SOTL IN THE SOUTH

A journal dedicated to the scholarship of teaching and learning in the 'global South'

Volume 7, Issue 1 April 2023

Pages: 83-100

Crafting Medical Education Differently: An Innovative Pedagogical Approach to Enhance Deep Learning in Obstetrics and Gynaecology

Chivaugn Gordon
ORCID: 0000-0002-9751-896X
Department of Obstetrics & Gynaecology, University of Cape Town, Cape Town, South Africa
c.gordon@uct.ac.za

Veronica Mitchell
ORCID: 0000-0002-3436-5185
Women's & Gender Studies, University of the Western Cape South Africa, Cape Town, South Africa
veronicaannmitchell@gmail.com

Gregory Doyle
ORCID: 0000-0002-1321-8178
Department of Health Science Education, University of Cape Town, Cape Town, South Africa
gregory.doyle@uct.ac.za

ABSTRACT

In this article we explore an innovative pedagogical approach initiated during the COVID-19 lockdown period to support student learning in Obstetrics and Gynaecology in the Faculty of Health Sciences at the University of Cape Town. Student isolation and the lack of exposure to clinical cases during this period brought many challenges to the teaching platform. However, the global disruption enabled an ontological opening for imaginative and creative experimentation, an aspect of teaching rarely brought into medical training. We take up the unusual work of a clinician educator and others to describe the process of developing novel video recordings for undergraduate medical students. These videos, used as pedagogical tools, enabled new ways of engaging with core curricular needs in this discipline: for the teacher, new ways of producing teaching materials, and for the students, new ways of learning medical content. The videos drew on a range of creative modes including drawing and acting, to augment student learning. As authors, we suggest that the collision of the clinical content and the performative delivery in the videos fostered deep learning and made the curricular material alive and engaging. The existence of the videos enables a sustainable blended learning approach moving forward. The uploading of the videos as Open Educational Resources onto a YouTube channel and a public website now also contribute to teaching resources extending beyond institutional boundaries.

Submitted: September 23, 2022
Accepted: February 27, 2023

ISSN 2523-1154

Introduction

Alternative strategies for teaching to enable the continuation of instructional delivery were implemented at the initial stages of the COVID-19 lockdown in South Africa (Lindner, Clemons, Thoron & Lindner, 2020; Chaka, 2022). The University of Cape Town (UCT) embraced the new process, calling it "Emergency Remote Teaching" (ERT) (Lange, 2020; Ma, 2022). Emergency Remote teaching involved a forced shift as a temporary deviation from the usual face-to-face classroom engagement as a result of the crisis, and it dominated the changed landscape during the start of the pandemic in South Africa and globally. Medical training was affected by these changes as much as – if not more than – other disciplines, particularly clinical and practical courses like Obstetrics and Gynaecology (O & G), a core discipline for undergraduate medical students.

Many educators were unprepared for the shift from teaching in the classroom to an online space (Jili, Ede & Masuku, 2021; Shin & Hickey, 2021). The most popular manner in which this was done, was through narrated PowerPoints which in some way tried to replicate a lecturer delivering a 'live lecture' (Hulke, Wakode, Thakare, Parashar, Bharshnakar, Joshi & Vaidya, 2022). These presentations were uploaded to the institutional Learning Management System (LMS), which students accessed like an online filing cabinet into which educators uploaded teaching material. These resources tended to be supplemented with video conferencing applications like Zoom and Microsoft Teams which were used to enable synchronous conversations and engagement (Sidpra, Gaier, Reddy, Kumar, Mirsky & Mankad, 2020). Most educators tried to stay in a safe place with their teaching, finding ways to represent their past classroom experiences online – either due to a lack of time to do otherwise, or a fear of the unknown (Jili, Ede & Masuku, 2021). Additionally, the vast majority of online content in the South African context needed to be delivered asynchronously given that many students did not have reliable access to the internet.

There was enormous pressure placed on teachers to maintain the continuity of teaching, despite the constraints of lockdown. Students were also still required to complete academic tasks to enable their progress. The anxiety of dealing with the unknown and the extra workload due to the immediate need to redesign teaching materials and strategies in addition to other core academic functions became a heavy burden for many academics and support staff. These pressures were especially felt in health sciences faculties, as the healthcare platform relies on an annual influx of new graduates to maintain a functioning health service. Furthermore, many of the Faculty's clinical

educators expected to create online material were those called to serve in the COVID-19 clinical service, which created immense difficulty managing competing responsibilities.

In contrast to the safe predictability of narrated PowerPoints, Chivaugn felt an urge to use the crisis as an opportunity to transform her traditional teaching practices; to be creative to help her students through the troubling times and to support their learning through creating unusual and unexpected performances relevant to their curricular needs in O & G. In what follows, we focus on this period of imaginative exploration in the home of an educator during the global shutdowns. We explore the emergence of her unconventional teaching and learning intervention through the production of video recordings which represented a direct challenge to the established medical education status quo.

