

## Assessing the immeasurables of practice

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This paper examines a significant challenge facing students and educators in work-integrated learning (WIL), the learning and assessment of practice immeasurables. Often student assessment focuses on the overt and those aspects of practice that are readily observable and measurable. Educators also need to look at those aspects of practice which are less observable and less measurable, particularly by typical assessment tools, because the immeasurables of practice are deep, fundamental, and critical aspects of successful, professional and person-centered practice. (*Asia-Pacific Journal of Cooperative Education, Special Issue, 2014, 15(3), 253-267*)

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This paper examines an intriguing and difficult challenge facing students and educators in work-integrated learning (WIL), the learning and assessment of practice immeasurables. It starts with an exploration of practice and particularly, the immeasurables of practice, then moves to learning in practice through WIL, and then to the assessment of practice immeasurables in WIL. In essence, the paper is arguing, that in university courses which utilize WIL, both learning and assessment (to promote learning and to measure learning outcomes) are means to achieve and warrant the preparation of students in becoming sound practitioners. Secondly, the paper is contending that preparation for practice cannot just focus on the obvious, expected and easily measurable aspects of professional practice. Indeed, it is higher level attributes and capabilities of practitioners that makes these people professionals, and many of these practice dimensions are either immeasurable or difficult to measure. Throughout the paper the arguments and reality of experiencing the immeasurables and their assessment are highlighted by reflective and illustrative asides to enrich and complement the text.

### PROFESSIONAL PRACTICE

The term *practice* and the activities linked with a particular group's practice are social phenomena. They represent the way people construct, articulate and enact their practice roles and actions. In relation to occupational groups and professions, the practice of the group or profession refers to the way the group and its members typically implement their activities, and set the standards and expectations for performing their practices. For practitioners, practice incorporates the customary activities, models, norms, language, discourse, ways of knowing and thinking, technical capacities, knowledge, identities, philosophies and other sociocultural practices that collectively comprise their particular profession (or occupation) (see, Higgs, 2012). Customary activities associated with a profession include technical or discipline-specific practices, ethical conduct, professional

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decision making, client-practitioner communication, consultation and referral, and interdisciplinary team work.

*As I learn about the profession I am joining  
I learn to walk and talk  
and think and know the way they do.*

Yet, practice is not unquestioningly uniform, universal, or generalized. Practice is inherently embodied, agential, owned, and socially-historically constructed. It is situated and temporally located in local settings, life-worlds, and systems, as well as professional and global discourses. It varies across cultures, workplaces, and among people. So, for the individual becoming a practitioner there is a need to recognize that they do and should see practice through their own frame of reference. Trede and McEwen (2012, p. 27) argue that “it is imperative to explore identity when becoming a professional, because it enhances the professional socialization process and strengthens agency in practice. ... (They contend) that critical identity formation should play an explicit role in practice-based education, because it interweaves the individual with the social, the personal with the professional and the local with the global; and it enables students to become practitioners with a sense of self and purpose both as members of a given community and as global citizens”. Being a human being in society is a reflection of our agency (Archer, 2000) and the choices we make.

*Who am I?  
What sort of a practitioner do I want to be?  
What practices and goals do I value?  
What workplaces best suit my preferred type of practice?  
Will my practice hold up to scrutiny  
by myself, my profession, my clients and workplace standard-setters?*

The nature and scope of professional practice and the choices practitioners make (see, Fish & de Cossart, 2006), is an essential consideration in relation to the education and assessment of professional entry students and for the student or novice of becoming a professional practitioner. Table 1 presents a set of attributes and capabilities needed for professional practice. It was developed for professional entry courses at Charles Sturt University (CSU), Australia (EFPI, 2011). It is pertinent to the current discussion of understanding practice as a prelude to assessing the performance of practice, in that professional practice is essentially about working with people, delivering services and working with clients (often people in need of professional knowledge and services) and so it is a complex, unpredictable, imprecise, and very human phenomenon. Even with advances in science, technology, and information sciences, and alongside rule-driven standards of evidence-based practice, we cannot remove ourselves from the importance of honoring the essential humanity and uniqueness of the practice that is received by some people and delivered or co-created by others. Further, it is essential to recognize the variability and situatedness of practice which means that what is best practice depends on the situation; it requires judgment, self-critique, and consideration of the client’s circumstances.

