learning.

The SCs also serve as a vehicle for explaining the story of the program and the *why* of program contents. The GMP director and faculty team are using a simple drawing to depict the “divergence - convergence – moving a SC forward journey” and the role of each program element therein. This allows participants to constantly gauge where they are in their learning journey and how program elements relate to their SCs.

Action learning. Leadership development involves learning to tackle challenges in complex, dynamic, non-linear systems with many stakeholders and many “unknown unknowns” (cf. Snowden & Boone, 2007). Traditional, lecture-based or case study-centered learning is generally perceived to be weakly effective for such learning (Day, 2000; Moldoveanu & Narayandas, 2018). Instead, there is widespread agreement among experts that action learning – which combines formal management training with learning by doing and reflecting – is more powerful (Conger & Xin, 2000; Revans, 2017; Suutari & Viitala, 2008). Feser et al. (2017) show that successful leadership development programs are much more likely to link content to challenges participants face.

Though action learning is not new (cf. Revans, 1971), it is known to be weak or missing altogether in many executive education programs. Reasons may be related to institutional structures, skill bases, and learning formats in business schools (Moldoveanu &

Narayandas, 2018), difficulty of applying action learning in open-enrollment programs (Conger & Xin, 2000), and resistance to educational change (Yılmaz & Kılıçoğlu, 2013). A survey among 73 multinationals and academic institutions revealed that action learning programs are mostly focused on learning about a single topic, like entering a specific new market. They frequently fail to develop *general* (meta)skills and processes, as needed to tackle different strategic challenges in the future (Conger & Xin, 2000; Crotty & Soule, 1997). Moreover, the effectiveness of action learning is often affected by homogeneity of participants, which can impede divergent and creative thinking (Conger & Xin, 2000; Kuhn & Marsick, 2005). Therefore, applying learning over an extended period, to multiple cases, to new and unfamiliar settings, and in groups of diverse participants is advocated (Clark, 1992, pp. 688–700; Conger & Xin, 2000; Feser et al., 2017; Kuhn & Marsick, 2005).

The new GMP was designed to incorporate these insights in several ways. First, the program forms “Buddy Groups” of participants from different companies with similar strategic challenges. The clustering is based on the ESOP framework (see section 2). Participants within a Buddy Group collaborate intensively to share experiences and apply contents to each other’s SC. For example, other participants have often faced similar strategic challenges in the past and can support each other. This occurs both during and in-between the program modules, through regular Buddy Group calls. They thereby get exposed to multiple similar problems, albeit in a different context. Second, GMP actively pushes participants to apply or tinker with learning beyond the program and beyond their own specific SC – e.g. by working on a number of experiments during the six months between P1 and P2. Third, GMP concludes with a session where participants actively develop a process for how to approach a strategic challenge in the future based on their learning during the program.

Unlearning. To find new ways to compete and survive in the so-called VUCA (volatile, uncertain, complex, and ambiguous) world, organizations are continuously striving to learn and transform themselves. Leadership development programs increasingly serve as a vehicle for such transformations (Conger & Xin, 2000). Transforming an organization, however, does not only require learning new things. In all areas of business, from strategy to marketing to leadership, people are operating with paradigms or mental models that have grown outdated or are ineffective, i.e., that have become *common nonsense* (Goddard & Eccles, 2012). This requires awareness of old mental models which is argued to be a prerequisite for stepping into more effective ones (Akgün et al., 2007; Johnson, 2008).

The “divergence – convergence – moving a SC forward journey” was directly inspired by this. Experience within GMP shows that executives tend to quickly jump to conclusions and solutions without first consciously trying to understand symptoms vs. root causes, assumptions, and the ecosystem in which the problem lives. During the divergence phase, which Mezirow (1981) refers to as a phase of “ex post facto reflection”, the large majority of participants realize that current mental models are ineffective and need to be shifted. Participants find or create a new mental model that helps them better reach their goals during the convergence phase. Unlearning hence precedes learning in the new GMP.

Reflection. Experiential learning theory argues that people learn by repeatedly applying the process of experimenting, experiencing, reflecting, abstracting, experimenting, etc. (Kolb & Kolb, 2009, pp. 42–68). “Learning is the process whereby knowledge is created through the transformation of experience” (Kolb, 2014). Neuroscience shows that this indeed arises from the way the human brain functions (Zull, 2002). As executives typically have rich track records of experiencing and experimenting, they could substantially take advantage of this. Research shows that they rarely take the time to reflect and abstract and thereby learn slowly and risk repeating the same mistakes (Adler, 2016; Dean & Shanley, 2006). Including time for reflection has therefore been advocated for leadership development programs in general (Dean & Shanley, 2006; Densten & Gray, 2001) and specifically in the context of action learning (Day, 2000; Froiland, 1994; Smith, 2001).

