A Team Coaching Model for Developing Criticality in Undergraduate Students

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ABSTRACT

This study investigates the implementation of a team coaching model in undergraduate education to facilitate critical dialogue and develop criticality in student-team work. It explored three unconnected areas: criticality, critical dialogue and team coaching. The paucity of studies in critical dialogue in undergraduate business education, the overarching definition of coaching in education, which focuses on personal development, and the limitations of critical thinking in problem-solving, support the significance of this study. The research proposes to bridge critical management studies and critical management education to facilitate critical dialogue in student-team work so as to develop criticality, that is re-conceptualised to support the need for business graduates to be able to address crisis and change. Two action research cycles were implemented at Deree – The American College of Greece, (NECHE accredited, and OU validated), during a period of 10 months and took various forms. These include eight semi-structured interviews with business faculty, reflecting on their experiences of assessed team-work in their modules; two orientation cycles to the coaching model; semi-structured interviews with the three co-coaches/co-researchers; three coaching sessions for every one of the 10 student teams that participated in the study and that were registered in the module Professional Communication; two focus group sessions; and electronic diary entries from the co-coaches and individual participants in the student-teams. The main findings of the study are that the proposed critical team coaching model can support critical dialogue and provide a fertile ground for student-teams to explore answers to questions, discover knowledge for themselves and construct knowledge through a collective dialogic process. The coaching fostered critical reflection and accountability and developed their criticality.

These findings add to the theoretical knowledge of team coaching in undergraduate education, which also provides a practical framework of orienting undergraduate tutors in implementing the team-coaching model. Moreover, it enriches the literature on formal and post-formal thinking with the re-definition of criticality and the evidence-based literature on critical dialogue. The findings also will inform future academic studies in higher education into the exploration of coaching student-teams for criticality.

Key words: Critical dialogue, Criticality, Team Coaching, Undergraduate Business Education

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1. INTRODUCTION

This study aims to explore the effects of a team-coaching model for developing criticality in undergraduate students. The purpose of this chapter is to provide an overview of the background that spurred the research question; provide an analysis of the aim of the study; clarify definitions of concepts used in the study; summarise the methodology used; and finally inform of the structure of the present study.

I. Background

Following the world economic recession in 2008, Business Schools have been trying to redefine their purpose (Mitroff, 2004; Phillips *et al.*, 2016). Some have acknowledged partial blame for producing the kind of graduates that were nurtured and were responsible for the financial crisis (Giacalone and Wargo, 2009; Parker, 2018) while others have remained silent, and others have moved on to question the relevance of research that continues to be 'uncoupled from the real world' (Bennis and O' Toole, 2005; Tushman and O' Reilly, 2007). Whether their purpose is to align their curriculum to market jobs and demands for the sake of making their graduates employable (Wolfe and Andrews, 2014) or they are teaching "greed and expect beneficence to be the outcome" (Huehn, 2016, p. 177) they are still far from situating societal responsibility, accountability and urgency as the drivers of collegiate business education.

What was said by Cunliffe et al. (2002, p. 492), at first glance, describes the resolve of the present: "The contemporary language of higher education has come to be one of production and consumption […] educating the "good employee" rather than the "knowledgeable citizen". Wolfe and Andrews (2014, p. 214) twelve years later urge universities to focus on "preparing a happy and successful workforce". Such thinking is not any different from what Freire referred to as banking education (Macedo, 2000).

Despite concerns about the role of business schools, one cannot disregard the emerging effect of Critical Management Studies conferences that have appeared regularly since 1996 (Cunliffe, 2002). CMS's rising prominence in the 1990s and 2000s (Butler and Spoelstra, 2014) within a wider multidisciplinary domain of organizational critique (Prasad *et al.*, 2016) have provided a strong voice of dissent. Adler et al. (2008) afford an overview of this 'growing movement'. Yet CMS has not been immune to criticism from within its own ranks. This has resulted not only in terms of the kind of research that is being published, which is to an alarming extent a

“dumbing down” of arguments (Butler and Spoelstra, 2014), but also its focus on non-performativity. Spicer et al. (2009, p. 538) argue for a ‘critical performativity’ that intercedes managerial practices rather than critiques from a distance.

The practical implications, however, for Critical Management Education is that CME in the UK is confronted with “renewed pressures for management programmes to train students *for* management rather than educate them *about* management” (Perriton, 2007, p. 1). What becomes tangible is while business degrees focus on “the successful understanding of the theories on offer and, often, the unquestioning reproduction of practice” (Perriton, 2007) there are critical management educators, on the side, using critical reflection (Cunliffe, 2002). Ostensibly, critical management education becomes an addendum to mainstream management theories, CSR and Business Ethics modules are added to the curriculum, and critical management studies have been given the status of a subdiscipline. Huehn's (2016) outcry that undergraduate business education has been stripped of its philosophical and ethical foothold in social science and has repositioned itself in positivism is an understandable but ultimately a sweeping claim. Despite the ushering of “non-positivistic social science of some hue”, Gray and Fournier (2010, p. 178) bemoan that in Business Schools of the UK “quantitative methods remain dominant and, ideologically, there can be little doubt that a managerial orientation *prevails* [my italics]”.

What can be inferred is that the Business School is demarcated into providing mainstream business degrees on the one hand, and on the other hand provide a prolific academic critical space for CMS research to expose the underlying power structures of such mainstream managerial theories. The mediator of the two is CME, which has produced a paucity of empirical studies. Despite the call for critical dialogue between managerial practices and business theories (Cunliffe, 2002; Perriton and Reynolds, 2004), this has resulted, at best, taking place in the form of critical reflection discussions initiated by critical management teachers in their undergraduate business classrooms, once mainstream managerial theories have been taught. Such critical reflections, however, are far from nurturing critical dialogue. That would require a Deweyan learning space, where knowledge transmogrifies from a static finished product in a textbook to a dynamic rediscovery of an explorer through questioning (Dewey, [1902] 2009). Within such a learning space, students ask questions to which *they* seek answers. In other words, as Abrami et al. (2014, pp. 290–291) explain, “The role of the instructor is to ‘psychologize’ knowledge to make students into

explorers who would work through genuine questions to rediscover, for themselves, the finished structure of knowledge". What is required is a different pedagogical framework that critically assesses 'pernicious ideologies' (Barnett, 2003), addresses 'grand challenges' (Whiteman *et al*., 2013; Ferraro *et al*., Etzion and Gehman, 2015; George *et al.*, 2016) or 'wicked problems' (Dentoni *et al.,* 2018) prevalent in the 21st century. Such a pedagogical framework is amiss in the undergraduate business classroom. A critical stance to social dynamics would give the collegiate business school the status of opening the future to its graduates to form, work through, and design. Dewey ([1902] 2009), I would suggest, was ahead of his time.

As an undergraduate instructor for 20 years, I have an insider's understanding of the role of a liberal arts education. Liberal arts colleges have tried to fill the gap between business, social sciences, philosophy and the arts with the liberal arts courses that all students are obliged to take, including business students. These courses, however, are uncoupled from the core courses of business. Strong critics of the business school reach the level of trenchant criticism (Huehn, 2016; Parker, 2018). The question that arises is whether CSR, Critical Management, and ethics should be separate from mainstream theory or incorporated as critical viewpoints in all business courses and not as addendums "once mainstream theory has already been covered" (Parker *et al.,* 2018, p. 16089).

With a managerial orientation *prevailing* in business education (Grey and Fournier, 2010), it is not a paradox that Business students are using their degrees to find a job in the market and are hoping to replicate their textbook managerialist styles. The sweeping generalization of Parker (2018, para. 6) that "[t]he business school only teaches one form of organizing – market managerialism" does not acknowledge or do justice to the many business schools that teach more than market managerialism. Yet, unwittingly, business educators believe that they are preparing their students for business careers. The corporate world, however, is confronted with numerous challenges for sustainable survival: environmental issues; social issues; a multicultural workforce; global competition; fight over energy, water, oil; international business and human rights (World Economic Forum, 2019). They are in need of graduates that can expect change, read crises, and problem-solve. That requires a different mindset and preparation (Ucok *et al.,* 2018). I contend that the role of undergraduate Higher Education is not only to critique corporate organisational culture and practices or scrutinize these under the microscope for examination, so as to continue to market its graduates for positions in the corporate world, but to

empower its students to envision business practices that can problem-solve such crises towards an inclusive, sustainable democratic society.

Despite changes that have been made to the business curriculum with a call for critical thinking and business ethics, the underpinning of a critical transformative pedagogy is still not evident. Students are not being prepared to function and work in a world of change and crisis, in other words a complex reality (Huehn, 2016). Undergraduate educators herald critical thinking as a major learning outcome in their modules and it appears as a major harbinger of graduate preparedness in their mission statements (Barnett, 1997; Pithers *et al.,* 2000; Higgins, 2014). Yet, critical thinking surveys conducted at the undergraduate level conclude the opposite (Flores *et al.*, 2012; Belkin, 2017). The gap between the need to problem solve in the corporate world and the need to distill such skills in undergraduate business students is a prevalent major concern (World Economic Forum, 2016; Lachs, 2017). What is at stake here is not fostering more critical thinking exercises throughout all levels of undergraduate business education, but the fact that the undergraduate business curriculum has chosen to show a blind eye in understanding that critical thinking skills (and in effect logic) are not sufficient in problem solving. Students are not being empowered with the tools of critical questioning and higher order thinking to envision and work towards an inclusive democratic future and work within and through change rather than be at a loss before change. With all the issues that abound in the world, it becomes evident that the collegiate business school needs to disenthrall itself from theoretical practices that have proven 'technorational', which satisfy "the unreflective business demand for 'hard data'" (Cunliffe, 2002, p. 492).

As a practitioner since 2000, my practice has been coaching high-level executives either to provide them with the learning space to think through their ideas facilitated by critical questioning or provide them with training in presentation skills or both. As an undergraduate instructor since 1999, I have always been concerned with ways to nurture critical thinking and have been mulling over concepts such as the role of higher education, pedagogy, crisis and youth, the learner, motivation, change, critical consciousness, and reflective learning. Based on a paper that I presented in May 2011 as a round-table discussion (Kostoulias *et al.,* 2011). I was motivated from the response of the academic audience to pursue further the development of critical dialogic pedagogy in the undergraduate classroom. I had argued then,

> Higher education is losing sight of the role of the student in the academe and in society at large, while educators are funneled into facilitating students

> rather than turning the object of their study into a transformative process of metacognition, [reflection], and empowerment in constructing a discourse of alternatives (667).

I believed then as I believe today that Higher Education has not created the learning spaces for its undergraduates to imagine a future of hope. It is far from nurturing its graduates to envision a future that requires tomorrow's professionals to address uncertainties, crises, and issues that abound. I believed then that if critical dialogic pedagogy were to be fostered in the undergraduate classroom, student empowerment, critical engagement can occur. In 2011, I was missing the how. The problem posed at the beginning of my doctoral journey, therefore, was what kind of thinking can prepare graduates for the challenges of the 21st century, which then led to what kind of learning environment could provide the space for it to be cultivated, and what kind of pedagogical intervention could be used to do so. Towards that end, even though team coaching has been implemented in the executive world, with prolific studies in the field, business education has not yet used team coaching to develop criticality so as to assist students to problem-solve within an environment of critical dialogue.

This doctoral study provided me with the learning, investigative space to propose the how. It gave me the opportunity to explore whether coaching in the undergraduate business classroom can facilitate a critical dialogic environment. My initial question: 'Is there a role for coaching in critical dialogic pedagogy?' underscored my pedagogical philosophy. Such a philosophy included a synthesis of Deweyan pragmatism, critical dialogic pedagogy (Freirean conscientization), higher order thinking (dialectical thinking), and the context within which these would interplay in project-based/problem-based learning with student teams. Once I decided the research question and began reading further into issues of qualitative research, I was able to focus my study, 'A team coaching model for developing criticality in undergraduate students'. I believe that critical dialogic pedagogy can empower the learner to investigate and search for answers to questions that will move beyond the 'I' and embrace, within a social criticality, the 'we', in a sense balancing the individual and the social, the Apollonian and the Dionysiac. I believe that coaching can bring about the balance between individual development and social responsibility through dialogue. This is a road that I have hopefully paved with the 'materials' from previous research to create a possibility of reaching a different destination that will open up horizons for coaching in higher education. I also believe that the research question

posed could be a prospective way of solving the problem in business schools by exploring the effects of a team-coaching model for developing criticality in undergraduate students.

Practicing reflexivity has played an instrumental role, like a strong dialogic tool, in terms of it being my critical naysayer, questioning my intentions and goals. Reflexivity has played a pivotal role in keeping me in check, understanding that there are multiple viewpoints, but it also has empowered me to make bold moves to tackle and sieve through, and it allowed me to refute back when I deem necessary. It brings into play who I am, what I have done and accomplished, my failures, my beliefs, my background, and questions the reasoning behind my every move, so that I am aware of any biases or stereotypes or anything else that may impede or influence my choices in the research study. At the beginning of this doctoral journey I knew what I wanted to accomplish, that is to say to explore coaching as a tool, an alternative pedagogy, and see whether it could empower dialogue to foster criticality (higher order thinking skills) in the undergraduate business classroom.

My pragmatist epistemological position and the fact that I have been in higher education since 1999 has guided me towards participatory action research, where hopefully change will take place for tutors who wish to provide students with a learning space to reason through, imagine, set goals and work through research to solve problems.

The prevalent research on the undergraduate student appears to have lost its Deweyan sense and is devoid of social responsibility, self-efficacy, engaged citizenship, and in effect any participatory decision making of the future. As educators, we seldom talk about the next generation of professionals, social agents or the next generation of citizens. Students are underutilised in the process. There is no clear pedagogical strategy of instruction in the undergraduate classroom apart from references to the lecturer as ‘facilitator’, guide, or ‘mentor’ (Betrand, 1995; Tavistock Institute of Human Relations and Cullen, 2002). How a lecturer facilitates, guides or ‘mentors’ has not been seen ‘in the light of instructional strategy’.

II. Aim of the Study

This study aims to explore the effects of a team-coaching model for developing criticality in undergraduate students.

The objectives are:

1. To critically review the literature on:
    a. critical thinking, criticality, and dialectical thinking in higher education;
    b. critical dialogue in higher education;
    c. coaching as an instructional intervention in higher education.
2. To clarify an initial team-coaching model of intervention to encourage individual criticality in undergraduates;
3. To analyse how criticality can be promoted in the undergraduate classroom in higher education.
4. To develop a team-coaching model within the context of HE and contribute to
    a. a theoretical understanding of criticality; and
    b. the literature on team coaching as a mode of delivery in HE.

A review of the relevant literature on criticality in higher education underscored a complex and confusing coexistence with critical thinking while other concepts were heralded as either integral to critical thinking or as more complex thinking. It also became important to situate critical thinking and criticality in the context of their significance following the Bologna Process in 1999 and the Lisbon Strategy in 2000. The Bologna Process was responsible for initiating a system of comparable degrees, course credits, and quality assurance of study programs of higher educational institutions in Europe to assist towards the mobility of students and teachers (The European Higher Education, 1999; European Commission/EACEA/Eurydice, 2018). The Lisbon Process in 2000 (European Parliament, 2000, para. 1) envisioned “a new strategic goal for the Union in order to strengthen employment, economic reform and social cohesion as part of a knowledge-based economy”.

Their subsequent updates made critical thinking one of the key or ‘transversal’ competencies in higher education. Notwithstanding the proclamation, the outcome of research corroborates that educational institutions are ‘falling short on their goal of imbuing criticality’ (Flores *et al.*, 2012; Higgins, 2014; Dunne, 2015) and that both critical thinking and criticality ‘are not sufficient, even in combination’ to address the issues that abound (Higgins, 2014). Still work at the level of the European Commission/EACEA to fund projects, such as the attempt to devise an educational protocol on the importance of critical thinking in higher education, its teaching and implications, chooses to ignore research on post-formal thinking (Elen *et al.*, 2019). Even more, the specific protocol differentiates critical thinking from problem solving

and creative thinking, choosing to use a definition synthesised by Facione (1990), a result of consensus from a Delphi study. One questions the reasoning behind such a decision since the authors proclaim the inadequacy of critical thinking skills in graduates. Doing more of the same and expecting different results is not congruent with rational thinking. Yet the authors reserve culpability at the institutional, faculty, and course level, and in a mitigating effort, they issue four mediations: “to model, to induce, to declare, to surveil” (see Elen et al., 2019, p. vii). It could explain also the authors’ reasoning that their objective is solely the European context as if education can be regionalised. The times demand different approaches to prepare our graduates to problem-solve. This has opened-up the opportunity to bring to the fore research on postformal thinking and in particular dialectical thinking and its connection to critical dialogue.

Kramer (1983) posits a lucid understanding of what constitutes post-formal thinking:

> (a) awareness of the relativistic nature of knowledge,
>
> (b) acceptance of contradiction, and
>
> (c) integration of contradiction into the dialectical whole. (Wu and Chiou, 2008, p. 238)

Dialectical thinking not only increases creativity but also provides the mindset to think about change and utilise critical dialogue. There is a clear link of dialectical thinking with creativity in college students between the ages of 19-26 (Wu and Chiou, 2008). Moreover, Laske’s work (2009) on dialectical thinking and Dafermos’ (2018) recent work on dialectical thinking and dialogue, provide an interesting intersection. Laske (2009) argues that dialectical thinking can provide the mindset to understand and capitalize on both change and crisis. Dafermos’ (2018) review of dialectical thinking and dialogue, two seemingly incompatible areas, open up areas in pedagogy to be seen as compatible.

A literature review on dialogue/critical dialogue in the business undergraduate classroom generated no results with the word ‘dialogue’ in journal titles. When dialog* and business education were used, a paper by Cunliffe (2002, p. 35) was found that argued for a “reflexive dialogical practice in management learning” that would provide a bridge between critical reasoning and critical action, resembling to a large extent Barnett’s (1997) theoretical explication of criticality. A possible answer as to why business education and critical dialogue have not found a platform within the academic research community could be because “business theory and education suffer from having been systematically de-philosophised over the last 200 years”

(Huehn, 2016, p. 170) and dialogue has its roots in dialectics. Huehn's (2016, p. 171) argument that the de-philosophisation of management has removed from business schools their focus on educating students to training them 'in tool use' has merit. Yet dialogue is "perhaps the most important goal of education" (Ravenscroft *et al.,*2007, p. 10), and a "human phenomenon" (Macedo, 2000, p. 87), in effect a humanising act. Dialogue in the Freirean sense would require the teacher be the student and the students be the teacher (Macedo, 2000). Even more, for Freire (2000) epistemological curiosity and use of dialogue as a means are found in problem solving.

Reviewing the relevant literature on coaching as an instructional strategy has opened up new challenges to be addressed. It seems that there is no consensus as to what coaching is in education, let alone higher education. According to van Nieuwerburgh (2012), coaching becomes an intervention in education that focuses solely on enhancing the success and wellbeing of learners; developing the capacity of educational leaders; supporting the professional practice of teachers and other staff in schools; and developing better relationships with members of the community.

What one can infer is that education and educational outcomes are not questioned but supported, and coaching is used under the umbrella of positive psychology to support and develop relationships as well as wellbeing focusing on the individual. Shoukry and Cox (2018, p. 1) are critical of such coaching practice arguing that "neoliberal values have been embedded in the discourse of coaching" and advocating an understanding of coaching as a "social process". As such, they contend that coaching can be "an enabler for change" (p. 1). Surely, education and pedagogy are about change. Even though the influence of van Niewerburgh has been significant, without a doubt, unwittingly these areas of coaching are also mirrored in higher education. Van Nieuwerburgh's (2012, p. 17) definition of educational coaching seems to pose limits to the potential of coaching in education. Educational coaching, he defines as

> a one-to-one conversation focused on the enhancement of learning and development through increasing self-awareness and a sense of personal responsibility, where the coach facilitates the self-directed learning of the coachees through questioning, active listening, and appropriate challenge in a supportive and encouraging climate.

The role of coach as facilitator precludes any learning taking place, resembling the role of facilitator in the classroom. Clutterbuck (2014, p. 278) refers to the differences between team coach and team facilitator, highlighting that the team coach

> shares the learning process…and acquires learning or change through the process [while the team facilitator] directs/manages the learning process [and] … remains largely unchanged.

The facilitator echoes what Giroux referred to in an interview with José María Barroso Tristán as "a conservative notion of teaching" where "teaching becomes synonymous with a method, technique, or the practice of a craft—like skill training" (Tristán, 2013, para. 3).

In addition, the research on team coaching in the undergraduate classroom is sparse. Very few empirical studies report the use of team coaching. The foci are on coaching graduate students or student assistants to enable student teamwork effectiveness (Sargent *et al.*, 2009); coaching student teams as one of many facilitative pedagogical strategies without reference to what this coaching entails (Ettington and Camp, 2002); training research coaches (graduate students and/or advanced undergraduate students) to support groups of students in research (Sangster *et al.*, 2016); and training student teams in agile routines with a focus on stand-up meetings (Stettina *et al.,* 2013). Two interesting adjuncts to the above are a study by Stein et al. (2013) and a study by Catchings (2015). The former study reports the findings from an intervention of coaching to support higher order thinking skills in groups of students on chat rooms, using the widely adopted Community of Inquiry (CoI) framework in online and blended education. The latter study focuses on coaching undergraduate students in an effort to increase six skills sets of critical thinking. The coaching resembled the role of the facilitator and tutor. Both studies implement a directive and evaluative form of coaching.

Although coaching is a professional practice with accrediting bodies certifying coaching credentials, anyone with a basic education and the funds can become a coach and belong to numerous coaching associations with supervision being included as one significant factor in attesting to the credibility of a coach. I believe that when it comes to higher education and the undergraduate classroom, the undergraduate tutor (that fulfills certain criteria) has the most potential to add the critical mindset to coaching to enable critical dialogue and support the unfolding of criticality in problem-solving.

This study identifies the need to define criticality anew as well as define the critical team coaching proposed.

Definitions

Rorty's core concept of "rediscription", which refers to "[…] speaking differently rather than for arguing well' as 'the chief instrument for cultural change' (1989, p. 7)) empowered my thinking and understanding of criticality and team coaching. As Reason (2003, p. 304) argues: "We need to speak differently in the face of an entrenched vocabulary".

Criticality: A definition of criticality cannot exclude the individual without its reconstruction into 'social intelligence'; it cannot exclude the pursuit of higher order thinking (dialectical) to discover through enquiry interrelationships and contradictions; it cannot exclude critical reflection on power structures, a result of racialism and neoliberal values; it cannot exclude problem solving; and finally it cannot exclude the 'growth' of the individual.

In effect, the definition of criticality adopted for this study is synthesised from five integrative concepts:

The reconstruction of the individual into social intelligence (Dewey, [1926] 2012). Experience is seen through the lens of the social, going beyond its impact on the individual. In effect, former individual habits are discerned and a renewed apprehension is created of how it affects others. As such, individual development is seen in alignment with social responsibility.

The pursuit of higher order thinking (dialectical) to discover through enquiry interrelationships of reality and its contradictions (Bidelll 1988). Such thinking steers one to discover the historicity of an issue, unravel contraventions and disparities in the present, and reformulate a revived viewpoint through synthesis that enables future possibilities.

The exercise of critical reflection on power structures that are a result of racialism (Brookfield, 2003) *and neoliberal values.* Disclosing the causes and effects of racialism and neoliberalism on experience whether individual or social is paramount to the development of democratic values and a reassessment of power structures;

The undertaking of problem solving. Problem solving becomes the means to address issues through employing social intelligence, dialectical thinking, and critical reflection on power structures and be able to forward solutions; and

The growth of the individual. Ultimately, through social intelligence, dialectical thinking, critical reflection, and problem solving, the individual is in a state of progress, *ἐν τῷ γίγνεσθαι* (in the making). The growth of the individual, in other words, is not static or final, it is in a continuous process of becoming.

Team Coaching

Before proposing a definition of critical team coaching, it is important to discern the difference between group and team and whether team coaching is unlike other interventions. According to Thornton (2010, p. 11) "[a]ll teams are groups, but not all groups are teams". Groups get together "for the purpose of learning" (2010, p. 9) while teams are created because of "an explicit shared purpose and/or task" (2010, p. 11). Learning is not highlighted in Thornton's conceptualisation of team. However, it is an important process and outcome in student teams in undergraduate education. It seems, too, that learning plays an important role in coaching executive teams (Clutterbuck, 2014; Jones, Napiersky and Lyubovnikova, 2019) as well as a process and outcome for the team coach (Clutterbuck, 2014). Another point is that team coaching is, also, distinctly different from team training, team building, and team development (Clutterbuck, Gannon, Hayes, *et al.*, 2019; Jones, Napiersky and Lyubovnikova, 2019).

Despite the challenges identified in the literature on defining team coaching, there seems to be an agreement on team coaching's two core principles that of engaging the whole team as a 'collective process' or as 'a system' and the coaching being 'non-directive' and 'exploratory' (Clutterbuck, Gannon, Iordanou, *et al.*, 2019; Jones, Napiersky and Lyubovnikova, 2019). Jones *et al.* (2019) attempt a construction of a definition of team coaching based on the responses of 410 team coaching practitioners that were thematically synthesised in alignment with "the existing TC definitions and the definitions of team training, team building and team development" (2019, p. 71). Their study is the first to employ an "abductive approach with an emic perspective" (2019, p. 63). Their resulting definition consolidates the distinctness of the team being 'a system', the coaching being "applied collectively to the team as a whole", the team learning being strengthened through "self and team reflection", the team coach affording no "advice or solutions to the team", the focus being that "on

team performance and the achievement of a common or shared team goal", and the provision of team coaching "over a series of sessions rather than as a one-off intervention" (2019, p. 73).

What is a possible limitation to the Jones *et al* (2019) study is that the team coaching practitioners were asked only three open-ended questions: "How do you define TC?", "How is TC different to one-to-one coaching?", and "How is TC different to other team development interventions?" (2019, p. 68). Even though the responses collated by the researchers to the first question identify 'facilitating' the team to reach their common goal, building synergy among the team members is the driver that enhances team performance and learning (2019, p. 60). Clutterbuck (2014) refers to the differences between team coach and team facilitator where he underscores also the importance of shared learning between coach and coachees. Facilitating a team to achieve their goal is merely directing their learning process, leaving the team coach unchanged. What could have been asked by Jones *et al.* (2019) as open-ended sub questions are what kind of learning takes place, who does it impact, what is the dynamic between coach and coachees?

The difference between the definition above of team coaching and the definition of critical team coaching lies in purpose, environment, and the dynamics between team coach and team. The purpose is to develop criticality in the team in their creative process of problem solving (Wu and Chiou, 2008); the environment cultivated is that of critical dialogue (Freire, 2000; Brookfield, 2001; Bohm, 2013; Dafermos, 2018), which is nurtured through questioning (Cox, 2012), and team discovery, a result of research, and the equal dynamics between the team coach and the team (Rogers, 2008; Shoukry, 2016), which is fostered within a safe (brave) climate (Arao and Clemens, 2013).

Critical Team Coaching in Undergraduate Education: A definition of critical team coaching would require a safe (brave), equal environment, where the coach uses questioning and active listening to usher self-awareness in the team, ownership of responsibility, and social intelligence, creating a dynamic interplay of critical dialogue and reflection among coachees so as to develop criticality, in their quest for answers to creatively problem solve.

III. Methodology

The research paradigm used is that of critical pragmatism, which underscores both the aims and the objectives of this study. Critical pragmatism sees social reality in flux where "patterns of injustice and inequality" are exposed (Kadlec, 2006, p. 539); education and democracy as one (Dewey, [1916] 2015); individualism as 'reconstructed' into 'social intelligence' (Kadlec, 2006); problem solving as consequential (Midtgarden, 2012); knowledge as learning through experience, enquiry, and participation (Dewey, 1938); and dialogue (Vannini, 2008) used in pursuit of "reconstructing possibilities where others might initially perceive or presume impossibilities" (Forester, 2012, p. 6).

Based on these principles, studying an initial team coaching model for developing criticality in an environment of undergraduate higher education was conducive to exploring the research question. I believe that the implementation of team coaching for criticality as an additional pedagogical strategy could provide a critical dialogic setting for higher order thinking to take place to utilize teams' creativity in problem-solving. The initial team coaching model is a result of my personal experience in coaching undergraduate student teams since 2011. It provided me with "a general guide or a framework of ideas for understanding and navigating an approach to coaching" (Lennard, 2013, p. 4). The initial coaching model is described in detail in Chapter 4.

The principles of investigation, collaboration in knowledge creation, and critique that would lead to improvement of the model were essential; hence the decision to use action research as the research strategy. According to Hughes and Albertyn (2017, p. 307) action research "provides a systematic process for investigating change and improvement in practice in a given context". Furthermore, Levin and Greenwood (2001, p. 105) suggest, "Action research is inquiry where participants and researchers cogenerate knowledge through collaborative communicative processes in which all participant contributions are taken seriously".

Following reflection, several choices were made when designing the action research strategy. Those were choice of institution to implement the research strategy, choice of module that used student teams to be coached, and choice of tutors who would become co-coaches and co-researchers in the study.

The choice to implement the initial team coaching model at Deree – The American College of Greece, was made because it is accredited by the New England

Commission of Higher Education (NECHE) and validated by Open University (UK). Deree, combines both American and British higher educational standards. Thus, the findings should have a wide relevance in Higher Education.

The team-coaching as an alternative pedagogical intervention took place in the module EN3942 – Professional Communication. The module fulfilled a number of criteria: it is a problem-based/project based module; a good number of student-teams are formed every semester so that the goal of five volunteer student-teams for every action research cycle could be feasible; the course is taken mainly by business students but also by other majors, broadening the base of the investigation; and it is mainly taught by English instructors, yet grades are validated at the Business Exam Board.

The coaching intervention would take place when student-teams are formed to decide on a focus for their Analytical Report, which is directed to a real audience and solves an issue or identifies an opportunity for an organisation or company.

The design of the research used Marsden and Piggot-Irvine's (2012) Problem Resolving Action Research model (PRAR). The model allows for a consideration of participant contributions in reflecting and acting on improvements to the coaching model. The PRAR model's spiral approach (an iterative process of observing, reflecting, planning and acting) lends itself to three cycles, which are preceded by an initial step, that of defining the issue. The cycles are examining the existing situation, implementing a preliminary coaching intervention, and evaluating the coaching intervention. The model, also, includes two 'spin-off' cycles. The first spin-off' cycle was used to reflect on the findings, together with the volunteer tutors, defining the issue, the examination of the existing situation and the initial coaching model. The second 'spin-off' cycle was used to reflect on the implementation of the coaching intervention with volunteer-tutor input and student-team input.

The research took place between May 2018 and February 2019. It included the following three groups of participants: volunteer tutors, volunteer student-teams and volunteer business faculty.

Volunteer Tutors: Two volunteer tutors participated in each action research cycle (Summer Term 2018 and Fall 2018). Data was collected in the form of audio recordings (orientation to the coaching model, semi-structured interviews and coaching sessions with the student-teams); and electronic data from the reflective diary entries.

Student-teams: Ten student teams (five for each action research cycle) participated in the study. Data was collected from audio recordings of the coaching sessions and focus group sessions, and electronic diary entries.

Business faculty: Eight business faculty volunteered to participate in the study. Data was collected in the form of audio recordings of the semi-structured interviews that took place in the first action research cycle (Summer Term 2018).

A detailed description of the action research model as well as the five interventions that were implemented is given in Chapter 3: Methodology.

IV. Structure of the Thesis

How the thesis is structured is shown in Figure 1.1. In Chapter 2, the literature review, I critically review critical thinking/criticality/ and post formal thinking; the pedagogy of dialogue; and finally coaching in education, including higher education with a focus on team coaching. A gap is identified in the interconnection of criticality, critical dialogue, and team coaching, which informed the philosophical foundations of the initial team coaching model presented in Chapter 4. In Chapter 3, the methodology, I present the world view of critical pragmatism, the research strategy implemented, that of action research, the research methods used to collect the data, the method used to analyse the data, and ethical considerations and research validity of the study.

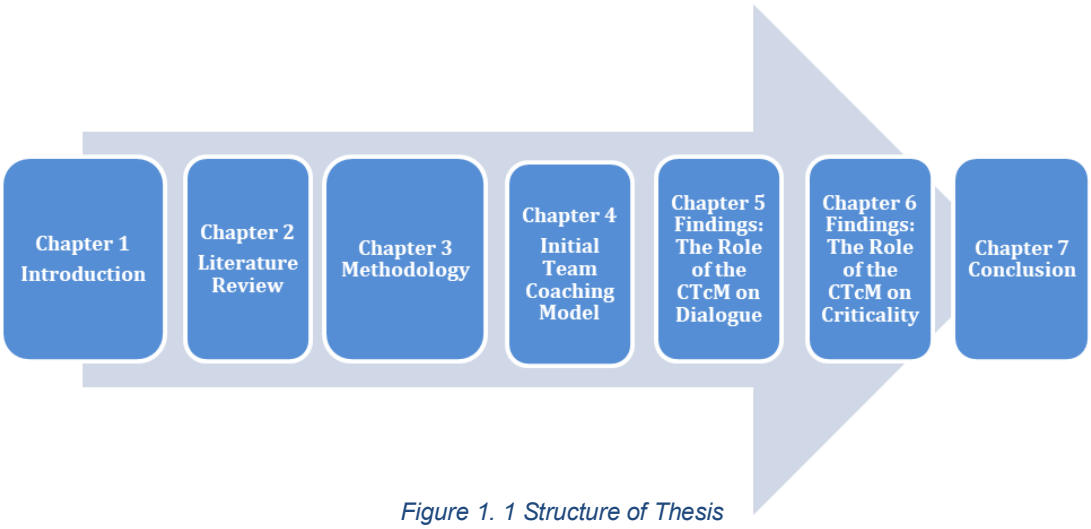

Figure 1. 1 Structure of Thesis

Chapters 5 and 6 present the themes deriving from the data collected from implementing the team coaching intervention in two cycles (CTcM: Critical Team Coaching Model). In Chapter 7, both contributions and implications from the study are critically presented. This study proposes a theoretical and practical framework of

implementing a team coaching model as an instructional intervention in the undergraduate business classroom that uses student-team problem-based/project based assessed work. As such, this study could also enrich the wider coaching literature in HE and include a team-coaching model for criticality to be used as an intervention to bring about the needed criticality skills in undergraduates. It hopes also to redefine criticality and coaching in HE, contributing to a theoretical understanding of both concepts. On a final note, both limitations and future considerations to the study are discussed.

2. LITERATURE REVIEW

A qualitative literature review was undertaken with a focus on criticality, critical pedagogy/dialogue and coaching in higher education. The following electronic databases were used: (Taylor & Francis, Eric, Science Direct/Elsevier, ProQuest, Emerald Journals, PubMed Central, MEDLINE/Pubmed, Directory of Open Access Journals, Store Room Theses, Informa-Taylor & Francis), Google Scholar, e-books and books. Key contextual filters were often combined to narrow the breadth of articles. These were business education, undergraduate studies, coaching in higher education and critical pedagogy, coaching student-teams/groups in higher education, dialogue/critical dialogue in business undergraduate education, pedagogy, criticality, critical thinking, and dialectical thinking. The focus of the literature review was to discern the effectiveness of critical thinking in higher education, the importance of critical dialogue in business undergraduate education, and identify the landscape of coaching and team coaching as an instructional intervention in undergraduate education. As a result, three key areas have been identified for review:

- Criticality in Higher Education
- The Critical Dialogic Approach in Business Education
- Coaching and Team Coaching as an Instructional Pedagogy in Higher Education

In the first part, I discuss the literature on criticality in terms of critical thinking and post-formal thinking and explore the potential of dialectical thinking for higher education. In the second part a review of critical dialogue in the undergraduate business classroom is discussed, which highlights the absence of published literature on the subject. In the third part I discuss the intervention of coaching in education and in particular in higher education as well as focus on discussing the literature on team coaching as an instructional intervention in the undergraduate setting. What becomes apparent from the literature review (see Figure 2.1 on the next page) is the discerned gap of coaching being used as an intervention to develop criticality through critical dialogue with undergraduate teams, thus, providing justification for the purpose of this study.

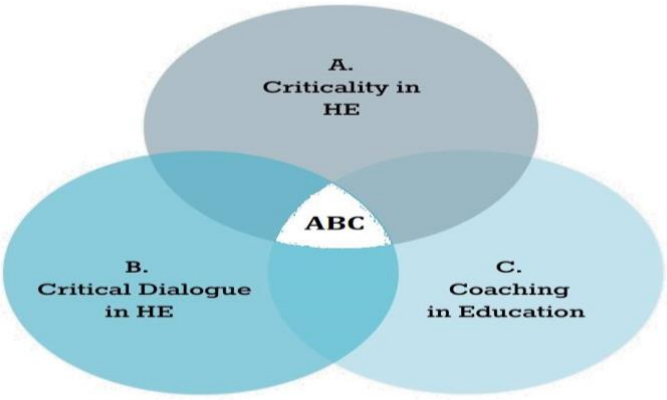

Figure 2. 1 Overview Mapping of the Literature Review

A. Criticality in Higher Education

A review of the relevant literature on criticality in higher education underscores a complex coexistence with critical thinking. Other concepts, too, are heralded as either integral to critical thinking or as more complex thinking, such as creative thinking, deep thinking, 'productive thinking,' 'higher order thinking', and critical stance.

With the introduction of the Bologna Process (1999, 2012, 2015) critical thinking became the penultimate goal to 'good thinking' (Pithers *et al.,* 2000). The need for graduates to think and problem solve (Pithers *et al.,* 2000), to analyse, synthesize and evaluate have become paramount since educational outcomes have become connected to national development (Pithers et al. 2000; Higgins, 2014). It is no surprise that critical thinking has become, therefore, a major learning outcome and highlighted in every mission statement of universities and colleges. In fact, it "is one of the key or 'transversal' competencies agreed on in 2000 as part of the Lisbon framework for international progress towards shared goals" (The European Higher Education, 1999; Higgins, 2014, p. 566).

A joint study by the Lisbon Council and Accenture (2007) identifies a mix of knowledge skills and enabling skills that are required for a knowledge-based economy. The enabling skills are technological, informational, problem-solving, adaptability, and team-working (8). For Higgins (2014) critical thinking (along with creativity, initiative, problem-solving, risk assessment, decision-taking and constructive management of feelings) runs across or is embedded in all the competences, but particularly communication, digital competence and civic

competence. Hence, the focus for Higher Education is on supporting employment and changing work patterns, which logically "affects how [one identifies] the final goals of learning, and how [one] can support how a student reaches these goals" (Higgins, 2014, p. 561).

A shift from critical thinking ('internalised cognitive reasoning') to criticality has identified further confusion between how critical thinking is connected to criticality, beyond its denotative use that of "a state of being critical" (*Collins Online English Dictionary*, 2019). As such, criticality is not used as a noun here but as mode of thinking. Without being exhaustive, critical thinking is defined in a plethora of ways with respect to criticality, as

- a generic skill appearing in theories of criticality (Danvers, 2015),
- one of the different forms of criticality (Banegas and de Castro, 2016)
- a major approach to criticality (Hughes, 2013),
- a 'broader kind of criticality' (Pemberton and Nix, 2007),
- a narrower concept than criticality (Johnston, 2008),
- a field of three domains ---that of knowledge, self and world--- which transforms into a model of criticality, (Hammersley-Fletcher and Hanley, 2016),
- a different domain of knowledge from that of criticality (Dunne, 2015), and
- a prerequisite to criticality (Barnett, 1997).

Stables (2003) identifies the reason for this confusion suggesting it is due to the "assumptions of criticality in the Western liberal tradition [being] by no means uniform, constant or uncontested" (p. 666). Nevertheless, this part of the literature review will embrace critical thinking as a generic skill and in effect a prerequisite to criticality.

In his seminal work on criticality, Barnett (1997, p. 4) expounds that the purpose of higher education is to form "critical persons who are not subject to the world but able to act autonomously and purposively within it," (p. 4) and are able to reach "critical being" as a result of integrating the three forms of criticality: critical reason, critical self-reflection, and critical action (p. 179). In effect, he spearheads an understanding of higher education as responsible for creating critical persons that can reason, reflect and critically act. It becomes evident that merely focusing on critical thinking is inadequate (Johnston *et al.*, 2011, p. 18).

Even though a number of studies following Barnett's conceptualisation of criticality present a clear distinction between critical thinking and criticality, Barnett's initial concept of criticality is blurred. Johnston et al. (2011) separate the pure instrumental cognitive operations of critical thinking from criticality as a response to incorporate 'the individual self' or 'critical being' (Barnett, 1997; Houghton and Yamada, 2012; Dunne, 2015). Dunne (2015) posits a major difference between critical thinking and criticality. Critical thinking is static in that it encompasses internalised reasoning processes while criticality is dynamic in the sense that these internalised reasoning processes transmogrify into 'critical being in action'. Dunne defines:

> Critical being emancipates from the epistemic slavery imposed by convention and empowers us to question the rules, to meticulously scrutinize and update them where necessary; to rigorously test and refine them, and most important of all, continuously revise them in light of our lived experience, our being-in-the-world. (2015, p. 92)

Dunn (2015, pp. 93–94) further presents four major differences between criticality and critical thinking that I have summarised in Table 2.1 below. However, these major differences blur the conceptualization of Barnett's exposition of criticality:

Criticality	Critical Thinking
1. Repositions the totality of self: a. Beginning with personology b. First-person experience c. Healthy skepticism: transcends immutable rules, axiomatic logic and inherited wisdom	1. Atomises reality and suppresses the first-person experience in favor of a third person perspective; solely truth oriented.
2. Considers reality as an ontological case, seeing with both eyes.	2. Sees truth as an epistemic construct that neglects the real, imposing a cognitive rubric on lived experience; seeing with one eye.
3. Considers critical persons as more than just thinkers: they can critically engage with the world and with themselves, as well as with knowledge, constituting a 'personal epistemology.'	3. Thinking with a 'critical edge' (Barnett 1997: 17)
4. Is critical being in action through phronesis (Aristotle) and prudence (St. Aquinas).	4. Can be reduced to a formulaic list of fallacies.

Table 2. 1 Differences between Criticality and Critical Thinking

A further comparison of the ideas presented in Table 2.1 could be that in criticality the 'it' is personalised while cognitive thinking is transformed into personal engagement with the world, through 'phronesis' and 'prudence.' Dunne (2015), however, has misconstrued Barnett's (1997) explication of critical thinking. While 'critical thought' finds itself as "one of the higher levels of *critical reason*" (Barnett, 1997, p. 179), critical thinking is "merely a level of critical reason and one of the lower levels of critical reason at that" (p. 179).

