Teacher Education through and for Distance Education: Riding the Wave, Avoiding the Undertow

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Abstract: This presentation begins with a personal reflection on my experience as a classroom teacher and as a distance teacher. I will then explore the ways in which a teacher's professional identity is forged and how this has been challenged in recent years by increasing use of ICT, the pandemic and the even more recent emergence of generative AI. I will then explore the ways in which this understanding has shaped our work within the Commonwealth of Learning, especially in relation to my own work in open schooling and in the Pacific. By using examples from practice, explaining the thinking underpinning these practices and the impacts thereof, I hope to build towards a pragmatic framework for future teacher development using distance education to learn about and to practise distance education, in ways that build on positive experiences and encourage experimentation and innovation.

Keynote Address:

Thank you for the introduction. As you have heard, my name is Tony … and I am a teacher.

This morning I will reflect on being trained as classroom teacher but now working in distance education, how we might help more teachers make that transition and why I think it is necessary.

I want to start by summarising my own story.

We start on the shores of Lake Malawi in southern Africa. At the age of 22 I left the UK to become an English teacher in Malawi in a posting organised by the British charity Voluntary Service Overseas. I ended up in a secondary school in a small town on the northern shores of Lake Malawi. On the day before school started, the principal outlined what was expected of me:

- Teach English in Forms 1, 2 and 3 – ok good so far
- Teach Physical Science in Form 3 – a bit of a surprise
- Teach Maths in Form 2 in the Night School …two more surprises …

Apart from the subject surprises, I had not engaged with Science or Maths since A-level and had brought no resources with me from the UK, it turned out that the Night School was an after-normal school hours contact support service to students enrolled with the Malawi College of Distance

Education. So, I became a teacher of both day-scholars and distance education learners. Interestingly, many years later, Malawi College of Distance Education is one of my core open schooling partners now I am at COL.

After Malawi, I moved to South Africa and began to work for an NGO called Promat Colleges. Promat Colleges was originally founded to provide learning pathways for nurses and teachers. Under apartheid, it was possible for black South Africans to leave school at junior secondary level and to gain a certificate, and then a diploma, as nurses or teachers. The challenge for them subsequently was that they were denied access to further or higher education and training because they had not matriculated from secondary school. Promat offered an accelerated programme to address that gap. The demand was overwhelming, and I was subsequently asked to establish a correspondence college version for all the students whom we could not accommodate as day scholars. Then Promat partnered with the Universities of the Witwatersrand and Natal to begin to offer formal teacher in-service training through print-based and content-supported distance education. I was responsible for managing all the content development and was also a tutor. I had become a teacher of teachers through distance education.

Twelve years later, I moved to another NGO called Saide and my first major assignment was to form, train and manage a team to implement a newly approved in-service programme for teachers – the National Professional Diploma in Education – for the University of South Africa, a dedicated distance education mega-university. The programme was offered through a mixed mode process – print, contact and some limited online communication. This led to several other engagements in which I was asked to provide support in developing capacity in using distance education for teacher education within Unisa, with other institutions in South Africa and then with a growing number of partners in other parts of sub-Saharan Africa. Eventually this took me to the University of Pretoria where I oversaw the transition of teacher education through distance education from a print-based and contact-support model to a blended model for all students (both contact- and distance-based) as a pre-cursor to beginning to offer fully online teacher education courses. I had become a teacher of teachers of teachers through and about distance education.

These experiences caused me to reflect on what it means to be a teacher.

To paraphrase a former South African Minister of Education, what we know about primary school teachers is that they love their children; that secondary school teachers love their subjects and university teachers love … their research!

Despite these different focuses, we are all teachers, and a teacher's identity is built up over many years in many different domains as illustrated. Any attempt to influence their practice requires an understanding of where they have come from professionally, as classroom managers, as caregivers acting in loco parentis, as professionals employing a range of teaching, learning and assessment strategies and as subject or phase specialists. School-level teachers are unique in being the only professionals whose clients are forced to come to them – we choose the doctors, lawyers, or tax advisers we want to see – but the 30 to 50 children who turn up in a typical school classroom are obliged to be there!

