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The contribution of reflective learning to experiential learning in business education

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ABSTRACT

Experiential learning theory states that reflection is just as important to learning as action. However, business educators often overlook reflection in their experiential learning activities, especially when it's understood as a dialogue process. Drawing on reflective learning theory, we explored the case of an undergraduate business programme that has been combining experiential learning with three different reflective learning mechanisms for the past ten years. Results show that: (1) reflective dialogue is central for ensuring that impressions from experience translate into better-defined learning outcomes, (2) this dialogue process greatly benefits from a closely guided process, and (3) different reflection mechanisms contribute differently to the learning process. Considering how fast experiential learning has popularised in business schools, this study alerts educators to the importance of combining their experiential learning activities with a guided process of reflection. Otherwise, educators risk students extracting meagre, wrong or misleading impressions from their experience.

KEYWORDS

Reflection; experiential learning; management education; reflective learning; dialogue

Introduction

As experiential learning has rapidly popularised in business education through consulting projects, problem-based learning, project-based learning, etc., questions arise on how to improve its learning effects (Kolb and Kolb 2005; Miller and Maellaro 2016). While many programs now provide students with better, more realistic experiences, efforts to improve the reflection process that should accompany such experiences have not followed a similar pace. This is despite studies showing that reflection is crucial to transform experience into learning (Di Stefano, Pisano, and Staats 2015; Cajiao and Burke 2016; Raelin 2016). As scholars have suggested, unexamined experience is an unreliable source of learning because we often make wrong judgments about our actions and what they mean (Reynolds and Vince 2007; Lambie 2009). However, when experience is reflectively examined, it helps learners to cross beyond impressions and immediate judgments, transforming the experience into a source for improved action and behaviour (Raelin 2001; Sadler 2010).

Despite its importance to the learning process, when educators do implement reflection in business schools, they often connect it with unilateral feedback for assessment purposes (Nicol,

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Thomson, and Breslin 2013; Helyer 2015; Ajjawi and Boud 2018; Steen-Utheim and Hopfenbeck 2018). Examples include questionnaires, reflective essays or logbooks that, once completed, are rarely discussed by students or teachers (as in Rubin 2006; Sadler and Good 2006; Mulder, Pearce, and Baik 2014; Reilly 2018; Cathro, O'Kane, and Gilbertson 2017). *Reflective learning*, on the other hand, grounds itself in the discussion of the whole experience. That means not only offering feedback on students' performance but also exploring how students make sense of the experience and how it impacts their respective conceptual perspectives (Raelin 2007; Hedberg 2009; Hibbert 2013; Ryan and Ryan 2013).

The last decade has witnessed a growing number of conceptual studies pointing out the potential benefits of reflective learning within experiential learning (Moon 2004; Mintzberg 2004; Raelin 2007, 2016). Similarly, empirical research quantifying changes in individual learning output because of reflection also gained ground (Di Stefano, Pisano, and Staats 2015; Caijao and Burke 2016). However, few studies consider *how* reflective learning fosters learning from experience, especially for business undergraduates (Evans 2013; Esterhazy and Damsa 2017). Drawing on three dimensions in which reflective learning theory is understood (reflection-in-action, reflection-on-action, and critical reflection), this study examines how reflective learning contributes to experiential learning in a business undergraduate context. We address this question through the case study of an undergraduate business programme that has consistently combined experiential learning with three different reflection mechanisms, based on the principles of reflective learning.

Theoretical background

Experiential learning's popularity in business schools emerges from the fact that, in contrast with traditional lectures, it accounts for the complex, contextual and provisional nature of management practice, building on the way managers learn naturally at work (Kayes 2002; Glen, Suciu, and Baughn 2014; Miller and Maellaro 2016). However, despite robust evidence showing that experiential learning has a positive impact on learning (Reynolds and Vince 2007; Cajiao and Burke 2016), experience alone does not guarantee that students accurately conceptualise content or meet expected learning outcomes (Raelin 2016). To more effectively meet learning objectives, a process of careful reflection on the experience is essential (Lambie 2009; Di Stefano, Pisano, and Staats 2015). Notwithstanding, much of the debate about the value of reflective learning takes place without an explicit statement of what the term means. Reflection entails different meanings related to thinking, learning and being (Peltier, Hay, and Drago 2005; Hedberg 2009; Hibbert 2013).