Despite Barnett's concept of 'critical being' (a summation of critical reason, critical self-reflection and critical action) having not found followers, the notion 'criticality' has taken on a life of its own. Yet it seems that both critical thinking and criticality are wanting. Despite the consensus in the academia as to the salient position of critical thinking, there are voices that further criticise critical thinking. In and by itself, critical thinking stands as a stepping stone of instrumental learning, rather than an all-encompassing higher-order form of 'human thinking', a term used by Elder and Paul (2011, p. 38). Johnston et al. (2011, p. 49) in their literature review of critical thinking refer to five overarching limitations to critical thinking approaches:

1. few teachers or students know the logical rules from analytical philosophy;
2. long-term memory is used to reach conclusions rather than relying on logical thinking;
3. critical thinking approaches view rational thinking as separated from social and intellectual contextual knowledge;
4. critical thinking processes focus on deconstruction and evaluation of arguments rather than construction of arguments or formulation of critical actions;
5. critical thinking focuses on the individual but does not consider how to foster appropriate dispositions.

Rudd (2007), also, differentiates critical thinking from higher order thinking:

> Critical thinking is not a 'catch-all' category for higher order thinking. It is one of a family of closely related forms of higher order thinking. Others include problem solving, creative thinking and decision making. (p. 48)

Further research highlights the shortcomings in teaching both criticality and critical thinking. Whether it is critical thinking or criticality there is a clear disconnect between

intent and pragmatic institutional outcomes (Flores *et al.*, 2012). Pithers & Soden (2000) in their literature review of critical thinking in education highlight a disconnect between teaching methods of critical thinking and student learning outcomes in critical thinking. Barnett (1997, p. 175) bemoans: "The degree and level of criticality that they [academics] have encouraged in their students has been limited even in relation to formal propositional reasoning." Dunne (2015, p. 87) adds, "Educational institutions are falling short on their goal of imbuing criticality" and Higgins (2014, p. 559) warns, "although both critical thinking and 21st century skills are indeed necessary in a curriculum for a 21st -century education, they are not sufficient, even in combination."

Kallio (2015, p. 28) in a review of the major theories in adult thinking, states that "Piaget's theory of cognitive development […] has bound scholars in recent decades when it comes to research on thinking skills." Piaget in expounding his developmental stage theory was interested in studying how cognition develops and focused on causal thinking as being the highest form of adult cognitive development. Research, however, has identified the limitations to such thinking, ushering postformal models of cognition. Kallio (2011) in her exposition of the major lines of research in cognitive thinking, Piagetian (formal thinking) and neo-Piagetian theoretical hypotheses, (post-formal thinking: relativistic-dialectical thinking, wisdom and myth thinking) succinctly argues that "the diversity and lack of uniform terminology used to describe adult thinking has resulted in some confusion and fragmentation" (p. 787). In fact, it comes as no surprise, therefore, that terminology such as post-formal thinking (Perry, 1970; Wu and Chiou, 2008; Kallio, 2011, 2015), integrative thinking (Kallio, 2011), wise thinking (Baltes and Staudinger, 2000; Grossmann, 2017), double-loop thinking (Argyris, 1977), mythos thinking (Labouvie-Vief, 2015), process relational thinking (Edwards, 2011), and epistemic understanding (Kallio, 2011), have appeared as a response to the limitations of formal thinking (critical thinking) and dialectical thinking is being revisited (Basseches, 2005; Laske, 2009). Despite ontological differences that exist in these models as to the world-view and raison-d'-etre of such thinking, there is one common element that of a dialectical relationship of "non-absolutistic relativistic thought" (Kallio, 2011, p. 788).

The World Conference on Higher Education (UNESCO Division of Higher Education, 2010) highlighted the need for HE to address the prevalent crises of the 21st Century-- what Laske (2009) identifies as 'crucial junctures'. Laske (2009) provides an

interesting perspective: “Crisis…is logically built into the fabric of the real world but shows itself only at certain crucial junctures where transformations are especially deep” (para. 5), and the 21st century is clearly experiencing ‘crucial junctures’ – economic, technological, environmental, geopolitical, political, educational, and social.

Dialectical thinking from both an epistemological (how we create knowledge) and ontological (how we become in this world) viewpoint can be used to think about and think through crisis and change. Anchin (2008) refers to its dynamic dialogical interplay with elements that stand in direct opposition or contradiction and its process of synthesis. Laske (2009), in fact, asserts that crisis and change are ‘dialectical terms.’ Kramer (1983) succinctly argues that the difference lies in that both formal thinking and dialectical thinking represent different world-views. Formal thinking is “mechanistic and static” while post-formal or dialectical thinking, is “contextualist and dynamic” (Kallio, 2011, p. 789). Philosophically, this binary opposition could be further juxtaposed in Platonic terms as ‘being’ and ‘becoming’ or in Piagetian and Bassechean terms as ‘teleological’ and ‘developmental transformation’, respectively.

In a literature search of dialectical thinking, various synonyms come into play: mode of ‘post-formal thinking’ (Wu and Chiou, 2008), systemic thinking (Laske, 2009), transformational thinking, constellation thinking (Letizia, 2013), ‘process relational thinking’ (Edwards, 2011) or ‘the dialectic’ (Sternberg, 1988) to name a few. Hegel, as Laske (2009, para. 44) informs, identifies it as ‘pre-suppositionless thinking’:

> Such thinking is unconstrained by ideologies, habitual assumptions, single organizing principles (such as linear causalities), logical hierarchies, or anything that gets in the way of “seeing what is before us” as opened up through dialog and reflection.

Conducting a literature review on dialectical thinking in HE revealed very few studies having dialectical thinking or post-formal thinking in their titles. To identify a definition, Kallio (2011) proposed the concept ‘integrative thinking’ since integration “seems to be the core component in models of adult cognitive development” (p. 785) to counter the difficulty that “lies in the theoretical definition of [the] concepts [of relativism and dialectical thinking]” (p. 785). A review of definitions by Kramer, Basseches and Laske sieves through convoluted expressions of negativity, “the other” or “transformation of

forms" adding further to the difficulty of the concept. Basseches (2005) clarifies dialectical thinking in his exemplars rather than defines it. Anchin (2008, p. 802) provides a clear description of the term:

> Ontologically, the dialectic fundamentally denotes bipolarity, wherein two elements stand in direct opposition or contradiction to one another but through their dynamic interplay they create a holistic system (Rychlak, 1976a). Dialecticism's epistemology logically follows. In applying a dialectical method, one seeks to understand a given phenomenon or process through undertaking a 'dialogue' between the opposing sides of the bipolarity, recognizing that each, being an integral part of the whole, contributes important knowledge about the phenomenon or process under consideration (Downing, 2000).

From the above definition and for the purposes of this literature review, three words stand out: dynamic interplay, dialogue and synthesis while in a quantitative study conducted by Wu and Chiou (2008) with late-adolescent college students, it seems that there is also a strong connection of creativity to dialectical thinking. All four notions (dynamic interplay, dialogue, synthesis, creativity) are important elements of coaching that will assist in defining the role of coaching for higher education. One more element from the dialectic that defines the epistemological position of the author is Hegel's dialectic method. Hammond (2013) sums it succinctly:

> Hegel wanted us to view the world not in terms of what is but what it is in the process of becoming or what it has the capacity to become; only by understanding the contradictory elements within a phenomenon we will be able to comprehend it. (p. 607)

Paul (2001), in contrast, uses both dialectical thinking and dialogical thinking as tools of critical thinking. Paul (2001, p. 309) argues that "students learn best in dialogical and dialectical situations, when their thinking involves dialogue or extended exchange between different points of view or frames of reference". Dialectical thinking, according to Paul, is using dialogical thinking to test strengths and weaknesses of opposing sides. Burbules and Berk's (1999) notion of critical thinking being used to "[…] seek reasons and evidence…diagnose invalid forms of arguments… [and] make and defend distinctions" (p. 48) is consistent with Paul's viewpoint. However, it differs

in that Paul introduces dialectical and dialogical thinking as tools of critical thinking to do so. The purpose is, as Paul states, together with logic to reach "a reasoned judgement" (p. 313). Through a series of examples of differing viewpoints, Paul concludes that once one hears all sides and is persuaded to take one side over another that is 'reasoning dialectically' (p. 309). The dialectical is congested to an "extended exchange between different points of view or frames of reference" (p. 309). Basseches (2005), however, defines dialectical thinking as:

> […] an organized approach to analysing and making sense of the world one experiences that differs fundamentally from formal analysis. Whereas the latter involves the effort to find fundamental fixed realities – basic elements and immutable laws – the former attempts to describe fundamental processes of change and the dynamic relationships through which this change occurs. (p. 52)

There are clear differences in epistemology and ontology here, in Paul's and Basseches' notions of critical thinking and dialectical thinking.

Dafermos (2018, p. A2) explains that "relations between different approaches […] are not fixed and stable but change in the history of human thought". This helps us understand that approaches such as critical thinking, dialectics, dialogic pedagogy and criticality have acquired different meanings depending on the historical momentum of human thought. To expound on this 'aphorism' Dafermos (2018) argues that critical thinking has many similarities with the Aristotelian dialectic. Aristotle used the dialectic as a method of logical argumentation and "became mainly a method of building knowledge" (Dafermos, 2018, p. A5) while in the Middle Ages, Nikulin (2010) argues it became a set of logical rules. Pavlidis (2010) makes a further enlightened evaluation within the context of philosophy. He surmises that a metaphysical mode of thinking in the 17th and 18th centuries described reality as detached, static and unchanging" (p. 76). As Dafermos (2018) concludes, such a consideration of reality "denies fundamentally both the interrelatedness of all things and their development" (p. A6). Reflecting on this statement, Marx's concept of alienation (1964) and Brecht's concept of the estrangement effect (Benjamin, 1983), encapsulate succinctly a critique of the times and a referral for critical evaluation and urge for change. With positivism becoming dominant in the 19th and 20th centuries (Dafermos, 2018) the bifurcation of dialectics and critical thinking takes place. While

dialectics “attempts to grasp processes in the full complexity of their interrelationship” (Bidell, 1988, p. 332), critical thinking becomes the mouthpiece of positivism and the focus of numerous theoreticians in a concerted effort to situate it as a curriculum outcome in education. The opportunity to revisit dialectics and dialectical thinking and dialogue comes in the 21st century, with its contradictions and crises at all levels (environmental, political, social, and acute obsession on the individual). Dafermos (2018, p. A2) states: “bringing together dialogue and dialectics may create the space for alternative and unpredictable encounters in the domain of education”. In 2006, Ravenscroft, Wegerif, and Hartley conclude from their work on technology enhanced learning that there is a link between the dialectic and dialogue with problem solving in specific contexts and propose “that both dialogic and dialectic processes are essential for stimulating thinking and creating the spaces where learning can happen” (2007, p. 26). In response to the urgent times, Sternberg (1988, p. 178) argued against teaching “a knowledge base that is more or less stable”. He believed that the dialectic as a tool in the classroom can prepare students for the future and the changes that will come. Dafermos (2018, p. A5) reminds us that “In ancient Greece dialectics emerged as an *art of dialogue* and a *problem-solving method* through argumentation” (my italics). Whatever the form of thinking, Morris (2017, p. 378) concludes that “critical dialogue may be the ultimate survival skill”. In contrast, Barnett (2007) promotes the concept of criticality (critical being, critical self-reflection and critical action) wherein critical thinking becomes the means and not the outcome. Dialogic pedagogy is absent in Barnett’s formulation of criticality. The focus is on the individual’s internal and external monologue, another independent concept and entity. The life of the individual is hedonised with positive psychology and supported by life-goal coaching, and a self-fulfilling commercialised life, where the private becomes a spectacle of its reality, or surreality, or virtual reality through print and online media and self-gratifying technology. Dafermos (2018, p. A7), in contradistinction, orients “dialectics as a way of thinking [that] emphasizes internal, essential connections between people rather than a separated individual, an abstract consciousness”. As Bakhtin (1986, p. 162) stated “Dialectics was born of dialogue so as to return again to dialogue on a higher level (a dialogue of personalities)”. Figure 2.2, on the following page, outlines a possible development of human thought. To this development of human thought from dialectics to positivism to critical thinking to criticality, I am proposing the addition of racialism, a form of human thought that critically and dialectically “dismantles racist power structures” that of “race, gender, sexual orientation, ageism, and ableism” (Brookfield, 2003, pp. 160, 156).

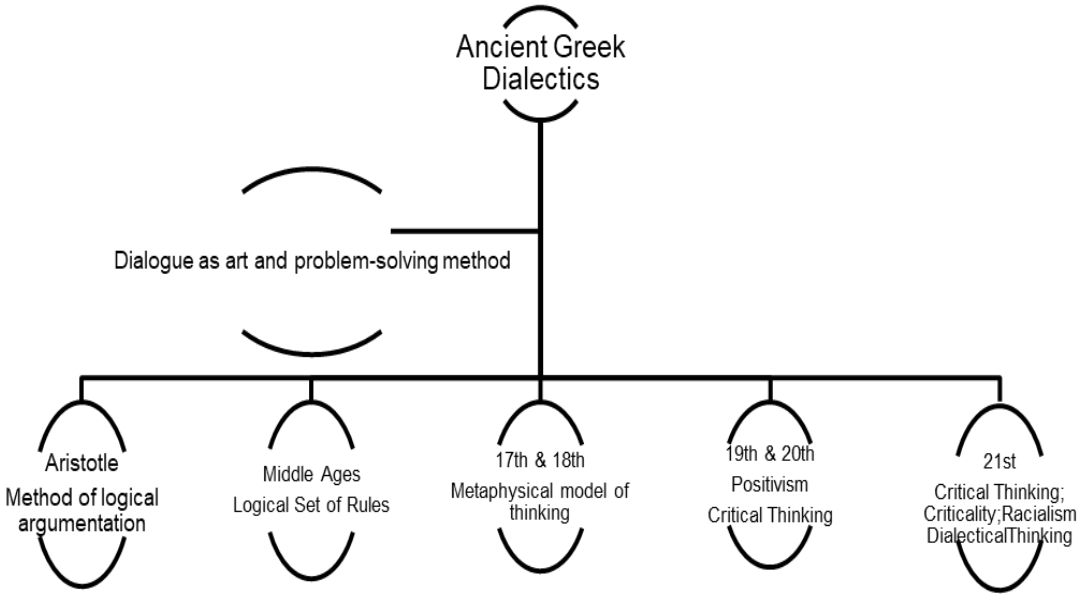

Figure 2. 2 Development of Human Thought Based on Dafermos 2018; Nikulin 2010; Pavlidis 2010; Bidell 1988; Brookfield 2003

Piaget's influence in the domain of psychology of cognition and in causal adult cognition (critical thinking) have pervaded the educational system. Dialectical thinking has not enjoyed the same prolific studies as critical thinking. The reasons evolve around its ties with Hegelian dialectics, or the German negative dialectic, or to a vision of the world that is in continuous flux , where "individuals understand their thoughts to be in a process of evolution" (Wu and Chiou, 2008, p. 240).

Summarising this part of the literature review, it seems that both notions of critical thinking and the focus on the individual in Barnett's conceptualization of criticality, cannot prepare graduate students to address the complex issues of the 21st century that abound. The focus on the individual is valorised in Barnett's critical being, without a consideration of the macro-context, that of the 'we' (Lasch, 1979). A criticality that utilises dialectical thinking and racialism and is empowered by coaching critical dialogue as an intervention in the undergraduate classroom is a possibility worth exploring.

B. Dialogic Pedagogy

Despite the significance of dialogue in education, Kaufmann (2010) bemoans the dearth of empirical studies on the use of dialogue in undergraduate education. Even more so, when conducting a literature review on dialogue/critical dialogue in the undergraduate business classroom few results appear. Dialogue and discussion are

used interchangeably in the literature to refer to “difficult conversations” (Morris, 2017, p. 377) or as a means to rectify social disparities (Jackson, 2008).

It is, however, important to discern what dialogue is and what it is not and identify its qualities for learning. As Ravenscroft et al. (2007, p. 10) assert, dialogue is “perhaps the most important goal of education”. Dialogue is not a neutral practice (Brookfield, 2001). It is informed by the frame of reference of participants (Brookfield, 2001) or “*basic* assumptions” one holds (Bohm, 2013, p. 8). However, it has a transcending value that goes beyond “speech acts that compose discussion” (Brookfield, 2001, p. 212) since discussion is not dialogue (Bohm, 2013) and dialogue is not conversation (Macedo, 2000). According to Bohm (2013, p. 7): “Discussion is almost like a ping-pong game, where people are batting the ideas back and forth and the object of the game is to win or to get points for yourself”. This echoes Bakhtin’s notion of dialogism “where truth becomes something negotiated and debated” (Tighe, 2012, para. 1). Dialogue, on the other hand, “is something more of a common participation, in which we are not playing a game against each other, but with each other. In a dialogue, everybody wins” (Bohm, 2013, p. 7).

Metcalfe and Game (2008) highlight the significance of Bohm’s description of dialogue for educational theory by which they argue that “social life generally, and classroom relations in particular, are constantly shifting between identity-based exchanges and dialogical meetings” (p. 345). A distinction between ‘identity-based exchanges’ and ‘dialogical meetings’ is succinctly described below:

> People who identify with knowledge take it personally, seeing the world and others only for what these say about themselves… People in dialogue, however, are able to hear differences offered by others because they are not personally affronted… Same and different are no longer qualities attributed to discrete individuals; each participant makes a unique contribution.
> (Metcalfe and Game, 2008, p. 345)

Freire and Macedo (1995, p. 379) further illuminate this notion of the social:

> I engage in dialogue because I recognize the social and not merely the individualistic character of the process of knowing. In this sense, dialogue

> presents itself as an indispensable component of the process of both learning and knowing.

Dialogue, for Freire is neither a method nor a 'tactic' to employ (Macedo, 2000, p. 17); nor is it "an end in itself but a means to develop a better comprehension" (Freire and Macedo, 1995, p. 372) "through epistemological curiosity about the object of knowledge" (Macedo, 2000, p. 18). It is ultimately a "human phenomenon" (Freire, 2000, p. 87) and to "exist humanly is to *name* the world, to change it" through dialogue (p 88).

Freire's epistemological curiosity and use of dialogue as a means is found in problem solving (Freire 2000). Problem solving not only counters banking education it also "makes [students] critical thinkers" (83), basing "itself on creativity and stimulat[ing] true reflection and action upon reality" (84). Dialogue becomes a transformative act, a humanizing act, where the teacher is the student and the students are the teacher; both are taught and learn through dialogue (Freire, 2000). In other words, according to Freire students "are now critical co-investigators in dialogue with the teacher" (Freire, 2000, p. 81). For Freire (2000) this is "authentic education" (p. 93).

Freire (2000) identifies the qualities that ought to be present in dialogue: love, humility, faith in humankind, mutual trust, hope (pp. 89-92), and critical thinking– "thinking which perceives reality as process, as transformation, rather than as a static entity" (p. 92). Such dialogue fosters student critical consciousness (Shor, 1992). Freire's notion of dialogue heralds critical pedagogy, which Giroux defines as "a political project" or "ongoing project" and not a method in any way. As such, dialogue takes on a prominent role in adult education (Kaufmann, 2010). To that end, Cunliffe (2002) proposes a reflexive dialogical practice in management learning to be used as a transformative learning junction between critical reasoning of management practices and critical action.

The literature review on dialogic pedagogy identified the stage of infancy of the undergraduate business classroom in using dialogue to nurture 'critical consciousness' in its core of business studies.

C. Coaching as an Instructional Pedagogy in Education

The focus of this part of the literature review was geared towards coaching in education and in particular coaching as an alternative method of instruction in the classroom. The key words used were coaching, instructional pedagogy, education, and critical pedagogy. The results yielded an array of methods, outcomes and contexts of coaching in education; a confusion as to whether coaching is different from mentoring or inclusive of each other; a strong affiliation with executive coaching and positive psychology; and last but not least, an overarching definition of coaching in education. As a result, the scope of this part of the literature review had to be narrowed to a representative sample of downloadable peer-reviewed articles and books that would provide the following criteria: an understanding of the coaching being implemented in the educational environment and whether coaching is being used as an instructional intervention in the classroom.

This section of the literature review highlights three important findings: there is a gap in considering coaching as a classroom intervention with students; there is a lack of definition/differentiation of coaching with mentoring; and there is an overarching definition of coaching that permeates all levels of education.

Campbell (2016) highlights the emergence of coaching in education as a sub-discipline of coaching at the onset of the 21st century. By situating coaching in education as a sub-discipline, one would expect to differentiate between the *needs* of educational sectors, that of kindergarten, primary, secondary, further education and higher education, and the *critical learning* environments, too.

However, this is not the case. Coaching in higher education reflects to a great extent the coaching interventions in primary and secondary sectors, in coaching educational leaders, administrative staff and faculty development, student-peers, and life skills all borrowed from the executive landscape of coaching with an underpinning from positive psychology. It seems that educational sectors have leveraged the effectiveness of coaching in organisations in learning and performance outcomes (Theeboom, Beersma and van Vianen, 2014; Jones, Woods and Guillaume, 2015; Bozer and Jones, 2018). Athanasopoulou and Dopson (2018, p. 48) warn, however, that there is "an obsession" on the outcomes of coaching "at the expense of the 'journey'." Though Devine et al. (2013) in their critical review of coaching in education, posit that with the emergence of coaching in education, "the conventional

transmission model of education is being called into question" it is far from differentiating "the focus and outcomes of education" (p.1382).

Based on the premise that "the intellectual integrity of coaching depends on research" (Boyatzis *et al.*, 2015), the initial findings identify that there is limited consensus as to what coaching is in education and, in particular, Higher Education. Griffiths, in 2005, identifies succinctly the nebulous terrain:

> There is a considerable amount of confusion surrounding the understanding of what coaching is in both literature and in the eyes of educators. This confusion has perhaps arisen due to the historical origins of the word 'coach', the presence of some related forms of coaching within educational settings such as cognitive, peer and academic coaching […] but also because of the various roles coaches assume during the coaching process in addition to the disciplinary roots from which coaching is derived. (p. 56)

Albeit Jackson (2005, p. 45) is not referring to coaching in education per se, he reflects the coaching environment:

> Definitions are many and varied. While certain features recur, there are significant differences depending on political and theoretical perspectives, and to this body of definitions is constantly added a stream of new slants and nuances.

This is echoed in Brock's (2008) doctoral thesis who highlights: "Whatever the definition, many coaches act from an eclectic position, choosing compatible parts of different definitions to explain and guide practice" (17) while the proliferation of definitions of coaching "some of which contradict each other [are] based on an influence by practitioner backgrounds, theories, and models" (13) as well as "the worldview of coach and client" (16).

Despite the prolific work of one of the most prominent contributors of coaching in education, van Nieuwerburgh, his definition in 2012 of educational coaching comes to pose boundaries to the potential of coaching in Education. Educational coaching, he defines, is:

> a one-to-one conversation focused on the enhancement of learning and development through increasing self-awareness and a sense of personal responsibility, where the coach facilitates the self-directed learning of the coachee through questioning, active listening, and appropriate challenge in a supportive and encouraging climate. (p. 17)

In other words, one could say that learning plays a pivotal role. One would expect learning most importantly to take place in the classroom. However, what van Nieuwerburgh proposes is teacher development, administrative training, leadership training, peer coaching between teachers or students, and life coaching. In fact, The Global Framework for Coaching in Education (van Nieuwerburgh and Campbell, 2015), in an attempt to codify the areas of coaching intervention in education, identifies four:

> enhancing the success and wellbeing of learners; developing the capacity of educational leaders; supporting the professional practice of teachers and other staff in schools; and developing better relationships with members of the community. (van Nieuwerburgh and Oades, 2017, p. 99)

If these areas mean to encompass all stages of education, there are two limiting assumptions underpinning the Global Framework stance: education and educational outcomes are not questioned but supported; coaching is used under the umbrella of positive psychology to support and develop relationships as well as wellbeing. These areas of intervention, however, also link to the areas of intervention that are being implemented in higher education with a consequential confusion between coaching and mentoring. Oti (2012) under the umbrella of post-compulsory education and training, often referred to as the Life Long Learning and Skills sector, uses both coaching and mentoring interchangeably. In fact, the author states, “the terms ‘mentoring’ and ‘coaching’ will be used interchangeably through this chapter and we therefore subsume ‘coaching’ within ‘mentoring’” (p. 357). One major critique made by Sepulveda (2017) to Andreanoff’s (2016) recent publication dedicated to *Coaching and mentoring in higher education: a step-by-step guide to exemplary practice*, is the abstruse use of the terms coaching and mentoring, which are used interchangeably, diluting even further any clear distinction or definitions of the terms.

This confusion with mentoring is further highlighted in Abrami et al's (2014) meta-analysis, where coaching as an instructional strategy becomes an interchangeable concept with mentoring, a subcategory of mentoring, and "one of the oldest forms of teaching" together with "one-on-one mentoring, tutoring, […] apprenticeship or modelling" (p. 291). There are two apparent issues in the meta-analysis: there is no understanding as to how coaching or mentoring were used to enhance the promotion of critical thinking; and there is no questioning of the interchangeable use of the terms. The meta-analysis included 684 studies –out of initially 2,332 studies-- to ascertain "the impact of instruction on the development and enhancement of critical thinking skills and dispositions and student achievement" (p. 275). The authors based their meta-analysis taxonomy on both Ennis's (1989) Critical Thinking Typology and the instructional approaches that were used. Ennis's Critical Thinking Typology assisted the authors in identifying how critical thinking was embedded in the courses being taught (whether critical thinking was linked to "specific subject matter content" and/or whether it was an explicit learning outcome). The justification of such a study in education focusing on critical thinking skills is identified by the authors as being important since critical thinking skills are "potential precursors to a more ambitious and robust form of criticality" (p. 304). Focusing on the instructional approaches used, Abrami et al. identify four that stand out, that of "individual study, dialogue, authentic or anchored instruction, and coaching" (p. 289). The authors conclude that "there are strong indications that dialogue, authentic instruction and mentorship are effective techniques for the promotion of [critical thinking]," (p. 305).

This nebulous terrain has resulted in coaching as a term being used not only disparately but also out of context. Take for example, Devine et al. (2013), who in their reading of Skiffington & Zeus (2003, p. 30) cite that coaching has been heralded as a "holistic multifaceted approach to learning and change" and yet the authors (Skiffington & Zeus 2003) are referring to behavioural coaching, one of the many types of coaching. Jackson (2005, p. 45) succinctly notes that "[c]oaching means different things to different people". This seems to be the norm rather than the exception. With the proliferation of the different types of coaching used in education, it comes as no surprise that some do overlap in their intent and focus with constant addition of "a stream of new slants and nuances" (Jackson, 2005, p. 45).

A proliferation of typologies of coaching implemented in education focus mainly on teacher training and development (Vogt and Rogalla, 2009), administrative staff

training, leadership training (Forde *et al.*, 2012; Devine *et al*., 2013), as well as peer coaching for teachers and students (Huston and Weaver, 2008; Andreanoff, 2015) and life coaching (Green *et al.*, 2007; Devine *et al.,*2013). Undoubtedly, such interventions are significant and "enrich the knowledge base of coaching" (Bachkirova *et al.*, 2014, p. 4). Devine's et al. (2013) critical review of the types of coaching in education together with further research that resulted from the search terms coaching and education, underscore the impact of executive coaching but with a heightened focus on learning and development. Table 2.2 exemplifies an indicative list of a broad array of methods, outcomes, and contexts of coaching used in education. While the list below is by no means a definitive list, it was put together to exemplify the diverse use of coaching and showcase how these approaches are enriching the scope of coaching in education. The scope of coaching in education has been organised to reflect the theories, genres, and contexts of coaching.

GENRE	THEORY-BASED	CONTEXT
Leadership developmental coaching used "as a way to develop leadership in schools in Scotland as elsewhere in the UK" (Forde *et al.*, 2012, p. 105) or *executive coaching* or coaching for educational leadership (Devine, Meyers and Houssemand, 2013)	***Cognitive-behavioural coaching*** used to "increase student achievement, greater teacher efficacy and satisfaction, higher levels of conceptual thinking about teachers and more professional, collaborative cultures" (Whitten, 2014, p. 157)	***Literacy coaching*** used as "a category of instructional coaching that focuses on literacy and related aspects of teaching and learning" (Toll, 2009, p. 57) and involves "master teachers who provide essential leadership for the school's entire literacy program" (Sturtevant, 2003, p. 11)
Content-focused coaching used as a one-to-one intervention with primary and secondary science teachers to increase both "Adaptive Planning Competency and Adaptive Implementation Competency" (Vogt and Rogalla, 2009, p. 1053)	***Solution-focused coaching*** used in developing life-skills (Devine, Meyers and Houssemand, 2013) (Devine, Meyers & Houssemand 2013)	***Peer coaching*** used as a developmental opportunity for faculty (Huston and Weaver, 2008) and between students used to enhance grades and academic ability (Andreanoff, 2015)
Instructional coaching used as a "specialist content-based approach effective in supporting teachers' professional development and higher student outcomes" (Devine, Meyers and Houssemand, 2013, p. 1384; Teemant, 2014; Haneda, Teemant and Sherman, 2016)	***Cognitive coaching*** used to improve elementary and secondary teacher effectiveness (Costa, A.L. and Garmston, 2002) and use of "rubric-focused coaching with peers"(Fine and Kossack, 2002)	***Strengths based coaching*** used as leadership development (Devine, Meyers and Houssemand, 2013; Welch *et al.*, 2014).
Evocative coaching used in focusing "on simple but effective techniques for having professional conversations in educational organisations" (van Nieuwerburgh, 2012, p. 12)	***Behavioural coaching*** used in "goal focus and action-orientation, and problem-solving models, such as GROW and TGROW" (Devine, Meyers and Houssemand, 2013, p. 1383)	***Mentor coaching*** used as a "facilitated, structured process whereby an experienced person introduces, assists, and supports a less experienced person (the protégé) in a personal and professional growth process" (Nolan 2007, p. 3 cited in van Nieuwerburgh, 2012, p. 14)2012: 14).
Appreciative coaching used to change perceptions and attitudes of educational leaders (Devine, Meyers and Houssemand, 2013; Suess and Clark, 2014)	***The positive psychology approach to coaching*** "to enhance wellbeing, facilitate goal attainments and foster purposeful positive change" (Devine, Meyers and Houssemand, 2013, p. 1386), an overlap with life coaching with examples from the Geelong Grammar School Project and the Pennsylvania Resilience Program.	***Life coaching*** overlaps with solution-focused cognitive behavioural life coaching (Devine, Meyers and Houssemand, 2013).

Table 2. 2 *Indicative List of Methods, Outcomes, and Contexts of Coaching Used in Education*

The indicative list of methods, outcomes and contexts of coaching used in education, suggest a focus on personal development. In this multi-varied environment, there is no differentiation between the stages of education and their learning environments. This becomes even more evident with the literature review on coaching in higher education.

Coaching in Higher Education

When it comes to coaching in HE and in the undergraduate classroom, the research is limited (Iordanou *et al.*, 2015). Iordanou et al. (2015) provide an overview of coaching and its uses in the HE sector. They refer to three 'distinct domains': coaching as a developmental tool for university staff; coaching PhD students; and training undergraduate students to be coaches for their peers. All three reflect to a good extent what is transpiring in primary, secondary, and further education. In a case study of coaching staff/faculty at the University of Warwick, Thomson (2012, p. 213) asks a probing question: "In what ways is coaching in a university different from coaching in other organisations?" (213). Thomson answers:

> […] coaching in the higher and further education sectors is similar to coaching elsewhere. Clients are dealing with concerns about how they manage themselves and their time, how they relate to colleagues, how they manage staff and their performance, how they influence upwards, and where they are going in their career. These are the issues that people in any organisation might bring to coaching. (p. 214)

Thomson's (2012) response affirms rather than posits future possibilities of the dynamic of coaching in Higher Education. Personal development becomes the mainstream coaching objective.

On a similar note, Dowson and Robinson (2009) contest that life coaching has direct relevance to higher education and discern "a symmetry with views of higher education that focus on personal development" (p. 157). Personal development modules according to the authors are a response to a contemporary social context that "takes individuals away from a focus on identity and purpose" and provides "little space for the meaning of the values and purpose behind choice or the creative possibilities that result from such individualistic choosing" (p. 163). They resort to connecting coaching to higher education through referring to 'three views of learning'

that of Ronald Barnett's (1997), Michael Oakeshott's (1989) and Parker Palmer's (2007). It becomes quite puzzling as to why Dowson and Robinson (2009) consider Barnett's and Oakeshott's viewpoints as 'views of learning'. Schunk (2012, p. 3) defines learning as "an enduring change in behaviour, or in the capacity to behave in a given fashion, which results from practices or other forms of experience". In the paragraphs below, it becomes obvious that these 'views of learning' fall under an epistemology of neoliberal perspectives of education where the individual is prised. It is not clear as to why other viewpoints on learning were left out, or why was Cox's (2006) explication of three underpinning learning theories of adult learning, that of andragogy, existentialism and transformative learning were not considered. Bachkirova et al. (2014, p. 7) state, "since the 1970s these principles have been assimilated into the learning culture and are now discernible in coaching".

Dowson and Robinson (2009), however, choose to take at face value Barnett's and Oakeshott's 'views of learning' to extract similarities with coaching and highlight the significance of personal development modules –with Life coaching and Life Planning becoming a mirror of a 'civilized society' where the student, tomorrow's professional, is 'developed' to fit in. What becomes apparent is that coaching principles are used to fit in with specific educational viewpoints, reflecting coaching practice in the corporate world, thus the focus on the PDP, or peer coaching for academic excellence and faculty development.

With the PDP being considered as one of the most important developments of the past decade, we are witnessing an impoverished philosophical understanding of the role of higher education and what role coaching can play. The authors note:

> The PDP practitioner […] seeks to empower their students to develop key outcomes that closely resonate with the values of coaching and higher learning, summarized as follows: identifying what people want; setting developmental goals; maximizing positive attributes and skills; addressing unhelpful patterns and behaviours equipping with tools and techniques; providing a support structure. (Dowson and Robinson, 2009, p. 164)

What becomes clear is the focus on the individual. Noam Chomsky in an interview (2 June 2017) succinctly underscores an outcome of neoliberalism by using a

Margaret Thatcher aphorism: “There is no society, only individuals” (Lydon, 2017, para. 17). It seems that the analogy here with education and coaching is relevant.

There is one holistic approach to coaching being used in the undergraduate classroom. Dowson and Robinson (2009) refer to a new programme in Personal Development entitled ‘Responsible Engagement’ offered by the School of Applied Global Ethics (SAGE) at Leeds Metropolitan University to undergraduate students in a series of four modules, where the penultimate aim is to help “students […] engage with a rapidly changing and globalising world [which] is considered central to both their personal and career development” (p. 170). Apparently, the focus is on personal and career development and positive psychology, what Western (2012) identifies as an outcome of a westernised self-celebratory culture. As Western argues, “Coaching filled the gap – promising to enhance individual performance in both life and at work – achieving a bridge between the ‘wounded’ and ‘celebrated’ self” (2012, p. 10). However, there is a rising group of coaching researchers that are identifying limitations in such a role. Western (2012) contests that the macro-social is ignored in the process. Ultimately the ‘I’ is glorified at the expense of the ‘we’ (Lasch, 1979). Even more, it seems that “the positivism of coaching has a built-in resistance to criticality, and that the promise of individual happiness favours an individualistic focus over social understanding” (Shoukry, 2014, p. 43).

Apart from the three areas that Iordanou, Lech and Barnes (2015) identified, coaching is being used in the undergraduate classroom from increasing exam performance (Chaplin, 2007) to improving literature searching (Graham, Schaller and Jones, 2015) to enhancing higher order thinking skills (Stein *et al.*, 2013) or critical thinking and leadership skills (Catchings, 2015). Of interest to this literature review are the studies by Stein et al. (2013) and Catching (2015) that focus on coaching thinking skills.

The study by Stein et al. (2013) focuses on e-coaching that was implemented in a blended graduate/undergraduate level course in the history and philosophy of adult education in America. Using the widely adopted Community of Inquiry (CoI) framework (Garrison, Anderson and Archer, 2000) in online education, e-coaching was implemented, as the authors contend, to assist learners in a group to reach higher order thinking skills. Two forms of coaching took place. One form of coaching was content coaching, conducted by the instructor of the course who provided knowledge and background from the readings, and assigned questions to be

answered. The second form of coaching was discussion process coaching and feedback. Feeback was not considered as part of the coaching but as the authors assert “feedback complements the coaching in that it identifies gaps between the coaching tasks that were encouraged and the performance. Therefore, coaching and feedback are iterative and build on each other” (Stein *et al.*, 2013, p. 82). Before the group of learners began answering the questions in the online chat room, the coach would have them assign a moderator and summariser of the chats, ensuring that their response to the question had the input of all members. For every chat, feedback would be provided within the hour. The feedback would focus on “identify[ing] errors in the discussion process and providing coaching and feedback to correct those errors” (p. 80). There is an evident misunderstanding of the use of coaching. The coaching used was evaluative, correcting errors, and feedforward. Higher order thinking skills were considered to include summarising, integrating, synthesising, “connect[ing] ideas and information from readings, experiences, and other sources” (p. 81). The Community of Inquiry (CoI) framework, which is used widely in online and blended education, facilitates inquiry-based group discussion. The conceptual framework includes an overlap of teaching presence, social presence, and cognitive presence. The authors of the framework do not see any of the presences as more important than the other. “The CoI framework is dependent upon the interaction of all presences to a greater or lesser degree depending on the subject matter, the learners and the communications technology” (Garrison *et al.*, 2010, p. 6). The study presented above exemplifies an educational underpinning of what higher order thinking skills should include, which are closely related to critical thinking skills. .

The study by Catchings (2015) applies a skill-building model of coaching for critical thinking and leadership development that was introduced to nine undergraduate students, who were either working part-time or full-time. The study measured the participants’ critical thinking skills by “using quantitative data (pre, mid and post) using the California Critical Thinking Skills Test” (p. 42) and qualitative coaching based on assignments that were given to the participants to interpret, analyse, evaluate and infer from past experiences. There are two limitations to the study: one is the assumption that there is a correlation of critical thinking skills and leadership skills when only critical thinking skills were assessed; and the other is the theoretical underpinning of the model that is left to the reader to construct as to how it informs and operates the model. The author refers to multiple theories being used “(experiential learning, collaborative learning, transformation learning, self-discovery,

adult learning, reflective judgment and learning, active learning, personal construct theory, reconstruction, reflective observation)" (p. 45). Seven out of the nine participants increased their critical thinking skills from 1 to 4 percentiles in the mid and/or post California Critical Thinking Skills Test, while two showed a decrease from 2 to 3 percentiles.

This section of the literature review on coaching in Higher Education, has underscored the fledgling stage in terms of coaching as an intervention in the undergraduate classroom. There is no definition of coaching in higher education, and it seems that a generic definition of coaching in education is overarching the learning landscape, limiting the dynamic of coaching to move beyond positive psychology and well-being. There are few fledgling attempts to utilise 'coaching' without reference to what is meant by it in 'modelling' active study techniques in undergraduate students and by 'coaching' students in information literacy and the use of library databases. When coaching is employed as an intervention to support higher order thinking skills in an online class, it becomes directive and feedforward. The example of implementing a developmental form of coaching with undergraduate students to increase critical thinking skills focuses on implementing critical thinking on future experiences. When the term coaching is used, many a time it is used interchangeably with mentoring. In effect, the term coaching is being used disparately or out of context or propagates educational viewpoints that do not question 'outcomes of education nor do they consider adult learning'. An overarching focus is that of professional personal development

Team Coaching in Higher Education

The key words that were used in this part of the literature review were coaching student-teams/groups, undergraduate education, and critical thinking. Inclusion criteria were student-team coaching in the title or in the abstract; if an underpinning philosophy of team coaching was explored; and whether it was conducted in undergraduate education. Peer coaching was excluded as well as mentoring. Out of the two hundred and seventy hits, only one article (Sargent *et al.*, 2009) appeared to be relevant. Further key words were explored such as team coaching, higher education, pedagogy, and systematic literature reviews that brought insight into the hybrid tutor coach and into teaching assistants and graduate students as team coaches.

It seems that research on team coaching that "draws from a theoretical or empirical basis" is sparse (Peters and Carr, 2013; James, 2015). When it comes to higher education and the undergraduate business classroom, there are a number of universities in Europe, Canada, Australia, and Asia that are including team coaching in supporting student teams, but the evidence based academic research is still small. Ziogas *et al*. (2017, p. 6), reason:

> Nowadays, coaching is mainly applied in the industry sector with evidence of return- on-investments. Such programmes are costly and support-intensive which therefore limits their suitability to immediate educational settings.

This is a short-sighted reason, which is seen not only from an unsubstantiated economic position but also equates ROI in terms of financial gain for higher education. I would argue that ROI is found in the educational gain of higher education institutions that comes with how their graduating students increase or not the brand of their institution.

While there are prolific studies in team coaching in sport, Clutterbuck (2014) drawing on the work of Keidal (1987) discerns that

> The structure, aims, processes, and interdependencies of sports teams are significantly different from those in the workplace – to the extent that the validity and transfer between the two worlds is low. (p. 271)

When it comes to Higher Education, and the undergraduate classroom, the differences are not that discernible even with sport team coaching's competitive orientation (Clutterbuck, 2014) or as Devine and Knight refer to as 'crude pragmatism', "coaching […] that 'gets results', […] on the scoreboard or on the clock" (2017, p. 35). Cases of coaching student teams in higher education to participate in competitions are also apparent (Jebaraj *et al.,* 2019). One major difference is that sports coaching is about consistent winning (Katz, 2001) while team coaching in HE is not.

Despite the dearth of studies in higher education on student team-coaching, there is a discerned lack of an educational philosophical underpinning of coaching and its implementation in the undergraduate classroom. This results in the blurring of

boundaries between teacher and coach (Bolton, 1999; Reich *et al.*, 2009), or an interchangeable use of the role of mentor or coach (Pinter and Čisar, 2018), thus, creating hybrids of team coaching roles in higher education. Such hybrid team coaching roles either define the role of the tutor as coach or use coaching disparately to refer to an outcome as in coaching student teams in the advantages of team work (Sweeney *et al.,* 2008).

