

The unique added value of co-present group learning

Interview with Prof. David Beckett, Melbourne Australia

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Weiterbildung: You have been working on the topic of learning in and from groups for a long time. What triggered this interest back then? Which questions were in the foreground for you at that time?

David Beckett: In the world of Western education, particularly schooling, right from kindergarten to university entrance, the bedrock assumption for two millennia is that learning is what a young person – an individual – does. And teachers work at guiding that person to see what she or he most wants to achieve in life. Perhaps this is more commonly an Anglocentric view within the Western educational world, and Australia was monocultural until recently. I can often remember being asked, as a child then as a teenager, by well-meaning aunts and uncles, ‘David, what do you want to be when you grow up?’ When I had grown up, and I became a schoolteacher, I heard lots more of this at parent-teacher interviews, when the young learner needed steering or motivating. It’s an odd fixation, this individualistic, or we may say, atomised, assumption. Don’t get me wrong. Ambition is terrific, and giving it a nudge is fine, but what is ignored, overall, is the fact that daily learning throughout schooling and into the adult workplace is shaped within groups: classrooms (age-groupings), projects (curriculum groups), study tours and camps, sports and arts performances and events. When I became an education academic and researcher, I similarly wondered how workers right across the labour market became practitioners: for example, how do novices become expert? And what does a professional look like? Simply, you can say: ‘That individual is qualified, or registered, or trained – ask to see their documents, or resume [CV]’. These are products of effort. Worthy effort, but effort spent in group activities. More deeply, then, I’m fascinated, as a philosopher in education, in how what we DO in schooling, and in the adult workforce, each day, with participation in myriad over-lapping groups on the go, *makes us who we turn out to BE*. ‘Being’ questions are identity questions. So, the aunt or uncle who asked the young David what I ‘wanted to BE’ was on to something important. But the typical Western assumption is that it is all up to ME. By contrast, I am curious about how who we are and what we DO are shaped by socialising, right from birth, more than by my choices. These identities (as a plumber, a lawyer, a musician, a parent...they over-lap in individuals) powerfully emerge from living, working and growing up, in small groups. Paul Hager, in Sydney, my distinguished co-author, and I in Melbourne, in several joint publications, such as the 2020 UNESCO paper reckon that it’s time to acknowledge the reality of daily life and work. Let’s bring into the light the honest truth: DOING small group participation makes US, and therefore ME, who we are. So, let’s leave behind the atomised David. He isn’t really the boss of his future – though, over the past 2000 years of Western education, he and his ancestors have been brought up to think they are!

A central concept in your work is that of complexity. Can you describe - briefly and very non-complexly - what this is about for you?

For Paul Hager and me, complexity theorising by the South African philosopher of science, the late, famous Paul Cilliers, is central. Cilliers argued that the natural world is very helpfully explained by relationships, that form systems. Think of flocks of birds that wheel about in the sky, or sand dunes that shift as the wind drifts across the desert, or cells within our bodies that slip and grip to one another as we digest food: these are 'complex systems' because new patterns of relations emerge from the changes in the whole (the flock, the dune, the juices), not through changes in the parts. So 'complex systems' contrast with 'simple systems', such as Newtonian causality, where linear mathematics builds up the 'whole' and the outcomes you can predict, from the parts. A Boeing 747 is complicated, but it is not complex. You can pull the plane apart and put it back together, and it will be predictably operable, and maintainable. It's linear logic. And that's fine for humanity. But complexity starts with *the non-linearity of relations as a whole*. The whole is something beyond the sum of its parts. What emerges is typically novel, and unpredictable. Now, for Hager and Beckett, in our 2019 book called *The Emergence of Complexity*, the heart of the challenge is to move the natural science modelling into the social sciences, such as education, law, social work, economics and so on. How does complexity theorising look when humans are doing the pattern-making, not flocks of birds, or sand dunes)? Well, all educators (and all artists, lawyers, economists) know that humans are *agentive*: we are active, motivated, purposeful creatures. Learning, creativity, criminality and market forces are all examples of agency. Birds and sand-dunes lack agency. So, we've set out how non-linear relations at the level of groups of humans generates novel and desired outcomes. Complexity theory starts with the whole (group), not the parts (individuals). More ambitiously, it stays with the whole group. It insists that when *reductions* of human activities are required (as they are, every day: we need a reduced version of almost everything – a script if you like – to make meanings of experience), these should be practically justified. So, an IQ test, a KPI (Key Performance Indicator), a legal or construction code, any manual, rules of games, a recipe, ethical rules (e.g. 'Ten Commandments') and so on, all of which display linear logic, are essential but do not capture novel and desired outcomes. That's the big claim complexity theory makes in moving from the natural sciences to the social sciences such as education. We are agentive creatures (we are built to make difference in the world that we want to make), and we learn from the day of our birth that *we are best agentive in groups*. This is sadly under-recognised in the Western world, and it is time we as educators, put that right. It's about bringing human sociality and agency to the front. Small groups start with the mother-baby dyad on Day One. This group of two blossoms out to small groups experienced through family, communities, and into schooling, and beyond into the adult workforce. Powerful daily experiences in small groups shape our individual identities. In the groups that provide the flow of life and work, humans are immersed, a bit like flocks of birds or wind-blown sand dunes. Our senses of self-hood arise within these non-linear small group experiences. Every day offers novel and (ideally) desired outcomes, right from birth.

