

Project Based Learning for professional identity: A case study of collaborative industry projects in Marketing

Philippe Vande Wiele, Bahrain Polytechnic, Kingdom of Bahrain

Darren Morris, Bahrain Polytechnic, Kingdom of Bahrain

Vincent Ribière, IKI-SEA, Bangkok University, Thailand

Jean-Louis Ermine, Institut Mines-Télécom, France

ABSTRACT

Assuming that higher educational institutions give credence to the goal of employability of its graduates, the adoption of effective Teaching & Learning methodologies towards such an objective is vital to its purposefulness. Problem Based Learning (PBL) has been proposed as an effective option in this regard, yet the literature is divided around whether this effectiveness carries through in terms of transitioning learners of business degrees into the workplace. This paper outlines a detailed case study describing the Associate Consultant (AC) approach used in the capstone course of an undergraduate Marketing qualification. The AC approach shows that it triggers and develops professional behaviours and self-reflection towards the formation of professional identity (PI) by embedding it in the curriculum through an appropriately benchmarked expectation around engagement and the use of a consulting firm as the overarching context to the PBL capstone course. An address of the whole self, collective dialogue, challenging self-perception, abandonment of performance for grades and high interaction with a real client are found to be highly conducive to PI formation. The findings of this paper strengthen the use of a PBL methodology in capstone business courses and it recommends the AC approach as a viable option to transition learners effectively into the world of work.

Keywords: Problem Based Learning (PBL), higher education, capstone, employability, professional identity

INTRODUCTION

The debate around the fitness for purpose of Higher Education Institutions (HEIs) and the *raison d'être* of Higher Education (HE) is highly prevalent against the backdrop of the emergent 21st century (Tomlinson, 2012). The tension of this global debate has resulted in the search for effective HE mechanisms that address new socio-economic realities (Oliver, 2015). Employability is often used as the overarching theme in conversations of this nature as evidenced by a plethora of work around employability, its place in an HE context and the various ways to tackle it (Ho, 2016; Vande Wiele, Ribière & Ermine, 2017; Oliver, 2015; Tomlinson, 2012).

Jackson (2016) points at professional identity (PI) and its formation as an integral part of employability as a result of engagement in HE. Without dismissing the value of other HE activities, this paper posits Teaching and Learning (T&L) as a primary angle that an HEI can review towards more effective transformation from student into an employable professional (Vande Wiele, Khalid, Morris, Ribière & Ermine, 2015) through heightened attention to the formation of PI. While various employability conducive attributes of T&L have been identified (DEST, 2006; Oliver, 2015), McNamara et al. (2011) draw particular interest to HEIs' ability to transition graduates into the workplace. Given the importance of PI in an employability context further exploration in this regard is valuable.

While the use of Problem Based Learning (PBL) has shown to be effective for the development of PI and scenario-based learning is strongly advocated towards the development of PI (Errington, 2011), the literature is divided around the effectiveness of PBL as a capstone T&L-approach to transition business graduates into the professional world (McNamara et al., 2011). This paper aims to support the potential of a Project Based Learning methodology as a variant of PBL to address effectively the formation of PI by outlining the approach used in a capstone course of an undergraduate marketing programme and thereby strengthen the argument in favour of PBL in the scholarly divide.

After a concise literature review of PI, its place in HE and appropriate T&L for PI, the paper builds its argument through a single case study of which the methodology is clearly outlined. The descriptive case introduces the place of the capstone project in the degree, describes the fundamentals of the Associate Consultant (AC) approach, discusses the manner in which projects are selected and scoped, outlines the process the learners follow, gives a detailed discussion of the assessment dimension of the course and finally discusses the overall transformation and career orientation that is observed as a result of the approach. The paper is closed by a concise conclusion and acknowledgement of limitations to the study.

PROFESSIONAL IDENTITY

Trede (2012) highlights the remaining ambiguous nature of PI formation in an HE context. A common starting point to operationalise PI is the work of Giddens (1991) around 'Self-Identity' which views it as an existential construct whereby one knows the 'what' and 'why' of one's doing suggesting the importance of reflexivity and articulation of actions and their purpose. Trede (2012) presents three broad concepts around identity: the conscious self, the power of relations, and the power of articulation. The conscious self is constantly transforming through critical learning experiences placed in a socio-cultural sphere and articulated by means of discourse about oneself and others. This results in position taking by the individual in their environment, or in the case of PI, locating themselves within a professional community. Trede, Macklin and Bridges (2012: 374) operationalise PI as both a 'a way of being' as well as 'a lens to evaluate, learn and make sense of practice', whereas its formation is presented as 'becoming aware of what matters most in practice, what values and interests shape decision making ...'. (Trede, 2012: 163), suggests an evolutionary pathway towards PI. Tomlinson (2012: 409) refers to pre-PI as 'work-related disposition and identity' while Paterson, Higgs, Wilcox and Villeneuve (2002: 6) simply state it to be 'the sense of being a professional'. Bauman (2005) indirectly suggests that the process leading up to PI and its actual existence is in fact one and the same and asserts its formation as everlasting. In light of the disruptive nature of the economy of today, Oliver (2015) argues for the consideration of discerning, adapting and continually enhancing that which is necessary in an employability context instead of the reliance on a one- time acquisition thereof. Even though the literature contends a difference between becoming and being a professional (Trede, 2012), the assertion of PI being in constant formation is arguably sensible against the need for flexibility in the highly dynamic economic and societal realities of the 21st century.

