COMING OUT OF THE CLOSET: FROM SINGLE-CELL CLASSROOMS TO INNOVATIVE LEARNING ENVIRONMENTS

BARBARA WHYTE
Te Kura Toi Tangata Faculty of Education
The University of Waikato

NIK HOUSE AND NIKKI KEYS
Welcome Bay School
Tauranga

Abstract
The New Zealand Ministry of Education encourages schools to update to flexible learning spaces and activate teaching approaches that augment such physical settings. Many schools have embraced the concept of innovative learning environments (ILE) and team teaching, motivating a trend fast gaining popularity in New Zealand primary schools. However, apart from positive self-reporting documentaries from enthusiastic schools, there is a dearth of New Zealand-based information available to assist prospective schools to consider the complexities of adopting this trend. As they venture ‘out of the single-classroom closet’ into a collaborative ‘community of learners’, the staff of one primary school in the Bay of Plenty has been researching their own ILE practices and processes through inquiry, regular appraisal and self-review monitoring. While the school’s experience is contextual and unique to its own specific situation and community, it provides a representation of some affordances and constraints that other schools might contemplate when they similarly venture into ILEs.

Keywords
Collaboration; innovative learning environments; flexible learning spaces; differentiation; inquiry.

Introduction
In current New Zealand (NZ) educational parlance, school classrooms and modern learning environments are ‘out’ and flexible learning spaces and innovative learning environments are ‘in’. However, such terminology changes beg the question: are these only semantic modifications, or are there conceptual differences under these new labels?

A scan of the NZ government Ministry of Education (MoE) 2016 website indicates support for a conceptual difference. Declaring that schools ‘need’ to upgrade to flexible learning spaces (FLS), the Ministry invites schools to plan and use their ‘5 year agreement funding’ to subsidize such upgrades (Ministry of Education, 2016a). The Ministry’s overall aim is though, not to advocate just for changes to physical teaching spaces, but to enhance educational outcomes for learners in schools. It provides factsheets (Ministry of Education, 2016b, 2016c) to indicate research shows there are optimistic links between teaching and learning environments, student engagement and achievement, and priority-learner engagement and achievement. It also encourages schools to view international sites for research (e.g. Organisation for Economic and Cooperation Development (OECD) website) that reinforce such optimistic linkages.

Innovative learning environments
Flexible or agile learning spaces are seen as one means of enabling (but not guaranteeing) positive educational outcomes for learners (Ministry of Education, 2016a). Flexibility means more than just
the popular idea of removing desks and chairs and providing more informal furnishings within a space previously known as a classroom. FLSs are essential components in the concept of an Innovative Learning Environment, which is what the Ministry is really endorsing in its advocacy for flexible spaces. Previously, the term Modern Learning Environment (MLE) was adopted to cover these educational spaces. However international recognition of the phrase Innovative Learning Environment (ILE) as encompassing the overall concept being promoted, means the Ministry is transitioning or migrating away from MLE towards ILE terminology. Sceptics suggest though, that such terminology change is merely semantic; ‘new fad’ (Mealings, 2015) or re-surfacing of ‘open-plan’ (Hickey & Forbes, 2011; Williams, 2013). However, others are convinced there is a conceptual difference (Alterator & Deed, 2013; Verstappen, 2015), and this is evidenced in NZ by the increasing number of school blogs with positive stories of their development of ILEs.

Referred to variously, for example, as ‘resources’ (Dumont, Istance, & Benavides, 2010) and ‘physical technical structure’ (Aitken & Core Education, 2016), physical spaces contribute to an ILE, but need to be considered as only one element. The establishment of an ILE provides school leaders and teachers with the ability to go beyond ‘classroom’ connotations: encompassing any place assigned for learning (e.g., art suite, gymnasium, laboratory, library, tutoring room, staffroom) while also acknowledging the dynamic interface between such places and contributing to the notion of learning spaces as a potential additional ‘3rd teacher’. Appealing and adaptable furnishings enhance these spaces, however it is more important that there is capacity to reconfigure the spaces to support different types of teaching and learning activities. Viewing online sites that show visual insight into ILE environments (search: Innovative Learning Environments: images) can provide the reader with a wealth of visual examples that go far beyond any description capable of this written article.