Teacher identity is formed over years of experience from being a learner in school, then as a student teacher in college and then as a classroom teacher in a school. For most teachers currently in service, these experiences were all framed by engagement in a physical space. Most teachers will need time to move into the virtual space, probably initially through technology-enabled learning and then blended learning approaches. Teachers also need reassurance and support in this journey. They know their learners and can draw upon their experience pre-emptively to address challenges. However, most of our current and aging teacher population teach a curriculum determined elsewhere, use one or more textbooks prescribed by other people, and follow a timetable which they might have had little input into.

However, the increasing access to mobile technology, has challenged teachers in terms of their subject expertise, their pedagogy and their classroom management.

What is the role of the subject expert in a world in which learners can find out anything about anything?

If the teacher no longer needs to be the sage on the stage, should they become a guide on the side or even a co-learner/co-creator? How do they make that transition after at least 4 years of formal training and 10, 20, 30 or even 40 years of practice has reinforced the message that teaching means being in the same space at the same time as their learners?

How do they manage a learning process which they can no longer completely control, for example by collecting all the textbooks in again at the end of the lesson?

As if technology wasn't enough of a challenge, this sneaky virus came along and took away the semblance of control that teachers still felt they had. Now teachers had to learn new ways to support learning at a distance. There was no time to learn to do this properly, so we saw a range of emergency remote teaching strategies. Teachers quickly learned that they could not hold the attention of learners in Zoom or Teams for extended periods and learners learned they could get away with – "our internet went down" and "the dog ate my cell phone" "… and that's why I was not online and did not upload my homework". Of course, the experience was much worse for the many teachers and learners who were not connected – and it will take us a long time to catch up with that lost teaching and learning.

Since teachers returned to their classrooms, we have seen the emergence of generative AI and teachers are now asking how can we be sure that our learners' homework or assignments weren't written by ChatGPT or Bard or one of a growing host of other applications? Of course, one could ask – how do we know that the learners' homework wasn't written by their parents, siblings or a best friend … so maybe the problem is with the nature of the assessment rather than the means of completing it? But it is a challenge.

This brings me to my metaphor of riding the wave and avoiding the undertow.

Although we frequently talk about the "new normal", for many of our 85 million teachers the experience of emergency remote teaching only reinforced convictions that learning can only happen meaningfully face-to-face in a controlled environment. This is especially the case in schooling where,

with a few exceptions like South Australia where they are piloting a custom-build GAI chatbot, EdChat, we have mostly returned to normal rather than to a new normal.

What interests me is how to take forward and build upon some of the more positive experiences from the pandemic and continue the process of increasing use of distance education provision … in my arena through open schooling?

And how do we mitigate the negative and avoid the undertow back into past practices of the exclusively classroom-based one-size-fits-all industrial model? And why is this important in relation to schooling provision anyway?

Let us start with the why.

This graph is taken from UNESCO and shows the numbers of out-of-school-children (OOSC) – that is children of school-going age who are not in school. You won't be able to see the figures but look at the shape of the graph. Despite our best efforts, the reduction in numbers of OOSC has progressively leveled off. In fact, UNESCO reports that in the past year, the number of OOSC has risen by 6 million to 250 million children of school-going age who are not in school. They are destined to add to the growing numbers of youths not-in-employment, education or – training (NEETs) in many countries. The challenge is particularly acute at the secondary school level. We don't have enough secondary schools, classrooms or teachers.

The growing number of NEETs is problematic. Young people with no opportunity to progress into further education and training or employment are more vulnerable to radicalisation or to turning to antisocial activities to survive. Even in the relatively peaceful environment of Canada, we have witnessed a growing incidence of youth mob attacks and thefts. Obviously, there are complex reasons for this, but access to motivating and flexible learning and employment opportunities must surely be at least one strategy. But offering more of the same is also not a solution as witnessed by the growing phenomenon of school refusal.

Moreover, most developing countries do not have sufficient budget to expand traditional provision. In fact, in recent years some countries have reduced, not increased their investment in education. Several institutions I work with are struggling financially as their subsidies have been cut due to a decline in economic activity. The question arises as to whether we can make greater use of distance, blended and online learning to reach more with less. We have known for well over a hundred years that it is possible to learn things independently if learners have access to appropriate study materials. And certainly, the pandemic showed us that some kind of interaction and learning support can continue if teachers and learners have devices and internet and the skills to use them.

