Economic, social and cultural rights and the internet

The 45 country reports gathered here illustrate the link between the internet and economic, social and cultural rights (ESCRs). Some of the topics will be familiar to information and communications technology for development (ICT4D) activists: the right to health, education and culture; the socioeconomic empowerment of women using the internet; the inclusion of rural and indigenous communities in the information society; and the use of ICT to combat the marginalisation of local languages. Others deal with relatively new areas of exploration, such as using 3D printing technology to preserve cultural heritage, creating participatory community networks to capture an “inventory of things” that enables socioeconomic rights, crowdfunding rights, or the negative impact of algorithms on calculating social benefits. Workers’ rights receive some attention, as does the use of the internet during natural disasters.

Ten thematic reports frame the country reports. These deal both with overarching concerns when it comes to ESCRs and the internet – such as institutional frameworks and policy considerations – as well as more specific issues that impact on our rights: the legal justification for online education resources, the plight of migrant domestic workers, the use of digital databases to protect traditional knowledge from biopiracy, digital archiving, and the impact of multilateral trade deals on the international human rights framework.

The reports highlight the institutional and country-level possibilities and challenges that civil society faces in using the internet to enable ESCRs. They also suggest that in a number of instances, individuals, groups and communities are using the internet to enact their socioeconomic and cultural rights in the face of disinterest, inaction or censure by the state.
The right to educational resources and the internet

Andrew Rens

Introduction

This report considers the right to educational resources, and the role the internet should play in realising this right, with specific reference to South Africa. South Africa is considered an example of a developing country with both a strong right to education and significant challenges in realising the right to education. One significant failure has been to provide the necessary textbooks required for education in a timely manner. This failure has led to public protest, with learners themselves taking to the street to protest against the denial of their right to education. Court action against the state by civil society has compelled the authorities to provide textbooks. The result is unprecedented jurisprudence which makes explicit issues that have not yet been fully explored in other jurisdictions.

The internet offers South Africa an important opportunity to make up for many, although not all, of the deficiencies of its educational system in order to fulfil the right to education. Set in the context of global human rights commitments and a global and globalising internet, the specific case of South Africa offers greater understanding of similar challenges elsewhere in the developing world.

The South African context

Data sources for school enrolment and textbook provision in South Africa are inadequate at best. However, approximately 15.9 million people are enrolled in formal education in South Africa. The majority (88%) are in primary or secondary school, while only 2.4% are in vocational training institutions (vocational colleges) and 4.7% in tertiary institutions. A major obstacle is lack of educational resources. In 2013 more children at public schools reported that the lack of books was the most pressing issue in their education. The South African government, through setting curricula, largely determines what is in textbooks, workbooks and the like. The state is also the main customer for the textbooks produced according to its specifications. While a few textbooks are sold to private schools which follow the national curriculum, they have no market power. Instead school textbooks are produced for purchase by the state. Failure to deliver educational resources, when it occurs, is thus primarily due to the procurement processes of the state.

The extent to which a population of approximately 52 million South Africans have access to the internet and the kind of access experienced is not entirely clear. We do know that bottlenecks and inequality in the provision of infrastructure limit internet access for the majority of the population. Information and communications technology (ICT) access in South Africa has also been overpriced by global standards due to regulatory failure, while the cost of both hardware and software remains high. Bad policy has led to failures in the roll-out of ICTs as much as poor implementation of policy. At the same time, failure by the state to invest in energy infrastructure has resulted in the chronic

---

1 Andrew Rens was a researcher on the Association for Progressive Communications (APC) project “Connecting your rights: Economic, social and cultural rights (ESCRs) and the internet” (https://www.apc.org/en/projects/connecting-your-rights-economic-cultural-socia). This is an edited version of his case study The right to education and the internet, on the role of the internet in the provision and accessibility of educational resources in South Africa. For the full version of this case study, see: https://www.apc.org/en/node/21675
2 For example, a learner, parent and teacher march to protest failure to deliver textbooks was held in Giyani on 21 November 2015. See: SECTION27. (2015, 9 November). #TextbooksMatter campaign launched. section27.org.za/2015/11/textbooksmatter-campaign-launched
4 Ibid., 20.
5 Competition Commission South Africa. (2007). Reasons for Decision, Pearson Plc and The Harcourt Education International and Harcourt Assessment Businesses of Reed Elsevier, Case number: 2007May2952, 2. Note that the author was Intellectual Property Fellow at the Shuttleworth Foundation, which brought a public interest intervention in the merger proceedings.
under-supply of power. Nevertheless, regardless of the source, the available data suggest a trend of rapidly increasing internet access. Most access is by mobile phone. It is predicted that by 2019 at least 50% of the population—a projected 27 million people—will use the internet. Smartphones will be 30% of all networked devices.

