



# DIGITALISING LEARNING:

THE NEW NORMAL

13 - 14 AUG 2020

skills  
future month

IAL

INSTITUTE FOR  
ADULT LEARNING  
SINGAPORE

AN INSTITUTE OF  
**SUSS**  
SINGAPORE UNIVERSITY  
OF SOCIAL SCIENCES

In partnership with

SKILLS *future* SG

In support of

 JOBS & SKILLS



# DIGITALISING LEARNING:

MAKING IT WORK

14 AUG 2020

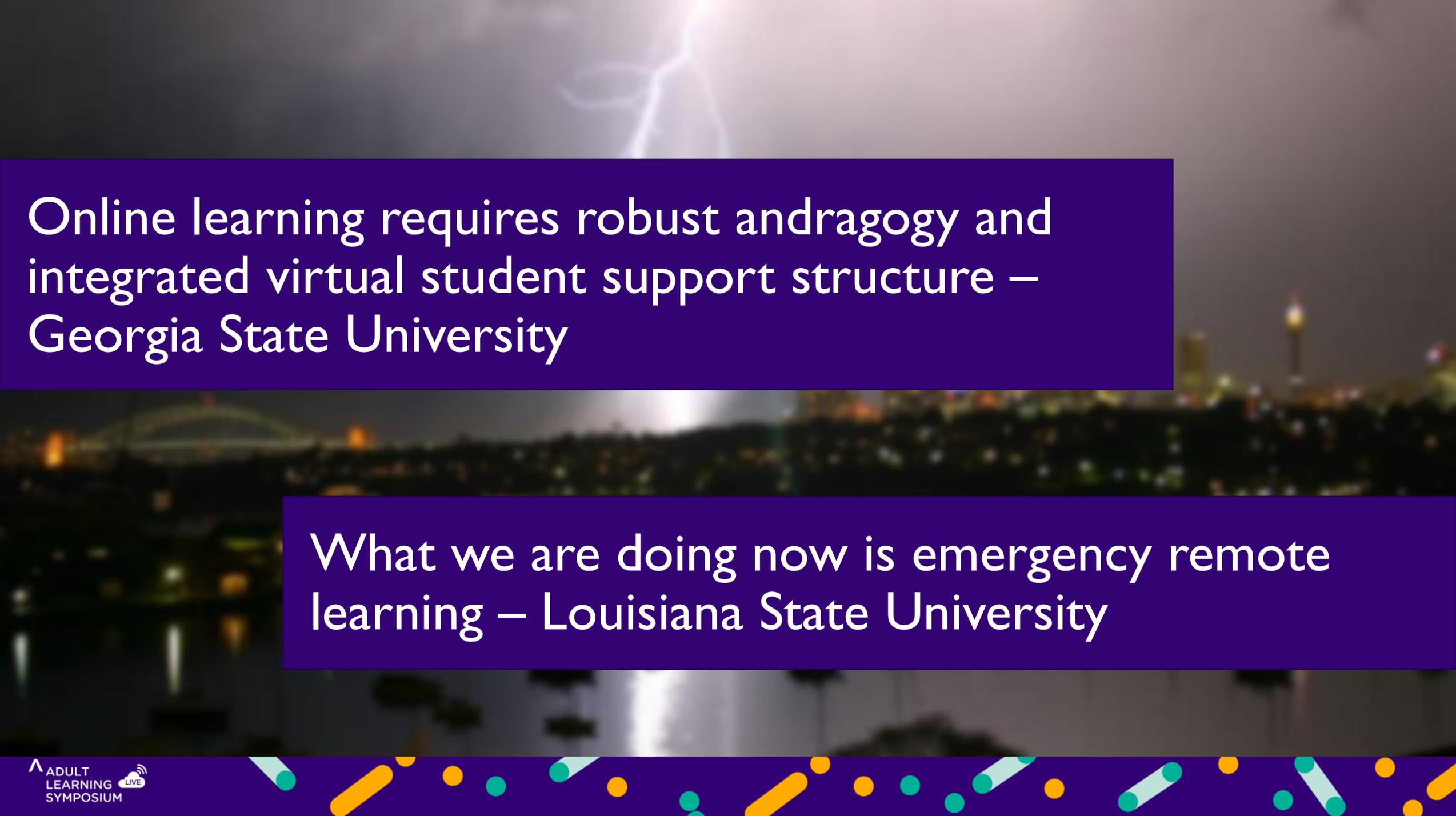


# **PIVOTING FROM OFFLINE TO ONLINE – DURING AND POST PANDEMIC**

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# Agenda

- Challenges
- Case Studies
- Research
- Opportunities



Online learning requires robust andragogy and integrated virtual student support structure – Georgia State University

