Effective Experiential Learning

PRACTITIONERS GUIDE

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There is a gap between the knowledge students learn, and the skills they need to succeed.

Experiential learning is a critical tool to close the gap.

In this paper, we attempt to provide some practical support and resources for educators seeking to deliver more effective experiential learning programs for their students.

We attempt to provide;

- An evidence based rationale for experiential learning programs in higher education.
- An evidence based practitioners guide to designing effective experiential learning programs, using a collaborative project learning pedagogy and drawing on practice based examples.
- A set of collaborative project learning resources that can be used to support effective experiential learning;

- **FREE ACCESS,** under creative commons license, to a collaborative project learning curriculum (draft unit outline, assessments and rubrics, 22 videos and transcripts).
- **FREE DEMO** of our Practera platform by our experiential learning design team, and discounted trial access to it following the demo.

We are writing this paper as active experiential educators informed by both practice and research. Over the past 7 years, our company Practera has enabled dozens of universities and organisations to engage tens of thousands of students and employers in a diverse array of experiential learning programs in Australia and around the world. Our customers include The University of Sydney, The University of New South Wales, University of Melbourne, University of Queensland, NMIMS Mumbai, RMIT Vietnam, Boston University, employers like EY, Deloitte, Allianz and Laminex, and many Government agencies. Also, co-author Nikki James is pursuing a Doctorate of Education in the application of machine learning and learning analytics to support experiential learning.

Nikki James is VP of Learning & Experience for Practera, and is based in Boston in the United States.
Beau Leese is co-founder and co-CEO of Practera and is based in Sydney, Australia. We are indebted to many colleagues for their contributions.

Effective Experiential Learning to Build Real World Skills

There is a gap between the knowledge students learn, and the skills they need to succeed. Experiential learning is a critical tool to close the gap.

In this paper, we attempt to provide some practical support and resources for educators seeking to deliver more effective experiential learning programs for their students.

As educators, we want to help our students answer important questions about the application of their education.

? How will investment in education lead to improved life opportunity?

? How can I apply my knowledge and abilities successfully to build a meaningful career?

? How can I develop the ability to evolve my skills in the face of increasingly rapid technological change?

The skills and abilities built through effective experiential learning will help students answer these questions.

Increased demand for experiential learning is also coming from students, employers and industries;

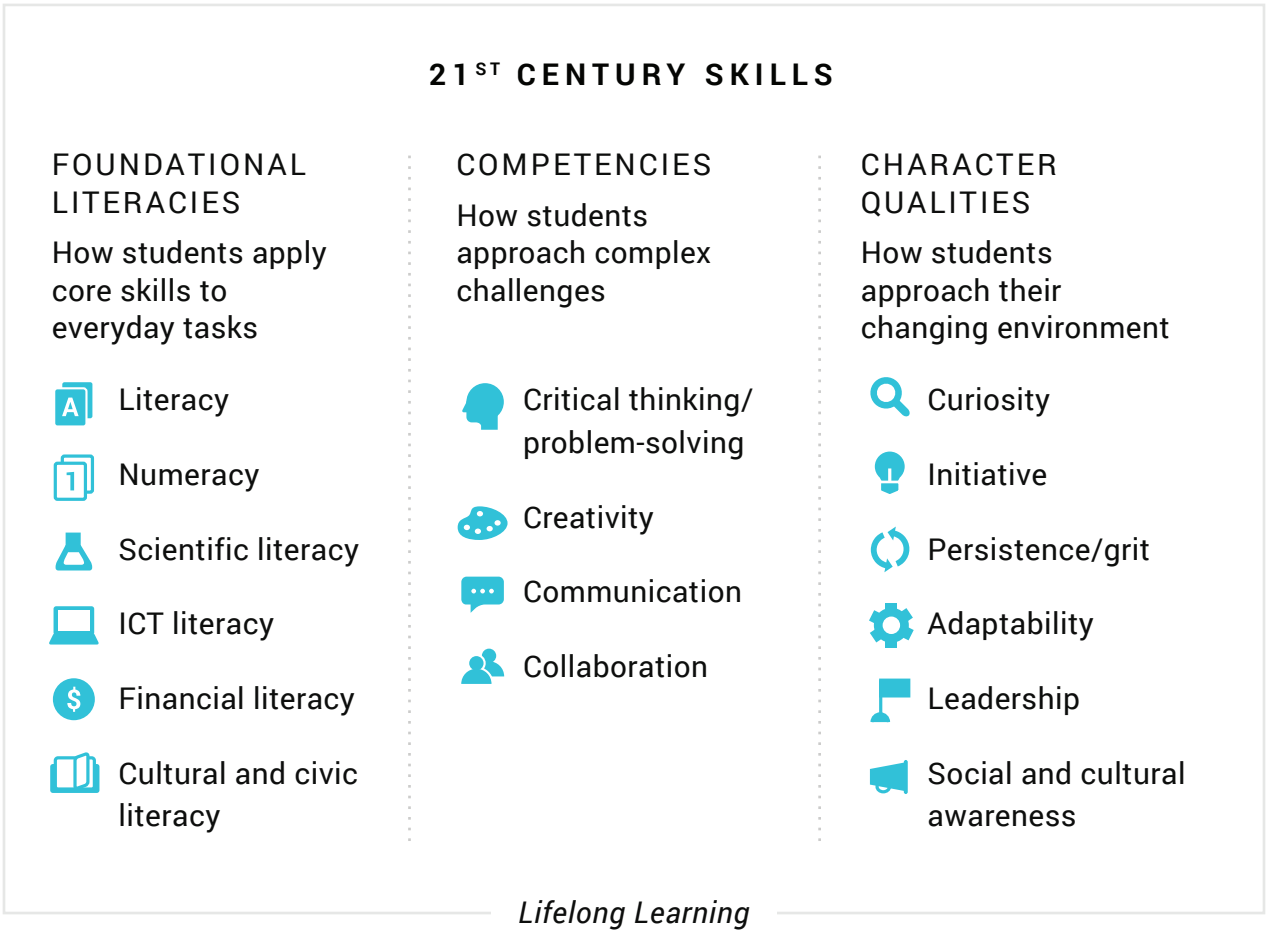
- The increasingly mass and mobile student market is demanding greater employability skills and outcomes from Higher Education providers.[1]
- Employers claim that the gap between the skills people learn and the skills people need is widening, as traditional learning falls short of equipping students with the knowledge they need to thrive.[2]

