THE 2008 ECAR STUDY OF STUDENTS AND INFORMATION TECHNOLOGY: WHAT IT CAN TELL US ABOUT STUDENTS' USE OF TECHNOLOGY BOTH IN AND OUTSIDE THE CLASSROOM

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The University of North Carolina at Pembroke

Educause Center for Applied Research

- 5th annual study of undergraduates' use of, & skill with, technologies & perceptions of impact of IT on their academic experiences
  - Primary component: Web-based survey
    - **First-year & senior students at 90 4-year institutions plus students at 8 two-year institutions**
  - New in 2008: Special topic focus groups
    - **75 students at 4 institutions**
  - Some longitudinal comparisons

27,317 survey respondents

Participant characteristics	4 year institutions (23,661)	UNCP (170)
☐ Under 25	☐ 83%	☐ 64.7%
☐ Female	☐ 62.1%	☐ 71.6%
☐ Full-time students	☐ 84.0%	☐ 82.7%
☐ GPA =/>3.0	☐ 76.7%	☐ 70.5%
☐ Living off-campus	☐ 55.1%	☐ 67.6%
☐ Attending public institutions	☐ 74.8%	☐ 100%

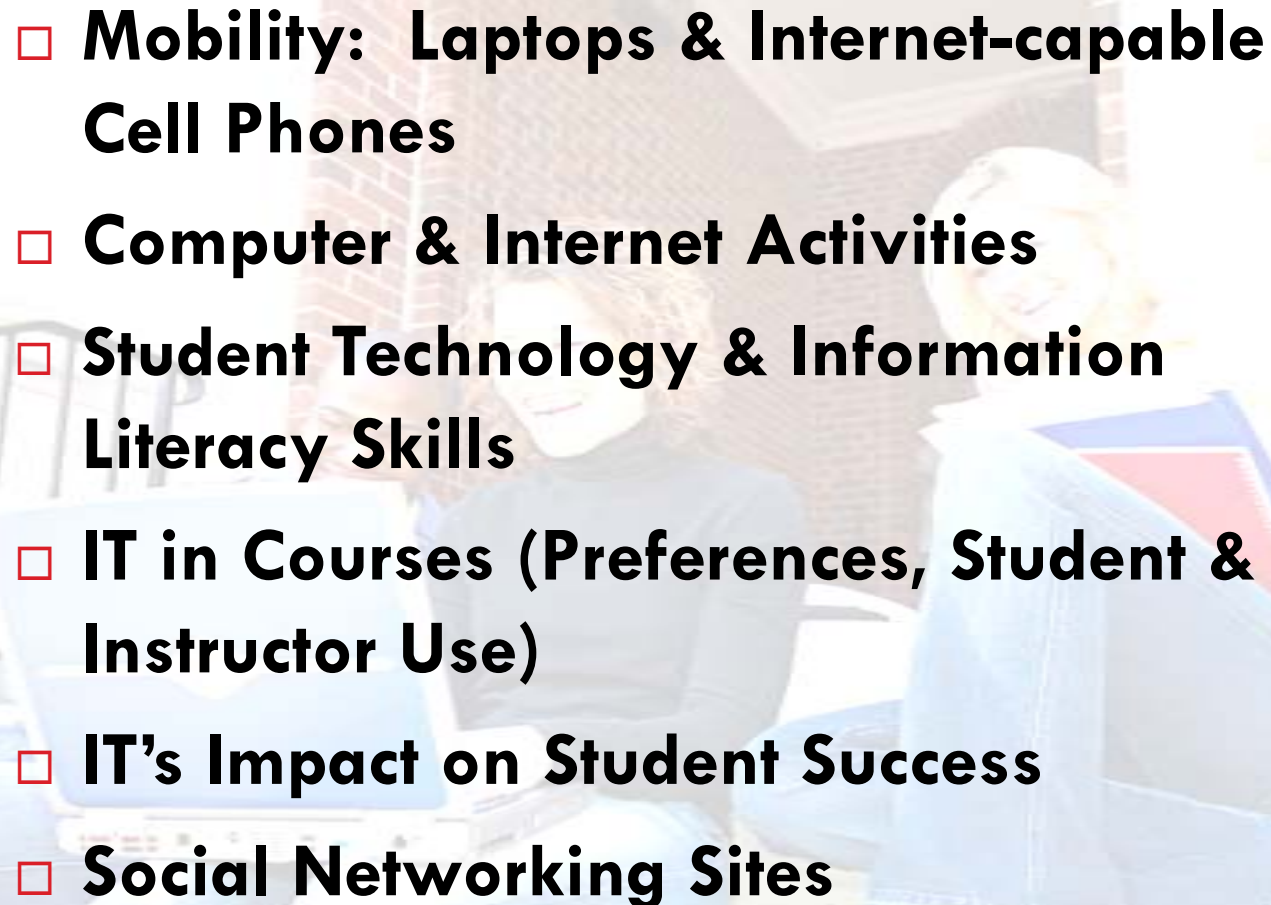**Overall response rate = 11.9%; UNCP response rate = 15.1%**

Beloit College's "Mindset List" for students graduating in 2010 & 2011

- They are wireless, yet always connected.
- "Google" has always been a verb.
- Being tech-savvy has always been inversely proportional to age.
- The WWW has been an online tool since they were born.
- Music has always been "unplugged."
- Text messaging is their e-mail.

Presentation Organization

- Mobility: Laptops & Internet-capable Cell Phones
- Computer & Internet Activities
- Student Technology & Information Literacy Skills
- IT in Courses (Preferences, Student & Instructor Use)
- IT's Impact on Student Success
- Social Networking Sites

# Mobility: Laptops & Internet-capable Cell Phones

Key findings	UNCP	Other 4 year institutions
☐ Own laptops	☐ 73.4%	☐ 83.5%
☐ Own internet-capable cell phone	☐ 70.6%	☐ 65.9%
☐ Use internet-capable cell phone to access internet	☐ 31.4%	☐ 30.8%

For all respondents, laptop ownership increased from 65.9% in 2006 to 82.2% in 2008.
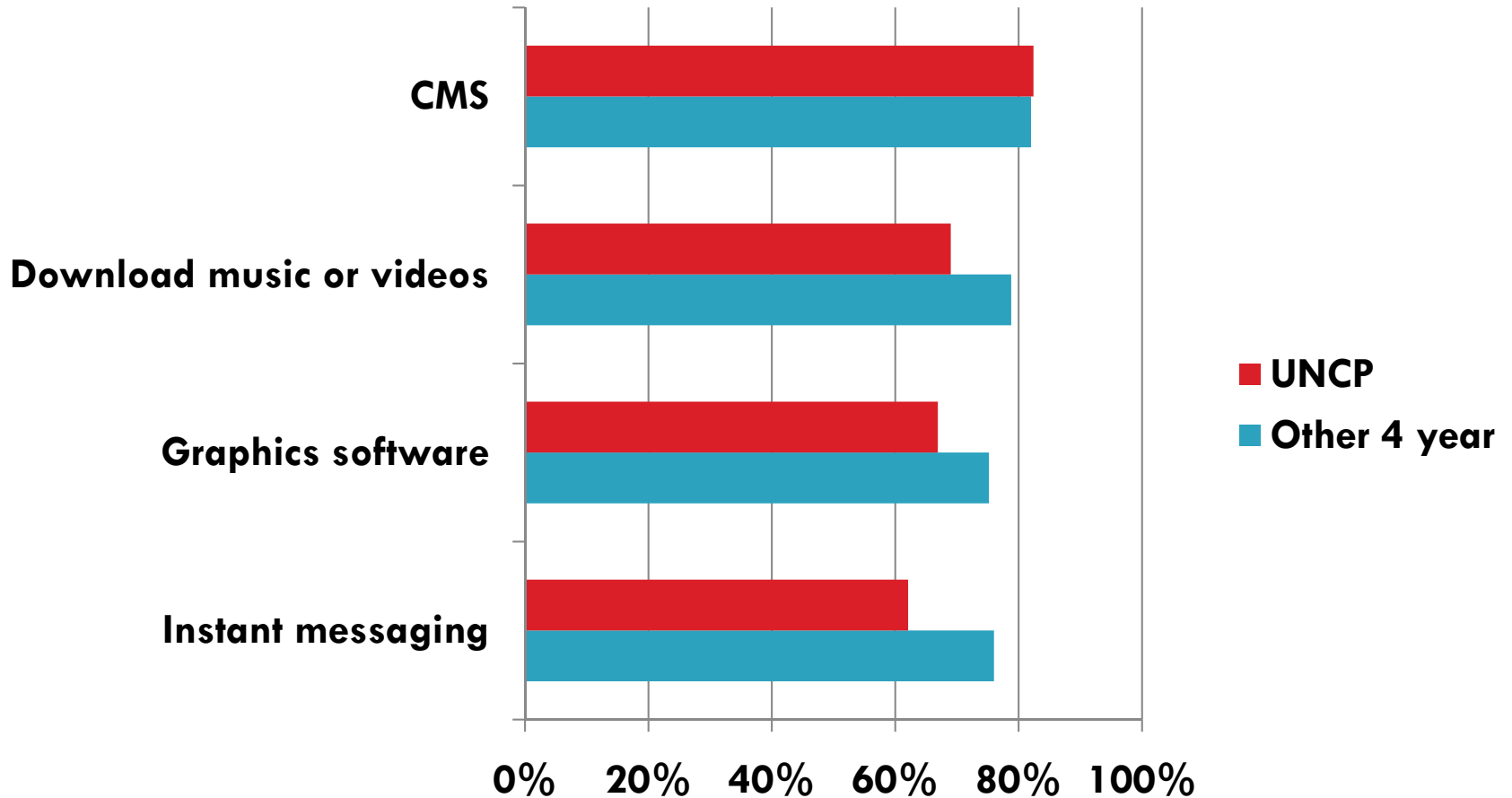
Computer & Internet Activities: Percent students who engage in at least once per year
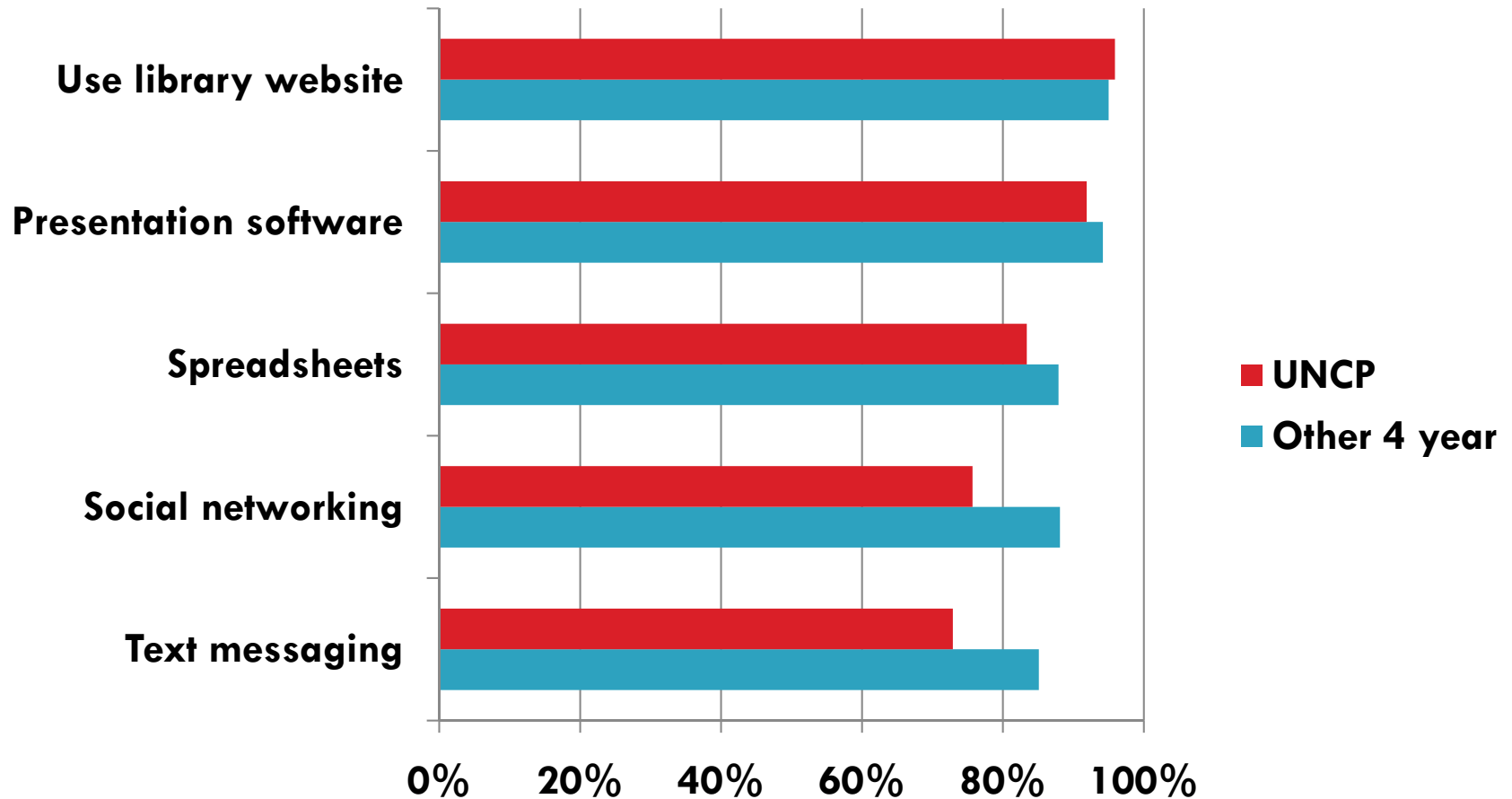
Use dial-up service: UNCP=5.3%; Other 4 year=1.6%
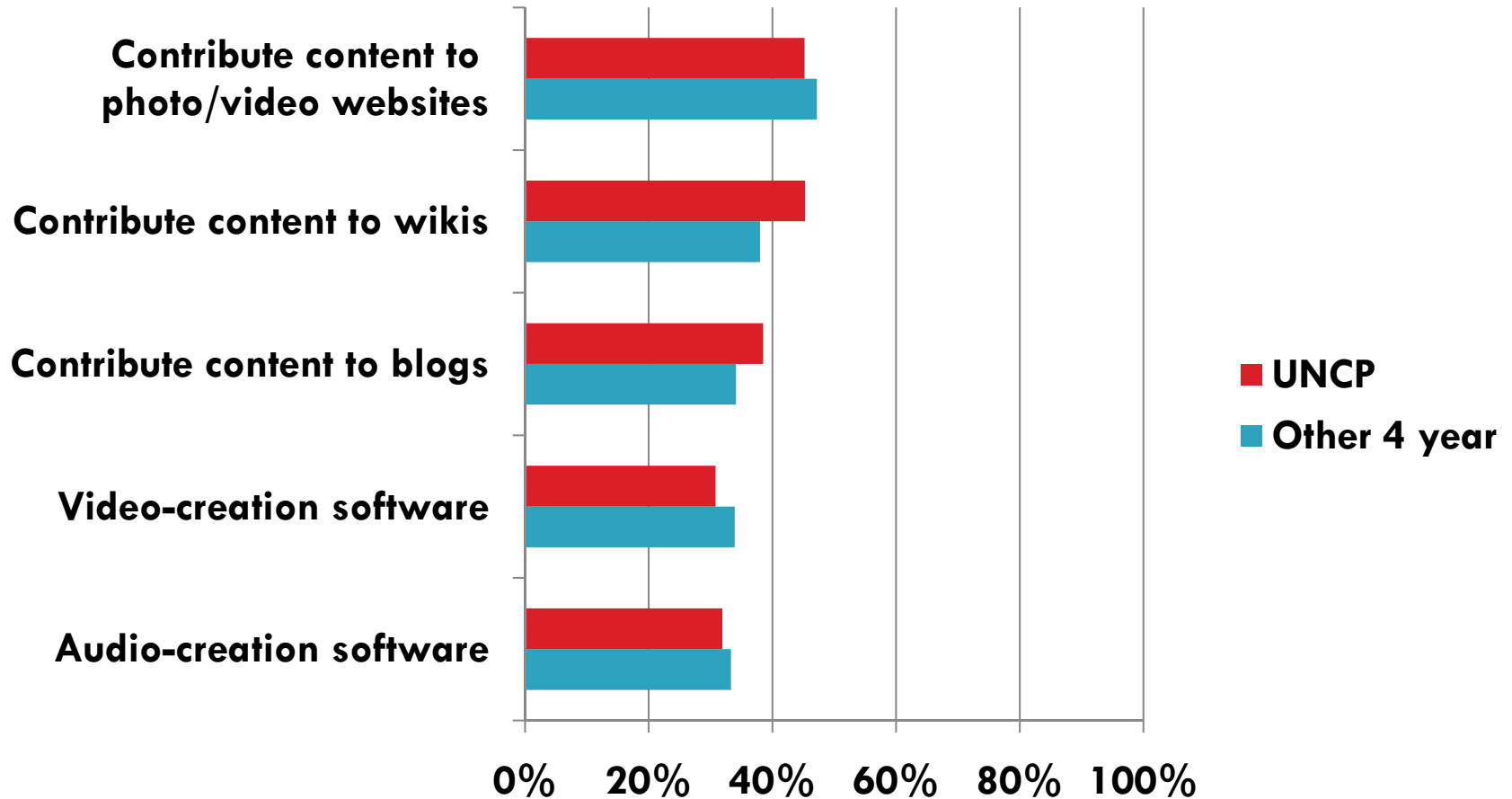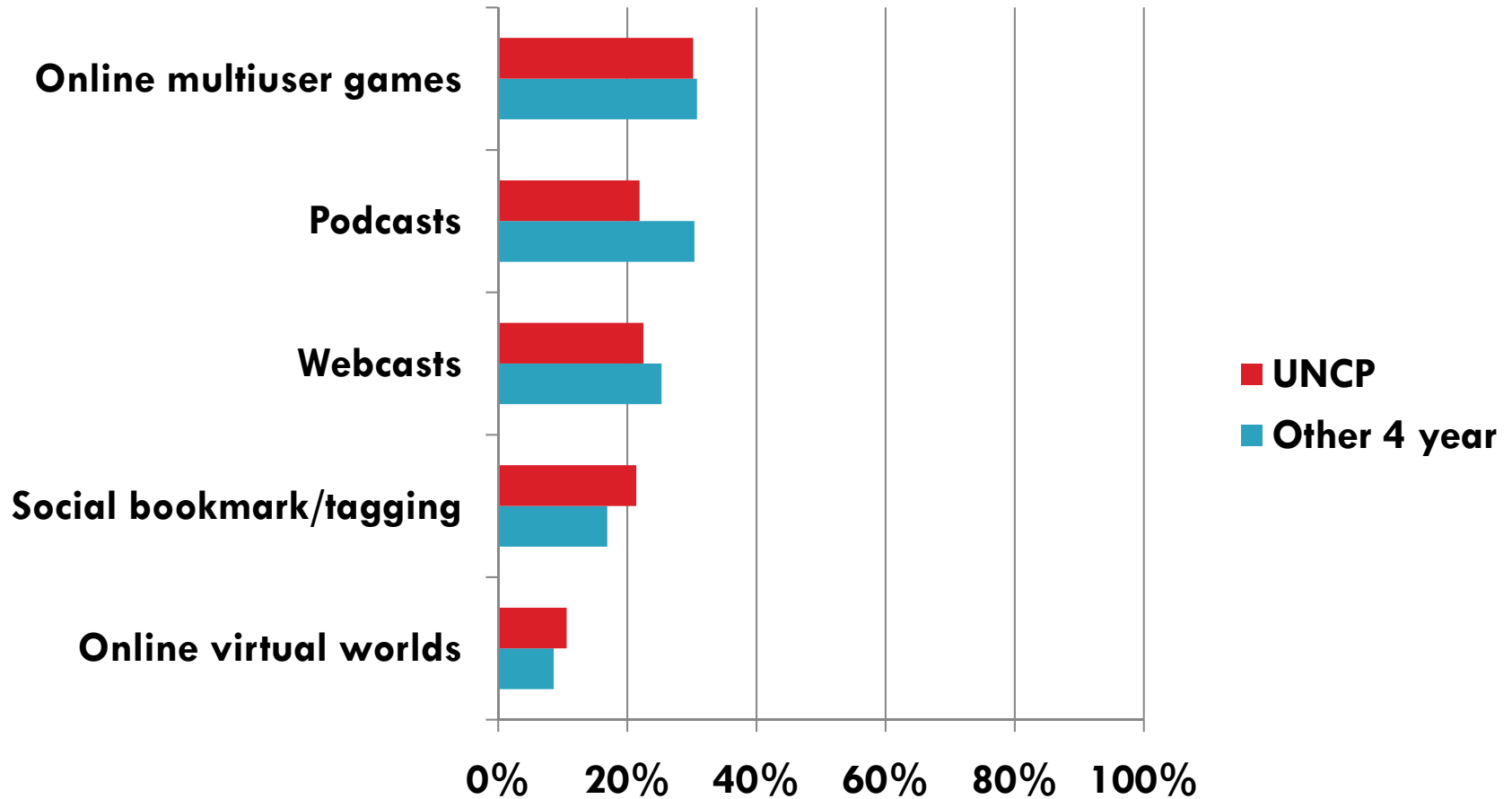
Computer & Internet Activities: Percent students who engage in at least once per year

Computer & Internet Activities: Percent students who engage in at least once per year


Activity	UNCP	Other 4 year
Contribute content to photo/video websites		
Contribute content to wikis		
Contribute content to blogs		
Video-creation software		
Audio-creation software		

Legend: UNCP, Other 4 year

X-axis: 0% 20% 40% 60% 80% 100%

Computer & Internet Activities: Percent students who engage in at least once per year