*Every day in my practice I aim to become an advanced practitioner  
who brings highly honed judgment,  
a depth of experienced based knowledge and deep learning,  
plus a commitment to ethical conduct to my goal of  
creating a service plan  
for individual clients, in individual situations.  
Best practice depends on this sublime combination  
rather than prescription and formulas.*

*By comparison, the technician is trained to follow manuals  
and perform protocols, and leaves decision making to the others.  
I realize this comparison is stereotypical, but it serves to remind me  
about the place of judgment in practice  
and to see the need for it in the assessment  
of my own performance and that of others.*

TABLE 1. Course goals and learning outcomes

Students will demonstrate by the completion of the course the following capabilities and attributes expected of graduates entering their professional communities and workplaces.

**Professionalism and Citizenship:**

- Accountability
- Ethical conduct
- Trustworthiness, respect, dedication
- Commitment to professional values
- Lifelong learner
- Social inclusion, diversity acceptance
- Contribution to the wellbeing of society
- Commitment to quality
- A global perspective of practice
- Understanding of financial, social and environmental sustainability
- Reflective practitioner

**Profession Competence and Work Readiness:**

- Profession knowledge
- Profession skills
- Ability to integrate theory with practice
- Knowledge of and ability to work within relevant legislation
- Competence in safe work practices
- Knowledge of relevant occupational health and safety policies
- Competence in discipline/ profession knowledge and skills
- Initiative
- Ability for independent work

**Communication and Interactions:**

- Communication according to professional values and boundaries
- Supportive communicator
- Cultural competence
- Confidentiality
- Team worker
- Collegiality and collaboration

**Information Literacies:**

- Ability to access new information
- Ability to judge information applicability to a specific work setting
- Synthesize information from multiple sources
- Produce reports and presentations utilizing multiple forms of media

**Professional Judgment:**

- Critical reflection
- Analytical
- Constructive criticism of own practice
- Flexibility, ability to manage change
- Problem-solving capability
- Creativity
- Ethical decision-making ability
- Practice according to the law

## PRACTICE NARRATIVES

We communicate much of who we are and what we do through stories. Our practice narratives are the means by which we make sense of our practice, convey its reality and humanity, and build and critique our store of practice knowledge. Boshuizen and Schmidt (1992, 2008) emphasize the importance of people's actual stories in building the expert knowledge base of experienced clinicians through their stage theory of the development of expertise. This theory evidences the parallel development of knowledge acquisition and clinical reasoning (or professional decision making) expertise, both of which result from changes in knowledge structure. Their research identified that the progress from student to expert clinician is accompanied by a development of decision making capabilities alongside a transition from biomedical knowledge (or scientific knowledge), through encapsulation of knowledge into concept clusters with clinically-relevant foci, to structuring of knowledge around *illness scripts* (generic case profiles and predictabilities) and finally to *instantiated scripts* (actual detailed cases/specific instances). Experts can draw upon their rich store of practice-based knowledge and practice-person narratives to deal not just with the regularities of practice but also on the nuances, the ineffables, the person-complexities and the immeasurables.

