

Is it time for matric exams to go digital?

By [Prof Rita Niemann](#)

21 Dec 2020

The Covid-19 pandemic has already put traditional ways of assessing learners to the test, but so has the leaking of two of the 2020 Grade 12 papers.



Prof Rita Niemann

For the first time in South Africa's history, the Department of Basic Education on Friday 4 December, 2020 took the extraordinary step of deciding that Mathematics Paper 2, as well as Physical Science Paper 2, be rewritten following the leaks.

But amid a legal challenge, this decision was then overturned in the North Gauteng High Court just a week later on 11 December 2020. In the end, there won't be rewrites of these exams.

However, regardless of these fast-changing events, this situation has still prompted educationalists to have a rethink around alternative forms of conducting assessments.

Globally, the development of 21st-century skills is becoming ever more needed, but it comes as an eye-opener that there is a clear disconnect between what is still expected from learners and where the world is moving to.

In an extensive piece of 2020 research on distance and online education — conducted by the assessment body SACAI — it is evident that South Africa lags far behind in terms of the global trends, and particularly in terms of the flexibility of conducting assessments. This investigation also rendered the question: “Why do learners still have to take their assessments manually?”

The Minister of Basic Education, Angie Motsega, has previously announced that within six years, all schools and education offices will have access to the internet and free data. She has also introduced subjects such as Technology, Robotics and Coding, and Digital Technology in order to prepare learners for the future. Textbooks are planned to be more interactive and more learners in the coming years will be equipped with digital devices.

However, contrary to the above, online assessments are not on the agenda – not even after the challenges caused by leakages during past examinations. The transition to online teaching and learning took the world by storm, but when will assessments follow suit?

On the one hand, it is very important that younger children learn to write as it forms part of whole-brain development. However, there is no need for learners in the FET phase (Grade 10-12) to do their assessments by hand. South Africa urgently needs to interrogate the value of online assessments and several reasons are outlined below.

Online assessments:

- are more authentic as they truly prepare learners for the world of work. In the workplace, all work is conducted by means of computer technology. Grade 12 learners need to be ready for the next phase in their education career.
- are much more secure as learners can only access their assessments as soon as they have logged in with their encrypted passwords.
- save a lot of time and money. Acquiring software is expensive, but if some of the money budgeted in the current system for preparation of physical exam papers, copying, distribution and much more is used towards technology solutions, then these could possibly be recovered within a short period of time. The advantages will also outweigh the costs involved.
- can enable teachers to distribute multiple versions of the assessments, which curbs cheating.
- learners can still write under the supervision of invigilators if required or learners can be invigilated remotely. Currently there are many programmes available that pick up whenever a learner acts in a questionable manner and then the invigilator can zoom in on that candidate.
- not only saves on paper (much more eco-friendly) but is much more flexible as it can be done at different places and times.
- can even be done at home – protecting learners against infections spreading in large groups. Learners also need not have to travel to assessment centres (another cost-saving initiative).
- can be submitted as soon as the assessment has been completed and distributed to competent markers who mark the assessments online. These can then be sent for online moderation to the appointed moderators, while short questions can be marked by an online assessment system. The system then adds up the marks and those marks are uploaded onto the marks systems. Artificial intelligence and approaches such as adaptive comparative judgment (which automates comparison between scripts) can help automate some elements. This is a much cleaner process that extensively saves time and money.
- can even be taken to the next level where a number of similar questions at the same cognitive level are available (as part of a question bank), meaning that different papers can be generated instantly. This would further allow learners

multiple attempts if an interruption occurs, such as power outages or internet disturbances.

- become more accessible to learners with learning and physical disabilities, and mental health issues.
- enables “open book” exams requiring learners to apply their knowledge and critical thinking skills, which forms part of the higher cognitive levels that are required in the FET phase.
- can be adapted by attaching a timer to each question so there is no time to search for an answer.
- take up less storage space with respect to keeping records than on paper. All data can be stored on a single server.

Of course, there are disadvantages, such as the lack of computer literacy, digital devices, access to the internet, and data, as well as power breaks.

But in light of the commitments made by the Minister, most of these concerns will be addressed in the near future.

In viewing the various options and the opportunities that are created by online assessments, it is crucial for South Africa to deliberate the way forward.

ABOUT THE AUTHOR

? Professor Rita Niemann is the Head: Stakeholder and Academic Engagement at Optimi Group, an education company that provides solutions for the home, classroom, workplace and college environments. Before joining Optimi, Professor Niemann was Associate Professor in Education at the University of the Free State. Her other roles at UFS included being Director and Vice-Dean of Postgraduate Studies in the faculty of Education. Professor Niemann has a PhD in Education Management (1995) as well as an MBA (2006). She has become a leading expert on all matters pertaining to home education in South Africa as well as issues relating to the CAPS Curriculum in the country.

For more, visit: <https://www.bizcommunity.com>