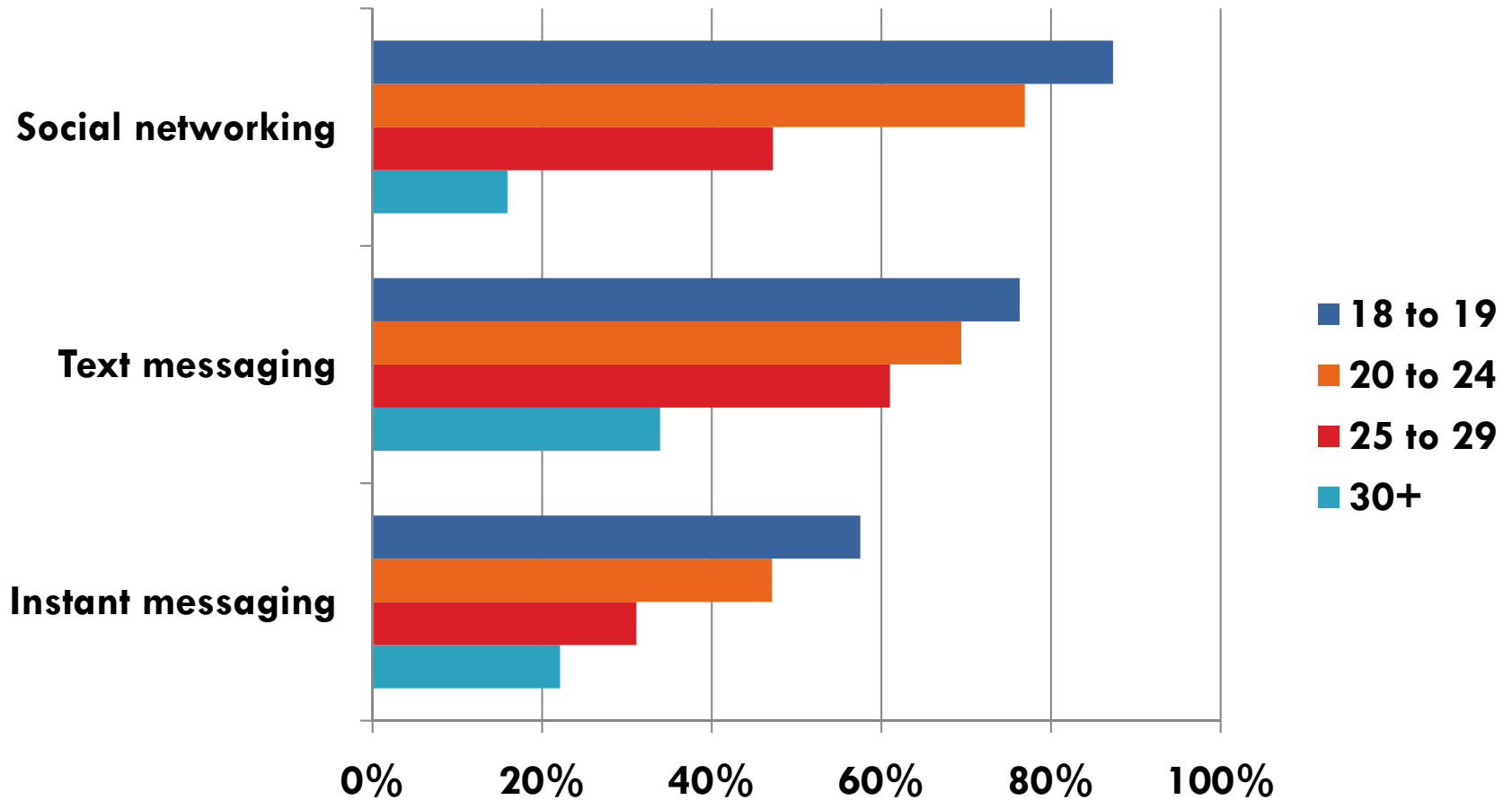# Selected activities by gender (All respondents; M=9,864; F=16,918)
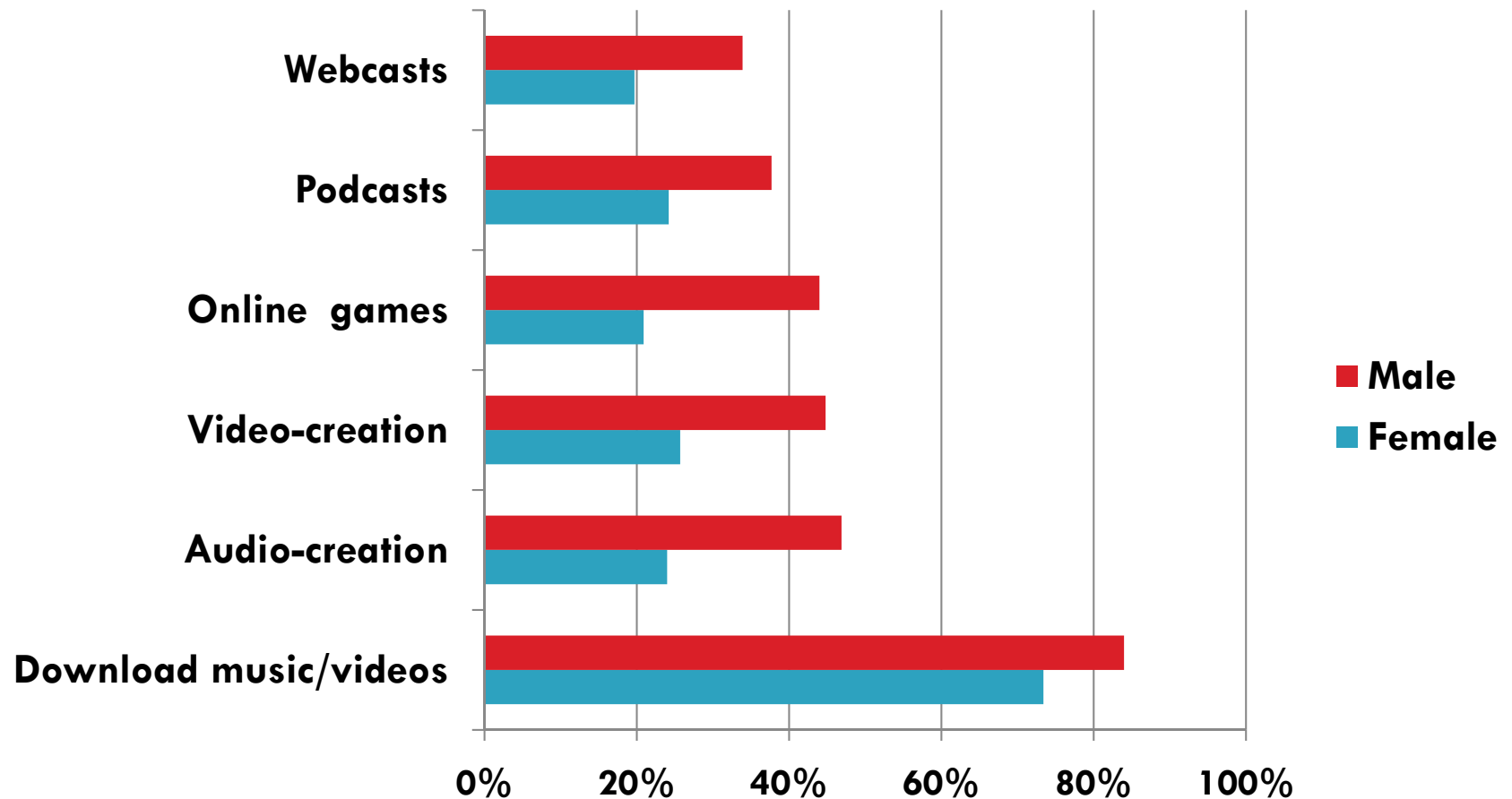
Time spent doing Internet activities
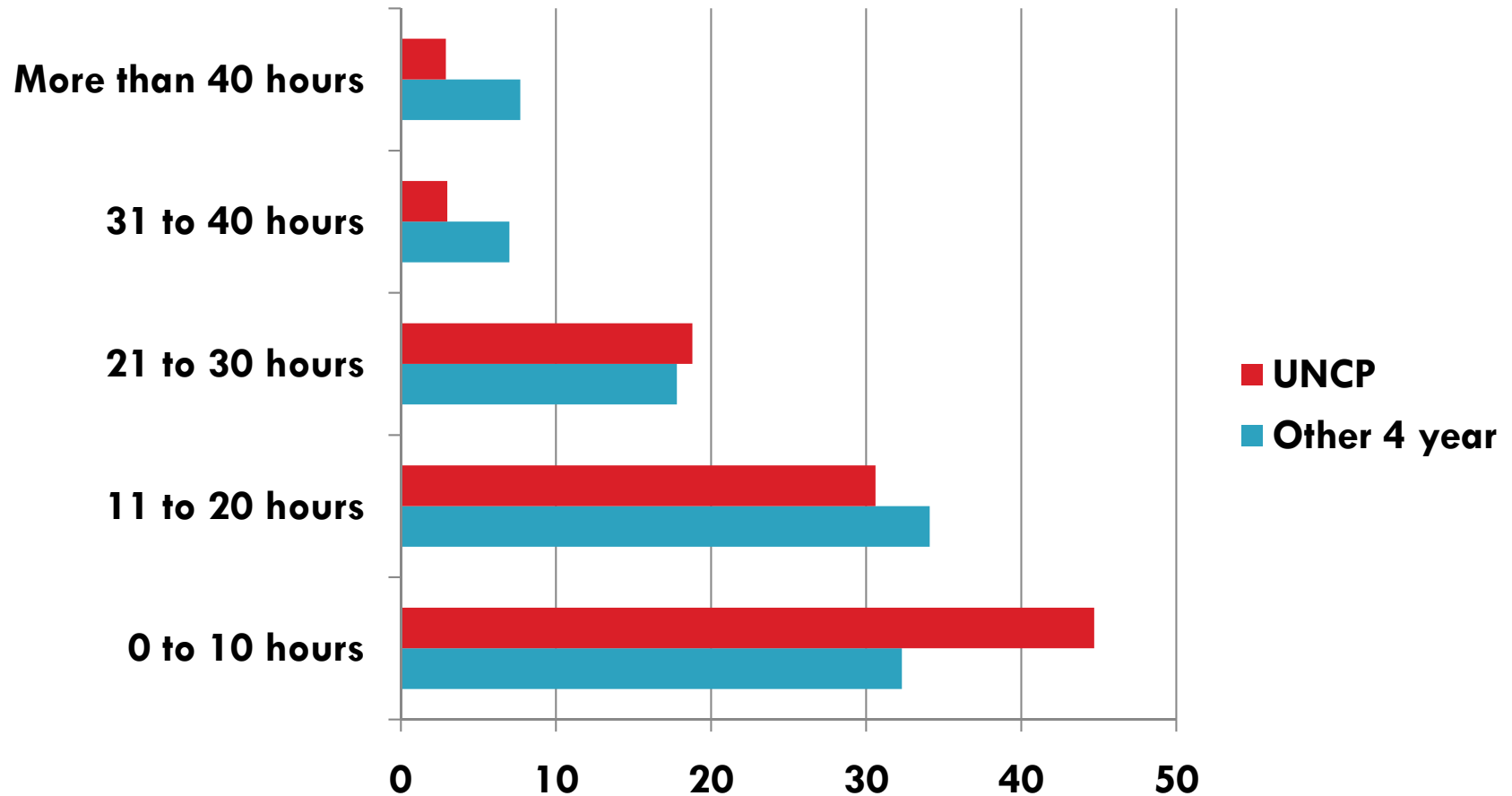
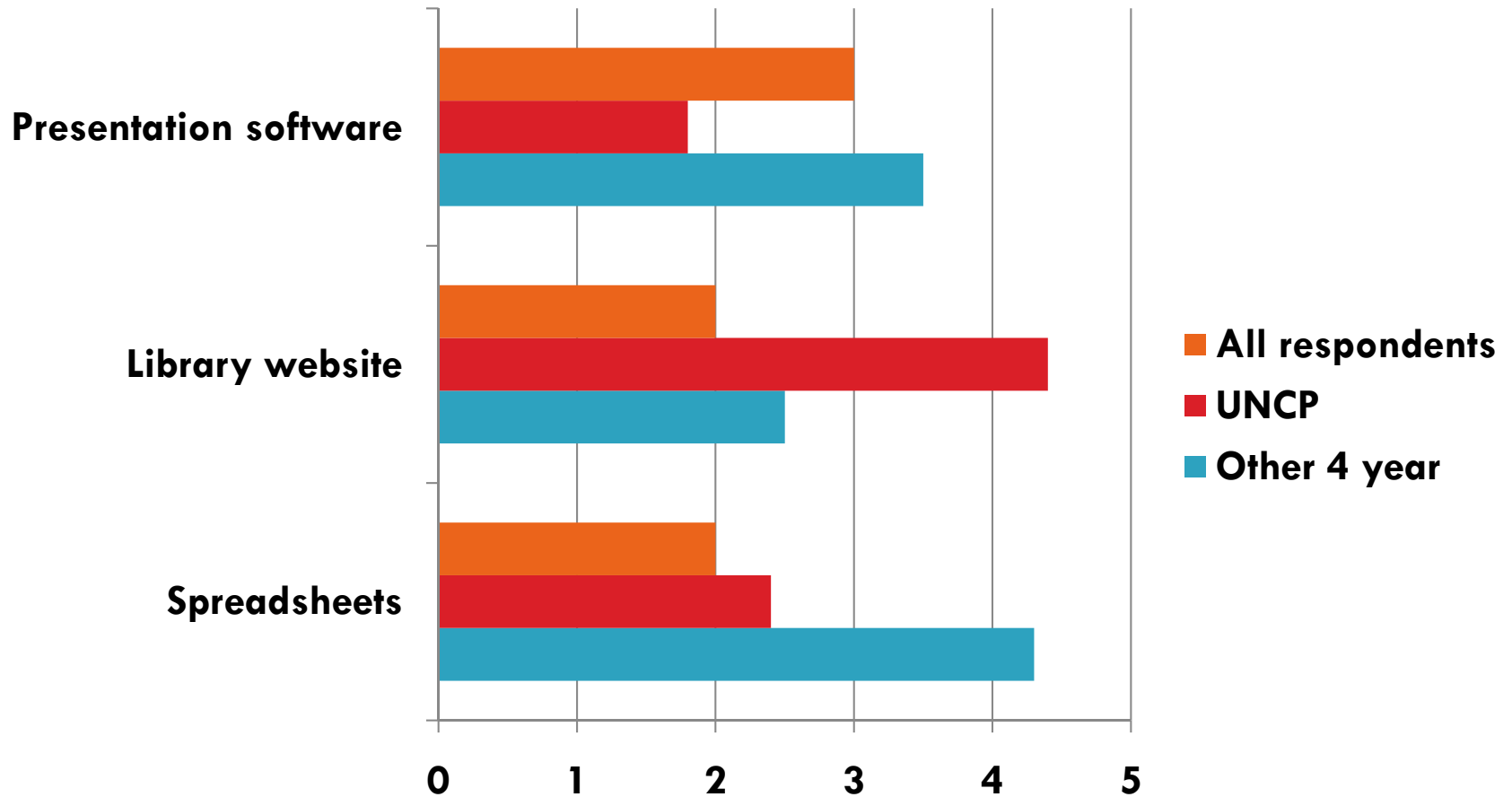No appreciable difference between seniors and first-year students

Selected activities by age (Use several times per week or more often; all respondents)
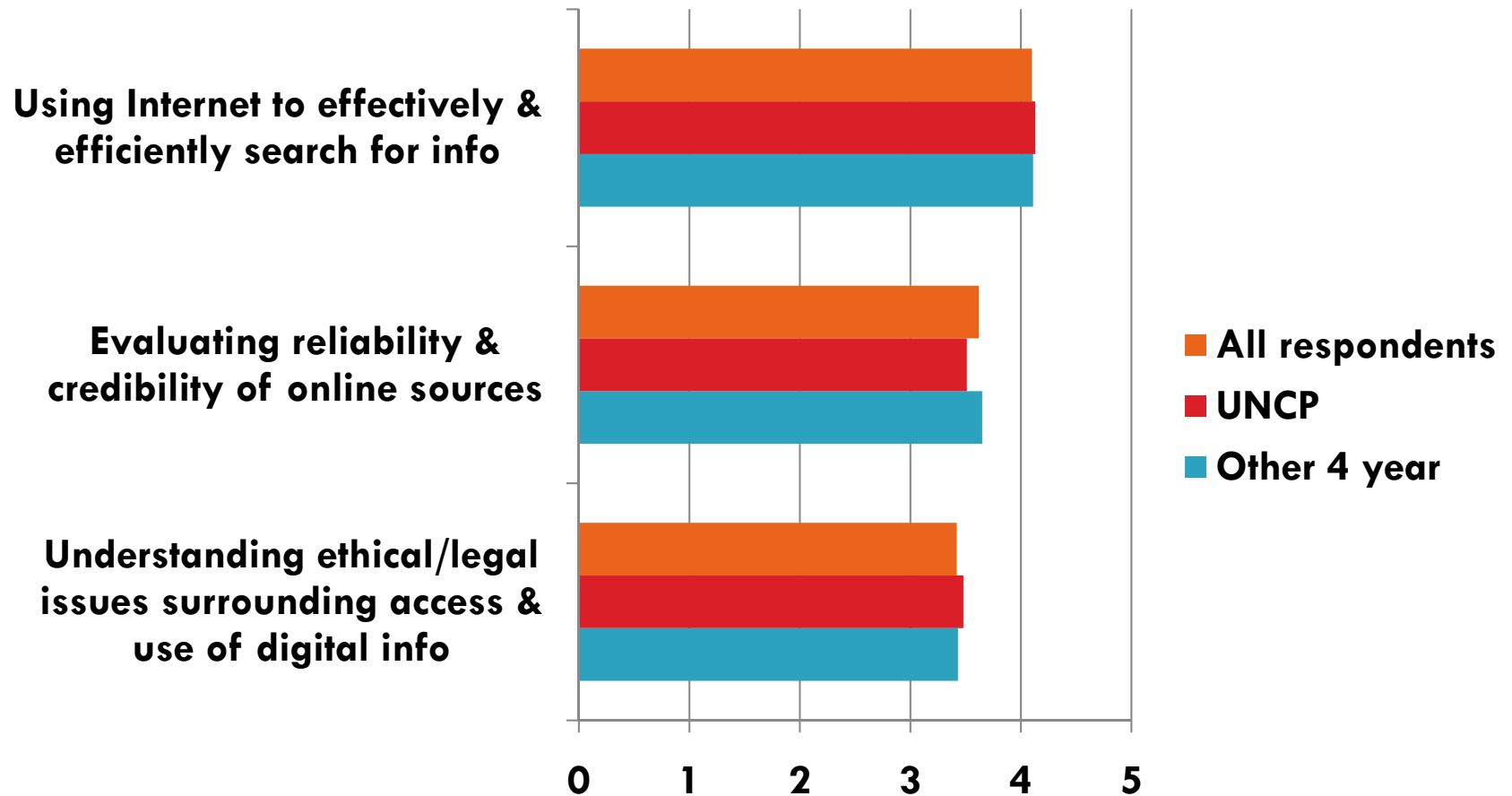
Self-rated Student Technology Skills

1=Not at all skilled; 2=Not very skilled; 3=Fairly skilled; 4=Very skilled; and 5=Expert
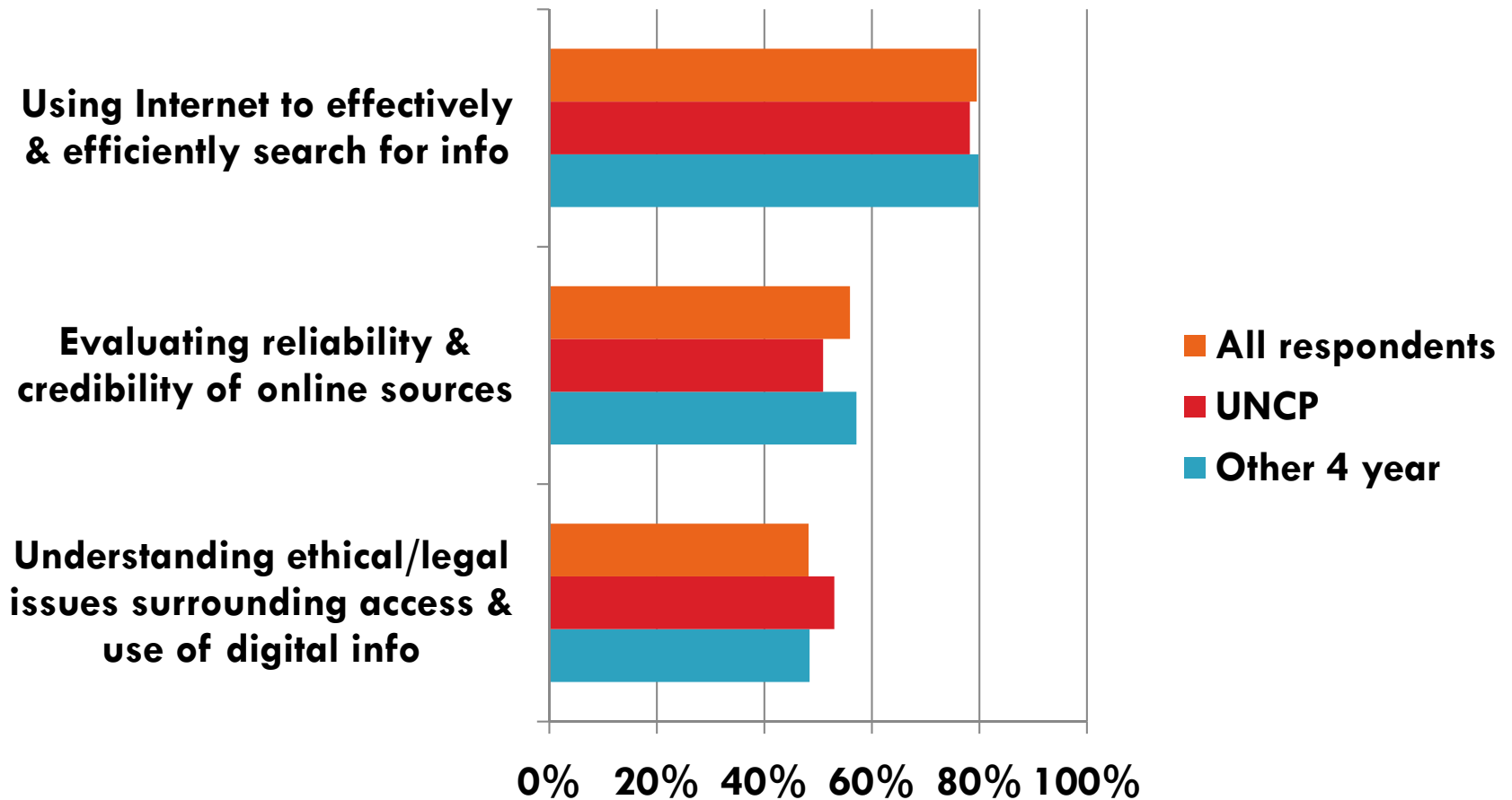
Self-rated Student Information Literacy Skills