What we are doing now is emergency remote learning – Louisiana State University

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# Challenges

- Digital Readiness
- Engagement

Adult Learners

- Instructional Design
- Digital Skills
- Engagement

Facilitators

- Technology
- Assessment
- Financials
- Engagement

Providers

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# Case Study 1

## Virtual Campus for Corporate



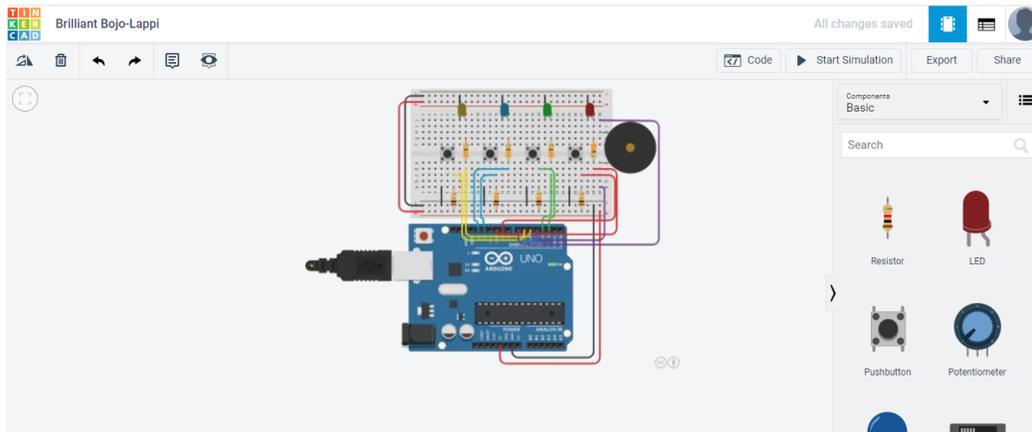
Tan Kok Soon

Kwan Wei Kuang

QH Poh



Physical kitset using  
MSP432P401R chipset



Online Simulator  
using Arduino Uno



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## Case Study 2

### Physical Microcontroller Kitset to Online Simulator

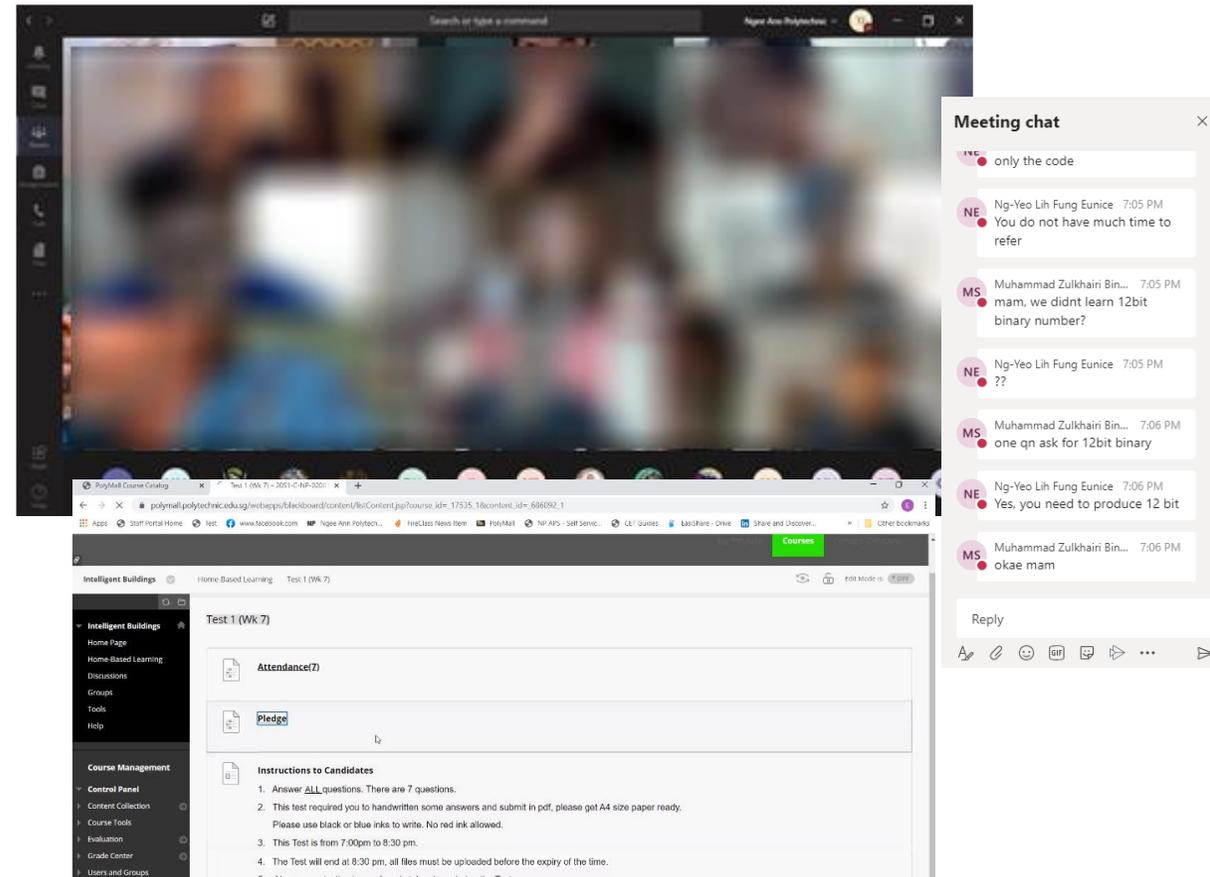
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# Case Study 3

eAssessment and  
eProctoring

# E-ASSESSMENT AND E-PROCTORING

- Modules
  - Fire Operations and Investigations
  - Intelligent Buildings
- Open Book on PolyMall
  - Timer and test commencement password features
- Basic E-Proctoring
  - Livestream and online chat via Microsoft Teams



# WHAT DOES OUR CLIENT SAY?



Knowledge Park Student  
Care Centre

Would you send more staff  
for remote training?

Yes, certainly. Remote  
learning seems to be the  
most ideal way to continue  
training for our coaches  
especially during this  
COVID-19 period.

Remote training allows learning and  
upgrading of skills for our coaches  
even during Circuit Breaker. Our  
coaches can attend classes in the  
comfort of their home and saves  
time on travelling too.

It is a good and effective  
way of learning especially for  
the younger generation who  
are tech savvy. Some coaches  
who do face problems either  
with connection or  
assignment are able to  
approach the trainer or IT  
support from NP.

# WHAT DOES OUR CLIENT SAY?



From thrice a week to fully remote,  
asynchronous and synchronous.

Support and encouragement from  
teaching team and classmates.

Queries were promptly addressed  
via regular e-meetings.



Chew Lai Teng  
Global Foundries  
Electrical Engineering

Looks forward to more  
remote learning.

Accessible and convenient,  
saves significant time and  
money on travel.

