Protect students and staff in precarious jobs

Universities face a severe financial crisis, and some contract staff are hanging by a thread. Senior colleagues need to speak up now.

Coronavirus lockdowns have precipitated a crisis in university funding and academic morale. When lockdowns were announced, universities all over the world closed their doors. They moved classes and some research activity online. But staff were given little or no time to prepare and few resources or training to help them.

Fewer students are expected to enrol in the coming academic year, instead waiting until institutions open fully (see page 449). That means that young people will lose a year of their education, and universities will lose out financially. Some governments have plans to boost post-lockdown research, but these will be undermined if universities decide to make job cuts and end up with staff shortages. Universities need support at this crucial time.

Australia, the United States and the United Kingdom are among the countries where universities are considering redundancies. These nations have relatively high tuition fees and large numbers of international students, a combination that is often crucial to the finances of the larger institutions.

Universities Australia, the body representing the higher-education sector, estimates that its 39 member-institutions could have to shed up to 21,000 full-time jobs (16% of the workforce) in the next six months. A projection commissioned by the University and College Union puts the funding shortfall for UK universities at £2.5 billion (US$3.1 billion).

Low- and middle-income countries face extra challenges from the sudden transition to online learning. The main concern is for students who are unable to access digital classrooms. This is especially the case for those who live in areas without fast, reliable and affordable broadband, or where students have no access to laptops, tablets, smartphones and other essential hardware. More than one-quarter of the students at Ghana's Kwame Nkrumah University of Science and Technology in Kumasi lack access to technology for these reasons.

Teachers in many countries have been reporting that students in such situations have been struggling to keep up since lockdowns began. In some cases, students from poorer households in remote regions are having to travel to their nearest city to access the Internet, and to pay commercial Internet cafes to download course materials.

There is a way to get the technology to under-served areas, and to avert redundancies. But it requires governments and
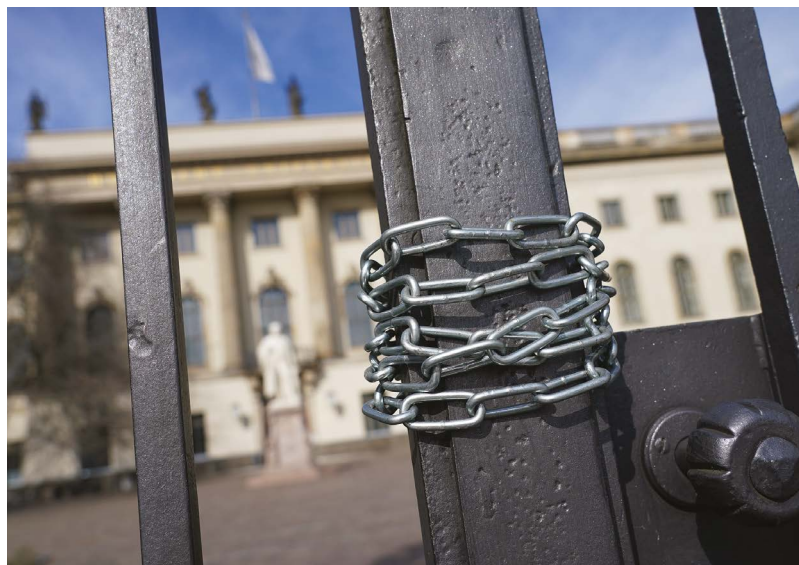
Humboldt University in Berlin closed its gates to students in March.

> **By failing to support their universities, countries are undermining their own plans to boost research.**

funding bodies to accept that students and universities should be eligible for the same kinds of temporary emergency funding as other industries are asking for. Airlines and tourism, for instance, are discussing bailout schemes with their governments so that they can maintain the workforce that will be needed when they reopen.

Some groups representing universities are trying to negotiate similar schemes. But governments so far have denied the requests or delayed their decisions. In high-income countries, this is partly because universities are still functioning and are therefore seen as less deserving of government help than businesses and professions that have had no choice but to close. In poorer countries, the public funding that universities rely on is under threat because economies have crashed during lockdowns.

Representatives of universities in the United States have requested a US$26-billion funding package for research facilities and support through the coronavirus period — but that is still pending. And last week, the governments of Kenya and Pakistan cut their universities' budgets. In Pakistan, this prompted the nation's higher-education regulator to take the rare step of issuing a public rebuke.