HIGHER EDUCATION AND PROFESSIONAL IDENTITY

The work of Trede et al. (2012) highlights the ambiguity around the role of HE in the development of PI in the sense that it is at best only segmentally addressed. The question whether it is the role of HE to address PI is prevalent in the literature (West & Chur-Hansen, 2004) and if not specifically addressed in those terms, is embodied in the wider debate around the purpose of HE in an employability context (Boulton & Lucas, 2011). The literature around how HE addresses employability is often limited to the acquisition of knowledge and the development of non-technical skills (Daniels & Brooker, 2014) without clear evaluation of its impact on PI. Trede (2012) concludes from a literature review on the topic that currently more often than not the formation of PI in HE is typically expected to emerge 'naturally' within learners as they progress through an HE programme. The work of Good and Adams (2008), for example, suggests an assisting capacity of academic achievement and positive learning objectives

in the formation of identity. The literature nevertheless equally points at the value of specific curricular attention to the professional component in a learner's formal educational journey (Daniels and Brooker, 2014; Tomlinson, 2012) yet without suggesting appropriate pedagogical approaches. Freudenberg, Brimble and Cameron (2009) assert the importance of such to avoid a situation of incongeniality when the learner transitions into the world of work. Harvey (2000: 3) states that HE's primary role is to 'transform students by enhancing their knowledge, skills, attitudes and abilities while simultaneously empowering them as life-long critical, reflective learners'. An address of professionalisation therefore arguably complements the noble purpose of 'schooling the mind' if the construct is approached 'beyond a single focus on an educated workforce for future economic competitiveness' (Harvey, 2000: 12) but instead as a necessity for a sustainably prosperous society as a whole inclusive of its economic, innovative, social, and political dimension (Harvey, 2000). Such a perspective of the transformational role of HE and the notion of 'ever-becoming' through lifelong learning clearly connects with the everlasting nature of PI formation.

The continuous rhetoric of mismatch between HE output and labour market requirements in a broad sense undeniably challenges the natural formation of PI. Jackson (2016) argues for such a formation in an HE context to be a valuable re-conceptualisation of graduate employability that holistically intertwines the vast array of competencies sought after by industry in the realm of knowing, doing and being. In the same vein, Galvin & Todres (2007) argue the importance of addressing the whole self (i.e. hand, head and heart) instead of focusing on mere hard and soft skills. In pursuit of an effective approach to addressing PI, the pivotal conduciveness of engagement and non-engagement - with peripheral or insider contexts - as well as the reconciliation of different social identities in one person (Wenger, 2010) are important to highlight. Jackson (2016) further notes a series of influencing factors spanning the professional, the personal and the contextual.

T&L FOR PROFESSIONAL IDENTITY

The world of work is asserted as a prime environment where individuals truly craft their PI (West & Chur-Hansen, 2004) yet using this consideration to ignore its formation would sell a truly meaningful HE value- offering short in its purpose. Instead, the notion of having learners engage in Wenger's (2006) 'landscape of practice' may provide a fresh perspective on how HE can tackle the student-professional transformation through offering a multidimensional learning setting. Reflective practice and self-awareness (Brookfield, 2012), appropriately benchmarked assessment (Barrow, 2006), experiential learning and practical work experience (Cornellissen & Van Wyk, 2007), self-directed learning (Grow, 1991), transformative learning (Bramming, 2007) and critical incident learning (Clouder, 2005) are all suggested to influence positively PI formation. Engagement is pivotal in this (Wenger, 2010) whereby the learner actively participates in meaning-making from what is experienced, gives it purpose towards the emergence of their professional stance (Billet & Somerville, 2004) and holds a central role in the construction of PI with the HEI providing a conducive environment to do so (Crebert, Bates, Bell, Patrick & Cragnolini, 2004).

The practice of Work Integrated Learning (WIL) in its various forms (placement, internship, apprenticeships, client-based projects, mentoring or simulated learning environments), undoubtedly holds opportunities to address PI in complement to the development of general, technical and career competencies (Oliver, 2015; Trede, 2012). Authenticity (closeness to the professional level requirement) and proximity (closeness to the professional environment) are key components in this regard (Oliver, 2015). Trede (2012) argues WIL to be a context where *self* and *professional* meet. A caveat is the advice to mindfulness for the possibility of unquestioning affiliation with identified practice or unknowingly adopting bad habits (Brookfield, 2012). Eraut (2000) argues for the need to explicate possible non-conscious learning by means of reflection through collective dialogue. Based on the ever fluid nature of PI and in particular its contextual

dependence, educators must be mindful of a too narrow focus on an '*ideal*' PI since '*a one mould*' arguably does not exist (Bauman, 2005). Bauman (2005) further argues the value of learner self-becoming, which follows the view of Fish and de Cossart (2006) that professionalism (as a behavioural result of PI), should be viewed as a natural disposition of responsible judgement and action in a work context.

The PBL approach, ranging from guided discovery to fully-fledged independent knowledge acquisition through problem solving, has been presented in the literature to be conducive to PI development in engineering education (e.g. Johnson & Ulseth, 2016), medical training (e.g. Marañón & Pera, 2015), ICT education (e.g. Dunlap, 2005) and teacher training (e.g. MacDonald & Isaacs, 2001). Tan, Van der Molen and Schmidt (2016) describe the impact of PBL on PI in a study that spans various fields of study at diploma level yet in a limited context of authenticity and proximity. Their work highlights the complementary value of PBL towards preparing people to start engaging with the workplace, but equally indicates value around stronger inclusion of experiences in the real workplace. The practice of Project Based Learning as a variant of PBL would be an arguably meaningful avenue to pursue since the literature suggests the capstone course of a degree to be a pivotal moment for learners to transition from their student identity into their PI (Holdsworth, Watty & Davies, 2009). The remainder of this paper presents the approach of Project Based Learning in a capstone course of an undergraduate Marketing qualification. Through outlining its design, delivery and assessment in connection to PI this paper makes an argument around how its PBL approach builds a meaningful bridge to the world of work in a business education context in response to the reservations in this regard (McNamara et al., 2011).

CASE STUDY METHOD

For this study, since it concerns the evaluation of a phenomenon in its contextual setting, the authors have opted to use a descriptive single case study (Yin, 2012; Stake, 2005). Its object concerns the curricular and T&L environment of the capstone course of the Bachelor of Business Marketing (BBM) programme at Bahrain Polytechnic (BP), an HEI in the Arabian Gulf that places employability at the heart of its existence. With a primary mandate to develop work-ready graduates and driven by labour market intelligence that highlighted the lack of generic transferable competencies in Bahraini graduates, BP translated the goal of employability into a set of eight '*employability skills*' to be embedded into its curriculum (Bahrain Polytechnic, n.d.). As part of an institutional framework for employability the institution has adopted a PBL-oriented T&L philosophy towards realising its mission of producing '*professional and enterprising graduates with the 21st century skills necessary for the needs of the community locally, regionally, and internationally*' (Bahrain Polytechnic, n.d.).

