

# Reflections from the pandemic: discussing the impacts of COVID-19 on computer science in UK HE

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BCS EARLY CAREER CS ACADEMIC NETWORK EVENT (30 MARCH 2022)

# Committees

[UK Parliament](#) > [Business](#) > [Committees](#) > [Education Committee](#) > The impact of COVID-19 on education and children's services

## The impact of COVID-19 on education and children's services

### Inquiry

The inquiry will look at how the outbreak of COVID-19 is affecting all aspects of the education sector and children's social care system and will scrutinise how the Department for Education is dealing with the situation.

It will examine both short term impacts, such as the effects of school closures and exam cancellations, as well as

CORRESPONDENCE | VOLUME 8, ISSUE 5, E644, MAY 01, 2020

## Considering inequalities in the school closure response to COVID-19

Richard Armitage  • Laura B Nellums

Open Access • Published: March 26, 2020 • DOI: [https://doi.org/10.1016/S2214-109X\(20\)30116-9](https://doi.org/10.1016/S2214-109X(20)30116-9)



Viewpoints/ Controversies | Published: 11 June 2020

## COVID-19 as a catalyst for educational change

Yong Zhao 

*PROSPECTS* 49, 29–33(2020) | [Cite this article](#)

9540 Accesses | 1 Citations | 249 Altmetric | [Metrics](#)

### Abstract

The massive damages of COVID-19 may be incalculable. But in the spirit of never wasting a good crisis, COVID-19 represents an opportunity to rethink education. The rethinking should not be about improving schooling, but should focus on the what, how, and where of learning. This article highlights some of the questions that schools can ask as they reimagine post-COVID education.

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Journal information ▾

nature > nature medicine > comment > article

Comment | Published: 27 March 2020

## Digital technology and COVID-19

Daniel Shu Wei Ting , Lawrence Carin, Victor Dzau & Tien Y. Wong

*Nature Medicine* 26, 459–461(2020) | [Cite this article](#)

63k Accesses | 114 Citations | 175 Altmetric | [Metrics](#)

The past decade has allowed the development of a multitude of digital tools. Now they can be used to remediate the COVID-19 outbreak.



Open Access | Published: 04 June 2020

## COVID-19 and digital disruption in UK universities: afflictions and affordances of emergency online migration

Richard Watermeyer , Tom Crick, Cathryn Knight & Janet Goodall

*Higher Education* (2020) | [Cite this article](#)

6175 Accesses | 34 Altmetric | [Metrics](#)

# THE IMPACT OF COVID-19 ON EDUCATION

INSIGHTS FROM  
*EDUCATION AT A GLANCE 2020*

Andreas Schleicher



A framework to guide  
an education response  
to the COVID-19  
Pandemic of 2020

Fernando M. Reimers, Global Education Innovation  
Initiative, Harvard Graduate School of Education  
Andreas Schleicher, Directorate of Education and  
Skills, Organisation for Economic Co-operation and  
Development



Stay Safe. Stay Learning:  
Continuity of learning policy statement



Stay Safe. Stay Learning.