What governments in these countries and other countries need to realize is that the impact of such decisions will fall disproportionately on the poorest students and on more vulnerable members of staff. Job cuts are more likely to affect people whose employment is less secure, such as those on fixed-term contracts. And such staff will, in turn, include people from minority groups, who are often over-represented in contract staff.

Short-sighted decisions

By failing to support their universities, countries are undermining their own plans to boost research. The United States and some European countries have pledged significant increases to research and development (R&D) funding as part of post-lockdown recovery plans. Germany,

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meanwhile, has promised to invest €17 billion (US$18 billion) in its science agencies over the next decade as part of an overall €60-billion package to support education, research and innovation. But this package seems not to include much support for students, especially those on low incomes, many of whom have been protesting across Germany all week. The closure of bars and restaurants has deprived these students of income from part-time jobs that goes to support their studies. Without help from the state, many say they will need to drop out of higher education altogether.

There are smaller actions that institutions and academics can take. Students, and staff on short-term contracts, would welcome more support from academic colleagues in senior positions and from others with permanent positions, for example.

These colleagues should make the case to their managers that failing to provide more help to low-income students, or cutting the number of postdoctoral staff and teaching fellows will harm the next generation of researchers and teachers. It will also drastically reduce departments' capacity to teach and increase the load on those who remain, who are often forced to taking on the teaching responsibilities of their former colleagues. Senior colleagues can also request assessments of how any planned redundancies will affect equality and diversity.

Cutting back on scholarly capacity is always unwise, but to do so while increasing spending on R&D is wrong-headed. It will slow down economic recovery and jeopardize plans to make research more inclusive. Yet again, the academic precariat finds itself at a disadvantage. Governments, research managers and senior colleagues have a duty to help so that universities can keep these essential and valuable employees.

Communication is key to constructive peer review

The review process should be an honest, but collegial, conversation.

Differences of opinion, critique and robust debate are at the heart of how research advances. Learning and practising how to make — and how to respond to — an argument is foundational to both research and research publishing. Authors present their work against a background of existing knowledge and make a case for why their findings are new. Reviewers assess the work, offer their honest opinion and explain the reasons, especially if they disagree.

But such disagreements are not always communicated collegially, and all of those involved — authors, editors and reviewers — will recall occasions when lines were crossed. To obtain insight into researchers' experiences of the process of peer-review communication, *Nature* conducted two short polls of authors and editors earlier this year.

In a poll of editors of the Nature Research journals, nearly one-quarter (23%) of the 108 respondents said that they had encountered examples of inappropriate language in the course of making publication decisions.

And of 295 authors who responded to a separate poll about peer review, 48% said that their experiences with the process were broadly positive, 5% said their experiences were broadly negative and 47% said their experiences were neither positive nor negative.

To find out more, *Nature* asked these poll respondents for their one key piece of advice to journal editors; something that would help researchers trying to get published. Among the more than 100 responses to this question, one recommendation that frequently came up was that editors and reviewers should ensure that criticisms are more constructive.

"Honest, friendly comment on why the paper cannot be published," said one respondent. "Constructive reviews and motivating feedback," said another. "Look out for rude or inappropriate comments," said a third.

> **"Clearly, there's work to be done to improve review discussions."**

Clearly, there's work to be done to improve review discussions. One approach that can help is transparent peer review, in which discussions between authors and reviewers are published along with papers — and in which reviewers are named, should they wish to be — and this has been growing in popularity over the past few years. The approach provides one way to encourage reviewers to present clear arguments to support their views and to articulate why they would or would not recommend publication. This is particularly valuable in cases in which reviewers are asking for revisions to the paper.

Criticism can be difficult to hear and accept, and here, authors, too, have responsibilities. Arguments based on data and analyses are likely to be the most effective responses to reviewers' and editors' questions and concerns. Many authors will be reviewers themselves, and some will also be journal editors; this should help them to assess situations from those perspectives.

One survey respondent (an author) said that it would help if everyone involved approached the publication of a paper as they would a conversation. Ideally, it would be a discussion among colleagues, in which everyone was working to solve the same problem. This would form a basis for a collegial approach, but this is a hefty ambition, because research is often highly competitive, and publishing papers is, for good or bad, still among the main determinants of career progression.

When the stakes are high, lapses will happen — on all sides. And, amid such pressures, acting collegially can be a challenge. But it is a challenge that all must rise to. Everyone involved is ultimately on the same side: reviewers who put in the hours; editors who are the authors' champion and find the science compelling; and authors who want their work improved through peer review and published.