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# Research

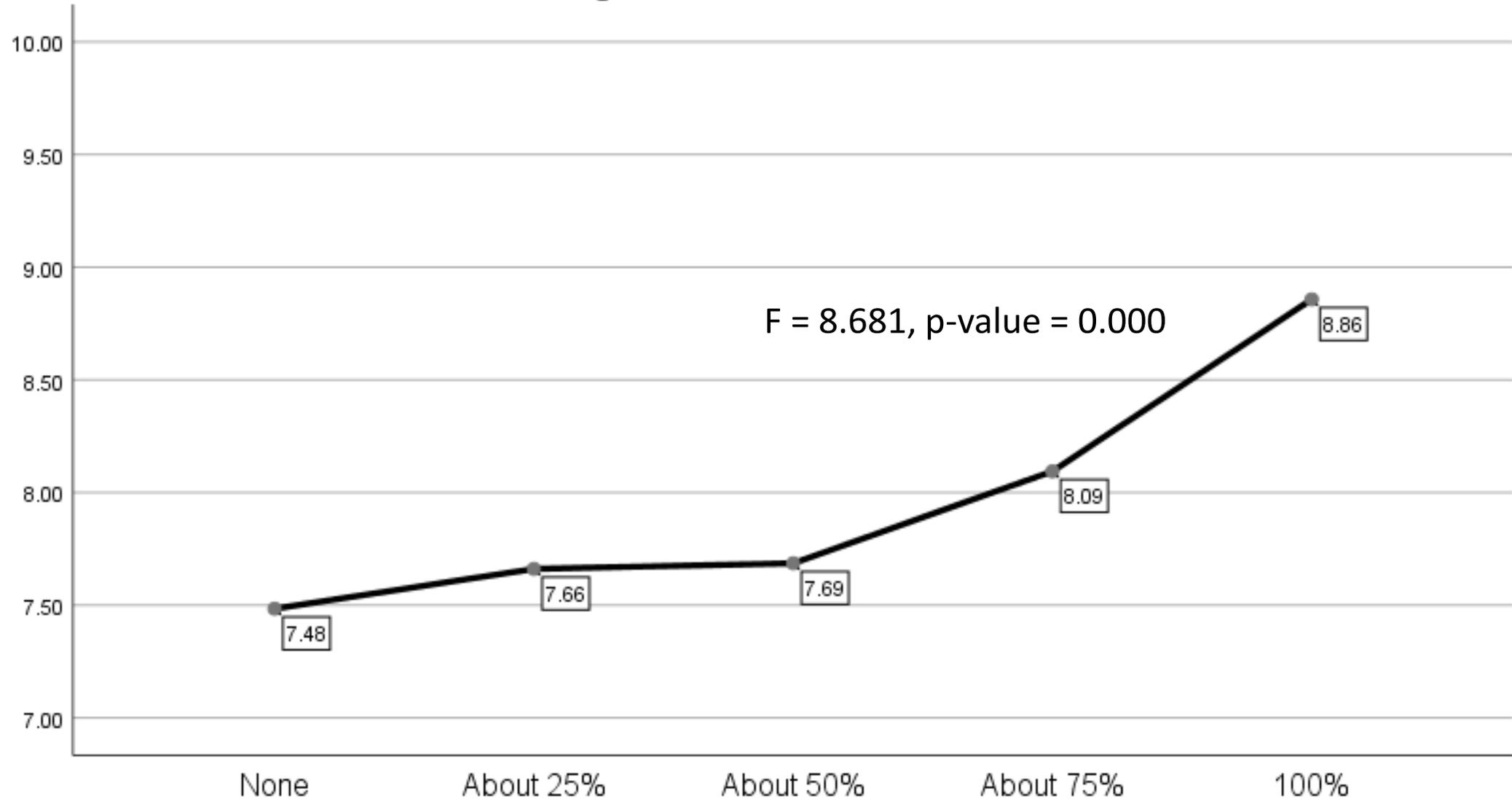
Digital Learning  
Readiness of Adult  
Learners : Influence of  
Age, Education,  
Employment and  
Gender.

# **DIGITAL LEARNING READINESS OF ADULT LEARNERS : INFLUENCE OF AGE, EDUCATION, EMPLOYMENT AND GENDER**

- 313 adult learners
- Circuit Breaker into Phase 2
- Self-Directedness, Learning Preferences, Digital Skills and Digital Accessibility

# SELF-DIRECTEDNESS

## Estimated Marginal Means of Self Directedness



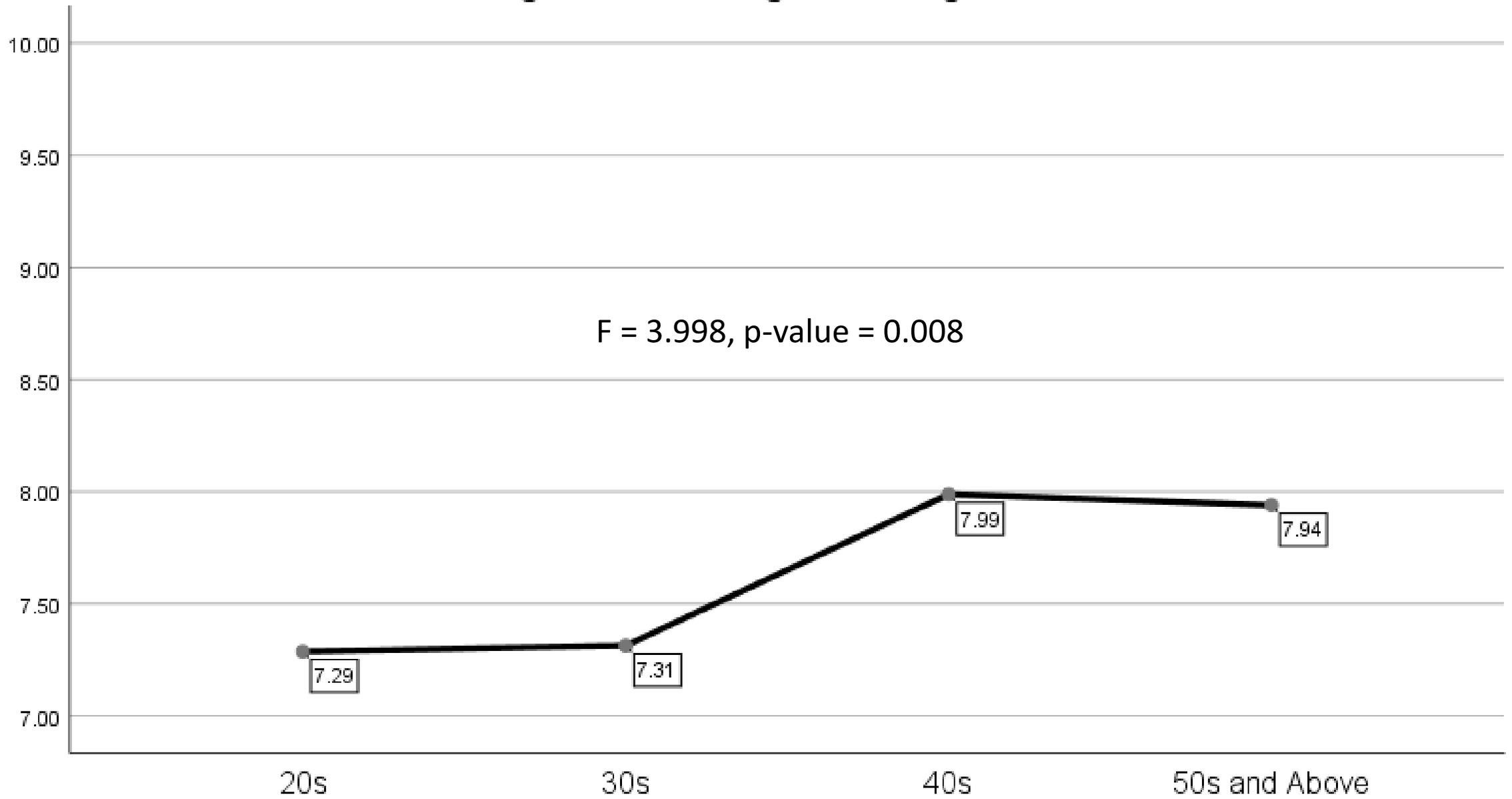
What is your ideal percentage of remote learning in a course?