Two studies focus on the role of the tutor coach. Bolton (1999) in his study of student marketing teams proposes the role of the instructor coach that models, confronts, suggests, provides feedback, tutors, and teaches (p. 244). Such roles find similarities with sports coaching (Kao *et al.,* 2017). On a similar note, Reich et al. (2009), in their study of graduate engineering project teams, go one step further and based on their surveys and literature review identify five teacher/instructor coaching style clusters that of "consultant, supervisor, instructor, facilitator and mentor" (p. 218). Each teacher/coaching style varies in terms of power dynamics between coach and student team and/or a tutor/coach's expertise. As a result, a tutor/coach may bring expertise and vast knowledge to the coaching (consulting role); or be an authority whose rules need to be followed (supervisor role); or have full control over the coachee (instructor role); or provide professional knowledge on the topic and have a non-binding relation with coachees (facilitator); or provide feedback and mental support without having expert knowledge on the coachees' project (tutor/mentor). Neither of the two studies considered separating the role of the tutor from the coach and/or utilised a theoretical and educational philosophical underpinning of adult learning to ground the coaching. It seems that a major difference between team sports coaching and team coaching in education is that sports coaching has its theorists, researchers, and critics while team coaching in the undergraduate classroom is at its nascent experimental stage. On the contrary, Devine and Knight (2017) drawing on the work of Jenkins who urges for a philosophical pragmatism in sport coaching, counter with a 'virtue based approach to coaching' that brings "the Philosophy back into the coaching philosophy" (p. 37).

Team coaching in higher education can gain much by research into team coaching in organisations. Team work skills are considered imperative in the workplace and much needed by our graduates (Riebe *et al.,* 2016). Utilising a consistent understanding of the characteristics of team coaching can only benefit how the process of team coaching is implemented in the undergraduate classroom. It is important to discern

what team coaching is at its core. Clutterbuck et al., (2019, p. 5) in *The Practitioner's Handbook of Team Coaching* identify two characteristics for the intervention to qualify as team coaching:

- engage with an entire work team, as a collective process;
- employ a non-directive, exploratory approach […].

While the role of the tutor coach in higher education takes on different hues, the challenges of teamwork in higher education and the inclusion of teaching assistants and/or graduate students and/or advanced undergraduate students to coach student teams identify further the context within which coaching takes place. The systematic review conducted by Riebe et al. (2016) on team work skills and learning practices in higher education in Australia provide an overview of the challenges of team work in business education. These are student academic workload issues; student part-time employment; lack of life experience; composition of the group; development of emotional intelligence and communication skills; just outcome in grade review process; lack of utilising individual team member skills; lack of prior training in group work; lack of conceptual framework for student teams to follow. Riebe et al. (2016) in their systematic review identified fourteen journal articles meeting their criteria. Out of the fourteen articles only one had team coaching, that of Sargent et al. (2009). Sargent et al. (2009) present their action research study at Melbourne University that was designed to build team coaching skills in teaching assistants at the undergraduate level to accommodate large classes of 200 students and facilitate student teamwork. Their goal was dual: to enable student teamwork effectiveness in large modules even though they argue it could serve smaller ones too; and develop transferable skills that of motivator, performance consultant, and educator in the coached teaching assistants. The teaching assistants followed a three-hour training and were assigned 20 student teams each, whom they coached once and if necessary, could add a second coaching session. What was concluded from the study is that student teams who had a teaching assistant coach performed better than student teams who had a teaching assistant but had not gone through the training.

Sangster et al. (2016) conducted a pilot project at the University of Saskatchewan, Canada, to support the undergraduate research initiative with the training of graduate students and advanced undergraduate students in becoming research coaches to support nine modules from which most were groups of students. The research coach

training consisted of “introduction to professional conduct, the university learning charter, the UGR initiative’s goals and complementary programming, as well as facilitation, teamwork, and interpersonal skills” (p. 2).

Heinis et al. (2016) presented their findings of an educational model of team coaching which is being implemented at the Mechanical Engineering bachelor’s program at ETH Zurich. The educational model creates a bridge between two parallel courses, where 15 senior students in the course “Leading Engineering Projects and Coaching Design Teams” are educated “in team dynamics and how to coach an innovation team” (p. 1) and “focus on team dynamics and social effects in product development teams”. The student coaches are assigned three student teams of five members each from the problem-based learning course “Innovation Project”. The 450 freshmen in the IP course are divided into 90 teams with the goal to “solve a developmental task” with the construction of a “full functioning machine” (p. 2) by the end of 14 weeks of the course. The authors mention that the student coaches meet with their teams every week for a one-hour consultation. Clutterbuck (2014), however, differentiates consultation from coaching. It is not clear also in the description of the educational model since 30 student coaches are needed, who are the other 15 required to coach the remaining 45 teams. The authors state that “in a newly developed lecture half of the coaches attend the course CDT to improve their coaching competencies” (Heinis *et al.,* 2016, pp. 2–3).

Pugalis et al (2015) present an interesting exploratory study that used semi-structured interviews to investigate “participants’ aspirations, entry decision choices and reflections after their first year of study” in the Entrepreneurship Business Management Programme at Newcastle Business School. Even though the focus of the paper was not to discuss the team coaching used, the authors’ findings suggest that an important role for the success of the programme is attributed to “the discursive coaching approach of the course” (p. 512). No other reference is made. The Programme is “loosely based on and takes inspiration from an approach developed at Finland’s Jyväskylä University of Applied Sciences ‘Team Academy’ “in which participants work in teams to set up and manage businesses, whereby they are encouraged to ‘think and behave like entrepreneurs’” (p. 505).

What arose from the literature search on team coaching in undergraduate education are three findings: one is that of a hybrid of tutor/coach that provides corrective

feedback, has authority over student teams, and brings expertise or not to the coaching intervention; another is that of the use of mentor or coach as being similar; and last but not least because of the mass lectures in higher education where project-based learning is utilised, student-team coaching is conducted by graduates or senior students who are trained in acquiring a 'coaching skill-set' catering to the needs of the program. It seems that Ziogas' et al. (2017) argument "that coaching is less apparent in higher education as being expensive and resource intensive" has some validity.

Summary

The literature review presented an overview of the key concepts and developments in relation to the research question posed for this study. A critical review of the literature on criticality and critical thinking highlighted their close connection to Piagetian formal thinking, reflecting also a westernised worldview that focuses on the individual. Dialogue becomes a cognitive internal process rather than a dialectic between or among different consciousnesses. A renewed interest by scholars to respond to such Piagetian formal thinking is ushered with a clear demarcation between formal thinking and neo-Piagetian theoretical hypotheses on cognitive thinking. Despite the limited studies in dialectical thinking in higher education, it seems to provide the critical mindset to address change and crisis. With dialectical thinking and critical dialogue finding a rediscovered common ground in the work of Dafermos (2018), a further justification for the need of this study is provided. A renewed understanding of criticality with dialectical thinking at its core informed the definition of criticality that was presented in Chapter 1. The second part of the literature review highlighted the paucity of studies in dialogue in business education. This has opened up the opportunity to explore critical dialogue as a means to develop criticality. The literature review on dialogue provided space to present what is meant by dialogue, what are its criteria, and what is its purpose in education, even more so for CME. The third section presented an overview of the relevant literature on coaching which brought to the fore a series of significant findings: there is no review of coaching in higher education nor a meta-analysis amidst a plethora of research studies focusing on primary, secondary, and further education, underscoring the fledgling stage in terms of coaching as an intervention in the undergraduate classroom; there is no definition of coaching in higher education and it seems that a generic definition of coaching in education is overarching the learning landscape, limiting the dynamic of coaching to move beyond positive psychology and well-being;

there are few fledgling attempts to utilise ‘coaching’ without reference to what is meant by it in ‘modelling’ active study techniques in undergraduate students and by ‘coaching’ students in information literacy and the use of library databases. When coaching is used to enhance higher order thinking skills and critical thinking skills the focus is on formal logic while the coaching is directive and feedforward. When the team coaching is used it is many a time employed interchangeably with mentoring; coaching is used disparately or out of context or propagates educational viewpoints that do not question ‘outcomes of education nor do they consider adult learning’. Team coaching in business undergraduate education is taking on momentum and is conducted by graduates/senior students and a hybrid of a tutor/coach that is directive in his/her approach; and, finally, coaching in higher education hasn’t found a strong voice as an instructional intervention in the undergraduate classroom.

The findings from the literature review strengthened the need to develop a renewed understanding of criticality and create an intervention within which critical dialogue could foster in undergraduate business education. The study proposes the intervention of team coaching, paving the way for coaching in higher education for developing criticality in undergraduate students within an environment of critical dialogue. The following chapter presents the methodology of the study, which is then followed by Chapter 4, which develops the initial team coaching model.

3. METHODOLOGY

The study aims to explore the effects of a team-coaching model for developing criticality in undergraduate students. The purpose is to investigate the question of whether coaching can support critical dialogic pedagogy and create an environment within which criticality can develop and whether the developed team-coaching model could be used as an alternative mode of instruction in the undergraduate classroom in problem-based, simulated, or experiential modules. I present in this chapter the methodological approach and practical steps taken in the study. The chapter discusses the following six distinct interrelated elements:

I. The choice of research paradigm
II. The research strategy that was employed
III. The participants
IV. The research procedures that were implemented to collect data
V. The method used to analyse the data
VI. The ethical considerations and research validity of the study

I. Research Paradigm

I come with a critical understanding of a qualitative pragmatic researcher. I see the world in flux, with interchangeable interfaces, according to the times and social movements, but as a reflection of the past with an understanding of what can be or should be tomorrow. I see myself as a critical pragmatist where knowledge is created by inquiry and problem solving and critical interaction with the environment. The research question as to whether there is a role for team coaching in developing criticality through critical dialogue in the undergraduate classroom identifies two problems to be explored that of developing criticality and creating an environment of critical dialogue, as well as whether the team coaching model proposed can support such an endeavor. The research paradigm that supports the study's problem-solving springs from Deweyan 'critical pragmatism' (Kadlec, 2006) and his work on democracy, education, the role of the learner, and experiential learning.

In *Democracy and Education*, Dewey suggests that within a democratic society where education and democracy are one "the reconstruction of social habits and institutions" is possible ([1916] 2015, para. 1 Chapter 8). Reconstruction for Dewey "is an intrinsically critical concept" in applying "creative intelligence to rethinking and

readjusting our principles (Kadlec, 2006, p. 523). Vannini highlights the critical perspective of early pragmatism:

> early pragmatism constituted a sharply *critical perspective*, even a radical one for the times. Pragmatism's views on social reality as being constantly in flux, on knowledge as relative and shaped by multiple and instrumentalist goals, on society as a form of discursive interaction […] and on methodology as a form of situated inquiry largely predate the onset of most postmodern and poststructural social and cultural criticism. (2008, p. 161) [my emphasis]

Kadlec (2006, p. 539) posits Dewey's critical reflection as an imperative for exposing "systemic patterns of injustice and inequality plaguing our present". Midtgarden (2012) further expounds on Dewey's belief in the emancipatory power of education and democracy where the notion of reconstruction is empowered through acceptance of responsibility and the "knowledge of possible consequences of one's decisions and actions" (p. 517). That would also require according to Dewey the reconstruction of individualism into 'social intelligence' that is "communicative, imaginative, and critical, rather than atomistic, acquisitive, and antagonistic" (Kadlec, 2006, p. 539).

Deweyan 'critical pragmatism' plays a dual role in this study. On the one hand, it provides a philosophical and educational underpinning to the study, that informs the team coaching model for criticality and as the chosen research paradigm informs the choice of research method that of action research. On the other hand, it provides me with the philosophical background that resonates as part of my ontology and epistemology: world in flux (Heraclitus 530-470 BC), knowledge as learning through experience, enquiry, participation, action (Levin and Greenwood, 2007; Dewey, [1926] 2012, [1916] 2015), and critical reflection on action to "address particular problems" (Hammond, 2013, p. 607). Problems for Forester (2012, p. 6) become "reconstruct[ed] possibilities where others might initially perceive or presume impossibilities".

Through a critical pragmatism paradigm, I hope to create knowledge within a critical form of inquiry of "experience and interaction […] where knowledge takes shape, and dialogue is the process through which consensus is achieved" (Vannini, 2008, p. 163).

To a pragmatist "[…] the mandate of science is not to find truth or reality, the existence of which are perpetually in dispute, but to facilitate problem-solving" (Powell, 2001, p. 884). Forester (2012, p. 10) highlights:

> The critical pragmatist […] will attend not only to the consequences of framing a problem in a certain way, but to the contingencies of the relations of power and authority that can make alternative frames and knowledge claims more or less plausible in the first place.

In effect, it is the dialogic process that shapes knowledge or constructs knowledge within a critical pragmatism worldview. In other words, through critical pragmatism knowledge is 'discovered' but without the dialogic process of reaching consensus it cannot be 'created' or constructed. There is a clear link between the dialogic process and Deweyan critical pragmatism. A constructivist epistemology of dialogue informs also the thematic data analysis that is discussed in Chapters 5 and 6.

II. Research Strategy

The research strategy that was chosen to support the research paradigm of Critical Pragmatism and in effect the research question had to fulfill four criteria: assist in problem solving the research question; provide a focus on bringing about change within the context of higher education; afford the collection of knowledge creation by the participants; contribute to the theoretical base of team coaching in higher education. Action Research was chosen among the research strategies of case study and grounded theory since it fulfilled all four criteria. It was an appropriate strategy to answer the research question since the case study is better suited to answer research questions of 'how' and 'why' (Baxter and Jack, 2010). Grounded theory is pertinent to explaining extant processes, as is Action Research. The core difference between the two, lies in the fact that Grounded theory's purpose, as Tie, Birks and Francis (2019, p. 7) inform using Birks and Mills definition, is to generate a theory "abstracted from or grounded in data generated or collected by the researcher." The purpose of Action Research in this study, however, is not to generate a theory, but to explore in action, evaluate and refine the coaching model. On another note, Action Research adds an important focus that of exploring change and improving practice. Within the context of coaching, Hughes and Albertyn (2017) conducted a study to explore change through coaching by using action research (AR). It seems that AR as the authors describe is not only versatile but also a "powerful application as a tool for knowledge creation that could contribute to the emerging theoretical base of

coaching" (Hughes and Albertyn, 2017, p. 295). For the current study's research question, one could say that action research becomes the lynchpin in answering that question: Is there a role for (team) coaching in developing criticality through critical dialogue in undergraduate education?

The action research model used is Piggot-Irvine's (Marsden and Piggot-Irvine, 2012, p. 37) Problem Resolving Action Research (PRAR) model. Even though the model was developed initially for working with groups in management development (Piggot-Irvine, 2002) the model allows for a consideration of participant contributions to the present study to reflect and act on improvements, if needed, to the coaching model. It highlights, also, "multiple perspectives that are acknowledged through the employment of multiple data collection methods, or triangulation" (Piggot-Irvine, 2002). The addition of the two 'spin-off' cycles act as reflections on the preliminary findings with the volunteer tutors who participate also as 'co-researchers'. The *Sage Encyclopedia* on "Qualitative Research Methods-Participants as Co-researchers" informs that the method of using participants as co-researchers constitutes an "interdisciplinary approach" (Boylorn, 2008, p. 599) in qualitative research: "Their feedback offers an opportunity to consider the perspective of the people being represented in the research" (p. 600) and this aligns with the collaborative communicative processes of action research (Levin and Greenwood, 2001).

Vannini (2008), draws attention to the value critical pragmatists give to participatory involvement, which he sees as a "tool for a participatory orientation toward praxis and change" (p. 162). As such the methodology of action research not only immerses the researcher into this experience, but also the participants with their plurality of voices which are analysed to explore the legitimacy of a team coaching model for criticality.

Once the research strategy was chosen, that of Action Research, a series of reflections on the choices I had to make as a researcher needed to be considered. I had to:

- examine and identify the academic environment where the methodology will be implemented;
- discern whether there is a perceived need for criticality by business faculty in that academic environment;
- identify the faculty that would be willing to volunteer in the action research as co-coaches, and

- choose a module that had student-team work and invite student teams to volunteer in the study.

From the reflections, four important aspects of the methodology became evident: The first aspect is the choice of Deree – The American College of Greece as a model undergraduate environment to conduct the action research. Deree-The American College of Greece is a private non-profit undergraduate institution, the oldest accredited American institution in Europe of higher education, both accredited by the New England Commission of Higher Education (NECHE, US) and validated by The Open University (UK). It combines both American and British higher educational standards, therefore, widening the significance of the results from the study. Being a tutor at Deree since 1999 it could also facilitate the process of conducting the action research in terms of administrative staff assisting in the distribution of the invitational e-mails to the participants of the study. Once UREC approval for the action research would be received, the Provost of Deree would provide a letter of support for the implementation of the study on campus.

The second aspect is the decision to invite business faculty with teamwork in their teaching modules to semi-structured interviews to discern their teaching methods in team-based projects and their perceived effects.

The third aspect is the choice of module from which the student-teams will be invited to volunteer as coachees. The module chosen was the Level 5 module EN3942 Professional Communication. The module was initially devised and validated to facilitate and accommodate business students of Deree in terms of professional workplace skills. It is a module that simulates business problems and provides experiential learning in the acquiring and fostering of professional skills. Since 2014 it also became a general elective for other majors from the Liberal Arts and Sciences and the Frances Rich School of Fine and Performing Arts. As part of EN3942, student teams, representing different areas of the Business School and the Liberal Arts and Sciences produce an Analytical Report which is directed to a real audience and solves an issue or identifies an opportunity for an organization or company. The diversity of majors represented would simulate also the diversity of teams in the professional workplace.

The fourth aspect was the specific pool of faculty to invite to the study to participate as co-coaches, co-researchers, and co-participants that would be willing to be

oriented into the initial team coaching model for criticality and conduct the coaching with the student teams. It became evident that involving the faculty that teach the module could facilitate the action research approach. A decision was made to involve the following three groups in the study: Business Faculty; Faculty teaching the EN3942 module, and student-teams registered in the EN3942 module.

III. Participants

Figure 3.1 provides an overview of the three groups that participated in the study: business faculty, student teams, and volunteer tutors.

Business Faculty: The formal invitation to participate in the study was prepared by the researcher and was sent on 26 April 2018 by the Dean of the Business School. The invitational e-mail informed of the purpose of the study and was requesting volunteers who had teamwork in their modules to participate in semi-structured interviews that would take place between May and June 2018. The business faculty received the invitational e-mail as well as the Participation Information Sheet (PIS) attached (see Appendices 3.1 and 3.2).

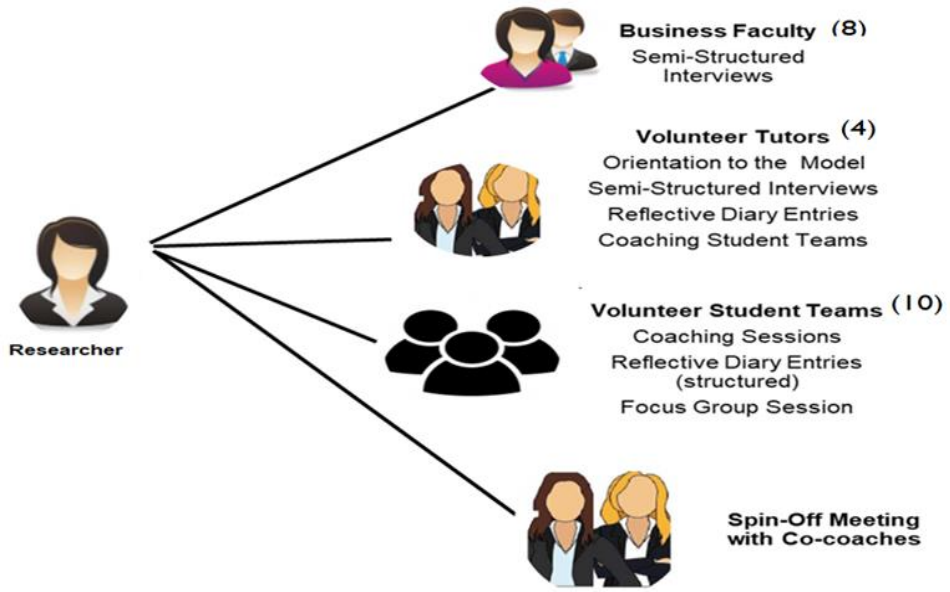

Figure 3. 1 Overview of Participants in the Action Research Study and Research Methods

The Participant Information Sheet outlined the purpose of the study, the reason why they had been invited to participate, as well as what would happen if they decided to take part, the benefits of doing so and where and how to contact the researcher. The goal was seven (7) business faculty with teamwork in their modules to ensure that

most of the business areas were represented. In the end 6 areas were represented by eight (8) business faculty who signed the consent form (see Appendix 3.3). Three of the interviewees were Heads of their respective departments), who responded to the researcher's Brookes e-mail account (Table 3.1):

Business School Department	Gender	Degree	Teamwork
International Tourism and Hospitality Management	Male	PhD	Yes
International Tourism and Hospitality Management	Female	MA	Yes
International Business	Female	PhD	Yes
Sports Management & International Business	Male	PhD	Yes
Management Information Systems	Male	PhD	For revalidation 2019
Management Information Systems	Male	PhD	For revalidation 2019
Marketing	Female	PhD	Yes
Management	Female	MBA	Used to

Table 3. 1 Demographics of Business Faculty

Form the demographics shown in Table 3.1 male and female business faculty was 4:4. This was not intentional.

Teaching Faculty of EN3942: An invitational e-mail to a meeting with the researcher was scheduled for May 2018 and was sent by the Head of the English Department in April 2018 to the six faculty who teach the module (see Appendix 3.4). The invitational e-mail included the Participant Information Sheet attached (see Appendix 3.5), outlining the purpose of the study, the reason why they had been invited, their role in the study and the time commitment involved. The purpose of the meeting was to inform the teaching faculty of the action research study and identify the two-volunteer-co-researcher tutors who would be willing to participate. Four out of six teaching faculty (Table 3.2) came to the meeting and the four (4) present expressed interest and signed the consent form, (see Appendix 3.6).

English Department and Programs	Pseudonym	Degree
Literature, Professional Communication	Phoebe	PhD
Writing Program, Presentation Skills, Professional Communication	Eve	MA
Writing Program, Presentation Skills, Professional Communication	Laverne	MA
Writing Program, Professional Communication	Pamela	PhD

Table 3. 2 Teaching Faculty of EN3942 Demographics

In the end, three participated in the orientation to the coaching model, which was scheduled at the end of June 2018. The decision to orientate three instead of two in the initial coaching model proved prudent since out of the two that were decided at the meeting to become co-coaches in the first cycle of the action research, one had to leave the study on the first day of coaching a student team due to medical reasons. Two out of the three who participated in the orientation to the coaching model conducted the coaching sessions with the student teams in the end. The composition of the participant tutors in Table 3.2 reveals the following facts: All co-coaches are female. We have never had a male tutor teaching until now where two male tutors will be added to the teaching team in spring 2019 and summer term 2019; none of the participants are practicing coaches.

Student Teams Registered in EN3942: An invitational letter signed by the Dean of Liberal Arts and Sciences was enclosed in an A4 envelope, including the Participant Information Sheet and the consent form of interest to an informational session for Q/A before committing to the study (see Appendices 3.7 and 3.8). The invitational letter was distributed together with the two attachments during the second week of June 2018 by an administrative assistant to the 90 students registered in the module, in Summer Term 2018. Student registration for EN3942 is limited to 16 students per section. The Participant Information Sheet outlined the purpose of the study, the reason why they had been invited, and the time commitment involved. Five student teams participated in the first cycle (see Table 3.3 below). The informational session for Q/A that was scheduled for the third week of June 2018 during activity hour (3-4 p.m.) proved manageable only for some student teams. Three teams came to the session. Two signed the consent form (see Appendix 3.9), and I had to organize on the following day an informational session with two more teams that had expressed interest. Following the informational session, they signed the consent form. One team opted to send me an e-mail requesting their interest in participating as volunteers in the study and we met the following day. I had the team go through the Participant Information Sheet again as a team and asked them if they had any questions and they could decide not to participate since the coaching was an intervention for a study. They decided to participate and signed the consent form. Table 3.3, on the following page, provides an overview of the teams in the module in Summer Term 2018:

Sections Formed (6)	Registered Students	Teams Formed	Volunteer Teams #of members	Course Tutors	Co-Coach
A	15	4	1 (4 members)	Phoebe	Researcher
B	16	4	0	Pamela	-----
C	15	4	1 (3 members)	Researcher	Pamela
D	16	4	1 (4 members)	Phoebe	Researcher
E	15	4	2 (2x3 members)	Researcher	Laverne (x2)
F	13	4	0	Eve	-----
TOTAL	**90 students**	**24 teams**	**5 volunteer teams**	**4 Tutors**	**2 co-coaches**

Table 3. 3 Overview of Teams in EN3942- Summer Term 2018

In the second action research cycle, Fall Semester 2018, four teams confirmed their interest to be coached while a fifth team was added following their request to be coached at the end of Fall 2018 when they had received a failing grade in their Analytical Report. An e-mail was sent by the Dean of Liberal Arts and Sciences to all students registered in the module, including as an attachment the Participant Information Sheet (see Appendices 3.10 and 3.11). As a result, the second action research cycle had four teams and a 'resit' team. It was interesting to pursue adding the 'resit' team in the coaching cycle (Table 3.4).

Sections Formed (6)	Registered Students	Teams Formed	Volunteer Teams #of members	Course Tutors	Co-Coach
A	14	4	1 (3 members)	Phoebe	Researcher
A2	4	1	1 (3 members_	Laverne	Researcher
B	15	4	1 (3 members)	Phoebe	Eve
C	8	2	1 (4 members)	Researcher	Eve
D	15	4	1 (3 members) Resit	Eve	Pamela
E	15	4	0	Eve	_____
TOTAL	**71 students**	**15 teams**	**5 volunteer teams**	**4 Tutors**	**2 co-coaches**

Table 3. 4 Overview of Teams in EN3942- Fall Semester 2018

Having presented how the three groups of participants were invited to the study, a discussion of the action research model follows.

Action Research Model

The spiral approach of the Piggot-Irvine's PRAR model (an iterative process of observing, reflecting, planning and acting) lends itself to three cycles: examining the existing situation, implementing a preliminary coaching intervention, and evaluating the preliminary coaching intervention. These are preceded by defining the issue. An overview of Piggot-Irvine's PRAR model used to plan, reflect, observe, and act on the

implementation of the initial coaching model for criticality is presented below, including also the initial six actions implemented that are discussed in research procedures (Figure 3.2).

***Action 6*: Focus group of volunteer student teams and reflecting on results with volunteer tutors. Suggested improvements, if needed, following the first academic cycle of action research to be included in the second academic cycle.**

***Action 5*: Interviews with volunteer tutors; diary entries by volunteer tutors; diary entries by participating volunteer student teams.**

***Action 4*: Implementing three coaching sessions with volunteer student teams**

Action 3: Orientation to the coaching model; reflecting on the qualities of coaching and description of the coaching process with the volunteer tutors.

Action 2: Eight interviews with Business Faculty conducted before the first academic cycle.

Action 1: Informing the Faculty that teach the multi-section module on the need to foster criticality in students and proposing the implementation of an initial team-coaching model to develop criticality within an environment of critical dialogue.

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Figure 3. 2 Action Research Process Adopted from the PRAR model (Piggot-Irvine, 2000) and Further Adapted from the Cardno/Piggot-Irvine Model (1994)

As shown in Figure 3.2, Actions 1 and 2 belong to Cycle 1; Actions 3 and 4 to Cycle 2; and Actions 5 and 6 to Cycle 3.

Reflecting on whether I should implement one cycle of the action research, it became apparent that by adding a second cycle the total findings would provide some relative generalisability. I decided, therefore, to conduct two action research cycles with different cohorts of student- teams, one in summer term 2018 and the other in Fall Semester 2018.

First AR Cycle Summer Term 2018: Summer Term began May 21, 2018 and ended July 20, 2018 with a break in June 22 – July 1. Class time is 80 minutes from Monday through to Thursday.

Second AR Cycle Fall Semester 2018: Fall semester began Thursday, September 13, 2018 and ended Tuesday, December 11, 2018 and February 2019 for the re-sit team. Classes for EN3942 are either Monday-Wednesday-Friday (50 minutes), Monday-Wednesday (75 minutes), or Tuesday-Thursday (75 minutes).

Mid-cycle reflection took place between the two cycles. I decided to make adjustments as to how I would conduct the orientation to the coaching model with the volunteer tutors, clarifying from the onset the differences between tutor and coach before having the volunteer tutors reflect on how they use or not the coaching qualities specified for the coaching model. There was no analysis following the first cycle apart from listening to the audio-files and reading through the diary entries. The student-teams' responses as well as that of the volunteer tutors became the motivating force to implement the second cycle with new student-teams. An overview of the implementation of the PRAR Model including the two AR Cycles is provided after the discussion of the 6 interventions.

IV. Research Procedures

Methods are "the techniques or procedures used to gather or analyse data related to some research question or hypothesis" (Crotty, 1998, p. 3) while Creswell and Miller (2000, p. 39) stress that the pragmatic paradigm "emphasize[s] the research problem and use[s] all approaches available to understand the problem".

The following subsections outline in detail the steps taken in the study. Six actions were planned to take place in the problem/solving action research model (PRAR) involving the three groups of participants. Four methods of data collection were used (semi-structured interviews with business faculty, co-coaches; reflective diary-entries from co-coaches and student-teams; and two focus group sessions) and two groups

of interventions were implemented (orientation to the coaching model and student-team coaching).

Action 1 Informational session on the research study

The first action was organized to present the issue to the faculty teaching the Level 5 module, Professional Communication, which is a problem based experiential learning simulation module. All faculty belong to the School of Liberal Arts & Sciences, and to the English Department, apart from one who is in the School of Business. The meeting that took place was scheduled for May. The meeting took place in the Faculty Lounge and out of the six faculty, without including myself, four came to the meeting with the Head of the English Department being present in the beginning. Once I presented the reasoning behind the action research, and the purpose of the coaching model, as well as answered questions that they had, all four opted to sign the consent form to participate as volunteer tutors, co-coaches, co-researchers.

Action 2 Planning and Conducting Semi-Structured Interviews with Business Faculty

The second intervention involved planning and conducting semi-structured interviews with eight faculty from the School of Business that have assessed teamwork in their modules. Semi-structured interviews provided me with the opportunity to gather data to understand the what, the how and the why Business faculty employ specific strategies with student teams. Such considerations play a pivotal role when using semi-structured interviews (Saunders *et al*., 2013). The purpose of the interviews was to discern the current situation of team-based projects and what teaching methods are being used in team-based projects in the business school and their perceived effects.

I interviewed 8 business faculty. The reason was because I had received four (4) requests to participate on the first two days following the invitational e-mail and the others came in quite sparingly. The following majors were represented: two (2) faculty from International Hospitality and Tourism, two (2) faculty from Marketing, one (1) faculty member from International Business and Sports Management, one (1) faculty member from Management, and two (2) faculty from Computer Information Systems. The interviews were conducted between May and middle of July 2018. These interviews were audio recorded and were saved on Google Drive for transcription. Consent forms were saved and filed. Only one opted for using his name in the study.

The others opted for a pseudonym. Choice of pseudonym was left to the researcher (Table 3.5)

The semi-structured interviews conducted with the Business Faculty were between 50-60 minutes long and afforded an in-depth discussion. The questions (see Appendix 3.12) were used as a "road-map to guide [me] through the interview and allow me to probe further following a response" (Adams *et a*l., 2014, p. 144). All eight interviews were audio-recorded, saved on Google Drive and transcribed. Once the transcription was ready, it was sent and approved by the faculty member.

School of Business	Gender	Date of Interview	Time of Interview	Pseudonym
ITHM	Male	25 May 2018	13:30	Greg
ITHM	Female	25 May 2018	15:30	Maria
IB	Female	25 May 2018	18:00	Kleio
SM &IB	Male	1 June 2018	12:15	Steven
MIS	Male	15 July 2018	10:00	Athanasios
MIS	Male	31 May 2018	11:00	Mike
MK	Female	4 June 2018	14:30	Aspa
MG	Female	15 July 2018	11:00	Nicky

Table 3. 5 Dates & Times of Interviews Conducted with Business Faculty

The process of the interview at times became a two-way dialogue. Taylor & Ussher (2001: 296) refer to Griffin's (1990) role of the researcher in the interview process as 'talking back'. I understand this more as a form of dialogue, where actively listening may result in providing clarifications.

Action 3 Orientation to the Coaching Model

The orientation to the coaching model in the first Action Research Cycle was presented to three volunteer tutors who had opted to participate in the study by signing the consent form (Pamela, Laverne, and Phoebe). The fourth tutor that had signed the consent form was in Turkey at an academic integrity conference. It was decided that she could opt to participate in the action research in the second cycle in fall 2018, if she wished.

The process of finalising the volunteer student teams was not completed. I decided to initiate the three tutors into the initial coaching model. Since no tutor could coach

their own teams from their sections and the volunteer student teams had not been finalized, one volunteer tutor who was not teaching that term would become one of the volunteer tutors. A decision was made between the other two as to who would be, in the end, the second participant in the action research.

The decision proved prudent since the second tutor had to opt out for health reasons before the first coaching session with her assigned team. As a result, the other volunteer tutor became a participant in the study, once approval was given by the student team that they wished to continue and be assigned another coach.

The online Cambridge English Dictionary (2018) defines 'orientate' as meaning "to aim something at someone or something or make something suitable for a particular group of people." Since the particular group of people were experienced undergraduate tutors for more than fifteen years, having implemented various pedagogical strategies in the classroom, the purpose initially was to have them discern the differences between a tutor and a coach against a list of coaching qualities that was given to them:

- in terms of mindset
- in terms of learning space that is dialogic and critical
- in terms of power dynamics
- in terms of asking questions
- in terms of facilitating accountability

The orientation to the three-hour orientation to the coaching model, which was recorded, saved on Google Drive and transcribed was organized as follows (Figure 3.3).

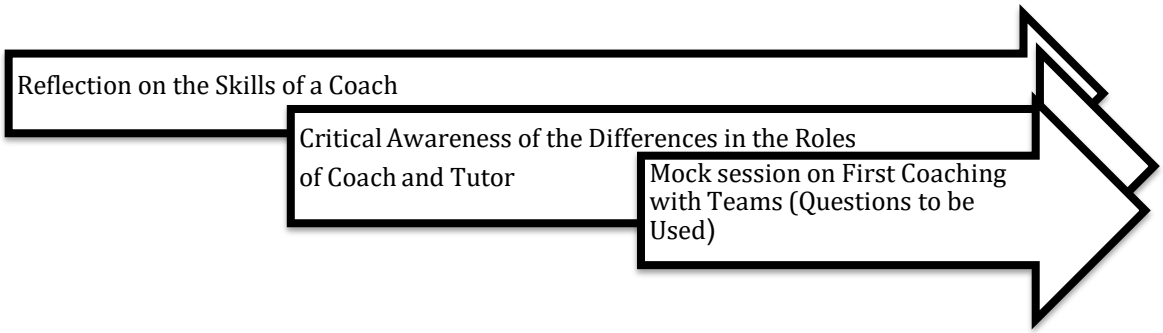

Figure 3. 3 Initiation into the Preliminary Coaching Model

Following a discussion of the coaching attributes, a list of questions for the first coaching session with the volunteer student teams was shared with the tutors. Once questions were answered, a mock coaching session took place.

Reflection: In the first orientation, I was not expecting to be asked questions such as how the coaching could be implemented with their own student teams. Despite the Participant Information Sheet having been distributed to the faculty teaching the module Professional Communication, in the informational meeting in May, and it was again distributed in the beginning of the orientation, I was persistently asked by one tutor how this could be done. From what I understood one tutor was trying to figure out how this could be implemented for her own purposes in her own teaching. It took time until it was fully understood that this is not the case and not the purpose of the study. When it came to the list of coaching qualities, they could see that there are some commonalities that are shared, and most of the discussion focused on how they could enter the coaching session with 'ignorance' and not provide feedback to the student-teams, something that they are accustomed to doing as instructors. One of the tutor-coaches struggled with not being able to provide feedback, which was further addressed and discussed during the semi-structured interview. The first orientation provided me with insight on how to conduct the second orientation to the coaching model in the Second Action Research Cycle (Fall 2018).

Second Orientation to the Coaching Model: In the second orientation to the coaching model more time was spent on clarifying the role of the coach and implementing such a role in a mock coaching session. An invitation to participate in the second cycle was sent on 5 October 2018 to the five faculty that teach the module with the request that they respond by 12 October 2018 (see Appendix 3.13 Second Cycle). Pamela responded that she would like to participate again in the second cycle as co-coach and co-researcher. Eve responded positively, too. Since both volunteer tutors had been present at the informational session regarding the purpose of the study in May, and one had gone through the initial coaching session, it was agreed via the researcher's Brookes e-mail to conduct the orientation to the coaching model on Wednesday, 24 October 2018 at 09:30. The second orientation to the coaching model was audiotaped and was saved on Google Drive for transcription.

Action 4 Implementing the Initial Coaching Model with the Volunteer Teams

The purpose of the initial coaching model was to create a learning space of critical dialogue for both coach and team coachees that is open, safe, and equal, with the aim to enhance critical consciousness, accountability, and productive teamwork. Student Teams were informed from the Participant Information Sheet and the

informational session that coaching would be used as an alternative pedagogical tool to facilitate critical dialogue to foster accountability and functioning of the team, as well as higher order thinking skills, using their third assessment, the analytical report, as a means.

Three coaching sessions were planned for each volunteer student team—one coaching session per week over a span of 3-4 weeks. The coaching sessions were 50-minute sessions, but some varied from 40-60 minutes. A proposed plan was provided in the PIS suggesting the coaching sessions to take place on Friday 22 June; Friday 6 July; and Friday 13 July 2018 (Cycle One) and Friday, 16 November 2018; Friday, 30 November 2018; and Friday, 10 December 2018 (Cycle Two) . Each volunteer team however could organize with their 'coach' the date for the next coaching session. All coaching sessions were audiotaped and saved on Google Drive.

Action 5 Generating further data from both Cycles

During both Action Research Cycles (Summer Term 2018 and Fall Semester 2018) further data were generated from the interviews with the tutor/coaches and their reflective diary entries; the reflective diary entries of the members of the volunteer student teams and the 'spin-off' meetings with the tutor/coaches. Below a discussion follows for each.

A. Semi-Structured Interview with Volunteer Tutors

The purpose of the interviews with the two participating volunteer tutors was to discuss faculty members' experiences of implementing coaching with student teams and the relationship between tutor/coach and student team. Moreover, it intended to discuss development of the coaching model in terms of student teams' motivation work ethic and thinking skills. Another point was to discern the challenges they may have had with the model and include any recommendations (see Appendix 3.14). Even though initially two semi-structured interviews were outlined in the action research model, only one was conducted with each volunteer tutor in Summer Term 2018 and in Fall 2018. Interviews were audio-taped and saved on Google Drive and then transcribed. In Fall Semester 2018 I was able only to conduct one of the interviews and it was done following the first coaching intervention with their volunteer student teams.

Reflection: The semi-structured interviews with the volunteer tutors proved to be invaluable. Even though one interview with each tutor was done, I was able through 'impromptu meetings' to refer also to the other questions. The feedback I was receiving was promising with regard to how the student-teams seem to be experiencing and taking advantage of the coaching. This gave me a further opportunity to probe for issues that the volunteer coaches may be experiencing. In the beginning they were concerned whether they were doing it 'right' but through discussion their concerns would lighten and begin to enjoy the process.

B. Diary Entries from Volunteer Tutors

Diary entries in the form of reflected journals are also used in the discipline of coaching (Woods, 2011). The reflective diary entries employed three sets of structured questions, prior to the coaching, following the first and second coaching, and lastly following the third coaching session. It was used as a qualitative research tool of collecting data. The objective was to have them reflect on challenges prior to the coaching, discern whether they were still having challenges during the first two coaching sessions, and reflect on a series of questions relating to the student-teams they were coaching:

1. Prior to the Implementation of the Coaching Intervention with Student-Teams

--What challenges do you perceive as an educator implementing the coaching model?

2. Following the First and Second Coaching Intervention

--Having done the first and second coaching intervention with the student-team(s) what further challenges, if any, have you identified? If not, why so?

--What have you observed during the coaching intervention with student-teams that stands out for you?

--What feedback have you been receiving from your student-team(s)?

--Would you see any stages added or removed based on your experience of using it?

3. Following the Third Coaching Intervention

--Have you observed higher order thinking skills being used by the student-team(s) you coached? If not, why? If so, what do you think played a role?

--What was your experience of using the coaching model?

--What further would you recommend?

Both volunteer tutors from each cycle sent diary entries to the following three sets of questions to the researcher's Brookes e-mail account. Twelve journal entries from both cycles were collected.

C. Reflective Diary Entries- Volunteer Student Teams

The questions that were designed for the individual student-team members to respond to provide insight into the pre-during-post process of being coached. In the first cycle, seventeen students comprised the five volunteer student teams. Each student chose an e-mail, from seventeen e-mails prepared by an administrator in the IRM Department: student1_gk@acg.edu up to student18_gk@acg.edu. In the second cycle, 17 students comprised the 5 volunteer student teams. Each student chose an e-mail prepared by the administrator in the IRM Department: student18_gk@acg.edu up to student 34_gk@acg.edu. The diary entries were separated into three parts with questions to reflect on:

1. Prior to the coaching intervention

--What challenges do you perceive with the teamwork?

--How do you see your role in the teamwork?

--How do you think you can be supported in achieving higher-order thinking skills to problem-solve an issue or an opportunity for a company or organization?

--What is your understanding of criticality?

2. Following the First Coaching Intervention

--What changes have you seen individually and collectively in the team's use of higher-order thinking skills to problem-solve a company or organizational issue? If none, please explain.

--What challenged you in the coaching intervention?

--What have you decided to work on further?

3. Following the Second and Third Coaching Intervention

--What is your understanding of criticality following the coaching interventions?

--How would you describe your experience of being coached?

--How would you describe the overall experience of your participation in a team?

In the first cycle, out of the 17 student members in the five student teams, nine (9) provided their diary entries: Students 1, 4, 5, 6, 7, 8, 16, 17, 18. Volunteer student teams were sent the request for diary entries on June 30, 2018 and a reminder was

sent July 11, 2018. In the second cycle, out of the 17 student members in the 5 student teams, five (5) students provided their diary entries: Students: 20, 21, 26, 32, and 33. In the end, both cycles of implementing the coaching model (Summer Term 2018 and Fall 2018) generated in total 37 journal entries from student team-members.

D: Spin-Off Meetings

Reflecting on the Coaching Model with the Co-Coaches was conducted 'impromptu', whenever the tutor-coaches were in their offices and could spare some time. In the end, it depended on their availability. Time and obligations played a role. I had tried to organise a meeting with the volunteer tutors from the First Action Research Cycle but only one had responded that she was available (Pamela). Therefore, whenever the tutor coach was in her office and had some time available, we would discuss the findings. Reflecting on the data from the first and second cycles of action research did not provide any further insight apart from the fact that the data corpus supported the coaching intervention. Hammond (2013, p. 7) suggests: "The wider significance of collaboration is epistemological for it offers a means of validating new knowledge and leading to what pragmatists describe as warranted assertions about the world."