While knowledge and foundational literacies are and always will be fundamental to education, to meet the increased demand for employability skills and experiential learning, institutions need to adopt and embed more systematic and scalable solutions for experiential and real-world learning programs. Employability skills and work readiness extend beyond the development of

1 OECD 2017; Milliken 2014; Deloitte, 2016

2 World Economic Forum, 2016

foundational disciplinary knowledge to competencies and character qualities including collaboration, creativity, leadership and adaptability.[3] Recently, transdisciplinary skills models have evolved and developed significant currency – for example the World Economic Forum's '21st century skills'.[4] Universities are increasingly embedding student competency and graduate attribute models to facilitate the development of social and emotional learning, across traditional discipline boundaries.



Source: "World Economic Forum" 21st century skills

The competencies and character quality elements of these models are best acquired **experientially**[5] – in integrative and applied learning, through the use of higher order thinking skills. According to the Association of American Colleges and Universities, experiential – or integrative and applied learning - is one of the four essential learning outcomes of a college education. This includes synthesis and advanced accomplishment across general and specialized studies, demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems.[6]

3,4 World Economic Forum, 2016

5 Blackwell et.al, 2001; Proctor, 2011; Wilton, 2011; Nenzhelele, 2014

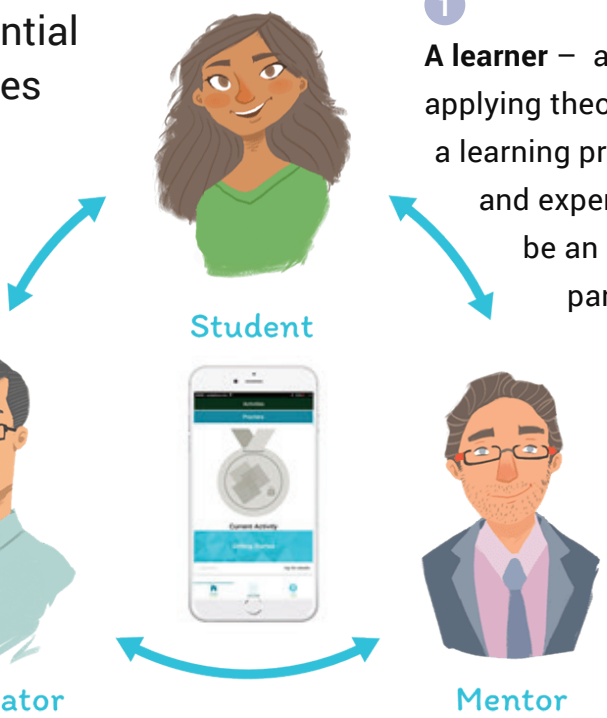
6 Kuh 2008

To maintain distinctiveness and serve students, employers and communities, Universities need to systematically encourage, challenge and support students to apply, synthesize and reflect on their use of knowledge in real-world situations.

Doing this systematically – across the student lifecycle - requires Universities to build efficient, structured and engaging experiential learning programs of multiple types, that deliver value for both students and or employers. These are programs like cooperative education, experiential case studies, professional placements, mass challenges, placements, team projects, accelerators, internships, mentoring and competency-based skills credentialing.

Implementing Effective Experiential Learning in Practice

Generally, a real-world or work integrated experiential learning program requires at least three different participants to collaborate together;



1

A learner – a student consciously applying theory to practice as part of a learning process to develop skills and experience. The student may be an individual or working as part of a team.

2

An industry coach – a more experienced practitioner who is providing the context for the practical experience, and / or feedback to the student on their performance.

3

An educator – an educator managing the learning process, providing learning support to the student and a reference point for the mentor.

These three roles are supported and enabled by a 'program manager' the educator or administrator responsible for the overall participant experience outcomes, structuring, resourcing and performance of the program.

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Common challenges

We have found that experiential learning is fundamentally a complex collaboration between the three participants to achieve multiple outcomes, which faces a number of common barriers to successful outcomes.

- Different objectives and priorities – eg; grades (student), work outputs (mentor) and quality assured learning (educator).
- Lack of time to participate effectively.
- Lack of shared language and taxonomy.
- Lack of familiarity with and aptitude in the specific processes required by the program.
- Lack of time and resource to support all participants at required scales.
- Lack of timely quality and experience assurance data and insight.
- Provision of efficient and effective support to participants in a timely manner to mitigate or circumvent issues.

Meeting the challenge

We have developed and outline here three innovations designed to help experiential learning educators and program managers overcome these common issues and deliver better outcomes for students and mentors, more efficiently;

1. A pedagogical framework, Collaborative Project Learning.
2. A practice-based curriculum designed to support experiential learning programs
3. Practera – a patent pending experiential learning platform designed to help educators apply collaborative project learning techniques in program design and management.