Moon (2004), for instance, promoted a view of reflection that is akin to thinking. People say they are reflecting when they are deeply thinking about how to solve a complex issue, a process Schon (1987) named reflection-in-action. However, reflection is also understood as the act of looking back to evaluate what happened in action, or reflection-on-action (Raelin 2001). Last, reflection also encompasses critical reflection, concerned with the questioning of taken-for-granted personal, social, political and ideological assumptions with the purpose of emancipation (Reynolds 1998). Reflective learning theory maintains that these three instances play a critical role in learning from experience (Raelin 2001, 2007; Hibbert 2013).

Reflection-in-action

Schon (1987) distinguished two types of problems that practitioners encounter: instrumental and ill-defined. Managing the first type of problems requires a *modus operandi* Schon called 'knowing-in-action': an automatic execution of performance without reflection on the actions taken. However, often enough practitioners meet unexpected situations that interfere with their

knowing-in-action, transforming an instrumental problem into an ill-defined one. To solve it, practitioners must re-think their knowing-in-action in ways that go beyond rules, facts and theories. They must restructure strategies and invent 'on-the-spot' experiments to test new understanding: reflection-in-action.

Schon (1987) also described how to incorporate reflection-in-action in business education, through an environment called *practicum*. This is a place where students learn by doing, guided by an experienced practitioner. The practitioner-lecturer introduces an ill-resolved problem which students cannot solve using knowing-in-action. The practitioner-lecturer and the students then engage in close dialogue with the problem. Each student is stimulated to generate and implement solutions while the practitioner-lecturer raises potential inconsistencies, suggesting new directions. This interplay promotes knowledge and skills acquisition.

Reflection-in-action is becoming increasingly popular in management education, as educators recognize that managerial problems have become more complex, contextual and socially embedded than in the past (Cajiao and Burke 2016; Matthews and Wrigley 2017). Design thinking and integrative thinking are two examples of how reflection-in-action has been recently implemented in business schools (Glen, Suciu, and Baughn 2014; Welsh and Dehler 2013). In recognising that problem-solving does not necessarily follow a rational-analytical line but is an adaptive process of experimentation, they 'enable the complex and non-mechanical nature of managerial practice to be fully addressed' (Holman 2000, 209).

However, while it is central to reflective learning, reflection-in-action concerns itself almost exclusively with the process of problem-solving. Perhaps because of this, there is a sense that reflection-in-action dominates discussions about reflection in management education (Gray 2007; Kelliher 2014; Lancione and Clegg 2015). However, associating reflection only with problem-solving undermines other instances of reflection that are equally important to managerial learning (Héber 2015).

Reflection-on-action

'Doing' does not unfold all the layers of learning offered by experience. To learn, one needs to consider what happened and how it happened; in other words, reflect *on* the action (Di Stefano, Pisano, and Staats 2015). For Raelin (2016), returning to the experience via reflection is central to experiential learning. It helps learners to move beyond the intuitive (and often misleading) sense-making of immediate action, recognise past behaviours, and find ways to improve. It also makes explicit what was planned and what was achieved, leading to a deeper understanding of the experience (Helyer 2015).

In this context, literature highlights the importance of collective discussion for reflection-on-action. Although students can learn through a solo re-evaluation of an experience (Boud, Keogh, and Walker 2013; Hughes and Scholtz 2015), social theory considers that the self is defined not only by our actions but also by how others perceive those actions (Säljö 2004). It is therefore difficult for a learner to identify misconceptions in his or her actions alone (Lambie 2009). The input from others is often necessary. Hence, learning from experience is incomplete without the involvement of peers (Raelin 2007). Engagement in the form of a dialogue (an exchange of impressions shared among trusting parts) is often required to unfold the multiple learning opportunities offered by experience (Sadler 2010; Hibbert 2013).

Aware of its importance, educators have incorporated reflection-on-action into the business school curriculum through feedback mechanisms like written reports, logbooks or questionnaires that students complete after a learning activity, mostly as part of a summative assessment (Nicol, Thomson, and Breslin 2013; Helyer 2015). While research corroborates the value of feedback as a mechanism to facilitate reflection, showing that it supports students in constructing meaning from experience (Mulder, Pearce, and Baik 2014), recent studies suggest that the simple

completion of written reports does not promote a deeper understanding of the experience: 'written feedback without dialogue often created students' frustration and disengagement' (Steen-Utheim and Hopfenbeck 2018, 3). A dialogical process should accompany feedback: a close interaction between the parties involved in the experience as they read, discuss and act upon feedback comments (McLean, Bond, and Nicholson 2015; Esterhazy and Damsa 2017; Ajjawi and Boud 2018).