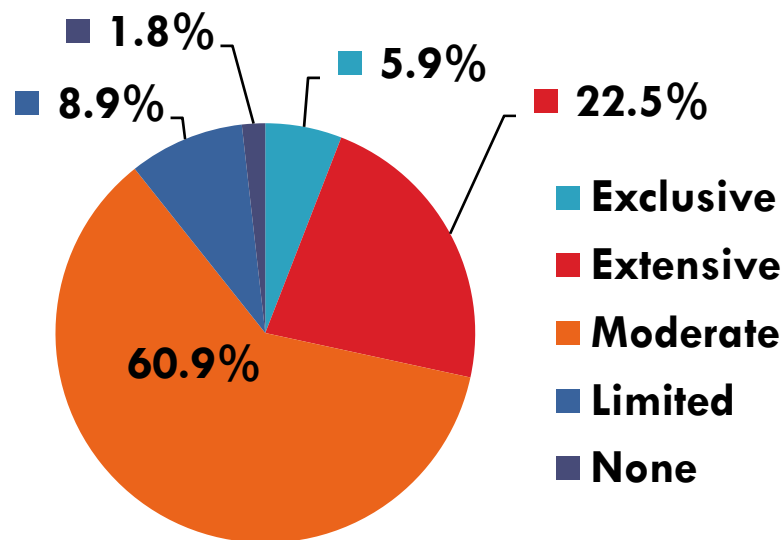1=Not at all skilled; 2=Not very skilled; 3=Fairly skilled; 4=Very skilled; and 5=Expert
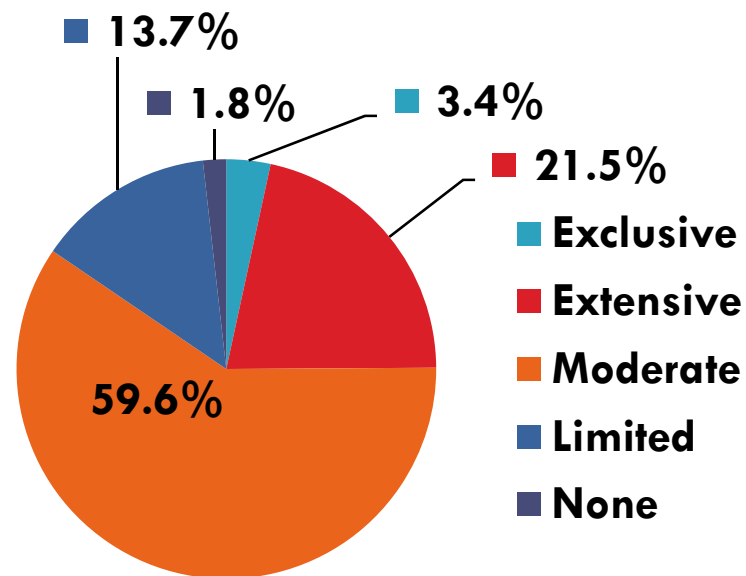
Percent who view themselves as "very skilled" or "expert"

How much IT use do you prefer in courses?

UNCP

Other 4 year institutions

UNCP pie chart:
- 1.8% None
- 8.9% Limited
- 5.9% Exclusive
- 22.5% Extensive
- 60.9% Moderate

Legend: Exclusive, Extensive, Moderate, Limited, None

Other 4 year institutions pie chart:
- 13.7% Limited
- 1.8% None
- 3.4% Exclusive
- 21.5% Extensive
- 59.6% Moderate

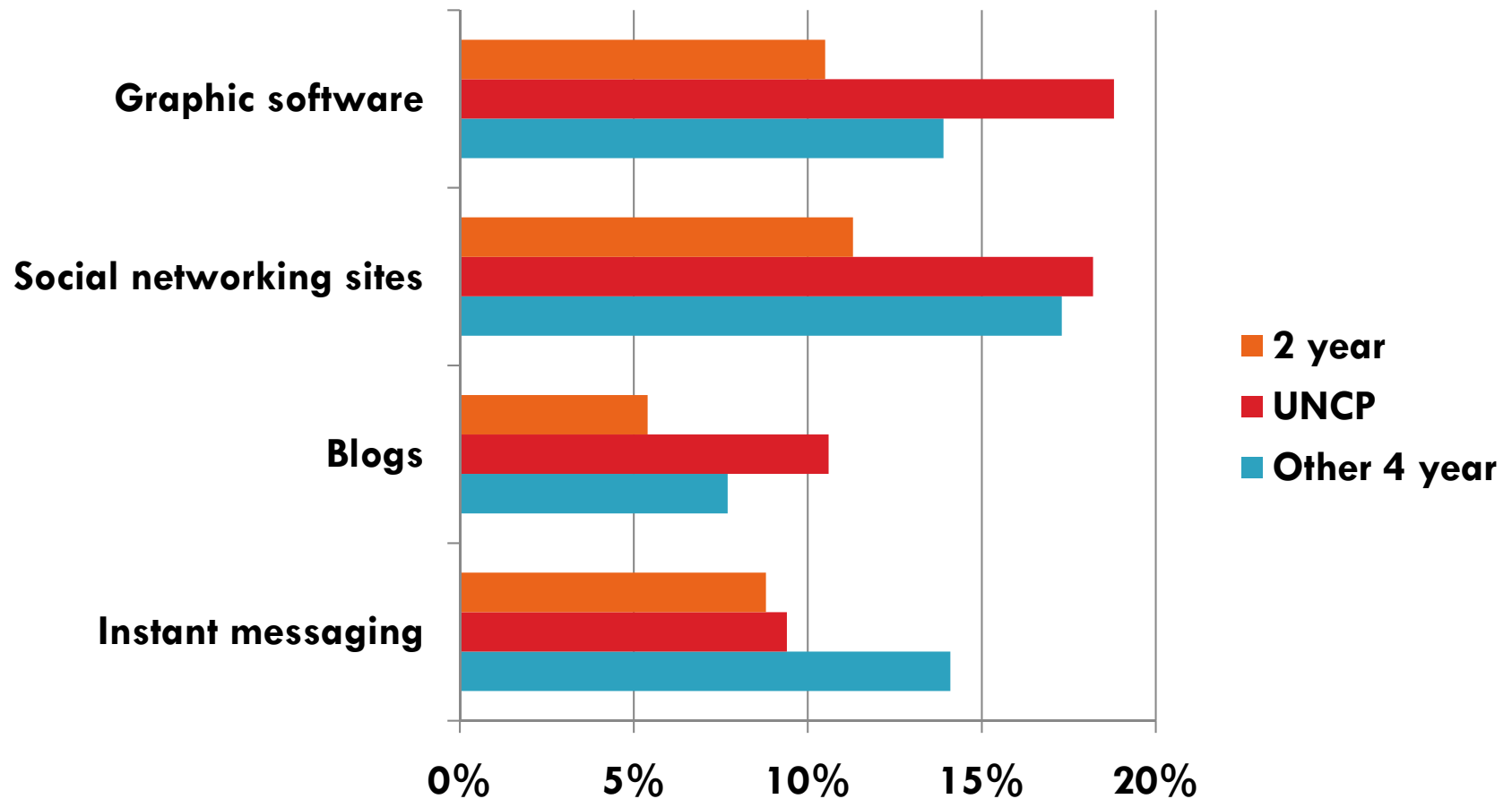Legend: Exclusive, Extensive, Moderate, Limited, None

Overall, males prefer somewhat more IT in courses than females; similar preferences across age (first time in ECAR survey history)
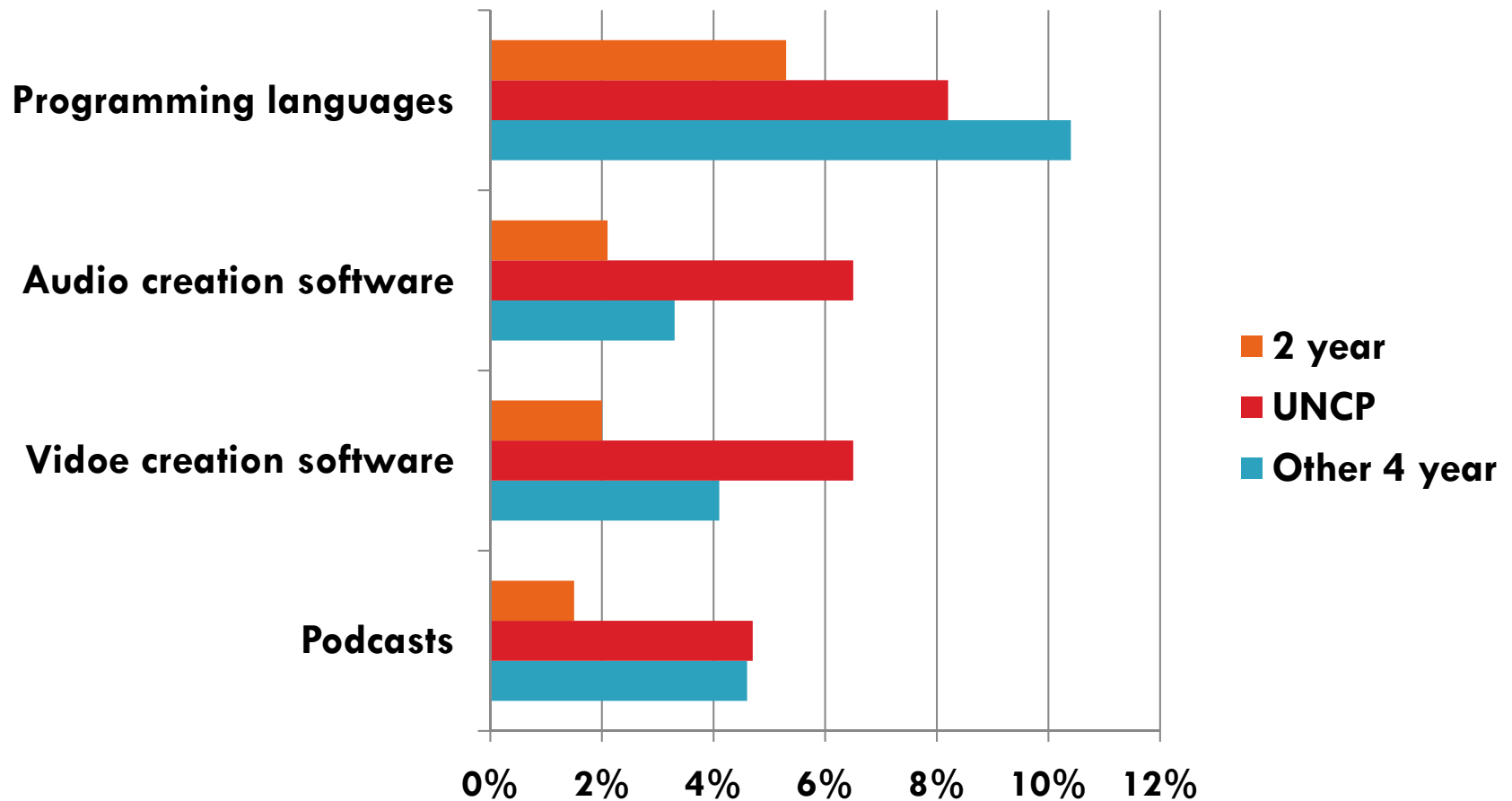
Using in courses (semester of survey)
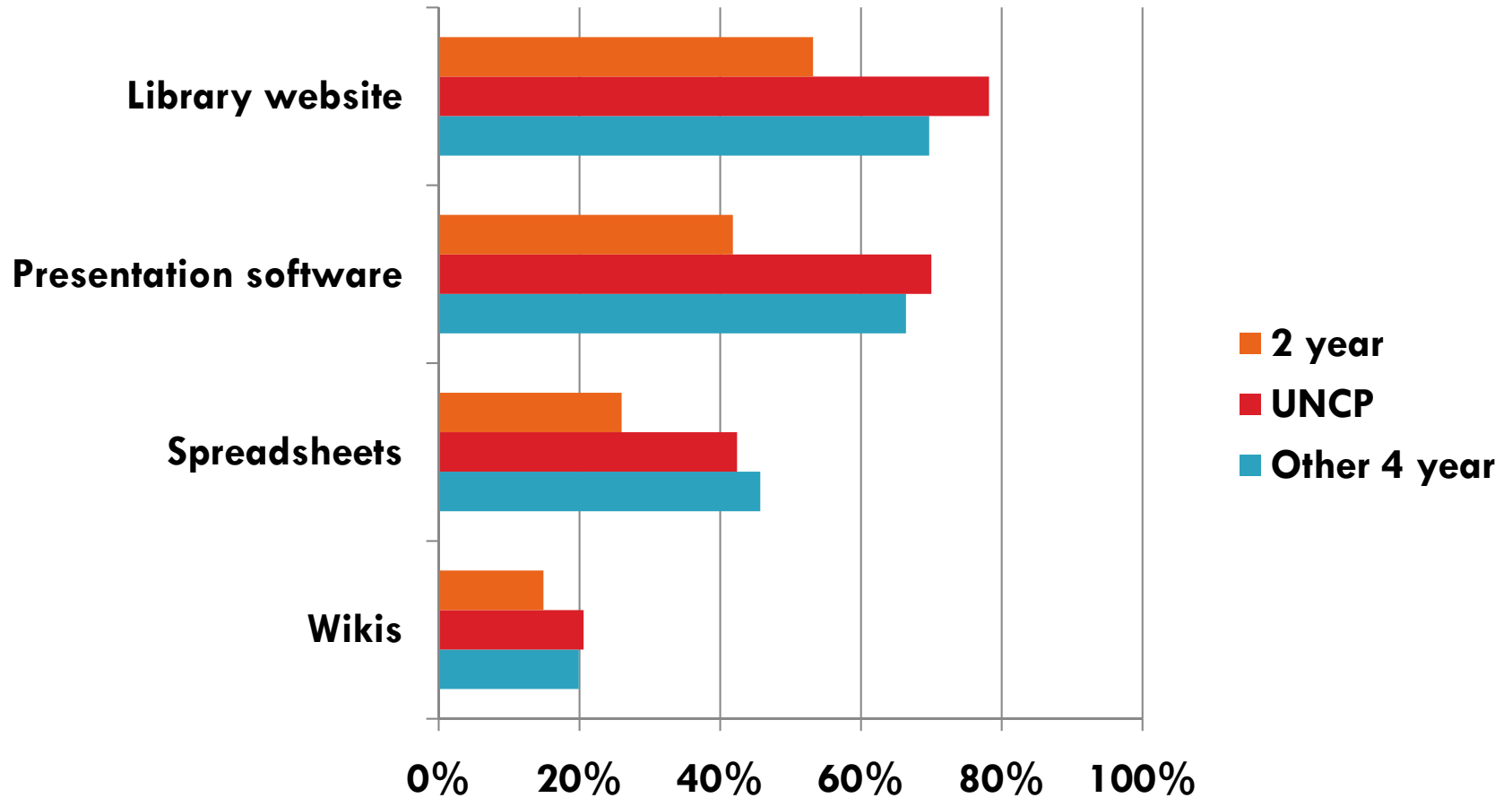
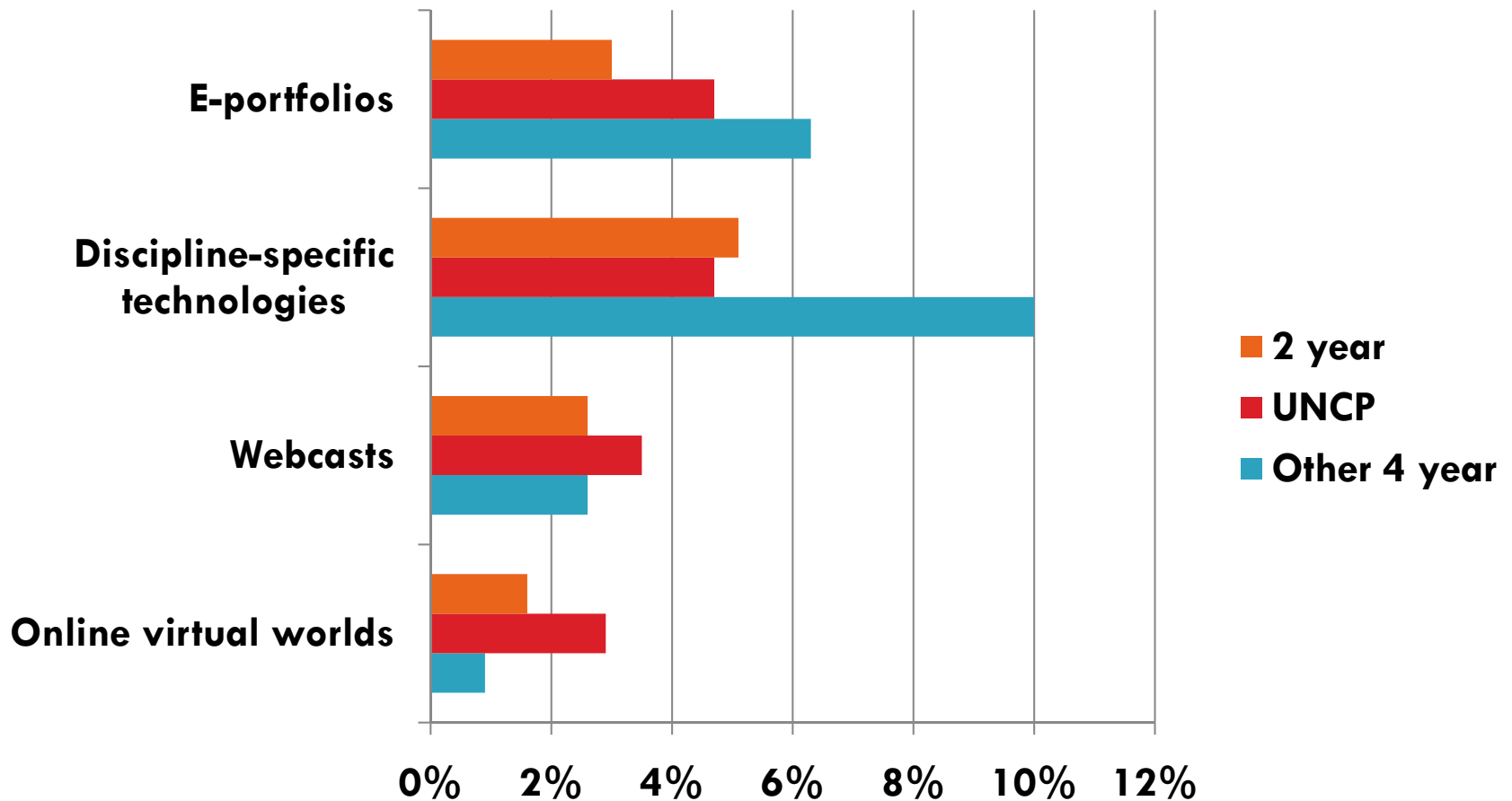# Using in courses (semester of survey)

Using in courses (semester of survey)

Using in courses (semester of survey)

Additional observations

- *Seniors from 4-yr institutions use the following more than first-year or community college students*
  - Presentation software (PowerPoint, etc.)
  - Spreadsheets (Excel, etc.)
  - Graphics software (Photoshop, Flash, etc.)
- *Technologies by major*
  - Engineering students use more technology overall than any other major
  - E-portfolios used most often by education majors