# LEARNING PREFERENCES

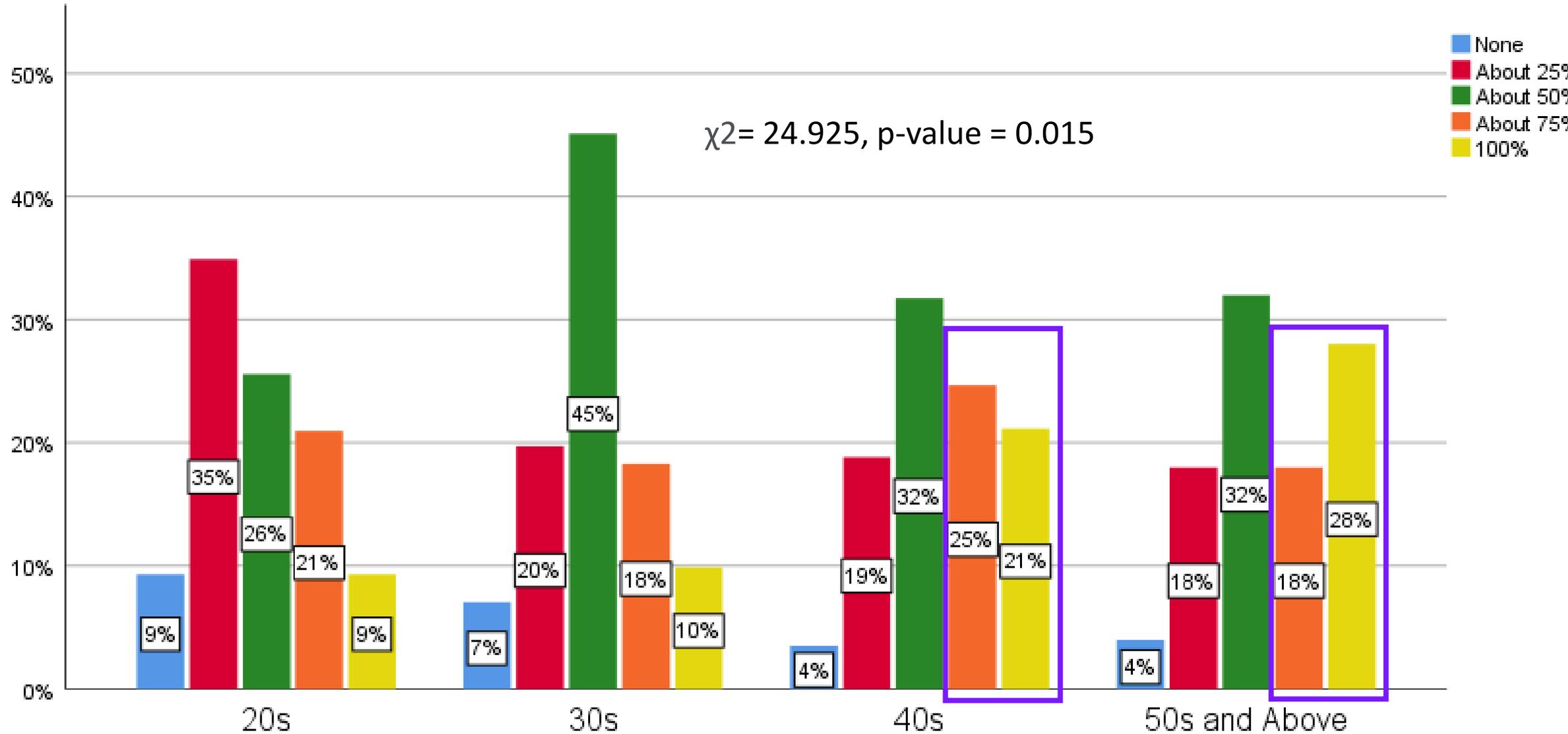
AGE



# Estimated Marginal Means of Digital Learning Preference



# What is your ideal percentage of remote learning in a course?