Rather than overloading executives with more content, GMP has chosen to provide substantial time for reflection. Less is more. Participants are tasked to reflect on their behavior and experiences related to their SC with learning contents in the back of their mind, and to do so in an open-minded and wholehearted manner. This occurs both individually and in small groups, e.g. during Insight Fairs. Participants thereby ask and receive questions that hurt, take other viewpoints, and actively turn their experience into learning.

Passing on learning. A strategic challenge typically involves a large number of stakeholders. Success therefore substantially depends on their engagement, ensuring commitment to shared objectives, and capabilities to translate the big picture to stakeholders’ realities. Leadership development has the potential to teach participants to address these requirements. Nevertheless, many programs fail to do so (Conger & Xin, 2000). They push leaders to change their habits and mindset, while colleagues at work are still stuck in their old routines when they return (Crotty & Soule, 1997). Successful programs go beyond developing individuals and ensure sufficient reach of learning across the organization (Feser et al., 2017; Suutari & Viitala, 2008).

The new GMP was therefore designed to facilitate passing on learning to colleagues and teams and thereby build a shared managerial jargon and shared tools, objectives and processes. Participants are tasked to involve colleagues at work throughout the entire transformation journey – in formulating the SC, reformulating it, and moving it forward – and to pass on learning while doing so. For instance, participants write “the new script” at the end of the first module; a narrative of their SC that integrates learning from this module to be shared with their bosses and team. Participants are also encouraged to report learnings to their team at work on a regular basis during the program.

4. Implementation journey

The redesign of GMP required substantial adaptations from the program team (program director, faculty, coaches, dean of programs) as well as the participants. Whether these changes would work out well was far from obvious from the beginning (GMP19 cohort), particularly since several faculty did not quite applaud the change. This section discusses major implementation challenges based on extensive participant feedback from the first four cohorts participating in the new GMP (GMP19 - GMP22). We also use program team observations, as summarized in evaluation reports for these cohorts. To maximize validity of results, we have

extensively triangulated the different types of data and variables.

GMP19. Though GMP19 participants saw the overall benefit of directly applying course content to their business context, execution was imperfect. Defined challenges were too broad and often outside of the participant's sphere of influence. Participants spent relatively little time defining and redefining them. Many tended to jump to conclusions and solutions instead of first trying to understand the real problem. Furthermore, participants complained about limited applicability of course contents to their SC, particularly in the first module. Only 38% of the participants were satisfied with the progress they made during this module and only 6% submitted a redefined SC.

CEDEP then decided to practice what it preaches: to be agile and travel the journey of continuous improvement. The program team sent out a questionnaire at four moments during the program – one before and after both modules. Results were used to rigorously evaluate the state of the SCs and the link with the program. See [Appendix A](#) for the survey questions and Online [Appendices A - O](#) for a summary of survey results. This yielded 17 concrete improvement actions to be implemented for the next GMP cohort. Sessions were moved or replaced to ensure a better fit with the “divergence - convergence - moving a SC forward journey”. Time slots for reflection and discussion were included. A one-on-one call with the GMP director before the start of the program made participants aware of the importance of a well-defined SC. A one-pager explaining what constitutes a “good” SC provided further guidance. Peer groups consisting of participants with similar challenges were introduced to improve feedback.

GMP20. The results were generally positive. Satisfaction with progress during the first module rose to 95% (vs. 38% in the previous cohort). Perceived applicability of course content rose by 26%, appreciation of peer group work increased by 28%, and the GMP team reported that SCs were better defined upon arrival. Moreover, 58% of the participants submitted a redefined SC (vs. 6% in the previous cohort).