You have jointly written a background paper for UNESCO on 'co-present group learning'. Can you tell us what 'co-present' means? What are the central statements in your paper?

We formalise these powerful daily experiences in small groups in the notion of the 'co-present group'. The definition of a co-present group is: 'A group of between two and twelve individuals whose social processes are likely to cause novel, even unpredictable, outcomes, from which the group as a whole learns'. You can see that human agency is embedded in this definition, because 'social processes' always involve humans relating to each other, that is, getting up, and out and about, with activities we (as individuals) want to do. In the UNESCO paper, we develop this definition through five key – and widely unrecognised – features of this novel emergent learning. These are:

1. Learning is distributed across the group: no individual group member is able to fully comprehend everything that emerges from the group's interactive processes.
2. Learning emerges from the group's activities in themselves: it is not 'applied' or inherited, from outside it.
3. Emergent learning cannot be specified in advance: it is therefore often genuinely novel, creative and innovative, and, in virtue of its focus on shared social processes amongst 2-12 individuals, it is also inclusive, contextualised and participatory.
4. Learning is typically beyond any individual's learning: so, groups can achieve learning that is beyond any individual acting alone.
5. Emergent learning is not restricted to just a particular group: this is because interactions between (a) groups, and (b) between individual members of particular groups who participate in other, often overlapping, groups, are both very powerful mechanisms by which creative and innovative learning can and does emerge – it ripples out, and up.

Here are some examples of co-present groups; not surprisingly, these are common human experiences all around the world, although I'm giving a Westernised version here. The mother-baby dyad I mentioned already is a co-present group of two, where the mother is committed to nurturing through shared activities with her baby towards the formation of a novel human identity. This new human selfhood is a joint effort, even though the baby's agency is very much 'under construction'. It isn't an equal relationship, though over years it may become so. A jury of (typically) twelve is charged with forming a verdict through jury-room processes that are all-inclusive of human experiences: emotions, cognitions, and embodied presence are in the social decision-making mix, and the judge gets the outcome. Between the dyad and the jury, a common example is workplace-based small groups tasked with, say, short-term projects, or some permanent part of a larger organisation's operations. Early in my career, when I was a high school teacher, I became head of a sub-school of about 100 teenagers, and 10 core staff. Within a school of over 1000 students, several of these sub-schools brought pastoral care and educational achievement closer together. My fourth example comes from the arts: jazz or string quartets work best when they share the whole performative plan (the improvisation, or the Mozart

score) amongst themselves with an element of interpretative spontaneity. No repeat performances of the same quartet's interpretation are identical, yet, ideally, each performance is an aesthetic success. So, with these four common examples, we think we have pinned down 'co-present groups'. These are daily experiences and their educative significance is profound: humans learn best from each other in small groups (2-12 participants) that share a purpose, and we do it every day, and all our lives!

Is there a particularly powerful example of a group that learned "as a co-present group"? Can you describe this a little?

The entire world was transfixed by the 2018 search and successful rescue of the Wild Boars football team of teenage boys and their coach, from a cave in northern Thailand. Rising floodwaters had trapped them and no cave-diving expertise could show a safe rescue plan. You will remember the TV news over about eighteen days: Thai politicians, families, navy divers and lots of international experts all desperate. The air supply would run out and the waters would drown them! Yet we know all the boys and their coach were rescued, alive and well. How did this occur? In our UNESCO paper we explain that it was a textbook case of co-present groups in action. Remember, complexity theorising starts and stays with the forming and persistence of relations (not individuals) amongst group participants. These relations energise the group towards their common purposes. For humans, agency and skills are shared across the group. Our four examples of co-present groups each show this sharing – it doesn't need to be equitable, because it evolves as the situation evolves. The mother-baby dyad is a vivid example of this. This 2018 Thai cave rescue involved eighteen divers, led by the Australian cave-diver, Richard Harris who, in his 'day job' is a medico. In fact he is an anaesthetist. His expertise was central to the rescue plan, which involved Thai navy divers and other expert 'cavers' from around the world. Their group of eighteen was divided into what we call 'co-present groups' of pairs or three or four rescuers, because the cave had several chambers over its 2.5 km length, many of them fully submerged. Harris' novel idea was to anaesthetise each boy within the chamber where they group had remained for several days (lost to the world for nine of those days, without food), then the divers would 'float' the boy out: each rescue took about three hours and required each drugged and bound boy to be passed from chamber to chamber, between each co-present group of expert divers. The dangers were massive: no visibility, narrow craggy openings that could ensnare masks and oxygen pipes, sedation that may subside and induce panic, and turbulent subterranean flooding. None of the eighteen experts had worked with each other, and nowhere in the world had this ever been tried. So the rescue plan was shaped and refined amongst them all, but tailored to particular parts: Harris and a colleague performed the sedations on the boys and their coach deep in the furthest chamber, then one by one the boys were slowly passed between the chambers and through the floods up to the cave mouth. This plan was 'emergent' both in the literal and in the educational senses. As educators, we can see in this miraculous story the five features of novel and purposeful learning that complexity theory provides, namely: that learning was apparent right across the