*Practice is grounded and released in metaphor,  
interpretation and narrative.*

*It defies prescription and predetermination.*

*In practice, as real people we encounter other real people  
in their lived spaces and places.*

*We all shape and tell our lives in stories.*

*In narrative and metaphor we interpret who we are  
to ourselves and to others.*

*We see ourselves  
and realize who we can be  
in life and practice.*

## PRACTICE IMMEASURABLES

When we talk of professional practice we may be referring to the practice and practice context of a profession and also to a individual practitioner's practice. Both of these practice contexts have in common the collective knowledge base, set of practices (activities, techniques, decision making practices), and practice standards (values, principles, norms, expectations, ethics) of the professional group. The shared knowledge base comprises propositional knowledge (derived from research and theory) and professional craft knowledge (derived from practice experience), both forms requiring deliberate testing and critique to attain the status of knowledge of the profession (Higgs & Titchen, 1995). These collective capabilities are situated in the history and culture of the profession, they are regulated, and evolve through the development and maturation of that profession and they are regarded as current best knowledge and best practice based on the collective critique (through research, practice scrutiny, external feedback) by and of the profession. Each

individual practitioner's knowledge and practice also incorporates personal knowledge derived from life experience, engagement with clients and their situation, the practitioner's chosen and emergent practice model (including beliefs, interests, approaches) and their practice artistry and wisdom. In the following sections the nature and immeasurable dimensions of these practices are examined.

Immeasurables are those typically deep aspects of practice that are impossible or difficult to measure and, at times, to articulate. They are often deliberately or inherently hidden and undisclosed, they are often marginalized, they are essentially invisible, unobserved or unspoken, they can be complex and hard to articulate and they are difficult to name.

*How can we practice if we do not realize what (our) practice entails?  
How can we claim and demand good practice if much of it remains obscure  
and if we cannot critique and challenge  
the deepest spaces, beliefs and acts of our practice?  
How can we work together, delivering shared services, if we cannot  
name and scrutinize each other's contribution and role in shared practice?  
Practice development requires leadership and individual practice  
that is flexible, responsive and creative;  
that recognizes the need for critique and better understanding  
of not-observable, unspoken practices;  
that provides safe yet uncomplacent spaces  
to reflect and deliberate upon, to dialogue experiences  
and to question taken-for-granted, dominant,  
and often unchallenged ways of practicing.*

We need to create communicative and reflexive spaces for practitioners and for those who guide and mentor novices:

- to share practice stories and challenges,
- to articulate and debate to rethink their practices,
- to be bold, creative, ethical, and critical,
- to engage with sensitive, unattractive and often silenced issues in an authentic and human manner,
- to imagine other options and offer choices to mainstream approaches,
- to be critical by entertaining skepticism, humility and careful consideration for other views and possibilities.

Through such dialogue we can clarify, humanize and make sense of professional practice and create new ways of practicing, that are professional and credible in a world of accountability, that are ethical and grounded in values, and that work with our colleagues and clients in mutual respect of interests, persons and abilities.

*Professionalism*

*Professional* behavior (or *professionalism*) comprises those actions, standards and considerations of ethical and humanistic conduct expected by society and by professional associations and members of professions (Higgs, McAllister, & Whiteford 2009, p. 108).

*So you're a professional ...  
What can I expect of you as a client?  
What does your profession demand of you?  
What status do you have in society?  
How do you match your responsibilities against your privileges?*

*I want to be a professional?  
I've learned about my role  
I've learned to do my role  
I understand my profession's code of conduct  
but there seems to be more than this to it.*

*I look at established practitioners,  
and experts in my field  
I see their various approaches  
to the task in hand  
to working with people – their clients and colleagues.*

*What sort of professional practitioner  
do I want to be?  
How do I live out,  
– embody, authenticate –  
my professionalism?*

*Serving Individuals and Society*

The term professional practice can be understood as “the enactment of the role of a profession or occupational group in serving or contributing to society” (Higgs et al, 2009, p. 108). Clearly professions and their members have a role and responsibility to contribute to society and provide professional services to members of society. Professional status comes with this obligation; it is not just a means of acquiring the privileges of recognition and income. Not only is professionalism recognized in professional codes of conduct and statements of ethical practice, it is also being increasingly recognized in university statements of graduate learning outcomes where university graduates are expected to demonstrate roles of contributing to society such as ‘to demonstrate global citizenship’. While many such statements are part of university and professional discourse, what this means in reality can be taken-for-granted or made secondary to such demands as enacting evidence-based practice, fiscal accountability, performance efficiency and other aspects of managerial approaches to practice management. We need to produce well-rounded graduates who

recognize and honor their responsibilities. Alongside the wider goal of citizenship as a desired output from professional education, there is a growing emphasis on valuing life-wide education (utilizing wider contexts and sources of learning beyond academic settings) as rich inputs to higher education (see, Barnett, 2011). WIL is well placed to address the demands expressed in this section.

