Teachers must be trained to cope with the new 'e' in education

Christina Watson

THERE has been much excitement about digital technologies in education and how they are revolutionising the classroom.

From textbooks being brought to life with augmented reality, to apps that allow pupils to test themselves whenever and wherever they want, the forms in which the "e" in e-learning come are multitudinous.

Learning processes are no longer what we grew up with and what teachers were trained in, and the developments have led to questions about the role of the teacher in technology-driven education.

• What is her job if pupils are doing things at their own pace and competency level?

• Is he still expected to lead lesson work, and if so, how?

• Has the teacher become obsolete? With the ease that digital technology brings to education and the simplicity with which information can be accessed online or through tablet devices such questions can be understood. Understandable. but misguided in my opinion.

As increasing numbers of schools go digital, many teachers are witnessing a change in their roles. Some see digital technologies as simply traditional teaching in disguise, but it's more than that.

In the classroom of tomorrow, the teacher is no longer the lone transmitter of information. In the classroom of tomorrow the teacher assumes a new role as facilitator, coach, and guide.

For effective e-learning to occur there has to be a constructive overlap between content, pedagogy and technology.

In terms of technology, we not only require the device, but also the infrastructure to support the device. And we need to ensure that both pupils and educators are

competent to use the device.

With regard to content, it needs to be suitable for use with, and on the technology. We often harp on about the need for e-learning content to be engaging, while forgetting the importance of it remaining relevant to the curriculum.

The final element needed for effective e-learning to take place is the right pedagogic approach.

For e-learning to be effective, educators will have to change their very ideas on how lessons are presented, and pupils assessed. This change will see less of kids sitting in rows and listening to the teacher but more of a teacher being on the sidelines listening to what kids are doing and saying and providing that guidance.

But as the teacher still has a key role to play in the classroom of tomorrow, and there's one core concern that we cannot ignore: training.

these new technologies, the training has to be outcome specific. Additionally, we cannot come at the issue of training with a "one size fits all" approach. In as much as we tout the benefits of e-learning "individualising" the learning process for pupils, we need to look at the training of our educators in the same way.

Training has to be differentiated to levels that match the teacher's needs. And most importantly, training cannot be seen as a one-off occurrence, but rather something that requires constant follow-up and reinforcement.

The teacher's role remains vital, but to be effective facilitators, coaches and guides, the technology at the centre of the classrooms of tomorrow must not leave teachers behind.

As Free State Education MEC Tate Makgoe said at an event launching our dig-

When it comes to training educators in ital libraries initiative in Bloemfontein a few months back, we - both the public and private sector - must partner at the level of development. We need to work hand in hand to develop the capacity of our educators.

Teachers – second only to parents – are shaping and developing the minds which will lead South Africa into the future. Teachers are the killer apps in the classroom of tomorrow. But for them to be these killer apps, we need to provide the support, development, and training, that is so necessary. Without this training the potential returns e-learning has for our pupils in the classroom of tomorrow will remain beyond our grasp.

• Watson is chief executive of Via Afrika Publishers, a leading publisher of educational textbooks and related material for South Africa and southern African countries.

ONLY MOM + DAD FAMILY STRUCTURE COUNTS Schools must move with times



New Cites protection for sharks, rays incredibly significant

William Winram

IN THE history of our blue planet, September 14 was a big day. That's when real protections started for five species of shark and all species of manta rays.

From that day onwards, these seven species, which are commercially valuable and traded in large numbers, have been subject to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (Cites). South Africa has a vital interest in this matter, not only because shark populations are world-renowned along our coastline, but because the next meeting of all the 180 nations that are party to Cites will be in Johannesburg in 2016.

In March of 2013, member nations of Cites agreed to add porbeagle, oceanic whitetip and smooth, great and scalloped hammerhead sharks, along with all manta ray species, to Appendix II. This category means that international trade in any of these species must be proven to be sustainable and legal, or it must stop. And that is a welcome relief because these five shark species are some of the most commercially exploited species in the world.

Sharks are resilient - they have survived in our oceans for over 400 million years, even withstanding an era that included a newly discovered aquatic dinosaur that eats sharks. But now a quarter of all shark and ray species are threatened with extinction due to overfishing. Despite the popular perception of man-eating sharks hunting humans, we are far more dangerous to sharks than they are to us.

Demand for shark products, including fins, liver oil and meat, has led to the overfishing of sharks for many years and has decimated populations worldwide. More than 100 million sharks are caught and killed in commercial fisheries every year. And because sharks are slowgrowing and mature late, only bearing a few young over the course of their lifetime, they are not able to recover from those huge losses.