However, as the GEM 2023 report observes, technology is not a panacea and it's going to be a long time before we can ensure everybody has access and the skills to select and use the most appropriate technology in the most appropriate ways for different contexts and needs. In most developing countries it is necessary to make provision for learners and teachers without devices or internet, for those with devices but limited or no internet and those who have both devices and internet. In our work in open schooling, I call this a Moodle-cubed approach. First develop all the core content in texts and graphics only – so it can be exported to PDF and printed or downloaded at

an internet-enabled centre in one go and work on even a low-end device. Then go back and enrich the course materials with video content which will work for learners and teachers with higher-end devices and which could be exported and shared more generally as open textbooks. Then enrich the courses further with H5P interactivity for the growing numbers who can get online on a fairly regular basis. It's essential that even our teachers and learners in rural and unconnected areas have access to all the content necessary for success and that's why they are my starting point.

But there are examples which offer possible solutions. In Mozambique, for example, it is not uncommon to find schools which support multiple cohorts of learners – for example morning and afternoon day-scholars and evening cohorts for older learners seeking to complete their schooling. It has even been known also to have weekend cohorts and school holiday cohorts. So, the same physical infrastructure can be used to support a greater number of learners – we can offer teachers greater flexibility about which cohorts to work with, we might make use of retired teachers and we might even have peer-supported study groups. It obviously needs careful planning, however.

We need to work out which parts of the curriculum can best be covered independently and then how best to use the reduced time for contact.

So, we need to have free and easy access to appropriate content as OER and we need to offer continuous professional development to teachers in various ODFL strategies to support blended learning.

But we can't stop teaching: so we need to offer continuing professional development in manageable but meaningful bite-sized chunks.

For some ideas about how this might be done, I want to turn to our work in the Pacific.

We are currently involved in an initiative called the Partnership for ODFL in the Pacific. The partnership is between the Commonwealth of Learning and Pacfold Learn at the University of the South Pacific with the support of the New Zealand Ministry of Foreign Affairs and Trade.

One of the first activities of the partnership was to source useful OER on aspects of Emergency Remote Teaching, OER and aspects of ODFL, as well as examples of ODFL subject content, and share these through a regional OER collection.

We then created national versions of these and offered training to customise for different national needs.

So, we had created a space for sharing at a national level.

We also developed guides on use and re-use of OER contextualised for the Pacific, while teachers also have access to COL's award-winning free micro-courses on OER, blended learning, universal design for learning and other areas, which they can access at any time according to their needs.

We then began to offer a series of short courses to introduce teachers to different aspects of ODFL provision. These typically run over 4 weeks, require about 5 hours a week of engagement and offer various exit badges so teachers can complete as much or as little as they need. All the content is

freely available for use and re-use even after we have offered a facilitated version on a platform created from open access tools.

We sought to develop the capacity of teachers to use OER to support both Emergency Remote Teaching and possibly future blended provision. We started by re-offering the OER4OL short course we had developed at the start of the pandemic at the request of the Ministry of Education in Fiji and we then offered a series of follow-on open courses which built on the introductory course.

We set out to reach 3,000 Pacific teachers over a four-year period – but we have reached over 6,000 in less than three years.

Course completion rates in minimum facilitated time average about 10%, which is not unusual for the Pacific, but we have designed multiple exit points with badges so teachers who stop out can come back at any time. Typically, 40-60% of teachers earn one or more badges in minimum time. The course content is always open and available in WordPress and teachers need to sign in only if they want to access the assessment opportunities. Once we have facilitated a session and we know everything works, we make a back-up and our partners at USP PACFOLD-Learn re-offer the course for teachers who prefer to feel that there is a real-person available to them – although as noted the courses never actually close and assessment can be completed at any time.

However, for sustainability, we need progressively for our Pacific partners to assume responsibility for continuing professional development locally. So, we then created a new course aimed at supporting Pacific lead teachers to use the open course platform we had provided to re-contextualise the existing open courses and to re-offer them in their own context. Take up was not high so we have modified the process to offer an intensive mentoring support process through bi-monthly online training and support sessions complemented by an ongoing open-source chat.