Remote Learning:  
Rapid Evidence Assessment

April 2020

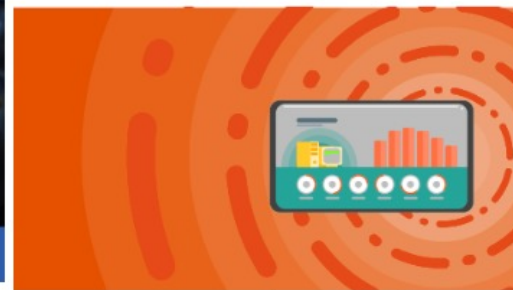


## Guidance

Building a Taxonomy  
for Digital Learning



USING DIGITAL TECHNOLOGY  
TO IMPROVE LEARNING  
Guidance Report



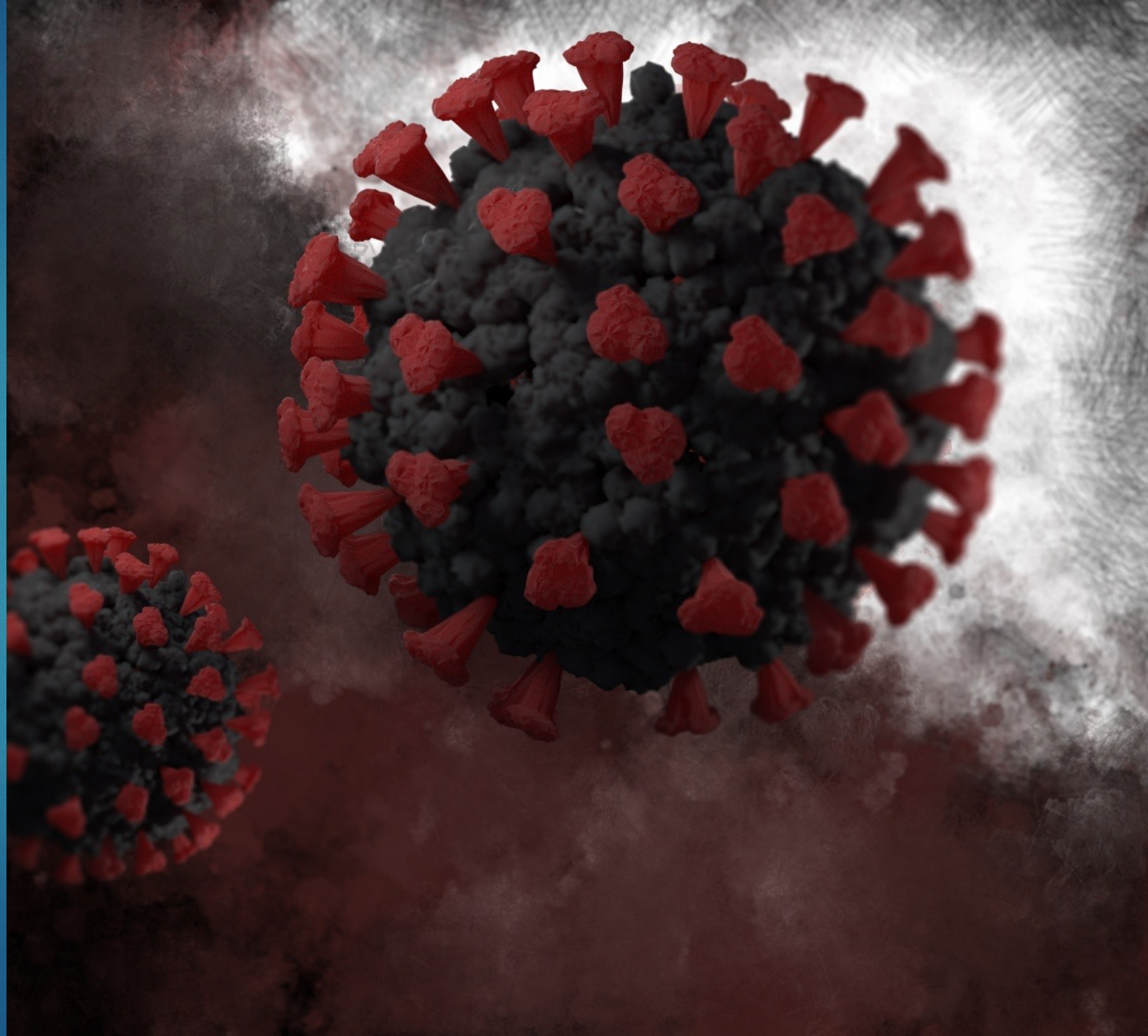
COVID-19 | Global Education Coalition | What we do | Stories & Ideas | Resources




Education: From disruption to recovery

Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the COVID-19 pandemic.

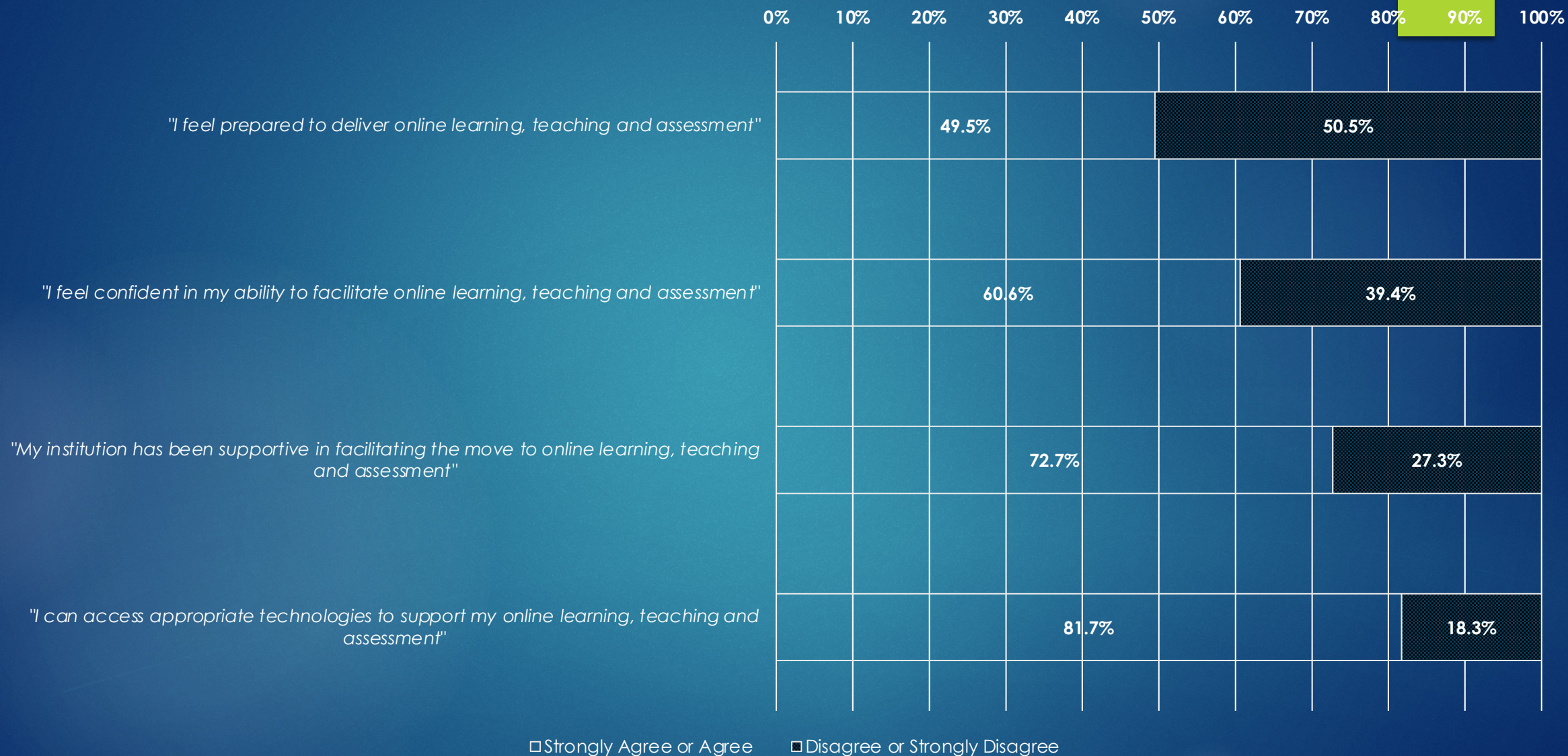
Drawing on  
data from four  
major empirical  
studies over the  
last 24 months,  
consulting  
+7000 UK HE  
workers