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Collaborative Project Learning

Collaborative Project Learning (CPL) is a pedagogical framework, underpinned by Kolb's experiential learning cycle[7] and critical reflection[8] as an approach for the development of 21st Century Skills through structured project-based learning.

Use of the Collaborative Project Learning pedagogical framework enables the design and delivery of learning experiences that;

- Provide a support framework that enables learners to extract more learning from real-world or simulated experiences.
- Enables meaningful engagement of experienced practitioners that is aligned with the learning outcomes of the program.
- Provide a shared framework and common language for efficient student, mentor and educator collaboration to deliver outcomes.
- Facilitates and supports a critically reflective learning process that is required for competency and character development.

EXTRACTING MORE LEARNING FROM REAL-WORLD ENVIRONMENTS

An effective method for achieving learning objectives in the higher order thinking domains[9] is creating learning environments and using pedagogical approaches that support active and experiential learning. Therefore, course design and curriculum development needs to focus on the practice and assessment of knowledge demonstration as opposed to knowledge acquisition. Building a simulation or real-world learning experience underpinned by the CPL pedagogical framework provides a context within which students can demonstrate how they work collaboratively to apply, synthesis and generate knowledge to solve problems while dealing with ambiguity that builds self-efficacy and resilience. Underpinning this with the CPL Framework provides a structured process for the design of feedback and reflective loops that increase learner's ability to accurately identify where their knowledge and competencies require development.

7 Kolb, 1984
8 Collier & Williams, 2005
9 Bloom et al, 1956

MEANINGFUL ENGAGEMENT OF EXPERIENCED PRACTITIONERS

Engaging experienced practitioners through experiential and project-based learning gives students the opportunity to gain up to date insight on what is happening in practice and understand not just academic, but industry perspective on their work through structured feedback[10]. The CPL Framework provides a structured process for industry evaluation on work and team behaviour that is aligned to the program learning outcomes. This feedback can unearth blind spots and help students have a more realistic understanding and perspective on the quality of their work and workplace behaviour[11].

SHARED FRAMEWORK AND COMMON LANGUAGE FOR COLLABORATION

Project based learning has long been recognised as a framework that integrates knowing and doing, where students learn knowledge and elements of the core curriculum, but also apply what they know to solve authentic problems and produce meaningful results.[12] The CPL Framework extends the concept and applies project management taxonomies to the experiential learning process, defining objectives, milestones and tasks for participants, by role, to deliver on a defined scope, in a defined time, with defined resources (PMBOK). This provides a shared framework and common language for predictable and efficient action by participants, adds a valuable element to student learning, and lowers barriers to effective industry participation by utilising a commonly understood lingua franca.

SUPPORTS A CRITICALLY REFLECTIVE LEARNING PROCESS

Character and competency development require the acknowledgement that change is required[13]. This acknowledgement can be cultivated by a moment of cognitive dissonance generated through critical reflection or feedback. Learning experiences designed using the CPL framework intentionally build moments of cognitive dissonance and subsequent critical reflection into their design by introducing peer feedback loops and structured reflective processes. The inclusion of these moments in the design of a CPL learning experience not only supports the cultivation of competencies and characteristics but the development of lifelong learning capability.

10 Hattie, 2009
11 Richardson et. al., 2009
12 Markham, 2011
13 Prochaska, & DiClemente, 2005

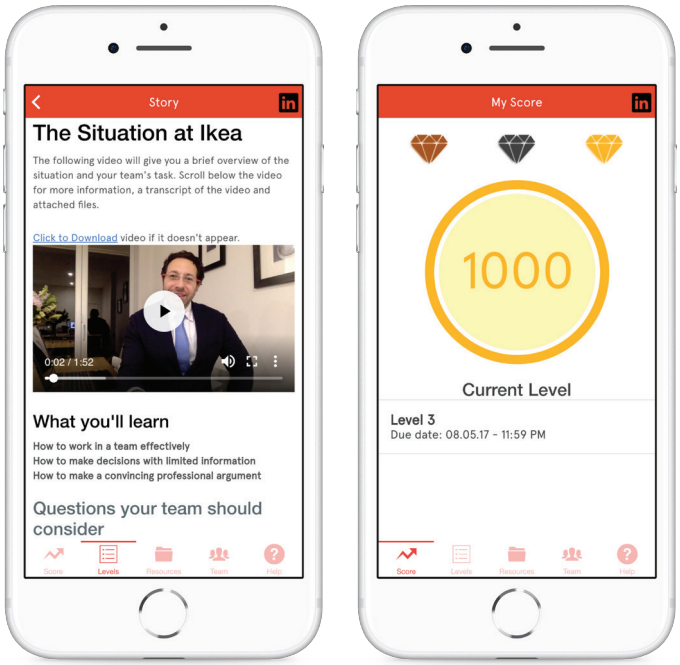
A Curriculum to Support Collaborative Project Learning

To support the application and reflection in experiential learning programs we have defined a collaborative project-learning curriculum.

The curriculum is designed to support university students as they engage in an experiential learning experience that is underpinned by the CPL Framework.

The content is provided to support students extract more learning from an experiential learning experience. It does this through practical, bite size tips derived from theoretical concepts associated with team collaboration, self-development and project management. It is not discipline or project method specific but goes to critical social and emotional learning objectives in 4 key areas.

The curriculum consists of 22 modular videos in 4 key areas. The videos feature Practera's co-founder and co-author of this paper, but the transcripts are available, and could be adapted to feature alternative personalities.