#### *Thinking, Decision Making and Judgment*

Practice without judgment and decision making is simply the implementation of procedures; indeed it is not professional practice at all. Professional education needs to encompass the development of profession-specific decision making abilities utilizing the knowledge base and techniques (e.g., data collection and analysis) of that profession. Professionals need to be able to critique and judiciously use available evidence, to rely on their own practice knowledge to make choices about best practice actions for the given circumstances (e.g., client's needs and interests, location, resources), and to make decisions in the absence of certainty or learned precedents. This is what we expect of professionals – to use judgment to make the best choices and to be able to articulate and justify their decisions.

#### *Being Critical, Challenging Hegemonic Practices, Recognizing Interests*

To use judgment and be critical in making decisions requires practitioners to understand what practice is (as discussed above) and embody it holistically, rather than just to learn and use the parts (the techniques and knowledge base) of their practice field. They should be able to recognize and critically appraise the interests underpinning practice and to learn to challenge taken-for-granted and hegemonic practices as the 'automatic' or unquestioned best practice.

Habermas, a leading critical social scientist and philosopher developed a theory of knowledge and human interest (Habermas, 1972). Interests are the motivations, intentions, and goals that guide behaviors. Habermas divided interests into three categories, technical, practical, and emancipatory. He argued that technical interest has a scientific bias and aims for technical success, practical interest has a pragmatic bias and aims for consensual understanding, and emancipatory interest is directed towards critique and emancipation, and aims for critical understanding. Such interests may be implicit and invisible; they are often unspoken and provide unconscious motivations for our actions. It is important for practitioners to understand and own their interests and to make their practice compatible with these interests; doing and being what they believe in. Also by recognizing interests in the practice of others, practitioners can seek to understand the rationale for their practice and question the basis for different practices.

#### *Choosing a Practice Model: Living Practice Ontology and Practice Epistemology*

Practice, can be collective (as in a profession's practice) and individual (i.e., an individual practitioner's practice). A (collective) practice comprises ritual, social interactions, language,

discourse, thinking and decision making, technical skills, identity, knowledge, and practice wisdom, framed and contested by interests, practice philosophy, regulations, practice cultures, ethical standards, codes of conduct, and societal expectations. An individual's practice model and enacted practice are framed by the views of the practice community as well as the practitioner's interests, preferences, experiences, perspectives, meaning making, presuppositions and practice philosophy (Higgs, 2012).

Philosophy of practice includes practice epistemology (the understanding of practice knowledges and how they are generated) and practice ontology (being and becoming in practice, the way practice is embodied). These concepts are rarely taught in professional entry programs. Students may themselves bring such knowledge to practice or may acquire it during their careers but they lose much if they lack this appreciation and understanding of how to appraise, choose and shape practice.

Practice models come in many shapes and forms; for example, technical-rational, empirico-analytical, evidence-based, interpretive, and critical emancipatory models. What model practitioners choose is a reflection on their education, their profession's traditions, and their personal values and choice.

*Practice is about being and becoming  
the practitioner that is the best of me  
and the best I can be for and with others.  
In practice I draw together my life-practice-world  
with the lives, needs, interests of others.  
Practice involves knowing, doing and thinking  
- understanding and enhancing practice  
through knowledge review and development  
participating in practice discourses  
to expand and re-shape my own knowledge  
and the profession's knowledge base.*

#### *Practice Wisdom and Artistry*

Much of the layering of advanced practice – building on basic competence to develop integrated capabilities, expanding on expertise to move further towards practice wisdom (see, Benner, 2000) and artistry – arises through adding reflexively and humanity to practice. It is an expansion of the depth and breadth of practice through experience, education and feedback, and through self-challenge. It is also a refinement of practice through the addition of nuances and finesse as well as those human understandings that emerge from genuine and respectful human engagement.

