

SANS EMEA Survey: the iGen and Cyber Security

Is the next generation aware of Cyber Security's importance?



INTRODUCTION

RESEARCH OVERVIEW

In September/October 2018 Vanson Bourne* undertook research on behalf of the SANS Institute, questioning 4000 students aged 14-18 across EMEA. The research explored both awareness of and opinions on cyber security among that age group, as well as more specifically asking students for their views on cyber security as a potential career. The countries surveyed were the UK, France, Germany, the Netherlands, Belgium, the UAE and Saudi Arabia.

Simultaneously, we surveyed 1000 parents and 200 educational professionals (including senior or head teachers) in the UK to find out their views and awareness of cyber security, and its suitability as a career for their children/students. Although this obviously only represents opinions in the UK, we have included those findings in this report to provide a flavour of how the opinions and understanding of cyber security among parents and teachers differ from the students.

Statistics vary, but broadly speaking, by 2020 there will be approximately 24 billion internet-connected devices installed across the world – equating to four devices per human. And the more we connect to the World Wide Web, the more we risk our personal data and privacy. With that increasing risk comes the need to ensure that our connected devices and online accounts are secure and we can enjoy technological innovation without fear.

However, we're currently on the brink of a cyber security crisis. Reports vary but all predict that in the next year or two, unfilled cyber security job openings globally will run into several million. Cyber security practitioners are hard to come by, despite the high salaries that these roles often command, and cyber criminals are taking advantage of understaffed and under-resourced companies, who simply don't have the talent, manpower, budgets and know-how to effectively fend off a bombardment of online attacks. While up and cross-skilling professionals from other industries or sub-sectors is one option, there is no way that the current working population can keep up with the pace of change in cyber security and the widening gap in supply and demand.

This conundrum sees companies and governments the world over having to rethink their strategies for plugging the cyber security skills gap. There is widespread agreement that the answer lies within our younger generations and more must be done to educate them about cyber security, and the skills needed to protect our digital lives, at a younger age.

As digital natives, the iGen (iGeneration or Generation Z) is the first generation that has only known a mobile world. Whether it's Facebook, Snapchat, Netflix or online gaming, the iGen has a vast enthusiasm, aptitude and appetite for technology consumption, and will account for a huge proportion of the world's population (32%) this year. What if the cyber security industry could capitalise on this untapped pool of tech skills by catching students at an earlier age and encouraging the pursuit of cyber security as a career?

* Vanson Bourne is a respected market research agency, specialising in conducting research in the technology sector.

Encouragingly, students across EMEA have a good basic understanding of cyber security, according to the respondents of the SANS EMEA iGen and Cyber Security Survey. However, there are concerns around how well-equipped role models such as teachers and parents are when it comes to establishing good cyber security hygiene, as well as pointing interested students in the direction of adequate resources to further their interest in the sector. It's also promising to see that students aren't necessarily listening to stereotypes and misinformation about the cyber security industry and those that work within it. However, when looking at how cyber security is taught across schools in EMEA, it's clear that a few countries are doing better than others in actively promoting cyber security as a topic. Conversely, despite a basic understanding of cyber security, students are not always aware of when they are learning about it, as evidenced by some of the responses of the survey.

Programmes such as Cyber Discovery, which is currently being delivered by SANS for the UK Government as part of its Cyber First initiative, are beginning to address this lack of engagement among young people, as are similar initiatives in the United States. However, as the research indicates, the UAE and Saudi Arabia are currently leading the pack when it comes to a greater awareness of both cyber security more generally and as a career option. This is likely due to Government focus in those countries on promoting cyber security education at school and in wider policy.

Ultimately, the aim of the SANS research was to explore students' attitudes towards cyber security, whether they have ever considered a career in the industry and what they think it takes to excel in a cyber security role. The research indicates that, although there is strong broad awareness of cyber security, when you drill down into the detail of what constitutes good security hygiene, there is a lack of deep knowledge of what is required. Neither is there a consensus among those surveyed. The research also shows that there is still a strong need to establish cyber security as a credible career path in the minds of students, parents and teachers alike.

RESULTS

The results can be broadly grouped into the following categories:

- General awareness of cyber security
- Education and careers
- Ownership of devices and their security

The first section of this report explores students' general awareness of what cyber security is, asking questions such as where they had heard about cyber security, how much they felt the topic is covered in the school curriculum, whether they would like to learn more, and if so why. We also tried to get a picture of how much parents were educating their children about cyber security.