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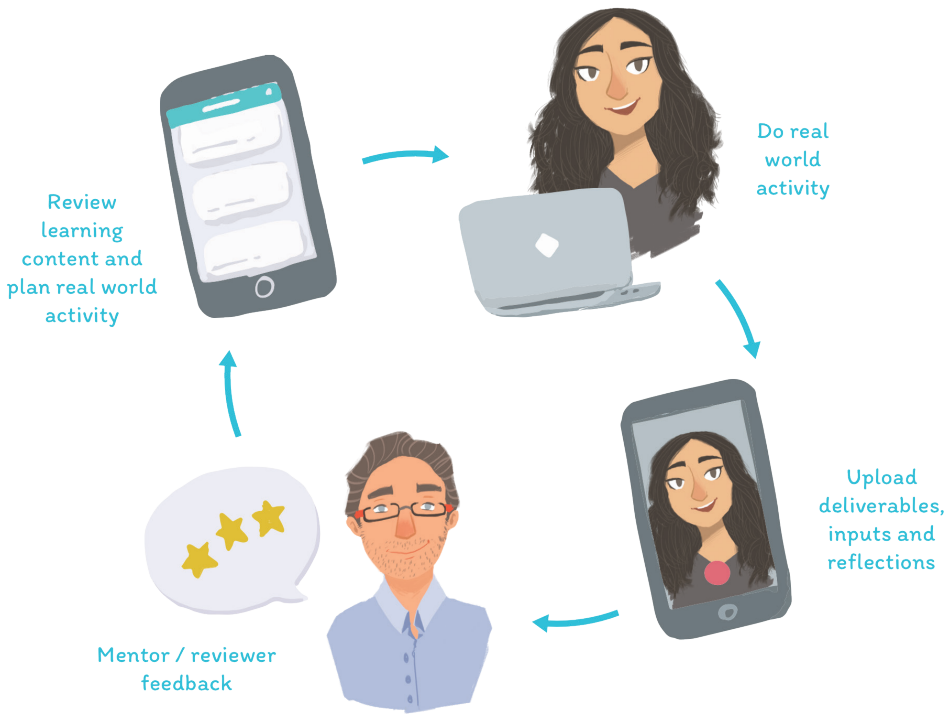
ELEMENT	DESCRIPTION	MODELS
Introduction	Introduction to collaborative project learning.	Collaborative Project Learning
Self	Help learners develop self-awareness to be able to identify strengths, weaknesses and blind spots of their professional personality, then apply self-management to proactively develop their knowledge, skills and abilities.	Self Awareness, Self Management, Leading Self
Team	Help learners identify characteristics of high performance teams and provide the foundational knowledge, opportunity and support for teams to collectively develop these characteristics.	Katzenbach, the discipline of teams, Tuckman's Team Formation
Project	Help learners understand the fundamentals of project management and provide the foundational knowledge, opportunity and support for teams to develop the ability to communicate in project terms, and the skills to effectively plan, mobilise, and deliver a project.	Agile project management
Learning	Help learners understand the value of and knowingly apply the experiential learning cycle to deepen knowledge, skill and ability (KSA) acquisition from an applied learning experience.	Kolb's Experiential Learning cycle, Bain's 5R's Reflection Framework

Practera - A Platform to Support Collaborative Project Learning

The Practera platform has been designed to support the effective implementation and scalability of this pedagogy within project based learning and experiential learning programs.

Parts of CPL can be supported by traditional Learning Management Systems (LMS) designed for a knowledge acquisition paradigm, or Project Management systems designed for outcomes delivery, or collaboration systems designed for facilitating group work. However, we identified that the capabilities of each of these systems were sub-optimal for enabling collaborative project learning as described, and critical data for monitoring and quality assurance was difficult to capture as it sat across multiple systems.



Practera is an experiential learning platform that has been designed to support the **authoring** of learning experiences underpinned by the CPL framework, and manage the **workflow** of student and mentor participants around a real-world activity – which may be partly or wholly off system. Moreover, its analytics dashboard, intervention process management and assessment centre streamline the **administration** tasks that make experiential learning traditionally difficult and expensive to deliver at scale .

COLLABORATIVE PROJECT LEARNING WORKFLOWS

Smartphone apps built on the Practera Platform can be deployed to student and mentor participants to deliver learning content and step participants through the 'real world' activities. Practera Apps allow participants to collaborate, record multimedia

inputs and enable feedback and reflection loops. These Practera Apps can be copied, modified and rolled out repeatably, reducing rework. Practera Apps are not designed to necessarily cater for or capture all of the project activity (although that can be delivered if it is a design objective), but rather 'wrap around' real-world activities. Mandatory and gamified interaction points incentivise engagement and facilitate data capture for analytics.

ANALYTICS DASHBOARD – EFFECTIVE TEAM AND PROJECT MONITORING

Practera's analytics dashboard aggregates learning analytics and fast-feedback from students and industry mentors to provide insight to learning facilitators on team collaboration, project confidence and industry engagement happening on or off system. The visualisation of these metrics enables easy identification of individuals, teams and projects that require support. Learning facilitators and program managers can use this data to focus their time investment and support on industry partners, students and teams who would most benefit from it. One of our research programs is to increasingly enable predictive, personalised and automated intervention via machine learning.