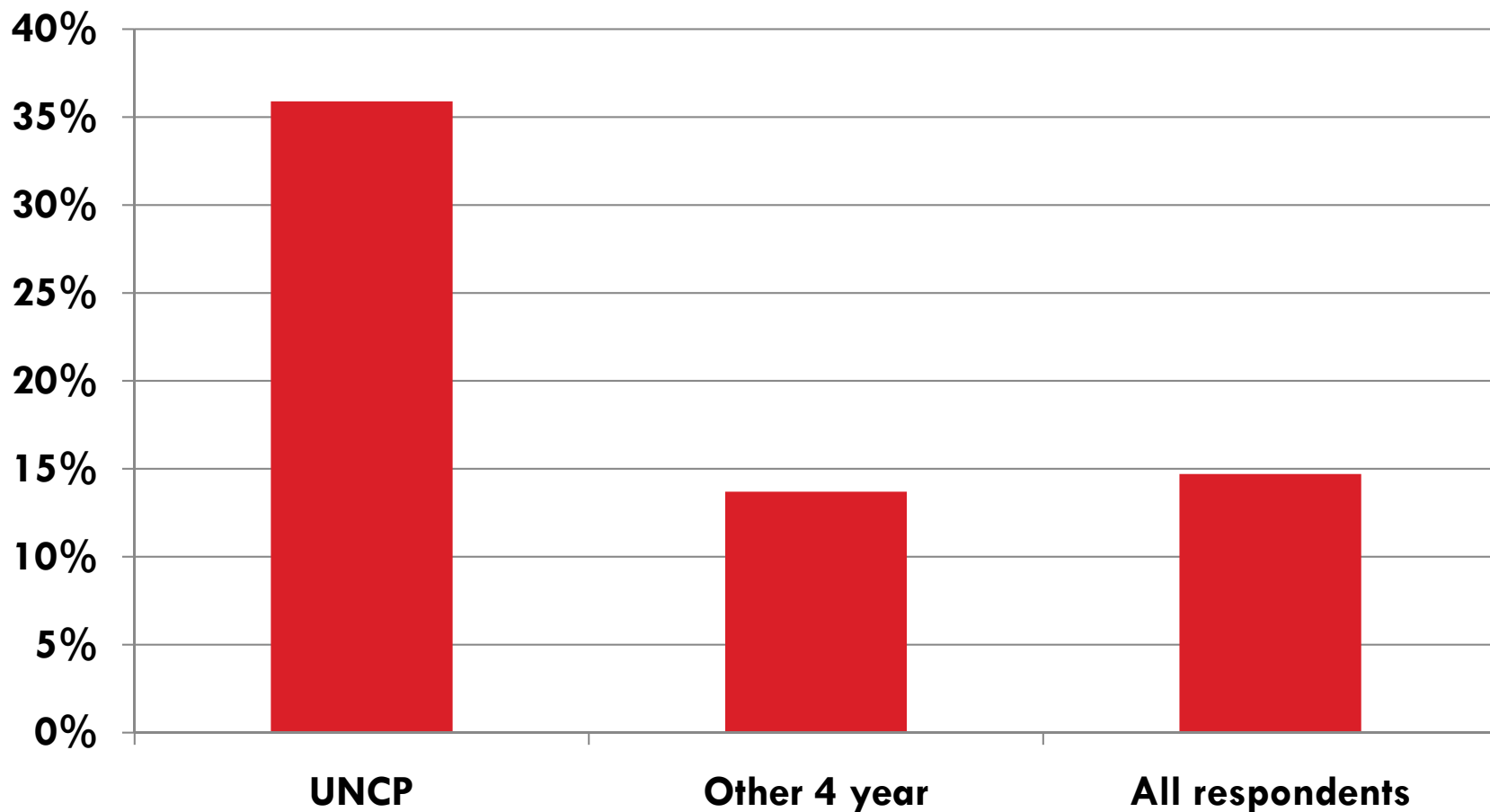# Additional observations

- *Technologies used more by fine arts majors*
  - Graphics software (Photoshop, Flash, etc.)
  - Video-creation software (Director, iMovie, etc.)
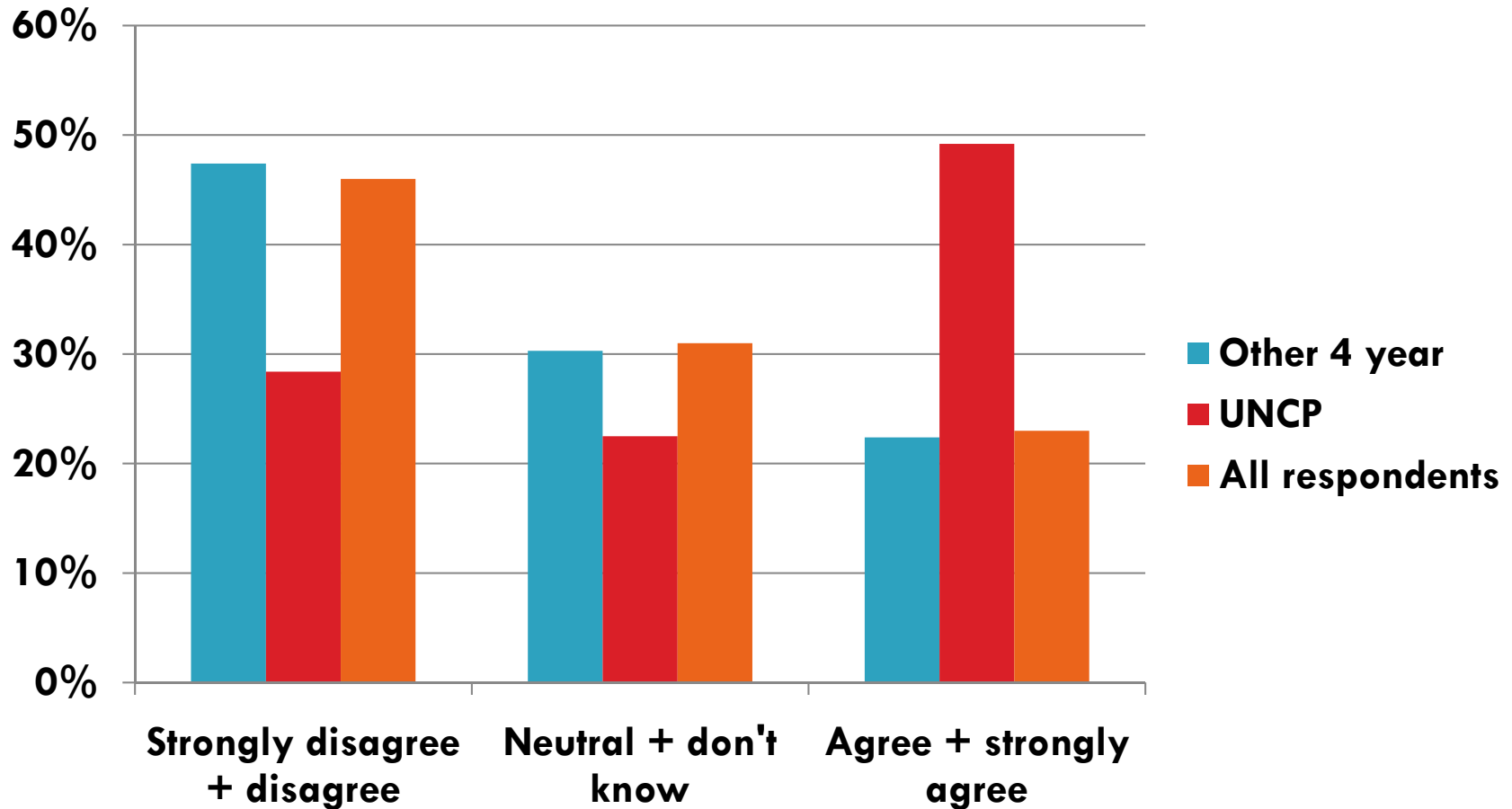 - Audio-creation software (Audible, GarageBand, etc.)

Percent students taking one or more online courses

Older and part-time students more likely to take online courses.

Responses to: "It would benefit students if my institution required students to take at least one entirely online course."
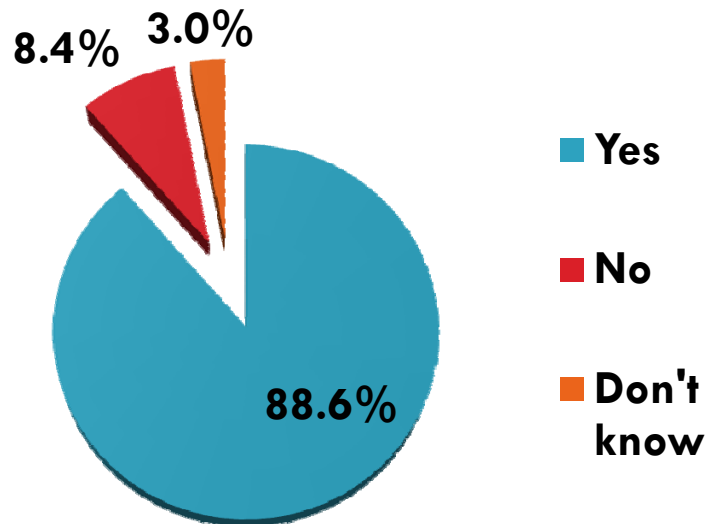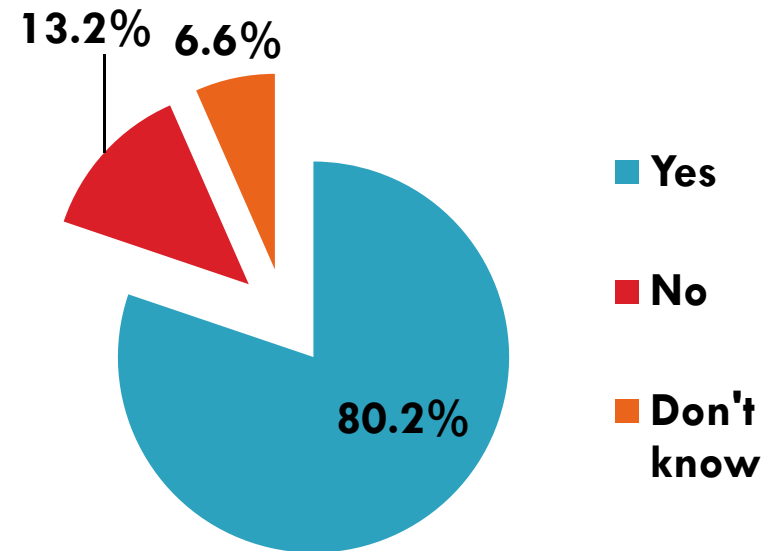
How students like to learn with technology

How students like to learn with technology
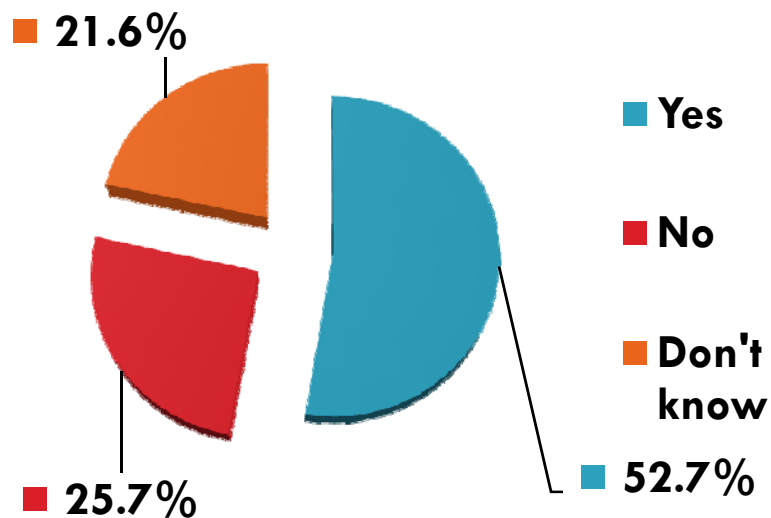
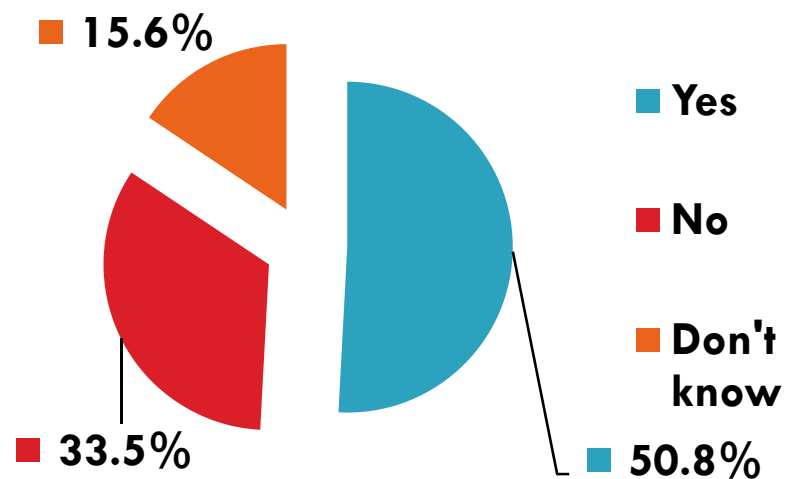| UNCP	All respondents

Programs I can control, such as video games, simulations, etc.

Programs I can control, such as video games, simulations, etc.

UNCP pie chart:
- 21.6% Don't know
- 25.7% No
- 52.7% Yes

All respondents pie chart:
- 15.6% Don't know
- 33.5% No
- 50.8% Yes

Legend: Yes, No, Don't know

How students like to learn with technology

UNCP

Text-based conversations over e-mail, IM, and text messaging

16.3%

33.1%

50.6%

- Yes
- No
- Don't know
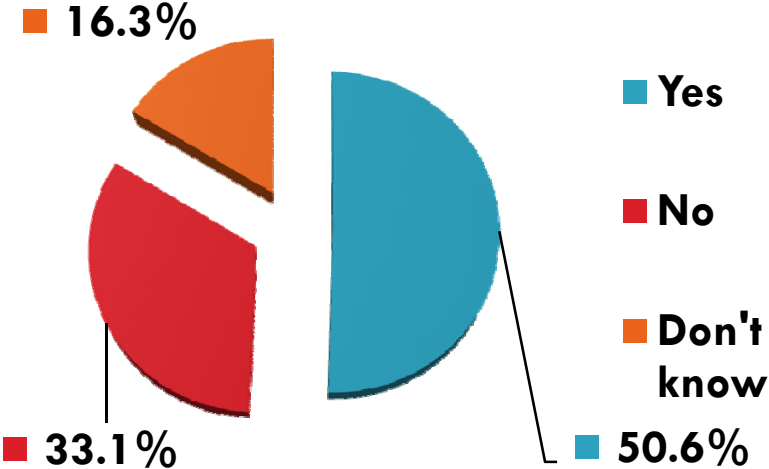
All respondents

Text-based conversations over e-mail, IM, and text messaging

14.5%

44.3%

41.2%

- Yes
- No
- Don't know
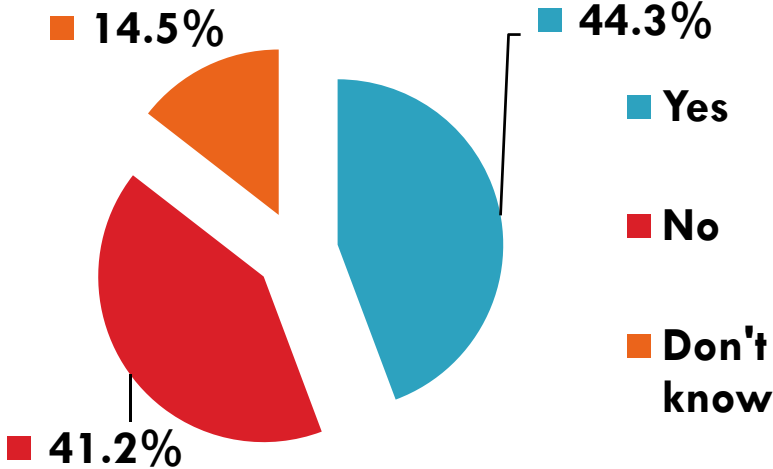
How students like to learn with technology

UNCP

Contributing to websites, blogs, wikis, etc.

- 18.5%
- 38.7% Yes
- No
- Don't know
- 42.9%
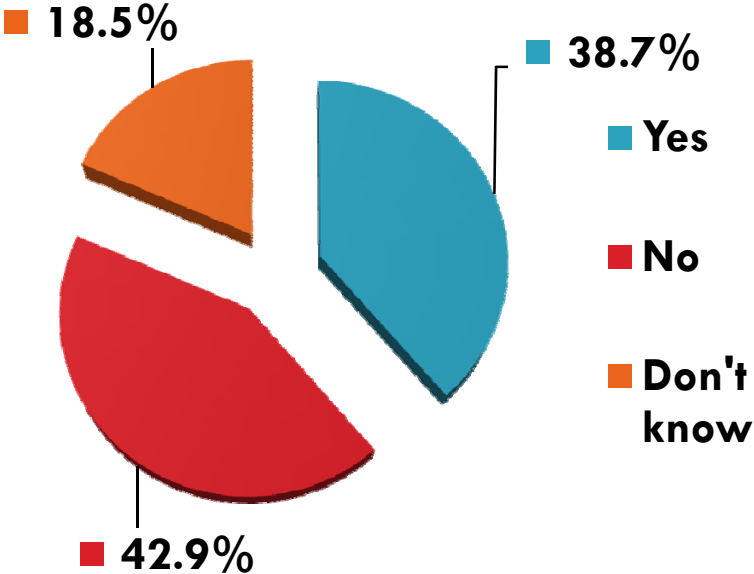
All respondents

Contributing to websites, blogs, wikis, etc.
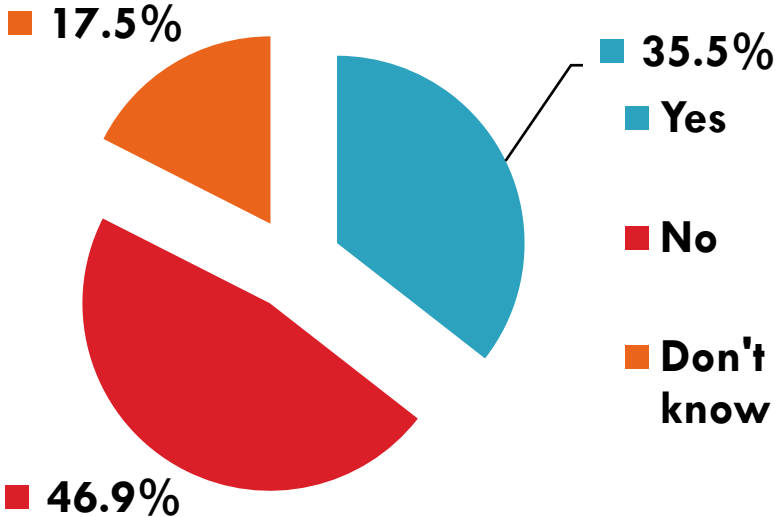
- 17.5%
- 35.5% Yes
- No
- Don't know
- 46.9%