There are multiple schools in NZ that showcase their new or upgraded physical environments online through the Ministry website (Ministry of Education, 2016b); through private educational development companies (e.g., Core Education) and individually through digital compatible sites (e.g. social media or YouTube). The intimation associated with an ILE and flexible learning spaces, is that it offers opportunity for flexible teaching approaches. Teachers have successfully encompassed flexible teaching approaches for decades in regular NZ classrooms (Fraser, Aitken, & Whyte, 2013; Fraser, Aitken, Price & Whyte, 2012; Whyte, 2007; Whyte, 2008; Whyte, 2013; Whyte, 1996). However, contemporary online case studies suggest many NZ schools are using flexible learning spaces to pair or group teachers and interpret such an approach as ‘cooperative teaching’ (Friend, Reising, & Cook, 1993). Some of these case study schools adopt the 1990s practice of cooperative teaching as either ‘supportive teaching’ (where one teacher takes the lead instructional role while the other moves around the learners to provide support on a one-to-one basis as required, i.e., ‘one teacher and one drifts’); ‘alternative teaching’ (where one teacher takes responsibility for the large group while the other works with a smaller group); or ‘parallel teaching’ (where two or more teachers work simultaneously with different groups of learners in different parts of the classroom, for example, ‘station teaching’ when teachers divide content and students, and then each teaches the content to one group and subsequently repeats the instruction for the other group (Friend, Reising, & Cook, 1993).

There are though other schools that interpret flexible teaching approaches as the more recent practice of ‘complimentary teaching’ (where co-teachers do something to enhance the instruction provided by the other co-teacher(s) for example, one teacher might paraphrase the other’s statements, or model note-taking skills on the digital screen (Villa, Thousand, & Nevin, 2008). As well, yet other schools interpret flexible teaching approaches as ‘co-teaching’ or ‘team teaching’ (where two or more teachers do what teachers do for a class: to plan, teach, assess and have responsibility for all the students in the room, taking an equal share of responsibility, leadership and accountability (Thousand, Villa, & Nevin, 2007; Friend & Cook, 2002). In one form of co-teaching or team teaching, both teachers deliver the same instruction at the same time (‘one brain in two bodies’), an approach that is dependent on mutual teaching styles. However, schools that have a strong conceptual grasp of ILEs appear to gravitate more towards another form of team teaching; one where the learners are acknowledged within the learning environment as its core participants, encouraging their active engagement, and developing within them an understanding of their own activity as learners. As well, in such a learning environment where the social nature of active learning is well thought-out and organized it is regarded as co-operative learning. Moreover, this learning environment is highly sensitive to individual differences among the learners in it (including acknowledgement of her/his
prior knowledge). This latter approach to team teaching is reinforced as most appropriate by the well-regarded research into ILEs by the OECD (Dumont, Istance, & Benavides, 2010; Groff, 2012).

An ILE is defined by the NZ Ministry of Education as “the complete physical, social and pedagogical context in which learning is intended to occur” … “capable of evolving and adapting as educational practices evolve and change, thus remain future-focused” (Ministry of Education, 2016a, p. 1). Such a definition takes the concept beyond the physical, to encompass open spaces with access to a range of facilities that serve to cultivate social interaction and collaboration. More deeply, the definition captures the teaching and learning philosophy that fortifies the educational practices in such spaces. That is, the invitational pedagogical essence or heart of the learning environment (OECD, 2013), which motivates the community of learners within it to take maximum advantage of such physical and social spaces to learn. Guided by a research synthesis that acknowledges seven key principles of learning (learner at the centre; social nature of learning; motivation; individual differences; challenge; assessment for learning; horizontal connectedness) that underpin quality learning environments (Groff, 2012), the MoE definition is evocative of rhizomatous educational practices that continually develop and spread; rather than remain as static practices that tend to wilt.

Welcome Bay School

Welcome Bay School (WBS) in the Bay of Plenty provides an example of a school that cultivates such rhizomatous educational practices as it progresses along the journey towards becoming an ILE. The school is decile 4, with a diverse community (socially, culturally, economically) and with approximately 50% Maori on the roll. It was built in 1979 as an ‘open plan’ school with prefabs introduced over time. Two of the earlier ‘open spaces’ have been upgraded in the last seven years, with the third to be completed early 2016. Like some other NZ schools, WBS staff forayed overseas to view examples of schools developing environments and practices towards ILEs. However, while utilising ideas and strategies gleaned during these Professional Learning Development (PLD) overseas visits and viewings of other NZ schools, WBS has strived to evolve its own ILE to fit with the entire school community but differentiate in response to identified needs of the community. Initially in 2014 when WBS staff agreed to trial ‘MLEs and team teaching’, as it was conceived at the time, teaching teams were sorted out (a mix of ‘arranged marriages’ and ‘chosen marriages’). Some teams danced enthusiastically into the fray, while others more nervously toe-dipped. Learning ‘how to’ was experiential and at times classic Tuckman’s (1965) stage theory of small group developmental sequence (Forming, Storming, Norming, Performing). The ‘Forming’ of the WBS teaching teams was a relatively relaxed stage in the development process, however at times was followed by a ‘Storming’ stage where differing teacher expectations and management styles created tension until negotiated and compromised. From there ‘Norming’ (unified or agreed practice) had the capacity to settle the teams into a state of equilibrium that enabled a cohesive ‘Performing’ stage of collaborative practice to develop.