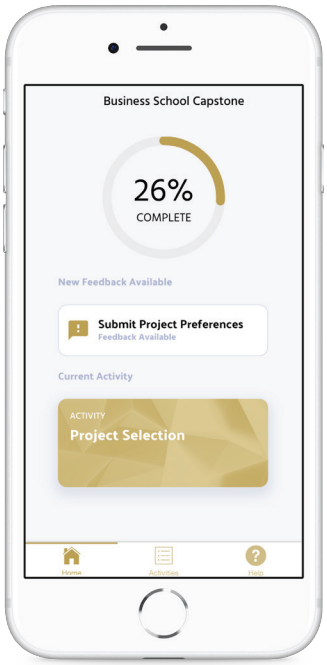
INTERVENTION PROCESS MANAGEMENT– QUALITY AT SCALE

As students launch out into a real-world context where moments of cognitive dissonance are likely to occur effective support is paramount. In a small cohort, one learning facilitator is managing and supporting the entire experience and in most cases has an established relationship with both students and industry collaborators. However, at scale effective support is a challenge as there are often multiple learning facilitators at varying levels of ability collaborating to manage the experience. Practera's Intervention Process allows for the tracking and management of support provided by learning facilitators throughout a CPL experience. The tracking allows for multiple learning facilitators to effectively support a larger cohort by triaging support based on the experience of the facilitation team.

ASSESSMENT CENTRE – ENABLES INDUSTRY AND PEER FEEDBACK

Unlike traditional learning programs where learning facilitators provide all feedback and assessment CPL experiences involve peers and industry feedback loops. The addition of peers and industry in this process lifts the level of complexity and data management required. Practera's assessment centre allows for industry feedback within the assessment work-flow, has configurable Team360 assessments and enables the ability to unlock learning content based on assessment inputs and evaluations.

Experiential Learning Program Examples



Beyond traditional internships and professional placements there are a variety of experiential learning options that bring industry into the classroom, provide real-work contexts for practice and support critical reflection.

Like classroom curriculum that starts with introductory material before progressing to advanced, experiential learning can be scaffolded in order to build up competency prior to students participating in a full placement or internship. Institutions who effectively scaffold their experiential learning will enable more students to be successful over the longer term.

Experiential learning has a wide range of applications, each of which has many variations. Different models of experiential learning can be characterised as being at different levels of ambiguity, personal agency and scalability. They fulfil different learning needs and offer different types of experience for the student. Here;

1

Personal agency – means the degree of influence the participants (students & mentor) have on the objectives, scope, activities of the experience, and how customised the outcome can be.

2

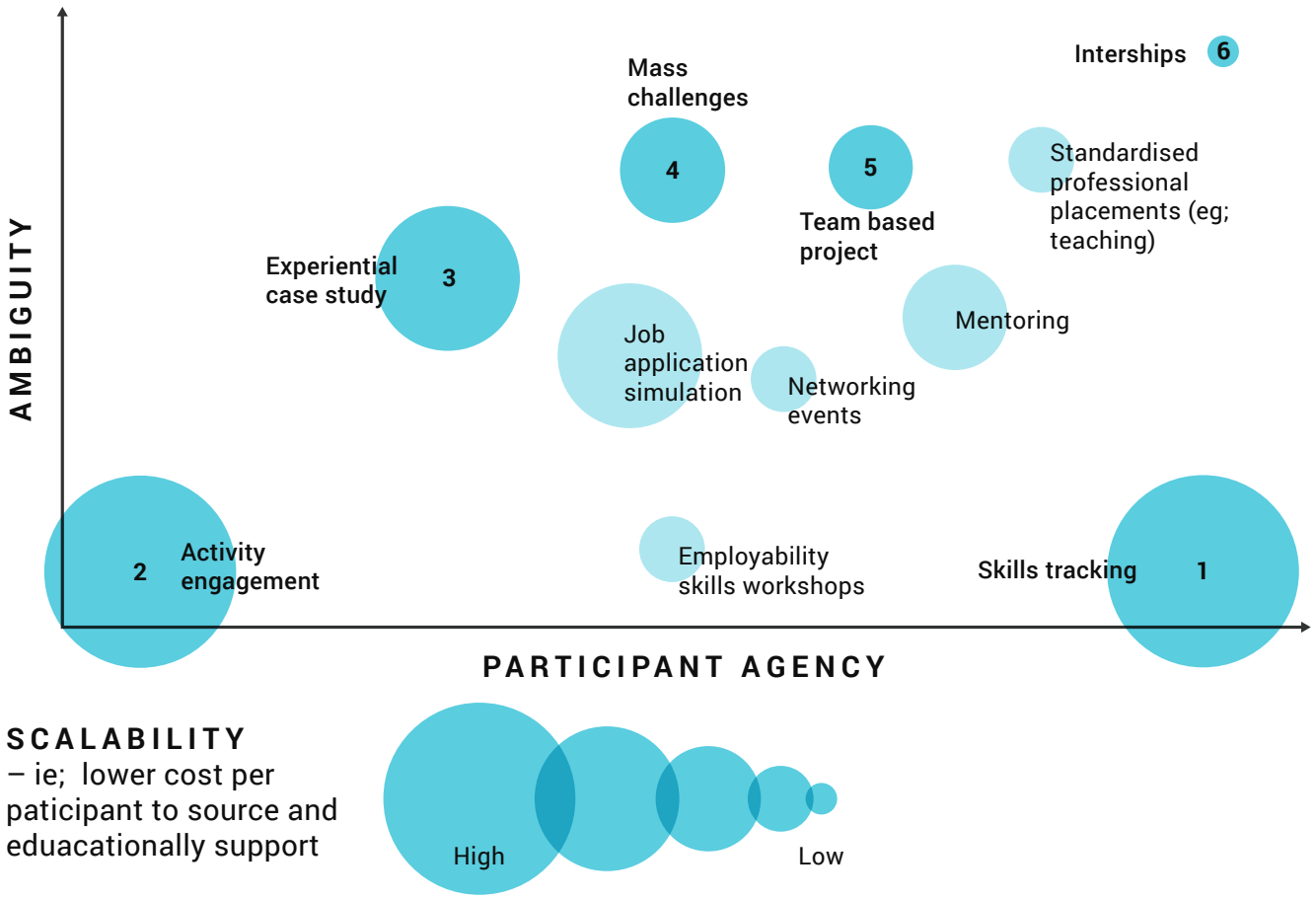
Ambiguity – means the degree of structure, procedural certainty and activity support available to the student as they go through the experience.