The second section of the report tackles 'Education and careers', asking what are the most commonly studied subjects amongst EMEA students and whether they could allow a student to follow a career path of cyber security or provide the foundation of skills necessary for that. It also looks at whether students are even aware of cyber security as a potential career. Responses across EMEA were broadly similar with the exception of UAE and Saudi Arabia which showed a stronger awareness of and interest in cyber security as a career.

Finally we asked students about their own access to devices and how they viewed their personal security, as well as what they felt the greatest risks were to the country as a result of cyber threats.

It's worth emphasising that while the survey questioned students across EMEA, only UK parents and teachers participated in this study. Therefore, any conclusions or observations about parents' and teachers' perception and understanding of cyber security have been based solely on this sample, but could point to similar trends and parallels of teachers and parents in other countries. Note that on graph titles, only the student question text is quoted and that slightly different variations of the question text were asked to parents and teachers, where applicable.

1. GENERAL AWARENESS OF CYBER SECURITY

In the first section of this report, we will look at students' general awareness of cyber security, how deep that awareness is, and whether they believe they are taught enough about cyber security at school. Is there an appetite amongst students to learn more about cyber security and, if so, in what capacity? What are the drivers behind wanting to learn more and what's holding them back? And, from a UK perspective, what active roles are teachers and parents playing in building up that important knowledge?

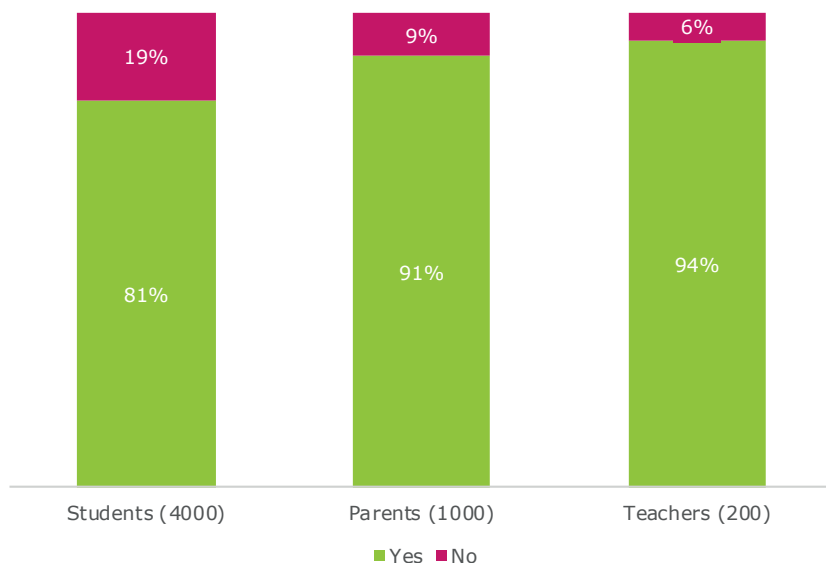
The first question we asked our survey base of 4000 students was whether they had heard of cyber security. Given the prolific nature of cyber security and the amount of media attention it has garnered in recent years, it is perhaps surprising that we did not get a near 100% 'yes' result; in actual fact, almost a fifth (18.5%) said they had not heard of cyber security. Students in Germany were the most likely (91.8%) to have heard of cyber security, followed by UAE (85.2%) and then UK (81.5%).

	Have you heard of cyber security?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Yes	81.5%	81.5%	79.0%	91.8%	76.2%	78.8%	85.2%	77.8%
No	18.5%	18.5%	21.0%	8.2%	23.8%	21.2%	14.8%	22.2%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

More parents and teachers (UK only) had heard of cyber security than students, perhaps simply by virtue of exposure through the workplace to that particular terminology.

HAVE YOU HEARD OF CYBER SECURITY?



EMEA student responses plus UK parents and teachers

WHERE HAVE YOU HEARD ABOUT CYBER SECURITY?

Over 60% of students in the UK said they had heard about cyber security from their teachers, considerably higher than Belgium, Netherlands and Saudi Arabia, which trailed at 35.4%, 35% and 38.3% respectively. This may be due to differences in how cyber security is covered in the various curricula. Certainly other responses indicate that cyber security is not really integrated into the teaching of computing in Belgium or the Netherlands. Parents in Germany came out top as a source of cyber security information (58%) as did online resources (60.6%), notably higher than any of the other countries surveyed.