Though this proved GMP to be on the right track, the GMP20 evaluation also showed the implementation to be far from perfect. First, though SCs were on average somewhat better defined, much progress was yet to be made: many SCs were still outside the participant's sphere of influence (“let's change the world challenges”), too broad, or insufficiently stretching. Second, whereas the ultimate objective is to equip participants with tools and a process to tackle business challenges in the VUCA world, the SC was “rather positioned as a problem they will need to solve” (GMP20 evaluation report). Third, the connection between program content and SCs got somewhat lost in the second module. Communication about the SCs prior to this module was weak. Participants therefore made few preparatory efforts. Several faculty were reported to remain anchored in the classical way of teaching, put little effort into linking content with the SCs of the participants, and provided little time for reflection and discussion. Consequently, difficulties with applying contents to SCs persisted, and participants were still overwhelmed with the quantity of new inputs. Overall satisfaction with progress on SCs dropped by 19%.

GMP21. A list of 15 concrete action points followed for GMP21. Faculty were again briefed to integrate SCs into their sessions rather than working on case studies. The GMP team improved the one-pager explaining what constitutes a “good SC” and the GMP director started following up on weakly defined SCs before the start of GMP. More time for reflection and discussion was integrated into the second module. Communication about the role and objectives of SCs as well as their link with program content was revised. The GMP director and faculty team, for example, started visualizing the program. A simple drawing was used to depict the transformation journey as well as the role of each program element therein. Faculty were asked to continuously remind participants of their position in the picture and how the subject covered in their session helps them move forward on their journey. The SC was repositioned as a vehicle that helps participants *reflect* and develop a *methodology* rather than a specific problem to be solved. To sustain the momentum in-between the two program modules, participants were tasked to apply and experiment with their learnings. Newly introduced regular Buddy Group calls of 2–3 participants were instrumental, helping participants drive their SC forward during this period.

Results were again largely positive. The program team reported that GMP21 participants entered the program with better defined SCs, correctly understood the role of the SC in the program, and shifted their focus from solving a problem to acquiring a problem solving methodology. The percentage of participants seeing the methodology to be definitely applicable to future SCs rose from 45% to 81%. The percentage of poorly defined SCs in P1 dropped from 53% to 26% while satisfaction with progress on the SCs increased from 40% to 75%. Adherence to Buddy Group calls was high: 79% of participants participated in at least one call. Participants also reported a higher impact of peers and satisfaction with progress on the SC in-between both modules. The program team and participants also clearly indicated that extra time for reflection substantially boosted learning and triggered changes in the way SCs were defined and tackled. All participants agreed or strongly agreed that self-reflection triggered the change in the SC in P1 and 93% did so for P2. Though the quantity of formal content decreased, what remained substantially gained value. Less turned out to be more.

GMP22. Cycle 22 further strengthened the program's storyline, developed the methodology rather than the solution focus, and strongly encouraged reflection. Several GMP21 participants had indeed requested more time for reflection “to integrate insights (questions) from the Insight Fair into their challenges” (GMP21 evaluation report). The GMP21 cohort had also suffered from several SCs that were too complex. The program team therefore decided to make the definition of a SC the co-responsibility of a participant and his/her manager, in part to create some pressure to take the SC seriously.

Unfortunately this initiative backfired and was subsequently dropped. The program team observed that many SCs were either too broad, outside participants' sphere of influence, or too close to business as usual. 30% of the GMP22 participants complained that their SC was not well-defined in P1 and 26% that their SC was too complex (vs. 26% resp. 16% in GMP21). The positive trend initiated since

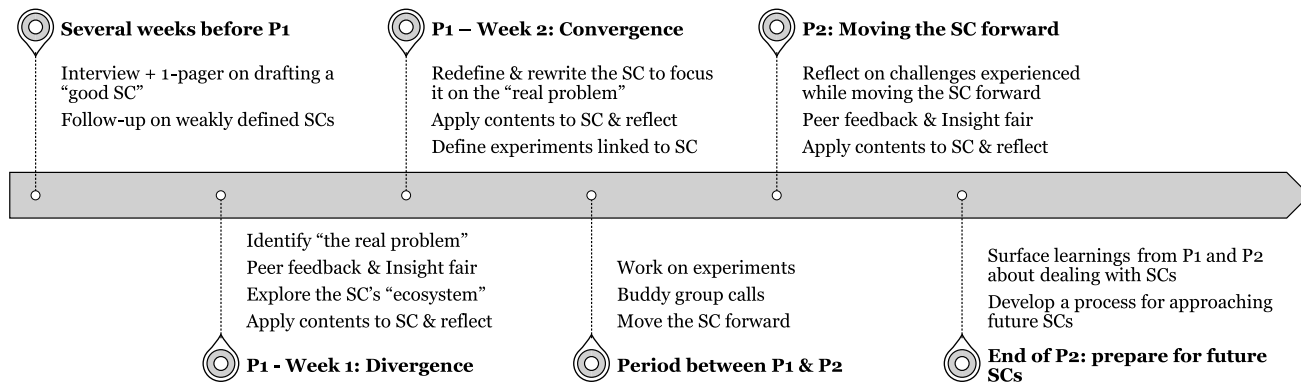


Fig. 1. The Strategic Challenges approach as it was at the end of GMP22.