Reflection: I had expected to be able to organise the spin-off meetings. The workload of both the volunteer tutors and our continuous obligations were a deterrent. I was eager to share the findings from the focus group sessions and the student-team diaries and together with my co-coaches and co-researchers go over them and reflect. However, I understood that it was challenging to find the time to do so amidst teaching, preparation, and family obligations. The findings from the reflective diary entries together with the focus group sessions and the responses from the semi-structured interviews provided us with a rich array of data that could be compared. In the end, I found that working around their schedules, proved also meaningful.

Action 6: Focus Group Meetings with Volunteer Teams

The purpose of the focus group was to stimulate a discussion on the coaching intervention received by the student-teams. Barrett and Twycross (2018, p. 63) suggest that it

> offers qualitative researchers an efficient method of gathering the views of many participants at one time. Also, the fact that many people are discussing the same issue together can result in an enhanced level of debate, with the

moderator often able to step back and let the focus group enter into a free-flowing discussion.

The authors, also, refer to the advantages for participants: The focus group provides "a more relaxing environment than a one-to-one interview" (p. 63); ideas can be shared when "they want and when their ideas are shared by others in the group" (p. 63); and participants can "'bounce' ideas off each other which sometimes results in different perspectives emerging from the discussion" (p. 63).

In the first cycle, a focus group meeting of all participant volunteer teams was scheduled for July 18 during activity hour: 2:30-3:30 p.m. Student teams had already been informed of the focus group meeting. I wanted the focus group to have the freedom without the presence of the researcher or the co-coaches to discuss their experience of the team coaching as an alternative pedagogical mode –its strengths, weaknesses, and possible recommendations. Once I received permission from the Psychology Department at Deree in February 2018, Dr. Sissi Karakitsou volunteered to facilitate the session. An e-mail reminder with the focus group session semi-structured questions was sent on July 12, informing also in writing that the focus session is organised for Tuesday July 17 at 1:30 pm in the 7th Level Auditorium.

On Tuesday July 17, prior to the focus group session, a meeting took place in the researcher's office with Dr. Karakitsou to go over the process and the semi-structured questions and discuss any points. I had organized also for pizzas to be served at the end of the focus group to thank the participant student teams and the focus group facilitator. The focus group session was audiotaped and saved on Google Drive and was transcribed.

The second cycle with the focus group session was scheduled to take place on Tuesday, December 11 during activity hour, 1:30-3:00. Dr. Karakitsou volunteered to conduct the second focus group session. A meeting took place in advance discussing certain areas that the facilitator could probe further into. The focus group session was audiotaped and saved on Google Drive and was transcribed. One student team-member decided to send anonymously to Dr. Karakitsou using the Student 20 e-mail account his/her focus group question responses by e-mail. These were sent to Dr. Karakitsou who then forwarded the responses to me.

An overview of the academic input, dovetailed with the data collection, throughout the AR cycles is shown in Figure 3.4 below. What is highlighted are the common actions in green and the one-off actions in grey within the PRAR's Model Cycles 1, 2, and 3.

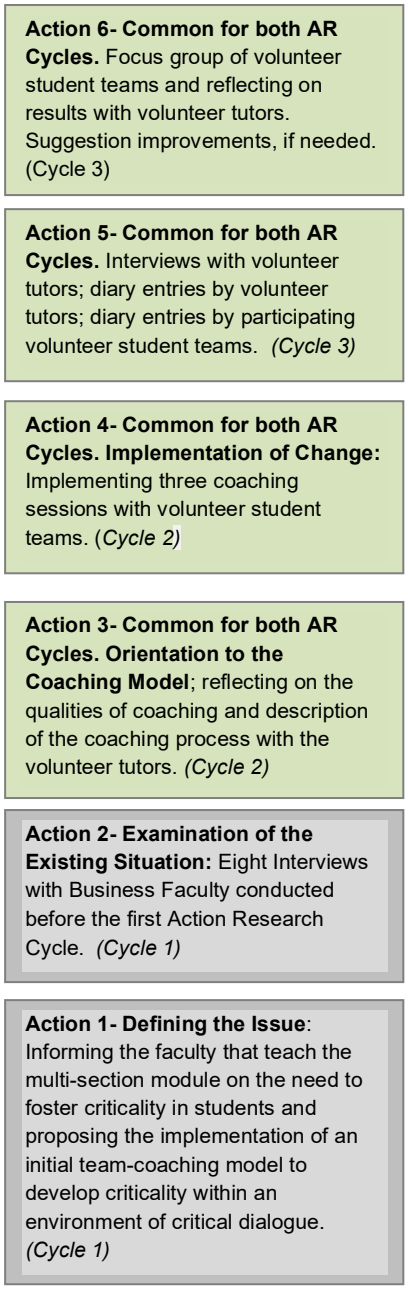

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Figure 3. 4 An Overview of the Data Collection throughout the AR Cycles Using the PRAR Model (Piggot-Irvine, 2000) and Further Adapted from the Cardno/Piggot-Irvine Model (1994)

V. Methods Used to Analyse the Data

The analysis of data is consistent with the pragmatist approach that sees the world in flux, as problem-solving. The type of analysis used was the 6-phase guide to thematic analysis as proposed by Braun & Clarke (2006, p. 79), as a method "for identifying, analyzing, and reporting patterns."

Since data were not collected from Action 1 —being an informational session to inform the faculty that teach EN3942 of the purpose of the study— it was not included therefore in the Data Analysis section. Also, the spin-off cycles that became 'impromptu meetings' with the volunteer tutors generated only affirmation of the effectiveness of the coaching intervention. With the richness of the complex data set (complex since it included the responses of three groups who participated in the study) I conducted the thematic analysis against the study's research question: *Is there a role for team coaching in developing criticality through critical dialogue in the undergraduate classroom*. The first steps that I took with the data set was to transcribe the audio recordings, then organise in tables the responses from each group of participants, under each question that was asked (interview questions; reflective diary questions; focus group sessions' questions from both cycles). Transcribing the audio recordings gave me the opportunity to familiarise myself with the data set. Organising, also, the transcriptions of each participant in an overview table that used the questions as headings afforded me with an easier task to go through the responses seeking for similarities and differences. Even though Braun and Clarke (2006) recommend familiarizing oneself with the corpus data first, I decided to do the transcriptions of the audio recordings before doing so. Reading through the data sets, I began using different colours for responses that referred to team skills, thinking skills, dialogue, team coaching (see sample Appendix 3.15). Once I had the responses coded under the same color, I began comparing responses given from the three participating groups (business faculty; student teams; tutor/coaches). The codes were data driven. An initial thematic map was created that generated thirteen themes (identified in blue) (see Figure 3.4 on the following page).

Reviewing the themes was the next step in the data analysis process. I went through the colour coded data a number of times and assessed them against the themes. This assisted in further refining the themes from thirteen to three. What assisted me further was my objective to organise the themes in accordance with solving the problem, congruent with the epistemology of pragmatism. The overarching themes

were the team coaching (prior-during-after), critical dialogue and criticality and their interrelationship from the perspective of the three participant groups in the study. Sub-themes were also refined to map the data set. Any miscellaneous data were still included but as appendices since they were not directly relevant to the study.

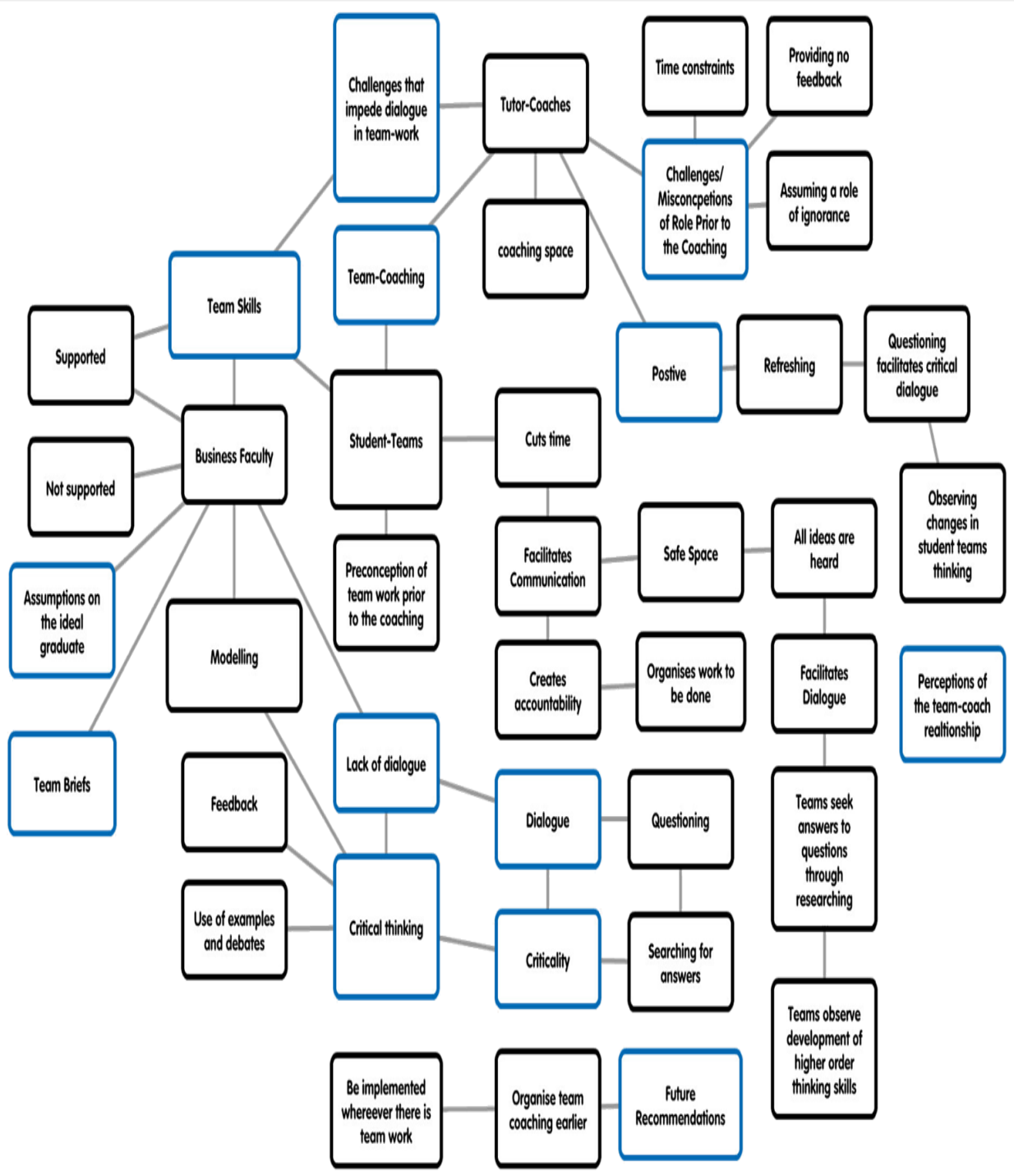

Figure 3. 5 Initial Thematic Map Showing Thirteen Themes and Their Sub-Themes

Once I reached the stage that the themes and sub-themes were a good representation of the data, I stopped any further fine-tuning. The final mapping of the data set in themes and sub-themes is seen below (Figure 3.5). Then I began the analysis of the themes and sub-themes, what Braun and Clarke (2006) refer to as telling a "complicated story".

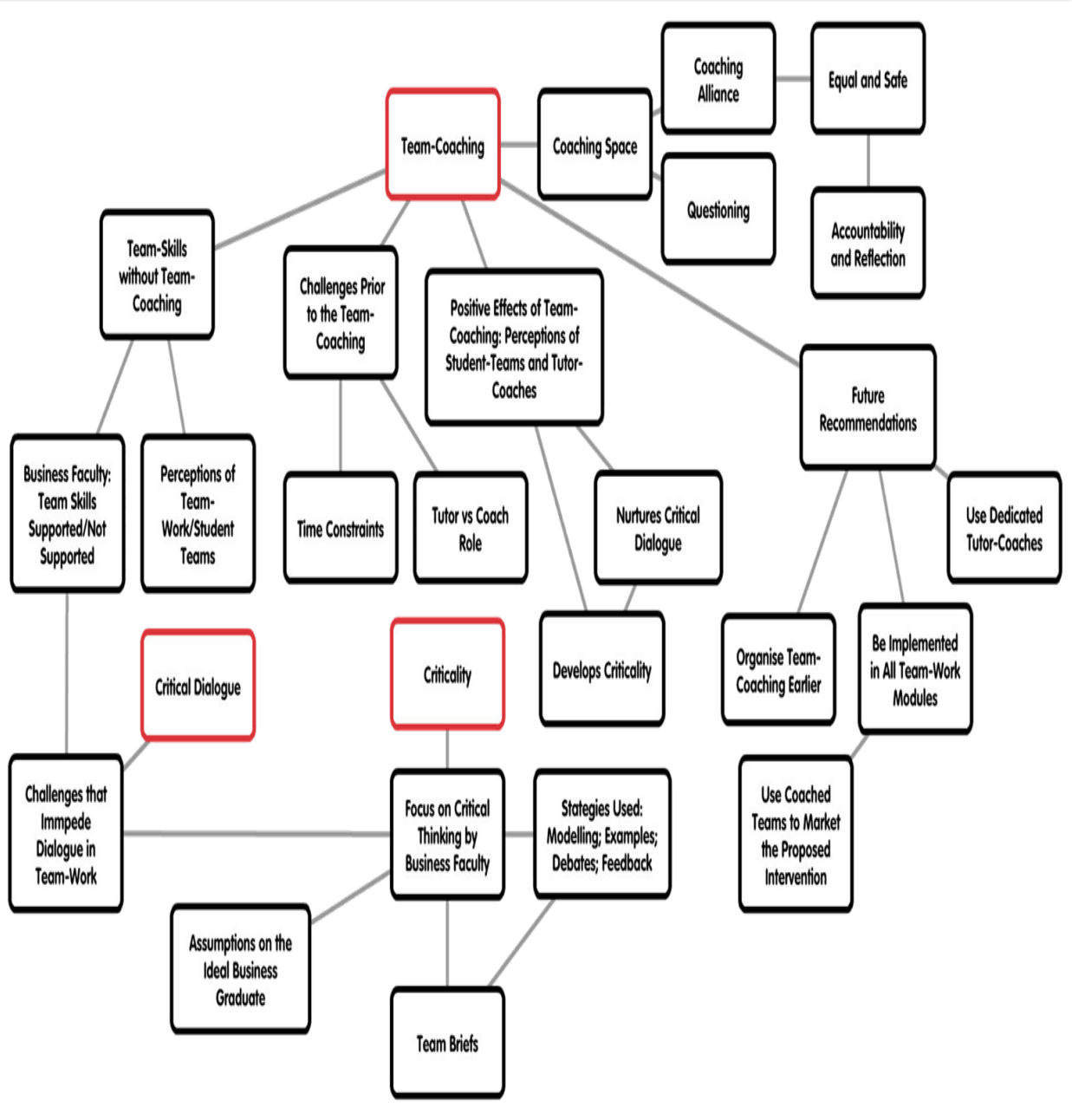

Figure 3. 6 Final Thematic Map, Showing Three Themes and Interrelated Dynamic

A full discussion of the themes are found in Chapters 5 and 6.

VI. Ethical Considerations and Research Validity of the Study

When ethical approval was sought to begin this research, several ethical considerations were highlighted and needed to be addressed:

Choice of Institution

The choice of institution was posed as an ethical consideration since I would be conducting the action research at my home institution, Deree-The American College of Greece and I was Area Coordinator and Module Leader of EN3942. As Tracy (2010, p. 846) poignantly argues: "Ethics are not just a means, but rather constitute a universal end goal of qualitative quality itself, despite paradigm". Insider research is quite explicit about the drawbacks and advantages of conducting research in your own organisation or institution. Two main drawbacks are possible "lack of objectivity and bias" (Saidin, 2016, p. 849) on behalf of the researcher and the exertion of pressure by the researcher on Deree faculty to participate in the study. These were addressed two-fold: by presenting an ethical, transparent compilation and analysis of the data corpus and by indicating in the Participant Information Sheets that whether to decide or not to participate in the study, this would not affect their employment at the institution. Moreover, the reasoning behind using Deree-The American College of Greece apart from it being an environment where the action research could be facilitated to take place, it provided me with an academic space where both US and UK educational models are being implemented and faculty and student body are from diverse cultures and nationalities. Another advantage was the support provided by the Provost to have at my disposal the technical facilities to implement the AR. This was a strong reason for me to conduct the study, in the hope that the findings would provide wider relevance in higher education.

This led to another ethical consideration as to who would be sending the invitational e-mails to the faculty from the Business School, the teaching cohort of the module, and the students registered for EN3942. It was proposed that administrators would take on this role.

Volunteer Student-Teams

In relation to the students registered in EN3942 there was an ethical concern of educational equity as to what would happen if more than five student teams were interested to participate in the study, and how would any disclosure of any unmet teaching needs on the part of the student be managed.

It was suggested that all student teams have the choice to participate or not in the team coaching intervention after reviewing the PIS and opting to participate in the Informational Session where they can ask questions. Choice plays a paramount role in coaching (Whitmore 2009). Teams that decide not to have the coaching intervention will continue to be tutored by their instructor as usual. The advantage, or not, of the teams being coached relates to the development of their joint thinking about the issues concerning the topic they have chosen for their report. So, the research is about developing a model of team coaching that can help foster student higher order thinking skills. It is not focused on preparing students to complete their assessed report. The analytical report is the means, not the outcome.

If any student disclosed unmet teaching needs, they would be advised to contact their instructor or the course leader since the team coaching research is separate from the EN3942 teaching programme.

Time commitment to the study, also needed to be outlined and defined clearly. This was done in the Participant Information Sheet which provided the timeline of the coaching sessions, the time required to do the structured reflective diary entries, and the date and duration of the focus group session.

Volunteer Tutors

A concern of the Ethics Committee was the time commitment of the volunteer tutors that would need to be stated in the Participant Information Sheets. This was addressed in the Participant Information Sheet, outlining the time required if they had one or two teams, as well as their participation in an interview, and their commitment to keep structured reflective diary entries.

Focus Group Session

The initial Ethics document included student-team interviews but was changed to a focus group session that would be facilitated by someone else. The purpose of the focus group was to provide freedom to the participant student teams, without researcher and volunteer tutors present, to discuss their experience of the team coaching as an additional pedagogical mode, its strengths, weaknesses, and possible recommendations. I made the decision to change the student team interviews to a focus group session because I would be interviewing my own student teams from my sections as tutor. That is why I discussed with the Head of the Psychology Department at Deree in February--before providing a response to the Ethics

Committee-- whether I could state that I would be using a psychology instructor to facilitate the process.

Once these ethical considerations were addressed, ethical approval was given. Despite the submission of the Ethics Form in December, approval was given in April due to the clarifications that were needed. This moved the first action research cycle from February-May (spring semester 2018) to Summer Term 2018. As result in Summer Term 2018 the first action research cycle took place, with Fall Semester 2018 becoming the second research cycle. I found myself questioning the time frame being moved six months later, especially during Fall Semester 2018, with the upcoming academic duties. I wanted to ensure, also, that the volunteer tutors would respect my space for time to discuss with them the data corpus from each action research study.

Pseudonyms were used to ensure confidentiality while those participants who wished to use their name was included. All participants in the study signed the consent form and if interviewed would receive a transcription for approval. All had the option to withdraw from the study prior to the analysis of data and those who chose to are to receive a report of the findings once completed.

Robson (2002, p. 170) suggests that action research has validity when it is "accurate, correct, or true." These characteristics, however, are difficult to ascertain, especially for a critical pragmatic study where truth is always shifting. Instead, the author proposes that practitioners "focus on the credibility or trustworthiness of the research (p. 170). Lincoln and Guba (1985, p. 290) present the conundrum of trustworthiness: "How can an inquirer persuade his or her audiences (including self) that the findings of an inquiry are worth paying attention to, worth taking account of." The authors refer to four criteria: truth value, applicability, consistency, and neutrality.

Credibility or trustworthiness of the research starts with disciplined enquiry (McNiff, 2013), a concrete presentation of methods used for data collection and analysis (Mays and Pope, 2000). Creswell and Miller (2000, p. 125) identify nine strategies as 'validity procedures' that qualitative researchers can choose from. Based on the present study triangulation and researcher reflexivity have been met while a third one that of thick rich description is up to the readers of the study to determine.

The data corpus comes from multiple sources: business faculty interviews, volunteer tutor interviews, two sets of recorded coaching sessions, two sets of reflective diary

entries from both volunteer tutors and student team members, two focus groups, as well as the two reflective sessions with the co-researchers. Creswell & Miller (2000, p. 126) identify triangulation as “a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories”.

Researcher reflexivity comes in contrast with neutrality at first glance. I see them as informing each other. Creswell & Miller (2000, p. 127) define reflexivity as the “report on personal beliefs, values, and biases that may shape [a researcher’s] inquiry”. The authors suggest that if the researcher’s biases and beliefs are stated early on, then they can be bracketed and set aside as the research study progresses. On the other hand, neutrality requires the removal of the researcher’s beliefs, values and biases from the findings (Lincoln and Guba, 1985). It becomes therefore the task of the researcher to determine the extent that the findings have not been biased.

Summary

The methodology was informed from a critical pragmatist perspective. The action research process adopted the PRAR model (Piggot-Irvine 2000) and was further adapted from the Cardno/Piggot-Irvine Model (1994). The findings from the interviews, coaching sessions, reflective diary entries, and focus groups can be found in Chapters 5-6.

4. INITIAL TEAM COACHING MODEL FOR CRITICALITY

The aim of this chapter is to articulate the theoretical foundations and key drivers of a team-coaching model for criticality, in an effort to explore how coaching can be implemented as an intervention in the undergraduate business classroom. As such, the epistemic theory of knowledge that contextualises the initial coaching model will be explicated to situate the learning theory used, reflecting a philosophy of education in the coaching model itself. The chapter provides a discussion of coaching as a learning model in higher education; the philosophical underpinnings of the coaching model, and a deconstruction and reconstruction of the initial team coaching model in an attempt to describe how it could be used.

Coaching as a Learning Model

Learning models in education according to Scott (2017, p. 73) are "learning mechanisms in specialised environments". As Scott explains, learning mechanisms are "underpinned by a particular theory of knowledge, which also has implications for the development of a theory of learning in which knowledge plays an important part" (p. 73). As such, a learning model is the means, the process, through which learning takes place in a specialised environment such as undergraduate higher education. Such a specialised learning environment could take the form of online modules, to blended courses, problem-based curricula, experiential learning simulations, to lecture based course offerings. In effect, "theoretical and contextual considerations impact, then, on how elements of teaching and learning are realised" (Scott, 2017, p. 74). As Scott (2017), Cox (2015), and Cox *et al*. (2014) have argued, coaching can too be considered a learning model. Even more, coaching too is underpinned by "logical and epistemological beliefs that informs *[a coach's] assumptions about learning*, that, in turn, influences the types of *coaching methods and practice activities used*" (Cushion and Partington, 2016, p. 862), [my italics]. It would not be farfetched if we were to substitute the word coach with the word tutor in the above description and coaching with teaching; it can be suggested that the coach does take on a pedagogic identity.

In the initial coaching model for criticality the philosophical underpinnings inform the dynamic learning space, dialogic pedagogy, and reflection and accountability. A preview of the framework is presented below before moving onto the discussion (Figure 4.1).

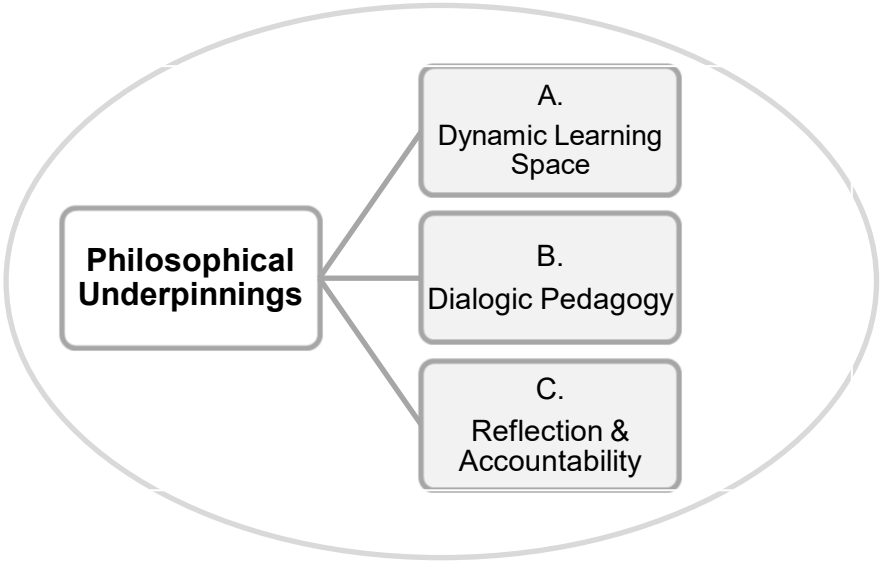

Figure 4. 1 The Philosophical Underpinnings' of the Team Coaching for Criticality Model

Philosophical Underpinnings of the Coaching Model

Since any coaching model reflects a coach's philosophy (Lennard, 2010), the initial coaching model to be expounded in this chapter reflects the ontology, epistemology, and axiology that constitute my educational philosophy. Cushion and Partington (2016, p. 852) underscore three important themes in philosophical theorising: ontology (nature of reality), epistemology (nature of knowledge), and axiology (subdivided into ethics and aesthetics). The philosophical underpinnings of the team coaching model for developing criticality are critical pragmatism, knowledge as experiential learning through dialogue and dialectics, and democracy.

Ontology: Critical Pragmatism

Pragmatism finds a creative space in experiential simulated learning and critical dialogic pedagogy in Higher Education. Taatila and Raij (2012), in their philosophical review of pragmatism as a basis for learning, echo Dewey when they highlight that pragmatism "sees the social world as an ever-changing place" and as such, argue that the goal in education "is not to seek the ultimate blueprint" but have students "learn the process of discovery and self-sufficiency as much as the facts that are discovered" (p. 832). The differences between realism in HE and Pragmatism in HE are contrasted by four criteria: learning environment, knowledge, mode of learning, and evaluation of learning (Table 4.1).

Criteria	Realism in HE	Pragmatism in HE
Learning Environment	Lecture and theory-based	Action Oriented Solutions that translate 'real-life' problems into action
Knowledge	How the world functions	Tools provided to students to accomplish real tasks in constantly evolving situations; life-long learning.
Learning	Living in order to learn (Ardalan, 2008, p. 22)	Learning in order to live (Ardalan, 2008, p. 22)
Evaluation of Learning	Facts in an exam	Action in practical situations

Table 4. 1 Differences between Realism and Pragmatism in HE based on Taatila and Raij (2012)

As such, realism in higher education propagates a theory-based learning environment with the tutor playing a pivotal role in underscoring how the world functions while living for the students becomes an end to such learning, and facts are assessed in a final exam (Taatila and Raij, 2012, pp. 832–833, 835). On the other hand, pragmatism focuses on an action-oriented form of education, where project learning is assessed, and to be educated "is life itself" (Ardalan, 2008, p. 35).

Building on such principles of pragmatism, critical pragmatism focuses on the critical dimensions of Dewey's thought, that of reconstruction of social habits; a critical reflective stance to discern the power structures that are silent, not evident (Feinberg, 2012); the emancipatory power of education and democracy (Midtgarden, 2012); and the role of democracy and education in educating "social beings" (Ardalan, 2008, para. 35). Ulrich insightfully argues that pragmatism "cut across the empiricist/rationalist divide and uncovered the discursive and societal character of knowledge" (2007, p. 1110). He defines critical pragmatism as a combination of "classical pragmatist conceptions of inquiry, meaning, and truth with the critical turn of our notions of rational discourse" (2007, p. 1112). Such critical dimensions of Dewey's thought have been brought to the fore by Kadlec (2006), Vannini (2008), and Midtgarden (2012) among others.

Epistemology: Knowledge as Experiential Learning

Project based/problem-based learning provides the environment and focus of the proposed coaching model but also a foundation for a critical pragmatic philosophy. As Dewey argues thinking cannot be cut off from experience. According to Dewey:

> thinking is often regarded both in philosophic theory and in educational practice as something cut off from experience, and capable of being cultivated in isolation. In fact, the inherent limitations of experience are often urged as the sufficient ground for attention to thinking. (Dewey, [1916] 2015, chap. 12, para. 2)

In effect, to put this into context, thinking from experience in undergraduate education can be seen as a fruitful process and outcome in the educational environment of simulated problem-based learning. The initial team-coaching for criticality model could utilise the educational environment of simulated problem-based learning to nurture criticality. Problem-based learning and simulations provide the grounds within which dialogue and criticality can foster. Beckem (2012, p. 62) has suggested that apart from the fact that simulations in education provide students with more control "of how and when they learn" they also empower students to move beyond "merely remembering, understanding and applying concepts to a higher order process of analyzing, evaluating and synthesizing information to formulate new knowledge".

Dewey's pragmatic philosophy with its emphasis on experiential learning is considered paramount for student thinking and development. As Elkjaer (2009, p. 74) discerns, "In Dewey's version, pragmatism is a method to think and act in a creative (imaginative) and future-oriented (i.e. consequences) manner". Stoller (2018, p. 452) argues that "For Dewey, the central aim of education is cultivating unique, productive capacities which allow students to engage in the world through reconstruction of the world". However, the purpose of education for Dewey is inconceivable without its conceptualisation within a democratic community (Dewey, [1916] 2015). It is the continued capacity for growth that is awarded by learning that can function within a democratic community as the purpose of education to reconstruct social habits and social institutions but "by means of wide stimulation from equitably distributed interests" (Dewey, [1916] 2015, chap. 8, para. 1).

Axiology: Democracy and Education

For Biesta an axiology of education is what "provides us with criteria for judging what we want education to work for" (2015, p. 18). However, for Dewey the 'criteria for judging what we want education to work for' are intertwined with democracy.

Democracy for Dewey:

> is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience … [which is] equivalent to the breading down of …class, race, and national territory. ([1916] 2015, chap. 7, para 8).

Democracy relies on education to create "democratic habits of thought and action" that will buttress it from becoming "too exclusively political in nature" (Dewey, 1937, p. 467). As he cautions, "unless democratic habits of thought and action are part of the fiber of a people, political democracy is insecure" (Dewey, 1937, p. 467). This resonates with my understanding of what I want education to work for and that is to provide a critical dialogic environment where criticality can be nurtured in an effort to foreground issues that continue to threaten an inclusive society. "The culture in which "getting things done" has become more important than "thinking deeply" has in recent decades wiped out the courage to think creatively for oneself" (Laske, 2017, pt. I, p. 3). An overview of the philosophical underpinnings of the team-coaching model for criticality is given in Figure 4.2.

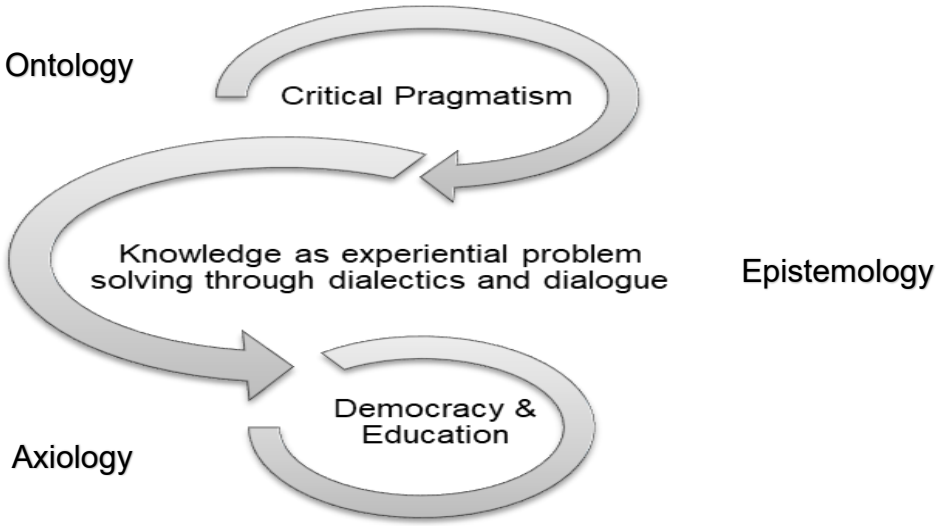

Figure 4. 2 *Philosophical Underpinnings of the Team Coaching Model for Criticality*

Extracting from the philosophical underpinnings the educational philosophy, these would translate as follows (Figure 4.3):

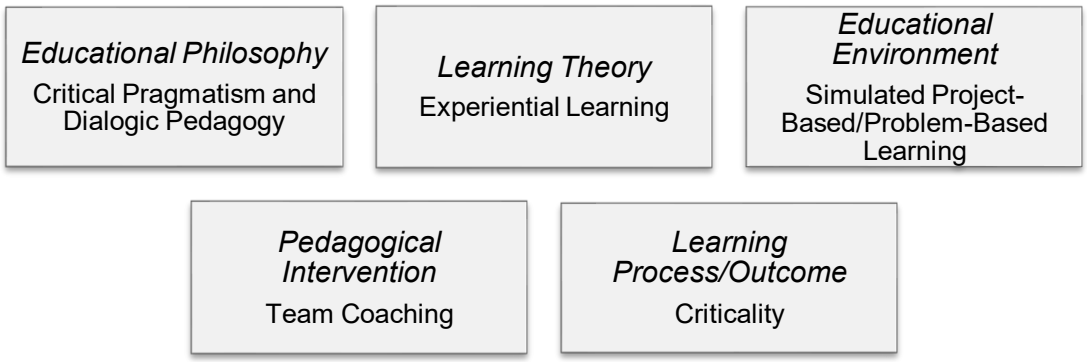

Figure 4. 3 Educational Philosophy of the Team Coaching Model for Criticality

The philosophical foundations that translate into the educational philosophy of the initial team coaching model constitute the overarching principles that inform, pervade and infuse *how* the three subsequent interrelated quadrants interact within the coaching space. These will be presented in this chapter. But first, it is important to note that these philosophical foundations are paramount in providing the tutor-coach with an understanding of critical pragmatism, whose form of experiential learning that of problem-solving, and the political philosophy of democracy and education interrelate and inform the purpose and practice of team-coaching for criticality. Without such a critical understanding in the practice of team coaching for criticality the purpose of the model is permuted. So, is the critical understanding of fully taking on the persona of coach.

A list of coaching skills (Table 4.2), which resulted from a mixture of exploration of the coaching literature, my personal experience as an undergraduate tutor since 1999, and work with student teams since 2010, raise awareness of the differences between coach and tutor. Embracing such differences are paramount to the practice of team coaching in undergraduate education. Once these differences are fully understood and respected, further explication of the differences between tutor-team contact hours/conferencing and a coaching alliance have to be discussed.

	List of Coaching Skills Used	References
1.	Authentic Listening and Active Listening Strategies	(Cox, 2013)
2.	Asking Questions (non-judgmental)	(Cox 2013)
3.	Challenging Constructively	(Clutterbuck and Megginson 2005)
4.	Providing Feedback	(Hackman and Wageman 2005)
5.	Creating Accountability	(Hackman and Wageman 2005)
6.	Providing Encouragement and Support	(van Nieuwerburgh 2017)
7.	Building Rapport and Trust- psychological safety and respect	(Cox 2012)
8.	Critical Reflection and Reflexive Learning	(Cox 2012; Kristal 2009)
9.	Equality between coach and coachee	(Shoukry 2016)
10.	Facilitative and Collaborative Relationship between coach and coachee	(Grant 2003)
11.	Learning Space	(Kolb and Kolb 2005)
12.	Space where creativity can emerge	(Western 2012)
13.	Critical Consciousness	(Askew & Carnell 2011)
14.	Coach's "knowledge demands be sublimated"	(Cox 2012)

Table 4. 2 List of coaching skills used

The dynamics of the classroom have different features from a coaching alliance between coach and coachee:

Conferencing with the tutor is an example of interaction that could mimic a coach/coachee interaction, but it is not a coaching alliance that requires commitment from both parties and is consistent for a period of time (Whitworth *et al.*, 2009). Tutors use conferencing time to have one on one discussions with students or a team of students, but the power relationship is 'asymmetrical' and though focused on the needs of the student it is created from an authoritative position of the tutor. The Socratic method of questioning adds to this power dynamic. Cox (2012, p. 117) refers to Gronke's (2010) misgivings of using the Socratic method of questioning and focuses on one main weakness,

> Socrates determines the content of the dialogue, and any alleged self-knowledge of the learners is produced by him, […] as they have not worked out the ideas independently. Thus, the Socratic Method essentially depends on leading questions.

Cox also highlights that "Socrates…does much more talking and telling that would be expected in coaching" (2012, p. 117). This leads us to the next disadvantage.

Tutors do not come to coaching with ignorance (Cox, 2012) or 'authoritative doubt' (Mason, 2005), . It is not the coach, but the student-team that will provide the answer. Cox (2012) reminds us that one of the differentiating features of coaching is "when coaches have no prior understanding of the client's context" (p. 111). She explains why:

> If questions are dependent upon the knowledge coaches already have, then the less prior knowledge coaches have, the more current information they will need to gather on behalf of the alliance, and the 'purer', less contaminated, or naïve and innocent the questioning is likely to be. (p. 111)

In effect, the coach takes on what Overholser (1996) referred to as 'a position of ignorance'. Kemp explains:

> [the] position of ignorance can be interpreted as the adoption of a mindset of an inquisitive and curious learner underpinned by genuine interest, concern, and unconditional positive regard" (2008, p. 42).

This becomes "an empty space" for the coach, which transforms into a dynamic learning space for both coach and student-teams (Cox, 2012).

Mentoring is more of a preferred role to be attained by tutors. As mentors "they have more knowledge in a specific area than their learners, and so…the position of ignorance cannot be attained" (Cox, 2012, p. 121). In my experience, tutors are generally reluctant to relinquish the role of mentor for an alliance between coach and coachee(s) because of limitations of learning space (the physical classroom), class-size (the number of students registered for the course), time (the time frame of a semester or term), epistemological constraints adopted for the module (realism, constructivism, pragmatism and so on).

Tutors are reluctant to use the word coach especially when professional credentials are required or at its extreme, they may use it without thought.

Once the above constraints have been fully understood and compartmentalised, tutors can be oriented into the coaching model. Many faculty members, by default, have the reasoning skills, and the critical stance of the intellectual that bridges academia and society. As such, HE faculty have the reasoning skills and subject matter that can be used to nurture an environment of criticality and create an environment of inquiry. The critical stance of HE faculty as intellectuals can underscore where academia meets society and challenge social issues. It can also immerse undergraduate students head-on, in an environment of problem-based learning, into thinking, researching, and finding solutions to such issues.

The Role of the Tutor/Coach in the Coaching Process

The tutor-coach mediates the student-teams' thinking. Forester (2012, p. 6) within a different context explains: "mediators do not make stakeholder agreements any more than midwives make babies". The role of the coach as mediator/intermediary therefore is not to do the thinking for the student teams (to make the baby), but to mediate inconsistencies, contradictions, and guide them through these contradictions so that student-teams identify legitimate, transparent, and accountable solutions.

The tutor-coach invests in and gains from the alliance with the student-teams. Coaches strike an alliance with the student-teams. Both sides need to be invested. Both learn, but differently. The coach learns through the three stages of reflective practice taken from Schön's seminal work (1987): Knowing in Action, Reflection in Action and Reflection on Action. This is how the tutor/coach grows and learns. Tacit knowledge gained from experience is more important than credentials to be able to teach to learn. It seems that Schὸn is an advocator of that too.

Having presented the underlying quadrant, that of the philosophical foundations of the team coaching model, the salient quadrants that work in unison are: A. Dynamic Learning Space; B. Dialogic Pedagogy; and C. Reflection and Accountability, (see Figure 4.4). In other words, the three quadrants that support and reflect the overarching quadrant which constitutes the philosophical foundations of pragmatism and in particular critical pragmatism and dialogic pedagogy and the student-centred pedagogy of group problem-based learning, create an ontological and epistemological intersection that bridge the coach as intermediary (critical pragmatist) and the group coaching into a malleable alternative of classroom pedagogy.

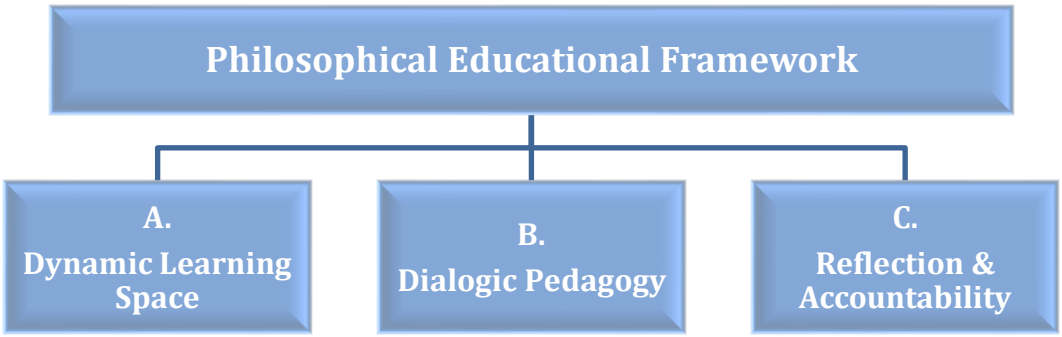

Figure 4. 4 The Philosophical Educational Framework and the Three Salient Coaching Quadrants

A. Dynamic Learning Space: Safe and Equal

The intention of the model is to create a learning space characterised by safety and equality. Irrespective of where the coaching takes place, what defines a space as a learning space is the agreement by all participants, coach and student team to learn in a defined space which is safe. Safety is a result of nurturing both thinking and dialogue and while thinking can be exposed for what it is and challenged through pointing, elaborating and linking, it is equality of learning for both tutor-coach and student teams that fosters such safety in the creative learning space. According to Kolb and Kolb (2005, p. 200) "learning spaces […] require norms of psychological safety, serious purpose, and respect to promote learning". Cox (2012, p. 97) reminds us that "coaching provides an ideal, safe, 'powerless', yet empowering environment": where learning does take place. All three norms, that of psychological safety, serious purpose and respect are embedded in both the coaching space and team coaching process. As such, the prospective tutor-coach subsumes the identity of tutor and acknowledges and welcomes the role of guide and co-learner. Only when a learning space is equal can dynamic learning take place, for it is then when risk-taking is safe, and ideas are created since judgement is transposed into individual and group reflection, that thinking can grow (Figure 4.5).