Essentially, there needed to be a reconsideration of schooling as expected for the last 100 years e.g., age based levels, timetabling,) and this aspect was more of a challenge for some than having another teacher constantly in their space. End of year reflections indicated teachers were either enthusiastic about team teaching and willing to continue the following year, or not enthusiastic and wanting to return to a previous way of teaching.

In 2015, a more deliberative approach was taken. Grounded in the notions of Ako ā–roopu (a group learning from each other) and Teaching As Inquiry (having an open mind to change that is improvement-focussed, not change for the sake of it), alongside management fostering the concept of ‘collaboration’, “staff moved away from the construct of WBS as a ‘Learning Community’ to the concept of WBS as a ‘Community of Learners’ ” (House, Personal communication, 2015). Meaning they repositioned to a culture of collaborative and collective responsibility, based on the belief that collaborative teachers have the most impact (Hattie, 2015). That is: a culture that declares and accepts that everyone is a learner; everyone is open to challenge and being uncomfortable, but safe and supported; and everyone is open to supporting others. A culture of not just flexible spaces, but an authentic ILE environment with staff collaboration at the heart: involving a shift in thinking from “this is my class of children, to these are our children” (Keys, personal communication, 2015). Within this culture, the staff function as four syndicates known as ‘Hubs’. Hub teams vary in size (from 2–3
teachers) and operate in differing learning spaces (open spaces recreated from the original open plan, through to groupings of single-cell ‘classroom’ spaces).

Researching the processes involved in the move to an authentic ILE was three-fold: school-wide inquiry into practice monitoring, regular school appraisals monitoring, and school self-review monitoring. A combination of the documentation from these three aspects reveals rich data about positive progress. One example is the development of understanding of the concept of collaboration.

**Collaboration**

The school-wide inquiry into collaboration began in 2012 with a school management determination that collaboration was important for two major reasons: increased transparency, and enhanced capacity and accuracy. Raising capacity was favoured as a goal over raising accountability, however a belief that accountability was integral to capacity, meant increased accountability was expected to compound with increased capacity.

The development of understanding across the staff of the concept of ‘collaboration’ is evident in the definitions generated at year apart school-wide staff review meetings, following experiences with collaborative teaching. The staff collective definition in 2014:

> Collaboration is working together with shared purpose incorporating different perspectives to achieve a common goal, whereas the collective definition by 2015:
> Collaboration is creating a community who are all working towards common goals and vision, drawing on strengths, sharing ideas and learning from and with each other. Other collective idea contributions on collaboration from the first 2015 review indicate increasing perception of the attributes of collaboration: a deep collective determination, common understanding, ownership, equal stakeholders, shared accountability and different perspectives. (WBS Staff Review 1 Concept Chart, 2015)

Moreover, when applying the 2015 definition of collaboration pragmatically to their teaching and learning, accountability was clearly evident to the staff in their joint response:

> All the children belong to all of us and we (children, school & wider community) should be working towards their betterment; we have a common purpose/goal to grow children to their maximum potential; we’re being more efficient and effective at working towards the common goals; we’re sharing knowledge; we’re creating a rich and diverse pool of ideas and strengths—adding value to all. (WBS Staff Review 1 Concept Chart, 2015)

Gratifyingly though, the response to how collaboration might look across the school, indicated staff mutually perceived similar benefits for the children as for teachers:

> … caters to wide range of learning styles; grows communication skills and brings value and purpose to sharing ideas and working together; learning from each other (ako—kids/kids, kids/teachers, teachers/kids, community/teachers, community/kids etc.); ownership and accountability. (WBS Staff Review 1 Concept Chart, 2015)