The process began with the intention to make learning as activating and engaging as possible during the COVID-19 lockdown period. A central aim was to connect with and bring joy to students, many of whom were completely disconnected, sitting in isolation at home, with no synchronous teaching. Furthermore, Chivaugn aspired to induce deep learning, despite the logistical challenges of the pandemic, because it consistently results in higher quality learning outcomes (Trigwell, Prosser & Waterhouse, 1999; Herrmann, McCune & Bager-Elsborg, 2017). Deep learning is associated with true understanding and retention, as opposed to superficial or strategic learning, which relies on rote learning, and tends not to lead to depth of understanding and application. Marchese (n.d) found that students were more likely to engage in deep learning when teachers enabled learner independence, active involvement in real-world tasks, opportunities to work with others and where teachers maximised natural curiosity, amongst others. Ramsden, Margetson, Martin and Clarke (1995) showed that student perceptions that they were receiving good teaching consistently correlated with a deep approach to learning. These studies defined good teaching as that which involves useful feedback; making an effort to understand the challenges students may be having; being good at giving clear explanations; making coursework interesting; appreciating students' contexts and getting the best out of them; motivating students and being willing to listen to and learn from students. Hativa, Barak and Simhi (2001) distilled the qualities of excellent university teachers as follows: "exemplary university teachers are well prepared and organised, present the material clearly, stimulate students' interest, engagement, and motivation in studying the material through their enthusiasm/expressiveness, have positive rapport with students, show high expectations of them, encourage them, and generally maintain a positive classroom environment" (pp. 701–702).

In the context of asynchronous teaching and learning, many of these aspects were not possible, but it was possible to exploit natural interest and curiosity, be organised, good at clear explanations, and make the subject matter interesting, alive and engaging. It was also possible to motivate students to learn with abundant enthusiasm, and to listen to their struggles and needs[1]. To achieve these aims and make deep learning more likely, videos were chosen as a more appealing option than narrated PowerPoints. Additionally, our student body is of a generation that uses social media platforms, especially those with short videos as their main output, for example TikTok, which is one the fastest growing social media applications in South Africa, used by young people in their teens and twenties (McBain, 2021). This was one of the reasons Chivaugn decided to create material using videos as the preferred pedagogical vehicle.

Different role plays connected to curricular content in the students' O & G modules were acted out and recorded by Chivaugn. These portrayals were enacted with multiple everyday items, including dolls, dress-up clothes, toys, drawings, comics, games, kitchen items and so on. Each video aimed at teaching about specific illnesses affecting women (see examples below).

Manning (2016) encourages us to rethink how knowledge is crafted. The pedagogical process described here involved playful performances in which the teacher has (in many of the videos) taken up the role of simulated patient. This humorous role-reversal offers a 'rethink' about how knowledge can be created and transmitted and is a disruption to traditional medical teaching. The performances in the videos were created to provide engaging, empathic teaching resources that could connect students to patient scenarios that were otherwise unavailable at the time of COVID lockdowns. The narratives in the videos emerged spontaneously. They were roughly planned but unscripted and thus more authentic than conventional teaching videos. They captured and represented clinician-patient encounters which stemmed from the educator's own clinical experience of patient encounters.

Considerations of social justice

Access to learning material was a crucial issue during the height of the pandemic and was a core concern for Chivaugn as she considered her teaching practice at the time. These considerations had a significant effect on the process of the content creation. The recorded videos were made available

[1] The University conducted surveys on students' learning needs; students had email access to the teaching staff; and some courses had discussion forums for student questions.

to the undergraduate students through the institutional LMS. The videos were purposefully created to be short, and they were also compressed to avoid substantial data costs to students. When conceiving of the videos, Chivaugn spent a significant amount of time considering how to make the content work for students at home in a rural area with little data and no Wi-Fi, as well as those in metropolitan areas with ample data or Wi-Fi. Transcripts were also provided for students who faced insurmountable data difficulties. In the first iteration, links to the videos were posted, but this was an error with an unintended consequence, as it required students to have data to download the videos, the very situation we aimed to avoid. Subsequently, videos were embedded into the LMS which afforded zero rated access. Towards the end of the COVID-19 lockdown period, when the campus space opened for students to return, the size and bandwidth requirement no longer limited access to learning resources on the LMS. In addition, the aim from the outset was to have content that could be used as Open Education Resources material, allowing free access to anyone in the world, thus further contributing to the social justice aspect of this intervention (see more below).

The catalyst

> Stop doing the clinical work. You are the one who needs to make online content!
> (Friend and colleague of Chivaugn)

Chivaugn had been having a conversation with this colleague about the conflict she felt between clinical and education service. The 'clinician Chivaugn' wanted to dive in and help with the COVID-19 healthcare service. Despite her internal conflict, she made a commitment to the field of education and its pandemic-related challenges. Chivaugn resolved to find a way to make content that was relevant to her student body, the local health context. She wanted whatever happened to reflect her personality and teaching style, already familiar to many students and she wanted it to be freely accessible.