	Where have you heard of Cyber security?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
From my teachers	47.8%	60.5%	45.8%	54.7%	35.4%	35.0%	49.5%	38.3%
From my parents/ guardians	46.6%	46.0%	48.1%	58.0%	47.8%	39.1%	47.7%	38.6%
On social media (Facebook, Instagram, Snapchat etc.)	43.6%	37.1%	40.5%	41.8%	46.7%	39.8%	53.3%	52.7%
Online	43.5%	50.6%	29.4%	60.6%	31.5%	40.6%	43.9%	37.5%
On the news	43.3%	41.1%	46.8%	51.9%	43.8%	51.0%	39.7%	29.8%
From my friends	33.5%	28.1%	31.1%	42.5%	30.4%	21.8%	44.1%	39.8%
Government scheme promoting cyber security	13.9%	14.7%	12.9%	9.4%	10.0%	10.4%	21.4%	18.0%
I've been the victim of a hack or attack	4.3%	2.8%	5.1%	7.6%	5.5%	1.5%	3.5%	5.1%
From my careers advisors	3.2%	3.8%	2.0%	4.1%	2.1%	1.0%	3.5%	4.9%
Other (please specify)	0.2%	0.1%	0.8%	0.0%	0.3%	0.3%	0.5%	0.0%
Don't know	2.5%	3.7%	2.0%	2.4%	3.4%	3.6%	0.9%	0.5%
Base	3259	815	395	459	381	394	426	389

Student responses across EMEA

The table above indicates that the majority of students are aware of cyber security in general. The next graph addresses the school's role in providing this information as part of the curriculum, showing to what extent students feel that cyber security is covered in the day-to-day subjects they study at school.

	To what extent is cyber security covered in the day-to-day subjects you study?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
It is a standalone subject	6.3%	4.7%	7.4%	6.8%	6.6%	4.2%	6.4%	9.6%
It's just covered in our IT lessons	29.4%	30.2%	26.2%	32.4%	20.8%	19.2%	39.4%	36.6%
It's covered in IT and other subjects too	14.5%	16.2%	12.6%	17.4%	7.2%	7.0%	21.4%	18.2%
We sometimes have one off lessons on it	14.7%	17.5%	10.8%	14.6%	9.0%	13.6%	16.2%	18.6%
We don't learn about it at all	29.0%	22.9%	38.4%	24.2%	47.4%	51.0%	12.6%	12.8%
Don't know	6.1%	8.5%	4.6%	4.6%	9.0%	5.0%	4.0%	4.2%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

The responses to this question differed wildly from country to country, which suggests that cyber security is covered within the curriculum but to varying degrees. According to all respondent groups, the most likely way cyber security is taught is via IT lessons (29% of students; 29% of parents; 39% of teachers), with lower proportions reporting it's covered in other subjects too.

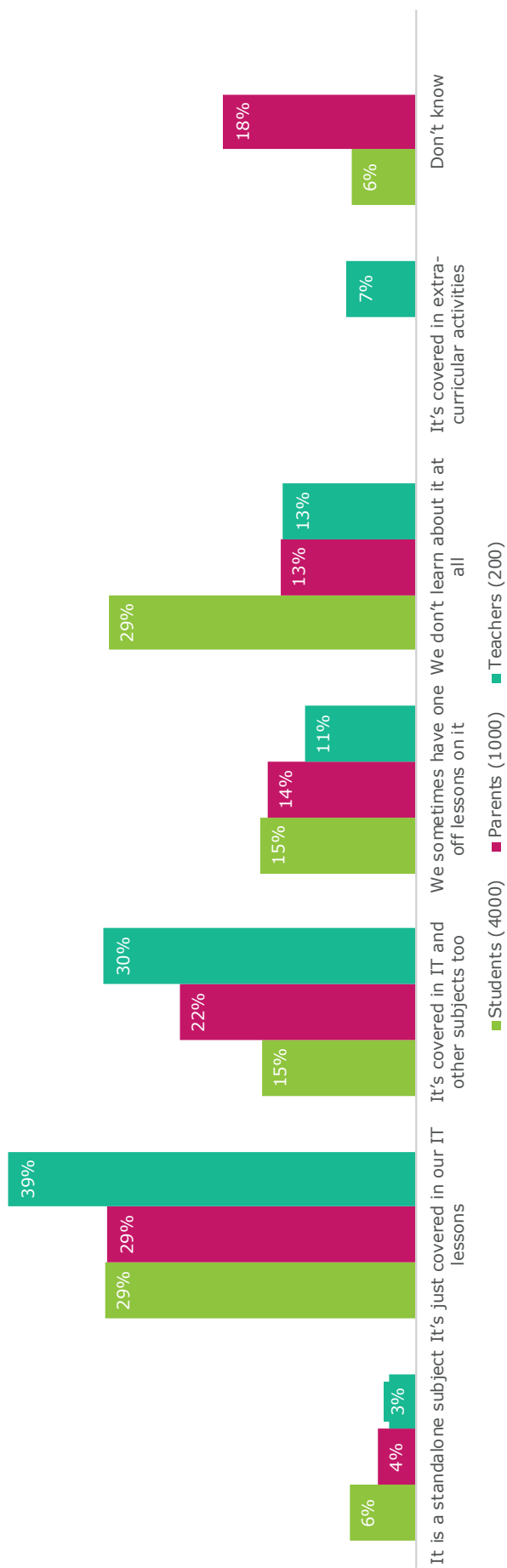
Interestingly, 29% of students reported that they believe they don't learn about cyber security at school in any capacity, when compared to parents (13%) and teachers (13%). This suggests that perhaps students are not fully aware of the breadth and depth of the subject, and could very well be learning about cyber security without realising it.