*As a novice I look around and ahead  
I admire the experts' skill and knowledge  
and strive to emulate their abilities.  
I watch in awe those practitioners  
who embody practice artistry*



*and see what is fine  
and wondrous  
about practice.  
I admire the wise practitioners  
whose deep knowing  
knows no bounds  
who draw all forms of knowing  
from texts and studies and practice and life  
into a rich appreciation  
and understanding  
of the best of what practice can be.*

### *Collaborating and Working with Others*

Practice activities occur within the social relationships of the practice context, the discourse of the practice and practice systems, and the settings (local and wider) that comprise the practice world. Collaborating with others is a complex phenomenon to understand and a challenging range of activities to pursue. Recent doctoral research (see, Croker, Trede, & Higgs, 2012) identified eight interdependent dimensions core to the experience of collaborating. Five dimensions expressed interpersonal dimensions of endeavor: engaging positively with other peoples' diversity; entering into the form and feel of the team; establishing ways of communicating and working together; envisioning together frameworks for patients' rehabilitation and effecting changes in people and situations. Three reviewing dimensions, reflexivity, reciprocity and responsiveness, operated across the endeavor dimensions. By identifying meaning structures of the experience of collaborating, this study highlighted the importance of seeing beyond clients' surface needs and context and beyond team members' professional affiliations in order to become aware of their contextualized interpersonal and activity-related collaborating capabilities.

### *Dealing with the Marginalized and Taboo Dimensions of Practice*

One of the most difficult things for novice practitioners to learn is the *deliberately* unspoken aspects of practice that constitute the marginalized and taboo matters; the things that you are supposed to know not to do or talk about. Much attention is paid to hegemonic practices – the dominant, promoted, currently endorsed dimensions. Yet other practices are silenced.

*Why do my colleagues, my seniors, my supervisors  
favor this approach to that?  
Why can't I work overtime – unpaid – my choice  
to finish my work to my satisfaction?  
Does it show others up?  
... someone mumbled something about budgets.  
Who chooses which clients are given priority –  
I thought they were all supposed to be the same?*

*Why does the senior get to veto proposals  
without consultation or explanation?  
Why did he get that promotion over him or her?*

*I don't get it.*

*Social Justice, Advocating and Giving Voice to the Silenced*

Loller and Butcher (1999, p. 1) pointed out that living in a globalized world can be associated with often accepted and unquestioned dominant discourses, structures, and expectations, "it is important that people are educated to be more aware of and advocate for those who are alienated and excluded from dominant structures". They argued that changes to educational systems are required if the graduates of these systems are to be "both committed to and capable of participating at a local level in decision making which has an influence on social structures" (p. 1).

One aspect of promoting social justice and giving voice to the silenced is to consider the place of collaborative decision making. While team-based decision making among professionals requires considerations of working across disciplinary cultures (which can be a particular challenge for novices) the inclusion of clients as decision making partners poses an even greater challenge. Professionals bring their expertise to practice decisions and traditionally have operated as knowledge owners and guardians, using this knowledge (often unshared and across power differentials) to provide services for/to their clients.

Increasingly, consumers of professional services are more well informed and have greater access to professional knowledge (e.g., via the Internet) and want to have more of a partnership role in decision making, with greater respect for their preferences, agency and knowledge (of their situation, needs, capabilities) as part of the decision making process. Re-interpreting collaborative decision making along these lines fits more with a critical social sciences model (see, Trede and Higgs, 2008) than historical technical-rational models of professional dominance. Critical social science practice models aim to foster critique and emancipation from both unreflective and intentional dominance in decision making. They employ collaborative decision making as a strategy that enables practitioners to liberate themselves from unnecessary constraints and to work authentically with patients, to empower patients to reclaim responsibility for their pathways, autonomy, dignity and self-determination. Collaboration starts with critique, skepticism and curiosity to deepen understanding and to identify the scope of common ground for change and engages clients in dialogue and choice rather than instruction and compliance.