Critical reflection

Through the work of Reynolds (1998), Gray (2007), and Hibbert (2013), critical reflection has gained political, cultural and ideological connotations. In their view, critical reflection entrusts the business school with the responsibility of offering students a critical view of management. However, critical reflection also underlies individual emancipation, not only from the social order but also from the order of our social consciousness (Raelin 2007). More of interest to this study, this perspective on critical reflection recognises the importance of one's own hidden influences and constraints, those concealed by our own assumptions (Hibbert 2013). It is less concerned with what happened and more with why things happened. It cares less for the assessment of outcomes and more for helping learners to process the emotions associated with the experience, releasing them from taken-for-granted assumptions, making them more receptive to alternative ways of reasoning, and breaking down self-confirming thinking (Strati 2007). As Raelin (2001) noted, individuals are born with natural pain avoidance. As a result, they often avoid confronting their own beliefs and capabilities. Nevertheless, a critical look into our behaviour lets us 'search for truths even if they are unpleasant to us, to take personal causal responsibility for problems, and allows us to accept some pain in order to learn' (Raelin 2001, 17).

Looking at events and experiences from a critical stance encourages learning at a deeper, transformative level (Hibbert 2013). However, for critical reflection to happen, a 'ruthless and courageous examination and deconstruction of assumptions' is required (Gray 2007, 497). This process does not come naturally to managers, let alone students (McLean, Bond, and Nicholson 2015). In this respect, Shepherd (2004) proposed reflective mechanisms such as oral debriefings. They support students in directing and managing the conflicting emotions arising from experience, in a way that minimises interference and maximises learning. Table 1 summarises the three forms of reflection discussed.

Methods

Building on the three instances of reflective learning described, this study explores two research questions:

Q1: How does reflective learning contribute to experiential learning?
Q2: What specific role does each of the three instances of reflection play in promoting learning from experience?

To meet these objectives, our investigation follows a single case study research design based on the Management Experience Program (MEP). MEP is a four-year, full-time business undergraduate program created in 2008. It combines traditional lectures on business theory in the morning with a series of experiential learning activities (called real-world practices) in the afternoon. Examples of real-world practices include designing and implementing fundraising activity to support a children's hospital, helping different local small and medium enterprises solve specific managerial problems, and managing a portfolio of shares in the real stock market.

Table 1. The three instances of reflection.

nstance	Description	Sources
Reflection-in-action	Reflective process where practitioners must think in ways that go beyond available rules, facts, and theories. They must restructure strategies and inventing 'on-the-spot' experiments to put the new understanding to the test.	Schon (1987), Glen, Suciu, and Baughn (2014), Di Stefano, Pisano, and Staats (2015), Cajiao and Burke (2016)
Reflection-on-action	The (ideally collective) act of returning to the experience with the purpose of re-evaluate what happened in action, identify misconceptions, and integrate the new understandings into future improved behaviour.	Raelin (2001), Lambie (2009), Nicol, Thomson, and Breslin (2013), Sadler (2010), Esterhazy and Damsa (2017), Ajjawi and Boud (2018)
Critical reflection	A form of meta-reflection in which the person questions his/her own actions and internal beliefs. This process helps the learner to search for truths even if they are unpleasant, take causal responsibility for the problems, and accept that change in necessary in order to learn.	Reynolds (1998), Shepherd (2004), Raelin (2001, 2007), Gray (2007), Hibbert (2013), McLean, Bond, and Nicholson (2015)

Each real-world practice lasts for two semesters, implemented as a compulsory module during three of the programme's four years. To support students' competence development in those activities, MEP has developed and refined, over the past ten years, three different reflection mechanisms: (1) reflection during practices, (2) group reflection, and (3) one-on-one reflection (Figure 1).

Data sources

To answer the research questions, we collected quantitative and qualitative data. The quantitative data assessed the relevance of each MEP reflection mechanism to students' competence development. Results were measured using a Likert scale, with one meaning that the reflection mechanisms were not relevant and four meaning that they were extremely relevant. We surveyed five cohorts consisting of current students (cohorts 2017 and 2016) and alumni (cohorts 2015, 2014, 2013). We contacted 102 students, attaining a response rate of 70% ($n = 72$).