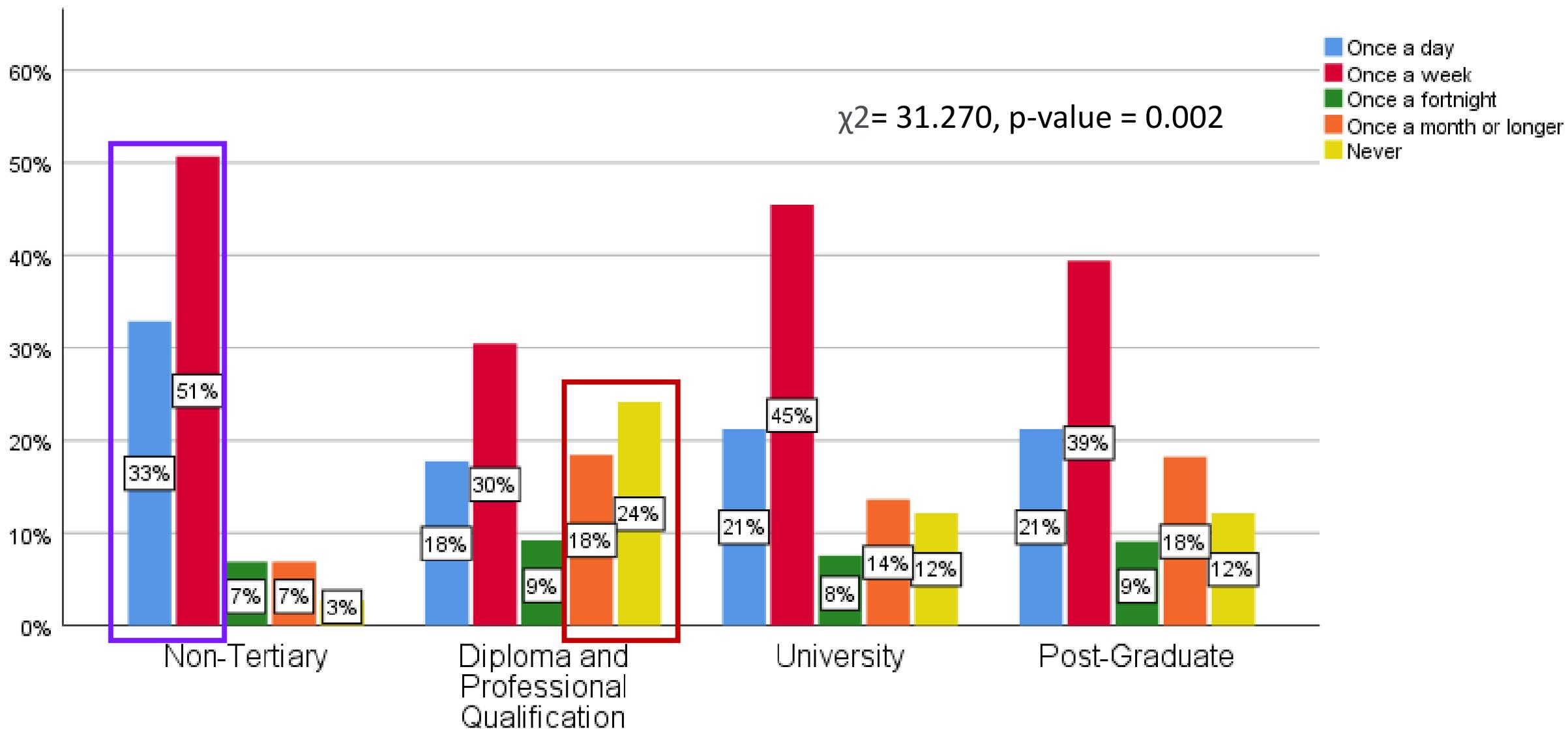


# LEARNING PREFERENCES

EDUCATION

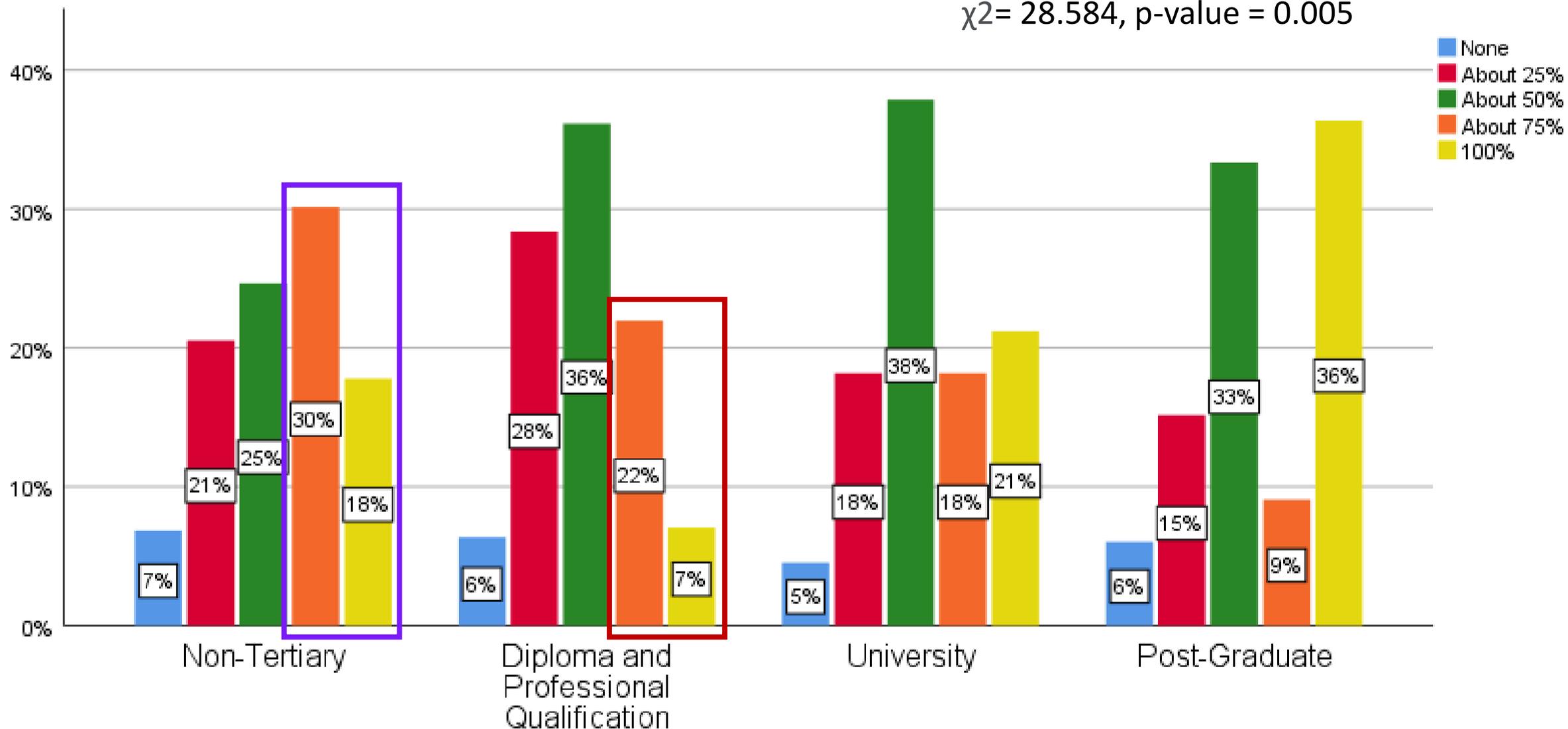


# How often have you attempted remote learning