**Horizontal connectedness**

Similarly, the combination of the documentation from the school’s three monitoring processes, identified earlier, reveals another example: the building of horizontal connectedness within the school and with others. ‘Shakedown 2014’ was a professional development event across six professional learning network schools, where collaborative teaching approaches and strategies were shared. At that time, based on practical experience WBS staff felt confident to ‘give one; get one’, that is, share their practices as valid and learn about others’ valid practices. ILE practice continued to develop positively from there, with modifications in practice and trust towards greater collaborative practices. For instance staff coaching each other and building on good practice: for example, Hubs creating and using their own moderation when needed, in order to move all children (mainstream, low achievers and priority learners) to the next point in their learning. Another instance: of staff looking at achievement data across Hubs, indicating a conceptual shift from ‘I own my kids’, to ‘we own this
year group’; accommodating teacher knowledge so teachers could have learning conversations, moderate data and get to know the children across rooms. Rather like the village owning the child instead of one teacher owning the child, based on the notion ‘we’re all in this together’.

By early 2015, a whole-staff meeting generated a written list of advantages of collaborative teaching. Contributed to by each Hub team, the list indicated Hub team practice (underpinned by the seven key principles of learning mentioned earlier) was developing as advocated by the OECD (2013). However, there were still questions from the staff that showed the Hub teams were sincerely reflecting about the quality of developing practice. In-depth reflection continued to be evident at another mid-year self-review staff meeting that interrogated ‘What has our inquiry revealed?’ There was positive acknowledgement of the value of Hub-team learning and the collective staff written record of responses indicated a level of honesty in terms of pragmatics, such as:

There is no hard and fast ‘right’ way; teams need to be carefully collated; teachers need the social and emotional skills to effectively collaborate; time is needed for teachers to collaborate successfully; considerable class culture development is required to establish expectations.

An appreciation of the importance of accountability was evident in the collective staff response: “gathering evidence that this is increasing kids capacity for learning; we have to carefully consider approaches for children with high behavioural needs”. As well, there was consideration of how students need help to enhance their collaborative skills: “children need to learn the social and emotional skills to collaborate”; but also perception of the benefits to students: “children benefitting from enhanced opportunities to learn from more than one teacher and from each other”; and “collaborative practice aligns as a culturally responsive approach”. Interestingly, it was more common at this stage that teachers did not want to revert to a single cell model.

However, at the same meeting, when considering the challenges and considerations of collaborative practice, points raised were more pedagogical, for example, ‘professional trust’: extensive time invested in development of assessment and reporting processes; knowledge, consistency, to support teachers trusting each other’s professional decisions regarding kids learning. Some challenges and considerations were also social, especially regarding ‘communication’: when I need to speak with a colleague regarding a challenge, how do we agree to do this. And specifics such as ‘time’ were identified: collaboration requires time, how do we create this? However, answers to questions raised became self-evident to staff as they unpacked the advancements that had been made, which include the following:

‘Time’: Using an idea stimulated from a visit to Melbourne schools, WBS created ‘staff time’ (known at WBS as ‘Tuakana/Teina Time’, but AKA ‘Professional Learning Time’) that equates to an afternoon of PLD release per week for each of the four Hub teams. Tuakana/Teina Time means that for two hours, junior and senior students interact together supervised by one Hub, while another Hub is released for PDL to inquire into its own practice. Thus, WBS teachers gain a rotation of PDL time within school hours, to scrutinise data, map out systems, brainstorm, reflect together, plan collaboratively and self-appraise.

‘Differentiated PLD’: As each Hub team analyses data, identifies student learning requirements and deliberates how best to meet those needs, their own professional learning needs become evident. Each Hub defines its team’s professional learning requirements in the light of determined student learning needs for both mainstream and priority learners. As a result, follow-on differentiated coaching and mentoring is an integral part of Hub PLD. Such practice is an attempt to replicate differentiation as applied in the flexible learning spaces with children.

‘Social-emotional Learning’: This is developed as a staff professional learning focus at the beginning of each year, with an expectation that it is taught throughout the year. Hub teams plan together and use Tuakana/Teina Time as a vehicle to support this learning. This relates to ‘Capacity’: continual fostering of capacity-building, with careful regard of each team (what are the needs, where do strengths lie, personality combinations). Another consideration here is ‘Effective Systems’. These

---

1 All quotes within the two following paragraphs are from the WSB Staff Review 2 Concept Chart, 2015.
have been promoted via ongoing sharing through regular team meetings. An example is the school has moved from a “‘whole, part, whole’, to a ‘part, whole, part’ approach” (House, personal communication, 2015) to first develop collaborative culture in smaller groups. Thus, abilities are developed and children are upskilled on how to work in larger groups prior to participating in them. As well, students are now organised into mixed social and academic groupings (known as Island Groups) for some learning rotations, where they talk together about their learning. Teachers have worked extensively with students so that they understand what collaboration means; and they believe students appear to be applying this understanding in the flexible learning spaces and in the playground.