In a number of provinces in South Africa the government is moving towards digitising classrooms and using the internet as the primary way of providing educational resources. South Africa has been the site of a number of pioneering attempts to make use of digital technologies to offer educational services and support, especially to high (secondary) school students.

### The right to education

The right to education is a fundamental human right in international law and is entrenched as a fundamental right in the South African Bill of Rights. The right to education was first internationally recognised as a basic human right in Article 26 of the Universal Declaration of Human Rights; this right became legally binding in international law in the International Covenant on Economic, Social and Cultural Rights (ICESCR) in Article 13.

The provisions of Article 13 could be summarised as requiring education directed towards development of the person—through fulfillment of the human rights to free primary education, equal and increasing access to other kinds of education, and freedom to educate children in non-state institutions. Free primary education is so important to the right that it is also dealt with in a separate article, Article 14 of the ICESCR. However, the right does not only include primary education but also increasing and equal access to further education, which includes university education. Article 13 is elucidated by the Committee on Economic, Social and Cultural Rights (CESCR). The CESCR stipulates that generally education is required by the right to be available, accessible, acceptable and adaptable. One of the aspects of the right is provision of “teaching materials”—or educational resources.

The rights set out in the ICESCR place obligations on a state to provide means for their fulfilment. This, in turn, requires use of financial and other resources by the state. The challenge for states with limited resources is addressed by Article 2 of the ICESCR. The “realisation” of a right is now understood to require at least the following elements, notwithstanding the constraints on available resources: immediate non-discrimination, no retrogressive measures, minimum obligations, and an obligation to take steps to fulfil the right and report on them. Because providing education is resource-dependent, the government of the day of a particular state does have some freedom in determining how to go about realising the right to education, referred to as a “margin of discretion”. This margin of discretion does not permit the current government of a state to take into account irrelevant considerations in realising the right to education; for example, a government official’s belief that the role of women is to bear children and therefore that women need not be educated is irrelevant. It also allows a state to take into account relevant considerations such as the requirements of the local job market in realising the right to education.

The duty on the state to respect, protect and fulfil the right to education encompasses a number of interconnected obligations, not only to provide education directly but also to ensure that education procurement practices and the regulation of education realise the right to education. The right to education does not only require provision of

---

9 The potential of the internet to provide educational resources in South Africa is best demonstrated by Siyavula, an educational technology company started in South Africa. Siyavula offers an intelligent practice service for mathematics and science subjects. Intelligent practice uses adaptive learning technology to tailor instruction, sequence, difficulty and type of problem presented to the individual student. These services are available on feature phones. Siyavula has also produced open-licensed textbooks and workbooks. During the crisis in textbook supply Siyavula was able to rapidly supply workbooks to students who had not had textbooks for several months. Separately, during 2015 the wealthiest province in South Africa, Gauteng, began a project that has resulted in distribution of internet-enabled tablets to approximately 61,000 students at over 375 schools.
10 According to the Office of the United Nations High Commissioner for Human Rights, “human rights are rights inherent to all human beings.” Human rights are thus inherently different to other types of rights such as the rights of states under treaties, and rights such as contractual rights which can be held by corporations and transferred.
12 Ibid., at 6 (a).
13 This development is often referred as progressive realisation, so this term is used in the case study. However, it is important to note that it is somewhat misleading, since some obligations are immediate.
14 The well-known distinction between a state and the government of the day is significant when a state makes a declaration in respect of rights such as the Declaration on Article 13 (2) (a) by South Africa on accession to the ICESCR. If the declaration is unconstitutional then successor governments are not bound by it.
education by the state, it also prohibits others from preventing education. Thus the right would operate against an individual or corporation which acted to prevent education. One example of this would be a corporation which prevented access to educational resources, such as an internet services provider (ISP) which disconnected a school because of an allegation of copyright infringement without investigating whether the allegation is true.

The right to educational resources: What the courts said

Although South Africa signed the ICESCR in 1994, it acceded only in January 2015. Nevertheless, the country has a fully justiciable Bill of Rights: all rights including ESCRs can be enforced through the courts. Most ESCRs are subject to progressive realisation. However, in South Africa the right to a basic education, as per section 29 (1), is not subject to progressive realisation; instead the state has an absolute obligation. Other aspects of the right, such as the right to further education, are subject to progressive realisation. In South Africa the right to education has both “positive” and “negative” aspects. The negative right ensures “people are not prevented from accessing existing educational resources” and may impose duties on private persons and corporations.