*Does my practice manner and actions  
invite collaboration and show respect?  
Or, do they demand recognition of my professional superiority?  
What if the shoe were on the other foot  
– how would I like to be treated?*

*How does my practice need to change  
to be there – with others  
to work with them  
towards negotiated goals?*

### *Self-Critique and Reflexivity*

All of the above practice pursuits would be for naught without the capacity and commitment for self-critique and self-development – manifest in the habit of, as well deliberately sought as periodic time out for, reflexivity (see also, Archer, 2007). These activities require honesty but also the development of an internal yardstick for standard setting and re-setting and the capacity to learn from practice.

*I am not just being, I'm becoming  
... the practitioner I seek to be.  
I am looking inwards and outwards  
to create a vision for my practice  
and to pursue this with ongoing refinement  
and aspiration to improve.*

## TEACHING AND LEARNING PRACTICE IMMEASURABLES IN WORK-INTEGRATED LEARNING

Key theoretical foundations of Practice-Based Education (PBE) (Higgs, 2011, p. 2) suggest that, as an educational strategy, PBE:

- is situated within practice-relevant contexts,
- involves reflexivity, participation and dialogue,
- occurs in many communities of practice (including workplace, academic, multidisciplinary communities),
- involves a process of socialization into professional/occupational worlds, roles, identities and career paths (see also, Zegwaard and Coll, 2011),
- involves engagement, through industry partnerships, in practice-based teaching and learning activities, and
- develops capabilities and behaviors that will enable graduates to contribute to local communities and society as responsible citizens and professionals who display ethical conduct and duty of care.

In this way PBE provides a framework complete with goals, strategies, a critical frame of reference and a range of contexts for achieving these outcomes. To assess students' performance in the context of their overall educational preparation for practice and specifically, in the context of workplace learning requires a consideration of these intentions and dimensions of education. Thus, assessment must neither be concerned with superficial aspects of practice nor simplified to the limitations of basic assessment tools. Assessment needs to encompass the rich scope of practice – in content and in process. And assessment needs to *rise to the occasion* just as students are expected to *rise to the occasion* in pursuing a

grounded, sufficient-for-today as well as prepared-for-tomorrow education to be ready-for-their-future-practice and to-be-ready-to-make-themselves-ready for their future-future-practice.

#### ASSESSING PRACTICE IMMEASURABLES IN WORK-INTEGRATED LEARNING

To return to the nature of professional practice (Table 1) we can identify four important considerations by looking at these attributes and capabilities needed for professional practice. Firstly, many of these capabilities and attributes are difficult to measure. Secondly, to reduce a complex capability to one or several parts of the capability (e.g., the therapist's appearance as a measure of professionalism) is vastly inadequate. Thirdly, the assessor's judgment inherently contributes a greater dimension in such assessments than empirically precise measurements. Fourthly, these capabilities are not readily separable in practice or assessment of practice. The implication of these factors is that we need to re-think assessment strategies in order to assess the more complex and invisible aspects of practice.

Consider for instance, the typical forms of assessment that are utilized in WIL placements: direct observation of student performances in real-world practice, practice exams (e.g., demonstration of a treatment on a patient), log books, student presentations (of cases, topics, a proposed product, e.g., advertising campaign for a hypothetical client), student self-assessment and peer assessment. How might these reasonably assess the student's commitment to professionalism and ethical conduct? Alone, they cannot. In addition to actions or proposed actions, students need to be questioned on their rationale. As well as their ideas of best practice in the given situation of practice, students need to indicate how they have sought to understand their clients' interests and preferences and how they have involved the clients (if possible) in the decision making, implementation and critique of the proposed, and actual action plan for practice engagement. Alongside the espoused rationale for implementing complex practices (such as setting up contingency plans or demonstrating ethical conduct) students need to be able to manifest this in their practice, so assessment of both plans and performance are required, on more than one occasion.