3

Scalability – the relative cost per student of the experience. An entirely digital, structured, infinitely repeatable experience is more scalable.

Below, we have indicatively mapped some of the common models of experiential learning we have built using the collaborative project learning curriculum and enabled by Practera against these fields. Moreover, we have provided descriptions and case studies for a selection of six (darker blue circles) models that might be scaffolded together over

a 2-year period of study. This sequence of experiential learning could be integrated into an institution as an interdisciplinary extra-curricular program or embedded into the curriculum of a specific course or faculty.



SCALABILITY
– ie; lower cost per paticipant to source and eduacationally support

1. Skills Tracking

A structured skills tracking program helps students develop the capability to critically reflect and articulate the valuable competencies and character qualities gained through extracurricular and applied experiences across the whole course of study (eg; 2 years).

The mechanism is the ongoing curation and development of a portfolio or logbook of extra-curricular experiences which demonstrate learning, experience and achievement against cross cutting competencies and character qualities (which may be graduate attributes of the institution).

Students reflect on experiences against a structured framework – for example STARLP or Bain's 5R framework[14]. These experiences may be part of a formal program within the University or self

[14] Bain, Ballantyne, Mills, & Lester, 2002

directed – for example a part time job, a role with a student association, a work integrated learning project, a professional placement. The repeated critically reflective process over the course of the degree program, deepens reflexivity and builds a student's life-long learning capability.

Given that content is generated by each student participant agency is high, but a very simple, defined and replicable process means that ambiguity is low. Scalability is high if online solutions are utilised and appropriate frameworks incentivising participation are in place.

CASE STUDY

RMIT UNIVERSITY

RMIT Vietnam are using Practera to engage all of their students in building their employability portfolio and experiential learning skills alongside their University education.

The app allows students who enrol in the Personal Edge program to create a digital portfolio where they can showcase six skill sets. Students can demonstrate how they develop or perform the skills in a learning or working experience via the framework STARLP – situation, task, action, result, learn/plan.

With this digital portfolio, they can also attach evidence of their learning experiences like certificate scans, photos of real works, recommendations from teammates and supervisors, and others. Besides having an online record of their experience, students can take advantage of other useful functions directly on the app. They can book workshops and events offered by the Careers and Industry Relations office, compete with each other on the Monthly Leaderboard, and redeem points for gifts.

Ambiguity

Low

Participant agency

High

Scalability

High

2. Real activity engagement

Real activity engagement where students engage with an applied sequence of activities designed to gain an initial awareness and appreciation of the application of the discipline. Examples may include an engineering kit build project, a historical sights tour, an orientation in a new city, or engagement with an optional program of

extracurricular events – eg; careers. Evidence of completion, knowledge quizzes and critical reflections are completed after steps.

Given that the sequence of activities is pre-defined and content is generated by each student, scalability is high and ambiguity is low, however participant agency is also low as they are working towards a pre-defined outcome with limited capacity to influence the process or form of outcome.

CASE STUDY

THE UNIVERSITY OF SYDNEY

The University of Sydney Business School Careers & Employability team is using Practera to achieve step change improvements from its premier 'Job Smart' employability skills program with new, gamified mobile apps for experiential learning at scale.

- The initial phase of Job Smart involves engaging thousands of first year international students with a program of 10 employability awareness and skill building activities. The challenge was that with only a handful of staff, awareness and engagement with the program was low.
- The Job Smart app, built on Practera, has helped enhance and track learner engagement this program. >5000 students have used the app to review content, book event tickets, check in, and complete forms, quizzes and reflections. They won points and competed with friends for rewards at bronze, silver and gold levels.
- Administrators monitored activity engagement and completions in real time, making targeted adjustments and interventions to boost results. Across 5 semesters, the introduction of Practera technology has supported an average of 850% greater engagement over the pre-app program, without increasing the overall budget to operate.
- The Careers & Employability Office team have presented their experience with Practera at multiple internal and external conferences.

Ambiguity

Low

Participant agency

Low

Scalability

High

3. Experiential case study

An experiential case study is a pre-scripted learning experience likened to a 'choose your own adventure' storybook with the storyline dependent on the reactions of real people playing the industry role.

A case study is broken up to provide to the student team in episodes', with the pathway changing based on the decisions and explanations of students as they work through the case. Assessments are provided based on the technical correctness of the answer AND scoring from a real person against competencies demonstrated – eg; communication skills. As compared to an in class traditional case study, the experiential case study gives students opportunity to practice their decision making and communication skills with some degree of 'çonsequence', while building their self-efficacy and resilience in ambiguous but reasonably 'safe' situations.

Ambiguity is medium – well designed case studies provide ambiguous choices, and the communications that will resonate with the industry reviewer are uncertain. Given that the scope for participant action and response is constrained and limited influence over the type of outcome, but given the unscripted team and reviewer dynamic, participant agency is medium-low. Scalability is medium – high; the resources should be mostly on hand, but reviewer time required is limited however team formation and reviewer network – ideally industry - are required.