A previously conducted study on the T&L approach deployed at BP's BBM programme reported its employability conduciveness (Vande Wiele et al., 2015) yet little attention was given to the construct of PI. The BBM runs as its capstone course a full semester collaborative industry project following a fully-fledged Project Based Learning approach.

Through a combination of qualitative and quantitative data from four data sources (Table 1) this paper aims to be a semi-empiric contribution to the body of knowledge. The case study is developed based on institutional documentation of course design, the deployed T&L approach and various other curricular documents that make up the course in complement with impressions from all primary participants in the learning experience. Table 1 outlines the data sources and collection mechanisms.

Table 1:
Data Sources and Collection Mechanisms

Data Source	Data	Data collection
Institutional and curricular documentation		
Curricular approach	Document Review	
Academic Supervisor	Impressions in context	Review of meeting summaries, focus group, anecdotal evidence
Industry Supervisor / Client	Impressions in context	Review of formal evaluation of learners and relevant content shared in project closing meetings
Learners	Impressions in context	Survey adapted from Freudenberg, Brimble and Cameron (2009), reflective statements, project closing discussions and anecdotal evidence.

THE CAPSTONE COLLABORATIVE INDUSTRY PROJECT

Overview

The final semester collaborative industry project is a WIL experience that follows a highly authentic and highly proximal format whereby the learners assume the role of Associate Consultants pro bono contracted by a real company to address an ill-structured marketing issue. The BBM represents the 'Consulting Firm' that contracts the Associate Consultants and the relevant faculty members operate as a team of senior consultants that sources the projects and supervises two-people teams that are assigned a unique project. Over a period of approximately four months, the teams operate on site in close contact with the client. The final deliverable of the project consists of a substantial consulting report and the project is closed through a client-focused presentation pitch of the solution. For the remainder of the paper qualitative statements that reflect impressions of the learners, participating faculty and collaborating companies will be referred to respectively as Associate Consultants (AC), Senior Consultants of the 'Firm' (SC) and Clients (C). A description of the AC approach outlines the context in which the learning takes place. A next section addresses the sourcing of the projects, the crafting of the project scopes and the manner in which teams are formed. The third section of this case study gives attention to how performance is being assessed and outlines in the fourth and fifth sections the overall learning experience impact on PI formation and career orientation.

The Associate Consultant approach

From the very first communication engagement with the qualifying cohort, the learners are addressed as Associate Consultants in a professional *modus operandi*. The consultant context spans communication, dress code, evaluation, information exchange and interpersonal relations. A three-day, off-campus orientation addresses the Firm's expectations in terms of personal, interpersonal and practical aspects of this professional engagement.

We focus most of our time (of the orientation) on behavioural aspects ... concepts such as

attitude, tenacity, punctuality, personal excellence and commitment are key success factors for any project (SC).

The orientation draws extensively on past experiences from previous iterations of the course, inclusive of participation of past graduates, to highlight success enablers and disablers.

Involving recent graduates of the programme makes a big difference since they are fresh out of the experience ... they have a very honest and open conversation with the new cohort ... to create a sense of freedom and trust (SC).

The learners report the heightened sense of seriousness around expectation to be rather intimidating at first but equally highly motivational and positively challenging.

At the start of the project everything is very overwhelming. Focusing on the role as a consultant and following a process that a consultant would follow guides us in the project ... at the beginning I had doubts that I could do this, it seemed so big and the expectation was so high ... the positivity from our tutors and from the graduates is very motivating (AC).

The orientation marks the abandonment of thinking in 'evaluation by grades' by introducing a hypothetical pay scale for evaluation to trigger a professional mindset.

The introduction of the pay scale evaluation is truly the bottom line in terms of work versus reward and helps to more meaningfully distinguish exceptional work from satisfactory work ... it gives us negotiation power around quality of work (SC).

The evaluation system that uses salary and bonus to measure our work changes our thinking about what is good enough and motivates us to go beyond expectation ... it is much clearer and (more) real than grades ... I do not think about grades in this project anymore (AC).

When engaging with clients the faculty maintains the consulting approach, which sheds a very different light on the type of engagement.

We are not running an internship because we want to have clear oversight of what the learners are engaging with so that we can truly grow them as professionals in their field and build their expertise ... throughout the projects we consistently observe a moment where the teams gain trust from the client and are perceived as a true value-add to the company (SC).

At first we felt treated like interns, but after a few weeks, when we started showing the plan outline of what we were going to do, the atmosphere at work totally changed ... showing key findings of our starting research to evidence our understanding of the project really impressed the client and changed his view of us (AC).

Over time we do not see the difference anymore between our employees and the students, they are truly part of the team and we treat them like that (C).

All SCs are available to each team for consultation to widen the perspective of the learners.

Each member of the marketing faculty brings a distinct contribution to the programme ... this is necessary since the projects are always multidimensional from a technical point of view and warrant consideration of various contextual factors (SC).

Asking other tutors than our supervisor for advice can be very useful, but at times also confusing because they sometimes bring a very different point of view to the project ... It is up to us to decide what we do with the information we gather, there are many solutions possible for a problem, and that is ok, as long as we can justify our choice (AC).

Overall, the AC approach can be argued to set a meaningful scene to thinking and behaving like a professional in the field by providing a context that mirrors the professional contracting.

The consulting projects

In a Project Based Learning approach the 'project' is central to the learning making sourcing and scoping of the project's key essentials to craft a meaningfully challenging learning endeavour in constructive alignment with its objectives.

Sourcing the projects

Both faculty's personal networks and the institutional industry liaisons are the starting point to identify companies that may have marketing projects that are suitable for the capstone course.

80% of the projects have been with micro and medium sized companies and 20% with medium and large size companies ... smaller companies often offer greater opportunity for the teams to make substantial impact and interface with seniors in the Firm regular occasions (SC).

Introducing the AC approach to the potential clients shifts their mindset from an internship towards a win- win collaboration.

The focus of the project is really good, because it helps us to get work done that we sometimes cannot get to ... the outside view on things helps us to re-evaluate what we do (C).