GMP19 nevertheless continued for GMP22. For the first time, all participants indicated the problem solving methodology to be applicable to future SCs and to be satisfied or very satisfied with the progress made on their SCs over the course of P1. The reported impact of course content and self-reflection on the SC also increased, both during and in-between the modules. Complaints about a lack of time to work on the SC nearly disappeared. 84% agreed that they had enough time to work on the SC in P2 vs. 55% in GMP21. Fig. 1 depicts the approach as it had evolved towards the end of GMP22.

5. Impact

It is notoriously hard to determine the impact of leadership development programs on participants and their companies (Phillips & Stone, 2002). However, the impact of incorporating SCs in a leadership development program and the fit between SCs and the general purpose of the program can to some extent be gauged by participant feedback.

First, participants indicate that GMP has substantially impacted their approach to tackling SCs. This was clearly noticed for the specific SCs covered during GMP. The majority (74% in P1 and 95% in P2) of GMP22 participants, for example, report a “fairly important”, “important”, or “very important” change in their approach. This is also highlighted in several quotes:

“I came with an indication of what was needed (sort of solution) but now will take a different open approach to see what is really required.”

“I came with a predefined solution to a predefined problem and the challenge was basically implementation. Over the course of the two weeks I stopped assuming a solution and my SC became deeper and less superficial.”

“Instead of focusing on how to implement it, now I am focusing on how to sell it.”

“I changed from a top down approach to a bottom up approach.”

Second, a large majority of participants (100% in GMP22) state that the SC experience will (probably) be useful for tackling future SCs because of the focus on developing a methodology rather than a solution to a specific problem. The following quotes illustrate this:

“The outcome of the specific SC is not what matters most. The SC creates a mindset, a philosophy for reflection. It is a tool that leads to change.”

“The SC is not an end in itself, it is a vehicle.”

“I have learned the process of dealing with SCs, which makes me look at SCs differ-ently.”

Third, almost no GMP22 participant indicated course contents to be non-applicable to their SC (0% in P1 and 5% in P2) and a small minority had difficulties applying those contents to their SC (19% in P1 and 21% in P2). Participants reported the SCs to be instrumental in facilitating interactions among peers and concretizing contents:

“During the course the pieces of the puzzle fell into place. A lot of the courses appeared to be very helpful for my SC.”

“The SC is a red thread.”

“The SC served as a pretext to reflection, discussion, and exchange with other participants.”

Finally, the surveys also reveal self-reported impact on the company by asking participants to indicate for several areas “to what extent your SC will trigger a change in your company”. Two areas for which the SCs appear to be particularly impactful are Competitive Strategy, for which 58% of the GMP22 participant indicate an important or very important change, and Strategic Agility, for which 63% do. Other areas for which reported impact is high include Partnership & Alliances (46%), Operational Efficiency (44%), Risk Management (44%), and Innovation (44%).

6. Conclusions

Open-enrollment programs for leadership development struggle with meeting participant demand for tailored content. CEDEP's General Management Program therefore decided to center its program around strategic challenges (SCs) participants face. Such action learning approach is rare in executive education programs. This article discusses the conceptual foundations underpinning this approach as well as key implementation challenges and impact of corresponding program changes. Participant feedback suggests that the learning approach, when adequately implemented, equips them with a methodology to tackle strategic challenges in general, serves as a vehicle to concretize and apply contents, and substantially impacts their companies. The program thereby exemplifies how open-enrollment leadership development can successfully be tailored and thereby challenges common views that the two are difficult to combine (cf. Conger & Xin, 2000; Moldoveanu & Narayandas, 2018; Suutari & Viitala, 2008).

The first four cohorts have also shown that adequate implementation is not trivial. Analysis of participant feedback and program team observations suggest at least five design lessons.