How students like to learn with technology

UNCP
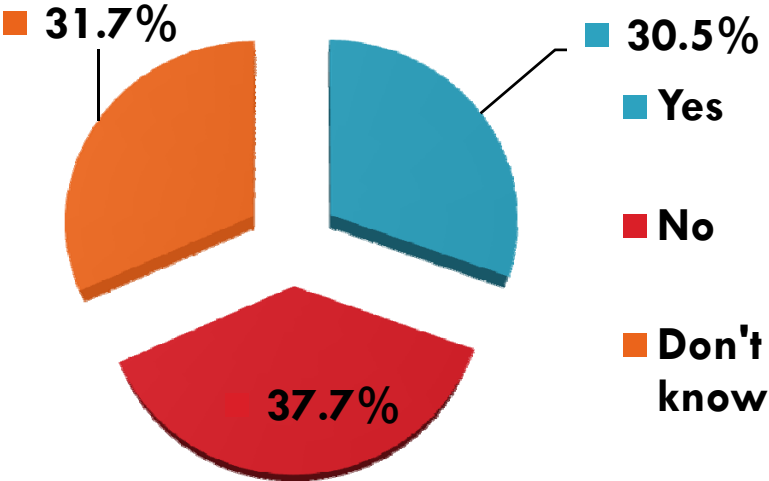
All respondents

Creating or listening to podcasts or webcasts

31.7%

30.5%

Yes

No

Don't know

37.7%

Creating or listening to podcasts or webcasts

25.8%

29.0%
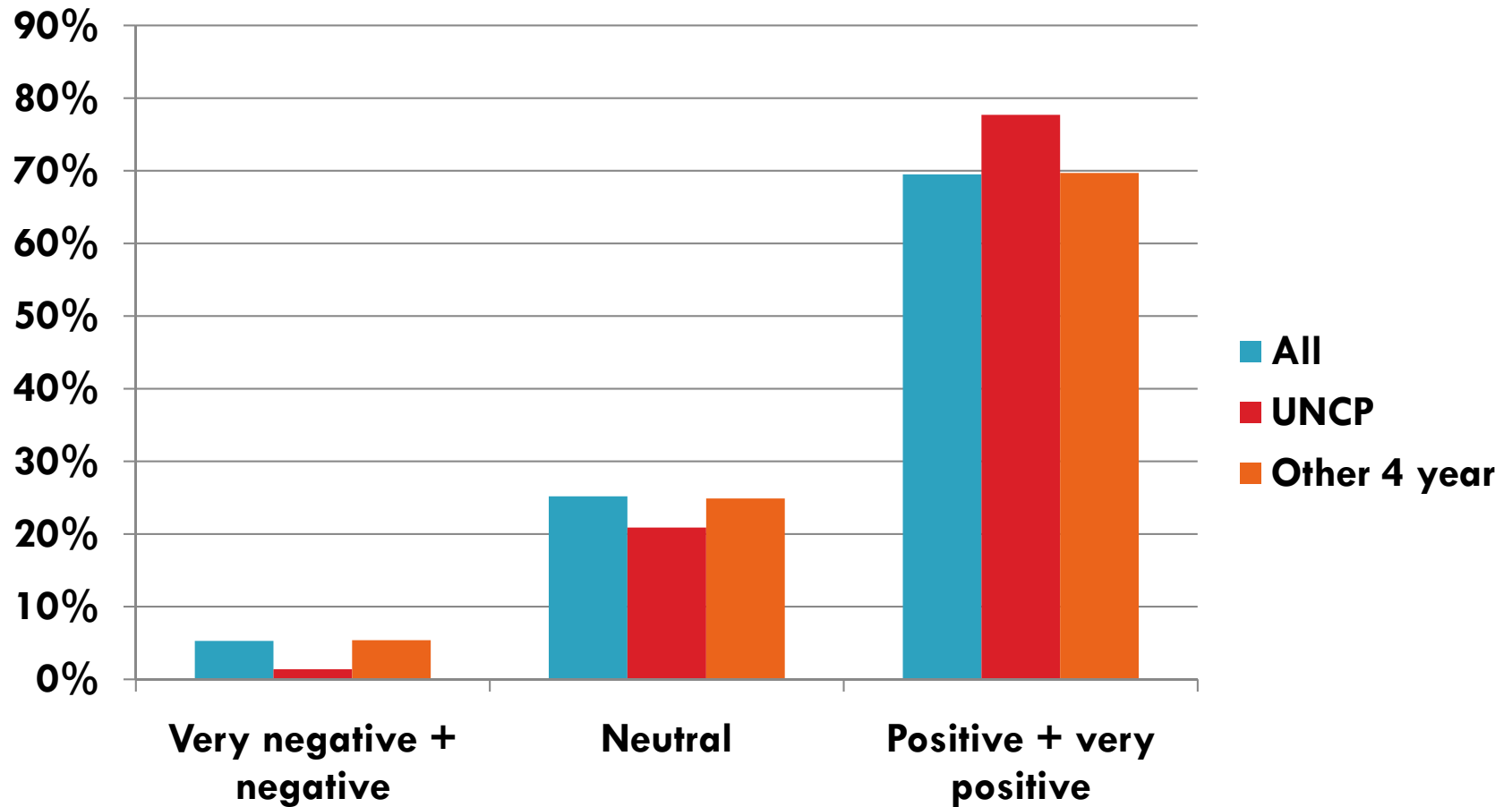
Yes

No

Don't know

45.2%
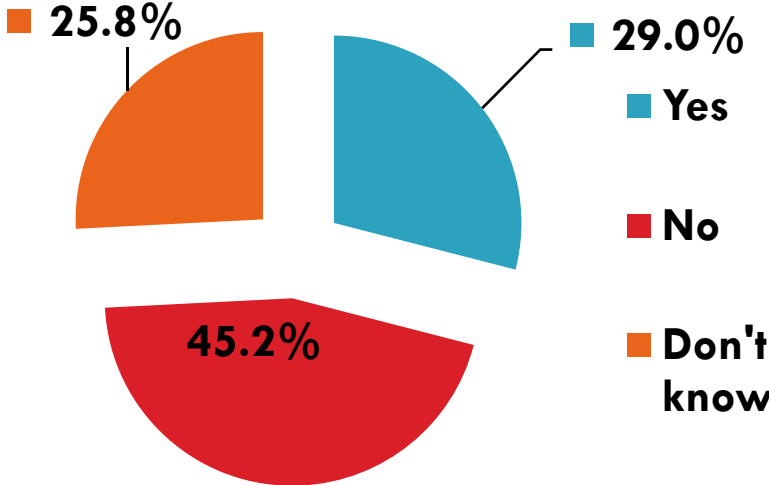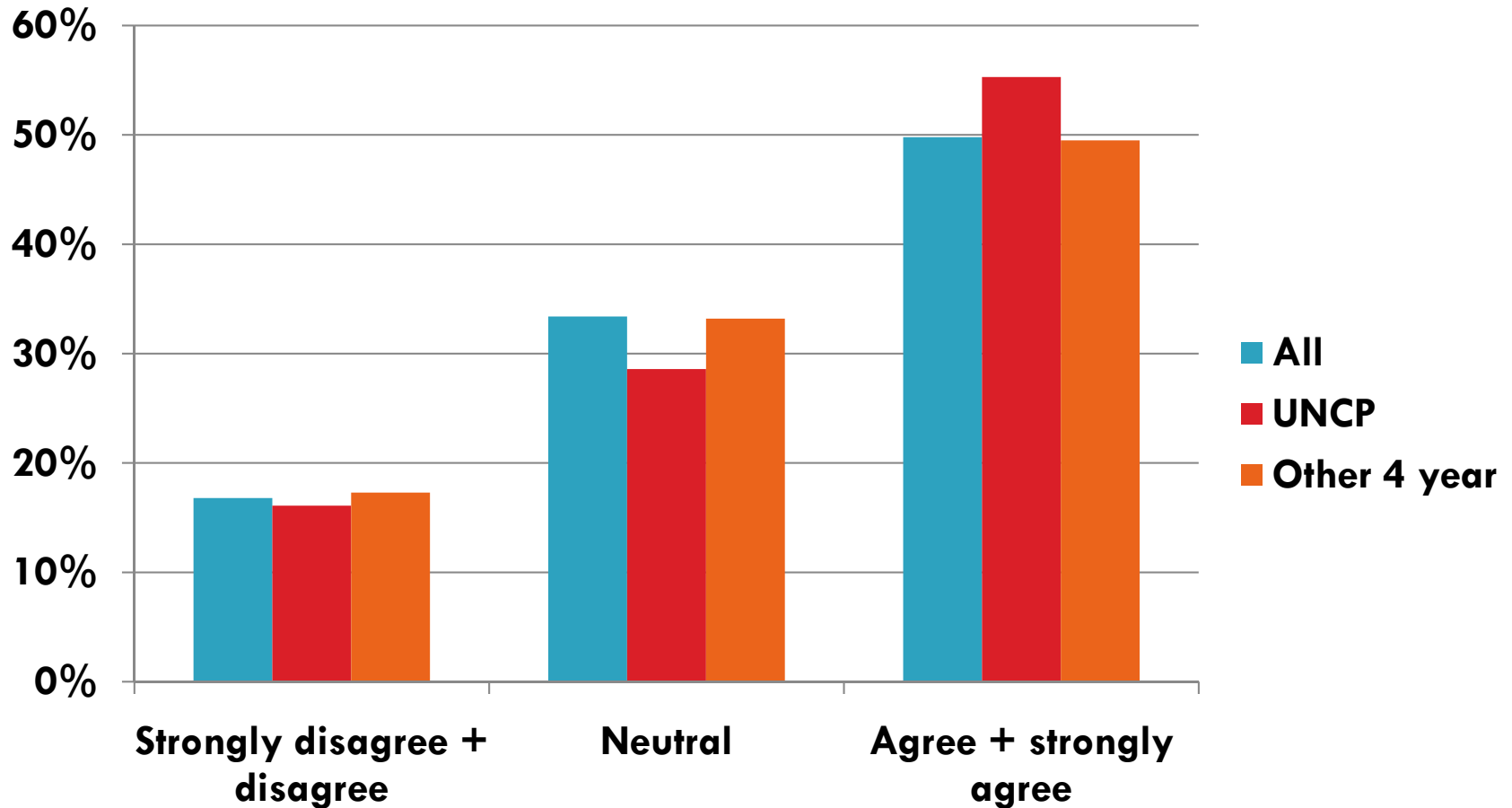
Students who have used a CMS
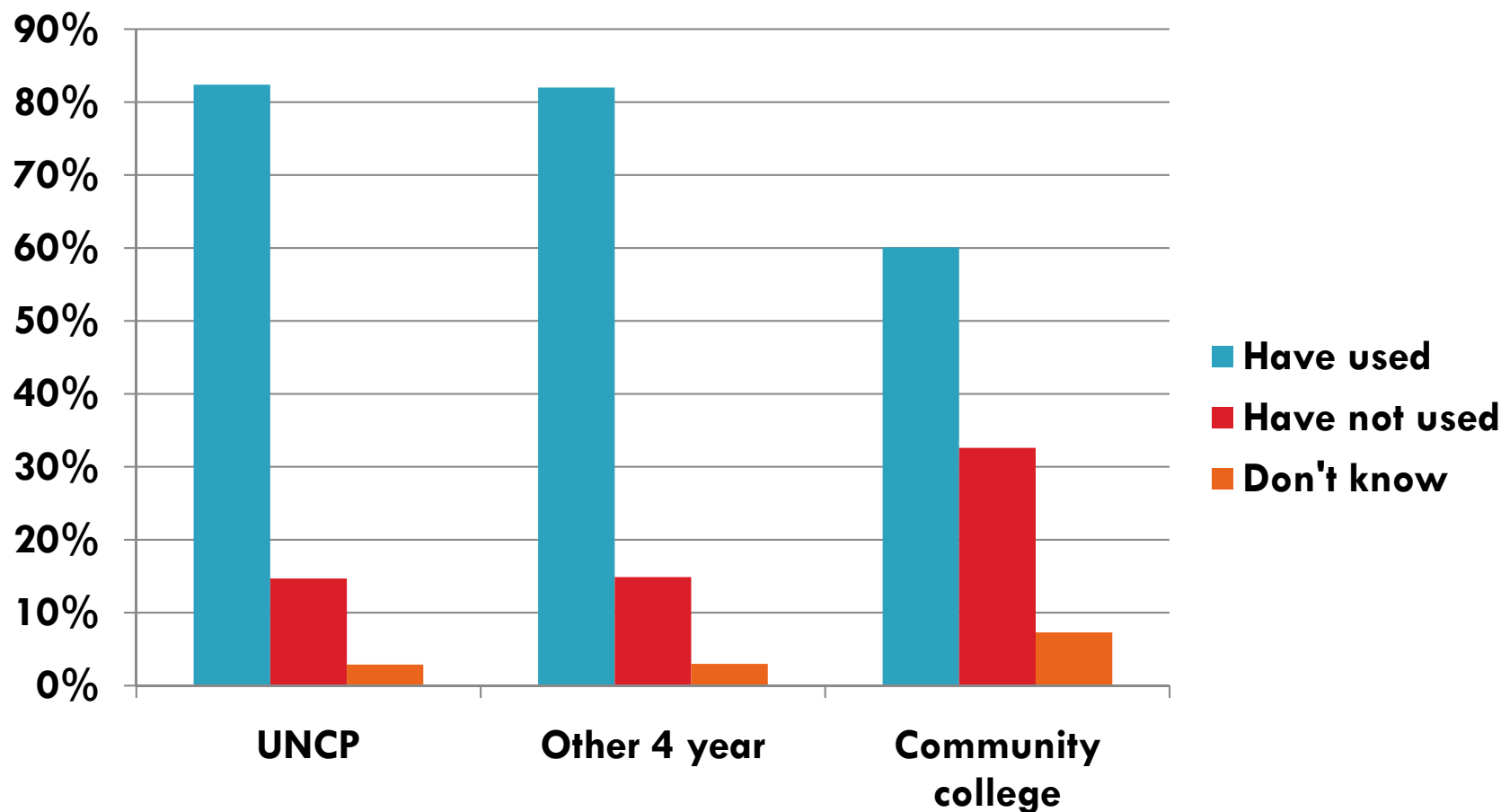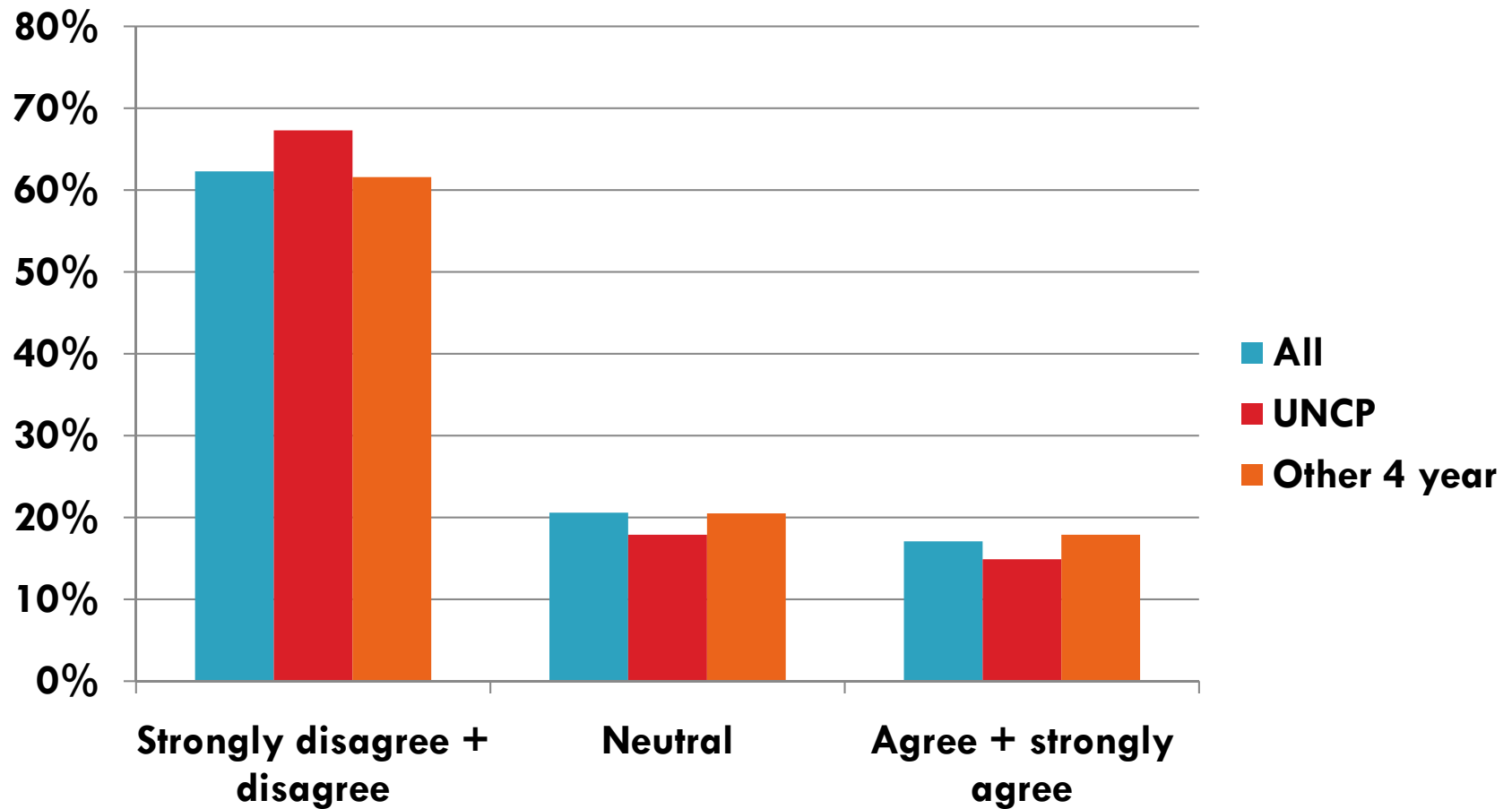
Experiences using a CMS

Responses to: "My institution's IT services are always available when I need them for my course work."

Responses to: "I skip classes when materials from course lectures are available online."

Instructor use of IT in courses

"You have to watch! If you see technology being substituted for teaching, run."
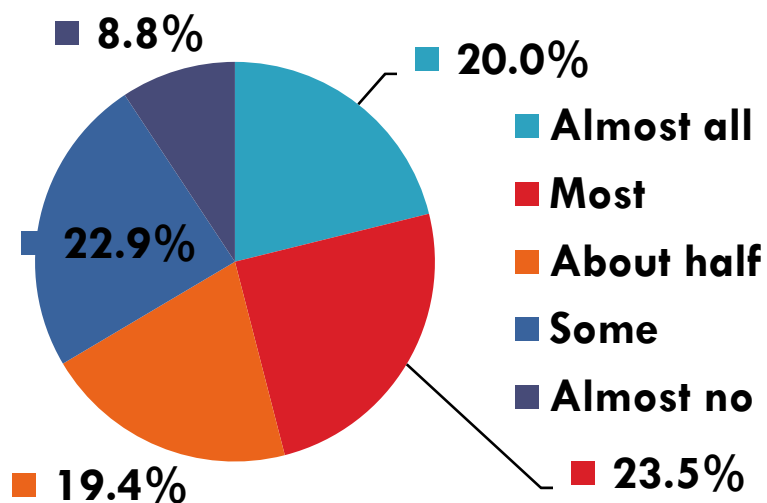
--An undergraduate physics student
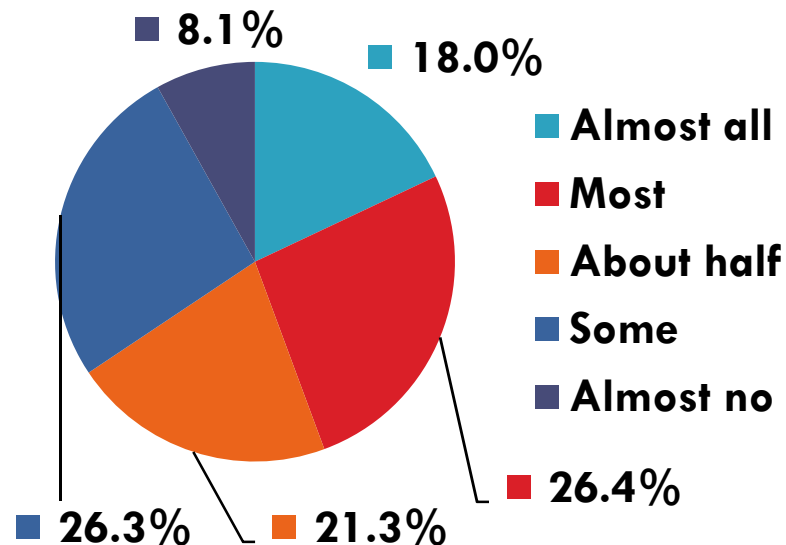
Instructor use of IT in courses

UNCP

Instructors use IT effectively

8.8% 20.0% 22.9% 19.4% 23.5%

Almost all
Most
About half
Some
Almost no

All respondents

Instructors use IT effectively

8.1% 18.0% 26.3% 21.3% 26.4%

Almost all
Most
About half
Some
Almost no

Instructor use of IT in courses

UNCP

**Provide adequate training
for IT used in courses**

18.3% 10.7% 18.3%

- ■ Almost all
- ■ Most
- ■ About half
- ■ Some
- ■ Almost no

30.8% 16.0%
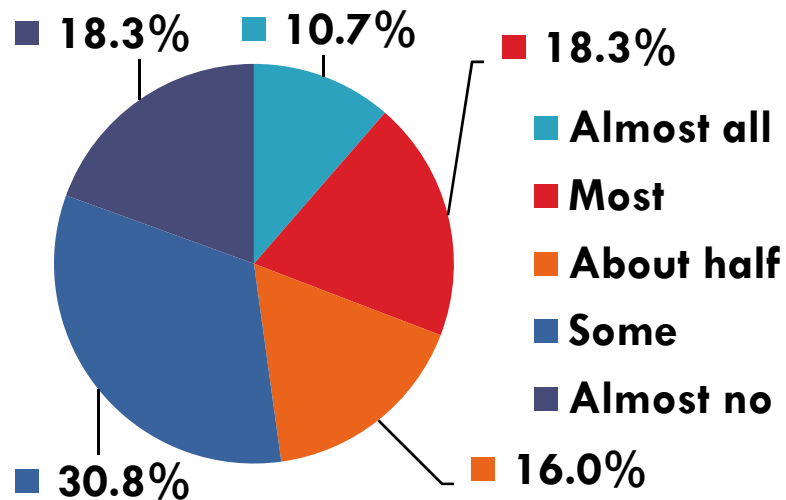
All respondents

**Provide adequate training
for IT used in courses**

20.9% 11.8%

22.3%

- ■ Almost all
- ■ Most
- ■ About half
- ■ Some
- ■ Almost no

29.9% 15.1%
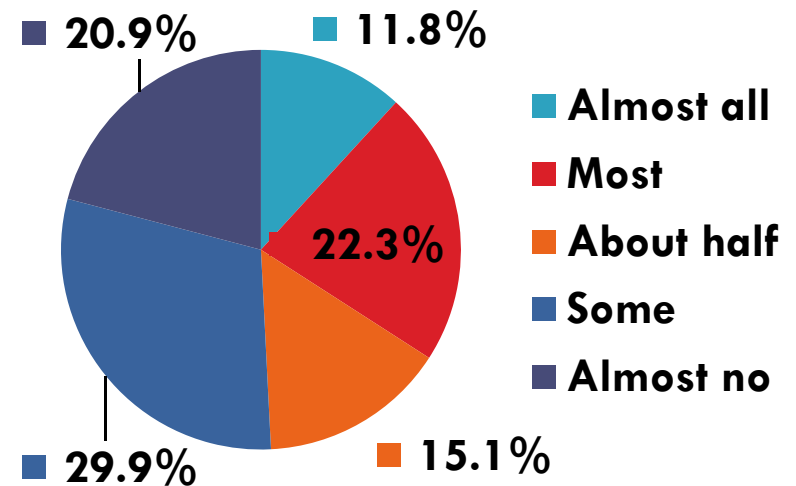
Instructor use of IT in courses

UNCP

Understand IT skill levels of students

18.9% 8.2% 17.6%

Almost all
Most
About half
Some
Almost no

15.9%

31.2%
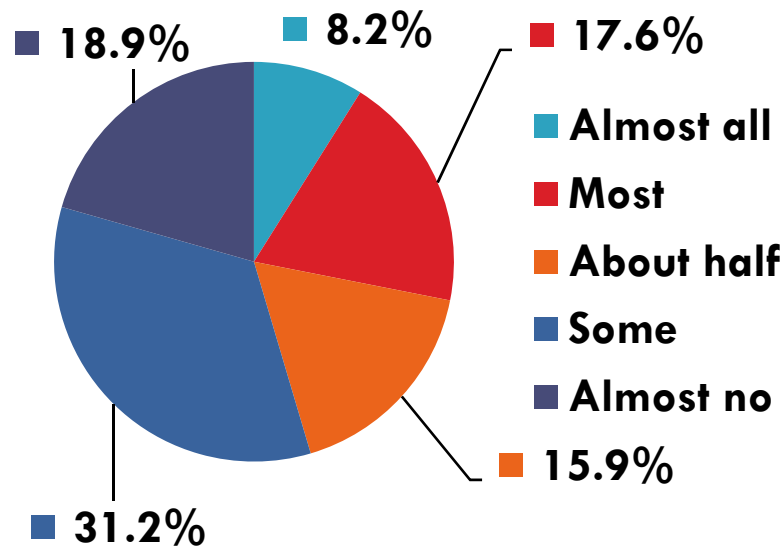
All respondents

Understand IT skill level of students

17.3% 11.2% 24.0%

Almost all
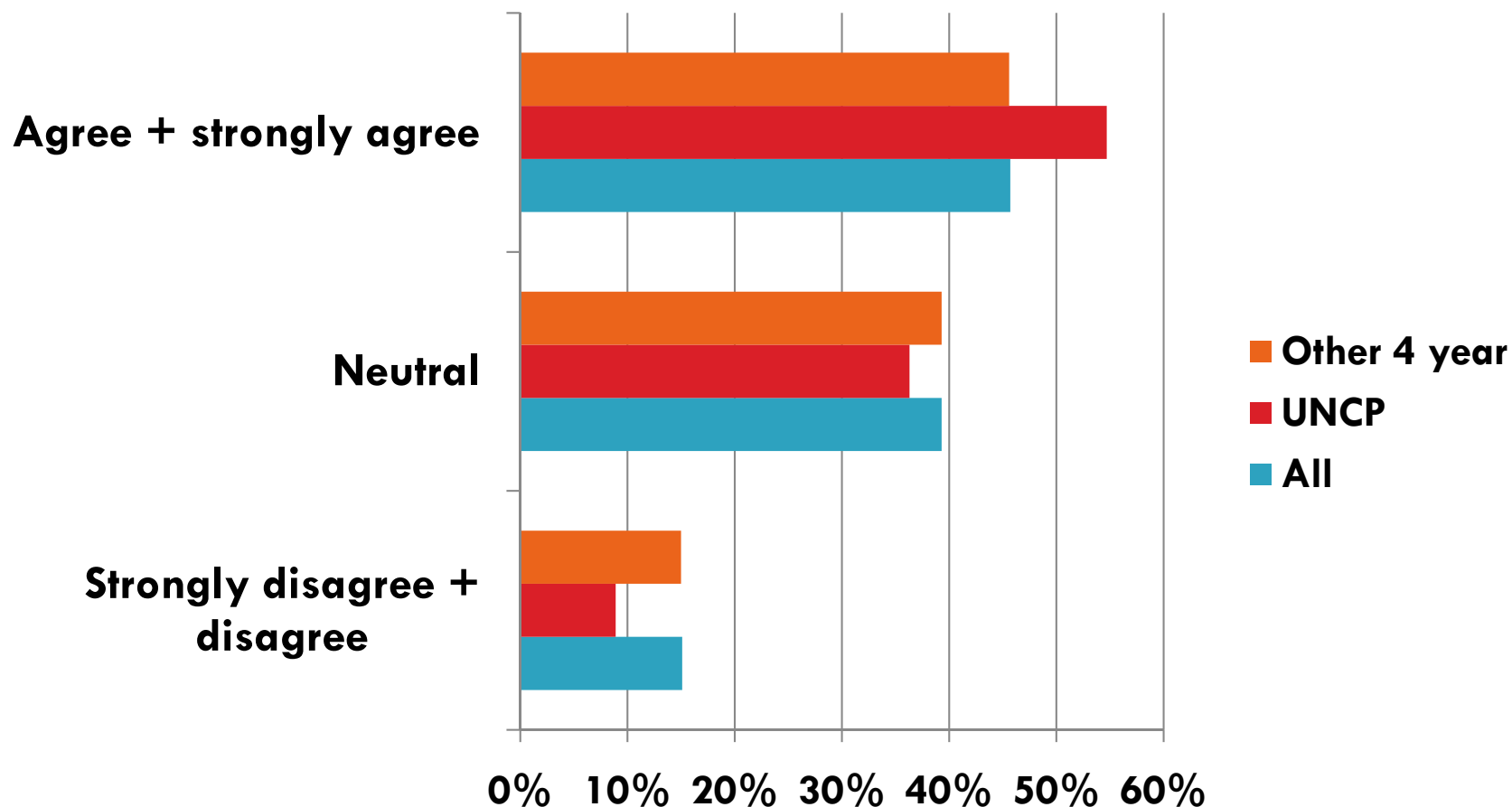Most
About half
Some
Almost no