Chivaugn recalls

> The process emerged amidst the many unknowns at the start of the pandemic. In thinking about the background logistics of the video recordings I recall how the Centre for Innovation in Teaching and Learning (CILT) at UCT ran a series of seminars on how to create learning pathways on the institutional LMS platform. In my role as Head of Undergraduate Education in the Department of Obstetrics and Gynaecology, I encouraged my entire undergraduate education team to become involved in these learning opportunities. We then decided who would tackle which topics related to our teaching curricula. My next step for my particular courses was to ask for student

volunteers to help me design the course learning pathways, and to create suitable knowledge content. Five then-students volunteered. Some students helped create the structure for the curricular activity, while others chose to make up some of the content. This left me with the exciting, yet daunting task of choosing how to bring my own assigned content to life. What follows is an explanation of how my affinity for sparkles, vibrant colour and drama materialised into a series of glittering performances.

Turning lemons into a glitter fest

Ingredients for fabulous content development:

- A flair for the dramatic
- A sense of humour
- A desire not to bore students.
- A smartphone
- A small tripod (purchased at a small cost)
- Everything one can get one's hands on in the house: from stuffed toys to potatoes, to the family albums
- A husband, some friends
- A toddler
- Two cats
- The dress-up box
- A willingness to make a complete fool of oneself in the name of meaningful learning.

Chivaugn remembers:

> What I did know, was that narrated PowerPoint presentations just were not going to work for the aims I had in mind. I wanted my students to come alive while they watched the videos, because activation and interest is so important for deep learning. I felt a strong need to give students a glimmer of colour in a truly dire time. Furthermore, while this was a global crisis, it also presented a massive opportunity to make Open Educational Resources that could be available to all through Creative Commons licensing. Therefore, all visuals had to be original and made from scratch to avoid any copyright infringements.
>
> I didn't care that I couldn't do fancy video editing, or that the students would see the complete clutter of my home, or hear my toddler in the background. And they didn't care either – in fact, I think the authenticity enhanced the learning experience because it made me relatable as a person, a wife and a mother – not just a decontextualised lecturer behind a screen.
>
> One of the first videos I made was about gynaecological emergencies using four of my daughter's toys. Each item represented a medical condition through cut outs of uteri and ovaries, and connections with a thermometer, blood pressure cuff and heart rate monitor (Figure 1).
>
> Another video, about special investigations in Gynaecology, saw a collision of medical equipment with mundane household items: a punch biopsy forceps was used to biopsy a knobbly potato, and an endometrial sampler was used to sample an endometrium made of hair gel and red glitter. The female pelvic anatomy lesson was accomplished

  ISSN 2523-1154

with a salad bowl, some straws, felt-tip pens, a stuffed sock (bowel), balloon (bladder), colourful paper, tinsel and a model uterus. This video not only demonstrated the pelvic anatomy and the anatomical relationships between organs, but was also applied to diseases and conditions; i.e. the relevance of each organ to gynaecological presentations was explicitly explained (Figure 2). In the videos where I was demonstrating lessons with just my hands, I started changing my nail polish and bangle for each new topic, to enable these objects to act as an aide de' memoire (Figure 2).

Figure 1: Toddler toys demonstrating key features of gynaecological emergencies.

Figure 2: The female pelvic anatomy and purple nail varnish.

As time went on, the team and I started writing simulated patient scenarios as a proxy for the real patients that students were not seeing. Other team members wrote the scenarios and I found ways to enact them. My simulated patients made use of some common stereotypes in an attempt to help students' recall (i.e., if they remembered the patient, they would remember her condition). One of the first simulated patient videos made featured Tannie Joan, a perimenopausal woman needing contraception. She was in the full bloom of a hot flush as she smoked a cigarette outside the doctor's

office. The video represented a consultation with a doctor, but there was no doctor, just Tannie Joan, holding up her hand-written sign saying first 'outside' and then 'inside the doctor's office', and then starting and stopping the recording herself. This was quite some time before Chivaugn learned how to do video editing, and so the 'raw' recording is what was used. Other patient videos did have a proxy doctor to interview the patient, and these co-creations brought forth surprising gems such as (also see Figure 3):

- India Wyatt-Jones (an organic reiki therapist who lives in Noordhoek, farms chickens, and now has pre-labour rupture of membranes staining her organic underwear)
- Tannie Kiekie [sister of Tannie Joan] (with her hot flushes, home-cut hair and sexual difficulties with her boyfriend whom she met on Tinder): Menopause
- American Phillipa's pelvic inflammatory disease (contracted while she was 'finding herself in Africa')
- Vagina Labia Majora (an Instagram influencer who gyms, drinks kale smoothies and experiences unacceptable side effects of her contraceptive method)

Figure 3: "The Meryl Streep of Gynaecology" (so-called by students).