First, participants do not naturally and trivially apply theories, concepts, and tools to their SC. Time for reflection, Buddy Group

discussion sessions and question-only sessions strongly help. It is also important to strongly encourage faculty to apply their subject input to SCs from the cohort. This requires them to move away from classical teaching to facilitating interaction on the basis of SCs. Making the link between traditional program contents and the different stages of the SC learning journey explicit, e.g. by using a mental map or drawing of the program, is also key. Though these insights may sound intuitive, implementation requires efforts and commitment from the faculty team and needs to be carefully managed.

Second, teaching the “divergence - convergence - moving a SC forward” process of tackling a SC requires alignment of the sequencing of contents. Participants naturally have difficulties in applying content to their SC if it covers a different phase than the one they are presently dealing with. This sequencing is not easy given faculty availability constraints, which again underpins the importance of securing their commitment.

Third, the success of the approach depends on well-defined SCs. The implementation journey shows this to be difficult and a silver bullet is yet to be found. Providing guidance and feedback before the start of GMP certainly helps but joint formulation of the SC by participant and his/her manager yields mixed results.

Fourth, the SC should be positioned as a vehicle to acquire a problem-solving methodology, not as an isolated problem to be solved. Careful management of the SC concept during the program is therefore essential as is the need for participants to explicitly formulate their acquired methodology to problem-solving by the end of the program.

Last, developing such general methodology through action learning requires that participants make substantial progress on their SC. Our results strongly suggest that reflection and peer group work are crucial. Moments of reflection are perceived to be the most valuable ones and have a major impact on the way SCs are formulated and tackled. They help transforming the participant's experience and course contents into knowledge relevant to tackle SCs (cf. Kolb & Kolb, 2009, pp. 42–68). Peers partly facilitate this reflection, providing feedback and asking questions that induce divergent thinking. Peer group work also exposes participants to multiple cases, which is essential for learning (Feser et al., 2017; Kuhn & Marsick, 2005).

Our study reveals several directions for which follow-up research would be useful. First, though GMP does not formally assess participants' performance with respect to their SC, other organizations may strive to do so. Case studies or other types of research providing guidance on how to adequately assess performance are much needed. Second, our study is based on self-reported and hence subjective impact metrics. Future research could study more objective ones. Third, follow-up research could study the approach from institutional, faculty, and quality assurance perspectives. Insights into barriers and drivers for faculty commitment are particularly needed, given that this is essential for success of the approach.

Guided by the lessons outlined above, CEDEP is presently rolling out the learning approach described in this paper to its middle and junior management programs. Though the type of challenges participants bring along is highly different, learnings described in this article appear to be rather uniformly applicable. This article thereby highlights the importance of applying key learning principles not only to *design* a leadership development program but also to *improve* it. Program improvement came from action and rigorous reflection.

CRedit authorship contribution statement

Harwin de Vries: Writing - original draft, Methodology, Investigation, Formal analysis. **Jens Meyer:** Writing - review & editing, Investigation. **LukN. Van Wassenhove:** Writing - review & editing, Project administration, Methodology, Investigation, Supervision. **Nana von Bernuth:** Writing - review & editing, Project administration, Investigation.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijme.2020.100416>.

A Surveys

Survey sent out before P1

1. Who suggested the subject of your Strategic Challenge?

You	Your boss	Both, in agreement
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2. How much time did you spend with your boss defining and refining the Strategic Challenge?

None	One hour	One day	One week	More than one week
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3. Relative to your current work responsibilities how much of a stretch does the defined Strategic Challenge represent for you in the following areas: a) Functional competence, b) Leadership competence, c) Geographical competence, d) Organizational competence.

No stretch at all Extremely important stretch	Somewhat of a stretch	Fair stretch	Important stretch
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4. What would you define as a successful outcome of the Strategic Challenge for yourself?
5. To what extent do you agree with the following statement: "I can significantly influence the success of the SC?"

Strongly disagree Strongly agree	Somewhat disagree	Neither agree nor disagree	Agree
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Survey sent out after P1

1. Please state to what extent your Strategic Challenge will trigger a change in your company in the following areas: a) Operational efficiency, b) Organizational efficiency, c) Geographical expansion, d) Organizational change, e) Culture change, f) New technologies/Digitalization, g) Competitive strategy, h) Strategic agility, i) Performance management, j) Partnerships & alliances, k) Risk management, l) Innovation, m) Marketing, n) Other.

No change Very important change	Somewhat of a change	Fair change	Important change
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2. Please state how important the change of your Strategic Challenge has been over the course of GMP P1 in the following categories: a) Scope, b) Subject, c) Approach, d) Key stakeholders, e) Criteria for success. Please explain.