activities in the past 3 months?



# What is your ideal percentage of remote learning in a course?

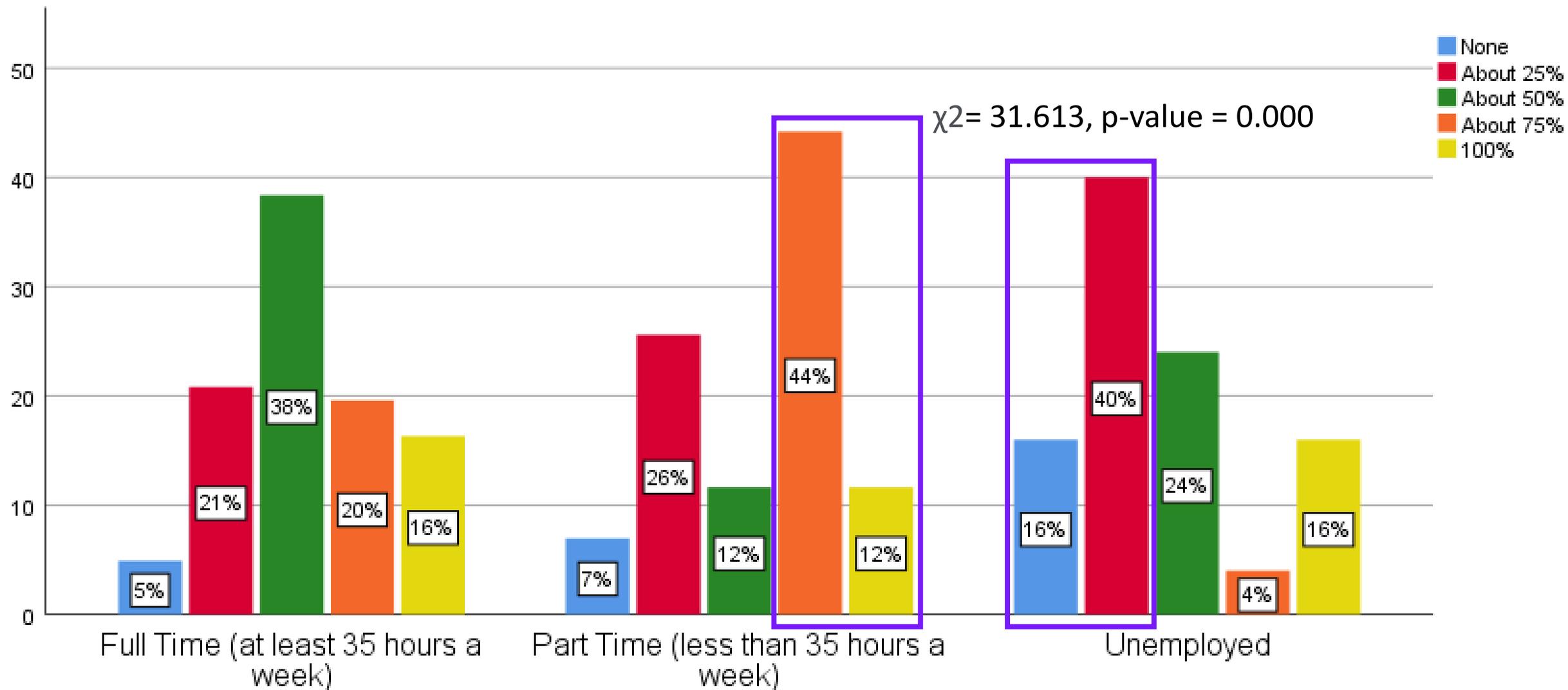
$\chi^2 = 28.584$ ,  $p\text{-value} = 0.005$