On accession to the ICESCR on 15 January 2015, South Africa made a declaration that it would give progressive effect to the right to education in Article 13 (2) (a) and Article 14 within available resources. This declaration, whatever its effect in international law, does not diminish the immediate constitutional right in South Africa to basic education, since a declaration to an international instrument does not amend the Constitution. The Constitution remains the supreme law; as a result law and action inconsistent with it are invalid (Section 1 of the Constitution of 1996).

Section 29 (1) does not state that education should be free, unlike Article 13 of the ICESCR. Article 14 of ICESCR requires states which do not offer free education on becoming party to the ICESCR to develop a detailed plan within two years. The declaration by South Africa that it will give effect to the right through progressive realisation “within the framework of its National Education Policy” may be understood as a claim that the National Education Policy is the detailed plan required by ICESCR Article 14. However, whether it meets the requirements of ICESCR Article 14 has not been authoritatively decided. Since the right to basic education is not subject to progressive realisation there is an intense unresolved debate whether education in South Africa should be free to all.

South African courts have developed the right to education to require provision of educational resources in basic education. From 2012 to 2015 civil society actors which included schools, SECTION27 and later Basic Education For All took the government to court. Their cases were aimed at ensuring that some learners, particularly black, rural, poor learners, are not deprived of the minimum necessities for a basic education, including textbooks and other resources. Three related decisions by the courts that resulted from this action have given cumulatively stronger statements of the state’s requirement to provide educational resources for basic education.

In the first decision, made in response to an urgent application, the court pointed out that the government officials responsible had themselves publicly emphasised the importance of educational resources for education. The judge added that “it is difficult to conceive, even with the best of intentions, how the right to basic education can be given

---


19 For an extensive review of the debate see Woolman, S., & Bishop, M. (2014). Op. cit. Vol 4, 57-24 and the sources cited for the contours of the debate. Even those, such as Woolman and Bishop, who argue that fees are constitutionally defensible in South Africa concede that “[n]o person should be denied a basic education because his parents cannot afford school fees.” The issues involved such as “fee” and “no fee” schools and the constitutional jurisprudence involved are largely irrelevant to the role of the internet in realising the right to education and thus beyond this report, but it should be noted that the debate overshadows South Africa’s claims of compliance with the ICESCR.

20 SECTION27 is a public interest legal firm that assists poor people in enforcing socioeconomic rights to education, food, housing and health care in South Africa. section27.org.za

21 Basic Education For All (Befa) is a voluntary organisation based in Limpopo. Its some 50 members seek to promote and protect the right to basic education for learners in Limpopo. It has links with another voluntary organisation, SECTION27, some of whose members are practising lawyers and whose aim similarly is to promote education. Befa was formed in 2012 in response to what the main deponent to the applicants’ founding affidavit calls the education crisis in Limpopo. North Gauteng High Court, Pretoria. (2014, 5 May). Basic Education For All and Others v Minister of Basic Education and Others [23949/14] [2014] ZAGPHC 251 at 52.

22 An account of the factual circumstances, the specificities of South African school administration, is beyond the scope of this case study.
effect to in the absence of textbooks.” As a result, the court ordered the government officials to not only provide the textbooks by specific deadlines but also to ensure that learners were not prejudiced by the failure to provide them with textbooks. Despite this order, two years later government officials again failed to ensure provision of textbooks in a timely manner for a large number of schools and their learners. When the case went to court the government argued that failure to provide textbooks did not constitute a violation of the right. The court ruled that “[t]extbooks are essential to all forms of education” and as a result “are therefore a component of basic education.” The government appealed the ruling. The appeal court held that it is a duty of the state to provide every learner with every textbook prescribed for a course before the course begins.

The second court pointed out that paper books require far less in the way of supporting technology than internet communications, and gave its opinion that in South Africa books have not yet been replaced by internet-based resources – instead books and electronic information are complementary. The appeal court emphasised that the advent of electronic reading materials has increased the importance of reading, and adopted a definition of textbooks which defines something as a textbook according to the information and activities contained in it. For the appeal court, a textbook is not defined by whether it is paper or electronic.

The negative aspect of the right of education against prohibitions on accessing existing resources is particularly important for digital and internet educational resources. If any number of people can use a digital textbook simultaneously there is no need to ration it. If there is no need to ration the textbook, can there be any constitutional justification to restrict use of the textbook? Excluding someone from a digital or internet educational resource cannot be justified by the inherent limits of the resource.