When asked what they thought cyber security encompassed, students were more likely to mention areas like "computer", "hackers", "security" rather than "programming", "prevent attacks" etc., demonstrating that their understanding of cyber security could be impacting their ability to engage with it as an area of interest.

Given that over three in five students (65%) agree that if they knew more about cyber security they might be more interested in it as a job, increasing their knowledge would help increase consideration of cyber security as a potential career

Also of note, both Belgium and the Netherlands had a notably higher percentage of students who said cyber security wasn't taught in school at all (47.4% and 51% respectively). This figure was far lower, at 12.6% in UAE and 12.8% in Saudi Arabia, indicating perhaps the benefits of investment in this area in recent years in those countries.

TO WHAT EXTENT IS CYBER SECURITY COVERED IN THE DAY-TO-DAY SUBJECTS YOU STUDY?



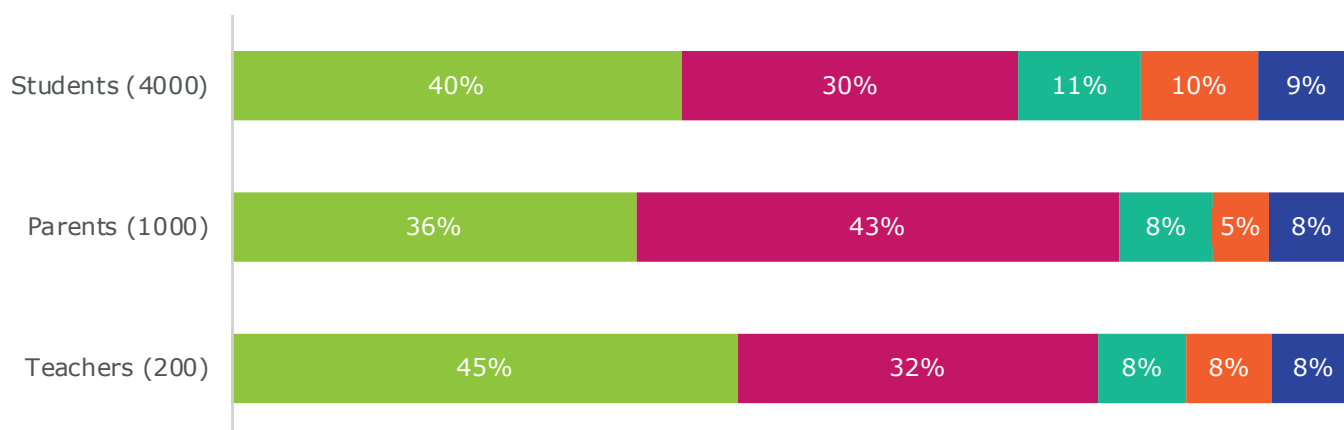
EMEA student responses plus UK parents and teachers

	If there was an opportunity to learn more about cyber security, would you be interested?							
	Total	UK	France	Germany	Belgium	Netherlands	UAE	Saudi Arabia
Yes, but only as part of my school day	40.0%	43.5%	43.6%	45.4%	45.2%	47.8%	27.2%	23.4%
Yes, both as part of my school day and as an extra-curricular activity	30.1%	22.2%	30.4%	37.6%	22.4%	16.8%	45.8%	43.6%
Yes, but only as an extra-curricular activity	10.8%	9.7%	7.0%	6.6%	6.2%	2.4%	18.4%	26.2%
No	10.5%	14.3%	9.8%	6.4%	12.0%	19.8%	3.4%	3.6%
Don't know	8.7%	10.3%	9.2%	4.0%	14.2%	13.2%	5.2%	3.2%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

Whether students realise they are being taught about cyber security or not, would there be an appetite to introduce more of the subject into the current school day, or even as part of an extra curricular club? The data is promising - 81% of students in all countries surveyed said they would be interested in learning more about cyber security. In the UK, 87% of parents said they would like their child to learn more about cyber security and 85% of teachers agreed.