A photograph of a person's hand gesturing while a laptop displays a video conference with six participants. The background is a blurred office setting with a wooden shelf and a potted plant. A solid green rectangle is in the top right corner, and a dark grey semi-transparent rectangle covers the right side of the image, containing the text.

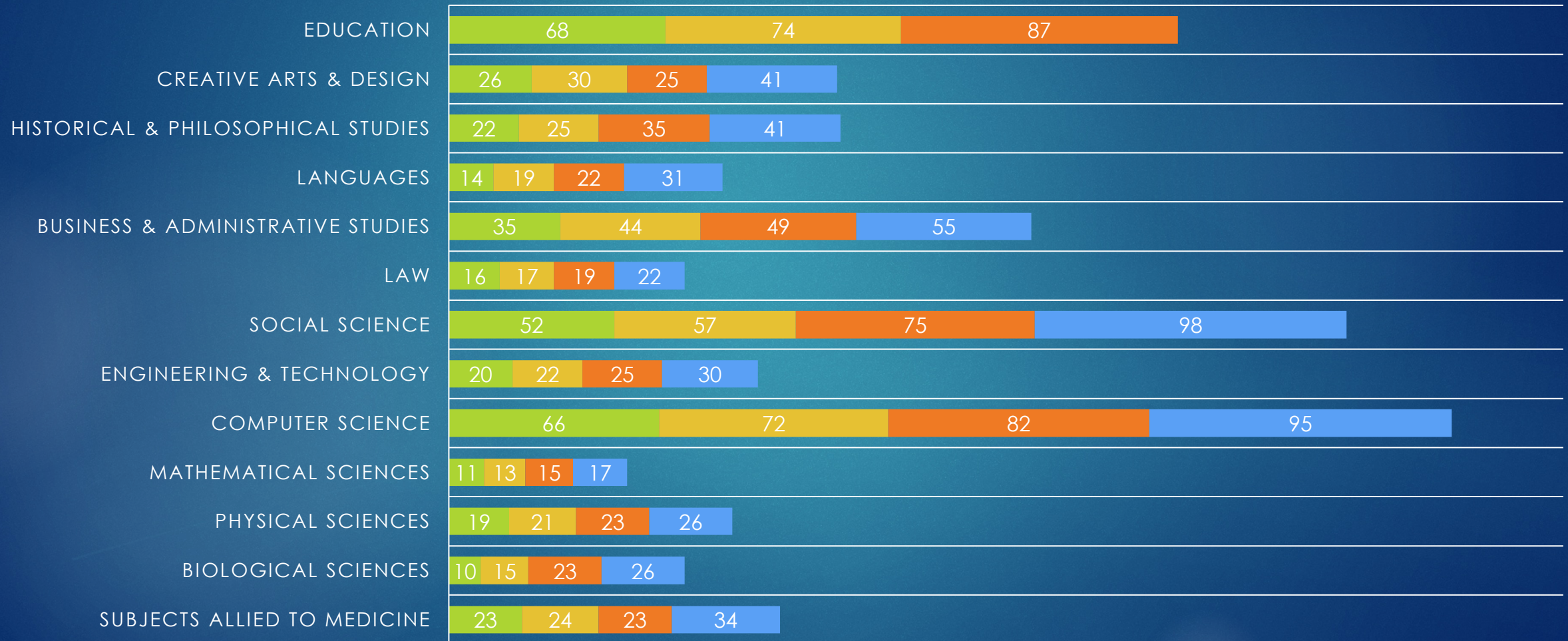
# UK HE academic staff: Immediate perspectives on transitioning to remote working