The growing reputation of the graduates in the market has allowed the programme to become more selective of its partners.

Since a few semesters we have included client commitment to graduate employment opportunity as a standing selection criterion for all our projects ... over 50% of the partner companies have extended offers to our graduates and 30% of our currently employed graduates are working at companies we have partnered with for projects (SC).

These projects are a great way for us to have a clear insight in the talent out there. We get to know them in a professional and personal capacity, which is far more effective than typical recruitment practice (C).

Crafting the scopes

A critical requirement for the success of the capstone course is a clear agreement between the

Firm and the Client on the project scope.

It makes most sense for us (the faculty) to take initiative on guiding the scopes, because we know best what type of projects fit our learning objectives ... scopes may change somewhat throughout the project, but never to an extent that they become entirely different from what was agreed at the outset (SC).

Scopes include clear end deliverables with bottom-line performance indicators and targets that link with organisational objectives.

Having clear targets focuses the teams towards client satisfaction but equally helps them understand the true value of marketing solutions (SC).

Project types span various marketing sub-disciplines and deliverables span detailed marketing intelligence, marketing plans and implementation of marketing activities. Project scopes typically have an implementation dimension that pushes proposals towards actualisation rather than carefully argued recommendations.

Not every company is comfortable to have young outsiders implement ideas on their behalf, but once the trust is formed ... clients start realising the benefit they can get out of taking action (SC).

I have learned that ideas are nothing more than ideas until they are proven to work ... nothing is more powerful to argue a proposal than having proof that it works ... knowing that something does not work is far more valuable than recommending something that you are not sure about (AC).

Compiling the teams

Based on the importance of teamwork as a 21st century competency, the allocation of teams is crucial for the learning opportunity to become meaningful and worthwhile. The faculty allocates teams on the basis of personality fit with the client/work environment, generic competencies based on the behaviours the learners have shown throughout their academic journey and academic acumen. The learners are paired where possible with a team member with whom they have never worked.

The objective is to first and foremost make them forge a relationship with their team member and client that is based on professional expectations ... there is no magic formula that we use but our discussions give consideration to the type of the project and what it will take for them to be successful (SC).

Relationship formation is observed as an integral part of the success from a learning perspective particularly towards PI formation. Various personal developments are based on who is involved rather than the technical nature of the scope.

I was teamed up with someone who could not be more different from me, but we found our mutual respect and professional position and we even became friends over time (AC).

Our interest in the project is very much about personal and professional growth of the learners ... personal conflict, leadership, peer learning and seeing different ways of doing things are all part of that (SC).

Not knowing my team member well at the start created an extra level of anxiety, but after this project I now am confident to work with strangers, stand up for my point of view and negotiate towards compromise (AC).

Up to date not a single case has been reported where teams had to be dissolved. In case dysfunctional team dynamics are identified, the Firm steps in to provide counselling sessions where the team members are given a platform to resolve the conflict with a constructive outlook. Focus on the project, mutual respect, professionalism and explicit articulation of strengths and weakness are recurring themes of such conversation.

Teams that go through personal conflict often conclude the project with heightened self-awareness ... it is almost as if we should engineer the teams to have a certain level of personal conflict, because it opens up a whole new realm of learning about what it is to be a professional (SC).

Giving clear attention to project partners, the scopes and the teams, evidences substantial opportunity to awaken a professional mindset in the learners and subsequent positioning in their project and assumedly at the start of their career.

The process

The solution development process spans 17-18 weeks with structured stages (Figure 1) that keep the teams aware of where they are at in their project and where they are going.

*Figure 1:
Project Sequence Outline*



The teams check in weekly with their SC to give a progress update which typically happens at the Clients' office or at a venue that holds professional context. The weekly meetings are run by the teams requiring evidence of a minimum of 40 hours of work per team member per week which is scrutinised by the SC. The key driver of the conversations is the constant demand for justification of choices based on facts.

My supervisor kept asking me 'why' ... so I changed my approach to the meetings by giving him reasons before he even asked (AC).

We try to emulate conversations we have experienced when we were working in industry ... so we ask the same questions (SC).

Teams are encouraged to have regular progress update meetings with their clients in order to grow the relationship and this often results in increased client involvement beyond the expectation of the teams, fostering a sense of importance and ownership over the project. Early on the teams are asked to produce a highly detailed plan that outlines the process towards the solution they believe will address the project supported by research and a timed activities list for the remaining time in form of a Gantt chart.

The Gantt chart is truly the backbone for focused project progression. It is a living document that changes as the project evolves, but has proven to be the master plan that keeps it all together (SC).

Planning and Organising is one of the skills that is truly put to the test ... the project is so large and there is so much going on that the project plan was really helpful to keep track of things and make us believe we would be ok by the end (AC).

Throughout the project the Firm organises two events where all teams convene to exchange experiences and update each other on the current state of their project.

The Industry Experience Exchange (IEX) is one of those moments where you can see the individuals stepping up as professionals to give each other feedback and advice based on their experience ... we are able to truly observe the professionals at work (SC).

IEX is great because it allows us to talk to our colleagues about our experience, share ideas and learn from each other. It also gives us a sense of where we are in our project compared to where the others are ... it shows how serious each of the projects is and how much we all know about marketing (AC).

Mid semester, the Firm calls each of the ACs in for a formal individual HR appraisal meeting prior to which they submit a self and peer appraisal document. The purpose of the meeting is to evaluate the learners on their knowledge of, and contribution to, the project inclusive of team dynamics.

The viva is a good barometer to see where the learners are in terms of their ability to concisely articulate their understanding of the project and their reasoning behind theory in practice... It is a self-reflective exercise that reveals their position in the project and allows probing for critical appraisal of themselves and their team ... it is another key moment where we see proof that professional transformation takes place (SC).

The viva is much easier than I thought, because we end up honestly talking about what we are doing and how things are going ... you need to bring depth to your answers, surface level conversations are not good enough (AC).

After this the teams are presented with an opportunity to consult formally with another expert of the senior consulting team of their choice to present their current state of affairs.

It is good to have someone who is not intimately involved in formative project evaluation ... a second pair of eyes can give a very different perspective to sharpen up the solution (SC).