IF THERE WAS AN OPPORTUNITY TO LEARN MORE ABOUT CYBER SECURITY, WOULD YOU BE INTERESTED?



EMEA student responses plus UK parents and teachers

- Yes, but only as part of my school day
- Yes, both as part of my school day and as an extra-curricular activity
- Yes, but only as an extra-curricular activity
- No
- Don't know



As the following table shows, online safety was the predominant reason for students wanting to learn more about cyber security (52.1% across EMEA), with only 16.4% selecting 'learning about a new career path' as their reason. Online safety was the top reason for UK teachers as well but the rest of the answers differed considerably.

For teachers:

- 57% - to make me feel safe online
- 56.5% - If someone I knew was a victim of a cyber security attack
- 55.5% - If I knew how it was more relevant to me and my lifestyle

For students:

- 52% - to make me feel safe online
- 43% - to increase my knowledge
- 33.4% - to learn a new skill

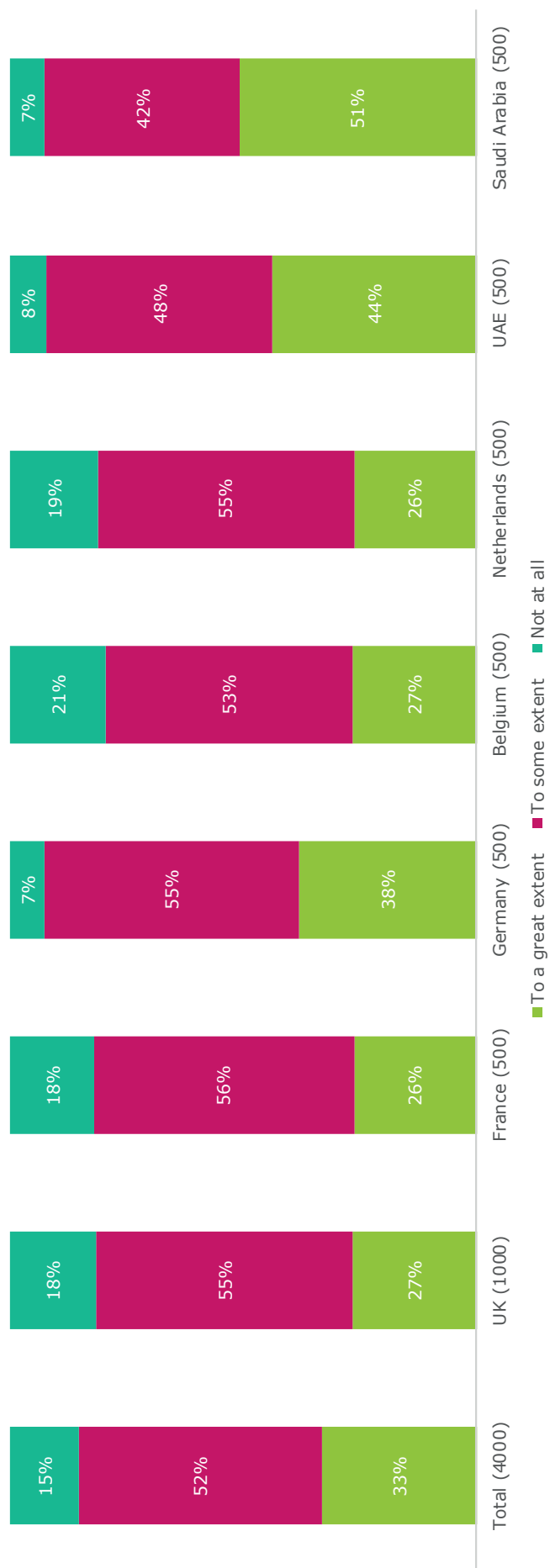
What, if anything, would make you want to learn more about cyber security?	Students	Teachers
If it was done in a fun and new way (playing games/competitions etc.)	20.2%	52.5%
If I knew how it was more relevant to me and my lifestyle	23.7%	55.5%
If it was more available, i.e. easy to find ways to learn about it	18.4%	12.0%
To learn a new skill	33.4%	29.5%
To increase my knowledge	43.4%	40.5%
To learn about a new career path	16.4%	30.0%
To make me feel safe online	52.1%	57.0%
If I got to use new computers/equipment	24.0%	34.5%
If someone I knew was a victim of a cyber security attack/incident	23.9%	56.5%
Other (please specify)	0.2%	0.0%
Don't know	4.2%	1.0%
Nothing	2.3%	0.5%
Base	4000	200