# Headline findings

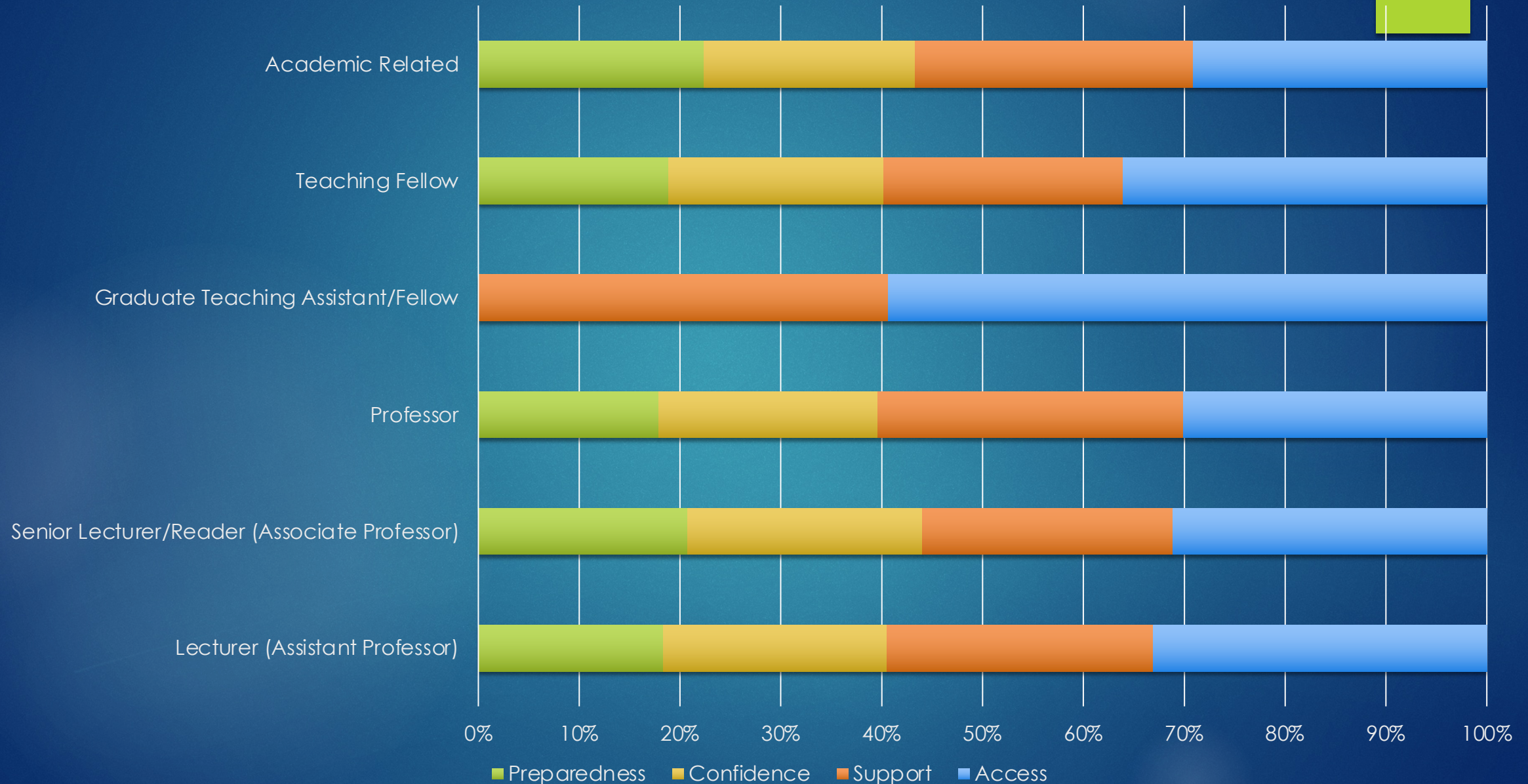


# PREPAREDNESS, CONFIDENCE, SUPPORT AND ACCESS BY DISCIPLINE

■ Preparedness ■ Confidence ■ Support ■ Access



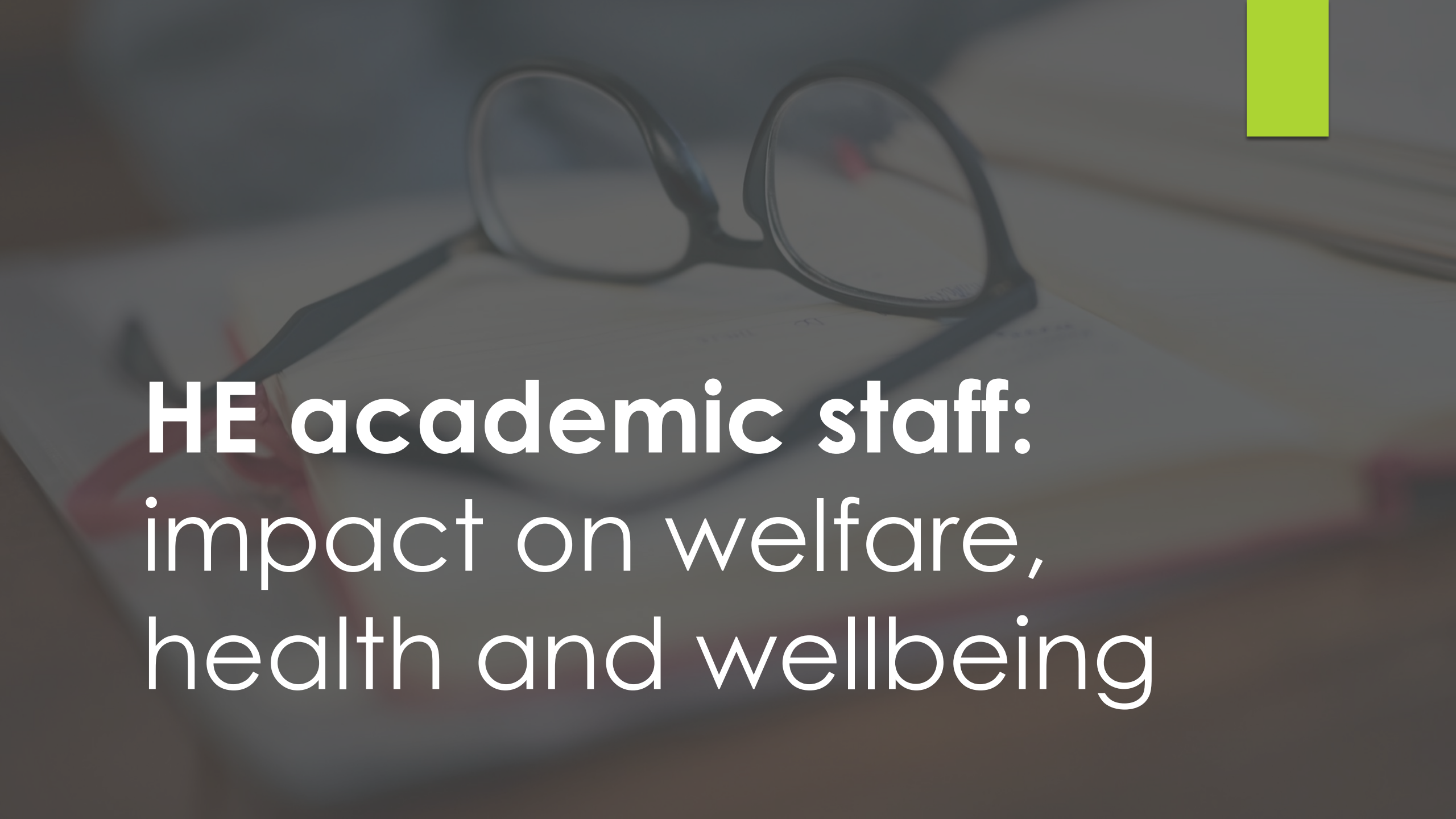
# PREPAREDNESS, CONFIDENCE, SUPPORT and ACCESS by POSITION



SEE: [HTTPS://DOI.ORG/10.1007/S10734-020-00561-Y](https://doi.org/10.1007/s10734-020-00561-y) AND [HTTPS://DOI.ORG/10.1145/3416465.3416472](https://doi.org/10.1145/3416465.3416472)

# Key themes

- ▶ Destabilisation of student marketplace in the UK:
  - ▶ issues of recruitment and retention; threat from private HE providers and edtech sector;
- ▶ Economic impact not only in terms of decreased revenue from tuition fees but other university services and by extension to local economies/national GDP;
- ▶ Deprofessionalisation, dumbing-down;
- ▶ Precarisation, jobs obsolescence, job cuts;
- ▶ Work intensification, gender inequality;
- ▶ Cessation of research:
  - ▶ impact on academic labour market (e.g. ECRs)
- ▶ Limited identification with digital affordances and digital practice.



# **HE academic staff:** impact on welfare, health and wellbeing

# “Pandemia”

## Overview

International survey of N=2649 academics; n=1099 UK (65% female; 61% open-ended contracts; 66% from “research intensive” universities

## Key Themes

- Crisis-management = creep of undemocratic forms of institutional governance; cost-cutting (disaster management); deprioritisation of research;
- Impaired trust in university leadership;
- Increase in labour casualisation; job insecurity;
- Rise in work exploitation and work-based inequalities;

## Headline Statistics

84%: corporate response of universities has contributed to work related stress

85%: suffering from digital fatigue

77%: feeling demotivated

81%: major damage to the job prospects of ECRs

92%: changes to academics’ working lives as a consequence of institutional responses to COVID-19 have resulted in long-lasting impacts to health and wellbeing