A question frequently asked by schools intending to implement team teaching, is what is the best way to form the teaching collaborations? In hindsight, WBS can offer the following insights from its experience:

a. Management choosing the teams and particularly with reasons in mind doesn’t work (e.g., not-so-strong teacher with stronger teacher, so first will learn from the latter).

b. Friends choosing to work collaboratively because they like each other and believe they are like-minded, doesn’t always make a durable combination in the end (friendships can end up broken).

By the end of 2015, WBS staff had identified three different models of how ILEs can function simultaneously and effectively within one school. All three models are bound but not constrained by buildings and encompass a blend of the team teaching approaches mentioned earlier, so there is no one identifiable approach used across the school. Such differentiation fits with school leaders’ vision of supporting the enhancement of capacity so that staff adopt and have ownership of the learning spaces in a genuine, not imposed, way. A brief summary of these models:

1. **Physical: Open spaces inherited from previous 1970s open-plan school buildings.**

   Three teachers working collaboratively with combined three classes. One teacher frequently takes low achieving and/or priority learners in one area of the space when needed, however integration of all and everyone working towards assisting low achieving and priority learners, is the main aim. The three teachers believe ‘these are our children’ and right from the beginning, have planned, taught and assessed as a collaborative team for the entire class.

2. **Physical: 2 x double teaching spaces.**

   Four teachers paired in two double teaching spaces. The teachers plan together, and intermittently combine teaching of two or four classes with separate class teaching. Trialled it in previous year and found it worked better the second time around, because collaborative practice understanding increased with experience.

3. **Physical: 3 separate single-cell classrooms, side by side.**

   Previous year staff planned together but taught separately. 2015, took 1st step in Term 2 with collaborative teaching of writing. Writing was a success, so moved to owning and working collaboratively as a team, of own volition. By term four, the three classes were comfortably working together in two teaching spaces (with the other room as a break-out space) and the teaching team maintaining full collaborative practice. An organic, ‘bottom-up’ approach.

The benefits of collaborative practice extrapolated at a WBS staff Review at the end of 2015, indicated the school management’s goals of increased transparency and enhanced capacity and accuracy were on track. The generated list of advantages indicated staff welcomed the feedback and advantages that greater transparency afforded their efficiency and practice. There was a strong sense of ‘we’re all in this together’ as positive, and most advantages related to increased capacity and accountability:

- shared responsibility/power sharing; multiple views/perspectives; using strengths to enhance the learner’s experience; enhanced consistency of programme delivery; increased accuracy in making decisions regarding learners; constant meaningful and organic moderation of practice and programmes; high levels of support and ability to provide responsive support; coaching and mentoring; can “create” space in the
programme for specialist support; flexibility and ability to modify programmes quickly. (WBS Staff Review 2 Concept Chart, 2015)

It is evident from the above, that WBS staff have adapted to ILEs in accordance with Alterator and Deed’s (2013) research that affirms “… teacher reaction to the new open classroom features adaptability, intensification of day-to-day practice, and intra- and inter-personal knowledge and skills” (p. 1).

The change to collaborative practice has enhanced the adaptive expertise of WBS staff. They now have the ability to apply meaningfully learned knowledge and skills flexibly and creatively in a variety of contexts and situations (Hattie, 2015). It is not just a matter of flexible learning spaces, but also flexible use and development of change ideas (Kotter & Cohen, 2002) that have enhanced the WBS staff understanding of collaboration and the effective development of their spaces as innovative learning spaces.

Acknowledgement

This article, written collaboratively between university and school staff, is the result of Welcome Bay School leaders researching their own school practice within a partnership collaboration with the University of Waikato.

WBS principal, Nik House, and deputy principal Nikki Keys invite discussion with schools. Contact: nik@welcomebay.school.nz & nikki-k@welcomebay.school.nz

Reference List


http://www.education.govt.nz/assets/Documents/Primary-Secondary/Property/School-property-design/Flexible-learning-spaces/MOETeachingLearningEnv.pdf