It is really useful to have another tutor to look at our work and what they see is missing or wrong (AC).

Towards week 12-13 the teams submit the final consulting report to the Firm outlining their solution to which the Firm provides feedback that informs the final presentation to the client.

The consulting report is very comparable to a thesis document in the sense that it is expected to include a high level of research, considerable theoretical argumentation of used constructs and a clear outline of relevant and viable solutions in a business context (SC).

At first 10000 words seems like a lot to write, but at the end you realise that it is not enough and the challenge is to cut things out that are maybe not as important as others (AC).

During the time between report submission and the presentation, the teams typically continue to work on their project, e.g. further implementation or testing of solutions, creation of additional marketing materials and preparation of presentation support documents. In a final one hour meeting the teams are to pitch their solution to the client, answer questions around the information they have presented and hand over a 'client appropriate' version of the consulting report.

The presentation is not at all a regurgitation of the report; it would be impossible to do that in the time frame. The teams learn to distil what is truly important to present and how to present it in a way that makes sense to their client based on their way of thinking and their context ... the teams typically want to keep something hidden from the client that they pull out on the presentation as a 'wow' factor (SC).

Even though we have been doing a lot of presentations throughout our degree, this presentation is far more intense but at the same time super exciting, because we get to explain our solution in one go and defend our points of view ... it is truly where it all comes

together I walked away with an enormous feeling of accomplishment and confidence in myself (AC).

The process that structures the project keeps progress going and focuses very much on client relevant justification for actions and choices. Learners operate with a high level of autonomy and are constantly encouraged to self-reflect and engage with feedback opportunities to move forward towards success. This process is chosen to expose the learners to various aspects of performance in a real-life work project (e.g. planning, autonomy, justification, consultation with externals, awareness of interpersonal as well as technical aspects of the project). This is supported by a corpus of various assessment methods discussed in the next section in terms of its approach and the way it is structured.

The assessments

Assessment approach

The capstone course uses a set of assessments that mirrors performance evaluations in industry towards oversight of project progression and quality control for success. Performance evaluation involves both the Firm and the Client with the largest participation by the Firm to avoid 'compassionate' grading.

Our clients take this very seriously, but we also see that they are very impressed with our learners compared to the common denominator graduate across the labour market ... our grades and the client grades can at times be at odds but we expect an academic agenda to be met for which clients show understandably less concern (SC).

The Firm's ethos to evaluation is one of expectation vs pay of which Table 2 presents the overall spirit in which this is being presented to the consultants. All assessment rubrics are written with similar heuristics in the professional context of expectations from a consultant.

Project level qualifying evaluation statements mapped to traditional grades

Evaluation category	You deserve promotion	You deserve a bonus	You have earned your salary (pass grade)	We need to talk ...	Pack your bags ...
Qualifying statement	<i>Your delivery against what is expected has been consistently exceptional. You are earmarked as management material by your supervisor due to your exceptional expertise, consistent professionalism and your proven leadership capabilities.</i>	<i>Your delivery against what is required has consistently exceeded expectation. You have been identified as a member of the team that deserves financial promotion. Your supervisor is willing to argue for a financial bonus on top of the pay you receive for your work.</i>	<i>You have satisfied the client and fulfilled your contractual agreement to provide an impactful solution that is credible and meaningful for the organisation on the basis of the scope and the context of the project. You will get paid your salary.</i>	<i>The work you have delivered is subject to doubt in terms of its professional calibre as a consultant. The company is not comfortable to charge the client the consulting fee that was agreed. This type of performance threatens the professional relationship between you and the Firm.</i>	<i>The work you have delivered is below standard and does not meet the expectations for our contractual agreement. This equates to grounds for immediate discontinuation of your contract with us.</i>
Equivalent Letter Grade	A	B	C	F	FF
Equivalent Nominal Grade	100 - 86	85 - 70	69 - 60	59 - 45	44 - 0

The chosen qualifying statements aim to reflect the reality of work by equating satisfactory behaviours and performance to those that meet 'contractual' agreements at the start of a professional engagement.

The evaluation descriptions at project level are highly effective in setting the tone of what is expected from the consultants and what they can expect. From the start it grounds them into a sense of reality and clearly indicates what it takes to be deserving of higher compensation than contractually agreed (SC).

The use of pay scales instead of grades makes everything much more real ... it makes it simple and to the point ... we are clear that we need to push for extra outputs if we want to score more than a pass (AC).

Some learners do not meet the expectation and are held back for another semester, but those learners are engaged in a reflective conversation towards helping them to realise and articulate where they went wrong and what commitments they will make towards change.

... if this project were a guaranteed pass for everyone, it would be an unnecessary component of the programme ... each repeater that has graduated has done so on the basis of a strong change in their behaviour in particular towards taking ownership of their work and unconditional commitment to the project (CS).

I used to make excuses why my work was not done, but after the first time at industry projects I realised that only I am responsible for my work ... in the second round of industry projects I felt an obsession to prove myself to myself and to my tutors (AC).

Evaluation by the Client uses the institutional ‘8 employability skills’ in the form of a scorecard of 46 specific behavioural descriptions. At the end of the project, the Client indicates through a confidence scale whether the learner has exhibited these behaviours throughout the course of the project. A final question item asks the Client to appraise the learner on their work-readiness using a four-category grade point with qualifying descriptions (Table 3).

The average evaluation of over 170 graduates sits at 84% (SC).

Commitment, positive attitude and professionalism are highly recurring themes in debriefing sessions with the Clients.

The graduates have proven to be effectively ready for the workplace ... their sense of ownership of their solution and their ability to effectively operate as associate consultants ... they exceed our expectation ... the type of graduates that can add value to an organisation as soon as they enter the workplace (C).