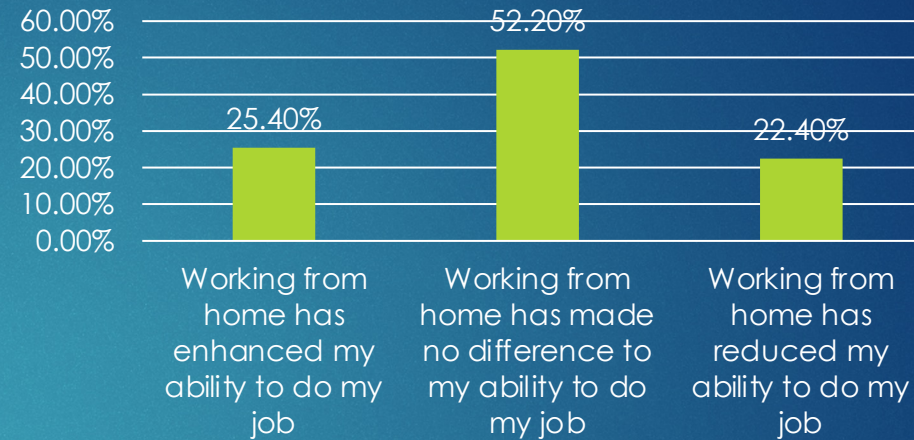
The background of the slide is a blurred office scene. On the left, a laptop screen is visible. In the center-left, there is a black and white mug. In the foreground, there are papers, a pen, and a paperclip. A dark grey semi-transparent rectangle covers the right side of the image, containing the text.