Many of these arguments and strategies raise the question of how the assessor (and the university) can ensure the quality and accountability of assessment. If the assessors' assessors demand objectivity and reliability within and across assessors, is this even possible given the need for assessors to use judgment. Objective and criterion measures of largely immeasurable abilities and performances are problematic to perform and indeed, undesirable. To assess the immeasurable, demands re-interpreting assessment and developing approaches that redefine best assessment practice and 'measure up' to the rich reality of professional practice itself rather than just try to measure it. In summary, greater uses of the following strategies are recommended:

- multiple points of assessment (without making the students feel they can never show their lack of knowledge or skills and can never ask for help because they are always being judged),

- mixed dimensions of assessment (rationale and performance, planning and implementation) to see the authentic coherence of the students' understanding, performance abilities, commitment, standards and self-critique,
- multiple sources of assessment including self, peers, and
- placing formative assessment, feedback and opportunities to improve ahead in time of summative assessment, while recognizing the duty of care of the assessors to the student, university and future clients of responsibly grading the overall performance of the student in terms of satisfactory completion of expectations for the phase and standard of achievement for the WIL activity/placement in question.

Assessment cannot be separated from learning, whether it is summative (demonstrating and assuring outcomes attainment) or formative (to shape and give feedback on learning) (see also, Boud, 2010). The former focuses students' attention on 'what matters' which, interestingly, may be interpreted by students as 'what will I be assessed on?', 'what do I need to learn to pass this placement/unit/subject', but to teachers it typically means 'what must be included in this unit and what do I have to assess to demonstrate satisfactory outcomes to my assessors or course accreditors?'. Formative assessment focuses on things that are essential and immediate for the students' learning, desirably involves direct or follow-up feedback to students, and relates to their current progress and learning needs.

In WIL, in professional entry courses, there is a liberating opportunity and imperative to move beyond the obvious and measurable and the needed-straight-after-graduation things to use informal assessment and feedback to look (also) at immeasurable factors. This could range from 'very novice' to 'nearly graduate' expectations. At novice level this could involve helping struggling students to raise their attention from recall of knowledge learned in classrooms and obsessive practicing of discipline-specific technical skills or tasks, to grapple with insights and expectations with what it means to be a professional in 21<sup>st</sup> century workplaces. For the advanced student who is (nearly) ready to face graduate responsibilities, immeasurables could take the form of asking the student to critique the interests and philosophy underpinning their own (and others') chosen practice models, and planning post-graduation learning objectives to extend their graduate capabilities. In the midst of learning and being assessed on core learning outcomes, the invisibles of practice are typically put aside as being: 'too difficult (to learn and assess)', 'too early' (and thus left to post-graduation learning) and 'up to the student – or graduate' (rather than being the educator's or institution's responsibility). These are deficient motivations and strategies. In the interests of all the stakeholders – including students, current and future clients, educators, universities, employers, and accreditation authorities – we need students to learn about, and be assessed and receive feedback on, their performance of and engagement with the invisibles of practice. And, we need them to engage authentically with self-assessment and development around these invisibles. For students and educators to avoid these essential as well as difficult aspects of learning and practice, is to leave them 'up to chance' or 'hope they work out'. This is not good enough and is and definitely not the practice of professionalism.

Finally, beyond this article and journal edition focusing on WIL assessment, it is vital that the assessment and learning of the immeasurables occurs in the rest of the curriculum also and that there are good links between these learning arenas. In the classroom, in online learning units, in peer learning forums, and in self-directed learning, students could well have greater opportunity to discuss complex issues such as ethical codes of conduct and expectations of consumers, in group discussions outside the immediate location of the workplace with its pressures for action, the busy workloads and the real-life consequences of professional practice in WIL placements, etc. Conversely, the 'it happened to me' or 'what I learned from real clients' learning around complex aspects of practice during WIL needs to be brought back to wider student group learning situations (classroom, distance peer group forums), not just for reinforcement or interpretation, but also to enrich peer learning and compare/contrast and synthesize the students' academic curriculum learning with the workplace learning.

