Higher education during COVID-19: A snapshot of digital engagement in Commonwealth universities

Detailed results and analysis

- The Association of Commonwealth Universities (ACU) conducted a digital engagement survey in May 2020, designed to capture the short-term impacts of the COVID-19 pandemic on the working habits of staff, students, and university leaders. The survey sought to answer the following key research questions:
  - What is the current picture of digital connectivity and engagement among university staff and students across Commonwealth countries?
  - What has the effect of the COVID-19 pandemic been on online and distance learning, and how might this also evolve in the future? How have attitudes changed? What opportunities and challenges does this bring?
  - How has research been affected by campus closures and lockdowns? What are the implications for undertaking research now, and in the near future?
  - What does the segmented analysis tell us about digital equality and how this intersects with national contexts or other inequalities?

- Results provide a snapshot of individual levels of digital engagement, changing attitudes and behaviours, and the challenges associated with online education, research, and remote working across different countries, institutions, and professional roles.


Overview of responses

- The survey elicited **258 respondents from 33 countries**.

- These included 30 responses from high income countries, 27 for upper middle income countries, 180 from lower middle income countries, and 21 from low income countries.

- Respondents were 63% male and 36% female. 1% preferred not to say.

- 44% of respondents were academics. 25% were professional services staff, and 17% were students. 10% of respondents were senior leaders (deans and above).

- Africa was the most represented region, accounting for 171 responses, and 66% of the total. Of these, 91 (35%) were from east and south Africa, and 80 (or 31%) were from west Africa.

- There were 55 responses from Asia, accounting for 21% of all responses. 28 responses (11%) were from south Asia, and 27 (10%) from east Asia.
• The regions with the smallest number of responses were Europe with 11 responses (4%), the Pacific with 11 responses (4%), and 10 responses from the Caribbean and Americas (4%)

Note on survey design and analysis

• As a self-selected online survey about digital engagement, there is inherent bias in the sample. Findings should be considered in this context.

• Sample sizes are very small for some countries. Regional and country groupings (e.g. high income countries) have therefore been created. To maximise the value of the responses, case studies have been developed for those countries with a higher number of responses.

• Questions on campus closure, urban/rural location, and internet speed have been excluded due to ambiguity in the original survey questions and response options (see Appendix 1 for the survey questions). Comparison between questions is sometimes hampered by inconsistency in phrasing and response options.

• Given the sample design, testing for statistical significance was not undertaken and findings are therefore not generalisable.

• 15 segmentation variables were developed and used in the analysis. Country-level analysis focuses on national income level due to sample bias and heterogeneity in the regional groupings.

• Given small sample sizes in some segments, differences are only reported when the percentage difference is more than 10% points or where a clear trend is apparent. Response percentages may not add up to 100% due to rounding.

• Some results are difficult to interpret due to the limitations of the original survey design. As a result, analysis has in some cases required a number of assumptions.

Figure 1: Sample overview

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Section 1:
What is the current picture of digital connectivity and engagement among university staff and students across Commonwealth countries?

Key takeaways

- There is widespread **access to devices** among respondents, as well as widespread **access to the internet** while working remotely. However, only 45% of respondents said they had access to broadband. The likelihood of respondents having access to broadband decreases with national income level.

- Responses suggest there will be a considerable **shift in behaviour** as a result of the pandemic. 25% of respondents said they worked online frequently (weekly) before the pandemic and 14% said they never did. By contrast, 65% of respondents predicted working online frequently after the pandemic and only 1% predicted never working online.

- For those in lower income contexts, the **challenges associated with remote working** are predominantly technical and financial (data costs, internet speed, and internet reliability), while respondents from higher income countries are less likely to cite challenges overall and most likely to cite the challenge of working across **time zones**.

- Forms of **institutional support for remote working** differ depending on national income status and professional role. The likelihood that institutions provide contributions to data and devices decreases according to national income level, and senior leaders and professional services staff were more likely than academics or students to report contributions.

- Findings suggest that **financial contributions toward data or devices from institutions may be effective**, insofar as they correlate with a higher likelihood of broadband access, a lower likelihood of reporting never having worked online pre-pandemic, and a higher likelihood of predicting frequent online working following the pandemic.