**HE professional  
service staff:**

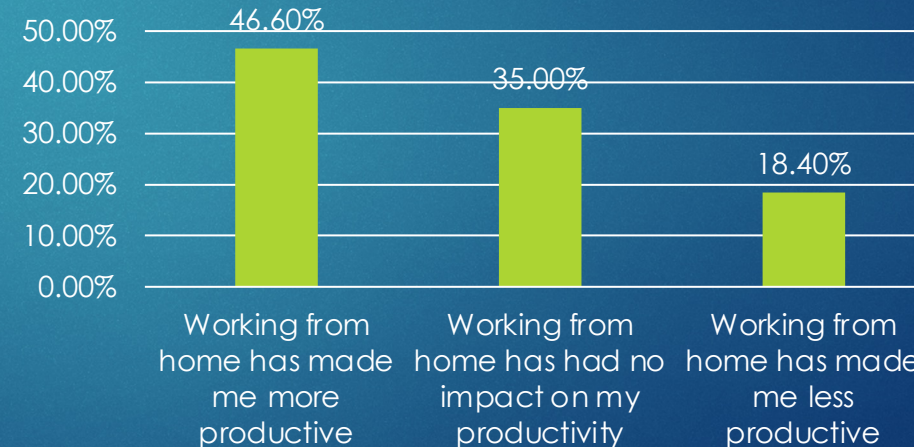
**Work experiences  
under COVID-19**

# Impact on work ability and work productivity

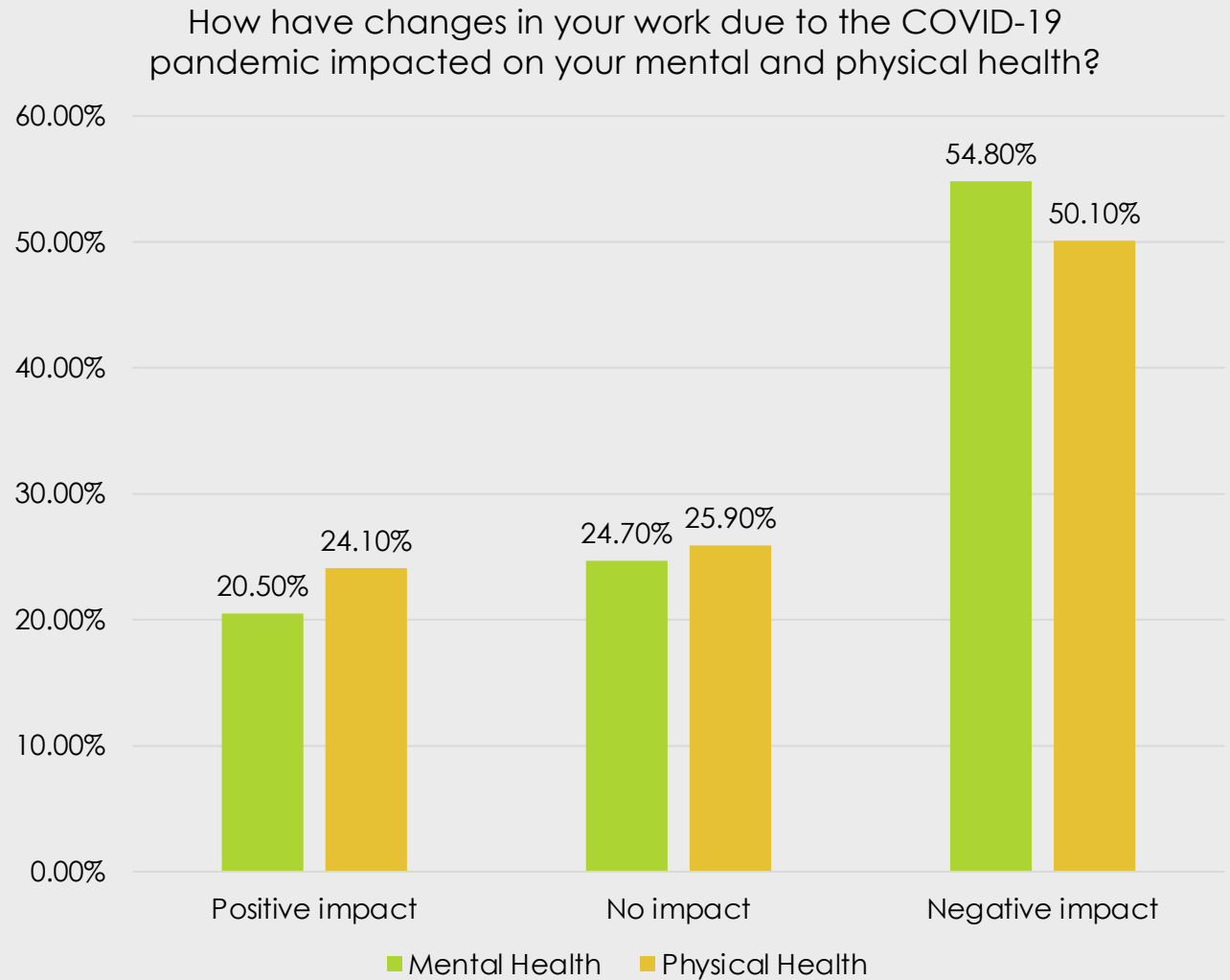
How has working from home affected your ability to do your job?



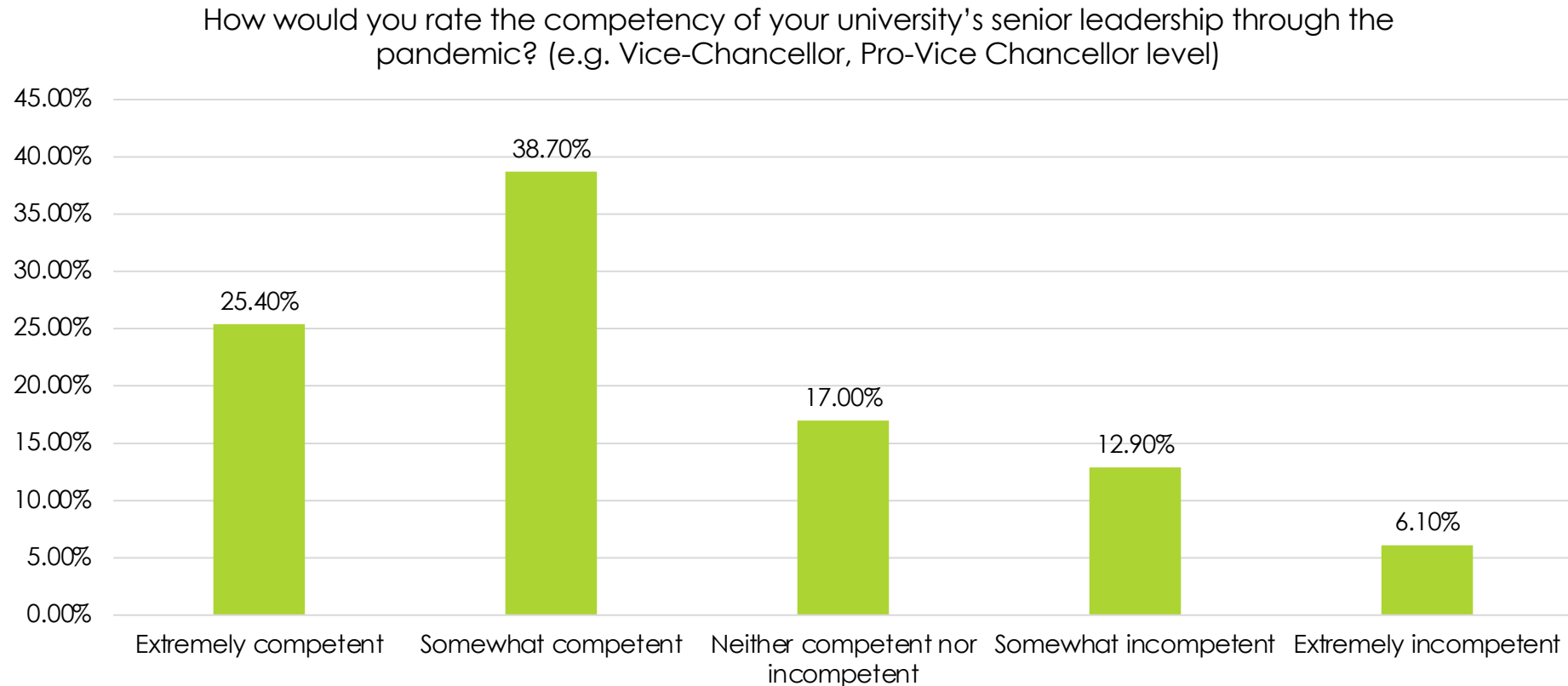
How has working from home affected your productivity ?