Table 3:
Evaluation qualifiers for Client Appraisal

Professional Entry Standard (5)	The learner has continuously evidenced professional entry level work standards throughout the project. The learner's performance was consistently high, and has shown great potential for future career development. Overall I would rate this as 'exemplary' for entry level employees in terms of attitude, commitment and performance. What has been evidenced exceeds the average standard of entry level work.
Very Good Entry Standard (4)	The learner has consistently evidenced very good entry level standard of work throughout the project. Overall the learner was able to rise to the challenge and has shown good ability and strong willingness to learn. What has been evidenced is in line with reasonably high expectations of entry level work standard.
Work ready with some reservations (3)	The learner has evidenced many instances of good entry level work standard, but did not do so in a consistent manner. The positive performance shows clear ability and potential however the lack of consistency needs to be addressed. Overall the learner has evidenced performance that would meet basic expectations of entry level work standard.
Not yet work ready (0)	Even though some of the learner's performance may have been promising overall, the learner has not evidenced to possess or the ability to apply the basics for employability at a satisfactory level. On the basis of what has been evidenced during this project, the learner has not been able to prove work readiness in a satisfactory manner. The learner needs to reflect carefully upon his/ her competencies in order to set a plan for improvement.

Assessment structure and criteria

The evaluative corpus of this course is highly varied and covers a multitude of aspects of PI by addressing marketing acumen as well as generic competencies in a professional context. Table 4 outlines the evaluation mechanism types, their attributes and the address of the '8 employability skills.

Evaluation mechanisms and relevant attributes

Assessment Title	Assessment Focus (Process / Output)	Deliverable / Event	Timing (Week)	Weighting % of final grade	Formative Feedback	Unit of Evaluation (Individual / Group)	Generic Employability Competencies (Explicit or Implicit assessment) (low attention * - ** - *** - **** - ***** high attention)									
							Marketing Acumen	Planning & Organising	Communication	Learning	Self-Management	Initiative & Enterprise	Problem Solving	Technology	Teamwork	
Project Plan	P	Report	4	10	*****	G	****	*****	***	****	***	***	****	**	****	
Progress update	P	Meeting	Weekly	20	*****	I	****	*****	*****	*****	*****	*****	*****	***	*****	
HR evaluation	P	VIVA	9	15	***	I	****	***	*****	***	*****	***	*****	***	*****	n/
	O	Report	13-14	20	*****	G	*****	**	*****	*****	**	*****	*****	**	n/a	
Presentation	O	Meeting	16-17	30	***	I	*****	***	*****	***	**	*****	*****	***	***	
Client Appraisal	P	Scorecard	16-17	5	n/a	I	**	*****	*****	*****	*****	*****	*****	*****	*****	

The assessment corpus evidences a scaffolding approach through assessing both process and final outputs with a clear progression throughout the semester.

We have observed that the evaluation of the weekly meetings gives a good indication of the eventual final result the learners achieve (SC).

Even though the assessments seem like a lot at the start of the semester, they all make sense and they all have a clear place in the project ... most of the assessments don't feel like assessments, more like moments of showing what we know, will do or what we have done (AC).

Table 4 further evidences the pervasive provision of feedback, the individual as a primary unit of evaluation and clear attention to both generic competencies and marketing acumen.

Feedback is truly a cornerstone of this project and that is what the role of the facilitator in PBL is all about ... by questioning their decisions and critically discussing what is going on ... feedback on the behaviour is at least as important as feedback on outputs (SC).

At the start I did not always realise that the discussions were a form of feedback ... the questions of the supervisors can be frustrating, but they help us to think further (AC).

Seventy percent of the graduates report on the enhancing effect of the industry project on their ability to engage with feedback mechanism and self-reflection. The focus on the individual as the unit of

evaluation is to conform to the institutional policy and is highly relevant to PI.

As much as they are working in teams, they need to find themselves as individuals in the project ... there is plenty of independent work to be done ... only two members in the team leaves no room for social loafing (SC).

We work as a team ... but it is good that we are evaluated as individuals in some cases, because if I do something well I should get recognised for that (AC).

Assessment of the generic competencies can take place explicitly or implicitly. Competencies such as Planning & Organising, Communication, Teamwork or Problem Solving are intuitively more easily assessed explicitly compared to Self-Management, Learning or Initiative & Enterprise. The weekly meetings are found to be good mechanisms to address the latter because the team evidences its work, how theory applies in practice and the commitment devoted to the project.

The employability skills are often evident out of what the learners have done, how they came to the realisation of certain things and to what extent they take charge of the project (SC).

The employability skills are all constantly present in the project and are what is similar between the projects ... we become confident in the skills and recognise our strengths and weaknesses ... we improve as the project goes forward (AC).

Using professional expectations as assessment criteria shifts learners' perception of the place of evaluation. Process evaluation scaffolds PI formation with particular attention to feedback and individual awareness of the value of generic skills.

The transformation

The production of employable graduates is at the heart of BP's institutional mission.

If we want to truly live up to our mission we must ensure that our programme provides our learners with a pathway to become young marketers who are confident in their ability, have a clear sense of professional self-worth and understand how to effectively navigate the world of work (SC).

The graduates report their learning experience to be highly meaningful towards the field of study (85%), very relevant to becoming a professional marketer (90%) and highly constructive towards building their confidence to operate effectively in industry (70%). The constant demanding of relevant business etiquette places the learners in a very different paradigm around how they are to operate.

We are not treated like students, we don't feel like students, we don't come to class anymore and that makes us behave differently and learn who we are and who our team members are in a work situation (AC).

Based on their industry project experience, graduates confirm the importance of employability skills (90%) and an appetite towards further enhancing them (85%). The associate-senior relationship generates a very different dynamic and demands the learners to find their professional stance in solving a business problem which results in a deep sense of ownership over their work.

It is very rewarding to see learners step out of their shell as students and find their feet as professional problem solvers ... for each of them this happens at different times throughout the project ... it is hard to identify when exactly it happens but you know when it has happened (SC).

During the first IEX I truly felt that I was behaving like a professional marketer ... the first meeting with the client without the supervisor was the moment I felt I brought value to the table that was appreciated by someone in the workplace ... I realised after the VIVA that I was a different person compared to previous assessments in the programme ... the presentation was the moment where I felt I had really made my mark as a professional (AC).

Throughout the project the learners gain enormous confidence in their ability by not only experiencing their tutors treating them as peer professionals but more importantly by a third-party professional endorsing the value of their ability and knowledge.

Positive feedback from our tutors is great, but a genuine thank you from the client for hard work is a whole other level of satisfaction (AC).