Not important Very important	Somewhat important	Fairly important	Important
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3. What has triggered this change of your Strategic Challenge over the course of GMP P1? a) GMP P1 course content, b) After class discussions with professors, c) GMP peers, d) Your boss, e) Self-reflection, f) Other.

Strongly disagree Strongly agree	Somewhat disagree	Neither agree nor disagree	Agree
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4. How much do you agree with the following sentences regarding the difficulties you encountered making progress on your Strategic Challenge over the course of GMP P1? a) I had difficulties applying the tools learned during GMP P1 to my SC, b) The content of GMP P1 was not applicable to my SC, c) The work in my peer group was not very fruitful, d) My SC was not well defined, e) My SC was too complex, f) I did not have enough time to make progress on my SC, g) Other difficulties, h) I did not face any difficulties.

Strongly disagree Strongly agree	Somewhat disagree	Neither agree nor disagree	Agree
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5. Please state how much you agree with the following statement: "I am satisfied with the progress I made on my Strategic Challenge".

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Agree
Strongly agree			

Survey sent out before P2

1. How many calls did you have with your GMP peers between the modules?

0	1	2	3 or more
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2. Did the peer to peer calls help you to advance on your strategic challenge?

Yes	No
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3. Please state how important the change of your Strategic Challenge has been since you have finished GMP P1 in the following categories: a) Scope, b) Subject, c) Approach, d) Key stakeholders, e) Criteria for success. Please explain.

Not important	Somewhat important	Fairly important	Important
Very important			

4. What has triggered this change of your Strategic Challenge? a) GMP P1 course content, b) Discussions with colleagues, c) GMP peers, d) Your boss, e) Self-reflection, f) Other.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Agree
Strongly agree			

5. How much do you agree with the following sentences regarding the difficulties you encountered making progress on your Strategic Challenge since you have finished GMP P1? a) I had difficulties applying the tools learned during GMP P1 to my SC, b) I did not get the support at work needed to progress on my Strategic Challenge, c) My SC was not well defined, e) My SC was too complex, f) I did not have enough time to make progress on my SC, g) Other difficulties, h) I did not face any difficulties.

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Agree
Strongly agree			

6. Please state how much you agree with the following statement: "I am satisfied with the progress I made on my Strategic Challenge since I have finished GMP P1"

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Agree
Strongly agree			

Survey sent out after P2

1. Please state how important the change of your Strategic Challenge has been over the course of GMP P2 in the following categories: a) Scope, b) Subject, c) Approach, d) Key stakeholders, e) Criteria for success. Please explain.

Not important Very important	Somewhat important	Fairly important	Important
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2. What has triggered this change of your Strategic Challenge over the course of GMP P2? a) GMP P2 course content, b) After class discussions with professors, c) GMP peers, d) Your boss, e) Self-reflection, f) Other.

Strongly disagree Strongly agree	Somewhat disagree	Neither agree nor disagree	Agree
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3. How much do you agree with the following sentences regarding the difficulties you encountered making progress on your Strategic Challenge over the course of GMP P2? a) I had difficulties applying the tools learned during GMP P2 to my SC, b) The content of GMP P2 was not applicable to my SC, c) The work in my peer group was not very fruitful, d) My SC was not well defined, e) My SC was too complex, f) I did not have enough time to make progress on my SC, g) Other difficulties, h) I did not face any difficulties.

Strongly disagree Strongly agree	Somewhat disagree	Neither agree nor disagree	Agree
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4. Please state how much you agree with the following statement: "I am satisfied with the progress I made on my Strategic Challenge during GMP".

Strongly disagree Strongly agree	Somewhat disagree	Neither agree nor disagree	Agree
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5. Will the process you went through with your Strategic Challenge over the course of the last six months be applicable for you to other challenges you will face in the future?

Definitely not	Probably not	Probably yes	Definitely yes
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B Example SC

When she entered CEDEP, she thought she had a clearly formulated strategic challenge (SC) and clear potential solutions. Being the vice-president research for a motor vehicles & parts company, she felt her division had to be better prepared for the future. Current 20th century skills and competencies had to be replaced by 21st century ones. Her weeks at CEDEP would reveal which solution to push: recruiting, training, subcontracting, partnerships, or acquisition.