CASE STUDY

THE UNIVERSITY OF SYDNEY

University of Sydney Business School

- The University of Sydney Business School 'Job Smart' employability skills program provides mobile app based case study experiences on the Practera platform. A "live business simulation" is played out for 300 students at a time with a handful of industry mentors and one supporting educator in a part time capacity.
- Students are presented 3 multimedia 'episodes' of an ethics case study and were asked to make and then justify strategic choices in a presentation video. Students' choices were evaluated by

Ambiguity

Medium

Participant agency

Medium-Low

Scalability

Medium-High

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business professionals; this evaluation AND the answer provided (eg; yes/no) determines the simulation outcome and what the students see next. There are 9 potential different ‘story endings’ and points earned combinations. Students reflect on their experience and performance against learning outcomes.

- Requiring approximately 25 hours extracurricular, uncredited work - completion rates average 98%, satisfaction rates 95%, and 68% of industry mentors felt their students demonstrated improvement in communication skills across the experience.

4. Mass Challenges

A mass challenge is a class of experiential learning program where a standard challenge question is provided to teams of students with a well defined process for the students to work through the development of their answer and provide a response.
These can range from simple online open ‘pitchfests’ to structured blended learning programs, and so scalability is highly variable. While the process and formats for response are relatively well defined, the internal team process and the response or outcome each team will propose is unique. This is a ‘mass customisation’ model.

Ambiguity is medium – the challenge, process and format are generally well defined, but the outcome is unique and customised. The scope for participant action and response is constrained but there is no ‘script’, and some influence over the type of outcome, and a unique team and reviewer dynamic, participant agency is medium. Scalability is highly variable depending on the format and requirements.

CASE STUDY

Deloitte.

- Practera has been deployed for several years to support 'NEXT' - a 12 week in curriculum innovation accelerator program managed across a collaborative partnership of 4 Universities in different Australian states and a network of participating employers anchored by Deloitte.
- Students enrolled in the NEXT Work Integrated Learning unit are provided a common challenge – to "develop a high potential innovation concept which will have positive economic, environmental or social impact." This could be a business, startup or social innovation.
- To tackle this challenge, student teams go through an idea generation phase, followed by a lean launchpad style curriculum delivered online and in 4 'flipped classroom' workshops focused on presentations, skills demonstrations and feedback. They have a mentor from an industry partner who is coaching an innovation project' for their own development. Undertake a blended program over 12 weeks, which includes.
- More than 2000 students and mentors have undertaken the program. A 2017 survey presented by Deloitte found that average student satisfaction is 85%, 65% of students thought the program helped secure their graduate employment, and 95% of mentors thought that NEXT was an effective program.

Ambiguity

Medium-High

Participant agency

Medium

Scalability

Between Medium and High depending on requirements

5. Team based projects

Team based projects where students work on real projects and problems for industry partners allow students the opportunity to engage in an industry engaged experience in a group. The team can support each other through the experience. The project usually conforms to some requirements for scope, duration, complexity etc,

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but is a unique one set by the industry partner. The project method and activity sequence is usually somewhat, defined however the project output is a unique co-creation between the team and client, supported by the educator. The team may be placed with the host organisation, however usually they work offsite or virtually, with defined meeting points with the client and potentially mentors / advisors – operating more like an external professional services team.

Ambiguity is medium-high – the scope and activities are somewhat defined, but the 'client' and team dynamic introduce significant ambiguity, and the outcome is unique and customised. The scope for participant action and value creation is relatively unconstrained and students have substantial influence over the type of outcome - participant agency is medium-high. Scalability is medium – team basis and systematisation of approach provide higher scalability, but a network of project providers and mentors ned to be sourced, and monitoring / quality assurance requirements are high to mitigate common failure points.

CASE STUDY

The international education arm of the New South Wales State Government (Study NSW) has developed a large scale, low cost business projects network connecting international students to undertake real 3 week business projects with NSW Government, Business & Community organisations.

Examples include evaluating NSW Police social media outreach channels to international students, researching multicultural and millennial personas for Allianz, and evaluating CRM systems for a small business. Teams complete 360 degree evaluations of each other's contribution.

Over 3 years, more than 1200 international students from 7 NSW Universities have gained real world skills with >150 clients and a professional mentor. Students have provided the program an 85% average satisfaction rating, 90% completion rate, and 94% of participants felt they made friends and connections.

Ambiguity

Medium-High

Participant agency

Medium-Low

Scalability

Medium

The Practera platform manages collaboration and learning at scale, tracks performance and identifies issues in real-time. The program received a 2016 Australian Business Higher Education Roundtable award.

6. Internships

An internship is generally a long form, part time or full time placement with an employer in an industry of potential interest to the student. Sometimes a standardised process, sometimes internships are paid, and sometime supported by a learning program.

Ambiguity is high – the scope and activities are generally undefined, and the students often need to demonstrate significant levels of initiative to make a contribution in the role, and the 'outcome' is unique and customised. The scope for participant action and value creation is relatively unconstrained and students have substantial influence over the type of outcome - participant agency is medium-high. Scalability is relatively low – generally securing and supporting long term on site industry placements with a supervisor is challenging although can be and often is done systematically.

CASE STUDY

UNSW SYDNEY

The University of New South Wales has deployed Practera to support its Industry Experience Program, which places students in structured internships with hundreds of employers, from start-ups to multinational corporations.