31.5% 16.0%
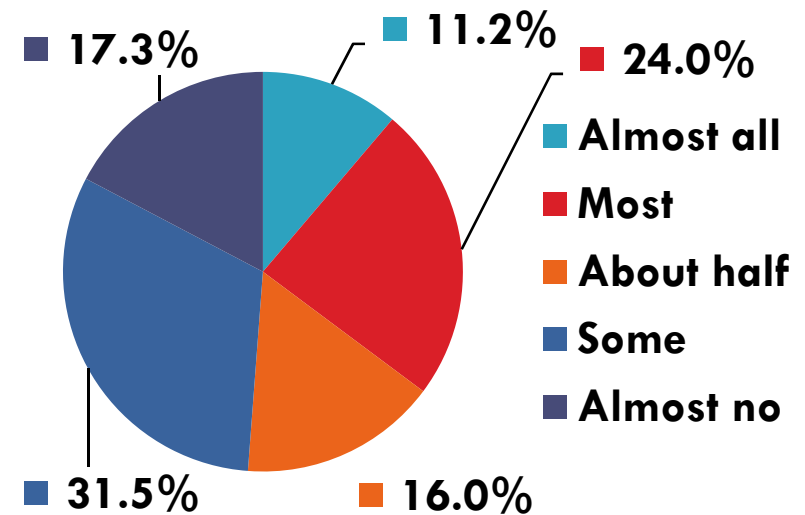
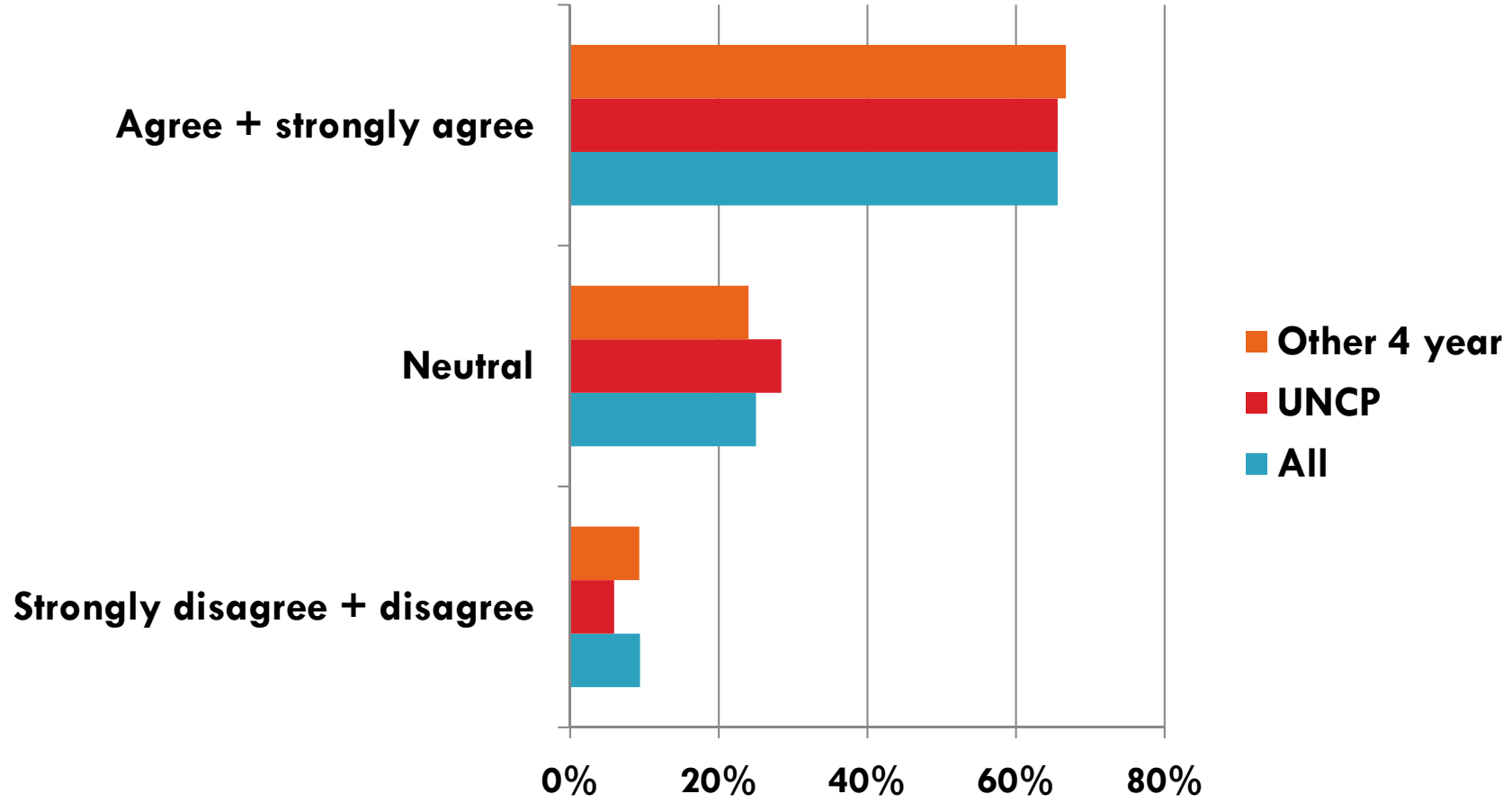# Student success: "I get more actively involved in courses that use IT."
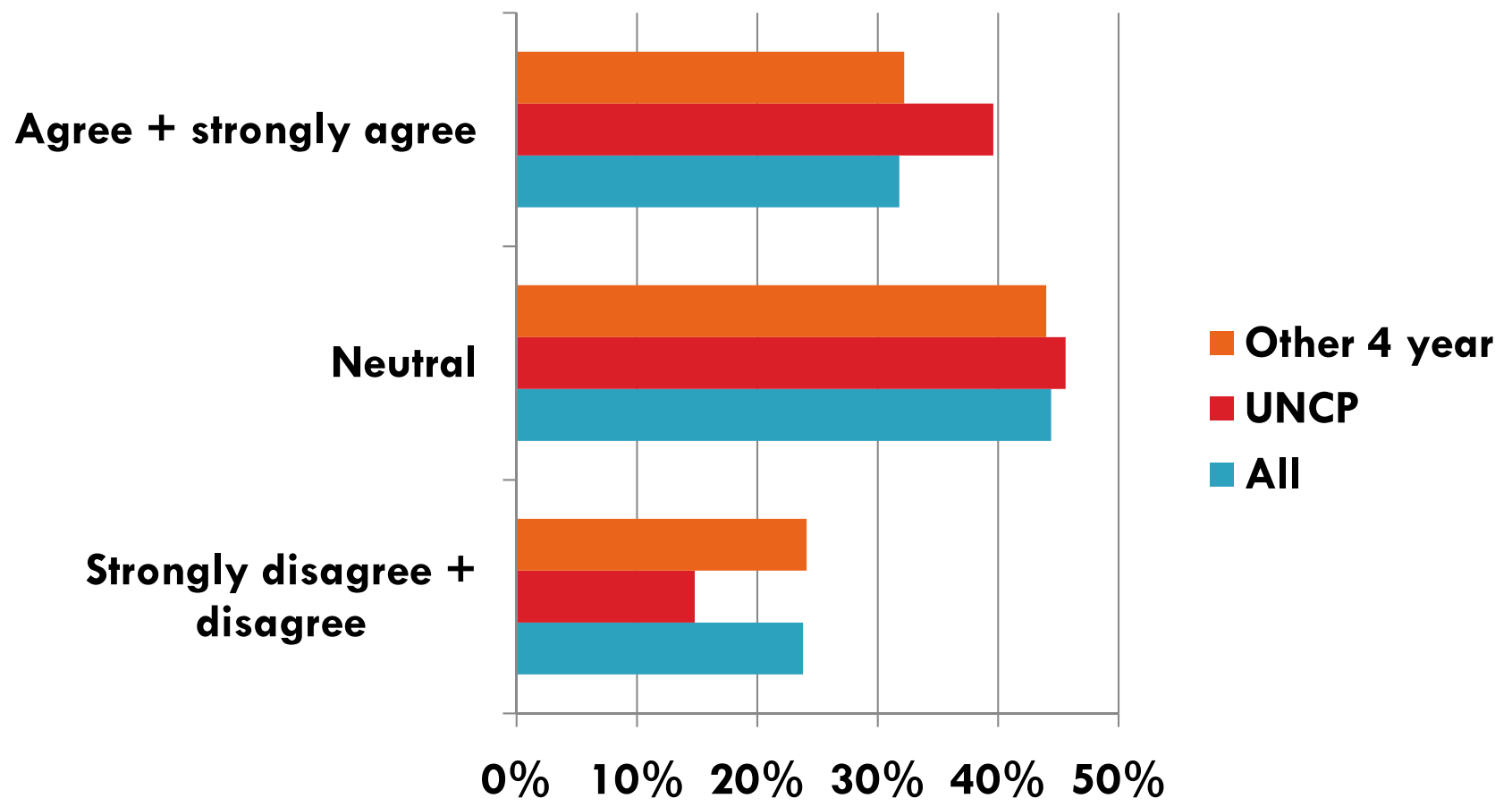
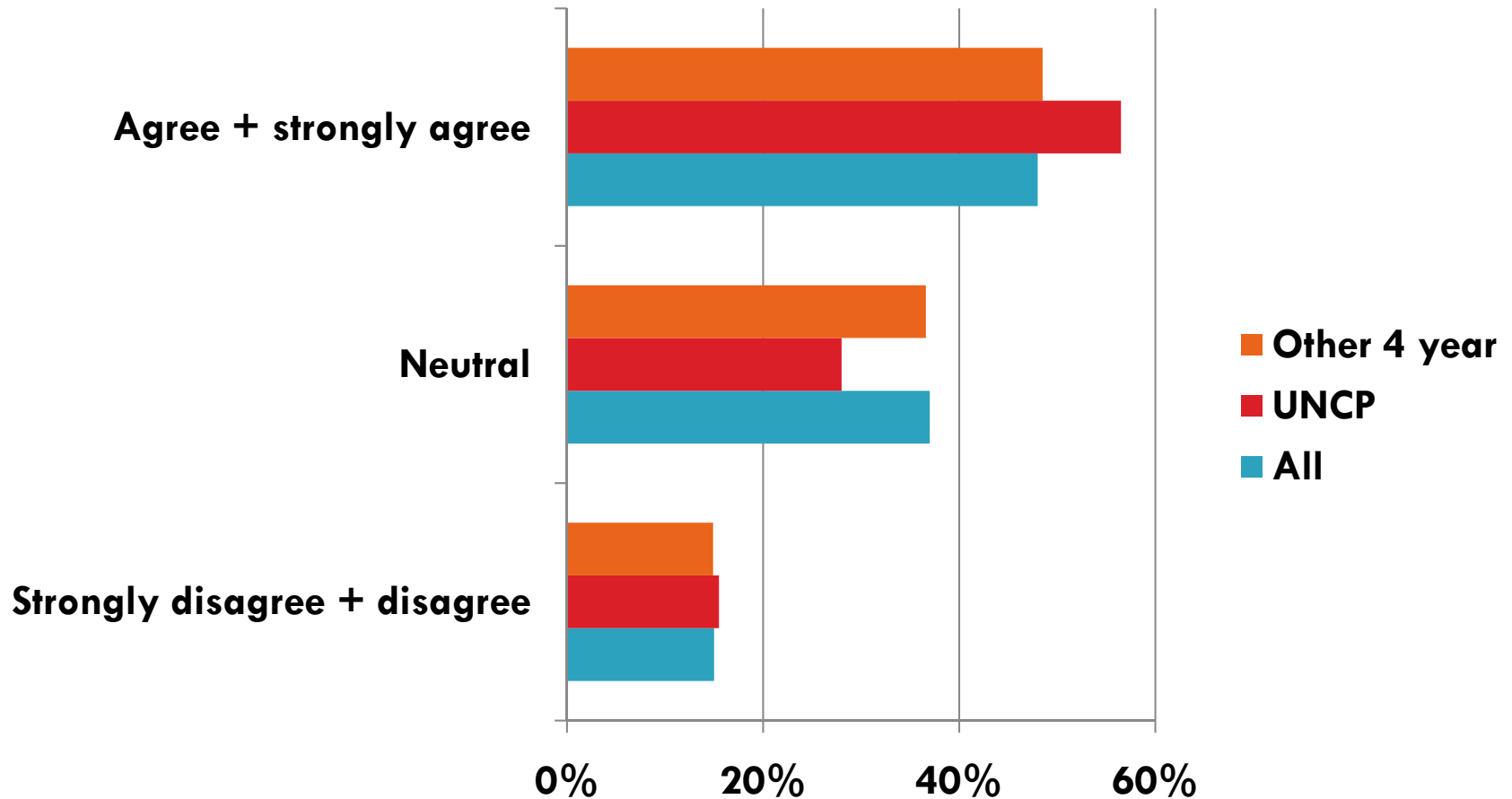# Student success: "The use of IT in my courses improves my learning."

Student success: "IT makes doing my course activities more convenient."

Student success: "By the time I graduate, the IT I have used in my courses will have adequately prepared me for the workplace."

Common characteristics of respondents who are positive about the impact of IT

- **Prefer more IT in courses**
- **Describe themselves as early adopters of technology**
- **More positive about CMS experiences**
- **More positive about availability of campus IT services**
- **More likely to say instructors use IT effectively**

Social Networking

"I can hardly remember when Facebook didn't exist. It would be very hard to adjust if it were to disappear. It is useful to keep in touch with my family back home, communicate about course work, and share photos."

--An ECAR participant

Social Networking Sites (SNSs)

- **General Observations**
  - Facebook most common SNS (among 4 year+)
  - Net Gen students most avid users
  - Most students use SNSs reasonably and moderately
  - Not very concerned about privacy/security issues
  - Common practice to place restrictions on profiles
  - Average about an hour a day using SNSs
  - Most friends are people they have met
  - Communicating with classmates common

of students who use SNSs
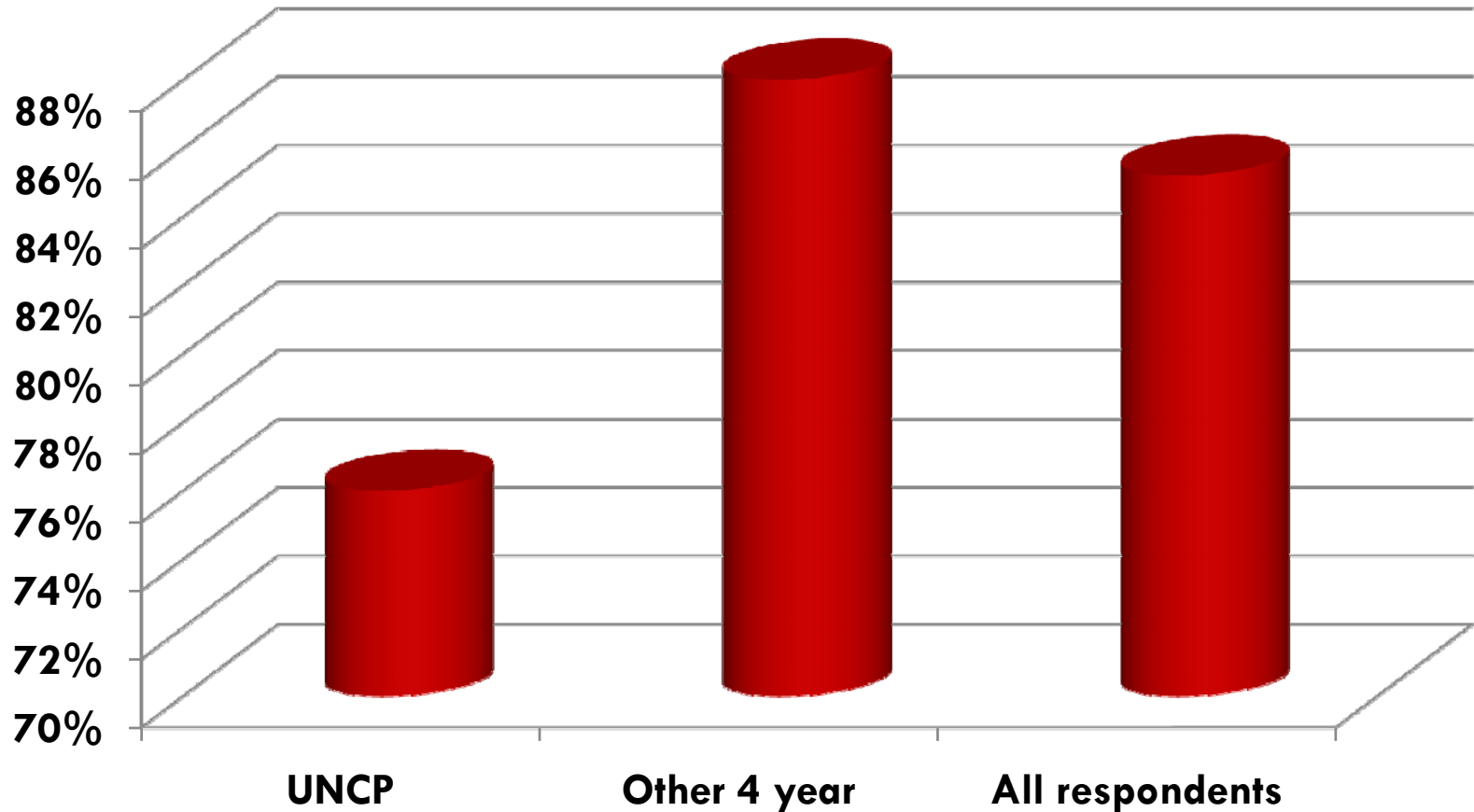
Hours per week use SNSs
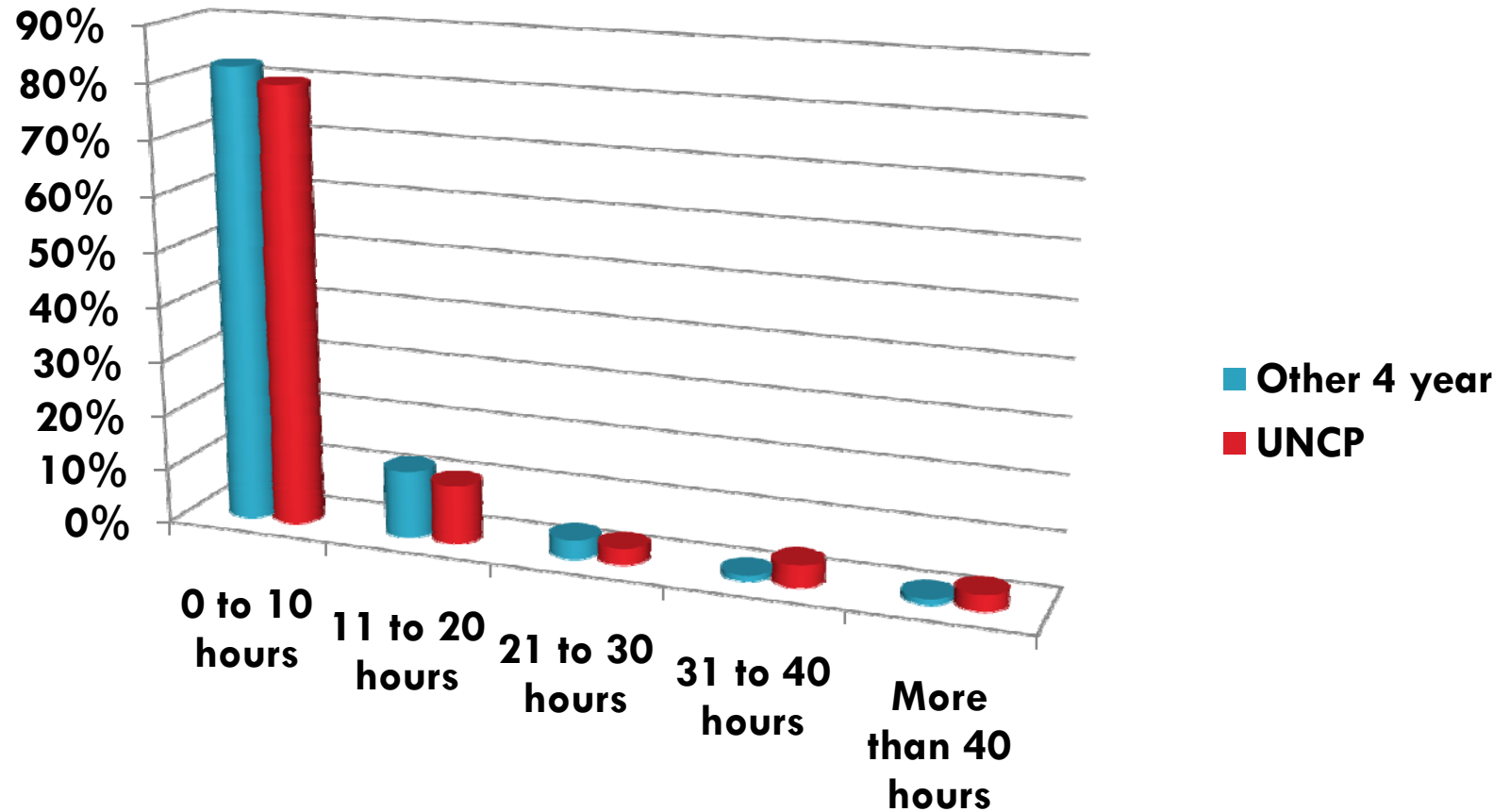
Time-consuming nature of SNSs