The qualitative data explored the specific contributions of each reflection mechanism. Data was collected through individual semi-structured interviews conducted with current MEP students (cohorts 2017 and 2016) and alumni (cohorts 2015, 2014 and 2013). The interviews followed a designed protocol ranging in length from 25 to 45 min. We reached saturation at fifteen interviews, including four second-year students (of 18 in the cohort), four third-year students (of 26) and seven alumni (of 59). The data collection mechanisms, including the specific questions asked to participants, are detailed in Table 2.

Data analysis

The quantitative data is descriptive, requiring no statistical analysis. The qualitative data analysis draws on an explanatory stance using analytic progression (Miles, Huberman, and Saldana 2014). From students' open and literal descriptions of how reflection contributes to experiential learning, we screened the data, separating it into initial codes. Then we grouped the data-driven codes into emerging themes to extract more general contributions. Finally, we compared the general contributions to the conceptual discussions outlined in the literature, to draw inferences

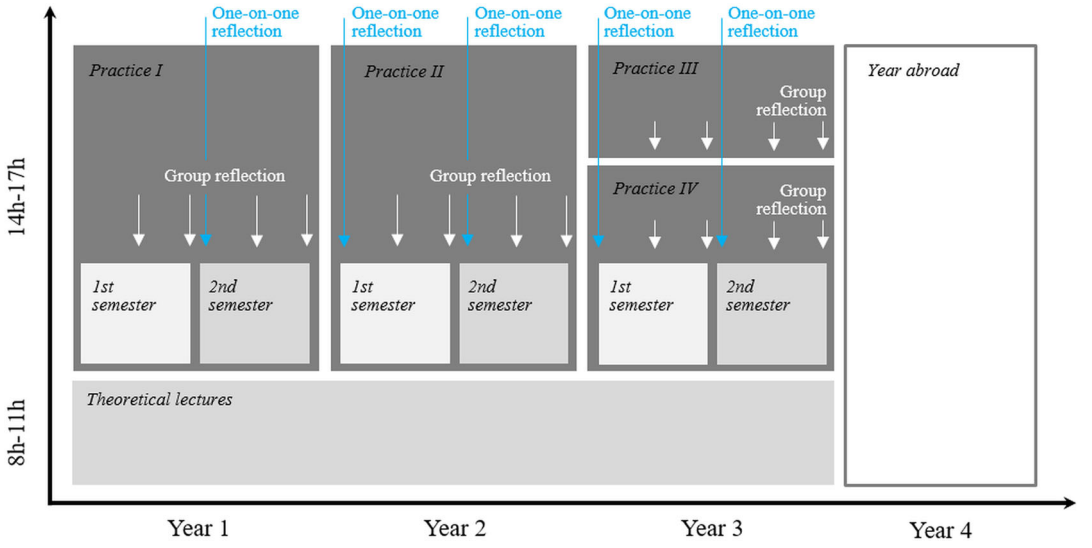

Figure 1. MEP curricular structure.

and produce an explanatory framework. An overview of the qualitative data analysis process is given in Table 4. We transcribed and coded the data with the support of MAXQDA data analysis software, using emergent coding by the lead researcher and with inter-rater reliability confirmed by the second researcher.

Results

The general contribution of reflective learning

Survey results show that the majority of MEP students and alumni consider reflective learning to be a highly relevant or extremely relevant mechanism to support competence development from experiential learning. Specifically, around 90% of participants affirmed that the reflection during the practices was highly or extremely relevant, 77% said the same about the group reflection, and 81% described the one-on-one reflection in those terms (Table 3).

Regarding how these mechanisms support the development of competencies, interviewed participants consistently stressed that without the support of reflection their competence awareness would be limited, because it is hard to reflect on one's performance amidst action or to find the time to give or receive feedback. Reflection contributed to this awareness by foregrounding the competences in which students excelled but did not realise. Conversely, areas students thought they excelled in were revealed as deficient. Moreover, reflection helped learners to 'sharpen' competences they already possess. The quotes below exemplify these processes:

> If I had not gone through the reflection activities and only had the project, for example, I would still see my evolution. However, I would see this only as a general improvement, not as specific skills that I am developing, or skills that I have to develop. By evaluating my colleagues and having colleagues evaluating me, and by assessing myself, I managed to 'visualise' the skills I improved and the ones I needed to improve. (3rd year)

> It is a leap forward because it's when the mediator tells you, in a clear and objective way, where you need to improve. And for you to realise on your own where you have to improve, it can take much longer. (Alumnus)

Additionally, all three reflective learning mechanisms proved to be crucial in supporting learning from experience. Results are summarised in Table 4.