We also have several complementary activities outside of the Partnership activities – we are supporting the Wisdom Community of Pasifika Teachers which is an initiative of Fiji National University to skill teachers and to help them to skill one another … in Papua New Guinea we have supported the Flexible Open and Distance Education unit to migrate to online provision – the Ministry of Education in Vanuatu have worked with us on an open and innovative schooling model and are in the process of creating a sub Directorate of Distance Education, we are supporting teacher development in Kiribati through our Teacher Education initiative and the ministry in Tonga recently asked us to support the development of a national ODL policy as a precursor to establishing open schooling …

So, there is evidence of growing interest in ODL among the Pacific Island Countries and a growing pool of ODL practitioners who will be able to help others …

So, what does it mean for teachers in this sort of new normal?

Teachers as professionals need spaces for the sharing of professional experiences, especially positive experiences of teaching with technology in professional learning communities but they must also be places to share their concerns and frustrations.

Teachers are also managers of people, resources, time and reporting, among other things. Over the course of their careers, they will have developed a range of strategies based on physical presence and need support to develop new strategies for a virtual environment.

Teachers act as caregivers in loco parentis in the physical classroom setting. Teachers need guidance in how to fulfil this role in a virtual environment, for example on how to pre-empt and address cyber-bullying and to help learners navigate the online space safely based on an understanding of their current use.

Teachers develop a range of pedagogic practices over the course of their careers. While there may be some shared underpinning theoretical assumptions, working with eighty children in an under-resourced classroom in a developing country in a rural area presents different challenges from working with two hundred first year students at a university in a connected urban setting or three hundred learners in an online cohort. Reimagining and experimenting with alternative strategies for a virtual environment requires time and support.

Teachers are also phase or subject specialists. There is need for targeted support in addition to more cross-cutting support. For example, how does the early childhood development teacher support emergent literacy through educational play in the virtual environment? How can the senior secondary physical sciences teacher support practical experimentation at a distance? Can we set up an automatic feed for new subject-based resources shared openly?

With GAI and technology will our children in future learn to be human by being taught by robots?

We have 85 million teachers. It is suggested we have a current shortage of 70 million. But I don't see any countries expanding their budgets for education by 80%. So, clearly, we need to use appropriate technology in appropriate ways to support our teachers.

A few years ago I did some work with another NGO called Haramabee. Harambee helps connect unemployed youths with entry-level employment opportunities. They had recruited over a hundred 23-years olds who had completed secondary school and matriculated but who had been unable to pass an industry entry level maths test. The maths test was about Grade 6 level. So, we brought the learners to a centre, gave them access to Khan Academy Maths and they took it from there. I taught very little of the maths myself and was rarely at the centre because this was just one of many projects I was working on at the time. Motivated by immediate feedback, a visible progress dashboard and the award of various badges for different kinds of achievement – and sustained by bananas and sandwiches – these young people were prepared to spend many hours a day "doing maths"! They were not compelled to attend – Harambee simply made their facilities available. Within a very short time, the learners were following different trajectories as some learners progressed more quickly than others in some areas and at the end of the day I could take a look at their profiles and maybe needed to provide individualised feedback to about 10 learners, the rest I could just encourage when I called in at the centre a couple of times a week. After about two weeks, most learners had completed the Grade 6 level, or enough of it, to re-attempt and pass the industry entry level maths test they had previously failed and then went on to employment. As predicted by Sugata Mitra, learners spontaneously sought advice and helped one another, without needing to be

directed to do so. It was a great combination of tutoring, technology, tenacity … and tidbits … in a learning space with no set hours or expectations apart from opening and closing times!

It can be done' So let's ride the wave …

Let's use OER to ensure that all learners and teachers have access to appropriate curriculum resources..

Let's use generative AI and appropriate technology to improve formative feedback, answer frequently-answered questions as often as learners need and to create more personalised learning pathways for the basics – a process that COL is exploring also in the Pacific project in relation both to the learning management system and also the course content.

Let's continue to advocate for ODFL and provide accessible training in bite-size chunks.

And let's save the limited face-to-face time of our too few and overburdened teachers to engage with learners and the learning process at a more critical human level. Let's empower teachers to do what teachers do best – engaging with learners at an inter-subjective level – learning to be and learning to live together.

I would like to thank the organisers for inviting me to speak at ICDE 2023 and to you for listening. I look forward to learning further from you and to returning to Vancouver with additional ideas about how we can support teachers to make more and better use of ODFL approaches.

Thank you.