- "I used to check these sites a million times a day. Now I try to limit myself to four hours/week on MySpace and seven hours/week on Facebook."
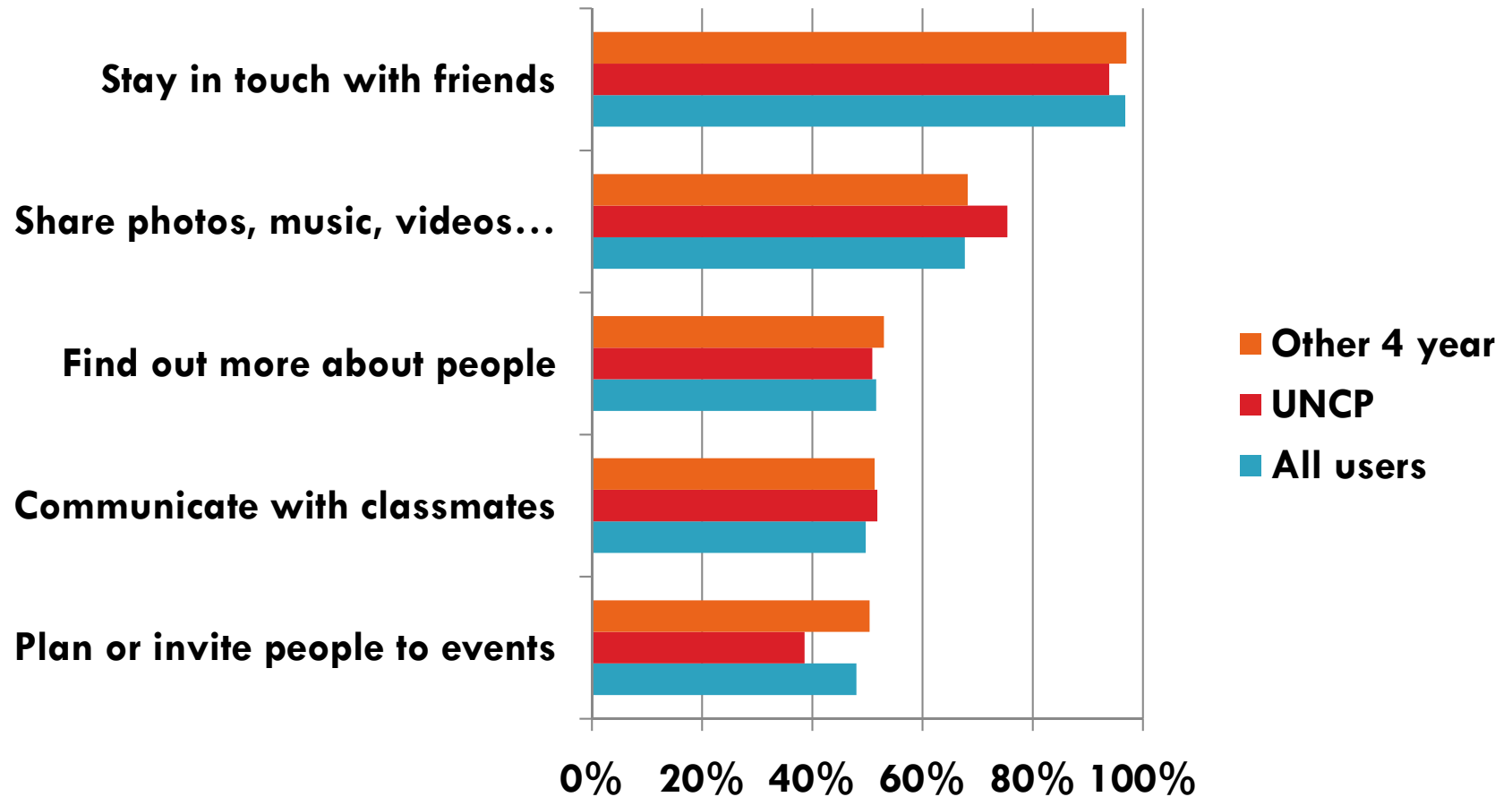
--junior music education major

- "I should be majoring in procrastination. Facebook is a great procrastination tool. It's always up."
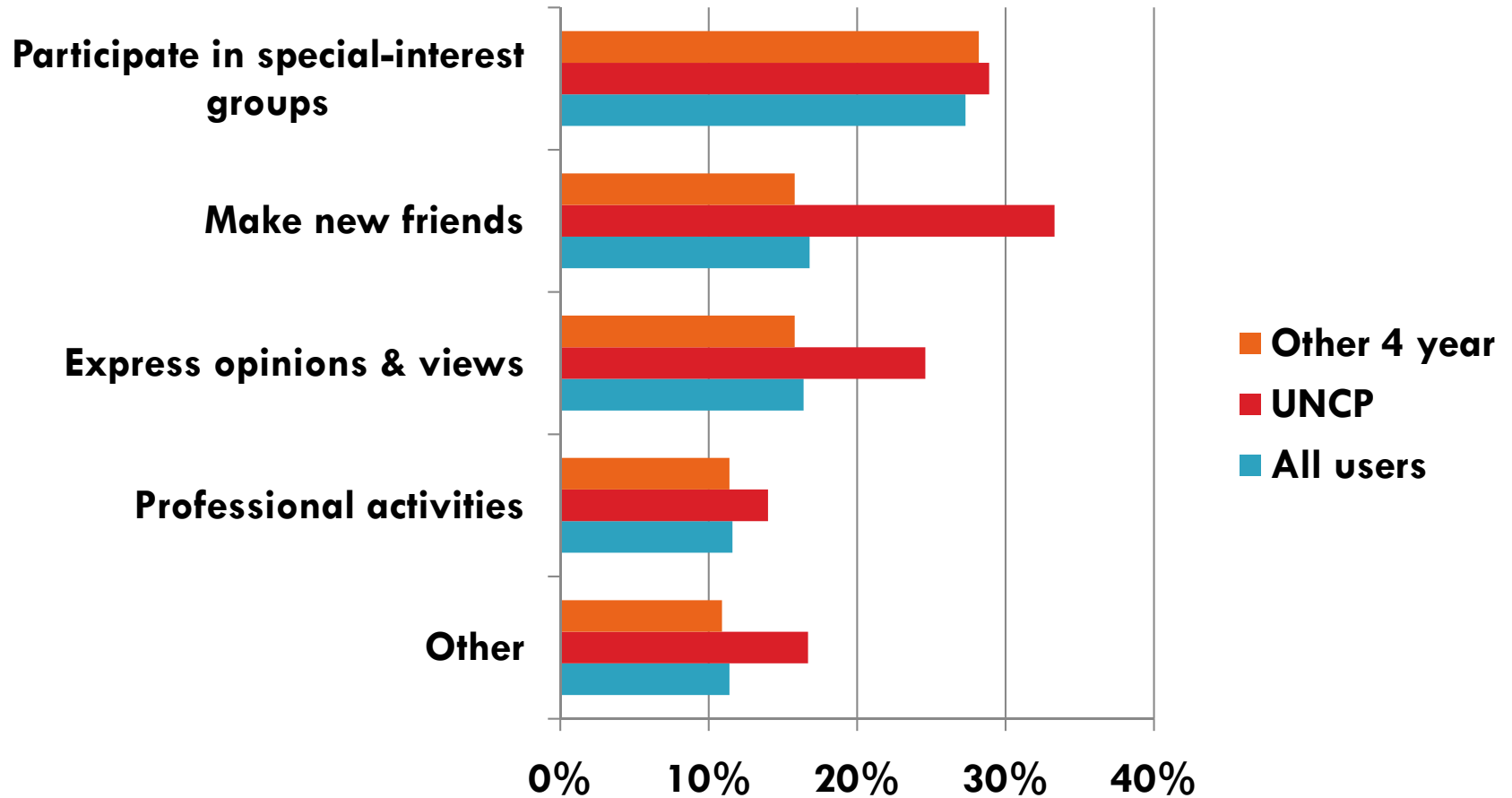
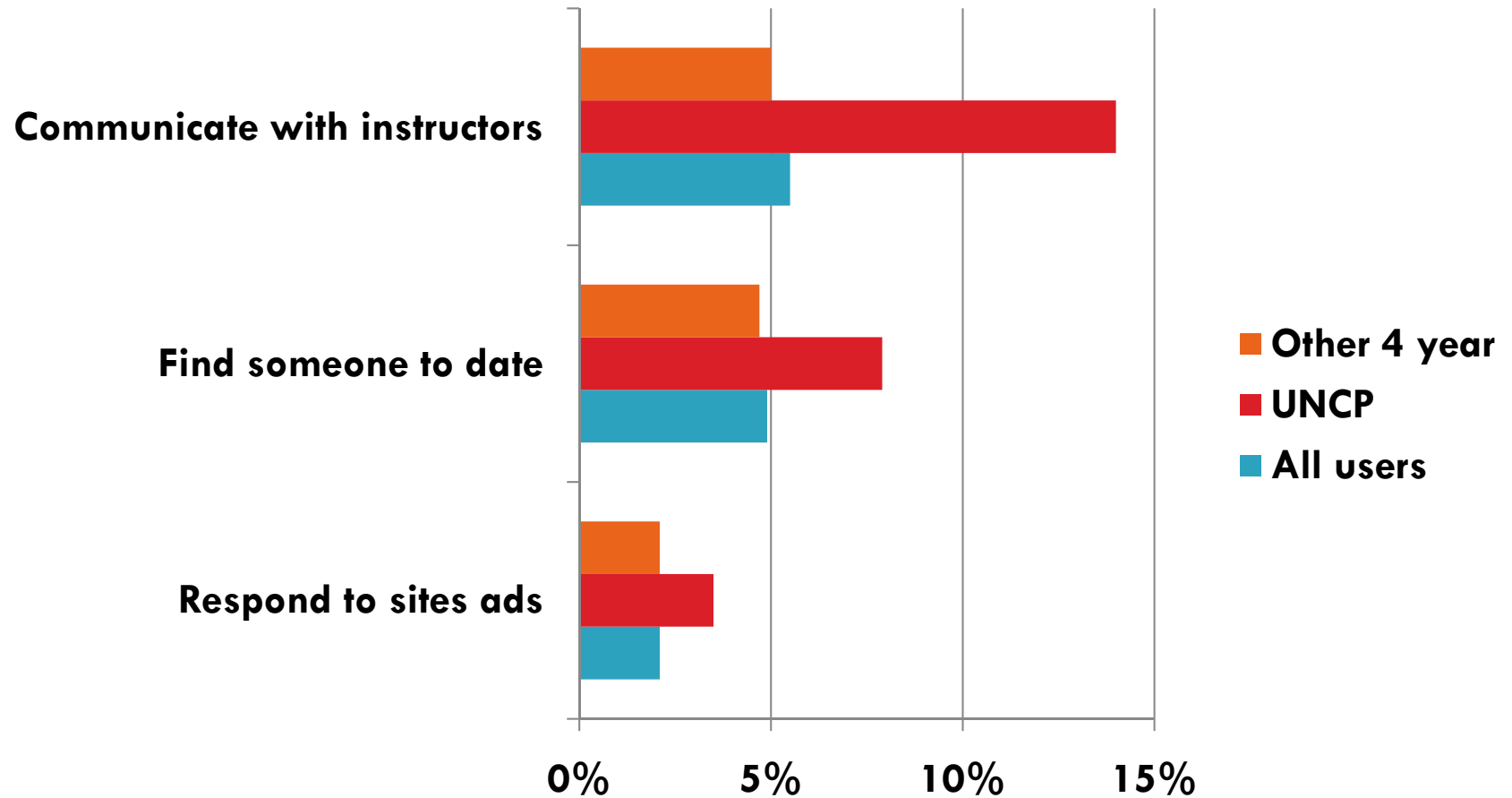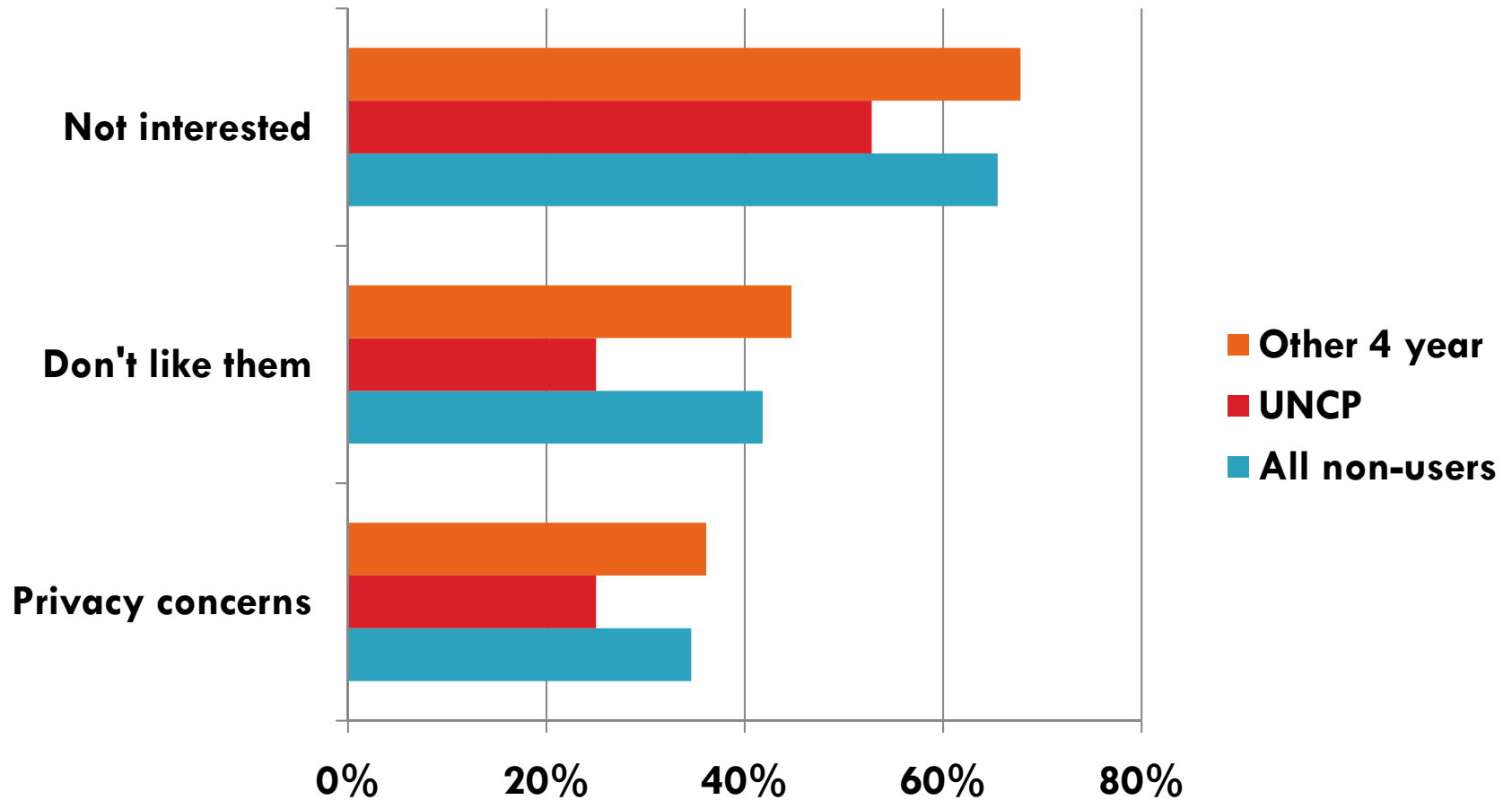--female sophomore

How SNSs Are Used

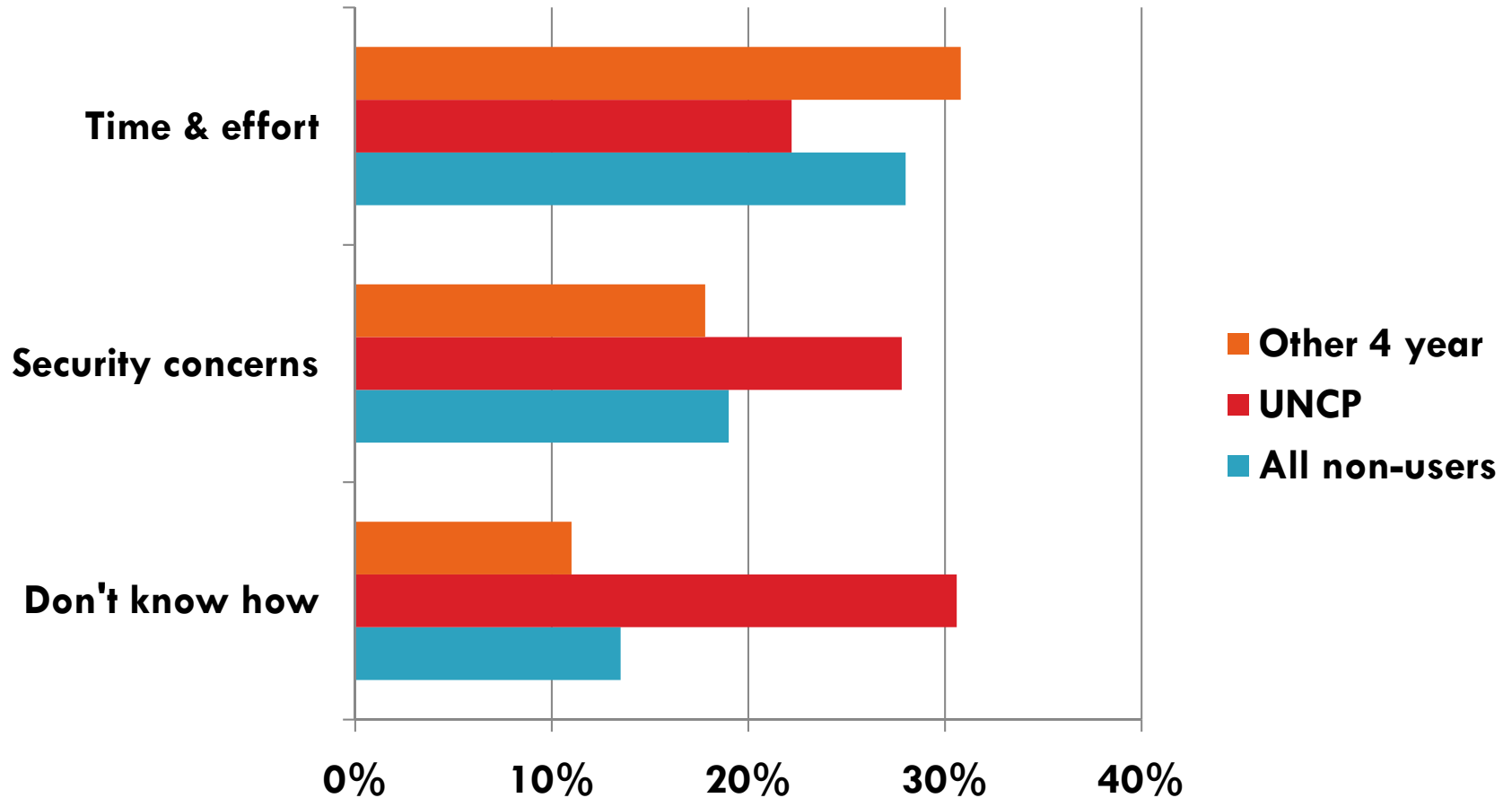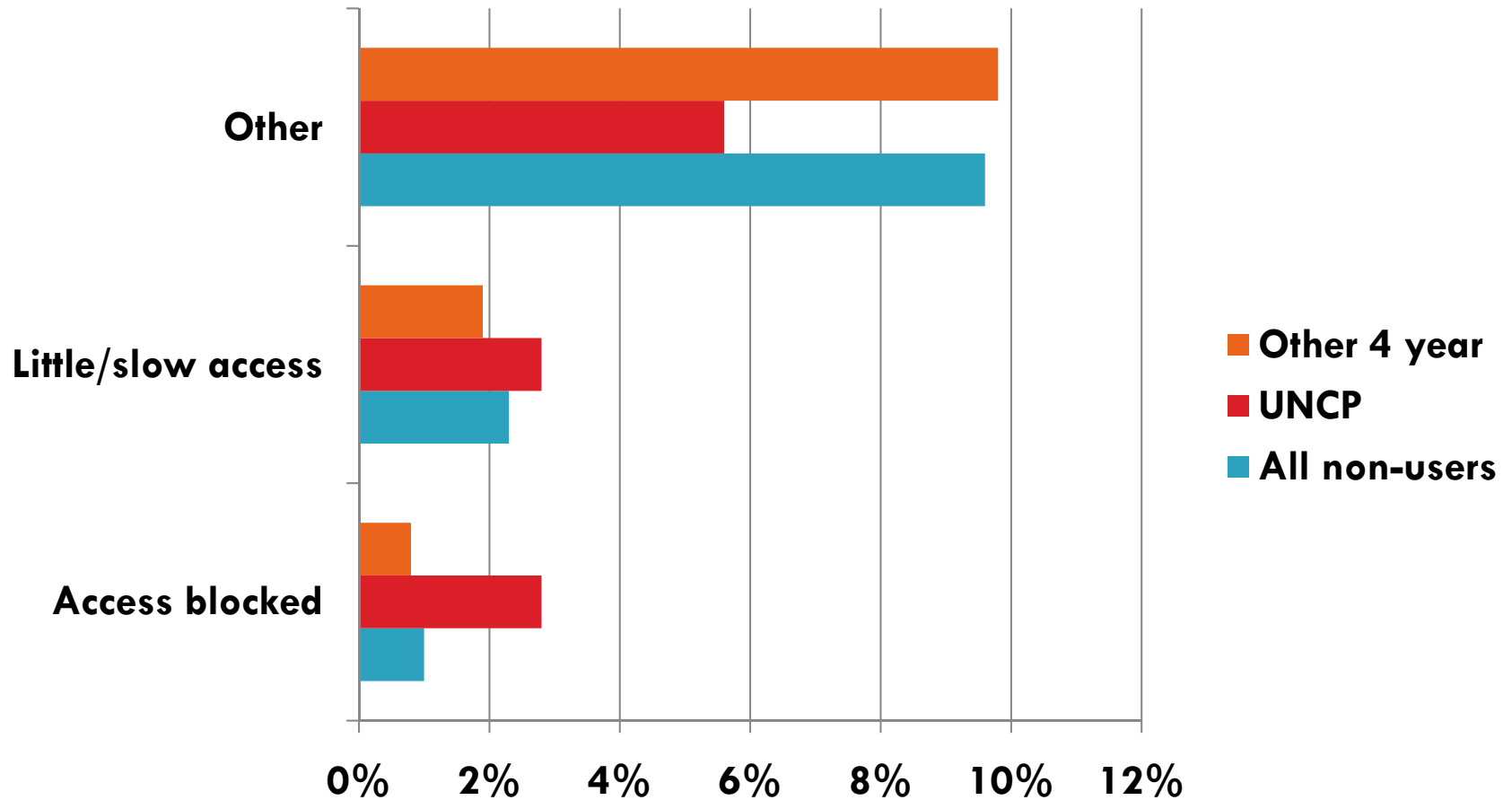# How SNSs Are Used

How SNSs Are Used

Reasons for not participating in SNSs

Reasons for not participating in SNSs

Reasons for not participating in SNSs

SNSs Users' Concerns about Privacy & Security: Sample quotes

- "I use a lot of the social networking sites. I have had many, many, many lectures on cyberstalking and what not to post about myself on the Internet. I think that students are smarter than older people give us credit for."