### The right to education and the internet

In 2012 the United Nations Human Rights Council affirmed that “the same rights that people have offline must also be protected online.” It follows logically that the right to education is entitled to as much protection online as it is offline. Building on its previous statement the Council affirmed in 2014 that “quality education plays a decisive role in development, and therefore calls upon all States to promote digital literacy and facilitate access to information on the Internet, which can be an important tool in facilitating the promotion of the right to education.”

The right to education has four “interrelated and essential features”: availability, accessibility, acceptability and adaptability. As elucidated in the General Comment on the right to education, these features have implications for the internet and related technologies.

Availability of education requires “teaching materials” and in at least some cases “computer facilities and information technology”. Accessibility has three dimensions: non-discrimination, physical access and economic access. Physical accessibility can be achieved “by attendance at some reasonably convenient geographic location (e.g. a neighbourhood school) or via modern technology (e.g. access to a ‘distance learning’ programme).” Acceptability means at least that the education should not endanger the health or well-being of the child, for example, through excessive or inappropriate punishment. Adaptability requires education to change to meet the needs of changing societies and students. The General Comment illustrates how the right to education applies: a state is required to “fulfil (provide) the adaptability of education by designing and providing resources for curricula which reflect the contemporary needs of students in a changing world” and fulfil (provide) the availability of education by “providing teaching materials.”

Basic education has historically been understood to include at least basic numeracy and literacy. However, in a global economy in which internet access increases economic, cultural and social opportunity, familiarity with and ability to use
the internet is itself a component of basic education. The internet itself is an unparalleled medium for the communication of information, and thus for the provision of educational resources (referred to as teaching materials in the comments).

Educational resources such as textbooks can be made much more readily available through the internet. A textbook that is made available via the internet is then immediately available to any person with an internet connection. This increases availability dramatically at very small cost to the state. Of course this does not mean that merely by making a textbook available online, a state has discharged its obligation to make it available.33

Accessibility of educational resources is increased if in addition to any existing channels for distribution they are also made available online. Those who have an internet connection but cannot attend school due to geography, ill health, disability or during periods of natural disaster or violence or political unrest can access educational resources that would otherwise be inaccessible.

The acceptability of educational resources can also be enhanced through making them available online in addition to any existing channels. The use of educational resources can be enhanced through online tools, or through videos, animations, music and games that can enhance text. Translations which can assist parents and others who help learners can also be easily and cheaply made available online.

Adaptability suggests that educational resources should be available online at least in addition to any other means being used. Since the ways in which knowledge is formulated, debated and communicated have changed profoundly as a result of the internet, to deny students an opportunity to work with educational resources online is to refuse them the opportunity to acquire the skills and capabilities they require for acquisition of further knowledge.

Availability, accessibility, acceptability and adaptability could each be increased through making educational resources available online in addition to any other means that are being used. There is however one barrier. It is not technological, pedagogical or financial – instead it is legal.

The current procurement practice in South Africa awards a statutory monopoly to control the use and dissemination of publicly funded educational resources to publishers. The state thus precludes itself from increasing the availability, accessibility, adaptability and acceptability of taxpayer-funded educational resources.

The misallocation of copyright

While South African schools and their learners must be supplied with paper educational resources such as workbooks and textbooks, we argue that the same educational resources must be available as both paper books and on internet-enabled devices. That is not possible under current textbook procurement policies which give control over state-funded textbooks to publishing companies. Despite the power that the state has in the procurement process, the current government permits the publishers the statutory monopoly of copyright by default.

Copyright tends to be vested in the authors and illustrators of textbooks and other educational resources by operation of law. However, publishers use their market power to require that copyright be awarded to them through contract. Although the South African government could specify that copyright is transferred to it as a condition of award of each textbook contract, it currently neglects to do so. One consequence is that government has given up the power to decide by which technological means educational resources will be made available. Another is that publishers retain legal control over re-use of the resources and learners and teachers in state schools can use the resources only with the permission of publishers or within the contested borders of narrow copyright exceptions. This does not seem to be the result of deliberate policy so much as a lack of attention to consequences of procurement policy. It is one example of the way in which policies and practices that developed before the emergence of the internet may limit the exercise of economic, social and cultural rights through the internet.