"Are you ready to change your brain"? This was the question the program director started the learning journey with. She was skeptical, just like the others from her cohort. Nothing was wrong with her brain. She knew her business, its strategic challenges, potential solutions. The weeks that followed proved her wrong. The first week of P1 – the **divergence** phase – shook the foundations underneath her SC. They revealed her hidden assumptions, her mental models, her paradigms. A session about sustainable growth cycles made her realize that her SC was not the "real problem". It was rather her own solution to the challenge of facilitating sustainable growth. She realized that a narrow focus on the future would be risky, as past and present growth cycles needed her department just as much. At least equally important for her were insights about creating the context of innovation. It is not only about

How to ensure the new engineering competencies development needed for the future ?

Background

- The future car innovations development needs more and more engineering skills in electric, electronic, information and communication technologies (ICT) domains.
- These new skills are linked to new technologies that evolve quickly.
- They are new and changing. They are missing from “conventional” industries.

Key point to be studied

Identify the best solutions to ensure quick, efficient and adaptive engineering new skills

- Recruitment of fresh candidates
- Training of current staffing
- Subcontracting of activities that need new skills
- Strong partnership with companies already having the new skills
- Investing in companies already having the new skills
-

Expected outcomes

Defend the best scheme to be deployed in the company
Implement the best scheme at department level

Fig. 2. The Strategic Challenge submitted before the start of GMP.

having the right competencies. It is also about making people work together in a productive manner.

Another session made her realize that she was looking at growth and innovation from a rather narrow internal perspective. Successful companies often innovate and grow by deeply understanding the customer (and the non-customer). For her, the starting point had always been the product, not the customer and how to create value for them. Her idea of the competencies for future growth drastically changed.

With these learnings in mind, she entered the **convergence** phase of P1, and set out to reframe and rewrite her strategic challenge. While considering how to **move the SC forward**, she realized her approach to tackling SCs had to change. It had mainly been top-down, telling others what to do.

How to develop/acquire the new skills needed for the next cycle of automotive industry ?

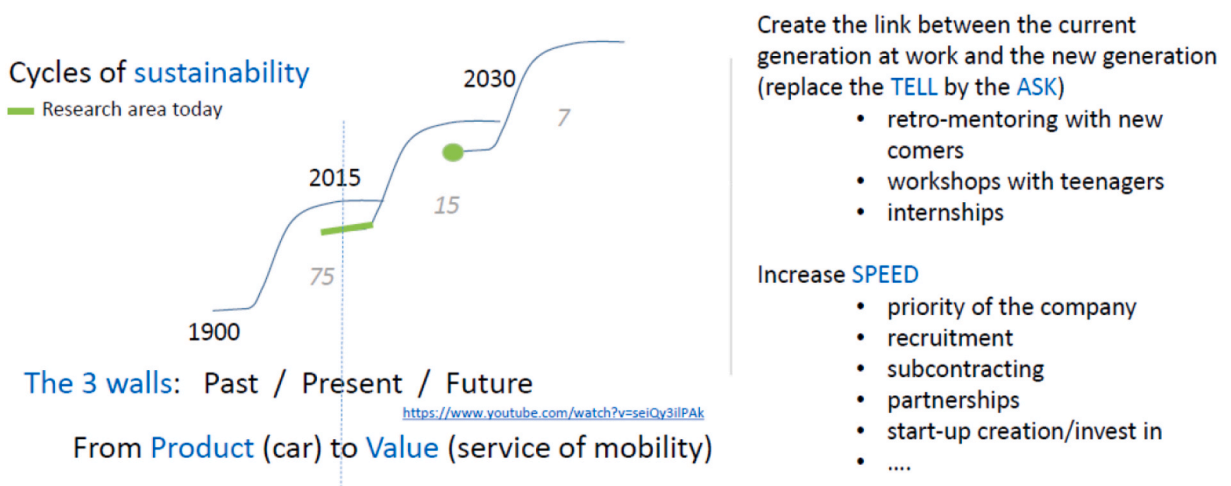


Fig. 3. The redefined Strategic Challenge.

The weeks at CEDEP made her aware of the importance of asking and enquiring. Doing so engages stakeholders and allows to understand their perspectives. “Telling” had to make place for “Asking”.

This was the result:

Four weeks of CEDEP had indeed completely changed her brain. They not only shed completely different lights on her SC. The SC had been instrumental to developing a new paradigm and mastering tools that were going to have a sustainable impact on her company. “It was a revelation”, she said.

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