I have been intimately connected to the ocean almost my entire life. It has been my workplace and my playground. I understand how essential a healthy ocean is to all life on our blue planet. Sharks are a vital part of the marine ecosystem. They are incredibly important to the health o our oceans. Our oceans produce 50 percent of the oxygen in the air that we breathe. We cannot afford to destroy them any more than we already have. In essence, healthy oceans need sharks. Research has shown that a reef shark caught and sold brings in only \$108 (R1 180). That same shark, alive and keeping the reef ecosystem in check, can bring in more than \$1.9 million in ecotourism dollars over the course of its lifetime. In South Africa, it's been reported that tourists visiting to shark dive account for as much as 50 percent of local business sales The bottom line - sharks have a better economic value alive than dead. The new Cites listings are incredibly significant. They show that the global community understands the critical need to protect shared sharks in our shared ocean waters. All five shark species that gained protections on September 14 are pelagic, which means they are highly migratory. So a shark seen swimming along the West Australian coastline could very well be the same shark seen off the coast of South Africa. That makes these global protections all the more necessary. In two years, South Africa will have the chance to host one of the world's most important conservation meetings. It will be an opportunity to show the world South Africa's commitment to shark conservation. And by then, let's hope the decline of these magnificent seven sharks and rays has stopped and the journey of recovery has well and truly begun.

NO CHANGE: I was shocked to find that 20 years after she was at school, the system still discriminates against children who do not come from a married family structure, says the writer.

Asanda Ngoasheng

IT'S SCHOOL admission season and, like many other parents, I set out and collected forms for various private and public schools to apply for my daughter's entrance.

The conclusion I came to after perusing the application forms was that our school governing bodies are stuck in a time-warp and need to be brought into the 21st century. Judging by the application forms and admission requirements, the school system is still carrying prejudices it carried more than 20 years ago when I was a learner in the 1990s.

I have always found the blatant refusal to acknowledge the existence of family units outside the married paradigm in South African schools very ancient.

When I was at school, I was constantly frustrated at the inability of the school to recognise that there were other family structures beyond married parents.

This attitude showed up in seemingly little things. My mother and father were never married and I lived with my mother and used my mother's surname, even though, thankfully, my father participated in every aspect of my life. My biggest frustration was that, at least every other year, I had to go to the administration and ask them to correct the Mrs prefix in the letters they sent to my mother. This also made me as a child feel as if there was something wrong with my family structure and that the only legitimate family was one where a mother was a Mrs.

I was shocked to find that 20 years later. the schooling system still discriminates

Statistics show that 53% of working mothers are single and receive no financial assistance from their children's fathers

against children who do not come from a married family structure. Although I am now a married mother, it irked me that prejudice against single parents still exists. In the forms I collected, there were various prejudices which I can only hope were unintended, and the consequences of not thinking outside the box.

The first problem I encountered was the idea that if you are not married and living with the father of your child, then you are on your own. One school in particular even went so far as to let you know that they will not abide by an order by a court of law. The form says, "In the case of divorce, irrespective of the divorce agreement, both parents will be held responsible for fees and must, therefore both sign the application form". This means that if you and your husband are separated or divorced and school fees are delegated as his responsibility, the

school does not want to even enter into any explanations or negotiations about it. Considering the high number of divorces, with 50 517 recorded in the 2012/13 year by the Department of Justice, I find such admission form clauses uninformed and not in touch with the reality of many South Africans.

Recent statistics also show that 53% of working mothers in South Africa are single and receive no financial assistance from their children's fathers. This means for a large number of women, the request for a father's identity document and signature was unrealistic as they do not participate in their children's lives financially. Children of estranged married parents will also be at a loss in light of this requirement.

I posed my concern about this clause to friends on Facebook and some suggested that they have had to find creative means to bypass this law. One friend said they signed on behalf of their aunt in the section for the father's child as the father was absent. Another friend detailed her frustrations in waiting for more than two months for her estranged husband to send a copy of his ID and sign the forms, which he still has not done, leaving her at a loss for the next course of action.

The whole process had me wondering if heterosexual parents of different family structures are treated with such disregard, how much more frustrating is the admission process for the gay/lesbian single/ divorced parents and heterosexual women who went to a sperm bank to conceive their child.

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In my school years, I was an anomaly in this. I started school at four and turned five in the middle of my Grade 1 year. I remember when I changed schools the issue of my age was a big deal at the school as I was two years younger than most of the children in my class. This was after being made to repeat a grade I had already done at another school. This was bearable until, when I was due to attend high school, teachers again called my parents and tried to argue that because of my age, I should be held back again and do another year of primary school. My mother's response was to ask them if I had passed the grade and if I was coping well with the current work and current age group. Their answer to both was ves, but they argued that based on my age, they were worried that I would

struggle to fit in to high school.

My mother refused, and as a result I went to high school and went on to pass every grade with no problems until I reached matric. I did so well academically that by the time I turned 21, I was in the middle of my honours year at University.