# LEARNING PREFERENCES

EMPLOYMENT

# What is your ideal percentage of remote learning in a course?

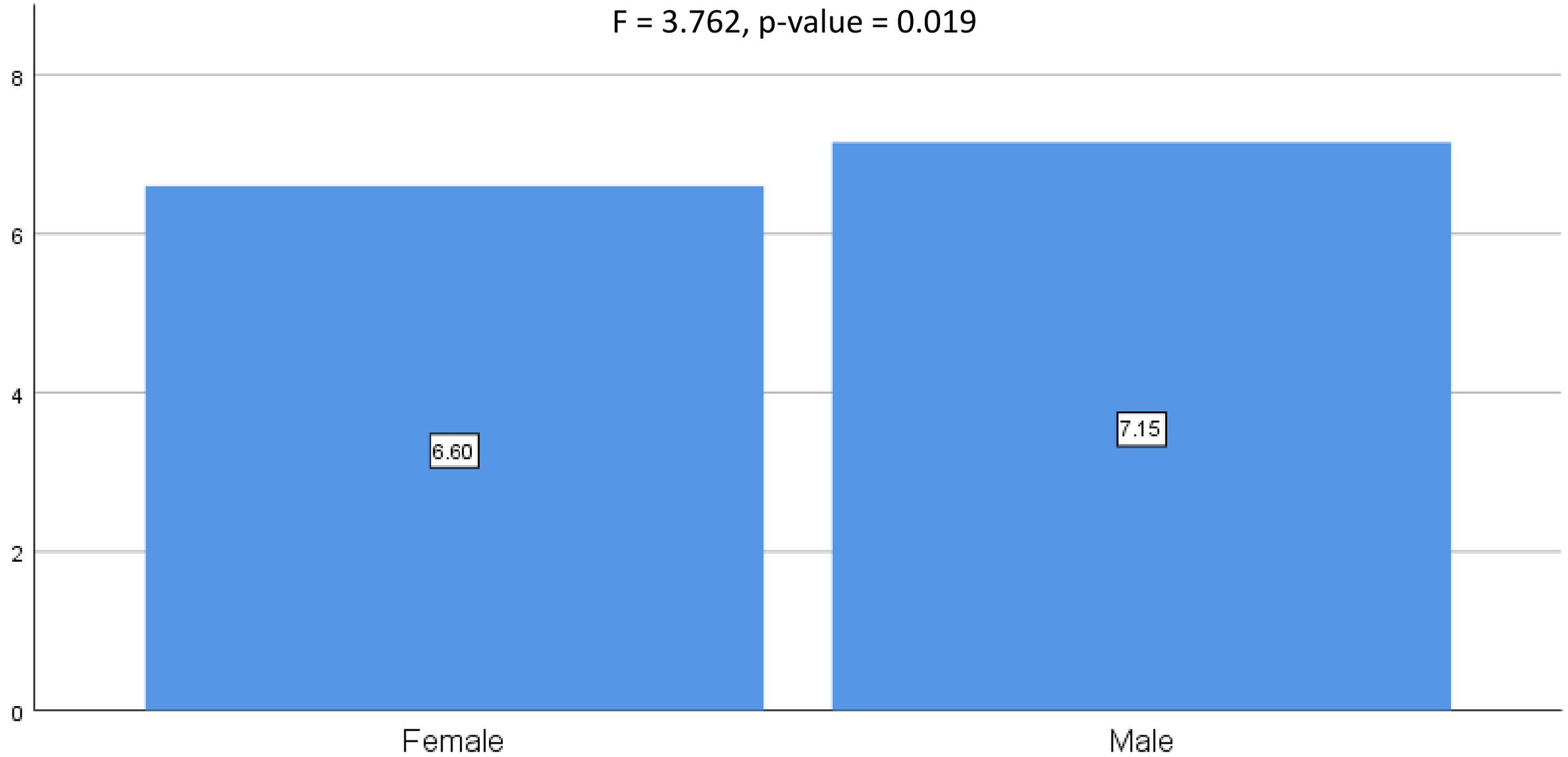


# LEARNING PREFERENCES

GENDER

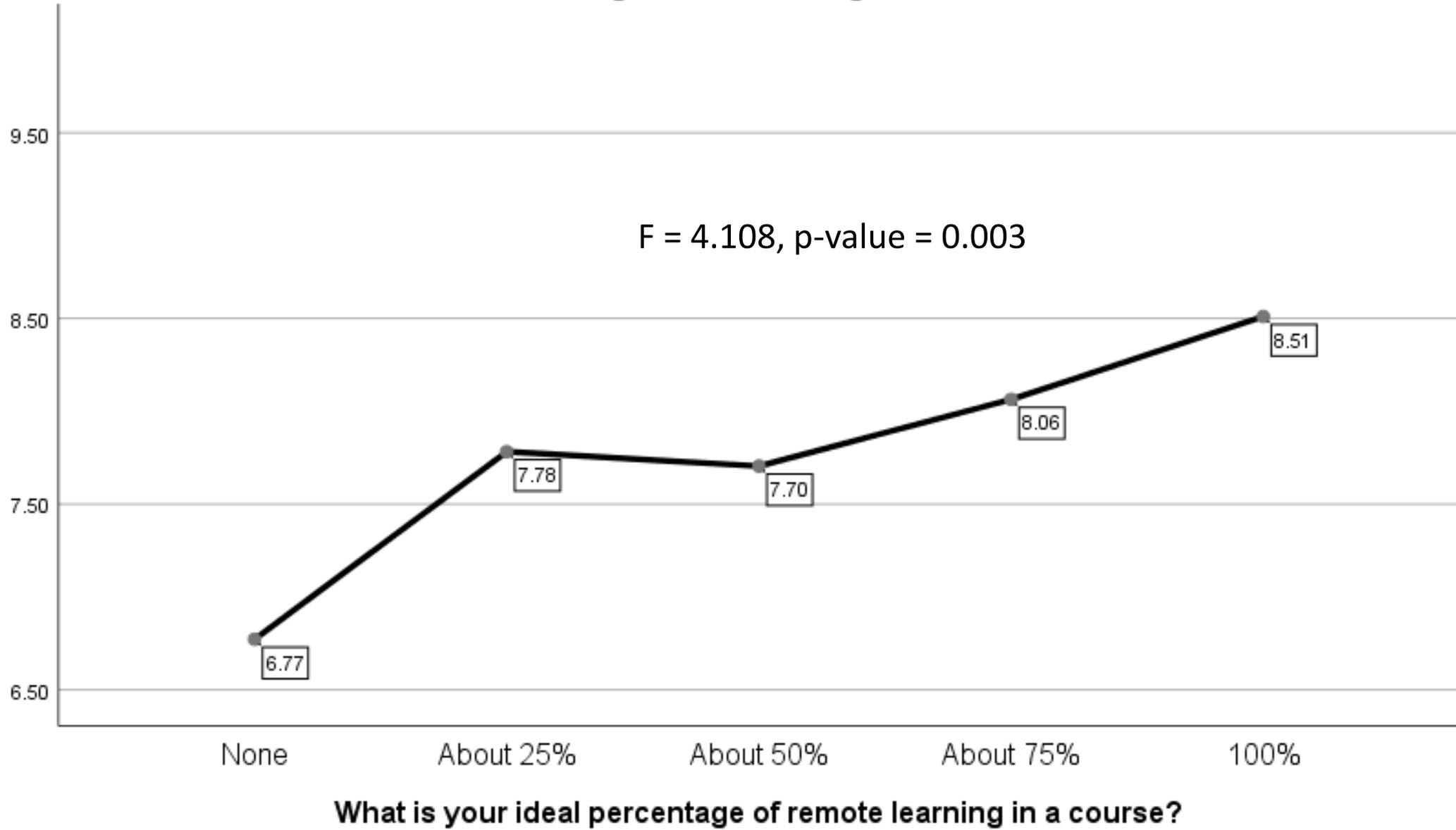
# Estimated Marginal Mean Face to Face Learning Preference