Practera is used as a matching platform to manage the advertising of opportunities, and the application & selection process for students to secure placements with employers.

Practera then supports a structured preparation and active reflection process for students, with employer feedback loops.

Ambiguity

High

Participant agency

High

Scalability

Low

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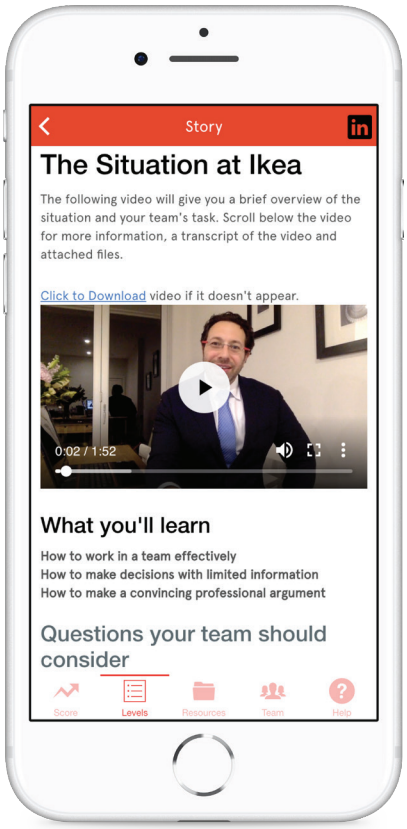
Implications for Practice

The networks, experiences and skill building opportunities that Universities can offer students are becoming ever more important.

Collaborative Project Learning is a powerful pedagogical framework for the development of higher order thinking skills and subsequently 21st Century capabilities, characteristics and life-long learning ability.

Use of CPL supported by Practera opens up more models of experiential learning methods at scale.

Implementation of CPL and Practera in institutions can increase the amount of experiential learning opportunities available to students throughout their degree, enable the effective administration and management of industry engaged experiences freeing up the learning facilitator to provide better support to students and streamlines the industry engagement which in turn could increase the volume of organisations engaging with students.



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References

Bain, J.D., Ballantyne, R., Mills, C. & Lester, N.C. (2002) Reflecting on practice: Student teachers' perspectives, Post Pressed: Flaxton, Qld

Bandaranaike, S. & Willison, J. (2015). Building capacity for work-readiness: Bridging the cognitive and affective domains. Asia-Pacific Journal of Cooperative Education, 16(3), 223 – 233.

Blackwell, A., Bowes, L., Harvey, L., Hesketh, A. and Knight, P. (2001), "Transforming work experience in higher education", British Educational Research Journal, Vol. 27 No. 3, pp. 269-85.

Bloom, B. S.; Engelhart, M. D.; Furst, E. J.; Hill, W. H.; Krathwohl, D. R. (1956). Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain. New York: David McKay Company.

Collier, P. & Williams, D. (2005). Reflection in action: the learning-doing relationship. In Learning through serving: A student guidebook for service-learning across the disciplines, C Cress, P. Collier & V. Reitenauer (Eds), 83 - 97. Sterling, VA: Stylus.

Global Innovation Index, World Intellectual Property Organisation et al 2017

Hattie, J. (2009). *Visible Learning: A Synthesis of 800 Meta-Analyses Relating to Achievement.* Routledge

Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice Hall

Kuh, G (2008) High-Impact Educational Practices: What Are They, Who Has Access To Them, And Why Do They Matter, Washington, DC: Association of American Colleges and Universities

Markham, T. (2011). Project Based Learning. Teacher Librarian, 39(2), 38-42.

Milliken, J. (2004). Postmodernism versus Professionalism in Higher Education. Higher Education in Europe, 29(1), pp. 9 – 18

Nenzhelele, T. E. (2014). Employability through experiential learning course in open distance learning institution. Mediterranean Journal of Social Sciences, 5(20), 1602 – 1612

OECD. (2010). International mobility in higher education. Retrieved from http://www.oecd.org/innovation/policyplatform/48137663.pdf

OECD (2017), Education at a Glance 2017: OECD Indicators, OECD Publishing, Paris. http://dx.doi.org/10.1787/eag-2017-en

Prochaska, J,O. & DiClemente, C, C,. (2005). The transtheoretical approach. In Norcross, John C.; Goldfried, Marvin R. (Eds) Handbook of psychotherapy integration. Oxford series in clinical psychology (2nd ed.). Oxford; New York: Oxford University Press. pp. 147–171.

Proctor, C. (2011). Employability and entrepreneurship embedded in professional placements in the business curriculum. Journal of Chinese Entrepreneurship, 3(1), 49 – 57

Project Management Institute. A Guide to the Project Management Body of Knowledge (PMBOK Guide), Third Edition.

Richardson, J, Jackling, B., Kaider, F., Henschke, K., Kelly, M.P., & Tempone, I (2009) The role of industry supervisors in providing feedback to students as part of the assessment process in work integrated learning (WIL). In: ATN Assessment Conference 2009: Assessment in Different Dimensions. J. Milton, C. Hall, J. Lang, G. Allan, & M. Nouikoudis. (Eds.) RMIT University, Melbourne, Australia, pp. 282-292.

Strohl, N.M. (2006). The postmodern university revisited: reframing higher education debates from the 'two cultures' to postmodernity. London Review of Education, 4(2), pp. 133 – 148

Wilton, N. (2011) The impact of work placements on skills development and career outcomes for business and management graduates, Studies in Higher Education, 37:5, 603-620.

World Economic Forum. (2016). New vision for education: Fostering Social and Emotional Learning Through Technology. Geneva, Switzerland: World Economic Forum.

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