Figure 4. 5 Dynamic Learning Space

B. Dialogic Pedagogy and Questioning

The coaching space nurtures an environment of team dynamics where monologue and dialogue are complementary (Matusov, 2009). Dialogue occurs within "the meeting spaces and dramatic processes of making meaning between different and

not reducible consciousness" and consciousness becomes "co-producing knowledge in the process of communication between different subjects" (Dafermos, 2018, p. A4). A balance of monologicity, non-dialogue, and dialogue can thrive in team members and team dynamics. It is when the default setting of the I, "which is to be deeply and literally self-centred" (Wallace, 2005, para. 8), is let go for dialogue to take place and the 'We' to come into the equation. Dafermos (2018, p. A4) provides an interesting position in terms of dialogic pedagogy that one can take a step further and justify it for team work.

> Individual consciousness cannot grasp the complexity and variety of the human world. In contrast to the single, isolated, monological consciousness, a dialogical coexistence of different irreducible consciousnesses develops. Bakhtin argued that the idea is not developed in isolated individual consciousness but in dialogic communication between several consciousnesses.

Team coaching thus is an attempt to bring out "in dialogic communication" the development of "different irreducible consciousness" (Dafermos, 2018, p. A4). What sets in motion such dialogue is what Laske proposes as the 'pel sequence' that of pointing, elaborating, and linking which he suggests creates "groupings or constellations of thought forms that leave all linear logical thinking behind" (2017 Part II, para. 7).

Driver: The *pel sequence (pointing, elaborating, and linking)* creates a dialectical discursive environment of inquiry, research, and synthesis going beyond critical thinking. Laske's (2017 Part I) insightful focus on dialogue and its role in deep thinking diverges from attending to an understanding of *what* is said to an exploration of *how* something is said. In other words, what thought forms (thinking processes) formulate the output, the content of what is said. As Laske (2017 Part II, para. 2) underlines "since the mind is a "system", thought forms never exist in isolation; they are therefore always ready to be deepened, linked, and coordinated". *Pointing* in the initial coaching model uses critical questioning, where the tutor-coach challenges assumptions and theoretical perspectives that reflect thought forms so that student teams can research, elaborate and link and interactively construct a deeper understanding, a dialectical or transformational understanding that can inform their problem-solving. Both coach and student team can *point* and *link*. What is solely the

prerogative of the student team is *expanding*. Figure 4.6 shows dialogic pedagogy in action in the team coaching model.

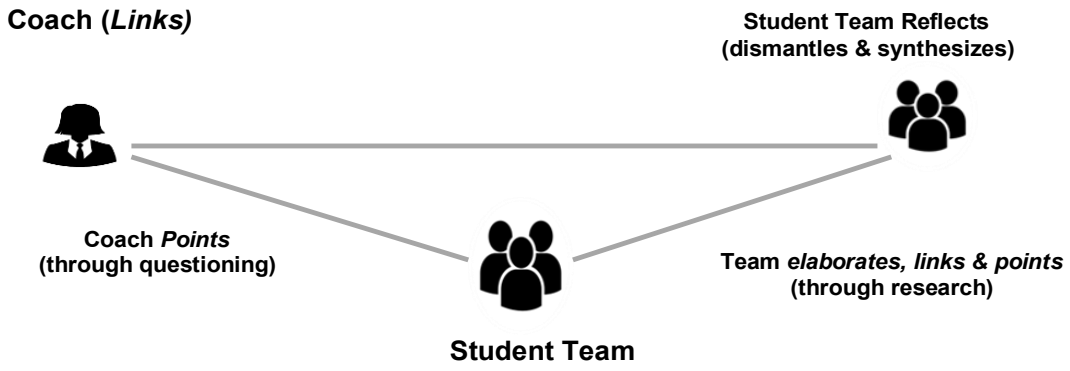

Figure 4. 6 Dialogic Pedagogy in Action in the Team Coaching Model for Criticality

Questioning and Higher Order Thinking Questions

Cox (2012) examined the function of questioning in the coaching context as well as the typologies of questions and their application to coaching. The review of literature on the importance of questioning in the coaching context reveals a focus on questions that prompt the coachee into considering multiple perspectives, and alternatives, reflexivity and awareness, and a scaffolding to assist coachees to free themselves from debilitating thoughts and views. As Cox (2012, p. 106) reminds us, questioning "is considered to be one of the most powerful elements of coaching; useful for helping the client reflect on experience and for encouraging criticality". The criticality that Cox refers to has to do mainly with personal development. Taking the significance of questioning from the coaching process, the coaching for criticality model focuses on nurturing a learning environment where critical thinking and social awareness merge as dialectical criticality to scaffold student's thinking from the superficial to the probing to elaborating and linking, and the search for answers that once synthesized and evaluated can propose solutions to pending issues. These issues go beyond the self and the individual and focus on the public and social.

Even though Cox (2012, p. 107) argues against the coach "fall[ing] back on a predictable set of tried and trusted questions" understanding the use of higher-order questions and their types is essential in construing questions that will enable coachees to immerse themselves in the dialectics of knowledge acquisition and are therefore paramount to the coaching for criticality model. The questions thus asked

by the tutor/coach can pose as a set of moves and countermoves to be reflected on so that inquiry and discovery is sought out and created by the coachees.

It is important to understand what kind of questions educators ask. Based on those questions, the kind of knowledge students are asked to answer in relation to their work-based project is categorised. There is a difference between: How effective have Walmart's sustainability practices been? from What sustainability practices has Walmart adopted?

The questions used in the two cycles of implementing the coaching model, which was done in three stages each time, were divided into questions that referred to an understanding of the student team's goal with its inherent complexities as well as an evaluation of how the team was functioning in pursuit of their goal (see Appendix 4.1). These questions function as suggested tools, but the tutor-coach depending on the context of dialogue that is taking place, should ask additional questions to clarify the kind of thinking that is taking place, so as to highlight inconsistencies in thought, identify key ideas that are being stated and pursue with questioning whether this is something the student-team would wish to consider and unravel further. As Cox (2012, p. 108) underscores "questions are contextual and arise based on the requirements of the current task".

C. Reflection and Accountability

Reflection and accountability enable students to engage as sole motivators in the process of knowledge acquisition. This resembles Knowles theory of andragogy or theory of adult learning (1984). Cox (2015, p. 27) crucially "highlighted how Knowles's (1984) theory of andragogy confirms the link between coaching and adult learning theory."

The lines of learning age, however, in undergraduate education are blurred: Kazis et al (2007) in their paper for the US Department of Labour define adult learners as those students who enter higher education at the age of 24 and above. On another note, Rachal (2002, p. 219) defines the adult student as "The learner [who] is perceived to be a mature, motivated, voluntary, and equal participant in a learning relationship with a facilitator whose role is to aid the learner in the achievement of his or her primarily self-determined learning objectives". Whether learners belong to the age group of 18-22 or above, there is no clear divide. Donnelly-Smith (2011, p. 8) in a conversation with L. Lee Knefelkamp, professor of psychology and education at

Teachers College, Columbia University, and a senior scholar at AAC&U, underscores: “We need to treat adult students as co-learners, and we need to do that for traditional-aged students, too”. Without considering students in higher education as being all adult learners they cannot be considered as equal participants *in* their learning and accountable *for* their learning. McCune and Entwistle (2011, p. 308) purport that it is vital for students to see themselves as “legitimate contributors to knowledge construction”.

Driver: The coaching space requires students to reflect on their thinking skills outside and within group power dynamics. Dewey ([1910] 2011, p. 6) provides an insightful definition of what constitutes reflection. It is the “[a]ctive, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends”. Dewey further explicates two paramount subprocesses that take place in reflection: “(a) a state of perplexity, hesitation, doubt; and (b) an act of search or investigation directed toward bringing to light further facts which serve to corroborate or to nullify the suggested belief” ([1910] 2011, p. 9). In the coaching model, the first subprocess is dual in the sense that both the coach and the student team may express perplexity, hesitation, doubt. The tutor-coach may feel so as a result of the student-team dialogue and responses to the questions being asked, while the student-team may feel so as a result of their own process of discovery which may have opened further unknowns that need to be understood and connected. However, what differs when coach and team find themselves in this state is the role of the tutor-coach who formulates further questions that will assist the student-team to move from perplexity hesitation, doubt to the act of searching or investigating to finding answers, clarifying, connecting, and relating. This process of perplexity, hesitation, doubt can be seen in figure 4.7.

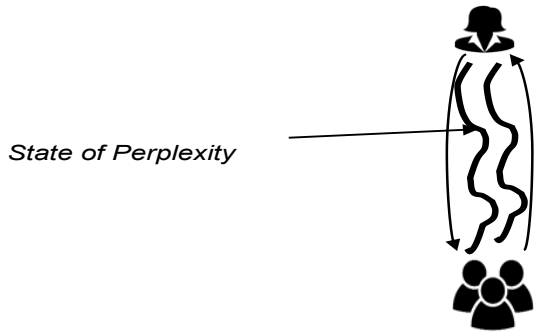

Figure 4. 7 Reflecting on state of perplexity, hesitation, and doubt

Transferring such reflection into a team environment, Hytten (1997, p. 40) insinuates that “intelligence is not solely an individual possession” but a result of “individual strengths and contributions [that] are simulated and emerge from association with others”. In effect, I agree with Dafermos (2018, p. A4) who suggests that the individual by itself “cannot grasp the complexity and variety of the human world”.

The act of pursuing decisions made through reflection and questioning is what makes student-teams accountable. They take on the responsibility, based on their decision to do so. Each and all co-agree as to what they are accountable for before the next coaching session, and accountability not only refers to *what* they have decided to do but also *how* they are to work together to do so. It seems, therefore, that without accountability, reflection becomes purposeless without an ascribed goal. In effect, *without* accountability reflection remains an internal process.

Summary

In this chapter, the initial coaching model was presented. Figure 4.8, on the following page, re-constructs all the parts into one complete model. The three blocks, A. Dynamic Learning Space (*driver: safe and equal*); B. Dialogic pedagogy (*driver: pel sequence*), and C. Reflecting and accountability (*driver: reflection*), within the philosophical educational framework, underscore the parts of the team coaching model for criticality.

The learning space between coach and student team(s) is where dialogue and exploration take place; it is where risks are taken, and doubt and confusion are reframed through questioning to provide reflection and accountable action. It is the learning space where thinking is deepened and expounded and linked to problem solving, dismantling power structures and their reasoning to produce different knowledge that may create other alternatives.

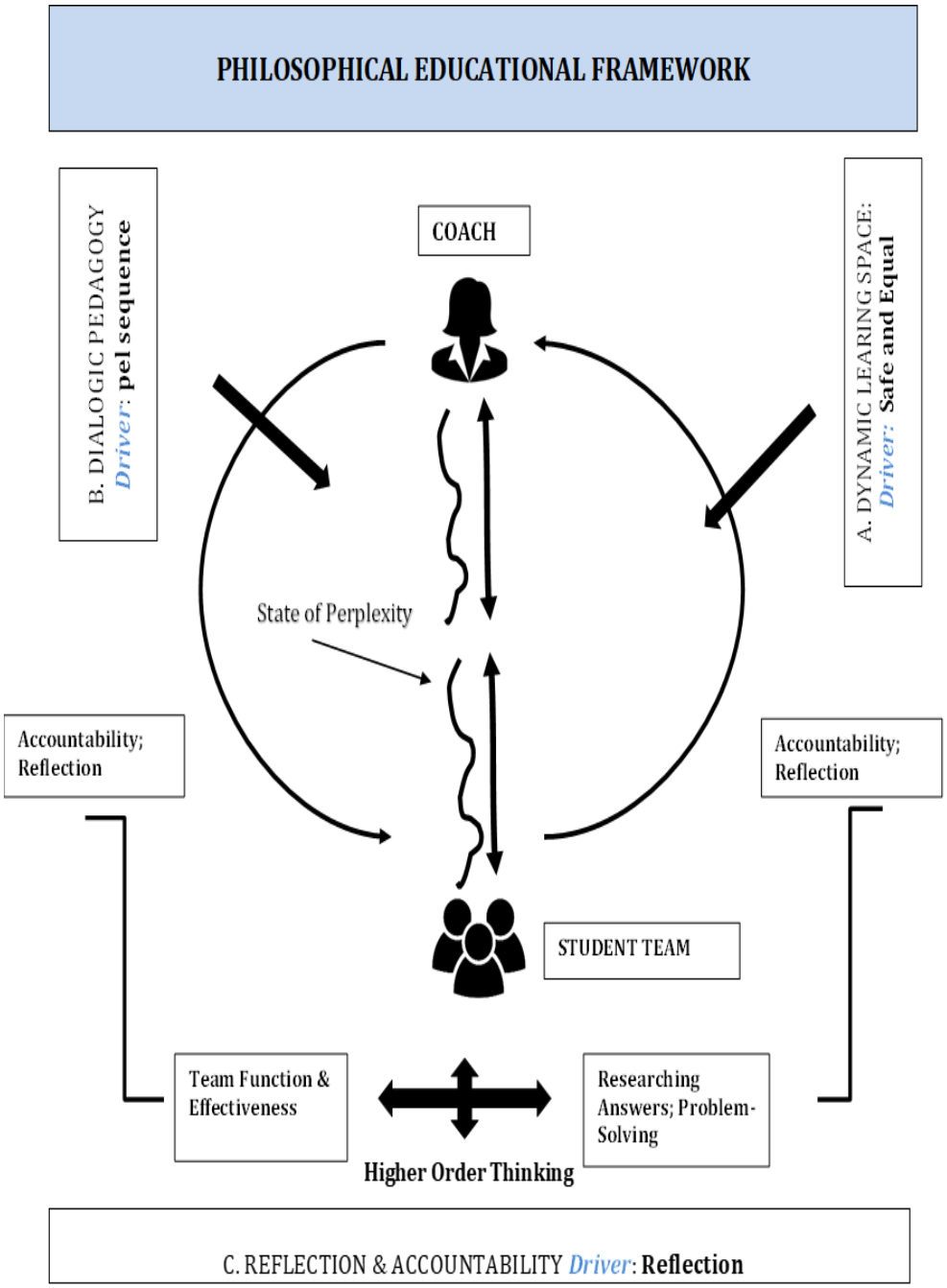

Figure 4. 8 Initial Team Coaching Model for Criticality

Developing the team coaching model for criticality came as a result of my exploration into providing a space for student teams to think deeply, creatively, in understanding and resolving crises (issues, problems) through poignant questioning. It came as a result of a critical pragmatic philosophy translated into an educational philosophy where experiential learning in higher education can provide student teams with a dynamic learning space where the individual is reconstructed into social intelligence;

the pursuit of higher order thinking will enable through enquiry the dialectics of relationships and contradictions as well as the power structures involved; and as a result provide the space for the individual to grow through the growth of the others on the team.

In the following two chapters (5 & 6), the outcomes of implementing the initial team coaching model in the two action research cycles are discussed. Chapter 7, the conclusion chapter, showcases an enhanced team coaching model for criticality, based on the findings of the two action research cycles.

5. THE ROLE OF THE CRITICAL COACHING MODEL ON DIALOGUE

The team coaching model was designed to investigate how the coaching environment could foster dialogue and enhance criticality. Following a careful analysis of the data, one interrelated pattern was discerned: As the coaching created an environment where volunteer student teams could bond, feel safe and equal, critical dialogue could take center stage through questioning, enabling accountability and higher-order thinking. Dialogue is used not as a strategy or a method, to refer to Freire's conceptualization of dialogue, but the means towards higher-order thinking. This chapter will present and discuss data relating to the role of the coaching model on dialogue. The method used to analyse the data was based on Braun and Clarke's 6-phase guide to thematic analysis (2006).

The findings that I present in this chapter are:

A. The Challenges of Promoting Dialogue through Teamwork
B. The Challenges of Impeding Dialogue in Teamwork
C. Coaching Space and the Promotion of Dialogue
D. Experiencing the Coaching Model
E. Recommendations for future Implementation

The following abbreviations are used to signify the Action Research Cycle when presenting the quote.

BF + Pseudonym: date (Semi-Structured Interviews with Business Faculty)
VT + Pseudonym: date (Semi-Structured Interview with Volunteer Tutors)
ST2018: Summer Term 2018
Fall 2018
DE + Pseudonym: ST2018: Diary Entry Summer Term 2018
DE + Pseudonym: Fall 2018: Diary Entry Fall 2018
FG + Pseudonym: ST2018: Focus Group Summer Term 2018
FG + Pseudonym Fall 2018: Focus Group Fall 2018
OCM: Orientation to the Coaching Model

A. The Challenges of Promoting Dialogue through Teamwork: Before the Intervention

In this section I discuss the experiences of the volunteer business faculty in conducting teamwork and the challenges expected to be experienced by the volunteer student teams. The theme that is identified from the findings are the challenges of promoting dialogue.

Volunteer Business Faculty

In the modules represented by the volunteer business faculty, feedback is used as a means of assisting student-team learning. This is consistent with the literature on feedback, being an important learning tool for students in higher education (Taras, 2013). What is amiss, however, is "the dialogic, negotiated understanding of feedback" (Taras, 2013, p. 34) where the student voice and in this particular case the student-team voice is central.

Steven renders an overview of the forms of feedback he gives to student-teams:

> *It can be from edits, to comments, to questions, to suggestions, to advice, to requirements.* (BF Steven: 1 June 2018)

The type of feedback chosen by the volunteer business faculty is mainly in the form of evaluative written or oral feedback on formative and summative work. Formative feedback, apparently, becomes an essential tool in the hands of the volunteer business faculty in how they perceive the process of student-team learning. Some business faculty, such as Steven provide multiple and progressive feedback:

> *[Student-teams] get a lot of feedback not only in terms of the time I spend to give them feedback on the text but also the time that I take to discuss with teams the feedback and address questions.* (BF Steven: 1 June 2018)

Discussion here, I can safely assume, is explaining any questions or explaining the written evaluative feedback. What is paramount, first and foremost, is for student-teams to understand and be able to implement theory in the requirements of the assessment. Maria underscores this from the outset with her student-teams:

> *So, my first and most important task [is] to make sure that all members [have] a very clear idea of what [are] the assessment's requirements, so that they […] answer what the assessment says and not what they think it says, and even worse not to impose it on the rest of the group.* (BF Maria: 25 May 2018)

Without the dialogic process of student-team-feedback-tutor, learning becomes for student-teams a means of deciphering evaluative comments. Steven describes how he addresses both task allocation and requirements of the brief:

> *In the proposal they have to propose a task allocation, and already there I make a lot of corrections because very often when they distribute the task, of course that has to do with the fact that they are not aware as I am of what the requirements of the tasks are. They imagine; they guess.* (BF Steven: 1 June 2018)

Imagining and guessing become the means for student-teams to figure out what the requirements of the task are. Student-team discovery and thinking are marginalized to a great extent because of lack of dialogue in understanding the requirements.

Along the same lines, Maria details:

> I want them to start digging on their own. And when I realize in our meetings that they haven't yet started connecting the dots then I ask them questions. […] *I'm throwing questions depending on their level of misunderstanding [of the requirements of the task]. So, the first question is, please tell me what you understand out of this assessment and what you've done so far.* (BF Maria: 25 May 2018).

For Nicky, once assessment requirements have been clarified, feedback becomes a directive, on the spot evaluation of a student-team's draft:

> *So we review the outline and then we sit together with the whole team…If they have developed a draft, I'm not reading the draft. I'm just scanning through the draft, and I'm just giving ideas that this is offtopic, this is irrelevant, this is good, I need more examples here, I need arguments here, so I'm not very detailed in correcting it.* (BF Nicky: 15 July 2018)

Meetings with student teams for some business faculty is mandatory but for others it is not.

For Greg team-meetings are not mandatory. However, he describes ways as to how he handles it:

> *I always try to give both individual and collective feedback and this goes for groupwork as well. So, I'll do that in the classroom as well as by e-mail or individual meetings or whatever…We always offer the opportunity for students to consult with us…we always ask students to come and see us as a group. If they don't come then we do that in the classroom to make sure everybody benefits from advice we can offer them. And in working with them we […] plant some ideas that they could refer to in terms of how they can engage with the material [….]. When working with them, we do offer them a lot of ideas or alternatives of how they could approach the topic. And even in doing so you get the students to understand that there is no simple right answer, that they have to do some research, that they have to decide what will be the supporting evidence that they need in order to present their case, what examples would be appropriate to use. (BF: Greg 25 May 2018)*

Athanasios highlights the significance of providing feedback on student work and is thinking of making it a requirement:

> *We encourage students to come for feedback. We hunt them down to come for feedback. But some of them don't want. And they never come […] They do not realize from the beginning the benefit of checkpoints where they see whether they are on track or there is need for corrective action […] They realize it later on and then the change might be much more painful and much bigger. If they come early enough, they make corrective actions.* (BF Athanasios: 15 July 2008).

Written evaluative feedback compensates for dialogue and is oriented towards the student-team final output: content, stylistics, format, referencing, and language, ensuring that student-teams are on track fulfilling the parameters of the assessment.

Usually, I structure my feedback, formative and summative, and that is the case of all assessments, based on strengths and weaknesses […] Those can be related to content, but they can also be related to steps they need to take. For example, I notice that there is a weakness with references most of the times. Or in other times inadequate writing skills, poor understandability, poor formatting and layout. (BF Aspa: 4 June 2018)

On a similar note, Greg provides "a lot of feed forward to the actual submission". He describes:

Usually if there are problems with language for example, I won't pay much attention to this other than flag this as a potential problem that could cost them some marks [...] I will check for accuracy in referencing sources. If I see that that's a problem […] but mostly I will look at the structure of the argument whether it makes sense, the relevance of the material, the sources, the examples they are bringing to the actual assignment. I would look at the nature of their argument, whether it makes sense, whether it has any holes in it. I go through the material that they've cited and suggest additional sources that I think might help them. I tell them outright if they're not addressing the components' requirements…And my concern is to be helpful to the students but not write the assignment for them. (BF: Greg 25 May 2018)

If the dialogic process in formative evaluation between student-teams and tutor is not facilitated, there are opportunities for learning with peer-assessment, if student-teams follow through with it. Steven, urges his student-teams to go through each other's tasks:

Students propose things that are not consistent with each other. This can be because of the way they're working or because they don't understand the connection, and I think that through these feedback opportunities they get to understand both: that on the one hand you have to read and contribute to what other people [on the team] are writing. So, I tell them okay you're doing for example the culture component, but if you find data about another component share with your fellow team member. And you also need to read and provide feedback. You also need to read the whole because you need to ensure that it's consistent. (BF: Steven 1 June 2018)

The fact that the majority of the volunteer business faculty, do not mention the word dialogue or the discussion taking place with student teams to *discern their thinking* and ask questions to take such thinking to another level, suggests that purely evaluative comments written and/or oral is what is expected of good practice. Such feedback, however, is monologic, in other words "largely one-way transmissive processes" (Carless, 2013, p. 113).

Even when 'discussion' takes place and dialogue is used the focus is not on the dialogue between the tutor and the student-team but on the dialogue that transpires among the members of the student team. When the word 'dialogue' is used by Maria, apparently it means the dialogue produced by the student-team in the presence of the tutor. Maria, describes:

> *Yes, there's dialogue. I basically listen, and what I do is that I record not what they are saying but how they are saying it, and even more, whether all members of the group have an equal opportunity to speak.* (BF: Maria 25 May 2018)

The tutor role here is to observe student-team member behaviours, dynamics, listen to their discussion, and then intervene.

> *When there is a discussion and one or usually two members are monopolizing the discussion, either because of their character or because their attitude is very dominant, I make sure that all members have an equal opportunity to express themselves.* (BF: Maria 25 July 2018)

Steven identifies the multiple roles he takes on when providing feedback to student teams.

> *I hope my role is that of a coach and facilitator, but of course depending on circumstances it can be the role also of the instructor and sometimes even the referee. When I detect, for example, that there are problems in teams, then I coach the team…*(BF: Steven 1 June 2018)

Kleio, plays the role of the devil's advocate:

> *To put it very simply, what I try to do but being friendly and being open and being honest, I try to be the devil's advocate for everything they bring me. Because I see that in the beginning, they start by doing the easy thing. The expected thing.* (BF: Kleio 25 May 2018)

Playing the devil's advocate requires also questioning, hard questioning, that could disclose possible gaps in student-teams' work. Kleio guides her student-teams to work on answering such questions so as to be prepared when presenting to the company:

> *Because if I don't ask [...] the aggressive question, but not asked in an aggressive way, the company will ask it in the end. Yes, and they will get embarrassed. So, I explain to them that that's what I'm doing. I'm trying to protect you because you will be presenting, I will not be presenting. That's what I'm trying to tell them that I'm not your instructor to grade you. I'm here to coach you so that you present something nice to the company. So, it's a different role and gradually it evolves into a different relationship.* (BF: Kleio 25 May 2018)

Athanasios uses role-playing in individual work, something that he will probably implement also in teamwork with the revalidation of the major:

> *So basically what I tell them is […] you will not come to see your instructor, you will come to see your client. So consider me as the one that buys your site and you have to convince me to put my money in that. So convince me. And then I put them in my place. Okay, if it was you listening to that, would you invest your money? Would you give your okay for this?* (BF Athanasios: 15 July 2018).

With tutor concerns to assist student teams to fulfill the assessment requirements, another factor that challenges dialogue with teams is student-team dynamics. Depending on the Level of the course, whether Level 5 or Level 6, it was a case in point for some volunteer business faculty not to interfere in the internal power dynamics of student-teams, giving them full autonomy in solving such challenges. It

is expected that student-teams will showcase the know-how of how to do so mirroring what one tutor said how teams work in companies. Yet there is growing literature that acknowledges that companies invest in team-coaching to create an environment of dialogue that will facilitate thinking, team-dynamics, performance and productivity.

> *Most of the times, what I try to do is that I try not to intervene in the team. So, I ask them to solve the problem by themselves. I identify the problem, so I tell them that I see that maybe you are not working that well, that effectively. I see that maybe there is no consensus. So, I just identify the problem for them but I don't intervene to provide a solution. I think it would be better for them to start working as an actual team.* (BF Kleio: 25 May 2018)

Others would 'informally' have student-teams discuss so as to discern whether there are students who are not pulling their weight. Others would be more directive in their approach on how student-teams worked taking on multiple roles when dealing with student-team dynamics. Focus is however on how a team can handle the free-rider member:

> *My role is to give them feedback on the task but also give them feedback on their group process. So, I give them feedback on the task and then that helps me understand what is going on in the team. When I detect, for example, that there are problems in teams, then I coach the team […] and I sort of guide them through this decision-making process of even expelling a team member from the team. This has happened two times. So, in that particular case you're also playing the sort of role of the instructor from the side of the judge.* (BF Steven: 1 June 2018)

Summary

The six areas represented by the volunteer business faculty: International Tourism Hospitality Industry, International Business, Sports Management, Marketing, Management, and Management Information Systems showcased that different modules adopt different positions on whether teamwork is a learning outcome or a pedagogical method. For those who already have implemented teamwork in their modules --or for those who removed teamwork in the first validation of their program and are reinstating teamwork in their modules for the upcoming revalidation— their

experiences and philosophy of how to conduct teamwork affect how they monitor and are thinking of monitoring student-team work.

Four key challenges seemingly impeded the development of dialogue: one was ensuring that teams understood the requirements of the assessment; the second was their focus in providing important evaluative feedback which took away time to dialogue with the teams; the third was observing and intervening or not to address asymmetrical team dynamics; and finally, the fourth was dictating scheduled meetings with student teams or giving teams full responsibility whether to meet with their tutor.

The thinking exemplified by the student-teams was assessed as a final product, be it a report or presentation. There was little reference to enhancing the process of the student-team's thinking through dialogue. When asked how they monitor student team input, evaluative feedback on student-teams' work would take center stage. What was amiss was the dialogic process between learners-feedback-tutor. Without such dialogic process which puts center stage the learner, as Taras (2013, p. 31) underlines, "Feedback will instigate change and support student learning only if learners actually use it". Only in the case of live simulations student-teams are challenged to consider answers to questions posed by their tutors.

Volunteer Student Teams

While the business faculty interviewed identified their experiences and concerns of how they interact with student teams and monitor student-team work, the volunteer student teams identified as their basic challenge lack of communication among team members. Such effects were highlighted in the volunteer student team members' reflective diary entries and constitute the word cloud in Figure 5.1. below:

Figure 5. 1 Word Cloud: Student Team Members' Reflections on Challenges

With lack of communication being their major concern, their diary entries had a common thread of responses. There were concerns with levels of engagement of all team members,

Student 7 encapsulates their major concerns:

> *Working as a team in general is not easy. A team faces lots of challenges such as role uncertainty, lack of trust, unclear goals, disengagement, and talent differences.* (DE Student7: ST 2018)

Other team members identify getting to know each other on the team so as to be able to trust the environment to speak up openly:

> *The biggest challenge is to get to know my teammates and establish a way of effective and clear communication in which every member of the team states his opinion freely.* (DE Student8: ST2018)

For Student33 it is more than stating an opinion freely; it is about other team members understanding each other's point:

> *Sometimes it's difficult to communicate your idea or to get your point across or get someone to see a point the way you do.* (DE Student33: FS2018)

What, also, impedes communication among the team members is the unequal skillsets of the team members that can lead to conflict:

> *Teamwork in my eyes can be very problematic. Team members might be of unequal skillsets… lack of effective communication can also be a challenge. Team conflicts are the main challenge for me. I think it's very hard to have many people working on the same project and not having conflict with each other.* (DE Student17: ST2018)

In the same light, Student18 considers team-conflict a major challenge but assigns it a debilitating role in the final output of the student-team work:

> *Group projects present an environment where conflict is unavoidable and, in the scenario, that the group isn't cohesive the final output of the assigned work may be questionable.* (DE Student18: ST2018)

Understandably, what contributes further to conflict is the inability to find the time for team members to work together. Student26 highlights two factors that may contribute to lack of communication:

> *Organisation and finding time for the entire team to meet up*. (DE: Student26 FS2018)

Concerns such as engagement, efficiency, cohesiveness, trust, team-scheduling, accountability, acceptance and difference are all basic considerations of fruitful dialogue that would need to take place. The key words that appeared in the student team members' reflective diary entries were engagement, efficiency, cohesiveness, trust, scheduling, accountability, acceptance, and difference.

Following the discussion of how the volunteer business faculty monitor teamwork, and the concerns of volunteer student-teams' regarding teamwork, I now turn to the challenges and concerns of the volunteer tutors. A number of challenges that could impede dialogue during the coaching were aggregated from the semi-structured interviews, orientation to the coaching model and the first reflective diary entries of the volunteer tutors.

B. Challenges and Concerns of the Volunteer Tutors Impeding Dialogue

Based on the reflective diary entries, semi-structured interviews and the two orientations to the coaching model (Summer Term 2018 and Fall 2018) a number of current constraints and challenges were aired as questions and concerns. It is important to note that even though the tutors that opted to participate in the study had never received any training in coaching before, as tutors they were highly experienced, including an array of teaching strategies to facilitate learning. The volunteer tutors who participated in the study did so either out of doing something novel, out of curiosity, and with a skeptic mindset.

Data arising from the two orientation sessions to the coaching model suggest that there were a number of pre-conceptions or concerns that created constraints or could create constraints during the coaching sessions with the volunteer student teams. Two main themes were synthesized from the data: Those were the possible time-constraints in doing the coaching within the prescribed 50-minute sessions; and being able or not to sublimate the role of the tutor to create an environment that was equal and non- evaluative. Other projected issues were also identified: such as the diminished role of the classroom instructor, the possible biased sample of volunteer student teams which are presented in Appendix 5.1 as not being related to dialogue but significant enough to be presented.

Possible Time Constraints with the 50-Minute Coaching Sessions

Time constraints are a major concern of instructors in educational settings. Being able to cover the material needed is considered a pre-requisite to assessing student learning. Comparing time in terms of instruction in the classroom and the coaching alliance may seem similar but they are not. A volunteer tutor during the orientation to the coaching model felt that based on her experience as a classroom instructor, time may pose a restricting factor during the coaching that would impede exploration of ideas through dialogue:

> *Students seem to need more time than instructors typically have in order to think through bigger ideas - apply criticality - and I'm wondering… what will it mean when there are four students? Will they begin to discuss amongst themselves even what it is they are 'realizing'? I know that the point is to engage them in the questions and for the 'seeds' to be planted in them - if they don't exist already. But I'm curious about the dynamic and the time….* (DE Eve: Fall 2018)

However, the coaching alliance sets a different relationship. It is a relationship of commitment between coach and coachees that "can be seen as the allegiance to the work of the coaching experience by both the coach and the client" (De Haan and Gannon, 2016, p. 203). In the third reflective dairy entry, the same co-coach refers to time being one of the strengths of the coaching model:

> *[…] What would allow this model to work revolves around the matter of time: if only we could have the time to assist our students in the manner the coaching model provides.* (DE Eve: Fall 2018)

Sublimating the Role of Tutor in the Coach

During the orientation to the coaching model and the co-coaches' reflective diary entries from both Action Research Cycles there was concern of the co-coaches whether they could sublimate their role as tutor and take on the role of coach, holding a position of ignorance. The following sub-themes were identified that even though interconnected could be seen as pre-requisites to taking on the role of coach. One sub-theme was not being able to provide the kind of feedback they were used to as tutors or it was expected of them by the student-teams, so taking on the position of ignorance could affect whether student teams will find the coaching session meaningful or a waste of time; another was whether student-teams would see the volunteer tutor as a coach and not as an instructor.

The whole premise of challenging constructively and entering the coaching space as a place to learn and not be directive or forthcoming with feedback, became concerns for the volunteer tutors. The extract below suggests concerns with whether one could offer feedback without asking evaluative questions, and not suggesting directly a way forward for the teams to work. The tutor role was still apparent in the first reflective diary entry of the co-coach.

> *How do you develop a deeper understanding of reality to help them develop solutions without offering feedback (knowledge) […]? a. I struggled with the idea that a 'Why' question is not appropriate. So, I felt it might be hard to formulate questions easily in the moment; .b. .I believe 'avoiding figuring it out' will be hard because instructors work under pressure regarding meeting*

syllabi requirements and learning outcomes, which are assessed by more than one person.

During assessment another instructor will base the grade often on their own knowledge of the topic, so it is important to raise awareness of some of that knowledge if students are to succeed in terms of assessment. Also, students are often grade oriented and expect the instructor to help them succeed. They look to them for knowledge. They often feel a meeting is wasted if they have not received advice and a clear path of where to go following the meeting. (DE Laverne: ST2018)

Feedback continued to be considered good practice. Yet it is different from dialogue. An opportunity to discuss these concerns came with the semi-structured interview. It proved to be enlightening for both the co-coach and for me, the researcher, and it proved invaluable to the research to do so before the second coaching session since it provided a learning space for both to address continuing concerns. As the tutor-coach was not teaching in the Summer, I believed that this would assist even further her role as being and becoming a coach. Reflecting on the first orientation to the coaching model I had not considered any resistance taking place. Apparently, the first orientation to the coaching model had still left questions for one co-coach. The semi-structured interview that was conducted with the tutor-coach after her first coaching session, gave both me and the co-coach the opportunity to clarify further the points that concerned her.

The dialogue below that has been transcribed from the semi-structed interview between the tutor-coach and researcher highlights two concerns: one concern was the constraints the co-coach felt when using the questions provided for the first coaching session; another was how the coaching space was restricting to the volunteer tutor in providing feedback. Even though the dialogue below (with some additional comments in between is quite long, I believe it reflects the importance of giving a strong voice in collaborative research).

'Asking Why' questions that are not judgmental was a challenge for the volunteer tutor as well as having to use scripted questions even though adding any questions that seemed conducive to the context would have been expected, if necessary.

Laverne:

Obviously, though, we're following certain guidelines that you've given us in terms of aspects of coaching that we have to be aware of, it's kind of challenging, not being able to ask a Why question. So, there is quite a lot of thought that goes into forming a question because of certain restrictions. Obviously, asking questions is a good thing because it facilitates thought. I'm also using scripted questions. So, I'm trying to ask the questions that I've been given, which sometimes means that there is perhaps some repetition because the students respond to a particular question and maybe answer in a way that covers the next question or the next question after that […]

Laverne is quite conscious of her new role. Unlearning the habit of providing feedback was quite challenging.

I'm confused about how to give feedback in terms of the coaching model because I don't know whether I'm allowed to say or respond as I would normally as an instructor.

Researcher

So, you're finding it restricting.

Laverne:

Yes, I am, finding it a bit restricting.

Researcher:

Is it because your role is somewhat contained?

Laverne:

Yes.

Researcher:

Because you're looking only now at what the students want to say and not what you would like to say?

This results in the tutor/coach confusing her roles:

Laverne:

Yes. It's restrictive because students also have expectations of you. And if they're going to spend an hour talking to you about their topic, they want you to give them some feedback. So, they're looking at you for a response.

Researcher:

That's the role of the instructor in the classroom; it's not the role of coach. The role of the coach is to help them think and for them to come up with their own ideas not to tell them what to do. And that's a role that usually we take. I don't know if you agree; we take this role when we are in the classroom when we have consultations with students. That's when we tell them what we think they should do. While here it's all about them trying to figure out for themselves, but also trying to be positive with their limitations […] The role of the coach obviously is different from that of the instructor and it is a little bit, kind of challenging. I completely understand that especially with the first coaching that you did. And the questions obviously that were given were not questions that needed to be followed one after the other, in a strict sense, because you could come up with your own questions too depending on what the student teams were giving you. But the most important thing is for student teams to come up with their solutions, their own way to help them think. So, I'm hoping that your second session is not going to be that restrictive and it will help you understand that it's a role, that it is a safe role, where students are there to figure out how they're thinking about certain things and hopefully to take it to another level rather than the

level of understanding. Or you know just understanding something but taking it to a level of analysis, of comparing contrasting different things and synthesizing and so on and so forth.

The response below given by Laverne, with the phrase 'anyway' I understood it as agreement to the above comment that I made and not as trying to change the subject or end the conversation.

Laverne:

Yeah, anyway, I think it'll be interesting to get your view having listened to both to see if there's a difference between one team and the other.

Researcher:

Shouldn't there be a difference? Obviously, there should be a difference because it's another topic […] The first coaching session was to help them understand what their topic is, whether they have an understanding of background to the problem, whether they can substantiate that there is a problem. These were questions that needed to be asked for them to say what they were going to do with that. So, it's interesting to see because you're having your second session today with the two teams to see how they've progressed and what's happened. Ok so from what I understand also you've had challenges with the coaching, thinking of course that you had to use the questions verbatim one after the other. That's not the case. Maybe it was my fault.

Laverne:

Well, no, not necessarily in the order of the questions, but just the way that they responded very often covered other aspects. I didn't mean that I had to follow a particular order just that some things get covered.

Researcher:

Did you think of asking your own questions?

Laverne:

I think there's a bit too much pressure. Because I know I'm doing something for you.

Researcher:

You're my co-researcher.

Laverne:

Yeah but I'm not as free with it because it's something that I'm doing for you and so I'm trying not to make mistakes. I do create my own questions. And you can look at that when you listen to the recording…

I think more has come out of the discussion now than what I did in the write up for you.

(VT Laverne: ST2018)

Seemingly, the frame of reference and experiences of the volunteer tutors and the value of feedback in education brought constraints in sublimating the role of instructor and taking on the role of coach. Once these concerns were aired, the volunteer tutors not only enjoyed the experience of coaching student-teams but were also able to identify strengths.

Eve reflects:

> *I really enjoyed my experience – did not expect to enjoy it so much. I was 'relieved' at not being the instructor—being the coach, the non-assessment scope of the relationship was liberating.* (DE Eve: Fall 2018)

Pamela reiterates and insightfully adds her understanding of coaching student-teams and how it affects their thinking:

> *It was a pleasant experience, which gave me further knowledge on how students' minds grow toward task-oriented activities and teamwork.* (DE Pamela: ST2018)

> *It was an extremely meaningful experience, which certainly enhanced not only my understanding of coaching and my future involvement into teamwork but also the team's ability to see clearly connections between aspects and concepts, develop critical thinking, and cultivate critical thinking skills*. (DE Pamela: Fall 2018)

Laverne concedes to leaving behind the tutor role:

> *I think I enjoyed the fact that these were not my own students. I was removed from the instructor role […] This was a refreshing feeling.* (DE Laverne: ST 2018)

The volunteer tutor coaches also experienced how the coaching facilitated student teams to resolve issues within the team. As Pamela describes:

> *[I]n the first session: one team member monopolized the conversation and I had to find a way to change this and give the opportunity to the other members to have their voice heard. However, this situation changed in the second session and there was equality in voices and perceptions. I now feel much more relaxed and I believe that the students are gaining from this experience. They seem to be more focused, more knowledgeable, and more specific in what they intend to do.* (DE Pamela:ST2018)

Moreover, the coaching organised student teams to set milestones to reach their goals before the next session, as identified by Laverne:

> *I felt I was quite lucky in terms of team awareness […] although I did find I could probe for more ideas and clarity […] The question where they had placed less thought was […] how they are thinking of factoring the focus areas…Both teams reiterated their new goals at the end. There were some new ideas.* (DE Laverne: ST2018)

An increase of confidence was apparent for Pamela who chose to participate in the study again in the second action research cycle:

> *Although in the coaching sessions of the first cycle I faced insecurity at the extent of my ability to help students as a coach, I now feel more confident.* (DE Pamela: Fall 2018)

Once into the coaching sessions, the volunteer tutors created a space for critical dialogue between co-coach and student team as well as among student team members. The coaching space provided a safe environment for critical dialogue to take place that was not judgmental and for creativity to emerge.

To be able to phrase what a coach brings to the coaching session once these 'unique commonalities' were addressed and clarified was a result of months of reflection before the second action research cycle:

> A*ll these qualities we may use them as instructors but we do not use them all […] in unison, in one session. That's the difference.* (OCM Researcher: Fall 2018)

Summary

Before the coaching sessions began, and once the first coaching session was done, the tutor-coaches were given the opportunity to reflect on possible challenges that they would, could face or are still facing. Hammond (2013) describes the importance of feeling free to question:

> For such consensus to be reached individuals need to feel free to disagree over what they consider to be important […] and to be encouraged to reassess their views in the light of new evidence. (p. 609)

Two challenges stood out: One was sublimating the role of the instructor and taking on the role of the coach, who would enter the coaching session with 'ignorance'; and the other was the scripted questions which one tutor coach referred to as constraining in the sense that if a team had already answered the next question without it being asked it would become repetitive to do so. Not being able to provide feedback was considered a constraint in the beginning since their assumption was that feedback would also be expected by the student-teams. Moreover, even if a team had answered a question that was not yet asked, it could be used as a means to have them summarise and clarify further what they had said or for the tutor/coach to do so. Once into the second coaching, the perceived constraints were lifted and the tutor-coaches began enjoying, also, the experience. What, also, assisted was the observable changes in the student-teams' responsiveness to the coaching sessions, and their accountability to prepare for the next coaching session.