A key question is whether these performances helped students in the clinical setting later on. A research project to formalise students' reported experiences of the videos is currently underway[2] and will give more in-depth analysis, but one of the quotes in response to the question 'Did the videos help you later on in a clinical situation' is shown below:

> Student 1: I saw a patient with abnormal vaginal bleeding, who presented very similarly to the patient scenario Dr Chivaugn acted out. I remembered the video so well due to how engaging and entertaining it was, so I was able to quickly compare the

[2] Reference: HREC: 403/2022

> similarities of our patient history, ask relevant questions as shown in the video, and quickly come to the diagnosis of fibroids!

Chivaugn recalls:

> At the time, while I was making and posting content (under extreme time pressures) something extraordinary started to happen. Students were sending me unsolicited emails of gratitude and praise. They thanked me for brightening up their lives and coursework. They told me they were showing the videos to their parents and siblings. One student sent me a photo of her kitten watching a video. The feedback at the end of the courses was breath taking. Not only had students learned and been activated – but they had also been deeply enthused, inspired and motivated – even to become gynaecologists! A few students shared how the videos actually rekindled their love of Medicine, and revitalised their commitment to their degree. Examples from the formal survey include:
>
> Student 2: The videos made me laugh. My classmates [sic] and I would record sections we found funny and send them to each other. I'd rewatch my favourite clips with my family and then explain what the video is referring to. All this meant I was reinforcing the knowledge while having a laugh and having educational social interactions.
>
> Student 22: [The videos] have even inspired me to pursue a career in [G]ynaecology.

One student said he initially cringed at the colour and spectacle, but soon changed his mind. Below is an excerpt from his course reflection (with permission):

> I should preface this reflection by saying that I really dislike silliness, especially when it pertains to academic matters. I am an older student… At the onset of the course, I groaned as I saw the bright pink type font and the unbridled and unbridleable exuberance of the so-called "gynae ambassador" dressed in pink herself… At first, I elected to read the transcripts. Then, taking myself very seriously, I watched one or two videos. Then I watched more and more. A strange thing happened then. I realised how much I was learning… All in all, Dr Chivaugn "gynae-ambassador" managed to do something I have not yet seen. She has successfully served a meal as nutritious as borscht with the allure and sweetness of cotton candy.

Chivaugn concludes:

> I saved the entire reflection he sent to me that is now pasted on my office wall to remind me and others about how a different way of teaching can be so transformative.

What energised the process?

Chivaugn remembers:

> As I question what may have energised and empowered us to be imaginative and playful in creating teaching resources that disrupted the usual, many insights are

revealed, both personally and in the broader context (see Figure 4, with a link to some behind-the scenes snippets).

Figure 4: Explaining the pedagogical processes in a conference presentation for the 2020 UCT Teaching & Learning Conference (see video titled Out the Box in a Box).

Risk-taking and experimenting in different ways is part of my being and becoming. Today I wear eye shadow reflecting the Ukrainian flag and tomorrow, it's hot pink. My Myers-Briggs personality type is rare in Medicine. Drama and performance were my alternative career path, if Medicine was not available to me. I am not the norm when it comes to clinical practice or teaching. I am usually very colourful – wearing eye-searing colour, bright make-up and enormous earrings. Perhaps I am unafraid to be myself, and I don't mind if the end-result of a video is cringeworthy – because I think that's how the students are going to remember something, for instance, when managing an emergency in the middle of the night.

In creating the teaching videos for the students, my primary driver was one of compassion for these students who were completely at sea. I knew they would be miserable at being held away and apart from their usual clinical exposure and social groups. I wanted to find a way of teaching that could be affirmative, to cheer them up and be productive. What was striking was that the value gained in and through the project was reciprocal. Students identified the investments I (and others) had made which spurred them on to invest more themselves, and their encouragement re-incentivised me and so on.

> Student 10: I really enjoyed the way the lecturers engaged with us. One could see the effort they put into these videos and that alone made me extremely grateful and want to engage more.

Three years later, the video-making continues despite COVID-19 dissipating. The range of recordings is expanding across more topics and adding different genres when time permits. For instance, an ovarian cancer rap song video is a new production which is different to the rest. The rap was performed by two Year 5 undergraduate students and enacted by me. This rhythmic upbeat video resource has become my all-time favourite, because it was so cheesy and over the top, and I had students performing with me. It also felt like a real achievement because this is a really difficult area of

> Gynaecology, so to have made it a bright, living organism that can be consumed in a totally different way felt like a great success.
> On a personal level, I have never had so much fun, or felt so liberated in my career. I have felt myself moving through a threshold where there is no turning back. I will never be able to teach my content the way I did before COVID-19, because a new standard has been set, and the material has become such an integral part of what is now offered to students – by their own demand.
>
> The students tell me they have gained a closer relationship with me. For instance, the videos enable them to feel they have been inside my home. Furthermore, students at the start of their face-to-face rotations with me, who have never seen me in person before, tell me that they feel they already know me. This perceived familiarity seems to enhance their experience of my rotations, and serves to break down some of the barriers that inevitably exist between clinicians and students. For those who worked with me in producing the videos, we have developed an unusual closeness because they really understand what it is like to be immersed in and with the video content, and they have seen the student responses.
>
> It must be said that there were other enabling factors, beyond the general fruitiness of my personality. My Masters degree in Health Professions Education was the bedrock which allowed me to understand what makes a brilliant teaching intervention. Furthermore, while I did volunteer time in the COVID-19 service, I am not a full-time clinician – I am paid by the University. This allowed me the space and time to think more creatively about how to incorporate unusual props and strategies in making the material.