Table 2. Data sources.

Reflection mechanism	Approach	Question asked	Data source
Reflection during projects	Quantitative (relevance)	How relevant was the reflection during projects to the development of your managerial competencies?	Survey, Likert scale (n = 72)
Representation of reflection-in-action	Qualitative (contribution)	What was the role of the lecturer in your learning process?	Semi-structured interview (n = 15)
		How did the lecturer support you in the development of solutions to the real-world practice problems?	Semi-structured interview (n = 15)
Group reflection	Quantitative (relevance)	How relevant was the group reflection to the development of your managerial competences?	Survey, Likert scale (n = 72)
Representation of reflection-on-action	Qualitative (contribution)	How did the group reflection contribute to the development of managerial competences?	Semi-structured interview (n = 15)
		How did the group reflection impact the performance of subsequent real-world practices?	Semi-structured interview (n = 15)
One-on-one reflection	Quantitative (relevance)	How relevant was the one-on-one reflection to the development of your managerial competences?	Survey, Likert scale (n = 72)
Representation of critical reflection	Qualitative (contribution)	How did the one-on-one reflection contribute to the development of managerial competences?	Semi-structured interview (n = 15)
		How does the one-on-one reflection differs from the group reflection?	Semi-structured interview (n = 15)

Reflection during practices

In the real-world practices, students work with ill-defined business problems under the close supervision of a practitioner-lecturer. MEP's first level of reflection is, therefore, akin to reflection-in-action, happening *during* the real-world practices. In this environment, the importance of the lecturers is highlighted. They connect theoretical concepts to their practical applications, offering students the tools needed to perform the required work. Additionally, each lecturer also plays the role of a coach. Based on their professional experience, they offer professional and personal counselling to students at the individual level.

Although the students asserted that they also reflect on their own while solving the real-world problems, the data shows that the lecturer-practitioner plays a central role in the process of reflection-in-action. Besides sharing disciplinary knowledge (deemed by participants as crucial to the success of the projects), they challenge and criticise students' work (route correction). Interviewees attached great importance to this process, given that they rarely received direct and precise feedback on their performance elsewhere. Additionally, lecturers often allowed mistakes to happen so that the students could better capture the consequences of their errors.

> The [lecturers] used to say: no, this will not work, do that instead … I think these [lessons] were essential because we enter the MEP believing we knew something and, deep down, we knew nothing. I am sure the projects would not have the success they had without the guidance of the lecturers. They were always instigating us, challenging us, not hesitating to point out the issues with the work. (2nd year)

Table 3. The relevance of MEP reflection mechanisms.

	Reflection during practices	Group reflection	One-on-one reflection
No relevance	0.0%	2.3%	1.5%
Low relevance	10.4%	20.9%	17.9%
High relevance	50.7%	44.2%	43.3%
Extremely relevant	38.8%	32.6%	37.3%

Table 4. Summary of qualitative results.

Reflection mechanism	Emerging themes	General contribution
Reflection during projects	Lecturer shares disciplinary knowledge Lecturer bridges theory and practice (idea vs reality) Lecturer provides feedback about students' performance Lecturer personifies an experienced practitioner (role model)	In dialogue with the problem, the lecturer **invites the students to reflect** on the knowledge acquired. The mentor **personifies an experienced practitioner**.
Group reflection	Increase students' awareness of their own competencies Aligns internal expectations and external reality Enhance the ability to deal with frustration and criticism Foster active listening and feedback skills Improve group performance in subsequent projects	**Foregrounds and validates** competencies acquired during the experience. Enhance **feedback skills** Improve **group performance/dynamics**
One-on-one reflection	Nurtures self-awareness at professional and personal level Define and monitor areas where the student needs to improve Suggests the next steps for improvement Encourages an active role towards change Supports career decision-making	**Helps learners to better process** the insights from the experience, pointing out to the necessary changes. Helps learners to **set and monitor their long-term goals** and evaluate career options.