F = 3.762, p-value = 0.019



# DIGITAL SKILLS

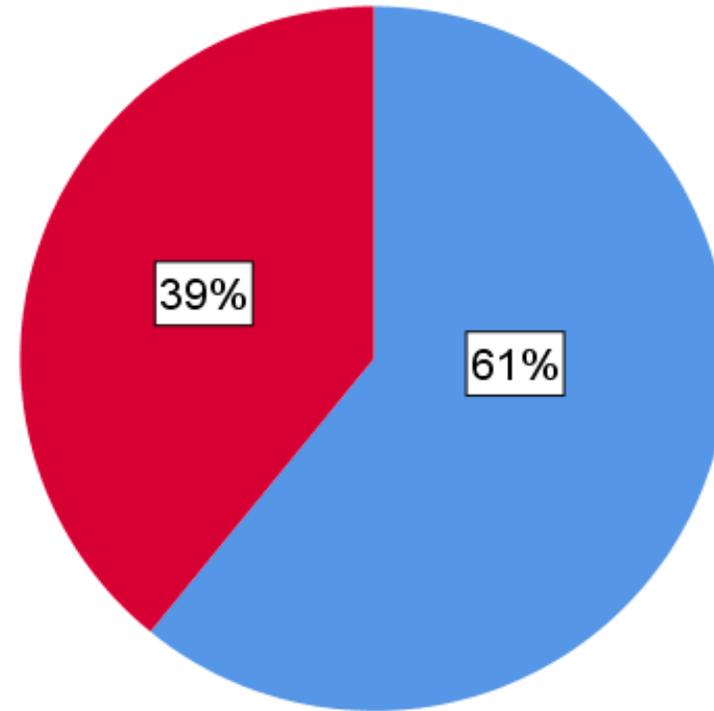
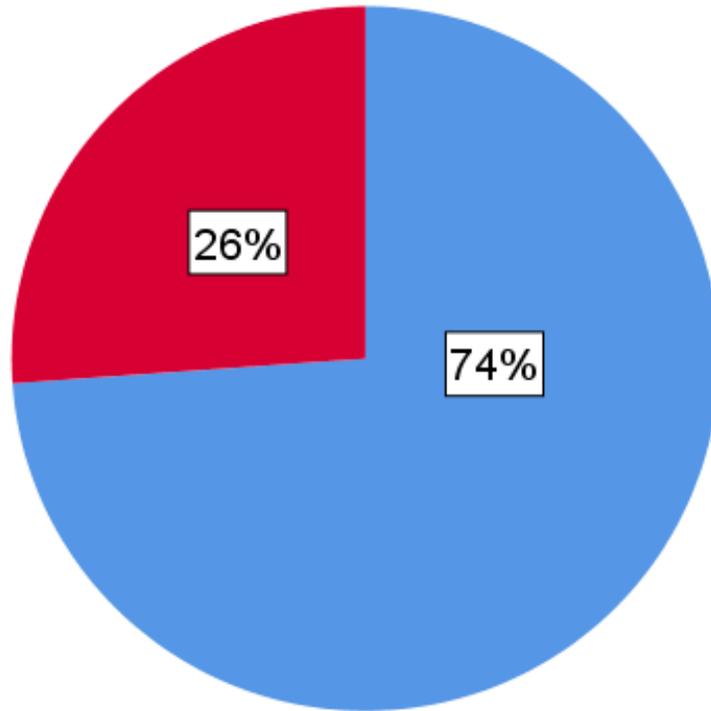
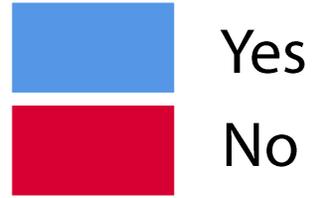
## Estimated Marginal Means of Digital Skills



# DIGITAL ACCESSIBILITY

# I know someone who can help me if I have issues with my computer for remote learning.

$\chi^2 = 5.798$ , p-value = 0.016



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# Opportunities

Best of In-Person and Online Learning

Higher Education with Tech Companies

Remote and Competency-Based Assessments

Strategic Partnerships

Online Credentialing

Funding Review

Higher Education with Tech  
– Google  
Best of in-person and online  
– MLC

Competency-Based –  
Work-Study Programme  
and Workplace Learning

46

Days

15

Hours

25

Minutes

29

Seconds

# CET MASTERS SERIES SYMPOSIUM 2020

RELEARN . RECHARGE . REBOUND

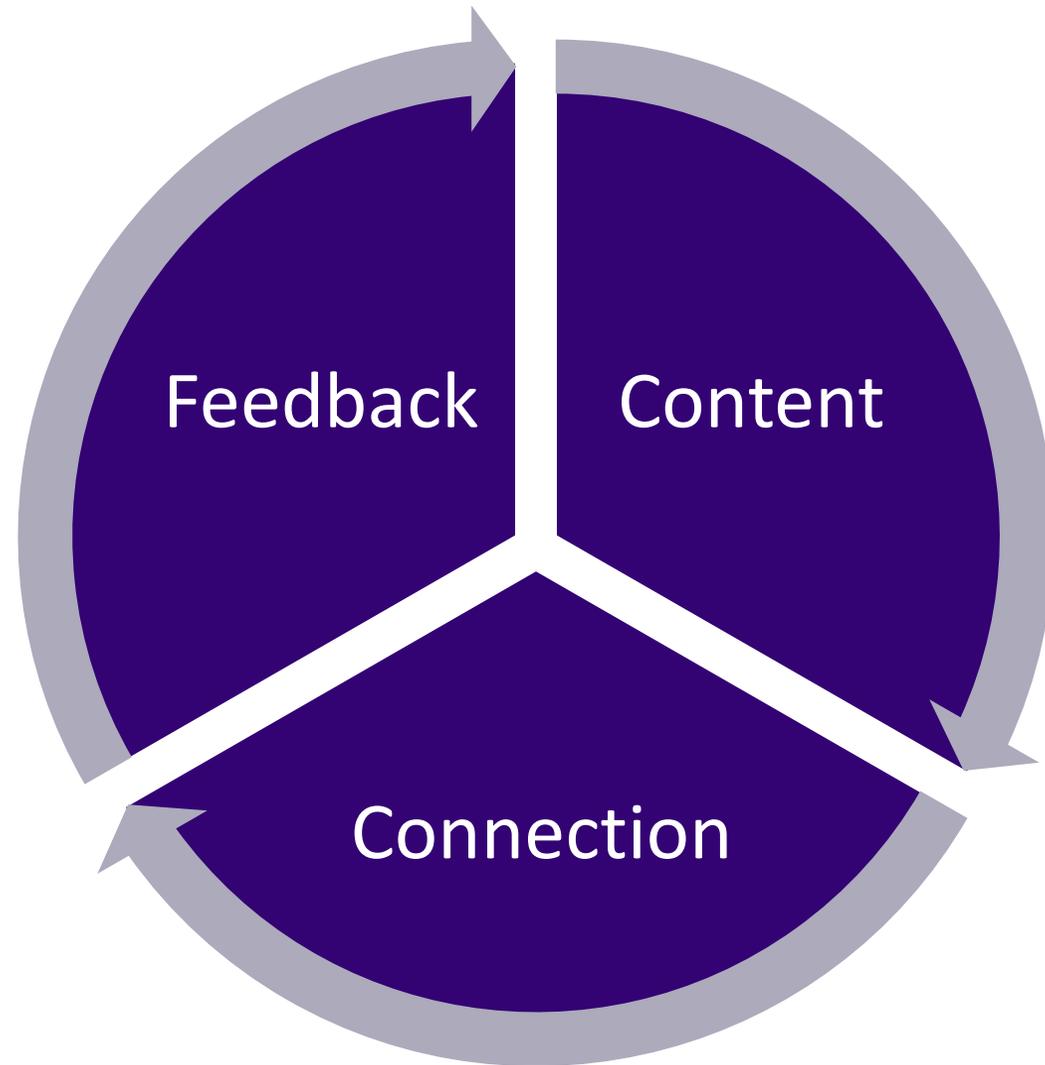
18<sup>th</sup> SEPTEMBER 2020  
ONLINE

REGISTER INTEREST

Adult Learner 360  
Framework

Support and  
Application of Learning

Digital Learning  
Readiness Bulletin



# Q & A