How students have used the videos over time

The affordances offered by the internet enable teaching to become more dynamic with multimedia components, as used in our project. In terms of student appeal and access, teaching material that is made available online is appreciated (Gruzdeva, Smirnova, Chaikina, Golubeva, & Cherney, 2019; Borba, Clarkson & Gadanidis, 2012). For instance, students can access the resources in their own time, as well as go over the lesson materials at their own pace, repeatedly, and wherever they have internet access (Lin, 2019). Data analytics on the UCT LMS showing when the students have used the videos reflected these benefits, demonstrating that many students continued to access the videos - oftentimes repeatedly – even when they were no longer compulsory (see figures 5 and 6).

Since 2021, UCT has formally adopted a blended learning approach. Unlike ERT, blended learning was introduced as a strategy to create a "robust educational ecosystem" (Hodges, Moore, Lockee, Trust & Bond, 2020:6). The quality and appeal of the resources is an important consideration to motivate new generations of learners to engage with their core learning material. Chivaugn's intervention has had a profound influence on future course design in the new blended learning

landscape in O & G at UCT, which now actively incorporates these resources and will continue to do so moving forward.

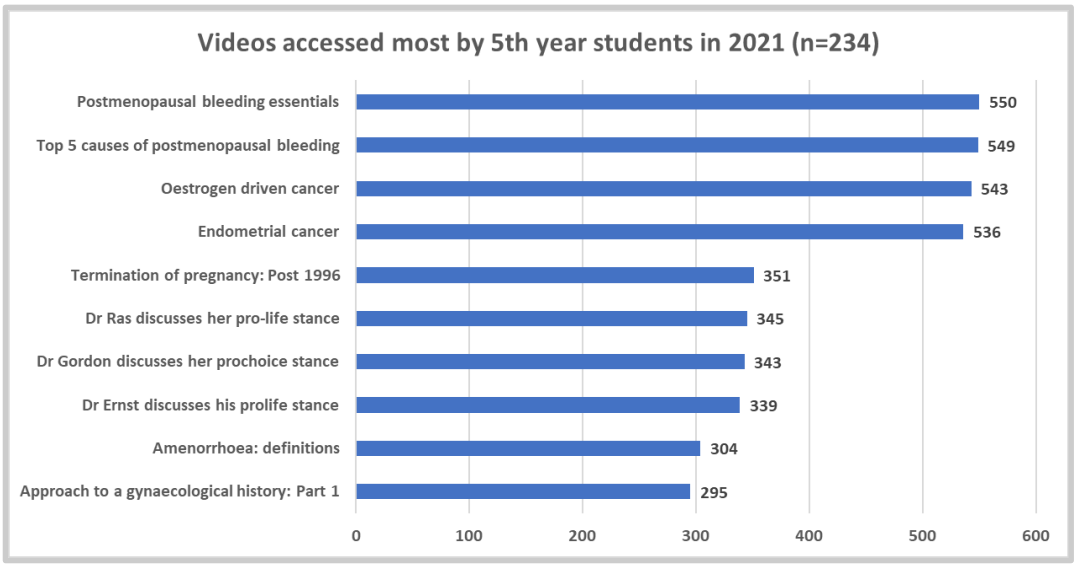

Figure 5: Videos most accessed by third year students in 2021, long after they were no longer compulsory (Students = 237).