> Mentors do not avoid mistakes from happening. They let the error occur and then take appropriate action. Of course, if it is a catastrophic thing, they will prevent the student from going through this, but many problems in my project were allowed … Often they [lecturers] were there only to hear what we had to say, and let the students find the solution on their own. (3rd year)

Another distinguishable feature of the lecturers is their practical experience. Working closely with an expert plays two crucial roles for students. First, experts can skilfully connect theory and practice. This connection helps students to distinguish what theories are relevant for the success of a particular project and how they translate into practical solutions. Lecturers offered what interviewees called 'the shortcuts'. Second, their *persona* provided an essential representation of the language, mannerisms and posture of professional managers:

> Over the year, in each conversation we had, in each mentoring session, in every project meeting, they slowly showed me the difficulties you encounter in a project and the differences between planning and doing. (2nd year)

> My managerial skills come much more from observing how the lecturers deal with other people. Of course when I had a problem, they always oriented me; but their posture and how they did things is what I capture as 'managerial skills'. (2nd year)

Group reflection

The group reflection is a reflective session solely dedicated to the collective discussion of the critical events occurring in the real-world practices. They take place at a time apart from the

practice period, being organised by a faculty mediator and not by the lecturer responsible for the practice. As pointed out by Hedberg (2009), Nicol, Thomson, and Breslin (2013), and Ajjawi and Boud (2018), reflective dialogue imposes an impractical workload on lecturers. For this reason, the MEP engages external staff to do it. The group reflection sessions take place every two months, totalling four sessions per practice. Doing it four times allows students to apply the outcomes of each reflection session throughout the practice.

With students gathered in their working groups of 4 to 8 students, a mediator first explains the 'rules'. Comments should always be constructive. Personal attacks are not tolerated. To foster students' openness, the mediator also highlights the contribution of the reflective sessions to the students' personal and professional improvement. To facilitate understanding, students are asked to illustrate comments with examples. After these initial clarifications, the reflective session begins. It is divided into two parts. The first part lasts for about 45 min and consists of a general discussion about critical events that took place during the practice. The mediator invites all students to share with the group general comments about critical events. How was practice for you? What were the positive and negative factors? What could you have been done differently? The second part also takes 45 min and is comprised of a collective evaluation of each student's performance in five different competences: analytical thinking, problem-solving, interpersonal communication, teamwork and creativity. Each student grades each colleague in those five competencies using a scale. An open discussion then follows the assessment. At the end of the session, each participant has received insights on his or her performance from every other member of the group in each of the five competencies.

The results show that the group reflection produces a series of positive effects on participants' learning process. Most noticeable is the alignment between one's internal perceptions and reality, especially regarding cooperative skills like teamwork and interpersonal communication. The group reflection helps students to better grasp the skills they are good at but do not recognise as strengths, as well as those where they overestimate their competence:

> I would think that I was terrible at, for example, organisation and spend my energy improving this skill, when in fact I was organising my team well. In reality, I had more difficulties with sales, which was something I did not know. If it were not for the feedback from my team, [showing] that I was underperforming in some aspects and was very good at others, I would not have changed my perspective. (2nd year)

> I have a hard time listening to people, and I did not realise it. Once I learned it, my relationship with my project colleagues has wholly changed. The group reflections were critical to my personal and professional development. (2nd year)

The development of three specific competencies was also directly attributed to the group reflection: learning from failure, seeing criticism positively and active listening. The open and trustworthy nature of the group reflection developed in participants an ability to cope with failure and criticism, transforming what was initially perceived as negative feedback into a motivation to improve. Similarly, to evaluate others, students must learn to listen actively and produce comments constructively:

> What I've learned from the [group] reflection is dealing with criticism and seeing them constructively. And from these criticisms, thinking of ways to improve. Last year I had a great group … It was good because, apart from pointing out my weaknesses, they helped me to grow daily. (2nd year)

> The central aspect that the group reflection made me develop is to know how to deal with frustration, of hearing 'you're not doing it right!' (3rd year)

One-on-one reflection

The one-on-one reflection session is a dialogue between the student and the mediator (the same one from the group reflection). However, different from the group reflection, the aim here

is not to discuss specific project outputs but to critically reflect on the student's competence development and career perspectives throughout the entire programme.