# Impact on mental and physical health and wellbeing



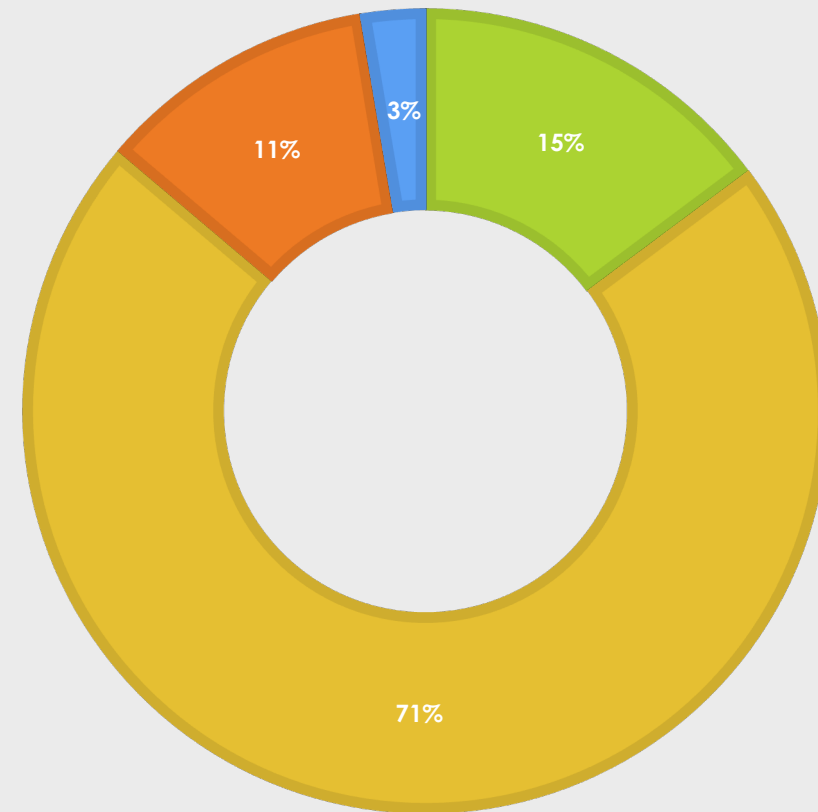
# 64% of respondents rate their university's senior leadership through the pandemic as: COMPETENT



A longer-term shift away from campuses?

## IN THE FUTURE WHAT WOULD BE YOUR PREFERRED MODE OF WORK?

■ Exclusively home-based ■ Blended ■ Exclusively campus-based ■ Other



# The future of learning in UK HE?

- ▶ The COVID-19 context has clearly not gone away, but has shifted — **a new (ab)normal?**;
- ▶ Rethinking/refreshing/resetting: **what/how/where of learning?**
- ▶ Impact across different settings, disciplines and domains;
- ▶ Renewed focus on digital pedagogy and practice (infrastructure, faculty, pro services, students, society?);
- ▶ Investment in professional learning/development;
- ▶ More criticality needed on widespread application of edtech;
- ▶ Wider policy context: post-COVID economic recovery, increased focus on “digital”, future skills demands.

# What does this mean for CS?

- ▶ Positives e.g. *“Computer science education is probably a good place to be right now...”* (UKICER'20)
- ▶ And negatives e.g. *“I am concerned that my institution thinks a move online is a move to more innovative and modern teaching, just by virtue of it being online...”* (UKICER'20)
- ▶ Positive renewed focus on “digital” (infrastructure, skills, society?);
- ▶ Changes in schools/quals, continued impact on UK HE;
- ▶ New innovative approaches to LT&A;
- ▶ Ongoing impact on R&I (and other activities)...thinking about balancing all of this post-COVID?

# References

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## **We would like to acknowledge the contribution of our wider team of researchers including:**

Professor Richard Watermeyer (University of Bristol, UK); Dr Cathryn Knight and Dr Janet Goodall (Swansea University); Professor Kalpana Shankar (UCD, Ireland); Dr Fiona McGaughey (University of Western Australia); Dr Joanna Hardman (University of Cape Town, SA); Dr Venkata Ratnadeep Suri (Indraprastha Institute of Information Technology, India); Dr Roger Chung (Chinese University of Hong Kong); Dr Dean Phelan (Maynooth University, Ireland) and Margarida Borrás Batalla (University of Bristol) in addition to funding provided by the Worldwide Universities Network (WUN)

# Diolch yn fawr/thank you!

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