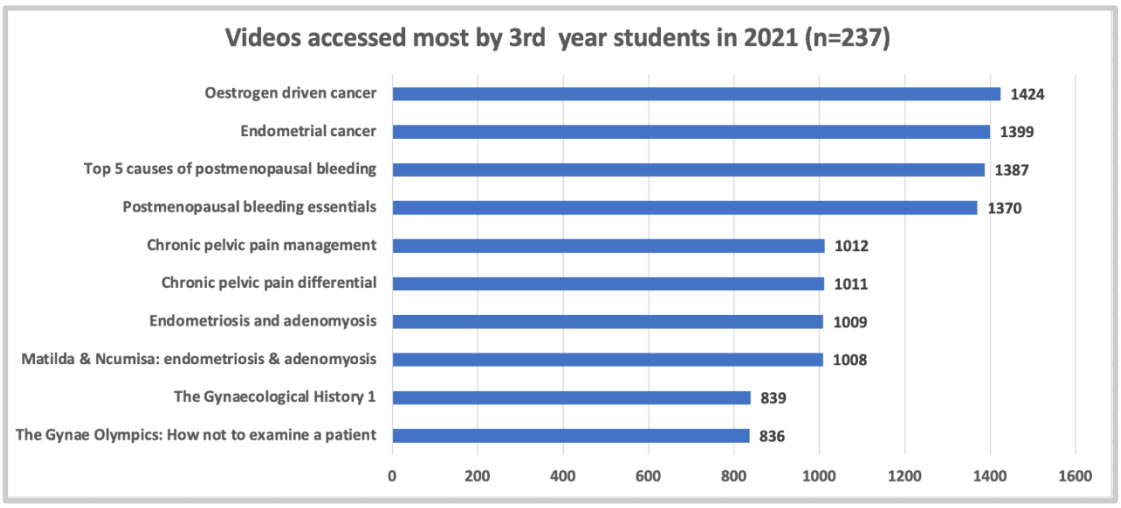

Figure 6: Videos most accessed by fifth year students in 2021, also long after they ceased to be compulsory (Students = 234).

Expanding the reach of this teaching resource

The popularity of the videos amongst students and encouragement from Greg and Veronica spurred Chivaugn to expand the reach of the resources through a YouTube channel. University funding was made available for the creation of a website as a holding space and reference point for all the videos. Moreover, the choice of a Creative Commons licence to accompany each resource enables others to use and re-use the video lessons. Such licences are a characteristic of OER, described as

educational materials that are offered freely and openly for anyone to use and under a variety of licence options to enable the resources to be adapted, copied and/or redistributed (Hylen, 2006). OER materials can be of any type including videos and textbooks.

Unlike copyright-restricted material, OER fulfils multiple roles with many advantages to the creation and publication of resources (Lane, 2019). For instance, creating teaching material as an OER fosters the social responsiveness agenda advocated by many institutions and has become a priority for many educators to incorporate into their teaching, and especially with those educators involved in the making and distributing of the teaching material, on which this article is based. By enabling content to be available to other institutions, we are empowering those with limited capacities to produce their own. That is, Chivaugn's website housed on the UCT OER platform is now available as a resource to support and augment existing forms of medical teaching and learning for other educators and students around the world. The showcasing of this work offers encouragement for others to do the same.

A benefit of Creative Commons licensing includes the visibility of the institution and authors through publicising their creative resources to others. This potentially increases the prestige of author(s) and/or institutions and opens up opportunities for collaboration between academics from different institutions or regions.

Although critical comments have been made about the quality of OERs as they are not usually peer reviewed, we claim that material made available as OER is often of a high quality because the process of making it openly available means it will be scrutinised much more by others in the international context (Mishra, 2017; Cox & Trotter, 2017; Hilton, 2020). Furthermore, online publication offers opportunities for feedback, comments and responsive changes.

Discussion

Chivaugn's priorities were focused on student wellbeing in relation to COVID-19 isolation, as students were denied clinical training and isolated from many of their support structures. This focus on student well-being, over and above the academic curriculum, created the space for a different approach to teaching and learning. Chivaugn opened up her home to become a space for playful experimentation with different resources, with the aim of facilitating joyful and deep learning. While we are not able to quantitatively measure whether deep learning occurred, the qualitative data

shows that the videos induced positive emotions and learning experiences for many students. This finding is similar to existing research on positive emotions in education, where researchers have found that emotions such as joy, interest, contentment, pride and love potentiate learning (Fredrickson, 2000; Pekrun, 2014). Positive emotions also enhance creativity, flexibility (of learning), deep learning, integration of new knowledge, as well as cognitive functioning, motivation, self-efficacy and coping skills (Fredrickson, 1998; Rowe, Fitness & Wood, 2015).

There is a significant amount of emotional contagion between students and teachers. If students experience positive emotions from their teachers' positive emotions, teachers will become aware of their students' enjoyment, enthusiasm, interest etc., will exhibit more positive emotions of their own and be galvanised to be more creative and flexible in their instruction (Frenzel, Daniels & Burić, 2021; Rowe, Fitness & Wood, 2015). Another interesting finding is that students who have positive emotions towards their teachers are more likely to attempt to match the effort put in by their teachers, i.e., they are inspired to work harder (Rowe, Fitness & Wood, 2015). This reciprocal and bidirectional relationship was clearly felt between Chivaugn and her students in the unique ecosystem that unfolded during this remarkably unusual time.

Of note is that humour was a central theme in many of the videos – especially the simulated patients. Liu, Sun, Wu, Yang, Zhang, Zhou and Quan (2017:5) point out that very few physician teachers "have professional training on how to teach or pass on knowledge effectively, much less teaching with humour". While humour in the form of role-playing is not unusual in clinical medicine being used by clown doctors with therapies for children and the elderly (Dionigi & Canestrari, 2016), there is sparse recognition for its place in undergraduate teaching, though some work suggests it is a potentially effective and overlooked tool to create positive feelings towards the content and teacher, which increases the potential for meaningful learning (Rowe, Fitness & Wood, 2015). The importance of humour in the videos was noted by many students (as shown in the quotes above).