The one-on-one reflection session happens twice per year, at the start of each semester. In preparation for it, students complete a self-evaluation report. The report contains questions that invite students to reflect on their trajectory over the past semester (e.g. What are your career objectives? What competencies could help you achieve such goals? How do you plan to develop them?). The session itself takes approximately one hour and is divided in two parts. The first part consists of a 20 min' open discussion between the mediator and the student. The mediator invites the student to evaluate his/her performance in the past semester, discuss what he/she has learned, etc. As the student elaborates, specific incidents stand out and are further discussed. While this may seem trivial, exploring these incidents is an emotionally charged moment for participants. In the second part (remaining 40 min), the mediator contrasts insights from this dialogue with the self-evaluation report. Gaps are often identified and discussed. The mediator then suggests areas for improvement, competencies to be developed and attitudes to be fostered (e.g. be more proactive, keep improving your presentation skills, consider whether your career choices are compatible with your competencies).

The data shows that participants see the one-on-one reflection as a moment of self-awareness. In the one-on-one reflection, students have the opportunity to carefully discuss their individual performance, the areas needing improvement, and their career goals; an examination that students do not usually do on their own. Interviewees highlighted that, during the group reflection, a significant amount of time is spent sharing impressions with the group or discussing specific project outcomes. The one-on-one reflection, on the other hand, is a time to talk about themselves. It is the moment where students can look back, debrief, self-evaluate and draw up plans for the future:

> The one-on-one reflection has always been a moment of self-reflection. It is the moment where I am externalising something, when I stop to think about it. It is more like a conversation with myself and with people willing to help me. (2nd year)

> It encourages us to see ahead, which is something I had no habit of doing. It pushes us, provoke us: What do you want for yourself? How do you want it? Where do you want to go? Where do you want to be in 10 years? They make us reflect on which aspects we have already evolved and what else we need to develop to reach the goals we dream about. (3rd year)

The one-on-one reflection also plays an essential role in promoting the changes revealed in the group reflection. After this one-on-one dialogue, students feel better positioned to learn from their mistakes and move away from engaging in self-defeating behaviour. This awareness leads to a change in attitude, although the process is not always straightforward. As alumni put it, sometimes the value of this critical reflection only manifests itself at the end of the programme or when they start their professional lives:

> Advice is given and you fear implementing it. 'I do not have that problem; it's with not me'. A week or two later you start thinking, 'what if I do what I've been told, will I improve?' You remain in doubt for another week until you try it and, the first time, you do not feel a big difference. You try it again, a second, a third time. Then it becomes a habit, and it lowers your stress which improves your performance. I think the biggest issue the one-on-one reflection fosters is the resistance to change. (3rd year)

> After MEP, I started to make sense of what [the mediator] was talking about. For example, that if I find don't identify what I'm good at, it would be hard to exercise influence at the workplace. But only after MEP. (Alumnus)

Discussion

On the limitations of experiential learning, Reynolds and Vince (2007, 3) asked: 'How can we know that our personal perception of the experience is real? How stable is experience as a

concept related to learning?' This study empirically shows that, for business undergraduates, (1) experience alone can be an unreliable learning mechanism and that (2) a *guided* reflection process is central to extract more well-defined learning outcomes from experience.

Corroborating theoretical assertions by Raelin (2016), Helyer (2015) and Lambie (2009), participants repeatedly mentioned that, without reflection, the learning outcomes from experience would be unclear, misinterpreted or lost. As one interviewee put it, it would be hard to 'visualise' improvements. Central to how reflective learning operates in enhancing experiential learning is the process of guided dialogue. Our results show that, without such process, undergraduates would have difficulties to make sense of what happened in action. Consistent with Esterhazy and Damsa (2017), McLean, Bond, and Nicholson (2015), and Steen-Utheim and Hopfenbeck (2018), while the written assessment and feedback questionnaires produced as part of the MEP supported reflective learning, a deeper understanding of the experience was only obtained because students engaged in a mediated dialogue. Reflective learning requires an engagement from the student side that does not occur naturally. Left alone, some would not engage in reflection whatsoever, or worse, extract the wrong lessons from their experience. These findings support Ajjawi and Boud (2018) recent suggestion that feedback dialogue mobilises self-regulatory behaviour. However, expanding on their conclusions, we show that the feedback-to-self-regulation process is not straightforward, often requiring (and certainly benefiting from) a guided process. It calls for the support of external agents such as a lecturer, colleagues or a trusted agent.