It was again with shock that I received an e-mail from a private school informing me that they had received my daughter's application form, but they would only place the form with applications for the next year as they have strict rules about age entry into the school. I called the school and asked the admissions lady to explain to me how the law of South Africa stipulates that "Children can be accepted in Grade R in the year they turn five and in Grade One in the year they turn six" but their school does not seem to follow this rule. Her reply at every turn was that they are a private school and have their own rules about the age of entry. I have requested a meeting with the principal and hope to finally sort out the issue of age of entry when we meet.

The issues raised above concern me because I see a school system that has not changed in more than 20 years.

Ours is a country that prides itself on celebrating diversity and yet it seems our institutions of education have not caught up with this.

How do we expect to raise and educate a generation that celebrates diversity in all its forms when the very institutions that are tasked with this job, reject any divergence from the "norm"?

• Ngoasheng is a Cape Town-based writer, social commentator and mother of one.

 Winram is Oceans Ambassador for the Global Marine and Polar Programme of the International Union for Conservation of Nature (IUCN) and a freediving world record holder.

Like the rhino, today an entire industry stands on the verge of extinction

RECENTLY re-watched Jon Blair's film on war reporters, Dying to tell a Story. I found it profoundly depressing because most of the journalists interviewed were the gung ho, glamour correspondents who we used to call Bigfoots, parachute journalists, in the Struggle days, because they would parachute into the big story with little background information, stomp all over it with their big feet, and fly out again.

But there were three people in that film who touched me deeply. The first was Robert Fisk of the London Independent, who has a profound knowledge of the Middle East. He spoke about the need to tell the world what the western powers did not want the world to know. the need to tell the story of the ordinary people of the region.

The second was Jon Steele, a cameraperson for ITN who wrote the book War



Junkie after a nervous breakdown. Jon spoke about watching a young girl die as he filmed her after she had been shot by a sniper in Sarajevo, and how, cleaning his lens later, he saw his own reflection and realised that the last thing she saw was her own image in the lens, as she died.

And the third profound moment was when Gloria Emerson, the New York Times fashion writer who went to Vietnam because she wanted to tell the story of the war through the eyes of the Vietnamese people, said "I feel as though the stories

I write are like ice cubes that melt in the sun, but a photograph lasts forever."

Which brings me to my next depressing moment: yesterday I read an article on www.themediaonline.co.za by Frédéric Filloux, general manager for digital operations at Les Echos, a French media group. He wrote "Ten years. That's how far away in the past the Google IPO lies. Ten years of explosive growth for the digital world, 10 gruesome years for legacy media... The asymmetry is staggering... the newspaper and magazine industry missed almost every possible train... Consequences have been terrible. Today, an entire industry stands on the verge of extinction.'

I regularly lecture journalism students, and one of the things I do to explain how journalism has fundamentally changed is simply to track the techno-

logical changes that have taken place. In the 1980s, there were no cellphones, if we were lucky we had radio pagers. If you wanted to call anyone, you found a payphone, or used a two-way radio. There were no computers in the modern sense of the word. There was no e-mail, no internet. When I joined the Rand Daily Mail in 1981, we worked on electric typewriters. We had runners delivering our copy to the subeditors and inputters. Our newspaper was

laid out with hot metal. I was based in Namibia between 1983 and 1985, and covering the bush war then, I used to send all my copy on a telex machine, a huge, clunky thing that you typed on as if you were playing Wagner on a concert grand piano. It punched out perforated ticker tape to transmit copy.

I used to shoot my pictures on Nikon

FM film cameras. Each roll of film held 36 exposures. On major shoots, I budgeted three to four rolls of 36 a day, 144 photographs. Photographs were transmitted by landline – if I wanted to send colour. I had to transmit three separate transparencies in cyan, magenta and yellow.

Today, I pop a 32 gigabyte disc into my digital SLR. I can shoot 12 800 pictures on Jpeg Fine. That's 356 rolls of film. And then I can download it onto my laptop and transmit it via a cellphone or satellite phone and send it anywhere in the world while the bullets are flying over my head. I can transmit from the summit of Everest.

And that makes me very sad. There's less time to reflect; to think over the day's events, and to process the information.

It also has enormous implications for newsgathering. Instant news. There is no

time to reflect on the issues, the human dimension, the history of a story. The first rough draft of history that journalism used to be is becoming increasingly unreliable.

Since the dawn of modern journalism some would argue this can be defined as the 1853 Crimean War, others 100 years ago with World War I – reporters in the field have been first-source historians. Now we are being forced to become multi-tasking "content providers" to meet the insatiable needs of a connected world, with one person doing the job that used to be done by at least nine (print, radio and TV reporter, sound recordist, cameraperson, photographer, sub-editor, sound editor, TV editor).

That "first rough draft of history" is becoming much rougher and much more unreliable.

tonyweaver@iafrica.com