The steady flow of positive feedback from both students and colleagues has not been without interruptions. Understandably, pushing the limits and breaking through conventional boundaries is unsettling and unacceptable to many traditionalists. There is judgement from some that the comic resources are inappropriate for an evidence-based scientific discipline such as Medicine. Similarly, for a few students accustomed to a very structured text-based and linear way of learning, the video recordings have been noted as unhelpful and distracting. Chivaugn remains aware that her particular brand of humour may not appeal to all who watch the videos or may not be interpreted in the spirit

in which they were made, which could alienate some students (keeping in mind that not all of the videos are humorous). Importantly, students do have access to other learning opportunities such as course notes and lectures, to ensure that several learning preferences can be accommodated.

Conclusion

During the extremely difficult time of the COVID-19 pandemic, most of the world closed down. There was a physical separation between students and lecturers, both at UCT and other institutions. There were, however, sparks of new, imaginative educational practices which erupted, and opened up new pedagogical opportunities. In this article, we present an innovative pedagogy which uses video performances created in a family home in Cape Town by Chivaugn, with assistance from her colleagues, students and family members; a collaborative process of generous engagement to try and facilitate students' deep learning as well as foster an enjoyment of learning. The novel and innovative relationships developed with everyday household items, dress-up clothes and her young daughter's toys enabled a change of teaching strategy; it fostered a move from traditional lecture material that tends to be formulaic, to experimental video recordings that covered clinical encounters and key topics for undergraduate medical students' learning in O & G.

Chivaugn took significant calculated educational risks in experimenting creatively to find new ways of teaching and communicating with students. Her role as teacher expanded to being a simulated patient, video producer, rap dancer and more. The risks seem largely to have paid off, as demonstrated by the positive feedback and repeated use of the resources. These show the value that many students have gained from a different kind of intervention – one that is appealing and relevant to their generation. The intervention has helped us understand how important positive emotions such as joy, happiness and love are for meaningful learning. There is much room for further research on the relationships between positive emotions and learning.

By applying Creative Commons licensing to these resources, the teaching material has the potential to be taken up by scholars globally both now and in the future, but with a particular emphasis on accessibility for the global South.

Acknowledgements

We are grateful for the support of our colleagues and students who are acknowledged on the website and individual YouTube videos. This work is based on research supported by the National Research Foundation of South Africa (Grant Number: 120845).

References

Borba, M. C., Clarkson, P. & Gadanidis, G. 2012. Learning with the use of the internet. In: Clements, M., Bishop, A., Keitel, C., Kilpatrick, J. & Leung, F. (eds), *Third International Handbook of Mathematics Education*. New York: Springer.

Chaka, C. 2020. Higher education institutions and the use of online instruction and online tools and resources during the COVID-19 outbreak: An online review of selected US and SA's universities, Retrieved from https://www.readcube.com/articles/10.21203%2Frs.3.rs-61482%2Fv1, 15 April 2023.

Cox, G. & Trotter, H. 2017. Factors shaping lecturers' adoption of OER at three South African universities. In C. Hodgkinson-Williams & P. B. Arinto (eds.), Adoption and Impact of OER in the Global South, 287-347. Cape Town: African Minds.

Dionigi A. & Canestrari, C. 2016. Clowning in health care settings: The point of view of adults. *European Journal of Psychology*, 12(3): 473-88. https://doi.org/10.5964/ejop.v12i3.1107.

Fredrickson, B. L. 1998. What good are positive emotions? *Review of General Psychology*, 2(3): 300-319, https://doi.org/10.1037/1089-2680.2.3.300.

Fredrickson, B. L. 2000. Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment*, 3: 1-25, https://doi.org/10.1037/1522-3736.3.1.31a.

Frenzel, A. C., Daniels, L. & Burić, I. 2021. Teacher emotions in the classroom and their implications for students. *Educational Psychologist*, 56(4): 250-264, https://doi.org/10.1080/00461520.2021.1985501.

Gruzdeva, M. L., Smirnova, Z. V., Chaikina, Z. V., Golubeva, O. V. & Cherney, O. T. 2019. Using internet services in teaching methodology. In E. Popkova (ed), *The Future of the Global Financial System: Downfall or Harmony*. Cham: Springer.

Hativa, N., Barak, R. & Simhi, E. 2001. Exemplary university teachers: Knowledge and beliefs regarding effective teaching dimensions and strategies. *Journal of Higher Education*, 72(6): 699–729, https://doi.org/10.2307/2672900.

Herrmann, K. J., McCune, V. & Bager-Elsborg, A. 2017. Approaches to learning as predictors of academic achievement: Results from a large scale, multi-level analysis. *Högre utbildning*, 7(1): 29-42, https://doi.org/10.23865/hu.v7.905.

Hilton, J. 2020. Open educational resources, student efficacy, and user perceptions: A synthesis of research published between 2015 and 2018. *Educational Technology Research and Development*, 68(3): 853-876, https://doi.org/10.1007/s11423-019-09700-4.