The capacity as an internal consultant gives learners a good understanding of what is required from them in the workplace. Seventy-five percent of the graduates report that the industry project experience gave them a very clear understanding of industry expectations. Being a consultant equally maintains a reasonable level of independence around what they believe is an appropriate course of action hence triggering a personal conception PI. The graduates report on the positive effect of the industry project towards self-awareness around what type of contribution they can and want to make as a professional (80%) yet to a lesser extent towards realising what they would like to do in the future (65%).

Our approach allows them to immerse in the business without being an employee. They need to understand the company in order to navigate their ideas effectively but are at the same time representing the Firm which has its own articulation around what professionalism means (SC).

We only see our academic supervisor two hours a week, the other 40 hours or more we are working with our team mate and with the people from the company. We can be who we chose to be and that is a great sense of freedom to find our own way of being a consultant (AC).

The development of a viable and relevant marketing solution does not get priority over the objective of the professional transformation.

The conversations we have among the faculty during the course of the project are more about their behaviours, their commitment, their attitude and their relationship with the client

than about the quality of the solution they produce because we have realised that if the personal stance of the learner in the project is that of a professional, all else falls in place (SC).

Career competencies

As much as the programme shows highly promising uptake in the labour market, the graduate survey revealed an area for improvement around entering the labour market after graduation. Only 60% of the graduates report the effect of the industry project experience on their ability to be more effective at job interviews and equally only 60% see the experience as a value add to their CV.

These findings make it clear that we need to more clearly impress on them that this project counts as real industry experience and should appear on their CV and be used in a job interview (SC).

The graduates do however report on the capstone course to help them with presenting their match with a company or a position (75%) and increased confidence in making career choices (75%).

Further exploration around how the project can connect with career competencies is something we assumed the immersion in the role would trigger naturally, but it seems that we have a gap to close there (SC).

CONCLUSION AND LIMITATIONS

The Project Based Learning approach of the collaborative industry project shows great potential towards supporting PBL as an effective methodology for the development of PI in a business education context. The active involvement of industry in the creation of the learning environment is fundamental to its success in context by providing high authenticity and proximity in which learning takes place. The case asserts the importance of carefully crafted scopes and clear understanding of the role of all participants involved in the project.

The AC approach triggers and develops professional behaviours and self-reflection towards PI formation for the learners addressing the self in a social learning context inclusive of articulation thereof by setting a conducive scene that embeds PI in the curriculum. The setting of an appropriately benchmarked expectation induces a paradigm shift from operating as a student of a field of study to becoming and behaving like a practitioner in that field clearly pointing at the value of engagement. The culture of the Firm, the immersion in the business context and high autonomous interaction with the project stakeholders effectively allow the learners to find themselves as professionals through an address of the whole self. The case further shows the value of collective dialogue and meaning making towards challenging self-perception and perception of others and clearer insight in the world of work and the application of their field of study. The learners report on a sense of personal liberation when fully surrendering to the experience by breaking free from performance for grades and pursuing professional recognition. The process that structures the capstone course shows the value of independence of the learner to craft their solution supported by the faculty as mentors and critics to their approach and outputs. The case points at the pertinence of fundamental consideration to how both process and outputs are being assessed. Formalised criteria for professional behaviour under the form of employability skills prove to be highly effective as does clear attention to feedback through careful dialectic. From what is observed, it is the totality of the carefully constructed Project Based Learning approach that is found to transform learners whereby the AC approach forms a logical context to address PI formation.

The authors recognise the limitations inherent to a descriptive case study in particular the likelihood that what is described does not capture the full extent of all influencing factors as part of a wider context that is both institutional and socio-economic perhaps due to selective observation and potential bias of the researchers. It is hoped that the triangulation of various data sources brings - albeit limited - solace to this concern. It is however felt that this study is a useful starting point towards further exploration of the subject under study in particular by a first codification of practice and findings towards more longitudinal evaluation of the programme and its impact. This single case study is part of a context that is highly conducive to the success of the approach and it would be worthwhile to explore whether the suggested T&L approach would work in different fields of study, different professional fields and can withstand an HEI culture that may be less employability oriented. The case is further set in an environment that enjoys institutional commitment to having a low student/faculty ratio and may be more challenging to realise when dealing with a large number of learners. The presented case study is highly qualitative and cannot assert significance of causal relationships between enablers and the development of PI nor does it explore the effects of demographic or other contextual factors towards PI. Further research through either multiple case studies or statistically significant approaches can explore generalisability of the findings and investigate causality between conceptual T&L concepts for PI and its actual formation considering socio-demographic and other contextual factors. The authors of the paper, however, hope to have presented a starting point for further exploration of T&L for PI formation and a strengthening of the proposition for PBL as an effective methodology to address PI in a capstone business course as set out to be the objective of this paper.

REFERENCES

Bahrain Polytechnic (n.d.) *Mission Statement*. <http://www.polytechnic.bh/default.asp?action=category&id=58> (Accessed 3 August 2017).

Barrow, M. (2006) 'Assessment and student transformation: Linking character and intellect' *Studies in Higher Education* 31(3) pp.35-72.

Bauman, Z. (2005) 'Education in liquid modernity' *The Review of Education, Pedagogy and Cultural Studies* 27 pp.303-317.

Billet, S. & Somerville, M. (2004) 'Transformations at work: Identity and learning' *Studies in Continuing Education* 26(2) pp.309-326.

Boulton, G. & Lucas, C. (2011) 'What are universities for?' *Chinese Science Bulletin* 56(23) pp.2506-2517.

Bramming, P. (2007) 'An argument for strong learning in HE' *Quality in Higher Education* 13(1) pp.45-56.

Brookfield, S.D. (2012) *Teaching for critical thinking: Tool and techniques to help students question their assumptions*. San Francisco, CA: Jossey-Bass.

Clouder, L. (2005) 'Caring as a "threshold concept": Transforming students in HE into healthcare professionals' *Teaching in Higher Education* 10(4) pp.505-517.

Cornelissen, J.J. & van Wyk, A.S. (2007) 'Professional socialisation: An influence on professional development and role definition' *South African Journal of Higher Education* 21(7) pp.826-41.