## CONCLUSION

It is important to recognize that the scope and reality of practice transcends measurement in experience, assessment and in learning. This is despite those factors that would negate such reality including: the hegemony of evidence-based practice, the pervasiveness of demands for measurable outcomes and performance metrics, and the predominance of empirical parameters and strategies driving research.

In recognizing the value of the immeasurables of practice we need to plan ways to assess students' performance in practice situations – in work-integrated learning – we need strategies that rely on judgment and practice wisdom from professional practice and educational practice.

*Practice at its most essential  
yet most immeasurable  
is often invisible  
frequently challenging  
and inherently situated  
in lived experiences  
and choices  
within the framework  
of professionalism  
and practice provision  
for the benefit  
of clients  
and society  
and the learning practitioner.*

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## About the Journal

The Asia-Pacific Journal of Cooperative Education publishes peer-reviewed original research, topical issues, and best practice articles from throughout the world dealing with Cooperative Education (Co-op) and Work Integrated Learning/Education (WIL).

In this Journal, Co-op/WIL is defined as an educational approach that uses relevant work-based projects that form an integrated and assessed part of an academic program of study (e.g., work placements, internships, practicum). These programs should have clear linkages with, or add to, the knowledge and skill base of the academic program. These programs can be described by a variety of names, such as work-based learning, workplace learning, professional training, industry-based learning, engaged industry learning, career and technical education, internships, experiential education, experiential learning, vocational education and training, fieldwork education, and service learning.

The Journal's main aim is to allow specialists working in these areas to disseminate their findings and share their knowledge for the benefit of institutions, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that will lead to the advancement of effective practices, development of further understanding of co-op/WIL, and promote further research.

## Submitting Manuscripts

Before submitting a manuscript, please ensure that the 'instructions for authors' has been followed ([www.apjce.org/instructions-for-authors](http://www.apjce.org/instructions-for-authors)). All manuscripts are to be submitted for blind review directly to the Editor-in-Chief ([editor@apjce.org](mailto:editor@apjce.org)) by way of email attachment. All submissions of manuscripts must be in MS Word format, with manuscript word counts between 3,000 and 5,000 words (excluding references).

All manuscripts, if deemed relevant to the Journal's audience, will be double blind reviewed by two reviewers or more. Manuscripts submitted to the Journal with authors names included will have the authors' names removed by the Editor-in-Chief before being reviewed to ensure anonymity.

Typically, authors receive the reviewers' comments about a month after the submission of the manuscript. The Journal uses a constructive process for review and preparation of the manuscript, and encourages its reviewers to give supportive and extensive feedback on the requirements for improving the manuscript as well as guidance on how to make the amendments.

If the manuscript is deemed acceptable for publication, and reviewers' comments have been satisfactorily addressed, the manuscript is prepared for publication by the Copy Editor. The Copy Editor may correspond with the authors to check details, if required. Final publication is by discretion of the Editor-in-Chief. Final published form of the manuscript is via the Journal website ([www.apjce.org](http://www.apjce.org)), authors will be notified and sent a PDF copy of the final manuscript. There is no charge for publishing in APJCE and the Journal allows free open access for its readers.

## Types of Manuscripts Sought by the Journal

Types of manuscripts the Journal accepts are primarily of two forms; *research reports* describing research into aspects of Cooperative Education and Work Integrated Learning/Education, and *topical discussion* articles that review relevant literature and give critical explorative discussion around a topical issue.

The Journal does also accept *best practice* papers but only if it present a unique or innovative practice of a Co-op/WIL program that is likely to be of interest to the broader Co-op/WIL community. The Journal also accepts a limited number of *Book Reviews* of relevant and recently published books.

*Research reports* should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research.

*Topical discussion* articles should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical discussion of the importance of the issues, and implications for other researchers and practitioners.



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