The contribution of the different reflective learning instances

Our study expands the understanding of reflective learning by evidencing how the three reflective learning instances recognised in theory (in-action, on-action and critical) contribute to experiential learning and how the process benefits from dialogue. The first level of reflection happens already in action. Reflection-in-action activates students' knowledge by the need to solve a problem. However, as Schon (1987) proposed, knowledge is presented through a dialogue, with the problem mediated by the lecturer. This dialogue challenges students' assumptions and invites them to reflect on the merits of the knowledge they have just acquired.

But because reflection-in-action is a cognitive process too embedded in action, our results show that it is insufficient to unfold all the competence layers that experience can promote. Developing them requires an awareness of how others perceive our behaviour. One cannot just say, for instance: 'I am a collaborative individual' or 'I communicate well'. Such affirmations need external validation, a validation obtained when trusting peers (colleagues) to reflect-on-action. This process, we learned, can be daunting for students as it puts in check their self-image and confronts their internal beliefs. Nevertheless, it is one that participants deemed central to skill improvement.

This finding contrasts with research suggesting that one should avoid negative emotions as they debilitate one's ability to learn (Auster and Ruebottom 2013). Contrariwise, our results agree with Raelin (2007), and Finch et al. (2015), who assert that, while emotionally demanding, criticism constitutes an opportunity for self-discovery and change. However, as we have found, this process is greatly facilitated by a guided process of critical reflection.

To Hibbert (2013), critical reflection plays a central role in supporting students to positively direct their emotions. Similarly, our findings show that even though having one's performance evaluated and discussed with others (as in the group reflection) is beneficial, it does not mean that the student always processes it positively. This is particularly challenging if the assessment confronts one's self-image, a commonplace in experiential learning (Finch et al. 2015). However, by inviting learners to critically examine the outcome of the experience, frustration and insecurity can give place to self-awareness and self-efficacy. This is in line with Di Stefano, Pisano, and

Staats (2015, 6), who suggest that practising managers, 'by reflecting on and articulating the key lessons learned from experience, boost self-efficacy'. But expanding on this notion, our study demonstrates that, perhaps different from managers, undergraduates need a formal structure to guide them through this articulation process. Supporting Shepherd's (2004) theoretical assertion, discussing why failure occurred can inform students on the cause of failure, which reduces anxiety, facilitates learning and builds confidence. Along these lines, Adams et al. (2019) proposed that students with high self-efficacy benefit more from feedback. Our study shows that these effects are bidirectional: mediated reflection on feedback develops self-efficacy.

Conclusions, limitations and further research

For decades, management scholars have stressed the importance of reflection as a catalyst for experiential learning. Yet, to date, there is a lack of empirical understanding of how these catalytic effects take place in business education. Our study shows that, while reflective learning indeed transforms impressions from experience into better-defined competencies, a *guided dialogical* process is critical for the process to happen. Specifically, we found that this process happens at three levels. Reflection-in-action (mediated by the lecturer) promotes the transformation of theory into practical knowledge. Reflection-on-action (mediated by peers) brings to the surface skills and attitudes developed during action, pointing out competence gaps and stimulating self-evaluation. This self-evaluation, in turn, is enriched by a guided process of critical reflection, where students can release themselves from the success-failure tension of the experience, transforming negative emotions into self-awareness, enhancing self-efficacy and promoting change.

These findings carry relevant practical implications. As experiential learning spreads in business schools, educators should ask themselves how to maximise the learning effects of experience. Our results show that, if not for a guided dialogue process, it is likely that students would extract a meagre, wrong or misleading impression of experience. Not addressing this represents not only a missed opportunity but it can also undermine learning. Educators working with experiential learning should, therefore, carefully consider the importance of reflection in their practice. But they should not settle for reflection as one-way feedback, as most business schools do it today. Educators need to invest time in building dialogue mechanisms with and for students.

Limitations and further research

This study suffers from a few limitations. The strength of a case study design is the ability to examine the intricate details and relationships the case portrays. The downside is being too specific and thus limiting the generalisability of the results (Yin 2009). Although our data encompasses multiple cohorts (longitudinal), the results reflect the view of MEP students and their experience. While theoretical generalisation of the results to a similar population (undergraduate business students) is defended by Tsang (2014), the generalisation and transferability of our results would benefit from a sample including students from other universities and cultural backgrounds. Additionally, it is important to stress further that the dependency on guided reflection differs among students. Whereas the vast majority of students see it as relevant (as our survey shows), some are more and some are less dependent on the mechanisms described for sense-making.

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