C. Coaching Space and the Promotion of Dialogue

The dialogue created by the questioning during the coaching sessions suggests that an environment of safety and equality was created nurturing team building, learning, investment and accountability.

Pamela illuminates the role questioning played in the coaching sessions:

> *Dialogue spurred by questioning created an environment of further discovery but also accountability and ownership of work. I believe that in the development of higher order thinking skills contributed the way the questions were formulated and the fact that the students were led to retrieve answers from their own concepts and perceptions, rather than being directed toward educators' perceptions. This gave the students accountability for their synthesis, strategy, and action.* (DE Pamela: ST18)

The findings from the focus group sessions and student member reflective diary entries on the benefits of the team coaching identified that dialogue played a pivotal role in the student team's creativity and cohesiveness:

> *[The coaching] actually channeled all this creative energy of the four members, because we were four members and we were so excited about the topic but our thoughts were all over the place. The coaching sessions allowed us to channel all this energy into a more focused, into one common purpose let's say. That is, I think the largest benefit of coaching.* (FG Student17: ST 2018)

The dialogue that took place resulted also in student team members getting to know each other, through openness:

> *We had the opportunity to create a professional environment and had the chance to speak openly and express our opinion on things, not only for the materials and ideas but also our thoughts about the teamwork and working together with students that maybe we do not know. The environment is maybe another strength.* (FG Student12: ST 2018).

> *I felt we got close as a group during the coaching session. That's what I think: it was helpful, insightful and I'd say, needed.* (FG Student24: Fall 2018)

But, also, through empathy:

> *Sometimes, you know, you could see the other person struggling or not struggling, helping him get through it, and also see how your team member was thinking. That was the important thing.* (FG Student4: ST 2018)

Dialogue also played a role in student teams' organisation and accountability:

> *So, basically, I think not that I became more organised but I managed to be more focused on what we had to do; to know that this is the goal; this is how we can achieve it; and which will be the outcome the best outcome for me, firstly for the group and then for me individually.*

> *I think that the whole coaching process was able to develop some things because for us when we started working we were thinking about how to start, what to do first, how to split the responsibilities, but after the coaching session we managed to develop also our thinking, how to communicate better, and forced us in a good way to meet also in the weekends, to do also some individual work, each person on his own. I think all blended really well to have the best possible outcome for us.* (FG Student21: Fall 2018)

Summary

Through dialogue and questioning team cohesion and productivity was enhanced, as were their thinking skills. Chapter 6 that follows focuses on how the coaching model provided a safe space for student-teams to question their assumptions, their knowledge and pursue research to discover answers on their own.

The findings above suggest, once team coaching was introduced, the volunteer student team members would bond, take on responsibility, focus their work, implement ways to facilitate communication, show empathy and understanding, and take advantage of the 50-minute coaching sessions to be able to perform once they had decided what they wanted to do. It seems that as Hawkins (2014, p. 18) points out, "team coaching is there not only to help create process improvement but also to impact on the collective performance of the team". Teams were able to function collectively by feeling free, open, and supportive of each other.

D. Experiencing the Coaching Model

This section presents data relating to how participant student teams and volunteer tutors experienced the coaching model.

Volunteer Student Teams

During the focus group sessions, student team members were asked how they would encapsulate their experience of being coached. The objective of this question that was asked during the focus group sessions was for student teams to visualize the experience of being a coachee. The findings from the focus group sessions identify that the images that they came up with would focus on the relationship that was created between the coach and the student team.

For one participant, the image that came to mind is that of a sports coach that uses time-out and coaching moves:

> *So, it's like the game started, November 20th, for example, when we kind of started writing and thinking about it [analytical report focus] and then the coaching session; I mean the coach, you know, was there in the time-out phases, for us to gather, you know, make the moves, think about it and then proceed after.* (FG Student24: Fall 2018)

Another student thought of the coaching experience as a warm, pleasant environment, like being in a coffee shop, where the team's creativity was spurred through thinking critically:

> *The image that comes to mind would be, let's say, a coffee place, where on the one side you have the people that are being coached that are thinking critically […] and on the other side, there are the people that are just tasked to do let's say work, coursework, but without coaching. They are reading the instructions, instead of thinking creatively and doing their own thing and what they are thinking. They are being passed specific instructions and they are supposed to follow these instructions to the letter and it's not something creative.* (FG Student26: Fall 2018)

For other participants in the study, what came to mind was the image of the sea. The coaching becomes either a springboard for creativity for one student team or a rope being thrown to a team who is drowning:

> *The image that comes to mind is a calming sea before the storm. The coaching session was a calming experience to see where we are heading […] Upon completing the coaching session comes the 'storm'. I chose to characterize it this way because after the coaching we became more anxious but not in a bad way, the clearer image of our topic made us more motivated to search.* (FG Student 20: Fall 2018)

> *I'd say the image would be in the sea, and someone is drowning, can't swim, and someone from the boat throws them a rope*. (FG Student 27: Fall 2018)

When asked by the facilitator who is throwing the rope and who is drowning, Student 27 clarified the coach is throwing the rope and the person who is drowning is the group.

The image of holding hands and walking through a landscape becomes the experience of others:

> *Two hands that are together.* (FG Student17: ST 2018)

> *Like holding hands with a friend, walking in a field and seeing the landscape and walking forward.* (FG Student5: ST 2018)

For Student 21 the experience of the coaching model was encapsulated in the image of a round table:

> *I think the first image that would come to mind would be a round table, or chairs in a circular organization, just because, I guess, going against the conventional system where you are facing the instructor. With the coaching you have a more informal but still more productive in a way, because I guess it provides a more stimulating experience by sharing your ideas more intimately, I guess for lack of a better word*. (FG Student1: ST 2018)

The first Focus Group Session in Summer Term 2018 brought also recollections of the Socratic method:

> *Symposium, Socrates.* (FG Student7: ST2018)
>
> *Maieutics.* (FG Student5: ST2018)

When the facilitator asked for other images related to being coached, an interesting dialogue took place:

> Student 8: *I have an image of a divine personality, coming from the clouds and giving us solutions*.
>
> Student 7: *The coach doesn't give solutions, like Socrates.*
>
> Student 8: *Coaching was like rhetorical questions that spark the light in our minds.* (FG: ST 2018)

Another image that reflected the experience of being coached was that of a metaphorical key:

> *The first thing that comes to my mind is a key, in a metaphorical way […]. So, we were asked questions and we had to find the answers*. (FG Student12: ST2018)

An interesting word to capture one student member's experience was that of psychoanalysis:

> *When you go to the psychologist and you are under psychoanalysis. I've had this experience and they do the same things. They ask questions and you have to find the answer for yourself.* (FG Student 7: ST2018)

Figure 5. 2 Word Cloud of Volunteer Student Teams Experience of Being Coached

Figure 5.2 above aggregates the experiences of the student team members being coached. The words that stand out in the word cloud are experience, key, image, sea, creativity, find, rope, holding, landscape, calming, questions, walking, thinking, creativity and moves. These words were choices that the student team members gave regarding their experience of the coaching and the relationship with their coach. The team-coaching experience seems to strongly support its efficacy with the student-teams to foster a dialogic environment within which students could safely present their ideas, consider questions that were asked so as to discover answers, and develop through the process their thinking skills and creativity.

Volunteer Tutors

When the co-coaches were asked to reflect in their diary entries on the question, what kind of feedback they were receiving from their student-team(s), their responses reflect that teams appreciated the dynamic of the coaching sessions, found them meaningful, became enthusiastic and felt secure. Laverne informs of how the student-teams found the coaching meaningful:

> *The feedback has been positive. The second team seemed a little more resistant to start with but as the sessions progressed, they also seemed to appreciate what they were getting from the sessions.* (DE Laverne: ST 2018)

Pamela describes how her teams responded to the team-coaching intervention:

> *They see the coaching sessions as helpful and meaningful. They mentioned that they learned a lot in the process and realized the importance of concentrating on certain aspects*. (DE Pamela: ST2018)

> *The team is enthusiastic feeling that success is coming, admitting to thinking more critically, learning through experience, being in a meaningful context*. (DE Pamela: Fall 2018)

Eve recollects on how equality between coach and coachees was appreciated by the student-team:

> *What stands out – although unsurprising – is that the team appreciated, I believe, having the 'expert' by their side: not to judge but to guide them. But maybe part of the 'surprise' is that there was a nice balance in the roles. I'm sure that the team felt it and I know I did*. (DE Eve: Fall 2018)

Summary

The findings from the team coaching intervention and how it was experienced by the student-teams and the impression it imposed on the teams as observed by the coaches is new territory in the coaching education literature in general, and higher education coaching literature, in particular. It seems that the coaching space created was safe for the student-teams to present their thinking without feeling judged or evaluated. It was an open space like a round table where equality among members (coach and coachees) was evident and appreciated. The questions became a spotlight for them to focus and discover answers to. It gave student-teams a purpose, an accountability to be prepared for the next coaching session. Dialoguing student-team thinking brings the focus on the learner, something that feedback cannot provide. Tutor-coaches could also observe this in their student-teams, which became refreshing, removing the role of the tutor from the equation.

E. Recommendations for Future Implementation

The focus group sessions became a productive ground for student teams to reflect on their experiences and give room for dialogue to take place among them. Providing recommendations for future implementation suggested also their belief in the efficacy of the team coaching. The findings suggest a range of recommendations, from recommending choosing tutor-coaches who believe in using coaching as an alternative/additional pedagogical tool, to marshalling former student teams to promoting the team coaching through video-spots and word of mouth, to implementing the coaching earlier and ensuring closure in the coaching alliance, to using word of mouth advertising and video spots, to implementing the coaching in level 5 and level 6 modules with group work.

In the first focus group session, Summer Term 2018, a recommendation that was made focused on the need for professors to believe in and be passionate about the pedagogical strategy of coaching before being assigned such a role:

> *In order to be trained in this aspect you have to love it and approve this kind of pedagogy. Our coach wasn't so much in favor of this technique. It should be run by professors or professionals that love this kind of technique*. (FG Student 5: ST 2018)

When the facilitator probed further and asked whether others share this, Student 1 added investment by both coach and coachees:

> *I think it goes to the coaches and the students. Both parties need to be invested in this kind of discussion or coaching system to work for the best. Students should be willing; also coaches also need to be invested in the same way.* (FG Student1: ST 2018)

Starting the team coaching earlier was identified by a number of student team members. For example Student27 suggested:

> *Begin the coaching as soon as the class gets into the discussion of the analytical report.* (FG Student27: Fall 2018)

One team member also referred to the need of persuasion for student-teams to be coached:

> *I'd say that there is no room for improvement for the coaching. The only recommendation I have for the future is that all teams should be persuaded to do the coaching session. It made me realize how to work on a subject of this nature and I strongly believe that the skills I gained from this session will be implemented in other courses as well*. (FG Student20: Fall 2018)

Student 24 also advised using student-teams who have been coached to create short videos of their experiences and/or talk to classes about it to promote better advertising:

> *So maybe show students, past students show a video. I feel like when students speak it is definitely more powerful then when my professor says it or the professor who does it. I feel like it's very important for the students to come to the class and speak.* (FG Student24: Fall 2018)

This was prompted by Student26 who in Fall 2018 was not sure with his team what the coaching was all about.

> *What exactly would the coaching be, because when we registered, and we read the email we thought it would simply be another teacher looking over our work. The coach did not even look at the work. It was just about making us think clearly and organized and it is very useful, but it wasn't what we expected reading the email.* (FG Student26: Fall 2018)

This is an interesting point for future advertising of the coaching intervention. For the purposes of the study, however, the Participant Information Sheet was attached to an invitational e-mail sent by the Dean of the Business School in Fall 2018 to the registered students of the module Professional Communication. From the student reflection, it seems it was bypassed. It became apparent that the choice to send an e-mail and not print out the PIS and letter and distribute it in an envelope for every registered student as I did in Summer Term 2018 played a role in how the students perceived the proposed coaching.

Student 21 proposed that the coaching model be implemented in other courses too:

> *It [coaching] gave us the chance to use more reason, and drop any idea on the table, be more open-minded, and I would surely, strongly state that it should be if not mandatory I think it should get inside the program not only for professional communication but for other level 5 or level 6 courses.* (FG Student21: Fall 2018)

Student 24 provided further insight into why:

> *I believe the idea is really good to provide coaching for students. In my eyes it is amazing […] I think, it is a perfect segue to academic studies.* (FG Student24: Fall 2018)

Adding closure to the coaching relationship became an important recommendation for one student team member. Even though the ending was discussed and planned, it was not celebrated with the tutor coaches. It was left to be discussed in the focus group sessions for the study.

> *The sessions were really effective. But for me it kind of stopped immediately. I really wanted the coach to see us achieving our goal.* (FG Student12: ST2018)

Discussion

Teamwork in undergraduate education has its challenges (Riebe, Girardi and Whitsed, 2016), challenges that can prevent and impede dialogue to take place. The findings from the semi-structured interviews with the business faculty revealed that evaluative feedback is the norm in developing student-team learning. The feedback, at times would be multiple and continuous, or feed forward with ideas on how to approach the brief. This resulted in feedback that became monologic (judgmental) rather than dialogic (Carless, 2013), putting the leaner(s) at centre stage (Taras, 2013). What is more, monologic feedback is about conformity and control (Bailey and Garner, 2010).

When a few business faculty used peer evaluations or an individual reflective essay on teamwork, the learner comes centre-stage. Both have proven as valuable tools in

the learning process of students (Carless, 2013; Taras, 2013), but still with regards to team-work it focuses only on individual rather than collective learning.

The time constraints of the semester could also have worked as a deterrent to dialogue with student-teams. The multi-varied forms of feedback (oral and written) from evaluative comments on the brief's requirements, to the arguments used, to the use of grammar, to sentence structure, to referencing, to team member allocation of work, to parts of the paper strung together without a coherent flow, to making team-meetings with the tutor mandatory or up to the student teams to decide whether to take advantage or not, and to include class-time so as to provide an overview of evaluative statements as to what is working and what is not, all add up. What was also considered important to address in teamwork, was being able to identify student team dynamics, which took most of the time in the meetings with the tutor. The objective was to identify the free riders.

On the other hand, the perceptions and assumptions of the volunteer student team members, prior to the coaching, identified as their main concern first and foremost lack of communication, the lack of safety to present their ideas, the different skills-sets of the team members, and being able to find meeting times to organise the work that needed to be done. Such perceptions are consistent with the literature (Pfaff and Huddleston, 2003) even though communication was highlighted by the volunteer student-teams as playing a much more dominant role. There seems to be a difference of importance in the contexts of the workplace and education. Similarly, in a study by Pinter and Čisar (2018) where they measured through a questionnaire team-based performance, they found that one of the responses given was that student-teams could have benefitted more from "better communication" (p. 31).

Instruction and feedback on formative and summative assessments is a widely acknowledged role in teaching and learning (Bailey and Garner, 2010). However, there is uncertainty as to whether students use such feedback and whether it has "the intended effect" (p. 187). Bailey and Garner (2010) argue that the standardization imposed by the Bologna Process has led to the 'semesterisation and modularisation' of the curriculum in higher education with "critics point[ing] to such measures as evidence of a pervasive techno-rationalism in the academy, which has a number of deleterious consequences" (p. 189). One of the most important effects that has relevance to this study is "that conformity and control are emphasised over dialogue, contestation and negotiation in the development of learning" (p. 189). When it comes

to teams, there are two extremes identified, prior to the coaching intervention: that of controlling student team input and the other that of providing complete autonomy. There is no in between, where dialogue becomes the means where higher order thinking skills could be nurtured and assist teams to identify for themselves courses of action and responsibility. Feedback was given on the student teams' formative assignments. It was used as a means in the stages of student-team work to identify weaknesses and strengths in their understanding of the parameters of the assessment. Such feedback was evaluative and directive. It lacked the transactional form of dialogue through questioning which did not take place during the process of student-teams working on their projects that could have opened up areas of discovery, ownership, and creativity.

A systematic review by Riebe, Girardi and Whitsed (2016) on challenges of team work in higher education identified the following ten issues with team-work: academic workload issues; part-time employment, lack of experience, group composition; development of emotional intelligence; development of communication skills, just outcome in grade review process; lack of using team member skills; lack of prior training in group work, lack of conceptual framework for student teams to follow. Comparing responses from the business faculty interviewed and the reflective diaries of the student members of the voluntary teams certain disparities can be discerned. On the one hand, there was concern on behalf of student members as to whether they would be heard or understood by their teammates to facilitate the beginning, middle, and end result of their outcome, while, on the other hand, business faculty were concerned with assessment requirements and identifying 'free-riders'.

It also seems that the comments on teamwork made by the business faculty link to two out of the three themes identified by Riebe, Girardi and Whitsed (2017, pp. 140, Table 4): Team formation and management; teaching and learning approach. Team challenges affecting teaching and learning practices were not addressed. The strategies that were used to immerse students into teamwork were: understanding the significance of doing teamwork and dispelling myths surrounding teamwork.

Once the coaching intervention began, it provided the means for dialogue to foster. Dialogue for Armstrong (2012) "is the central motif of coaching" (p. 33). In an action research study conducted in the workplace with groups, Alrø and Dahl (2015) used a "non-directive approach of dialogic group coaching" (p. 501) and concluded that the dialogic approach reduced "conflict talk and conflict-based relationships" (p. 501).

Dialogue, however, is not a method nor an approach, it is the means through which individual intelligence is ceded to collective intelligence (Freire and Macedo, 1995). Dialogue opened up collective thinking, where each team member could present their ideas in safety. Questions became the tool for research and discovery, focusing the depth of student-team thinking. This study opens a novel ground in using critical dialogue as a means to develop criticality and collective thinking through the intervention of team-coaching and utilizing tutor/coaches.

The challenges that the tutor-coaches identified before the coaching were expected. If there were none, it would have raised skepticism. The role of the tutor and the role of the coach share many 'unique commonalities' to borrow a term referred to by O' Broin and Palmer (2010). The differences lie in purpose and use. One underscoring principle that sets them apart is the use of feedback or dialogue. Feedback and dialogue are not similar. One is evaluative, the role of the tutor, and the other is exploratory, the role of the coach. Exploration is connected to dialogue where the types of questions used assist not only the 'position of ignorance' taken by the coach but creates a learning space for both coach and coachees. Sublimating the role of the tutor requires unlearning. Unlearning habits of mind is not only relevant to students. Even more so when the volunteer tutors who participated in the study were experienced, seasoned undergraduate instructors. This explains also the initial resistance in understanding and the initial skepticism whether this would be possible during the coaching sessions. Questioning whether it is possible for a tutor to unlearn and take on the role of coach which shares many similarities was fruitful for the process. Unlearning the role as tutor required muddling through their own skepticism whether this is possible or not. It became apparent that gradually they became more confident and relished the role of not being judgmental, being on equal grounds, and learning in the process with the student-teams. This is similar to team coaching literature that views learning as congruent with the coach and the coachees (Clutterbuck, 2014). Metcalfe and Game (2008) in the context of teacher and students refer to the significance of 'genuine dialogue' where both experience the "awe of learning" (p. 351). Both tutor/coaches and student-teams experienced the coaching and the relationship as highly positive. Even when a student team member referred to the need of the tutor/coach to be 'passionate' about the intervention, it only highlighted further that not all higher education tutors can become critical team coaching coaches.

Closure also was highlighted as important by a student-team member. In fact, closure plays a pivotal role in a coaching alliance as Cox (2010) asserts

> If the ending is not discussed, planned and celebrated and the relationship is left to fade or to end abruptly without closure, then the potential for marking achievement and fully integrating changes may be lost. (p. 179)

The discussion presented suggests that there is a role for the team coaching model in undergraduate education and modules with teamwork. The implications are that it can create a learning space for student-teams to problem-solve. This fills a gap in assessed teamwork in undergraduate modules and most importantly it provides a learning space for critical dialogue to take place, to question and discover. Ultimately, it can empower student-teams to think through their ideas, to research answers to questions, to work purposefully towards problem-solving an issue and be entrusted that they can come up with meaningful solutions.

6. CULTIVATING HIGHER ORDER THINKING SKILLS

This chapter is organised into five thematic units based on a careful thematic analysis of the data aggregated from the two action research cycles (the semi-structured interviews of the volunteer business faculty and the volunteer tutors, the reflective diary entries of the volunteer student-teams and volunteer tutors as well as the focus group sessions)

The themes are:

A. The Importance of cultivating higher order thinking skills and its challenges
B. Assumptions on the ideal business graduate
C. Student Perceptions on achieving higher order thinking skills
D. Achieving higher order thinking skills through questioning and critical dialogue
    1. Student-teams' perspective
    2. Volunteer tutors' perspective
E. Student-teams' understanding of criticality

A. The Importance of Cultivating Higher order thinking skills and Its Challenges

This section discusses the methods/strategies used by the volunteer business faculty to cultivate such thinking skills and their challenges in doing so.

For all volunteer business faculty being able to cultivate thinking skills in their students was and is of critical importance. One business faculty member summarised it distinctively:

> *This is my utmost concern. This is why this is hard for me to put it into words. I see this as the focus of what I'm doing in general.* (BF Kleio: 25 May 2018)

Towards that end, the findings suggest that a combination of pedagogical strategies are used, depending on the level of modules. These vary from defining what thinking critically means, to employing examples, to modelling how to conceptualise an argument from a synthesis of sources, to using in-class debates, to asking questions, to providing evaluative feedback on formative work.

Greg seems to make a conscious effort to clarify what thinking critically means. Assisting students to understand the difference between being critical and thinking critically is a first move for him for students to understand its importance in their studies:

> *I point the difference between being critical of something and thinking critically about something and that's you know, we take it for granted, or some lecturers take it for granted but it's something that we need to explain to students, cause a lot of them say, who am I to challenge existing theories? I say that's not what thinking critically is about. So, I clarify that very early on. And I explain to them that thinking critically means not taking anything for granted unless you can see the merit in an argument or the explanation behind an assertion or you know the proof or evidence or something and to give them examples of how this can work.* (BF Greg: 25 May 2018)

Even as early on as Level 4, students are nurtured into understanding the moves they need to make in thinking to go beyond memorisation. Greg reflects on how students understand what is required of them:

> *They do know that they have to think not just as students reciting things that they've read but as researchers in a sense and eventually as authors that have to present a coherent argument, explain or support their assertions, refer to examples, use proper terminology. And, obviously, we're less demanding with how well or how extensively this has been done at level 4 but much more as we progress with the curriculum.* (BF Greg: 25 May 2018)

The use of examples by Nicky is also implemented, illustrating to students what developing critical thinking means:

> *[In] all my classes in Level 4 I introduce the coin. The coin has two sides […] And I ask them [students] every time that you need to develop critical thinking this means that you must be able to see both sides of the coin and an argument can become the counterargument, so develop the negative side and the positive side and see how the two of them interrelate. This cannot be done in Level 4 because you have to cover material and definitions and new*

knowledge but at Level 5 and Level 6, the knowledge of 4 is there. (BF Nicky: 15 July 2018)

In Levels 5 and 6, facilitating classroom debates and discussion of case studies provide opportunities for students to take on the opposite side of what they believe and use their thinking skills to create plausible arguments. As Nicky reflects on her experience:

The debate I think is the best approach; they love it […]. They get to know the other side as well. (BF Nicky: 15 July 2018)

With student-team work being implemented in Levels 5 and 6, a focal point appears to be working on the strength of the argument in relation to the contextual theory/theories of the module. Modelling how to synthesise sources from research becomes an important strategy in assisting students to create similar discussions in their work. Kleio describes:

I […] try to show to them practically […] how I would use two different viewpoints to reach one conclusion, for example, deductive thinking. How I would phrase a critical argument in a way that would not be offensive to the source. (BF Kleio: 25 May 2018)

Creating also in-class workshops, where students attempt to synthesise competing arguments becomes an additional move for Kleio to exemplify how this can be done in bringing together source material:

I develop lecture slides that use references to indicate to students how to combine different parts of theory, and how they could possibly contrast different parts of theory. So, in a slide that has in it four different citations and in bold the four competing arguments […] they are trying to synthesise everything into one cohesive statement that for each student is different. (BF Kleio: 25 May 2019)

From the narrative above, tutor modelling and practical workshops on synthesising contrasting parts of theory become an important critical thinking exercise that student-teams will try to reproduce in their work.

Another strategy that is used to assist students to think critically is questioning. For Aspa questioning gears students not only to think critically but to begin asking questions themselves:

> *When my students get to me […] the question of understanding has been addressed to some point by prior courses, so the issue that they have trouble with is to move beyond understanding. So, this is where I fit in […]. When I reach the point of asking those questions to get them to critically think they have already started asking themselves questions that are beyond understanding.* (BF Aspa: 4 June 2018)

Whether students find the answers to their questions, Aspa suggests that even though it is not evident in their work, it shows a partial grasp:

> *To be frank with you I mean you don't see it in their work. I think in their work I see the reflective part. I don't see necessarily the product of their reflections. For example, I see them, I see their arguments why they chose this kind of sampling versus the other kind of sampling. But I'm not sure whether they have a clear answer to every question that arose in their heads in order to determine sampling. Possibly they have a partial grasp of what they need to have concluded at. And this is okay.*

A similar view, though somewhat differentiated, is expressed by Greg:

> *They don't necessarily have to provide answers, but sometimes it's better, more important to ask pertinent questions and that in itself shows a good level of engagement or manner of engagement. They must not simply cite examples without saying OK so what's the connection or the usefulness in this investigation or in this discussion. They must not cite theory, resources without explaining why they are relevant to the topic or which part of the answer they're supporting. (BF Greg: 25 May 2018)*

From the above narrative, level of engagement or manner of engagement is related to how students can exemplify their thinking skills through asking questions, making connections, and supporting relevance. For the volunteer business faculty, evaluative

feedback becomes the main means to discern how student-teams' thinking develops. For Steven, feedback becomes an essential strategy for students to improve their thinking skills:

> *What I also consider very important in terms of developing critical thinking skills is their requirement to improve based on my feedback. So, this is very important. I think for us, for everybody, it's always easier to be critical of what others are saying, but when you're forced to reflect upon critically, upon what you are saying and what you're thinking, that's a very high level of critical thinking and of course when you revise, and you change your ideas and your arguments in view of new information and feedback, I think that trains critical thinking skills. So, I think it is highly embedded there and again I want to emphasize that students are given feedback in three opportunities: they get a lot of feedback not only in terms of the time I spend to give them feedback on the text but also the time that I take to discuss with teams the feedback and address questions.* (BF Steven: 1 June 2018)

Towards that end, formative work is used as a means for student-teams to receive evaluative feedback which identifies weaknesses in their thinking: gaps in constructing an argument because of lack of data, ineffective synthesising of sources to reach a conclusion, and implementation of theory, or expected levels of engagement with the material. Evaluative feedback, however, precludes dialogue.

Kleio refers to her experience of whether she discerns development in their thinking and underscores how the lack of time plays a role:

> *I see some development [in their thinking]. I would very much have liked to see everyone developing but I would say that it takes some time for me to be able to observe the effects of this and in many cases I am able to assess development after the end of the course and not even that.* (BF Kleio: 25 May 2018)

When dialogue takes place with student teams it is more tutor centred, where suggestions and ideas of how to approach their topic are proposed leaving little room for questioning:

> *So, when working with [student teams], we do offer them a lot of ideas or alternatives of how they could approach the topic. And even in doing so you get the students to understand that there is no simple right answer, that they have to do some research, that they have to decide what will be the supporting evidence that they need in order to present their case, what examples would be appropriate to use* (BF Greg: 25 May 2018)

Apart from formulating a strong argument that is based on data and a synthesis of sources that support it, assisting students in understanding the significance of making assumptions is also another strategy that is used to cultivate higher order thinking. One business faculty member refers to her experience of teaching a Level 6 module where she describes her understanding of how student-teams are implementing higher order thinking skills:

> *So, they are asked for example to make assumptions. This is something they find extremely difficult. They feel unsafe making assumptions […] And it is important that guest lecturers also highlight this, so they see that in business in general in various companies people are working based on assumptions, on estimations, we never have a perfect set of data to be based on. So, I think that this approach of trying to fill - in the gaps and be creative and use the information that you have in a critical way, convincing others, in discussing with others, I think that all these aspects help them build this higher order thinking.* (BF Aspa: 4 June 2018)

Based on the above, higher order thinking could be defined as the guided cognitive ability of student teams to make assumptions based on a critical view of data with the purpose of being persuasive. This is an important narrative. However, it lacks the components that makes thinking purposeful, resourceful, dialectical (Laske, 2009). It lacks a comparative historical context, social context, social intelligence (Dafermos, 2018), responsibility, ethics, and the disclosure of racialism (Brookfield, 2003) and neoliberal values.

From the findings, there is a dissonance between what levels of thinking critically business students are in Levels 4, 5, and 6, and the acquired thinking skills from their liberal arts education. Before students begin their concentration of study, they are obliged to take courses in fulfilment of their liberal arts education in the fine arts, the

humanities, and the sciences. Students in such courses have already moved beyond memorisation and understanding.

The scaffolding (Vygotsky, 1978) implied taking place by one business faculty member is an oxymoron. To reflect that students still have difficulty moving beyond understanding in Level 5 and Level 6 courses, suggests a disconnect between how students are expected to think through a liberal arts education and how they are expected to think in their business concentration. It is, therefore, not surprising to have one faculty member lauding the perspectives that their business students are exposed to:

> *The fact that they (business students) are taking courses in sciences and humanities, in Fine and Performing Arts and Social Sciences, it helps them think from a diversity of perspectives, because when you study a particular subject let's say law, business, accounting, whatever, you not only learn knowledge, but you also learn mindsets. So, thinking from a specific perspective, a liberal arts education will break that because students are getting sciences, so they get the science perspective, they get the humanities perspective; they get the fine and performing arts perspective.* (BF Steven: 1 June 2018)

Steven's account of the different perspectives that business students can employ from taking liberal arts courses is enlightening; however, they remain perspectives. Huehn (2016) identifies the de-philosophisation of business education, which translates into the bifurcation of liberal arts and business education. In the end, a liberal arts education becomes merely a perspective for business students to consider and not the means to read business theory and issues in business education. There seems to be a dissonance of temporality that affects the possibility of discovery in learning. The learning outcomes of the modules and the time frame of a semester within which so much needs to be covered and assessed, downplay the role of dialogue and creativity. As Prasad, Prasad, Mills and Mills (2016) argue "there is a wider multidisciplinary domain of organizational critique" (p. 13). I believe that business undergraduate students are disadvantaged in comparison to the Liberal Arts and Sciences majors. They are not given the space and time to focus on providing alternatives to the expected business perspective.

This is reflected also in the kinds of briefs that are prepared in their modules. Greg gives his account:

> *Actually, for all of those group components we give them a very specific topic. They can choose the case study context. For example, in a marketing presentation they might need to explore a topic that we specify for them but by applying examples or a case study from the tourism hospitality industry. So that's the only choice that exists. The topic is prescribed for them. I mean the subject matter that they have to engage with.* (BF Greg: 25 May 2018)

When business faculty were asked whether they require students to interpret the brief and/or consider a social responsibility angle, their response was that there are always a small number of lectures "devoted in discussing an ethical debate […]" and "in later courses and more advanced courses they [students] are asked to provide in their exams an answer to a specific ethical dilemma" as one business faculty member put it (Kleio 25 May 2018).

Even though introductory courses present both the business perspective and the core field as a phenomenon, which identifies the negative impact of business on society, the environment, and culture, they are seen as separate entities rather than intertwined:

> *There are at least two ways that you can look at tourism. One is the business perspective, whether you are a business or a traveller, where you're interested in value for money, cost controls, profitability, competitiveness, branding, uniqueness, individuality, quality of experience and so on […] and there's another part which is more about looking at tourism as a phenomenon, as an area of activity. And we look at the impact that tourism might have on society, environment, culture, economy and so on, and even from that introductory module, I would say that unfortunately tourism […] comes with a price tag. In order to develop a destination for tourism it means that you might need to sacrifice other types of activity for agriculture, fisheries, or whatever, which traditionally might be the main area in which the destination made its money.* (BF Greg: 25 May 2019)

Ethical decision making, however, becomes for Steven a critical stance in the classroom, rather a problem for student group work:

> [W]*e address ethical issues in every single course, from the introductory course to the most advanced courses. In every single course they learn about ethics. And I always tell them that you will never become an ethical person by attending a lecture about ethics. But what we want to solve is that a lot of unethical behaviour is a result not of unethical people but because of amoral people, that is people who either do not understand the ethical dimension embedded in decision making, or who think that this is not relevant to business, and we try to raise their awareness of what are the issues and why they are important. We also address that from an international business perspective. So, when I discuss corporate social responsibility in global business management, I discuss why are ethical issues and corporate social responsibility critical in international business, and I go beyond what is discussed in corporate social responsibility or ethics classes*. (BF Steven: 1 June 2018)

It becomes apparent from the interviews that even though there are modules that may focus on sustainability in a field of study, or discuss ethical decision making as critical to business in the classroom, the assessments are individual (exams or papers). None of the briefs for group work provide an angle of sustainability, ethics, or impact on society. The business perspective dominates. This explains also the reasoning of one business faculty member as to why students are not required to provide solutions:

> *I don't make them a requirement in my courses at least because if there was an obvious solution to a problem, we would have found it already and with social problems or broader social problems, you know, it's very challenging because you can solve a part of the problem but if there was an obvious solution, we wouldn't have a problem to talk about.* (BF Greg: 25 May 2018)

The understanding above reflects the kind of briefs given to business students. Yet business graduates are expected to work with and resolve wicked problems that businesses are exposed to. The creative ability of business undergraduate students to tackle or even attempt to tackle such wicked problems (Grint, 2010) are not expected or asked for. The thinking skills that are valued, and which I believe are

important, but by themselves limiting, are making assumptions based on a critical view of data with the purpose of being persuasive.

Creativity, too, at times is suppressed as acknowledged by Mike in his experience of student-teams presenting to companies:

> *Sometimes in our effort to prepare students to respond to current industry needs and standards, we tend to suppress creativity, and we tend not to allow them to demonstrate, to bring out, all the skills they possess, not necessarily acquired from our course or program, but from other interactions or other educational engagements they have had. So yes, I think we should allow them more, or some professors you know they are worried whether students will say something wrong to an executive or to an expert who is invited.* (BF Mike: 31 May 2018)

Summary

Despite the efforts of the volunteer business faculty to cultivate higher order thinking skills, there seems to be a disconnect between expected thinking skills for business and thinking skills for their discipline when it comes to assessed group work. In terms of the findings, there is a lack of dialogue between business theories and business issues. The thinking skills that are highly revered in group work by the volunteer business faculty are deductive thinking, synthesising sources to show conceptual relationships, and the use of hard data or case studies for support. Student-team thinking is seen from an individual perspective rather than a collective one. The lack of seeing student-teams' thinking as a process and discovery in dialogue, is a result of observing it only as an outcome through evaluative written/oral feedback.

Even though it would seem that the group work as experienced and described by the business faculty was student centered, there is ample evaluative feedback that makes it tutor-centered. The context of the briefs for group work, too, are limiting, reflecting a business-oriented problem-set. Despite the fact that the business undergraduate students of Deree are obliged to take liberal arts courses in the sciences, the arts, and the humanities, and even though it is expected of them to have an interdisciplinary mindset when they graduate, it is not expected of them in student team-work briefs. That in itself has been limiting the scope of discovery and

development of higher order thinking skills, which are seen from a quite limiting perspective as to what these entail.

B. Assumptions on the Ideal Business Graduate

Even though the question was not included in the semi-structured interviews with the volunteer business faculty, one of the questions I asked was how they would describe their ideal graduate and their skills. The objective was to discern whether the profile of the business graduate of Deree would reflect the concerns of researchers on the kinds of business graduates that are nurtured.

The findings suggest that to a large extent similar skillsets are referred to with some variations depending on the major, such as academic cognitive skills, interdisciplinary mindset, cross-cultural competence and adaptability, team skills, individual values, social skills, business skills to address business needs, and global citizenship. Only when I probed and asked whether social conscience, sustainability and ethics should be included was there immediate agreement and inclusion in the Deree business graduate profile.

Steven describes his ideal business graduate as:

> *A student that has the business skills and knowledge that are typically imparted in business education. I would also like the soft skill set that all business students should have to work anywhere in business. And on top of that I would also like to have what I call cross cultural competence […] For example, the ability to function in diverse environments and cross-cultural context is by nature related to international business students that pursue international business careers […] And this requires flexible mindsets also, and mindsets that are able to think from a diversity of perspectives.* (BF Steven: 1 June 2018).

Flexibility takes on a different hue for Maria in her description of her ideal graduate. She refers to them as:

> *Transformative skills that could be transformed from industry to industry. I think that adaptability is one of the most important things: to be able to adapt but without losing […] ethical core values.* (BF Maria: 25 May 2018)

Mike summarises his description of the ideal business graduate as being a globalised citizen and having knowledge of different disciplines:

> *I said globalized because information systems is by definition a globalized discipline. I want this person to be able to understand marketing, international business, finance, be able to do research, be able to do presentations, be able to know about technologies not create technologies, know about technologies and how these technologies support the different functions in business. I want them to be able to speak the language of the IT people, and at the same time speak the language of businesspeople. I want them to be able to work in teams, because as I said in the beginning, their deliverables by definition require the skills and knowledge of a number of experts from different fields; for example, in marketing they have to work with the marketeer, they have to work with the web developer, they have to work with a CEO, they have to work with other people to manage the information `systems projects*. (BF Mike: 31 May 2018)

To the above narratives, Maria provides another account of what her ideal graduate should have in its skills-set. She adds "the ability to identify a problem, analyse a problem, and try to analyse it so well that they can synthesise and come up with solutions". Maria includes also:

> *The ability to understand the individual factor and the broader picture and how these two compare and combine*. (BF Maria: 31 May 2018)

She also describes what she means by performing well in teams:

> *As far as employability skills, the most important for me would be to be able to perform well in teams. In other words, put their selfishness and their ego behind […]*

This may come in contradistinction to what Greg describes as one of the most important attributes of his ideal graduate:

Critical thinking perhaps might be turned into a different way, just thinking for yourself. I'd like to see a student who reaches that level of their studies or graduates to be able to have some judgment, the ability to judge. (BF Greg: 25 May 2018)

The narratives above extol a form of leadership where collective thinking and a mindset to address crises that plague the world are not imagined.

Having discussed the findings regarding the methods and strategies that volunteer business faculty use in cultivating higher order thinking skills, the section below discusses what student-teams reflected on as needed to be supported to achieve higher-order thinking skills.

C. Student Perceptions on Achieving Higher Order Thinking Skills

A structured question was asked for student team members to reflect on how they think they can be supported in achieving higher-order thinking skills so as to problem-solve an issue or an opportunity for a company or organization. Their responses identify the significant role of dialogue in the process of acquiring those skills. One student team member reflects:

I think that the best way my team and I can be supported is through productive, stimulating discussion on the topic, where we can ponder and reflect on certain aspects of the project in a facilitating setting. (DE Student1: ST 2018)

Without a space for dialogue the student suggests that any discussion can be hard.

Otherwise, it may be hard to undergo such similar conversations. (DE Student1: ST 2018)

Dialogue also can facilitate brainstorming, which becomes a collective affair to contribute creative ideas as this student identifies:

I will be able to expand my thinking process and become more creative by thinking past the initial constraints that a given problem may present. By improving myself this way, I hope to be able to participate more in the initial

> *brainstorming process of a problem and contribute some original ideas instead of only helping in the secondary process of refining ideas.* (DE Student6: ST2018)

Another student refers to the importance of questioning that can lead to higher-order thinking:

> *I feel that Socratic questioning assists a team in identifying the root of an issue and, thus, come up with a solution that will not only solve the issue, but also will function proactively for avoiding the generation of other issues. All in all, I perceive higher-order thinking skills as crucial for an individual who aspires to be a successful professional.* (DE Student5: ST 2018)

If questioning plays a role in achieving higher order thinking skills, another student refers to the importance of creativity, learning, and risk-taking that can contribute to higher order thinking skills:

> *By being a member in a team first my creativity will foster. Furthermore, I have the opportunity to learn more things, to recognize strengths of the other members and adopt them.* (DE Student7: ST 2018)

Dialogue and student-team creativity once again become essential for nurturing higher-order thinking skills:

> *By having a coach that can channel our creative energy into the right direction and stimulate our critical thinking through discussion*. (DE Student8: ST 2018)

For student 33 (Fall 2018), listening skills are the pre-requisite for nurturing higher order thinking. Listening is not only a human need (Cox, 2013) where one needs to be acknowledged and heard by the other, it is also the means through which one's thinking can progress.

Summary

The student-perspective on how they can be assisted to cultivate higher-order thinking skills has not been referred to in the literature. As a result, these student-team-member reflections are valuable in discerning such needs. These are providing

a critical space in which listening and dialogue through questioning can foster brainstorming, student-team creativity, problem-solving and learning. It comes into contrast with how the volunteer business faculty support and nurture higher order thinking skills. Even though the limited team coaching literature in undergraduate education does not focus on how to develop thinking skills, it does focus on the importance that brainstorming and problem-solving can play in the team coaching sessions (Brown and Grant, 2010).

D. The Role of Questioning and Critical Dialogue on Higher Order Thinking Skills

1. Volunteer Student-Teams' Perspective: Having discussed student expectations of how they would be facilitated to develop their thinking skills, the discussion that follows focuses on the student team members' findings of whether the teach coaching model helped them to achieve higher order thinking skills. The data from the two focus group sessions and the reflective diary entries confirm that the team coaching sessions created an environment of discovery and deeper thinking which led them to focus, to actively listen to their other team members, to move beyond individual thinking to collective thinking and collective purpose.