various co-present groups (in chambers and underwater) and across the entire eighteen in the diving group; that the planning and the implementation of the rescue emerged from the urgency of the challenge and the activities that simply had to happen (inaction would mean deaths); that nothing could be specified in advance (because this plan was a world-first); that no individual diver understood how to do it all; and that various over-lapping groups (such as Thai naval or Australian medical practices) brought expertise into the situation in the cave.

In the introduction to this paper, you mention that too little attention has been paid to this kind of group learning so far. What has been looked at instead? And how do you explain this?

Continuing education for, and in, the workplace has been colonised by what you could call a 'KPI culture'. Sure, accountability for outcomes (or performances) is important, but rarely does this reside in the work of a single individual. Yet Key Performance Indicators are attached to Me, or You. Rarely is it Us. We all know why a KPI culture reigns: it is easier to hire and fire an individual. It is also easy to see skills and knowledge residing in an individual. The entire Western world assumes that expertise is atomised, as I pointed out earlier in this interview: little kids are brought up to see their purposes shaped by what she or he wants to Be, by what she or he wants to Do. But once you get into the workplace, you find out pretty quickly that there are local ways to Do, and local ways to Be. A KPI culture wallpapers over the subtle nature of these local 'performances'. Not only that, a KPI culture makes success at work very generic. An individual, stripped down to a stick-figure drawing, can indeed perform well, or competently, against, say, national or international competencies. You can tick all the boxes! But you could find that no-one locally wants to work with you! I remember one of my Masters students, a nurse educator, who came to my class after a busy day in the hospital ward. She was annoyed with a student nurse who had ticked all the nursing competencies but made such poor judgements about quality care, the ward staff were pleased she had left. Haven't we all experienced this in some colleagues? As labour markets have nationalised and work has globalised, we see expertise floating off and away from local contexts where it is actually shown (or not shown, because not everyone is terrific at work). My point is that a KPI culture is entrenched because it suits organisations to be able to move quickly in HR (human resources) to meet market forces. That's fine, but what falls through the cracks is precisely what complexity theory brings to attention: that the most valuable expertise is found in the activities of co-present groups, as they address local issues on a daily basis. Yet this is not captured by current HR operations, nor by a KPI culture that atomises work – and workers.

For the practice of continuing education, insights from social psychology and educational psychology, among others, are relevant. In a few key words: In which 'classical' concepts do you see the greatest need for further development based on your current findings?

Behaviourism is very limiting. Yet it has been perhaps the main traditional underpinning of all learning, both in continuing education (certainly in corporate training), and in the fundamental work of schooling that precedes that. Whilst schools and teaching in schools have moved into more holistic understandings of learning (notably and wonderfully, the work of John Dewey), there is still a lingering fascination with 'IQ' as the sole marker of ability. In adult workplaces, we all know that intelligence is essential but no less so is 'EQ' -the affective. Psychologists who work with practitioners on the emotions ('affect'), and especially how the affective plays out in groups, seem to me to be very helpful for continuing education. After all, a co-present group, at its heart, actually HAS a 'heart'. Participants in the Thai cave rescue in 2018 had obviously committed to saving lives! In our less dramatic daily work, we are, very often, committed to what Aristotle called the '*telos*', or purpose (or what Dewey called the 'end-in-view'): to wellness, to justice, to knowledge, to safety, to love, to profitability, to beauty...and so on. These include the purposes or goals of a mother-baby dyad, or a jury, or a jazz or string quartet, or a sub-school for 100 teenagers, or a corporate project that has a deadline and budget. All these examples require a theory of co-present groups, as I stated earlier, and everyone requires what psychologists and psychiatrists call 'affective functioning'. That's the 'heart' of shared activities that are agreed upon. This is a concept we need to really work up. How do participants share purposefully the decisions they find themselves making on the way through a project or a performance or in a jury? What is the emotional buy-in? All learning is normative. But not all learning is immediately conscious, *as learning*. It may first appear in a group or an individual, as cognition, or as feeling (affect). There is a big future in making this 'emergence of learning' more explicit in education. After all, when we 'find ourselves' Doing something we express our Being: we 'find our Selves', to be a bit slick about it. We build identities from working and living together in small groups that share and grow meanings, and purposes. That's a long way from B F Skinner and rats and rabbits in boxes pulling levers.