ISP takedowns are equally part of the legal “knot” limiting access to educational resources online. South African legislation offers a shield from liability to ISPs that host content, but only if the ISP promptly takes down content when it receives a complaint.34 Complaints are not confined to

33 Even if each student had a suitable internet-enabled device, electrical power and an internet connection, it would not follow that a digital version of a textbook is preferable to a paper copy. That claim relies on unwarranted assumptions about pedagogical methods, learning styles and the skills of students to make use of online resources. It is equally unwarranted to make the opposite claim that a particular teacher’s preference for a paper book is more than a preference and instead an unassailable fact of human nature.

copyright; they may have any legal basis or indeed none since they are never adjudicated by an independent authority. There is no explicit exception to the take-down rules for educational resources or educational uses. Thus anyone, including educators employed by the state, who uses copyright material under a lawful exception (such as for educational purposes) might have it summarily removed by an ISP based on a complaint of alleged infringement without having the validity of the use under the exception assessed. This effectively eliminates copyright exceptions on the internet, not as a matter of law but of practice.

Finally, the same legislation that shields ISPs from liability contains provisions which although not enacted to prevent the circumvention of technical protection methods (TPMs), effectively do so. TPMs are technical measures that are used by either the producer of an educational resource or similar product or by an intermediary to control the use of the product. The legislation criminalises disabling such technical measures. For example, a TPM imposed on a digital textbook might technically block copying a few lines from the book although that is permitted by copyright law. There are no explicit exceptions for educational resources or educational uses.35

**Conclusion**

South African legislation and policy fail to protect the right to educational resources on the internet. At the same time some parts of the state educational system are moving towards mass adoption of digital technology as the primary means for providing educational resources. Therefore the right to education and to educational resources requires government policies and action that are effective both online and offline. This can only happen if the government does not hand effective control over taxpayer-funded resources to corporations through permitting publishers to license educational resources as “all rights reserved”. Procurement policy should be changed so that all taxpayer-funded educational resources are under open licences such as Creative Commons Attribution.

Government efforts to use the internet for educational resources take place in a global environment which includes many of the most highly capitalised multinational corporations intent on re-inventing educational resources. Civil society organisations concerned with education and thus with the supply of educational resources in South Africa cannot ignore the internet. Failure to develop a vision of education that makes use of the opportunities presented by the internet due to mistaken claims that it is a luxury or unaffordable technology simply cede control of the future of educational resources to private actors in the global North. Nor will delay in developing appropriate policy until South Africa has a 100% internet penetration insulate South Africa from global developments, not least of which is the increasing importance of the internet to national economies.

It is likely that particular technologies appropriately deployed in particular contexts enhance education while other technologies inappropriately deployed will fail to improve, or even hamper, education. While this seems to be so obvious as not to need stating, many contemporary media reports and even some academic analyses or scientific authorities too readily either condemn or praise deployment of any internet-related technologies in all contexts. What is apparent is that a more nuanced approach is necessary, where digital technologies aid, supplement and reinforce appropriate pedagogical methods in specific contexts.

---

35 Professor Tana Pistorius in an analysis of the relevant provisions of the Electronic Communications and Transactions Act 2002 found that section 86 of the Act is “in essence, an anti-circumvention prohibition.” This is a criminal provision and it may be possible to negate the element of intention by demonstrating that use is putatively lawful. The effect is to prevent the appropriate exercise of educational exceptions. See Pistorius, T. (2006). Developing countries and copyright in the information age – the functional equivalent implementation of the WCT. *Potchefstroom Electronic Law Journal, 9*(2), 1-21.
Economic, social and cultural rights and the internet

The 45 country reports gathered here illustrate the link between the internet and economic, social and cultural rights (ESCRs). Some of the topics will be familiar to information and communications technology for development (ICT4D) activists: the right to health, education and culture; the socioeconomic empowerment of women using the internet; the inclusion of rural and indigenous communities in the information society; and the use of ICT to combat the marginalisation of local languages. Others deal with relatively new areas of exploration, such as using 3D printing technology to preserve cultural heritage, creating participatory community networks to capture an “inventory of things” that enables socioeconomic rights, crowdfunding rights, or the negative impact of algorithms on calculating social benefits. Workers’ rights receive some attention, as does the use of the internet during natural disasters.

Ten thematic reports frame the country reports. These deal both with overarching concerns when it comes to ESCRs and the internet – such as institutional frameworks and policy considerations – as well as more specific issues that impact on our rights: the legal justification for online education resources, the plight of migrant domestic workers, the use of digital databases to protect traditional knowledge from biopiracy, digital archiving, and the impact of multilateral trade deals on the international human rights framework.

The reports highlight the institutional and country-level possibilities and challenges that civil society faces in using the internet to enable ESCRs. They also suggest that in a number of instances, individuals, groups and communities are using the internet to enact their socioeconomic and cultural rights in the face of disinterest, inaction or censure by the state.