Crebert, G., Bates, M., Bell, B., Patrick, C. & Cragolini, V. (2004) 'Developing generic skills at university, during work placement and in employment: Graduates' perceptions' *Higher Education Research & Development* 23(2) pp.147-165.

Department of Education, Science and Training (DEST). (2006) *Employability Skills: from framework to practice – An introductory guide for Trainers and Assessors*. Precision Consultancy: Canberra, Australian Capital Territory, Australia.

Daniels, J. & Brooker, J. (2014) 'Student identity development in HE: implications for graduate attributes and work-readiness' *Educational Research* 56(1) pp.65-76.

Dunlap, J.C. (2005) 'Problem-based learning and self-efficacy: how a capstone course prepares students for a profession' *Educational Technology Research and Development* 53(1) pp.65-83.

Eraut, M. (2000) 'Non-formal learning and tacit knowledge in professional work' *British Journal of Educational Psychology* 70(1) pp.113-136.

Errington, E. (2011) *As close as it gets: Developing professional identity through the potential of scenario-based learning*. <https://researchonline.jcu.edu.au/15344/1/CHAPTER%2BC3.pdf> (Accessed 3 August 2017).

Fish, D. & de Cossart, L. (2006) 'Thinking outside the (tick) box: Rescuing professionalism and professional judgement' *Medical Education* 40 pp.403-404.

Freudenberg, B., Brimble, M. & Cameron, C. (2009) 'The building of a professional: Creating greater career identity within a degree' *The International Journal of Learning* 16(10) pp.253-265.

Galvin, K. & Todres, L. (2007) 'Embodying nursing openheartedness: An existential perspective' *Journal of Holistic Nursing* 25 pp.1-9.

Giddens, A. (1991) *Modernity and self-identity*. Stanford, CA: Stanford University Press.

Good, M. & Adams, G. (2008) 'Linking academic social environments, ego-identity formation, ego virtues, and academic success' *Adolescence* 43(170) pp.221-236.

Grow, G. (1991) 'Teaching learners to be self-directed' *Adult Education Quarterly* 41(3) pp.125-149.

Harvey, L. (2000) 'New Realities: The relationship between Higher Education and Employment' *Tertiary Education and Management* 6 pp.3-17.

Ho, J.K.K. (2016) 'A literature review on employability with diagramming techniques' *American Research Thoughts* 2(6) pp.3771-3784.

Holdsworth, A., Watty, K. & Davies, M. (2009) *Developing capstone experiences*. Centre for the Study of Higher Education, University of Melbourne, Australia.

Jackson, D. (2016) 'Re-conceptualising graduate employability: the importance of pre-professional identity' *Higher Education Research & Development* 35(5) pp.925-939.

Johnson, B. & Ulseth, R. (2016) 'Development of professional competency through professional identity formation in a PBL curriculum' In *2016 IEEE Frontiers in Education Conference Proceedings* pp.1-9. Erie, Pennsylvania, US.

Macdonald, D., Isaacs, G. (2001) 'Developing a professional identity through problem-based learning' *Teaching Education* 12(3) pp.315-333.

Marañón, A.A. & Pera, M.P.I. (2015) 'Theory and practice in the construction of professional identity in nursing students: A qualitative study' *Nurse education today* 35(7) pp.859-863.

McNamara, J., Brown, C., Field, R.M., Kift, S.M., Butler, D.A. & Treloar, C. (2011) 'Capstones: Transitions and professional identity' In *2011 WACE World Conference-Conference Proceedings*. http://www.waceinc.org/philly2011/conference_proceedings/Refereed%20Papers/Australia/JUDITH-1.PDF (Accessed 3 August 2017).

Oliver, B. (2015) 'Redefining graduate employability and work-integrated learning: Proposals for effective higher education in disrupted economies' *Journal of Teaching and Learning for Graduate Employability*

6(1) pp.56-65.

Paterson, M., Higgs, J., Wilcox, S. & Villeneuve, M. (2002) 'Clinical reasoning and self-directed learning: Key dimensions in professional education and professional socialisation' *Focus on Health Professional Education* 4(2) pp.5-21.

Stake, R.E. (2005) *Qualitative case studies*. Thousand Oaks, CA: Sage Publications.

Tan, C.P., Van der Molen, H.T. & Schmidt, H.G. (2016) 'To what extent does problem-based learning contribute to students' professional identity development?' *Teaching and Teacher Education* 54 pp.54-64.

Tomlinson, M. (2012) 'Graduate Employability: A Review of Conceptual and Empirical Themes' *Higher Education Policy* 25 pp.407-431.

Trede, F. (2012) 'Role of work-integrated learning in developing professionalism and professional identity' *Asia-Pacific Journal of Cooperative Education* 13(3) pp.159-167.

Trede, F., Macklin, R. & Bridges, D. (2012) 'Professional identity development: A review of the HE literature' *Studies in Higher Education* 37(3) pp.365-384.

Vande Wiele, P., Khalid, F., Morris, D., Ribière, V. & Ermine, J.L. (2015) 'Teaching and Learning for Employability – Triangulating three perspectives' Paper presented at the GECSO Conference 8th Colloquium, 24-25 June, Bordeaux, France.

Vande Wiele, P., Ribière, V. & Ermine, J.L. (2017) 'Diagnosing Higher Education on purposefulness: Introducing the Employability Development and Assessment Maturity Model (EDAMM)' In G.B. Teh and S.C. Choy (Eds.) *Empowering 21st Century Learners Through Holistic and Enterprising Learning* pp.177-188. Singapore: Springer.

Wenger, E. & Trayner, B. (2015) *Introduction to communities of practice*. <http://wenger-trayner.com/introduction-to-communities-of-practice/> (Accessed 3 August 2017).

Wenger, E. (2010) 'Communities of practice and social learning systems: The career of a concept' In E. Wenger (Ed.) *Social learning systems and communities of practice* pp.179-198. London, UK: Springer.

West, C. & Chur-Hansen, A. (2004) 'Ethical enculturation: The informal and hidden ethics curricula at an Australian medical school' *Focus on Health Professional Education* 6(1) pp.85-99.

Yin, R.K. (2002) *Case Study Research, Design and Methods* (3rd ed.). Newbury Park: Sage Publications.