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**Figure 2: Devices and connectivity**

![Access to broadband when remote working](image)

- **Access to devices**
  - **Tablet**
    - Senior leader: 52%
    - Professional services: 28%
    - Academic: 19%
    - Student: 19%
  - **Desktop**
    - Senior leader: 52%
    - Professional services: 28%
    - Academic: 19%
    - Student: 19%

- **Assessment of access to broadband when remote working**
  - **Broadband**: 45%, **Mobile or telephone line**: 50%, **None – not able to work away from campus**: 2%

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Figure 3: Online working and COVID-19

ONLINE WORKING & COVID-19

Frequency of online working before and after pandemic

Before and after Percentage point increase

Professional role

Before and after Percentage point increase

National income level

Before and after Percentage point increase

Figure 4: Institutional support for remote working

INSTITUTIONAL SUPPORT FOR REMOTE WORKING

Type of contribution and proportion receiving institutional support

Variations in institutional support

National income level

Professional role

Online working before COVID-19

Online working after COVID-19
Section 2:

What has the effect of the COVID-19 pandemic been on online and distance learning, and how might this also evolve in the future? How have attitudes changed? What opportunities and challenges does this bring?

Key takeaways

• Institutions have moved swiftly to ensure continuity of teaching in the pandemic, with 80% reporting that some, most, or all teaching and learning has moved online.

• There is some degree of confidence that the online experiment required by the pandemic will lead to lasting change, with 53% of respondents predicting that all or most departments would continue to offer online teaching and learning after the pandemic.

• However, both the extent of current online teaching and learning, and predictions for the future vary according to region, status/professional role and prior institutional experience.

• Individuals’ perceptions of the quality of online teaching and learning are mixed.

• Responses suggest a clear preference for blended degrees, involving a combination of online and face-to-face learning. While 90% of respondents agreed that a blended degree is equivalent to a traditional degree, less than half of respondents felt a degree earned solely through online learning was equivalent.

• A high proportion of respondents agreed that their institution had the will and the capacity to develop high-quality online teaching and learning. Over 80% also agreed that the quality of online learning and teaching has improved during the past six months.

• The most commonly cited challenges for online teaching and learning were accessibility for students, staff training and confidence, connectivity costs, and student engagement.

• Respondents from low and lower middle income countries were more likely to cite connectivity costs, while respondents from high income countries were more likely to cite challenges relating to student perceptions of quality, and less likely to cite challenges overall.
Figure 5: The impact of COVID-19 on online teaching and learning

ONLINE TEACHING & LEARNING & COVID-19

Extent online T&L occurred across departments before the pandemic

Extent online T&L moved online as a result of COVID-19

Extent online T&L anticipated to continue across departments after the pandemic

Figure 6: Perceptions of quality – online teaching and learning

PERCEPTIONS OF QUALITY

What is the quality of online teaching & learning compared to that offered in person?

Has quality improved in past 6 months?

Is a degree earned through online learning equivalent to a degree earned through face-to-face learning?

Solely online learning

Blended learning
Figure 7: Perceptions of institutional will and capacity

INSTITUTIONAL WILL & CAPACITY

Respondents’ perceptions of their institutions’ will and capacity to develop high quality online learning & teaching

Institutional will

Professional role

National income level

Agree Disagree

Institutional capacity

Professional role

National income level

Agree Disagree

Figure 8: Challenges for online teaching and learning

CHALLENGES FOR ONLINE LEARNING

Challenges for developing online teaching and learning

1. Student accessibility (81%)
2. Staff training / confidence (79%)
3. Connectivity costs (76%)
4. Student engagement (71%)

Specialist equipment/labs required

Natural, Environmental & Formal Sciences

Applied Sciences & the Professions

Arts, Social Sciences & the Humanities

Staff perceptions of quality

Challenges by national income level

High-income countries

Low-income countries

Professional bodies discourage...
Section 3:

How has research been affected by campus closures and lockdowns? What are the implications for undertaking research now, and in the near future?

Key takeaways

- University research across the Commonwealth has been impacted by the pandemic, with almost 80% of respondents agreeing that it has affected their ability to undertake research.

- Researchers have acted swiftly to take their research online. 69% of respondents said they had been able to undertake research activities online.

- There has been a variable impact across different disciplines, with 92% of academics in the natural, environmental and earth sciences indicating that the pandemic has impacted their ability to undertake research, compared to 61% of academics in the arts, social sciences, and the humanities.

- However, qualitative responses suggest that, overall, research-active staff have been able to pivot to activities which can be done online (e.g. online data collection, grant applications, write-ups) in the short term, but that the impact will begin to be felt more keenly if a return to some kind of normality is not possible in the medium term.

- A large majority (81%) have been able to migrate research collaborations online, potentially as a result of collaborations already having necessitated a degree of digital engagement.

Figure 9: COVID-19 and online research activities and collaborations

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The survey was conducted by Martin Hamilton and report writing and analysis was led by Lucy Shackleton and Rosanna Mann, on behalf of the ACU.