Questioning was identified as a catalyst in how student-teams processed their understanding and thinking of their topic:

> *I believe that our team has seen a great deal of change in regard to how we perceive and attempt to understand our topic. Due to some of the questions brought forth during our group sessions for this study, we came into conflict with some of our ideas and assumptions […] while they had appeared sound within our heads when not given much thought, stood on weak foundations. With these confrontations that tested how we applied higher-thinking and analytical skills, we were able to disregard weaker facets while strengthening the merits of those that held firm.* (DE Student1: ST2018)

For another team, questioning provided them with more ideas to research on:

Through the questions of our coach, [we] were assisted in terms of deriving more and more ideas and points, which eventually became parts of our secondary research. (DE Student5: ST 2018)

Student 21 suggests that a broadening of perspectives assisted them in encouraging higher order thinking skills:

Ever since the first coaching session, the team has started looking into a wider range of fields and perspectives revolving around the issue we chose. (DE Student 21: Fall 2018)

The ability to use judgment during the coaching sessions was encouraged during the coaching process of dialogue and questioning:

I have observed that the whole procedure affected the development of higher order thinking positively. More specifically, during that time we were able to value, compare, analyse, and think critically increasingly well. (DE Student4: ST 2018)

But, also, it was catalytic in stimulating their thinking:

The coaching session provided us with stimulation of our thinking, regarding the project, and basically it made us, the coach provided us with questions, which stimulated our minds, in seeking answers that will be added to our project. (FG Student5: ST 2018)

The coaching sessions became a safe harbour to navigate their ideas:

[I]t really helped us to navigate the ideas, the thoughts and the concerns that we had with our project; where we were going with it. Because when you take these ideas, maybe you just keep them at the back of your head, and it seems fine there. When they are introduced, you know, vocally, and you have to talk about it, think about it more critically, it can really, I guess, you can judge the strengths and weaknesses of these ideas and thoughts. (FG Student1: ST2018)

It also became a space where having resolved issues of team performance, they could focus on team productivity in terms of thinking through and refining ideas:

> *The team has become more integrated and efficient when facing problems […] since each team member has come to know and understand each other's strong and weak points and working habits, team members have found out how to complement and support each other. This is especially seen when problems arise, knowing how other team members think makes it easier to understand new, roughly conceived proposals and help refine them.* (DE Student6: ST 2018)

The more the student-team members understood the complexity of the issue from different perspectives the more they could evaluate:

> *We have a better understanding; therefore, we have more knowledge on the topic and can think more critically*. (DE Student 33: Fall 2018)

It also enabled one student-team to ask more focused questions: Student 28 describes her team's experience:

> *People from the group have started asking more specific questions of the topic, which in turn gives us back the more specific results that we want.* (DE Student 28: Fall 2018)

What was novel and valued by a number of student team members was the process of thinking collectively:

> *The process of thinking collectively as a team was new for me. Listening to other teammates, refining their ideas, proposing my own, letting others develop my ideas and finally combining them together, was a process that I experienced for the first time to such a degree. I was able to adapt my way of thinking in order to match the teams' and achieve better results that way*. (DE Student 6: ST 2018)

Creativity came as a result of such collective thinking in how they focused the problem, in how they evaluated the research and came up with solutions of their own:

> *I think the greatest benefit we got from the coaching sessions is that we actually had the time to quietly think about the problem not to just state the problem and find solutions but to see the root and to think inside the problem, not just to find and to rephrase solutions from other articles. So, we managed to quietly think about the problem and come up with solutions of our own and not restate others' ideas and to create insight and generate our own ideas.* (DE Student 8: ST 2018)

Volunteer student team members also saw their individual thinking skills develop:

> *I have developed the ability to mentally visualise myself inside the problem or situation and use my cognitive capacity to solve the problem on the spot. In other words, I have improved my problem-solving abilities* (DE Student8: ST 2018)

For another student it helped her thinking to focus on the problem and think differently:

> *It helped me focus more appropriately on what I should write in the AR. It helped me think in a new way*. (DE Student17: ST 2018)

Similarly, Student 1 in Summer Term 2018 notes the importance of using thinking skills to move beyond one perspective:

> *I have observed that my higher-level and critical thinking skills have developed to where they can be focused towards the efforts and necessities of this particular project. While I have studied and practiced such thinking strategies in many courses, these sessions have allowed me to channel my skills in a more efficient way, that doesn't just look through the perspective of a History-disciplined student.*

Summary

What becomes evident from the findings of the volunteer student teams' reflections is that the team coaching model proved to be invaluable through its use of dialogue and questioning in developing how the student teams were thinking. The teams became self-monitoring, reflective, and were eager to pursue different perspectives

to understand the complexity of the problem at hand, compare and contrast perspectives and synthesise, figure out through research how the problem evolved not only within a global context but also within the situatedness of the company or organisation. By understanding their limitations, they were able to creatively pursue solutions.

2. Volunteer Tutor/Coaches Perspective: I now discuss whether the tutor/coach participants by using the team coaching model experienced a difference in their student-teams' thinking skills.

The tutor participants in the study were asked in their diary entries to reflect on whether they observed higher order thinking skills being used by the student-team(s) they coached and if not, why, and if yes, what they thought played a role. Following a careful reading and analysis of the findings, three interrelated parts of the coaching model were identified: questioning, student-team autonomy, accountability, reflective thinking and commitment, which were all ensconced in a learning space created by the coaching environment that was safe, equal, and non-judgemental.

Tutor/coaches were observing from one coaching session to the next a difference in how students were thinking:

> *They became more specific, more focused, more concentrated on certain aspects. Of course, they had worked more during this week that we had not seen each other, but again they had put things into place. They knew what they were talking about*. (VT Pamela: 11 July 2018)

Questioning became a dominant theme in the tutor-coaches' reflections on how student-teams' thinking was enhanced, which involved student-team accountability in retrieving answers:

> *I believe that in the development of higher order thinking skills contributed the way the questions were formulated and the fact that the students were led to retrieve answers from their own concepts and perceptions, rather than being directed toward educators' perceptions. This gave the students accountability for their synthesis, strategy, and action*. (DE Pamela: ST 2018)

The same co-coach who had opted to do the coaching in the second action research cycle re-affirms her first observation in the first action research cycle:

> *Students display logical associations, reflective thinking, and problem-solving skills. The initial lack of organization has gradually transformed into organized thought, clear thought and accuracy. They understand mistakes, focusing on certain weaknesses, strengthen their minds. Overall, their progress in both constructing the Analytical Report and presenting critical thinking has been tremendous. As before, I believe that in the development of higher order thinking skills, formulation of questions and retrieval of answers have played a major role in the students' progress and constructive beliefs and perspectives.* (DE Pamela: Fall 2018)

The type of questions asked from the team coaching model for developing criticality assisted also one student-team to consider audience awareness:

> *Yes – they have been forced to consider things that they would not have done without the questioning […] Often at the start the information they have gathered is redundant as the receiver already knows these things. This means that a lot of the work needs to be scrapped and the students can then more easily focus on what the receiver doesn't know or has not already thought of. This type of questioning really helps this process*. (DE Laverne: ST 2018)

Additionally, another team was assisted to reflect, self-monitor, and question established beliefs:

> *As the sessions progressed, students' logical associations, reflective thinking, and problem-solving skills seemed to increase. They gradually became more open-minded and well organized in their thought. They seemed to be self-monitoring, questioning established beliefs, and focusing on certain subject matters. Overall, the way they communicated their ideas was firmer and more rationally presented in comparison to the beginning stage*. (DE Pamela ST2018)

The functionality of the student-team being able to self-monitor is an important criterion of a successful working team (Hackman and Wageman, 2005).

The student-team(s) were motivated during the coaching sessions to discover on their own answers to the questions and share them with their tutor/coach who also wanted to learn. The importance of the coaching space being relaxing and equal played also a pivotal role. Undertaking the role of the coach facilitated the development of thinking skills:

> *They felt some difference. I felt different. It was more relaxing, more equal, and I did not feel that they are dependent on me […] while as Professor Pamela I feel that my students depend on me a great deal, which is not good for their critical thinking. Yes, it's better to find for themselves what they have to look for*. (VT Pamela: 11 July 2018).

The tutor-coach's curiosity, too, became the springboard for dialogue through questioning in creating a non-judgmental environment that enabled accountability and autonomy in the student-team:

> *My curiosity for example worked very much during those sessions. Because they wanted to understand and learn what they were talking about and see how we could all contribute to these conversations and make them focused on the targeted aspects. And there was no judgment. While in class and with my students there is judgment, of course. I don't criticize, yes, but I do make my criticism constructive. And this is what makes them work. The actual criticism. In this case it was different. It was a way of bringing things to the surface from depth.* (VT Pamela: 11 July 2018)

Curiosity in the coach is a concept that is similar to but different from coming to the coaching session with a mindset of ignorance. One is dynamic while the other is static. With curiosity the coach shows commitment, caring, and interest in the student-team's discoveries making the student team even more accountable, resourceful, and motivated.

A perspective given by one tutor coach in Fall 2018 who observed higher order thinking skills occurring with her team explains it as a result of the student team's obligation to commit to the coaching session and not as a result of the coaching alliance between tutor/coach and student team:

I did observe higher order thinking skills occurring […] I do want to note that having the team commit to the instructional interventions of the coaching sessions might have put them more on 'alert' as to what they should do and prepare for – a kind of external motivator but also functioning side-by-side on some level as an internal motivator. In other words, the team members may have felt more 'obligated' to be prepared and generally to achieve something together with regards to the sessions. (DE Eve: Fall 2018)

Summary

The findings suggest that the team-coaching model proposed in this study from the perspective and experiences of the volunteer tutor coaches can provide a learning space where student-team thinking skills can be developed through what are essential techniques in the coaching literature that of questioning, listening, and clarifying, which are all-inclusive within dialogue. Dialogue as Armstrong (2012) argues is talking with rather than at and about. One interesting finding is that of the coach who brings curiosity to the coaching space which seems to enhance the learning environment for both coach and coachees. This is an underdeveloped concept in the coaching literature. Clutterbuck (2014) refers to the importance of learning being a shared experience where not only the team learns through the process but also the coach.

E. Student Perspectives of Criticality

It was of interest to this study to have student perspectives on what they thought criticality meant. The objective was to discern the context and the skills needed as perceived by undergraduate students. The discussion of findings below proves to be quite enlightening.

The volunteer student team members were asked to reflect on their perception of criticality. They also had the opportunity to refine their first diary entry on criticality, in the third diary entry following the coaching intervention.

One student team member discerned a difference between critical thinking and criticality. What stands out in the following excerpt is the fact that the student brings

in socially situated reflection and evaluation when referring to the difference between critical thinking and criticality:

> *Critical thinking is a complex process of deliberation which involves a wide range of skills and attitudes for deciding what to believe or do. Critical thinking means questioning not only assumptions of others, but also questioning your own assumptions. In this regard, criticality refers to the practice of socially situated reflection and evaluation. This means considering an issue from multiple perspectives, even when these involve self-critique. Thus, being critical does not mean being negative about other people's or one's own assumptions; it means being able to identify assumptions and evaluate evidence and issues logically.* (DE Student 7: ST 2018)

Student 18 refers to the importance of examining multiple facts and variables to reach a conclusion:

> *The pooling and examination of multiple facts or variables so that an educated conclusion or judgement can be reached, when combined with previous experience and knowledge of the decision maker.* (DE Student 18: ST 2018)

Another student adds to the above the ability to create original and insightful ideas:

> *I consider criticality as the ability to address multiple pieces of information, analyse them, connect them with pieces of already existing knowledge and create original and insightful ideas.* (DE Student 8: ST 2018)

The same student following the coaching intervention refines their understanding of criticality by adding:

> *The ability to examine a situation from various perspectives, even from uncomfortable positions.* (DE Student 8: ST 2018)

Urgency and in-depth thinking become significant in how Student32 defines criticality:

> *Criticality refers to urgent but thorough thinking about a certain issue, which would produce possible solutions. Moreover, it is about considering all the*

factors which are related to a certain topic and in that way find the best possible outcome. (DE Student32: Fall 2018)

Student 32 in the third reflective diary entry following the coaching intervention highlights:

Criticality refers to inspiring one to look at the certain topic from different perspectives and not be 'stubborn' on the belief that only one way can lead to a solution. (DE Student 32: Fall 2018)

Criticality for Student 1 takes on primacy in searching to address complex social problems:

As a history major, criticality to me underscores an event or situation where its importance or need holds primary. For example, a civilisation faced with a famine, invasion, civil discourse, or general upheaval may see the solution, to have criticality. You must first confront that which holds criticality, due to its critical nature. (DE Student1: ST 2018)

The same student's understanding following the coaching intervention changes to include that criticality need not only be used to address social issues but its:

[…] scope can be much smaller, such as with his project, rather than a large-scale importance, such as famine. (DE Student 1: ST 2018)

Combining past experiences and previous knowledge and understanding the complexity of the present problem so as to provide new thinking is the understanding of Student 20 of criticality:

Criticality for me is to be able to evaluate a situation and based on past experiences, create a solution or propose an initiative that can be applied in a specific setting. Criticality is an ability, or I would characterise it as 'out- of-the-box' thinking. The ability to propose something new by actively using past experiences as a lesson. (DE Student20: Fall 2018)

Problem-solving becomes an important function of criticality for Student6:

> *Criticality is the ability to collect all information relevant to a given issue, find the key problems that need to be solved, derive actions that need to be taken and categorize them in order of importance.* (DE Student6: ST 2018)

Summary

The context within which student team members understood criticality was within the pedagogical framework of problem-solving. Social consciousness, multiple perspectives, assessing of data and variables were important. What also stood out was their understanding that in order to problem-solve, evaluating past knowledge and experiences would provide them with a deeper understanding as to how to reach innovative solutions. There is a plethora of research that focuses on what tools faculty can use to develop higher order thinking skills, yet the perspective of undergraduate students has never been looked into. This suggests perhaps a lack of faith and low expectations of students. An assumption I can make is there may be dissonance between the liberal arts education that business students go through and what is expected of them contextually from the business faculty when it comes to assessed group work.

Discussion

The specific questions that were directed to the three groups of participants had the objective to produce findings from the two action research cycles on how higher order thinking skills are experienced, defined, and cultivated. In effect, it was important to discern whether the proposed coaching model for developing criticality in undergraduate students can assist student teams or not to develop their higher order thinking skills in team projects.

From the semi-structured interviews with the business faculty, it became apparent that time constraints and curriculum design left little room for dialogue to take place to discern the thinking skills of their teams. The research of Lefebvre into rhythms and its effect on Alhadeff-Jones' (2019) research into adult education provide an explanation as to how both time and space in higher education create rhythms of learning that can create "experiences of dissonance" (p. 165). Even though it would seem that the group work as experienced and described by the business faculty was student centered, there is ample evaluative feedback that makes it tutor-centered.

The coaching provided the student-teams with a platform to reflect as to what criticality means to them and how they believe they can be assisted to develop their thinking skills. Comparing the findings from the business faculty and the findings from the student teams there is a schism that needs to be addressed and bridged. This schism has to do with the briefs provided by the business faculty that focus on wanting to see student-teams implementing business theory to address business needs without including a parameter of sustainability or social impact to provide solutions or a theoretical understanding that qualifies how business theory is used. This disadvantages business undergraduate student-teams who are not expected to even attempt to problem-solve using such parameters. This is left for individual assessment. Even more importantly, it does not take advantage of the liberal arts curriculum that business students go through, yet business faculty believe that their ideal graduate has an interdisciplinary mindset.

The findings suggest that the team coaching model provides an alternative or additional pedagogical tool that can play a significant role in motivating student-teams to problem-solve, discover answers, question their assumptions and self-monitor, employ collective thinking once team performance has been resolved and understood, and be accountable and creative. In fact, the coaching sessions provided student-teams with a safe space to brainstorm, question, and mull through ideas, but also consider questions and answers that they had not thought of. Thinking collectively was considered refreshing and meaningful. They were able to see their thinking as a process but also as progress as they went deeper into looking at an issue from different viewpoints.

The experiences of the volunteer tutor/coaches in implementing the coaching confirmed the experiences of the student-teams on how the coaching model assisted them to develop their thinking skills. Through dialogue and questioning student teams were able to think through their assumptions, identifying weak and strong points, pursue answers, question their beliefs, and become accountable in preparation for their next coaching session. They were motivated to do so. It seems that the coaching alliance between coach and coachees played a major factor in following through what they had decided in the previous coaching session. The student-teams' agreement to participate in the coaching intervention (which included participating in three coaching sessions, writing reflective diary entries, and taking part in a focus group

session, as well as signing the consent form) brought about a commitment that was collectively decided by the team. Moreover, the engagement of the tutor/coach in creating a space of equality and safety within which critical dialogue was nurtured enabled student teams to think through the questions posed and seek answers through research. They came to trust the efficacy of the coaching intervention

7. CONCLUSION

This study was designed to develop a theoretical and practical framework of team coaching for developing criticality in undergraduate students. In this final chapter, in order to contextualise the conclusions drawn from the study, I present the findings and examine them in connection with the literature. The chapter begins with an overview of the study; then presents the inferences from the findings from the literature; it continues with a discussion of the theoretical and practical implications of the primary and secondary findings from the implementation of the team coaching model; and ends with limitations to the study and considerations for future research.

A. Overview of the Study

The question posed at the outset played a key role in deciding both the research paradigm and the design of the research. The choice of critical pragmatism as the research paradigm afforded a focus to the study, which was to discover knowledge created by inquiry, problem-solving and critical reflection. Critical pragmatism also informed the choice of research method. Action research was chosen as the research strategy. It provided a robust collaborative design to investigate change, collaborate with others in knowledge creation and critique of the coaching model, and link theory to practice. I decided on implementing an adaptation of Piggot-Irvine's (2012) Problem Resolving Action Research Model (PRAR) with its spiral, iterative process to have diverse participants in the study observing, reflecting, planning, and acting, and at its initial stage defining the issue.

The participants that volunteered in the study constituted three interrelated groups: these were business faculty who would be willing to be interviewed for the study on their practices and experiences of student team work; undergraduate tutors who were teaching a problem/based module that incorporated team-work, and student-teams registered in a module with team assessed work that would volunteer to participate to be coached. A conscious decision was made to conduct the action research at Deree – The American College of Greece, which is both NECHE accredited and whose undergraduate programs are validated by The Open University-UK. It combines both American and UK higher educational standards, strengthening the base of exploration. The multi-section module Professional Communication was chosen to implement the coaching model. The course implements assessed teamwork in a project based/problem-based/simulation. Student-teams are expected to focus on resolving an issue or an opportunity for a company or organisation. It was

considered safe and resourceful to discuss my research study with the faculty that teach the module. Once this was done, they could consider if they wished to volunteer to participate in the study as co-coaches and co-researchers.

The boundaries that were set for the research reflected four choices: one was to conduct two action research cycles with different cohorts of student teams in each cycle. The findings from the two action research cycles (Summer Term 2018 and Fall Semester 2018) would provide data to ascertain the initial workability and value of the coaching model and to consider future research implications. In the end, the two action research cycles proved sufficient to be able to reach meaningful conclusions through a range of data sources. The three coaching sessions were informed by the literature but also by my own extensive experience in having worked with more than 150 student teams over a span of 9 years. The number of student-teams was limited to 5 for every cycle. The objective was to ensure that at least five student teams would opt to participate in the study by choice. The final boundary was the number of volunteer business faculty who would participate in the semi-structured interviews. That number was eight. What was important to the study was to have volunteer business faculty from within different business majors to share their experiences of teamwork. This was accomplished.

B. Inferences Drawn from the Literature Review

The objective of the first part of the literature review was to discern which form of thinking can prepare graduate students to address crisis and change. The conclusion reached is that both critical thinking and Barnett's notion of criticality are based on Piagetian formal thinking, which have pervaded undergraduate education. Such thinking considers dialogue as debate, and the focus is on distilling cognitive skills-sets. The worldview of Piagetian formal thinking is reflected in the valorisation of the individual learner, ignoring the potential of collaborative thinking, and dialogue, that of the 'we' (Lasch, 1979). The work of Dewey (1937, [1902] 2009, [1910] 2011, [1926] 2012) on democracy and education, experience and thinking, Bohm's (2013) and Freire's (2000) conceptualisation of dialogue and its significance in education, Laske's (2009) and Bidell's (1988) work on dialectical thinking, and Dafermos' (2018) work on bridging dialectical thinking and dialogue have had two significant influences on this study: one was to develop a coaching model that can support dialogue in a team environment so as to foster higher order thinking skills and the other was to redefine criticality to include the kind of thinking that can support graduate students in their future professional environment. My proposed definition of criticality (Chapter

1) synthesises five integrative concepts: 1. the reconstruction of the individual into social intelligence (Dewey, [1926] 2012); 2. the pursuit of higher order thinking (dialectical) to discover through enquiry interrelationships of reality and its contradictions (Bidelll 1988); 3. the exercise of critical reflection on power structures that are a result of racialism (Brookfield, 2003) and neoliberal values; 4. the undertaking of problem solving; and 5. the growth of the individual. The second part of the literature review focused on dialogic pedagogy. The conclusion reached, based on the paucity of studies on critical dialogue, is that despite the advocacy of critical management studies since 1996 there is lack of critical dialogue being expected in assessed group work in the undergraduate business classroom. The third and final part of the literature review discerned a mainstream definition of coaching in education that has been limiting the dynamic of coaching to move beyond positive psychology and well-being - what Western (2012) identifies as an outcome of a westernised self-celebratory culture. This in itself limits the potential of coaching as a social process (Shoukry and Cox 2018). In fact, the coaching literature does not refer to how dialogue can nurture criticality, higher order thinking skills. Building on the potential for coaching to bring about change paved the way for creating a team coaching model for developing criticality in undergraduate students. The study, therefore, fills an important gap in the coaching literature as to how dialogue can nurture criticality, higher order thinking skills by exploring three unconnected areas: critical dialogue and criticality within a theory-based team-coaching model.

The team coaching model in Figure 7.1 synthesises the philosophical underpinnings of the coaching model and its educational philosophy. that were presented as two figures in Chapter 4. The educational philosophy is situated within the context of experiential learning theory, a problem/based educational environment while the learning process/outcome is criticality/higher order thinking skills. The philosophical underpinnings of the critical team coaching model are critical pragmatism, democracy and experiential problem-solving through dialectics and dialogue.

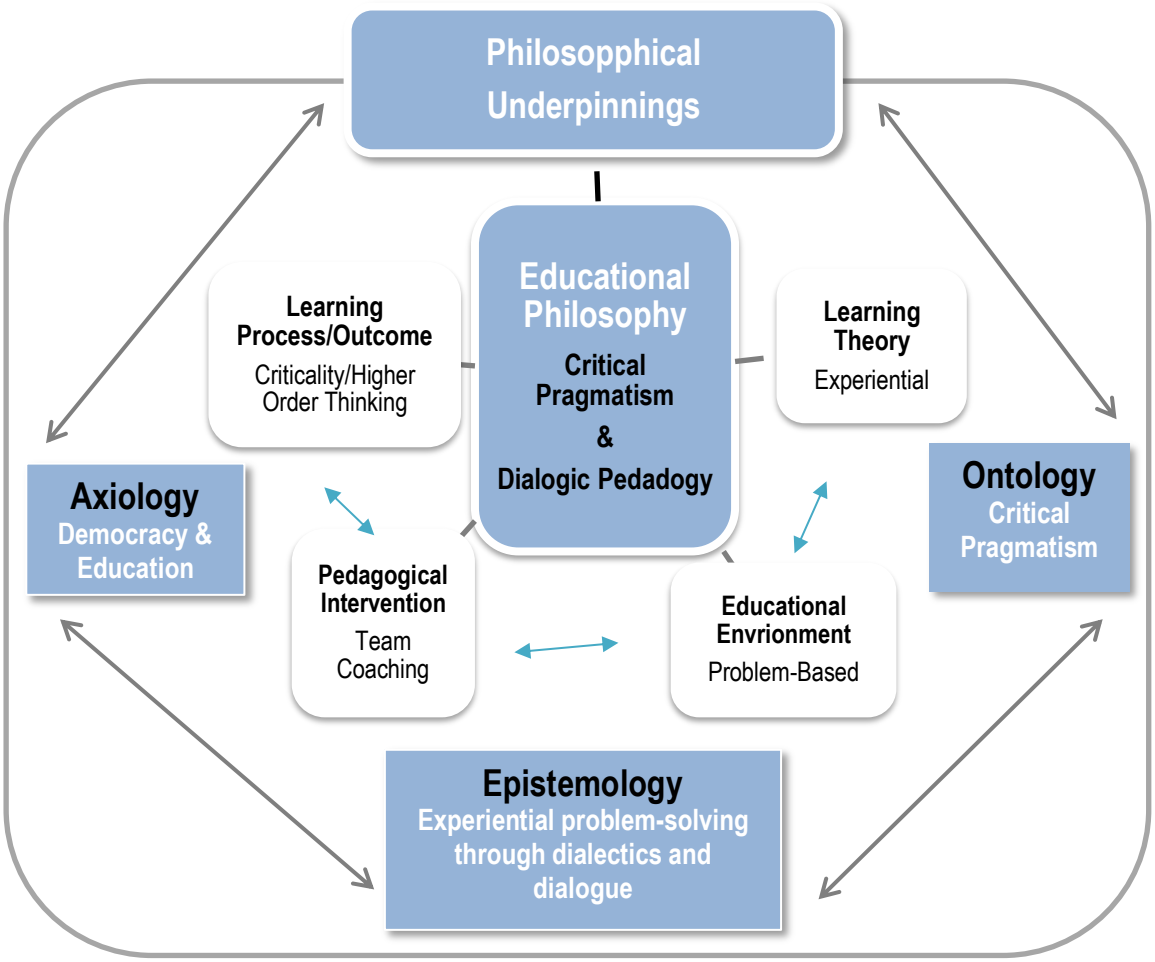

Figure 7. 1 Synthesis of Theoretical Framework

C. Team Coaching Model and Its Implications

In analysing the data based on the thematic analysis discussed in Chapters 5 and 6, the findings can be categorised into two areas: before the coaching and after the coaching. Before the coaching, the findings encompass the lack of dialogue in student-team assessed work, the limiting exploratory parameters of the team briefs, and the focus on student-team development issues. With the implementation of the coaching model, the findings suggest that the proposed-team coaching model created an environment of critical dialogue, which also enabled the development of higher order thinking skills, critical reflection and team accountability.

A discerned independent relationship and dynamic was found among the three processes of the coaching model: critical dialogue, higher order thinking, and coaching alliance between tutor-coach and coachees. The coaching model from Chapter 4 has been enhanced to include the coaching alliance and has moved

reflection and accountability above higher order thinking. The three processes aggregated from the findings led to an understanding of how the team coaching model works. The three processes have an interdependent relationship and dynamic. The enhanced framework is shown in Figure 7.2 below. The implication of these three processes follows:

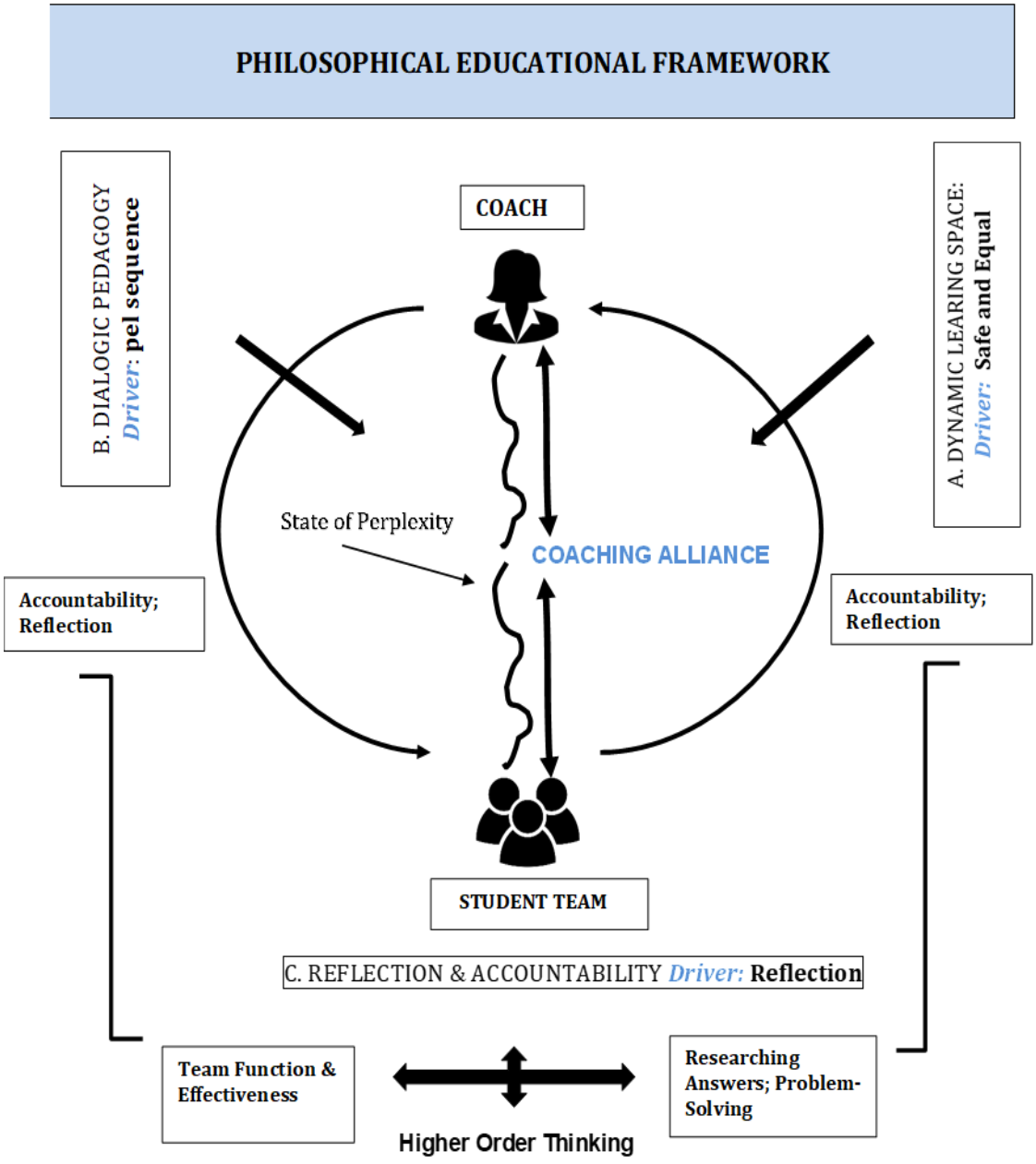

Figure 7. 2 Enhanced Team Coaching Model, Including Coaching Alliance

Critical Dialogue and Its Implications

Even though dialogue is important in the coaching literature, critical dialogue has not been implemented in a team coaching model. The findings aggregated from the two action research cycles suggest that the coaching model facilitated dialogue. Dialogue became the lever between the coaching alliance, reflection and accountability, in developing higher order thinking skills in student teams. The results provide the first evidence-based literature on how critical dialogue in the proposed team-coaching model facilitated student-team work. Critical dialogue through reflection and accountability empowered team effectiveness and took on emancipatory significance. Student teams set goals, resolved their power dynamics, found and owned solutions to improve team efficiency and effectiveness and reduce team-conflict. Dialogue empowered student-teams to question their own beliefs, focus their research, discover a multidisciplinary understanding of the issue, and work purposefully towards problem-solving. Critical dialogue encouraged student-teams to engage in questioning, discovering, disclosing and creating knowledge within a safe space, a brave space (Arao and Clemens, 2013)

Within such brave spaces, the coaching literature does not refer to how dialogue can nurture criticality, higher order thinking skills. Even though questioning plays an important role in the coaching process (Cox, 2012; Whitten, 2014), there is little reference to how questioning can facilitate problem-solving and deep thinking. Questioning in cognitive behavioural coaching, for example, focuses on challenging a client's perceptions to unlearn old habits and create new perspectives (Whitten, 2014). In effect, the Socratic type of questioning is used to challenge thinking rather than become a starting point for learners to find/research the answers for themselves. Cox (2012) exposes the weaknesses of Socratic questioning while Leigh (2007) argues for a method of inquiry as embodied by Plato's *Sophist*.

The study has theoretical and practical implications for higher education, business education, and coaching in undergraduate education. It situates coaching within an educational philosophy that is underpinned by the theoretical foundations of critical pedagogy, experiential learning, education and democracy. Employing critical dialogue as a means in project student-team based work in Higher Education will emancipate student-teams to discover for themselves knowledge through research and create it through collective dialogic thinking. Such thinking will require student-teams to develop criticality going beyond formal thinking and discerning interrelationships and contradictions as well as disclosing racialism and neoliberal

practices in their problem-solving. By doing so, this would provide student-teams with the intellectual creative space to propose sustainable solutions, considering the micro and macro environment. The implication for business education is noteworthy. The theoretical underpinning of the coaching model affords undergraduate business education with a theoretical educational framework to facilitate critical dialogue in assessed student-team work. Critical dialogue in team based assessed work will provide business schools with a common creative space where critical management studies and critical management education intersect for student-teams to problem-solve company issues. Critical dialogue becomes a powerful means to problem-solve through exploration, discovery and critical reflection. In other words, it enables undergraduates' capacity to engage with the world and with experiential and theoretical knowledge to develop their thinking skills. The role of higher education is to become critical of democracy. Only then is "the reconstruction of social habits and institutions" possible (Dewey, [1916] 2015, chap. 8, para. 1). Towards that end, critical dialogue can expose power structures, provide space for investigation into their historicity, and through questioning enable creative problem-solving. For coaching, the study makes an important addition with its educational philosophy to the coaching literature in general, and to the team-coaching literature in higher education, in particular. It is the first attempt to orient team coaching as a 'process of change' in undergraduate education with an explicit focus on critical dialogue. The notion of criticality used suggests outcomes such as transformative learning, problem-solving, higher order thinking skills, citizenship, strengthened through the prism of the emancipatory power of democracy that discloses power structures.

Higher Order Thinking Skills and Its Implications

Coaching as an intervention to develop criticality introduces a new territory in the field of coaching and team-coaching. The findings suggest that the team-coaching model proposed in this study from the perspective and experiences of the volunteer tutor coaches can provide a dynamic learning space for student-teams to develop their thinking skills. Criticality as espoused in the critical team coaching model differs from critical thinking that focuses on formal logical thinking (Laske, 2009). Criticality goes beyond formal thinking and through critical dialogue post-formal thinking becomes collective and creative in problem-solving through critically reflecting on contradictions, neo-liberal values, and racialism.

The model can fill a need in assessed teamwork in developing higher order thinking skills. It can also provide a learning space for critical dialogue to take place, where student teams can question, discover, and create through critical dialogue. For coaching, it provides a theoretical, philosophical and practical understanding of how the model works, ushering a new territory for coaching in higher education and its place in the undergraduate classroom and opening up research for further exploration.

The implications for higher education with regard to the 'transversal competencies' needed in preparing its graduates are worth pursuing. The redefined notion of criticality could provide the kind of thinking needed to address change and crisis in the 21st century.

Coaching Alliance in the Coaching Model and Its Implications

The study demonstrated the significance of the coaching alliance or 'coaching partnership' (Passmore, 2006) in setting the coaching environment as non-directive, equal, and with a commitment to problem-solve. This finding breaks new ground in the type of coaching alliance to be implemented in undergraduate education with student-teams. Within such an environment, student-teams worked to owning responsibility and accountability and to trusting in the coaching environment.

O' Broin and Palmer (2010a, p. 3) argue that whatever the conceptual approach to coaching, the coaching alliance is a universal "property of the components of coaching". They define:

> The Coaching Alliance reflects the quality of the coachee's and coach's engagement in collaborative, purposive work within the coaching relationship, and is jointly negotiated, and renegotiated throughout the coaching process over time. (O'Broin and Palmer, 2007, p. 305)

The quality of the engagement is what can strengthen or weaken the coaching relationship. This requires commitment. De Haan and Gannon (2016) identify commitment as priority for any coaching relationship. Commitment in Passmore (2007) based on a study by Hall et al. (1999) is recognised as the commitment of the coach to coachee success. Boyce et al. (2010) refer to the concept of 'allegiance' in the coaching relationship. Allegiance requires not only trust. It requires a non-directive approach by the coach as well as commitment from the coach to probe, summarise, and ask deeper questions for student-teams to find answers to and

create knowledge. According to O' Broin and Palmer (2010b) trust is what incurs safety and nurtures openness and dialogue, but also according to Cox (2012) empowers respect. Such allegiance is expected of and from the volunteer student teams, assisting also in the differentiating role of tutor as coach. Allegiance to the coaching relationship requires commitment to sustain a safe, brave, and equal environment, considered pivotal in the coaching alliance between tutor/coach and student-teams. Rogers (2008) and Shoukry (2016) refer to the equality between coach and coachee as one of the core principles of coaching. In the study, critical dialogue was nurtured in a brave, safe and equal space that sustained the coaching relationship and empowered student-team self-efficacy – team function and effectiveness as a result of accountability. The safe (brave) space refers to the learning environment where brainstorming is safe from criticism, when opinions are not frowned upon, where openness is respected, and ideas are welcome and refined. O' Broin and Palmer (2010a, p. 3) refer also to the coaching relationship as "essential for constructive change". Constructive change becomes evident once the student-teams begin functioning collectively and effectively, respecting each other and supporting each other in their common goal. Metcalfe and Game (2008) highlight the significance of dialogue not in coaching but between tutors and students: "It could only be genuinely dialogic if all the subjects involved were able to exchange contributions freely and on their own changing terms (p. 343). The difference lies in how the epistemological constructivist framework of dialogue was used to enable the drivers of safety, for student-teams to collectively construct knowledge

D. Limitations of the Current Study and Areas for Further Research

I discuss four limitations that will need to be considered when evaluating the outcomes of the study:

Tutor/Coaches

Three important outcomes are related to the co-coaches in the study. The first is that the tutor/coaches did not coach their own teams. Whether the results would be different is left for future study. However, I believe that changing 'hats' from tutor, to coach, to facilitator, to mediator, and adjudicator which are roles that faculty undertake are problematic in themselves. Another outcome is that not all university tutors can be coaches or are willing to be coaches or are willing to invest themselves in this role. Orienting future tutor/coaches would require immersing them in the

philosophical and educational framework of the coaching model, and fully understanding from the list of common attributes between coaching and teaching the differences between the two. A third implication for Deree is that an additional three-hour simulation should be added to the orientation to the coaching model.

Choice of Module

The question that arises from the study is whether the findings are transferable? Can similar findings occur? The paradigm of critical pragmatism asserts that the knowledge that is constructed is relative and in 'perpetual dispute'. However, at its core is problem-solving and creating 'reconstructions' of possibilities. Within such an understanding, it is plausible to contend that the findings are transferable in reconstructing possibilities of problem-solving. It may seem that the choice to conduct the study using the module Professional Communication was mainly because of convenience. The module, however, had all the parameters: it was a multi-section module, it had team problem/project-based assessed work, and it had tutors with whom I could discuss the research project and have them freely agree or not to participate in the study. Deciding on another module or two different modules would have taken time even though a tutor from the marketing department at Deree had suggested much later in the second action research cycle that coaching could have been conducted with their teams. Student teams in the Focus Group sessions had recommended that it takes place also in other modules. They saw the value of it being implemented also in Level 5 and Level 6 modules with student assessed group work.

Choice of Institution

Choosing to conduct the study at Deree – The American College of Greece may pose the question of transferability of the coaching model to other higher educational institutions, using the country's culture as a limitation. However, I would argue that Deree is representative of the kind of simulated/problem-based learning modules that use group work. Combining both British and American higher educational standards provides the study with relative generalizable findings. Even though the study was conducted with ten student-teams still the findings were rich due to the range of data collection sources included. As for the possible bias of insider research, this only is a concern when there are asymmetrical power dynamics in play. This was not the case in this study.

Choice of Research Model

Piggot Irvine's PRAR model afforded the study with multiple perspectives such as that of the volunteer business faculty, student-teams, student-team members and tutor-coaches through interviews, reflective diary entries, and focus group sessions. However, one limitation became apparent: finding a mutual agreed time with the tutor-coaches to conduct the 'spin-off' meetings proved challenging. Piggot-Irvine (2002) would consider this as 'low ownership'. However, I disagree. In the end, it was done 'impromptu', seeking out times when the tutor-coaches were in their office. The study confirms Piggot-Irvine's (2002) assessment of limitations to the PRAR model. Further research into using the model could offer additional insights on how to organise its robust iterative cycles.

The Future of Critical Team Coaching

I believe that the study has contributed to a theoretical understanding of criticality and critical dialogue, and the literature on team coaching as a model of delivery in HE. The study has both theoretical and practical implications. The key theoretical contribution is towards the literature of team-coaching in undergraduate education. Within the theoretical framework of the team coaching model are two important contributions: one is that of criticality and the other is that of critical dialogue, which contribute to the literature on criticality and critical dialogue.

Criticality

The study provides a theory of critical coaching within a philosophical educational framework, which adds to the evidence-based team coaching literature, and especially to the team coaching literature in higher education. Its re-definition of criticality encompasses a collective dialogic process of thinking that seeks to find creative sustainable solutions. Its focus is on exploring interrelationships and contradictions and critically reflecting on power structures. As such, criticality goes beyond formal thinking and utilises the thought processes of dialectical thinking to problem-solve collectively.

Critical Dialogue

The critical coaching model proposes to bridge the gap between critical management studies and critical management education. Critical dialogue is given the opportunity to be implemented in student team assessed work and move beyond the instances it

is employed in the classroom, so as to develop student-teams' criticality in problem-solving.

Critical dialogue was used based on the means through which student-teams developed criticality. Its efficacy in doing so was discussed in Chapter 5. Critical dialogue was informed by Brookfield's (2001), Bohm's (2013), and Freire's (2000) conceptualisation of dialogue. Such dialogue assisted student-teams to resolve conflict, reflect, and become accountable to produce work, but also through questioning to seek answers and develop their thinking skills in a brave space.

During the two focus group sessions two interesting future recommendations were made that could contribute to further research on the critical team coaching model.

One of the recommendations is for the critical team coaching model to be used in other team-project based modules. Coming into contact with other departments and working together on proposing a time frame to conduct the team coaching would provide further insight into the model but may also initiate a coaching culture at Deree, especially now since from Fall 2019 two major additions have been made in its undergraduate program offerings: Biomedical Sciences and Engineering and Science (in collaboration with Clarkson University).

The second recommendation is the choice of coaching space. Social spaces are also learning spaces on a university campus. Future research could discern whether the choice of coaching space makes a difference in any of the processes of the coaching model.

Further research into using the critical team coaching model as a pedagogical intervention in group problem/project-based assessments in online learning or blended learning modules would be meaningful to be conducted.

Designing an assessment tool that would incorporate Likert questions for each of the components of the three processes of the coaching model would provide an indication of quantitative validity that could provide interesting findings as to the correlation of each of the processes.

Further research into employing the critical team-coaching model in other undergraduate institutions in the US, Australia, and Europe that have problem-based team assessed work would provide further evidence-based literature. There is a need

for evidence-based research in team-coaching in undergraduate education that nurtures critical dialogue to develop criticality in its business students.

Higher education has an obligation to its graduates to prepare them to address change and crisis. Disenthralling its 'technorational theoretical practices' with a re-focus on distilling thinking skills that can foster problem-solving, can nurture its graduates with the mindset to work towards an inclusive transformational democratic society. Higher education has an obligation to democracy and society. Critical thinking has bounded Higher Education into a Sisyphean motif with its obsessive exertion in imbuing formal thinking in its graduates. Such thinking, however, has proven ineffective in problem solving and has bounded graduates' creativity. The role of higher education is not to be a step behind business, striving to meet its needs and wants. Its role is to be a step ahead business, conceiving objectives for business to create sustainable futures. With critical dialogue in student-team based work, such a possibility is viable.