Hodges, C., Moore, S., Lockee, B., Trust, T. & Bond, A. 2020. The difference between emergency remote teaching and online learning. Retrieved from https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning, 15 April 2023.

Hulke, S. M., Wakode, S. L., Thakare, A. E., Parashar, R., Bharshnakar, R. N., Joshi, A. & Vaidya, Y. P. 2022. Perception of e-learning in medical students and faculty during COVID time: A study based on a questionnaire-based survey. *Journal of Education and Health Promotion*, 11: 139, https://doi.org/10.4103/jehp.jehp_655_21.

Hylén, J. 2006. Open educational resources: Opportunities and challenges. Retrieved from https://www.oecd.org/education/ceri/37351085.pdf, 15 April 2023.

Jili, N. N., Ede, C. I. & Masuku, M. M. 2021. Emergency remote teaching in higher education during COVID-19: Challenges and opportunities. *International Journal of Higher Education*, 10(5).

Lane, A. 2019. OER as outputs of research projects. The Envisioning Report for Empowering Universities. Retrieved from https://eadtu.eu/images/The_Envisioning_Report_for_EMPOWERING_Universities_4th_Edition_2020_2.pdf, 15 April 2023.

Lange, L. 2020. Update on how teaching and learning is responding to COVID-19. Retrieved from https://www.news.uct.ac.za/article/-2020-03-19-update-on-how-teaching-learning-is-responding-to-covid-19, 15 April 2023.

Lin, H. 2019. Teaching and learning without a textbook: Undergraduate student perceptions of Open Educational Resources. *International Review of Research in Open and Distributed Learning*, 20(3), https://doi.org/10.19173/irrodl.v20i4.4224.

Lindner, J., Clemons, C., Thoron, A. & Lindner, N. 2020. Remote instruction and distance education: A response to COVID-19. *Advancements in Agricultural Development*, 1(2): 53-64, https://doi.org/10.37433/aad.v1i2.39.

Liu Y-P., Sun L., Wu X-F., Yang, Y., Zhang, C-T., Zhou, H-L. & Quan, X-Q. 2017. Use of humour in medical education: A survey of students and teachers at a medical school in China. *BMJ Open*, 7(11). https://doi.org/10.1136/bmjopen-2017-018853.

Ma, Y. 2022. A blessing in disguise: The emergency remote teaching of Chinese in University of Cape Town in South Africa. In S. Liu (ed), *Teaching the Chinese Language Remotely*, pp. 111-134. Cham: Palgrave Macmillan.

Manning, E. 2016. *The Minor Gesture*. Durham, NC: Duke University Press.

Marchese, T. J. n.d. Insights From Neuroscience and Anthropology, Cognitive Science and Work-Place Studies. The New Conversations About Learning. Retrieved from https://people.kth.se/~gunnarj/AAPORTFn/PED/ped010419.html, 15 April 2023.

McBain, W. 2021. TikTok wins over Africa's youth. Retrieved from https://african.business/2021/10/finance-services/tiktok-wins-over-africas-youth/#:~:text=Research%20firm%20Statista%20say%20TikTok,to%209m%20since%20January%202020, 15 April 2023.

Mishra, S. 2017. Open educational resources: Removing barriers from within. Distance Education, 38(3): 369-380. https://doi.org/10.1080/01587919.2017.1369350.

Pekrun, R. 2014. Emotions and learning: Educational practices series–24. UNESCO International Bureau of Education. Retrieved from http://www.iaoed.org/downloads/edu-practices_24_eng.pdf, 15 April 2023.

Ramsden, P., Margetson, D., Martin, E. & Clarke, S. 1995. Recognising and rewarding good teaching in Australian higher education. A project commissioned by the Committee for the Advancement of University Teaching. Canberra: Australian Government Publishing Service.

Rowe, A. D. Fitness, J. & Wood, L. N. 2015. University student and lecturer perceptions of positive emotions in learning. *International Journal of Qualitative Studies in Education*, 28(1): 1-20, https://doi.org/10.1080/09518398.2013.847506.

Sidpra, J., Gaier, C., Reddy, N., Kumar, N., Mirsky, D. & Mankad, K. 2020. Sustaining education in the age of COVID-19: A survey of synchronous web-based platforms. *Quantitative Imaging in Medicine and Surgery*, 10(7): 1422, https://doi.org/10.21037/qims-20-714.

Shin, M. & Hickey, K. 2021. Needs a little TLC: Examining college students' emergency remote teaching and learning experiences during COVID-19. *Journal of Further and Higher Education*, 45(7): 973-986, https://doi.org/10.1080/0309877X.2020.1847261.

Trigwell, K., Prosser, M. & Waterhouse, F. 1999. Relations between teachers' approaches to teaching and students' approaches to learning. Higher Education, 37: 57–70, https://doi.org/10.1023/A:1003548313194.