**Martin Hamilton**

Martin is a writer, futurist, and innovation adviser. His work focuses on helping people and organisations to understand the impact of near future trends and technologies. He has worked in and around the intersection of research and industry for some 30 years, doing everything from researching next generation internet protocols to running a supercomputer centre.

**Lucy Shackleton**

Lucy has a background influencing policy in local, national and international contexts, across science, higher education, and international relations. She led European and international engagement for Universities UK, including in the immediate aftermath of the Brexit vote. She has also held positions at King’s College London and the London School of Economics and Political Science.

**Rosanna Mann**

Rosanna is a social researcher with ten years of experience embedding evidence into policy design and delivery. She has worked for a range of government departments and has conducted research on research funding and widening participation for UK Research and Innovation, the University of Bristol, and the Sutton Trust. Over her career she has specialised in evidence synthesis and evaluation.
Appendix 1: Survey questions

ACU member survey – digital experience

As COVID-19 continues to have a significant impact on higher education across the globe, universities are adapting to a changing world and finding new ways to connect.

International collaboration remains at the heart of the ACU and its work, and online engagement will be a crucial element during this challenging time and beyond. We would like to understand how you prefer to work online, and the challenges and opportunities for more digital interaction, so that we can offer engagement opportunities to all of our member universities.

We are asking staff and students at ACU member universities about their experiences of online collaboration. This is very much about your own personal perspective rather than an institutional view. We would be very grateful if you could take some time to complete our survey. It should take no more than 15 minutes.

We will share anonymised summary results on ACU communications channels (including our website, social media accounts, publications, and presentations) by September 2020. The ACU is committed to protecting your personal information and to being transparent about the information we are collecting about you and what we do with it. To find out more, see our privacy notice.

This survey may include links to third-party websites, plug-ins and applications. Clicking on those links or enabling those connections may allow third parties to collect or share data about you. We do not control these third-party websites and are not responsible for their privacy statements. When you leave the survey, we encourage you to read the privacy notice of every website you visit.

Survey deadline: 3 June 2020, 23.45 UTC

Please answer this survey from your own personal perspective. We are seeking individual rather than institutional views - there may be other people from your institution also responding.

About you

1. Title and name

* 2. Your institution

* 3. Your country

* 4. Your gender
   - Male
   - Female
   - Other
   - Prefer not to say

* 5. Are you:
   - Staff/Faculty
   - Student
   - Other

6. Please state your job title

7. Your primary academic discipline or Faculty (if applicable)

8. Please provide your email address if you are happy to discuss your responses further

Status of institutional operations

* 9. Which of these options best describes the current status of your university’s campus in response to COVID-19?
   - Full closure
Partial closure (some staff/students still on campus)
Planning for closure
No change
Other (please specify)

**Devices and connectivity for remote and online working**

* 10. What device(s) do you have access to that you can use to work online? [tick all that apply]
   - Smartphone
   - Tablet (e.g. iPad)
   - Laptop
   - Desktop
   - Other (please specify)

* 11. How frequently did you work online at your university before the pandemic (virtual meetings, working from home, online training or CPD)?
   - Never
   - Rarely (monthly)
   - Frequently (weekly)
   - All of the time

* 12. How does your university support you in working remotely?
   - Contribution towards data costs
   - Contribution towards device costs
   - Provides device(s)
   - Provides other support (please state)

* 13. What kind of internet connection do you have access to when working remotely? [tick all that apply]
   - None – not able to work away from campus
   - Mobile data (e.g. 3G/4G/LTE)
   - Telephone line/dial-up
   - Cable TV broadband
   - Fibre optic broadband
   - Satellite broadband
   - Do not know
   - Other (please state)

* 14. What is your connectivity like when working remotely? (please visit Speedtest.net to carry out a connectivity test and paste in the results below):
   - Ping time
   - Download speed
   - Upload speed

* 15. How frequently do you foresee yourself working online at your university after the pandemic?
   - Never
   - Rarely
   - Frequently
   - All of the time

* 16. Where are you based when you work remotely?
   - Urban area
   - Sub-urban area
   - Semi-rural area
   - Rural area

**Tools and approaches to working collaboratively online**

* 17. How do you prefer to work collaboratively on documents?
   - Download documents to review and edit locally
   - Join with others to edit a shared document

* 18. How do you prefer to participate in group discussion?
Asynchronous (not in real time) group discussion (mailing lists, forums, etc.)
Synchronous (real time) group discussion (including video calls, etc.)