What prompted you to demand this perspective of group learning more strongly now, at this point in time?

I'd been doing some work on and off with some Indigenous Australians, in continuing education. It's a maxim in education, that when you teach something, you learn a lot from the learners. As an Anglo male, I found myself (there's that 'find yourself' phrase again) learning that in the Indigenous female view of the world, there's a fundamentally different ontology. By this I mean the world looks different – has different 'furniture'. So late in the 1990s I became aware of the Indigenous 'relational' world-view, or way of seeing. In far northern Australia, near Darwin, there was a fishing-boat pulled up on the beach. Your readers can easily imagine a similar scene in Germany. The fact that we can readily imagine such a scene described just as I

have done so, shows a Western 'way of seeing'. Take a look at that sentence. There was 'a fishing boat' pulled up 'on a beach'. We see two items and a relationship between them. That is normal in the West – at least for males. My Indigenous colleagues do not see two items and a relationship between them (an atomistic ontology). They see now, and saw then: 'beach-on-ness'. New word for me; new concept too. The *relationship* is the first and primary ontological experience. That was a "wow" moment for me. As Indigenous experiences and politics have become more prominent in Australian life in recent years, and currently, I have become more strongly committed to moving my own Western male way-of-seeing sideways and exploring alternatives. So, around 2010, when Paul Hager and I came across complexity theory via the work of Paul Cilliers, he and I were already receptive to relationality. It was not part of our own way-of-seeing, nor an explicit part of our philosophical research, but it quickly became important. It was that single puzzling concept of 'beach-on-ness' that did it for me!

What is the most unusual, surprising ... question you have ever been asked in connection with your pedagogical work?

Yes, I remember it vividly and I did not have a good answer to it then. Here is the question and what I now think, after all that I've done and taught since then. Perhaps your readers will come up with something. About twenty years ago, in a Masters class, with the nurse educators and various occupations, I was setting out these relational possibilities, (though without the complexity overlay), when one of the class, who worked for Melbourne public transport, asked me how a suburban train driver could possibly exercise any group-based agency, judgements, or affectively-focussed work. All he had to do was drive the train and it was (and is) timetabled, repetitive work. That question still bothers me. All occupations have elements of repetition. Indeed, behavioural competencies thrive on just that! I can tick the boxes because I saw it several times. For safety, we need strict behavioural performance of these. There is no small group experience, just the driver in the train cabin. The best I can say is that not all train-driving is strict or robotic performance and that there are many spontaneous and often critical situations that require sound judgement and (afterwards) consultations about the best 'way forward' (sorry about the train-driving pun here). You could as a train-driver contribute to better driver training and manuals by adding authentic tricky situations to enrich what you might come across when doing the work. So, overall, I'm not happy with my answer and I certainly want to preserve and honour repetitive work. Even brain surgery needs to be performed via a manual, at least for novices. But a haemorrhage needs to be managed. Can this be taught? Probably. It seems to come down to expecting the need for sophisticated practical judgments (what Aristotle called *phronesis*) even when the unpredictable occurs. And that's the heart of complexity theorising because it is *affective* as well as *effective*. Train driving needs that and so does brain surgery.

When you look at the big challenges of the Anthropocene, do you see connections to this with your approach to group learning? What would you like to see from whom as the next step to get close to this?

I'd like to see greater recognition of the way co-present groups' learning can spiral up, or ripple out, from the local daily site or workplace, to broader, larger, higher structures, in organisations and occupations and industries and communities and systems. The challenges facing the Anthropocene are global and inclusive. Leaders and decision-makers in general could rightly focus on the small group, but mainly to see (it's all about 'ways-of-seeing', after all) *how local relations generate novel and innovative outcomes from which we can all benefit*. Here's a creative example. Go to YouTube, find the *Bachstiftung*, in St Gallen Switzerland, and key in cantata BWV 66. It's a video from way back in 2011, now with free access. The camerawork, even in the first Chorus, acutely displays the superb musicianship of Rudi Lutz and his choir and orchestra. Your 'way of seeing' this is mainly via close-ups, that is, the lenses are on the co-present groups of strings, continuo, sopranos, and so on. It's up close and personal. Yet the whole of the performance is greater than the sum of these and Rudi and his technicians do it for us. Main point? The Anthropocene requires we learn from one another, in ways of seeing that make the whole desirable. Bach was brilliant! Centuries later, this music lives afresh for the world to enjoy. That's a sign of what complexity theorising can unleash if we think creatively about small groups.

The interview was
conducted by Wolfgang
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