This doctoral study provided me with the learning, investigative space to explore whether coaching in the undergraduate business classroom can facilitate a critical dialogic environment which could develop criticality. The findings suggest that it can. It can play a decisive role in creating critical dialogue in the business undergraduate classroom that includes assessed group project/based work. I believe that it can be the gateway for such critical dialogue to lead to research, to discovery, to the unfolding of neoliberal values and biases inherent in power structures, to problem-solving of issues through dialogic, collective thinking.

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APPENDICES

Appendix 3.1 Invitation E-mail to Business Faculty

Dear **(Business Faculty Name):**

I would like to extend an invitation for you to consider participating as an interviewee in a study Georgia (Gina) Kostoulias is conducting at Deree-The American College of Greece. This study is part of her Doctoral degree in the School of Business at Oxford Brookes University under the supervision of Dr. Elaine Cox and Dr. Peter Jackson.

The purpose of the study is to explore coaching as an instructional intervention with student-teams with the aim of developing a model to nurture higher-order thinking in problem-based learning using critical dialogue.

Participation in this study is voluntary. It will involve an interview of approximately one hour in length to take place in the Faculty Lounge on a mutually agreed date between May and June 2018.

I would like to assure you that this study has been reviewed and received ethics clearance through the Research Ethics Committee at Oxford Brookes University and has been approved by Provost Thimios Zaharopoulos to be conducted at Deree-The American College of Greece.

You will find attached the Participant Information Sheet to read before deciding to participate or not in the study. The PIS identifies for you the purpose of the study, why you have been invited to participate in the study, what will happen to you if you decide to participate, what are the possible benefits of taking part, how will your confidentiality be secured, and what will happen to the results of the study. Since the study aims for seven (7) business faculty, please include the course(s) you teach that have assessed team-work and your academic department in the School of Business.

If you have any questions prior to your decision to participate or not in the study, please contact Georgia (Gina) Kostoulias at 16087365@brookes.ac.uk.

I would appreciate it if you were to provide the doctoral researcher with your decision by 10 May, 2018.

Best,

Deree Administrator
Signature Block

Attachment: PIS

Appendix 3.2 P.I.S. Business Faculty

DEREE BUSINESS FACULTY

Participant Information:

Study Title
A team coaching model for developing criticality in undergraduate students

Invitation
As a business instructor at Deree – The American College of Greece that uses team-work in the modules that you teach, you are being invited to take part in this research study. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

Please note: The researcher is both a Doctoral Student at Brookes University and an Associate Faculty member at Deree – The American College of Greece, where she is Area Coordinator of Professional Communication.

What is the purpose of the study?
The purpose of the study is to explore coaching as an instructional intervention with student-teams with the aim of developing a model to nurture higher-order thinking in problem-based learning using critical dialogue.

Why have I been invited to participate?
All business faculty that have team projects in their modules have been invited to participate. The research will consist of one semi-structured interview with seven business instructors. If we have more volunteer business instructors than the required (7), the selection will be based on two criteria: a. Team work; b. Specific major in the Business School, so that most majors are represented.

Do I have to take part?
It is up to you to decide whether to take part. If you do not decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. Even if you decide to take part, you are still free to withdraw at any time throughout the research, but the data can only be withdrawn up to the point of analysis.

Taking part or declining to do so will have no impact whatsoever on your employment at Deree.

What will happen to me if I take part?
You will be invited to participate in one semi-structured interview of approximately 1 hour in length. With your consent, the interview will be audio recorded, and you will be given a copy of the transcript once it's prepared. If you wish to withdraw a comment of yours, you may inform of your decision by recording it on tape and/or sending an e-mail to the researcher so that the comment be deleted and not included in the data collection.

Your anonymity will be preserved: no names, or quotes which signpost a participant's identity, will be used in the final thesis.

What are the possible benefits of taking part?

This study aims to increase knowledge in a currently limited field. There is lack of understanding about what could constitute coaching in the undergraduate classroom in HE, as well as the use of coaching as a mode of delivery in the classroom that employs a critical dialogic approach to support an environment of questioning, research, and higher order thinking. By participating in this study, you are supporting the furthering of knowledge in this area. On another note, a discussion of team work and criticality in the Business school will provide food for thought for you to consider further.

Will what I say in this study be kept confidential?
All information collected about participants within this research (and people that they speak about during the interview) will be kept strictly confidential (subject to legal limitations). Confidentiality, privacy and anonymity will be ensured in the collection, storage and publication of research material.
Coding will be used in data analysis to ensure that names are removed from this process. Any quotes used to illustrate themes will not contain names or information that could clearly pinpoint an individual.

Data will be password protected when in soft copy, and locked when in hard copy. Data generated by the study will be retained in accordance with the Oxford Brookes policy on Academic Integrity. Therefore, data generated in the course of this research will be kept securely in electronic form for a period of ten years after the completion of a research project. Participants will have the option to withdraw from the study at any point of the research, but the data can only be withdrawn up to the point of analysis.

What should I do if I want to take part?
Please respond to me by email indicating that you are happy to be involved (16087365@brookes.ac.uk). I will then contact you to arrange a meeting time and place to conduct the semi-structured interview. The interview will focus on a discussion of team-work in the business school and its perceived effects. The timeframe for conducting the interview is between May and June 2018.

What will happen to the results of the research study?
Research from this study will form part of my Doctor of Coaching and Mentoring thesis. It will be submitted to Oxford Brookes University in the autumn of 2019. A copy of the thesis will be available in Oxford Brookes University Library. If requested, you can be provided with a summary of the findings, once they have been anonymised. You can also request an electronic copy from me if you wish to do so.

Who is organising and funding the research?
I am conducting this research as a student at Oxford Brookes University Business School. This research is being mostly funded by Deree-The American College of Greece, as part of my development, and part funded by myself.

Who has reviewed the study?
Prior to approaching you to commence this research, the research has been approved by the University Research Ethics Committee, Oxford Brookes University. I have also received approval from Provost Thimios Zaharopoulos to conduct the action research at Deree-The American College of Greece.

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
Business School	Business School	Business School
Oxford Brookes University	Oxford Brookes University	Oxford Brookes University
Tel: +30 694595 1013	Tel: +441865488 350	Tel: +44 01865 48 8449
16087365@brookes.ac.uk	ecox@brookes.ac.uk	peter.jackson@brookes.ac.uk

If you have any concerns about the way in which this study is being or has been conducted, you are advised to contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk and the Chair of the Institutional Review Board, Deree-The American College of Greece on provost@acg.edu.

Thank you for taking the time to read this information sheet.
Date XX/04/18

Appendix 3.3 Business Faculty Consent Form

CONSENT FORM FOR

BUSINESS FACULTY

Full title of project: A team coaching model for developing criticality in undergraduate students

Researcher: Georgia Kostoulias- Doctoral student at the School of Business, Oxford Brookes University, 16087365@brookes.ac.uk

Please initial box

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.	☐
I understand that my participation is voluntary and that I am free to withdraw at any time throughout the research, but the data can only be withdrawn up to the point of analysis.	☐
I agree to take part in the above study	☐
I agree to be audio-recorded	☐
I understand that the confidentiality of the information I provide can only be protected within the limits of the law	☐

Please tick relevant box

	Yes	**No**
I agree to the use of pseudonym quotes in the submitted Doctor of Coaching and Mentoring thesis to Oxford Brookes University	☐	☐

…….. …… ……

Name of Participant Date Signature

If you would like to be sent a *summary of the research findings*, please also provide your email address here:

…… …… ….

Name of Researcher Date Signature

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
Business School	Business School	Business School
Oxford Brookes University	Oxford Brookes University	Oxford Brookes University
Tel: +30 694595 1013	Tel: +441865488 350	Tel: +44 01865 48 8449
16087365@brookes.ac.uk	ecox@brookes.ac.uk	peter.jackson@brookes.ac.uk

Appendix 3.4 Invitation E-mail to Teaching Faculty

Dear (Name of EN3942 Teaching Staff):

Gina Kostoulias would like to invite you to a Professional Communication Team meeting, scheduled for 16 May 2018 to discuss the coaching intervention that will take place at Deree-The American College of Greece during summer term 2018.

This study is part of her Doctoral degree in the School of Business at Oxford Brookes University under the supervision of Dr. Elaine Cox and Dr. Peter Jackson.

The purpose of the study is to explore coaching as an instructional intervention with student-teams with the aim of developing a model to nurture higher-order thinking in problem-based learning using critical dialogue.

Irrespective of whether you decide to participate as a volunteer-tutor or not your presence is highly valued to understand what is to take place.

The research proposal has been reviewed and received ethics clearance through the Research Ethics Committee at Oxford Brookes University and has been approved by Provost Thimios Zaharopoulos to be conducted at Deree-The American College of Greece.

The meeting will give Gina the opportunity to present to you an outline of the action research process, give you the opportunity to share your thoughts and questions, and provide you with a copy of the Consent form for you to sign.

Her study aims for two volunteer tutors; if there are more than two volunteer tutors, since you all have similar experience of the course, the selection will be random to ensure equity among all who want to take part.

Before your meeting, to assist you in your decision to participate as a volunteer tutor or not in the study, (time commitment is 10.5-12.5 hours), find attached the Participant Information Sheet (PIS). The PIS identifies for you the purpose of the study, why you have been invited to participate in the study, what will happen to you if you decide to participate, what are the possible benefits of taking part, how will your confidentiality be secured, what should you do if you wish to participate in the coaching intervention, and what will happen to the results of the study.

If you have any questions prior to the meeting, please send your questions to Gina at 16087365@brookes.ac.uk

Best,

Head of the English Department

Attachment: PIS

Appendix 3.5 P.I.S Volunteer Tutors- First Cycle

EN3942 TEACHING STAFF

Participant Information:

Study Title
A team coaching model for developing criticality in undergraduate students

Invitation
As an English faculty member that teaches Professional Communication offered at Deree – The American College of Greece, you are being invited to take part in this research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Your commitment in the research study is invaluable and highly appreciated. Please take time to read the following information carefully.

Please note: The researcher is both a Doctoral Student at Brookes University and an Associate Faculty member at Deree – The American College of Greece, where she is Area Coordinator of Professional Communication.

What is the purpose of the study?
The purpose of the study is to explore coaching as an instructional intervention with student-teams with the aim of developing a model to nurture higher-order thinking in problem-based learning using critical dialogue. The coaching intervention will take place when student-teams are formed to decide on a focus for their Analytical Report. The Analytical Report is directed to a real audience and solves an issue or identifies an opportunity for an organization or company.-The coaching intervention will assist student-teams in clarifying their objectives, develop their levels of criticality through higher-order questions and work towards researching, writing, and submitting their Analytical Report. The intervention is created to support student-teams to reach their goal. An underlying strategy of coaching student-teams is to support the well-being of the teams in terms of individual and collective thinking-skill needs.

Why have I been invited to participate?
The faculty that teach Professional Communication have been invited to participate. The goal of the study is two volunteer tutors. As a faculty team member of the multi-section module Professional Communication, your participation in this study is invaluable since you will be asked to use an alternative mode of delivery that of a team-coaching model to assist student-teams in higher order thinking skills that will enable them to problem-solve an issue of an organization or company for their Analytical Report. You will, also, be a 'co-researcher' providing your reflections on the initial coaching model and preliminary findings prepared by the researcher. There will be a later opportunity to participate in a second cycle (Fall 2018), but there is no expectation that you must take part.
You are not expected, if you become a participant this term, to participate also in the second cycle.

Do I have to take part?
It is up to you to decide whether or not to take part. If you decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. Even if you decide to take part, you are still free to withdraw from the study at any time and can withdraw your data up until the point of analysis.

Taking part or declining to do so will have no impact whatsoever on your employment at Deree or your participation or not in the Professional Communication Team.

What will happen to me if I take part?

Your role in the study is tripartite, for a total of **10.5 hours**. You will be a participant, a participant coach, who will be implementing the coaching model as an intervention with the student team(s), and a 'co-researcher'. You will not be assigned more than two student teams to coach. You will implement 3 audio-recorded coaching interventions with the team(s) on their Analytical Report. As a participant coach, you will take part in two semi-structured interviews, and keep three electronic structured reflective diary entries that I will send you. As a 'co-researcher', you will participate in a discussion, presenting your reflections on the initial coaching model and analysed findings conducted by the researcher. These two reflective meetings will be recorded. During the semi-structured interviews and two reflective meetings, If you wish a comment of yours to be withdrawn, you may inform of your decision on tape and/or send an e-mail to me so that the comment be deleted and not included in the data collection.

Your role in the study and the total time required of you follows in the table below:

Table 1: Role in the Study, Total Time Required (10.5 – 12.5 hours) and Place

Participant	---Recorded orientation in the coaching model	3hours	Place: Faculty Lounge
	--Two recorded interviews (firstly, following the first and second coaching intervention; and then following the third coaching intervention).	2x1hour= 2hours per team	Place: Faculty Lounge
	---Three electronic structured diary entries to be sent to researcher via e-mal	3x30-45 minutes=1.5 hours	Via e-mail to researcher: 16087365@brookes.ac.uk
Participant Coach	--Three recorded coaching sessions with your assigned student-teams	3x50 minutes=2.5 hours	Place: Library Study Room
'Co-researcher'	---Two recorded 'spin-off' meetings to reflect on the initial coaching model and preliminary analysis of findings conducted by the researcher following the coaching intervention: 1. Once after the second coaching intervention and 2. The second after the third coaching intervention	2x45minutes=1.5 hours	Place: Faculty Lounge Place: Faculty Lounge
		10.5 (one student team or 12.5 HOURS (two teams)	

Your anonymity will be preserved: no names, or quotes which signpost a participant's identity, will be used in the final thesis.

What are the possible benefits of taking part?
This study aims to increase knowledge in a currently limited field. There is lack of understanding about what could constitute team-coaching in the undergraduate classroom in HE as well as the use of coaching as a mode of delivery that employs a critical dialogic approach in order to create an environment where higher order thinking can be supported. By participating in this study, you are supporting the furthering of knowledge in this area. In addition, you will have the opportunity to reflect on your experience of being a participant, a 'co-researcher' in a research study, and a coach implementing the model with student-teams. You will also have the chance to reflect on how you have benefitted, and even make suggestions for improvement to be used in the undergraduate business classroom as an instructional intervention.

Will what I say in this study be kept confidential?
All information collected about participants within this research (and people that they speak about during the interview) will be kept strictly confidential (subject to legal limitations). Confidentiality, privacy and anonymity will be ensured in the collection, storage and publication of research material.
Coding will be used in data analysis to ensure that names are removed from this process. Any quotes used to illustrate themes will not contain names or information that could clearly pinpoint an individual.

Data will be password protected when in soft copy, and locked when in hard copy. Data generated by the study will be retained in accordance with the Oxford Brookes policy on Academic Integrity. Therefore, data generated in the course of this research will be kept securely in electronic form for a period of ten years after the completion of a research project. Participants may withdraw at any time throughout the research, but the data can only be withdrawn up to the point of analysis.

What should I do if I want to take part?
Please respond to me by email indicating that you are happy to be involved (16087365@brookes.ac.uk). I will then contact you to arrange meeting times and place to conduct the informational session and go through the process of your tripartite role: that of participant, participant coach and 'co-researcher'. The timeframe of our collaboration is between June 2018 and first week of August 2018.
What will happen to the results of the research study?
Research from this study will form part of my Doctor of Coaching and Mentoring thesis. It will be submitted to Oxford Brookes University in the autumn of 2019. A copy of the thesis will be available in Oxford Brookes University Library. If requested, you can be provided with a summary of the findings. You can also request an electronic copy from me if you wish to do so.

Who is organising and funding the research?
I am conducting this research as a student at Oxford Brookes University Business School. This research is being part funded by Deree-The American College of Greece, as part of my development, and part funded by myself.

Who has reviewed the study?
Prior to approaching you to commence this research, the research has been approved by the University Research Ethics Committee, Oxford Brookes University. I have also received approval from Provost Thimios Zaharopoulos to conduct the action research at Deree-The American College of Greece.

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
Business School	Business School	Business School
Oxford Brookes University	Oxford Brookes University	Oxford Brookes University
Tel: +30 694595 1013	Tel: +441865488 350	Tel: +44 01865 48 8449
16087365@brookes.ac.uk	ecox@brookes.ac.uk	peter.jackson@brookes.ac.uk

If you have any concerns about the way in which this study is being or has been conducted, you are advised to contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk and the Chair of the Institutional Review Board, Deree-The American College of Greece on provost@acg.edu.

Thank you for taking the time to read this information sheet.

Date XXXX

Appendix 3.6 P.I.S Consent Form for Volunteer Tutors

CONSENT FORM FOR VOLUNTEER TUTORS

Full title of project: A team coaching model for developing criticality in undergraduate students

Researcher: Georgia Kostoulias- Doctoral student at the School of Business, Oxford Brookes University, 16087365@brookes.ac.uk

Please initial box

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.	☐
I understand that my participation is voluntary and that I am free to withdraw at any time throughout the research, but the data can only be withdrawn up to the point of analysis.	☐
I agree to take part in the above study	☐
I agree to be audio-recorded	☐
I understand that the confidentiality of the information I provide can only be protected within the limits of the law	☐

Please tick relevant box

	Yes	**No**
I agree to the use of pseudonym quotes in the submitted Doctor of Coaching and Mentoring thesis to Oxford Brookes University	☐	☐

…….. …… ……

Name of Participant Date Signature

If you would like to be sent a *summary of the research findings*, please also provide your email address here:

…… …… …….

Name of Researcher Date Signature

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
Business School	Business School	Business School
Oxford Brookes University	Oxford Brookes University	Oxford Brookes University
Tel: +30 694595 1013	Tel: +441865488 350	Tel: +44 01865 48 8449
16087365@brookes.ac.uk	ecox@brookes.ac.uk	peter.jackson@brookes.ac.uk

Appendix 3.7 P.I.S. Student Teams First Cycle

STUDENT TEAMS

Participant Information:

Study Title
A team coaching model for developing criticality in undergraduate students

Invitation
As a student team of the Professional Communication Module L5 offered at Deree – The American College of Greece, you are being invited to take part in this research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

Please note: The researcher is both a Doctoral Student at Brookes University and an Associate Faculty member at Deree – The American College of Greece, where she is Area Coordinator of Professional Communication.

What is the purpose of the study?
The purpose of the study is to explore coaching as an instructional intervention with student-teams with the aim of developing a model to nurture higher-order thinking in problem-based learning using a critical dialogic approach. The coaching intervention will take place when student-teams are formed to decide on a focus for their Analytical Report. The Analytical Report is directed to a real audience and solves an issue or identifies an opportunity for an organization or company. The coaching intervention will assist student-teams in clarifying their objectives, develop their levels of thinking and work towards researching, writing, and submitting their Analytical Report. The intervention is created to support student-teams to reach their goal. An underlying strategy of coaching student-teams is to support the well-being of the teams in terms of individual and collective thinking-skill needs.

Why have I been invited to participate?
All registered students and in effect student teams of Professional Communication in Summer Term 2018 have been invited to participate. The goal is at least five student-teams, but if more student teams choose to participate, they will be included in the study.

Do I have to take part?
It is up to your team to choose whether or not to take part. If your team decides to take part, you will be given this information sheet to keep and be asked to sign a consent form. Even if your team decides to take part, as a team you can withdraw from the study at any time throughout the research, but the data can only be withdrawn up to the point of analysis. If one member of the team decides to withdraw, and they others on the team wish to continue, then if the team remains with at least two members they may continue to be participants in the study.

Taking part or declining to do so will not disadvantage your team in any way, nor will it have any impact whatsoever on your assessment, which is based on the analytical report that you will submit for the course. All student teams, including those participating in the study, will continue to receive from their course instructor the feedback they would normally receive as teams working towards their analytical report for the course, so they will not be disadvantaged.

What will happen to me if I take part?
You will be asked to participate with your team in one informational session, three coaching sessions on the problem you have identified for the organization or company for your analytical report, three structured electronic diary entries, and a 1-hour discussion of the focus group (see Table 1).

Table 1: What Will Happen If I Take Par t- Time Needed, and When

	What?	How Long?	When?
Volunteer Student Team	Informational session	75 minutes	June 2018
	Three recorded group-coaching sessions	3x 50 minutes	1. End of June 2018 2. First week of July 2018 3. Second week of July 2018
	Three structured electronic diary entries	3x 45 minutes	Beginning third week of June and ending middle of July 2018
Focus Group	Recorded discussion following the intervention	1-hour	Fourth week of July 2018

The first information session will provide you with the opportunity to ask any questions about the research, provide you with the consent forms, as well as give me the opportunity to introduce you to the coaching model to be used. If you decide to participate as a team, you will be given a list of Gmail accounts to choose from, individually, so that anonymity is kept when sending your electronic diary entries. You will also keep an electronic structured reflective journal that will be sent to you by the researcher, where you will be responding to questions related to the coaching intervention (before, during and after).

The total time required of participants in the study is 1x50 minutes for the informational session; 3x50 minutes coaching; 3x45 minutes reflecting in an electronic journal; and 1x60 minutes participating in the focus group meeting, following the intervention.

Your anonymity will be preserved: no names, or quotes which signpost a participant's identity, will be used in the final thesis.

What are the possible benefits of taking part?

This study aims to increase knowledge in a currently limited field. There is lack of understanding about what could constitute team-coaching in the undergraduate classroom in HE as well as the use of coaching as a mode of delivery that employs a critical dialogic approach in order to create an environment where higher order thinking can be supported. By participating in this study, you are supporting the furthering of knowledge in this area. In addition, you will have the opportunity to reflect on

your experience of being a student-coachee, how you have benefitted, what you may like to change, or even improve.

Will what I say in this study be kept confidential?
All information collected about participants within this research (and people that they speak about during the interview) will be kept strictly confidential (subject to legal limitations). Confidentiality, privacy and anonymity will be ensured in the collection, storage and publication of research material.
Coding will be used in data analysis to ensure that names are removed from this process. Any quotes used to illustrate themes will not contain names or information that could clearly pinpoint an individual.

Data will be password protected when in soft copy, and locked when in hard copy. Data generated by the study will be retained in accordance with the Oxford Brookes policy on Academic Integrity. Therefore, data generated in the course of this research will be kept securely in electronic form for a period of ten years after the completion of the research project.

What should I do if I want to take part?
Please complete and send the interest form indicating that you are happy to be involved (16087365@brookes.ac.uk). I will then contact your team to arrange meeting times and place to conduct the informational session and clarify any questions you may have before signing the consent form.

What will happen to the results of the research study?
Research from this study will form part of my Doctor of Coaching and Mentoring thesis. It will be submitted to Oxford Brookes University in the autumn of 2019. A copy of the thesis will be available in Oxford Brookes University Library. If requested, you can be provided with a summary of the findings. You can also request an electronic copy from me if you wish to do so.

Who is organising and funding the research?
I am conducting this research as a student at Oxford Brookes University Business School. This research is being funded by Deree-The American College of Greece, as part of my development, and part funded by myself.

Who has reviewed the study?
Prior to approaching you to commence this research, the research has been approved by the University Research Ethics Committee, Oxford Brookes University. I have also received approval from Provost Thimios Zaharopoulos to conduct the action research at Deree-The American College of Greece.

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
Business School	Business School	Business School
Oxford Brookes University	Oxford Brookes University	Oxford Brookes University
Tel: +30 694595 1013	Tel: +441865488 350	Tel: +44 01865 48 8449
16087365@brookes.ac.uk	ecox@brookes.ac.uk	peter.jackson@brookes.ac.uk

If you have any concerns about the way in which this study is being or has been conducted, you are advised to contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk and the Chair of the Institutional Review Board, Deree-The American College of Greece on provost@acg.edu.
Thank you for taking the time to read this information sheet.

Date XX/06/18

Appendix 3.8 Consent Form of Interest

Student-Team Interest Form
Professional Communication Module Summer Term 2018

As a team, we are Interested to participate in the project ☐

Not interested in participating in the project ☐

If you have shown interest to participate in the project, please indicate whether **Thursday, 21 June**, during activity 2:30-3:30 suits your team to have the meeting to air questions about the project before you decide to sign the consent form:

2:30-3:30 activity hour* ☐ Yes

☐ No

*Activity hour is a designated time where no classes take place to accommodate extra-curricular activities that take place on campus.

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
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Appendix 3.9 Consent Form-Student Teams

CONSENT FORM FOR STUDENT TEAMS

Full title of project: A team coaching model for developing criticality in undergraduate students

Researcher: Georgia Kostoulias- Doctoral student at the School of Business, Oxford Brookes University, 16087365@brookes.ac.uk

Please initial box

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.	☐
I understand that my participation is voluntary and that I am free to withdraw at any time throughout the research, but the data can only be withdrawn up to the point of analysis. (If one member of a team wishes to withdraw and the remaining members of the team are at least 2, the team may continue in the study).	☐
I agree to take part in the above study	☐
I agree to the team being audio-recorded during the coaching	☐
I agree to the focus group meeting being audio-recorded	☐
I understand that the confidentiality of the information I provide can only be protected within the limits of the law	☐

Please tick relevant box

	Yes	**No**
I agree to the use of pseudonym quotes in the submitted Doctor of Coaching and Mentoring thesis to Oxford Brookes University	☐	☐

……..	……	……
Name of Participant	Date	Signature
……..	……	……
Name of Participant	Date	Signature
……..	……	……
Name of Participant	Date	Signature
……..	……	……
Name of Participant	Date	Signature

If you would like to be sent a *summary of the research findings*, please also provide your email address here:

…… …… ……

Name of Researcher Date Signature

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
Business School	Business School	Business School
Oxford Brookes University	Oxford Brookes University	Oxford Brookes University
Tel: +30 694595 1013	Tel: +441865488 350	Tel: +44 01865 48 8449
16087365@brookes.ac.uk	ecox@brookes.ac.uk	peter.jackson@brookes.ac.uk

Appendix 3.10 Dean's E-mail to Student Teams

Dear Team Members of Professional Communication:

I would like to extend an invitation for you to consider participating in a study Georgia (Gina) Kostoulias is conducting at Deree-The American College of Greece. This study is part of her Doctoral degree in the School of Business at Oxford Brookes University under the supervision of Dr. Elaine Cox and Dr. Peter Jackson.

The purpose of the study is to explore coaching as an instructional intervention with student-teams with the aim of developing a model to nurture higher-order thinking in problem-based learning using critical dialogue.

To assist you in your decision to participate or not as a team, find attached the Participant Information Sheet. The PIS identifies the purpose of the study, why you have been invited to participate in the study, what will happen to you if you decide to participate, what are the possible benefits of taking part, how will your confidentiality be secured, what should you do if you wish to participate in the coaching intervention, and what will happen to the results of the study.

I would like to assure you that this study has been reviewed and received ethics clearance through the Research Ethics Committee at Oxford Brookes University and has been approved by Provost Thimios Zaharopoulos to be conducted at Deree-The American College of Greece.

If you are interested in participating with your team, please inform the researcher, Georgia (Gina) Kostoulias at 16087365@brookes.ac.uk, so that she organizes a meeting with the teams that have shown interest to discuss any questions you may have before deciding to participate or not. The study aims for at least five (5) student-teams.

I would like to reassure you that whether you decide to participate or not, your participation in the coaching intervention will not disadvantage your team or affect in any way your grade in the course. All teams, including those participating in the study, will continue to receive from their course instructor the feedback they would normally receive as teams working towards their analytical report for the course.

Please send back the attached interest form by Monday 12 November to Gina Kostoulias at 16087365@brookes.ac.uk.

Best,

Dean of Liberal Arts and Sciences
Signature Block

Attachments: 1. Participant Information Sheet (PIS)
2. Interest Form

Appendix 3.11 PIS Student Teams Fall Semester

STUDENT TEAMS

Participant Information:

Study Title

A team coaching model for developing criticality in undergraduate students

Invitation
As a student team of the Professional Communication Module L5 offered at Deree – The American College of Greece, you are being invited to take part in this research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

Please note: The researcher is both a Doctoral Student at Brookes University and an Associate Faculty member at Deree – The American College of Greece, where she is Area Coordinator of Professional Communication.

What is the purpose of the study?
The purpose of the study is to explore coaching as an instructional intervention with student-teams with the aim of developing a model to nurture higher-order thinking in problem-based learning using a critical dialogic approach. The coaching intervention will take place when student-teams are formed to decide on a focus for their Analytical Report. The Analytical Report is directed to a real audience and solves an issue or identifies an opportunity for an organization or company. The coaching intervention will assist student-teams in clarifying their objectives, develop their levels of thinking and work towards researching, writing, and submitting their Analytical Report. The intervention is created to support student-teams to reach their goal. An underlying strategy of coaching student-teams is to support the well-being of the teams in terms of individual and collective thinking-skill needs.

Why have I been invited to participate?
All registered students and in effect student teams of Professional Communication in Summer Term 2018 have been invited to participate. The goal is at least five student-teams, but if more student teams choose to participate, they will be included in the study.

Do I have to take part?
It is up to your team to choose whether or not to take part. If your team decides to take part, you will be given this information sheet to keep and be asked to sign a consent form. Even **if**

your team decides to take part, as a team you can withdraw from the study at any time throughout the research, but the data can only be withdrawn up to the point of analysis. If one member of the team decides to withdraw, and they others on the team wish to continue, then if the team remains with at least two members they may continue to be participants in the study.

Taking part or declining to do so will not disadvantage your team in any way, nor will it have any impact whatsoever on your assessment, which is based on the analytical report that you will submit for the course. All student teams, including those participating in the study, will continue to receive from their course instructor the feedback they would normally receive as teams working towards their analytical report for the course, so they will not be disadvantaged.

What will happen to me if I take part?

You will be asked to participate with your team in one informational session, three coaching sessions on the problem you have identified for the organization or company for your analytical report, three structured electronic diary entries, and a 1-hour discussion of the focus group (see Table 1).

Table 1: What Will Happen If I Take Part- Time Needed, and When

	What?	How Long?	When?
Volunteer Student Team	Informational session	75 minutes	Friday, 09 November 2018
	Three recorded group-coaching sessions	3x 50 minutes	1. Friday, 16 November 2018 2. Friday, 30 November 2018 3. Friday, 10 December 2018
	Three structured electronic diary entries	3x 45 minutes	Beginning third week of November and ending second week of December 2018
Focus Group	Recorded discussion following the intervention	1-hour	Tuesday, 11 December 2018, activity hour

The first information session will provide you with the opportunity to ask any questions about the research, provide you with the consent forms, as well as give me the opportunity to introduce you to the coaching model to be used. If you decide to participate as a team, you will be given a list of Gmail accounts to choose from, individually, so that anonymity is kept when sending your electronic diary entries. You will also keep an electronic structured reflective journal that will be sent to you by the researcher, where you will be responding to questions related to the coaching intervention (before, during and after).

The total time required of participants in the study is 1x50 minutes for the informational session; 3x50 minutes coaching; 3x45 minutes reflecting in an electronic journal; and 1x60 minutes participating in the focus group meeting, following the intervention.

Your anonymity will be preserved: no names, or quotes which signpost a participant's identity, will be used in the final thesis.

What are the possible benefits of taking part?

This study aims to increase knowledge in a currently limited field. There is lack of understanding about what could constitute team-coaching in the undergraduate classroom in HE as well as the use of coaching as a mode of delivery that employs a critical dialogic approach in order to create an environment where higher order thinking can be supported. By participating in this study, you are supporting the furthering of knowledge in this area. In addition, you will have the opportunity to reflect on your experience of being a student-coachee, how you have benefitted, what you may like to change, or even improve.

Will what I say in this study be kept confidential?

All information collected about participants within this research (and people that they speak about during the interview) will be kept strictly confidential (subject to legal limitations). Confidentiality, privacy and anonymity will be ensured in the collection, storage and publication of research material.
Coding will be used in data analysis to ensure that names are removed from this process. Any quotes used to illustrate themes will not contain names or information that could clearly pinpoint an individual.
Data will be password protected when in soft copy, and locked when in hard copy. Data generated by the study will be retained in accordance with the Oxford Brookes policy on Academic Integrity. Therefore, data generated in the course of this research will be kept securely in electronic form for a period of ten years after the completion of the research project.

What should I do if I want to take part?

Please complete and send the interest form indicating that you are happy to be involved (16087365@brookes.ac.uk). I will then contact your team to arrange meeting times and place to conduct the informational session and clarify any questions you may have before signing the consent form.

What will happen to the results of the research study?

Research from this study will form part of my Doctor of Coaching and Mentoring thesis. It will be submitted to Oxford Brookes University in the autumn of 2019. A copy of the thesis will be available in Oxford Brookes University Library. If requested, you can be provided with a summary of the findings. You can also request an electronic copy from me if you wish to do so.

Who is organising and funding the research?

I am conducting this research as a student at Oxford Brookes University Business School. This research is being funded by Deree-The American College of Greece, as part of my development, and part funded by myself.

Who has reviewed the study?

Prior to approaching you to commence this research, the research has been approved by the University Research Ethics Committee, Oxford Brookes University. I have also received approval from Provost Thimios Zaharopoulos to conduct the action research at Deree-The American College of Greece.

CONTACT FOR FURTHER INFORMATION		
Doctoral Student	**Director of Studies**	**Second Supervisor**
Georgia Kostoulias	Dr. Elaine Cox	Dr. Peter Jackson
Business School	Business School	Business School
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16087365@brookes.ac.uk	ecox@brookes.ac.uk	peter.jackson@brookes.ac.uk

If you have any concerns about the way in which this study is being or has been conducted, you are advised to contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk and the Chair of the Institutional Review Board, Deree-The American College of Greece on provost@acg.edu.

Thank you for taking the time to read this information sheet.

Date November 1, 2018

Appendix 3.12 Semi-Structured Interview Questions-Business Faculty

SEMI-STRUCTURED INTERVIEW

Business Faculty of Deree- The American College of Greece

I would like to thank you first and foremost for agreeing to participate in this research, knowing that your schedule is extremely busy.

The purpose of the interview is to discern your teaching methods and perceived effects in team-based assessed work. Before we proceed with the interview, please be informed that I prefer to record the interview, and this requires your consent. Please sign the consent form. Following the interview, once a transcript has been prepared it will be sent to you for review. If you wish a comment of yours to be withdrawn during the interview process, you may inform of your decision and record it on tape, and/or send an e-mail to the researcher so that the comment be deleted and not included in the data collection.

QUESTIONS

1. What learning outcomes do you have for team-work?
2. What mode of delivery do you use to assist teams to reach those learning outcomes?
3. What kind of topics can student-teams choose from?
4. How do you monitor student-team input and development in the team-project?
5. How is higher-order thinking cultivated?

Appendix 3.13 Invitation E-mail to Tutors of EN3942 -Second Cycle

Dear Colleagues:

Find attached the Participation Information Sheet that was given to you in May but with dates for the Second Cycle of Action Research at Deree.

Please inform me by next week Friday, 12 October whether you would wish to participate in the study.

Warm regards,

Gina
Georgia (Gina) Kostoulias
Doctoral Researcher
Oxford Brookes University
E-mail: 16087365@brookes.ac.uk
Mobile: [Number has been removed]
Office: 534, ext. 1312 (210 6009800)

Appendix 3.14 Semi-Structured Interview Questions-Volunteer Tutors

Volunteer Tutors Deree-The American College of Greece

Thank you for participating as interviewees in the study. As you can see, you will be interviewed twice, once following the first and second coaching intervention of student-teams, and a second time following the third coaching intervention of student-teams. Please sign the consent form that allows me to record the interview. Once the transcript is prepared, I will send it to you, for review. If you wish a comment of yours to be withdrawn during the interview process, you may inform of your decision and record it on tape, and/or send an e-mail to the researcher so that the comment be deleted and not included in the data collection.

Find below the questions.

QUESTIONS

1st Semi-Structured Interview
Following Your First Coaching Intervention of student-teams
-Faculty Lounge

1. How would you describe your experience of coaching student-teams?
2. What kinds of benefits have you seen in student-teams' motivation, work ethic, and thinking skills?
3. What challenges did you have with the coaching model?

2nd Semi-Structured Interview
Following Your Third Coaching Intervention of student-teams
-Faculty Lounge

1. How did your student-teams respond to the coaching intervention?
2. How would you describe the relationship between tutor/coach and student-team?
3. What would you change or recommend further?

Appendix 3.15: Sample Color Coding of Data Findings

Appendix 4.1 Suggested Tools - Questions

First Team Coaching Session

Goal

1. What is the focus of your teamwork?
2. How did you choose this focus?
3. What contribution(s) do you believe you will be making with this focus?
4. What underlying beliefs do you have as a team to work towards this focus?
5. Have you substantiated the need for your focus?
6. What is the background that leads to the need of your focus?
7. What sources did you consult?
8. What are the major key words in your focus that you need to define, understand, and research?
9. How are the disciplines talking about these key words?
10. What perspectives have you investigated?
11. What kind of factoring of your focus will you be considering?

Review of Goal *(coach summarises dialogue that has taken place that includes the initial understanding of the problem, its perplexities, and the unknowns that the team will need to pursue further research on). The focus then moves to the reality the team is experiencing. What the challenges but also what opportunities can they identify.*

Exploring Team Reality

1. What motivates you individually and as a group about this goal?
2. What limitations/challenges have you identified as a team that will challenge you to reach your goal?
3. How have you thought of overcoming these limitations/challenges?
4. What rules and guidelines have you assigned to be able to work together towards this goal?

Second Team Coaching Session Questions: Reviewing Performance and Goal

Reviewing Performance

1. What has been your progress since our last coaching session?
   a. If little or some, what factors played a role?
      -- How are you thinking of overcoming them?
      -- What are your expectations, now? Do all agree?
   b. If a lot, how did you work together and do things?
2. Did you find any limitations in your research?
      --If yes, how did you go about it? Did you consult the librarian for assistance?
3. If you haven't found any limitations in your research, what do you think played a role?
      -- Is there a possibility that you are missing something that you have not thought of?
4. What have you decided as parts in your secondary discussion?
5. Do you believe that these parts will help your reader understand the significance of the problem
   you have highlighted and focused on to see also what others have done well and how?
6. Is there something that you have left out, intentionally?
7. What decisions can you make now? What milestones can you set?

Third Team Coaching Session: Evaluating Performance & Goal

Evaluating Team Performance

1. How would you review your performance as a team in terms of working together?
2a. What challenges did you discover as a team?
   [If they had no challenges]:
2b. What did you do collectively and individually to work together as a team?
   a. What qualities did you bring to the team individually, and what qualities do you see as having acquired collectively?
   b. What have you learned from each other?
3. How would you describe your thinking skills before the coaching session, and after the two coaching sessions?
4. What further milestones have you set for your team to reach your goal?

Evaluating Goal

1. In the beginning you had set a goal for your Team. How would you evaluate this goal, now that you are reaching close to submitting your analytical report?
2. If you could describe this journey, how would you describe it?
3. What does criticality mean to you, in your own words?

Appendix 5.1 Possible Biased Sample of Student-Teams

Possible Biased Sample of Volunteer Student Teams: The second orientation to the coaching (Fall 2018) brought another concern by one volunteer tutor who questioned the validity of the sample of the student teams that opted to do the coaching since she stated that the student teams that would participate would do so because they are the motivated students:

> *What I'm saying in terms of your research is that if you have only then teams that are choosing to participate in the study, then you have the motivated students, you have the ones that are interested in gaining the knowledge; you do not have the free riders the loafers […] the time commitment, the work commitment, so this will skew your data in terms of, to what extent the model itself can be used or promoted maybe on some level because it won't work. No, it will work and I'm sure it will work, and it does work, but it won't work for the individuals who see themselves somehow different, not a group, a unified group, who don't want to put in the extra time and work.* (OCM Eve: Fall 2018).

Even though this was not mentioned by any of the tutors in the first orientation to the coaching model and neither in the reflective diaries of the student team members, a number of student team-members in the focus group session (Fall 2018) painted a different picture.

> *My group had a problem to gather., because you know, unfortunately it was a small class with only three people. Everyone is a lenient guy, who needs someone to be productive, you know. And when you mix three of those, disaster comes, and we are still working on it. But if it wasn't for the coaching, I think we wouldn't even try.* (FG Student27: Fall 2018).

> *For me personally without coaching, maybe we would have struggled to do the work. But with the coaching session I think we made a really good choice, to facilitate us, to reach, to be at the point where one day before we send the analytical report and not have you know the last-minute team with all the pressure and all that stuff.* (FG Student21: Fall 2018)

From my perspective, this is how I feel. I feel like that. I really do. In the beginning, I was like, coaching session? when she spoke to us in class, like another obligation. That's what I thought of, another obligation, like another meeting set on one day. But then I thought of it for a second and we talked as a team and we said, let's try it, you know, it's something new, and let's see how it goes. And it was like three meetings […[like on Saturday after we woke up, something like that, it was like 50 minutes we got together. It was perfect. (FG Student24: Fall 2018)

I know I received the email from the dean of business which 99% of us ignore, including me, and the first time when we understood that it exists and that it actually gives help was when the professor came to the class and spoke to us about it. And even then, I personally thought like, as I told you before, like another obligation you know kind of we don't need this. I think there should be better advertising. better marketing, and kind of show the benefits of it. (Student24: Fall 2018).

Because we had a choice, but like student number 26 said, we were skeptical in the start. But after the first coaching session we were sure that we made the right step and it saved us a lot of time and it also helped us understand better the topic. Generally, I believe coaching should be done. Although we started late the coaching, we managed the time we had lost primarily to gain it afterwards. (FG Student21: Fall 2018)

My group had a problem to gather, because you know, unfortunately it was a small class with only three people Everyone is a lenient guy, who needs someone to be productive, you know. And when you mix three of those, disaster comes, and we are all still working on it. But if it wasn't for the coaching, I think we wouldn't even try. (FG Student27: Fall 2018).

For me personally without coaching, maybe we would have struggled to do the work. But with the coaching session I think we made a really good choice, to facilitate us, to reach, to be at the point where one day before we send the analytical report and have you know the last-minute team with all the pressure and all that stuff. (FG Student21: Fall 2018)

The above findings suggest that the teams that decided to participate in the coaching did so by choice. Whitmore (2009) also refers to the importance of choice in coaching. It was a free choice that was made by the volunteer student-teams. All student-teams had the choice to participate or not in the study. A case in point is that there were teams who had shown interest to participate and once they were introduced to what their commitment would be decided not to. The findings suggest that the student-teams opted to do the coaching because it was a novelty, out of curiosity, and for others out of desperation since they had done minimum work on their analytical report.