* 19. How do you prefer to participate in online events?
   Participate in live events (e.g. webinars, online conference events)
   Watch or listen to recorded events (not live)
* 20. What is your opinion about using these platforms for professional collaborations? [Select all that apply]
   I prefer this platform / I can use this platform / I can use but dislike this platform / I have not used this platform / I cannot use this platform
   Google Docs
   Microsoft OneDrive
   Basecamp
   Huddle
   WhatsApp
   Zoom
   Google Meet/Hangouts
   Facebook
   Microsoft Teams
   Slack
   Shindig
   YouTube
   Vimeo
   SoundCloud
   Moodle
   FutureLearn
   Adobe Connect
   CrowdCast
   Sli.do
   Instagram
   Twitter
   LinkedIn
   Other – please list as many as you can

* 21. What challenges do you face in participating remotely in online activities such as video calls and webinars? [tick all that apply]
   Internet speed (e.g., internet 'pauses' or 'falls behind' or cannot support video connection)
   Internet reliability (e.g., internet 'cuts out')
   Data costs
   Device costs
   Time zones
   Privacy – lack of private space
   Other (please state)

* 22. Thinking specifically about online events and training, what do you feel is the quality of experience compared to that offered in person?
   Much better / Somewhat better / About the same / Somewhat worse / Much worse
   Online training
   Online events
   Comments

Online learning at your university

* 23. How much online teaching and learning occurred at your university before the pandemic?
   None
   Across a few departments
   About half of all departments
   Across most departments
   Across all departments
   Don't know

* 24. To what extent has teaching and learning moved online as a result of COVID-19?
   All teaching and learning is now online
Most teaching and learning is now online
Some teaching and learning is now online
No teaching and learning is now online
Teaching and learning online is not an option (not applicable)
Don’t know

* 25. How much online teaching and learning do you anticipate will take place in your university, as part of blended programmes, after the pandemic?
   None
   Across a few departments
   About half of all departments
   Across most departments
   Across all departments
   Don’t know
   Not applicable

* 26. What do you feel are the challenges for developing online teaching and learning? [tick all that apply]
   Staff training and confidence
   Accreditation of online courses
   Staff/faculty perceptions of quality
   Costs of devices
   Connectivity costs
   Subject requires specialist equipment/laboratories
   Subject requires learning manual techniques
   Data protection / privacy concerns
   Accessibility for students
   Student perceptions of quality
   Student engagement
   Regulatory requirements prohibit (or limit) it
   Professional bodies discourage it (or actively mandate against it)
   Other (please state)

Perceptions of online learning

* 27. In general, what do you feel is the quality of online teaching and learning, compared to that offered in person?
   Much better
   Somewhat better
   About the same
   Somewhat worse
   Much worse

28. Do you have any other comments relating to Q27?

* 29. To what extent do you agree/disagree with the following statements
   Strongly Agree / Agree / Disagree / Strongly Disagree
   A degree earned solely through online learning is equivalent to a degree earned through face-to-face learning
   A blended degree involving a combination of online and face-to-face learning is equivalent to a degree earned only through face-to-face learning
   My opinion on the quality of online learning and teaching has improved during the past 6 months
   The accreditation of online teaching and learning is more susceptible to corruption than face-to-face learning
   My institution has the capacity to develop high-quality online teaching and learning
   My institution has the will to develop high-quality online teaching and learning

Research at your university

* 30. Are you involved in research at your university?
   Yes – as a researcher
* 31. To what degree do you agree with this statement:  
   Strongly Agree / Agree / Disagree / Strongly Disagree / N/A 
   COVID-19 pandemic has affected my ability to undertake research? 

* 32. Have you been able to undertake any research activities online? 
   Yes 
   No 
   N/A 

* 33. Have you been able to continue with research collaborations online? 
   Yes 
   No 
   N/A 

34. How are you engaging in online research activities? 

**Support from the ACU** 

* 35. Are you aware of the ACU’s new series of webinars launched in May 2020? [pick one]  
   Yes – have signed up for one or more webinars 
   Yes – but have not signed up for any webinars as they are not relevant to me 
   Yes – but have not signed up for any webinars as they have occurred at an inconvenient time 
   No 

* 36. What topics would you like to see covered in future ACU webinars and other online events, such as roundtables and training? 

* 37. What can the ACU do to support you and your university with online collaboration during and after the pandemic? 

**Final thoughts** 

* 38. What changes has your university implemented that you think should become part of normal operating practice after the pandemic is over? 

* 39. Do you have any further thoughts on the impact of COVID-19 for future online university operations (working remotely, online teaching and learning, undertaking research, etc.)?