- "A few years ago I applied for a job to work as a digital editor and the social networking sites I was using at the time helped me gain notice of the work I am capable of doing. In the end, it really helped influence the employer to hire me."

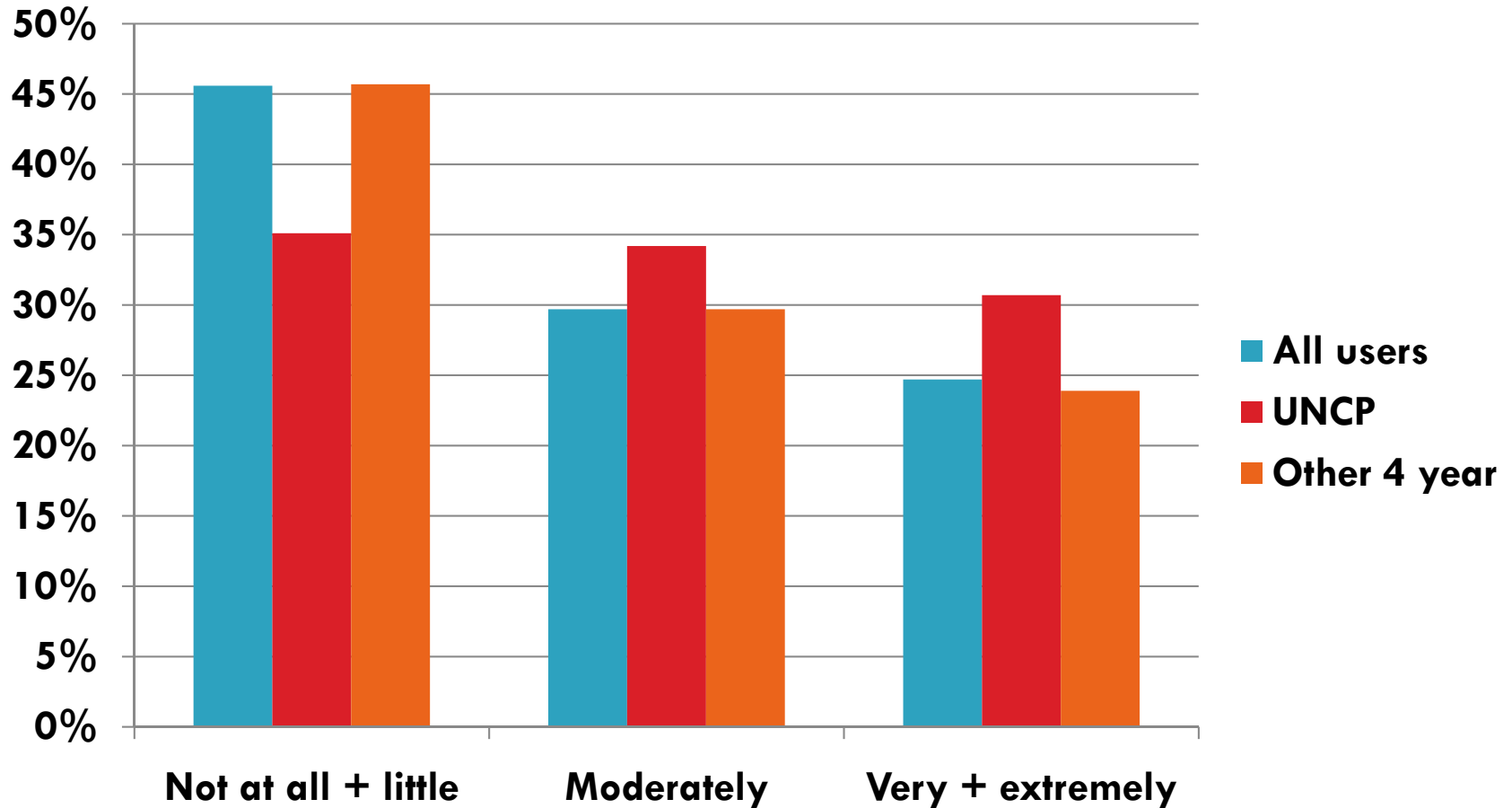# SNSs Users' Concerns about Privacy & Security: General Observations

- **Common for all age groups to reveal name & photo on SNS profiles**
- **Younger respondents more likely to all types personal info**
- **Females less likely to reveal directly identifying info (last name, cell phone, home phone or address)**
- **Most respondents place restrictions on who can access profiles; nearly half put many restrictions on them (younger more than older)**
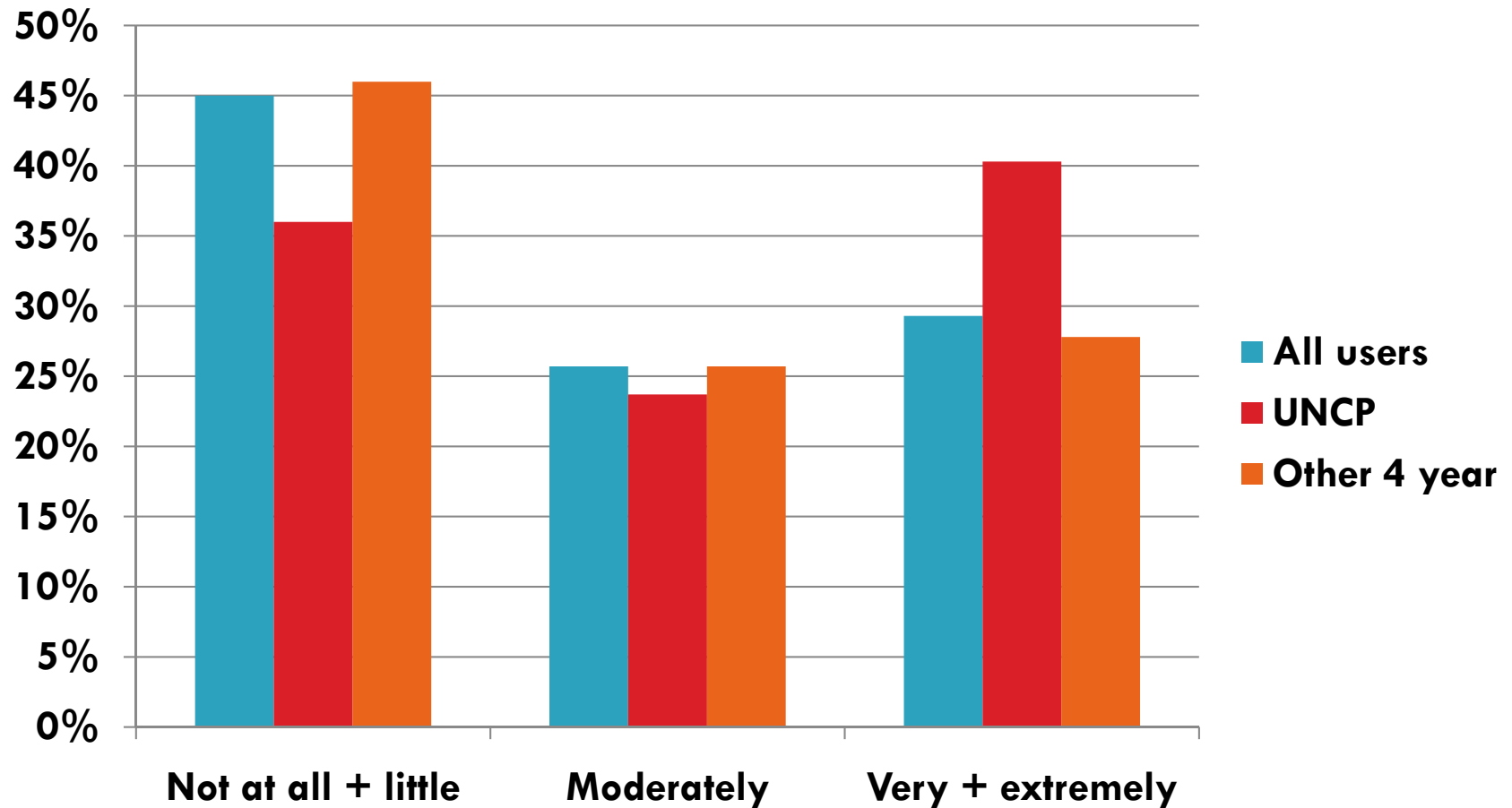
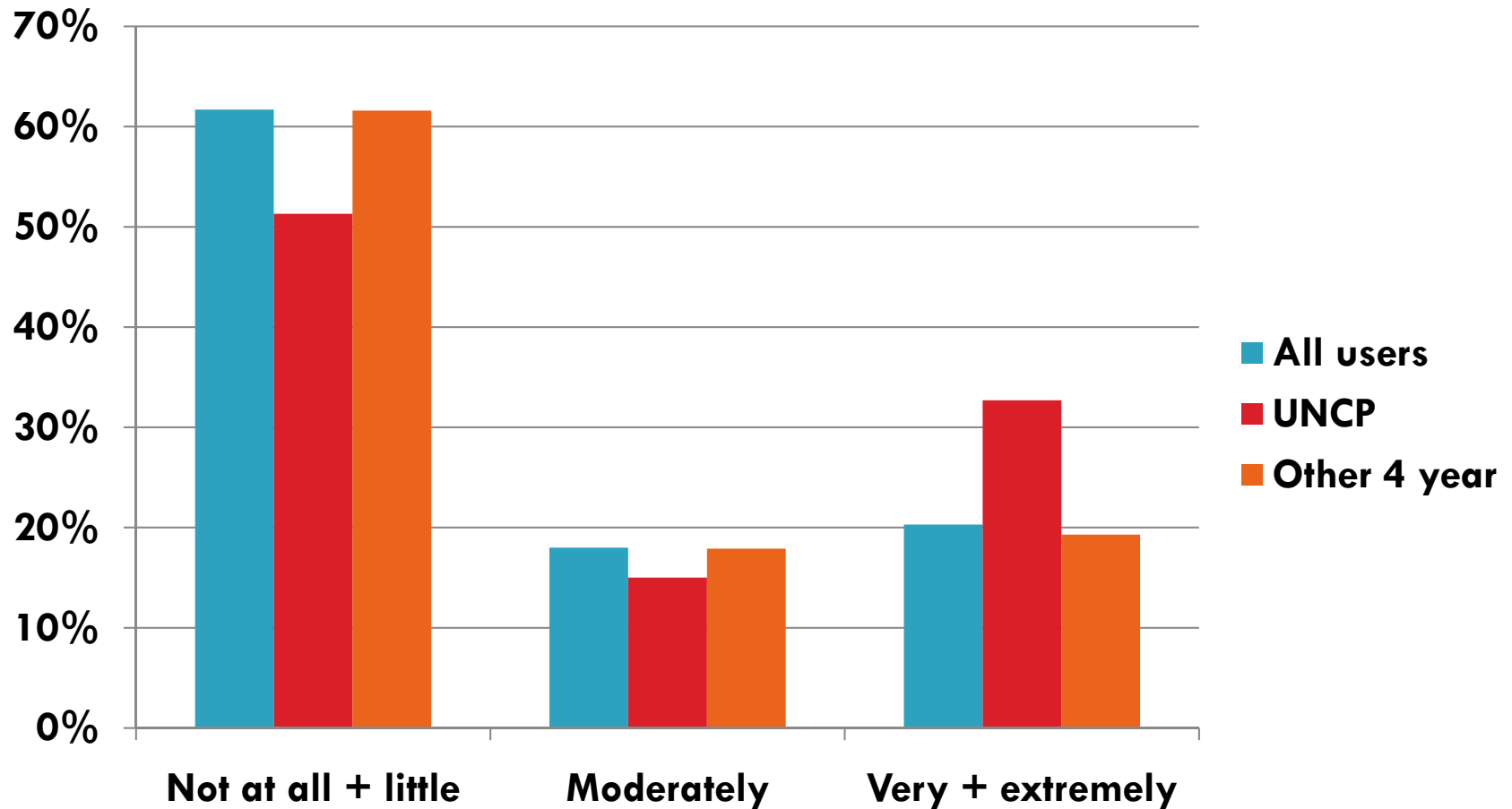# Concerns about SNS Privacy & Security: Misuse of information

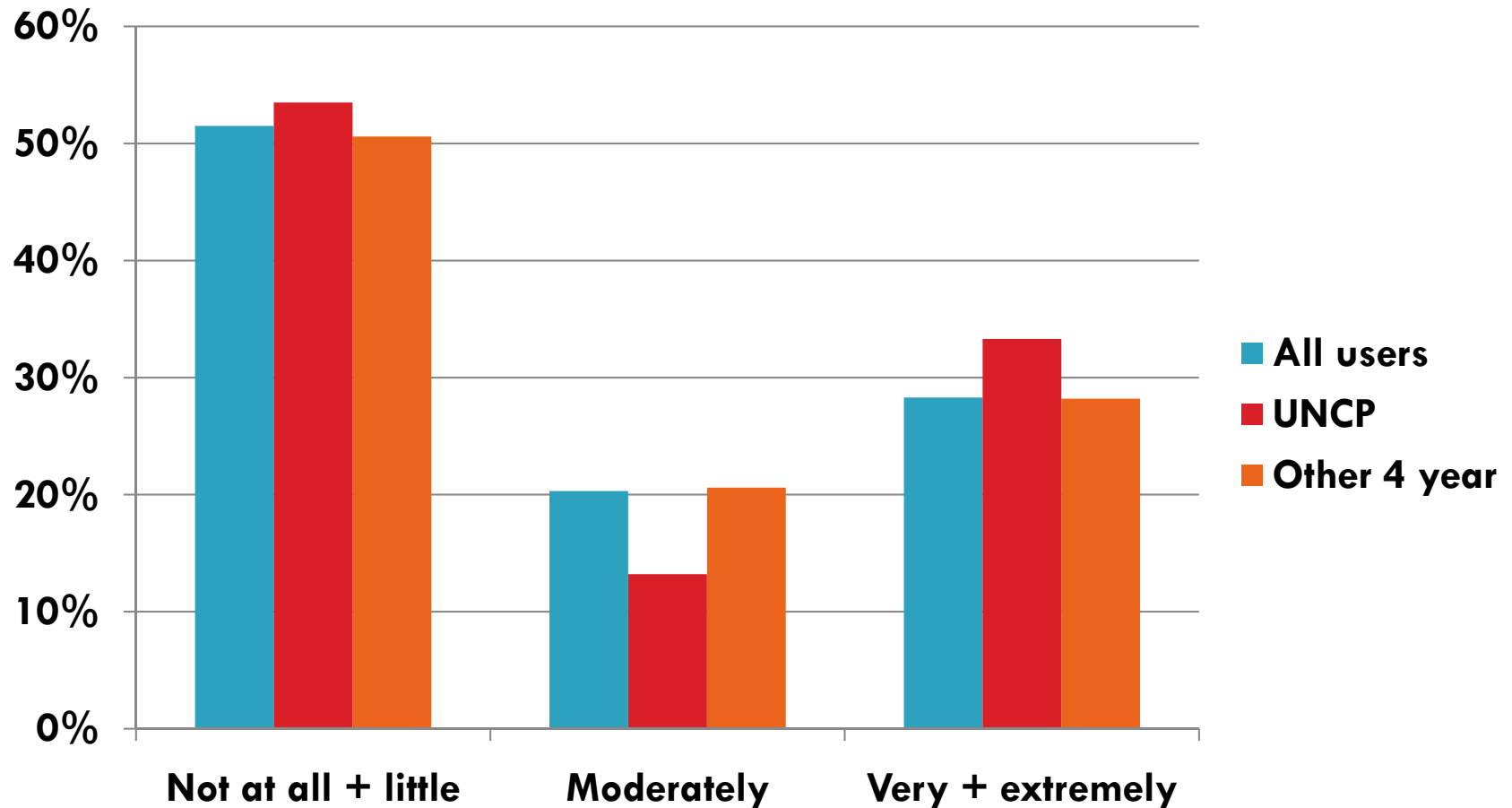# Concerns about SNS Privacy & Security: Security problems

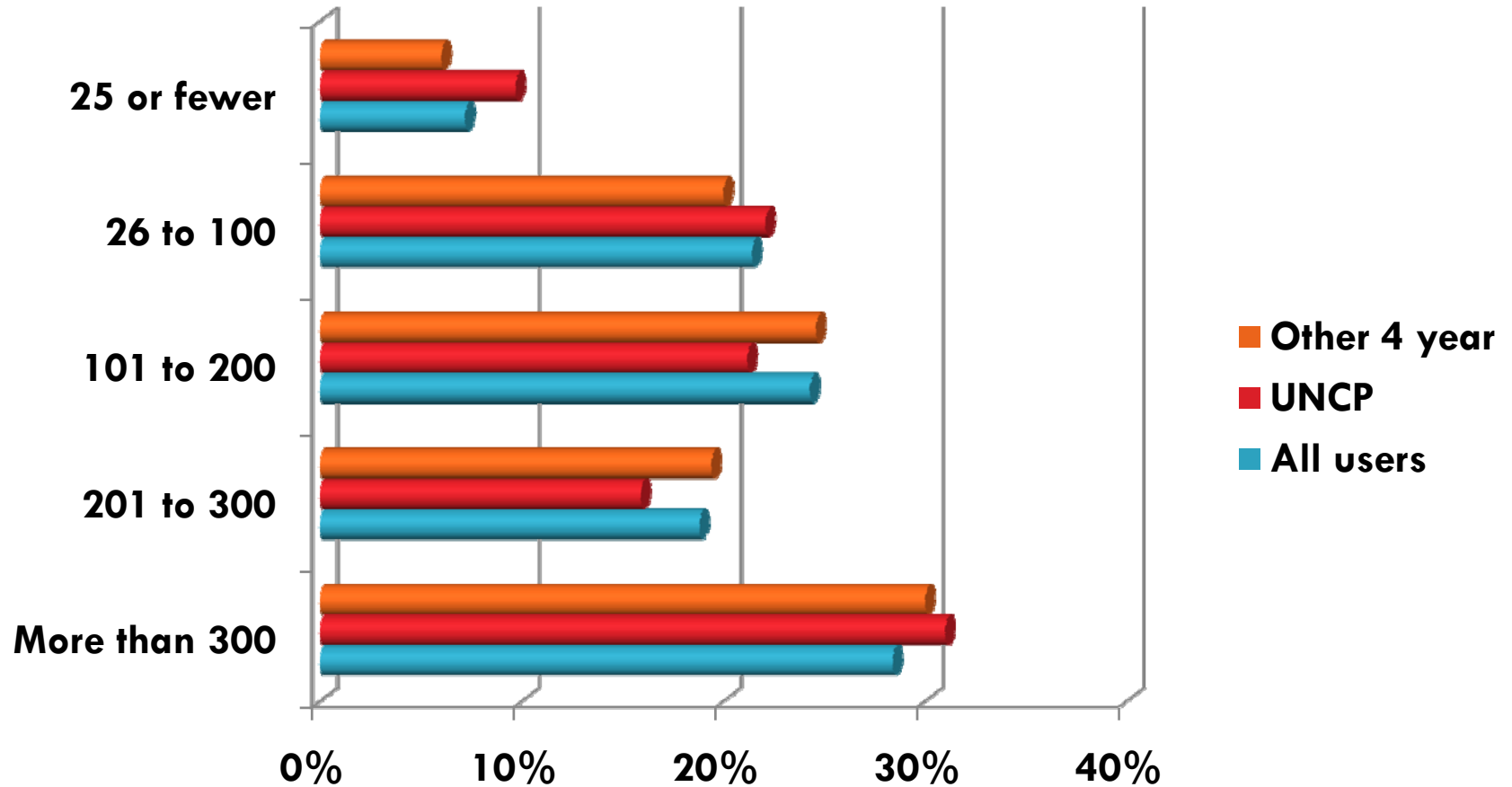# Concerns about SNS Privacy & Security: Cyberbullying/cyberstalking

Concerns about SNS Privacy & Security: Leaving history

Number of friends on SNSs

THE 2008 ECAR STUDY OF STUDENTS AND INFORMATION TECHNOLOGY: WHAT IT CAN TELL US ABOUT STUDENTS' USE OF TECHNOLOGY BOTH IN AND OUTSIDE THE CLASSROOM

QUESTIONS? beverly.king@uncp.edu