Student responses across EMEA plus UK teachers

	What, if anything, would make you want to learn more about cyber security?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
To make me feel safe online	52.1%	53.6%	48.4%	53.0%	47.0%	40.6%	58.2%	62.0%
To increase my knowledge	43.4%	45.9%	40.4%	39.4%	32.4%	31.4%	58.2%	53.8%
To learn a new skill	33.4%	30.1%	28.2%	38.2%	23.0%	21.8%	47.0%	48.4%
If I got to use new computers/equipment	24.0%	20.2%	26.8%	23.8%	20.2%	13.4%	33.0%	34.6%
If someone I knew was a victim of a cyber security attack/incident	23.9%	24.1%	26.6%	27.4%	21.2%	19.4%	24.4%	24.2%
If I knew how it was more relevant to me and my lifestyle	23.7%	26.1%	18.8%	28.2%	18.8%	18.2%	27.2%	26.4%
If it was done in a fun and new way (playing games/competitions etc.)	20.2%	21.3%	15.6%	18.8%	19.0%	18.8%	26.0%	20.8%
If it was more available, i.e. easy to find ways to learn about it	18.4%	16.2%	10.6%	31.0%	10.6%	13.4%	23.4%	25.4%
To learn about a new career path	16.4%	16.0%	16.6%	12.2%	10.0%	10.2%	26.6%	23.2%
Other (please specify)	0.2%	0.3%	0.0%	0.2%	0.0%	0.4%	0.0%	0.0%
Don't know	4.2%	3.4%	4.8%	3.4%	6.8%	9.8%	1.2%	0.8%
Nothing	2.3%	2.8%	2.6%	0.6%	3.8%	5.0%	0.4%	0.2%
Base	4000	1000	500	500	500	500	500	500

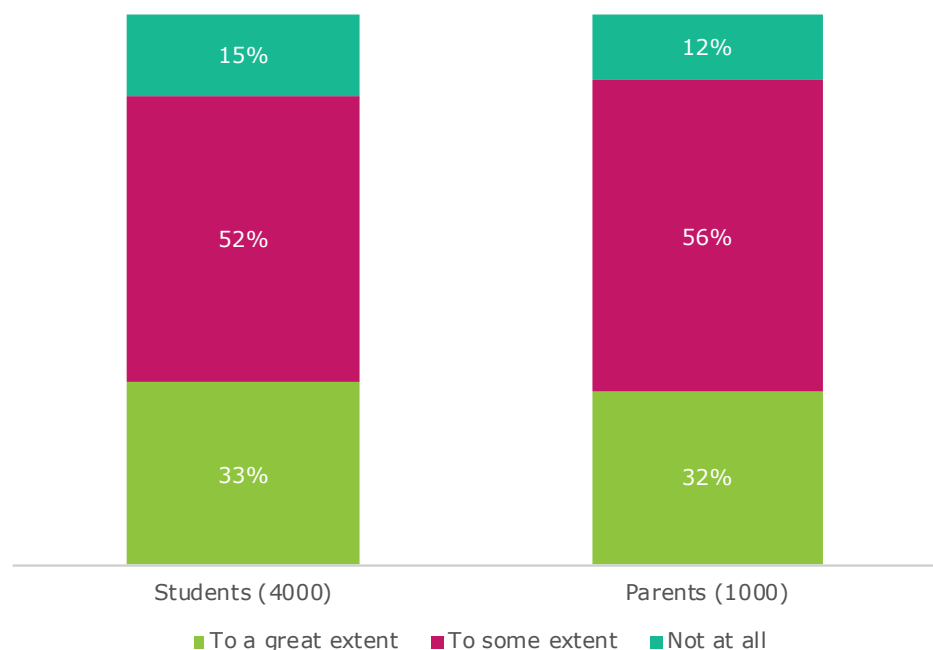
Student responses across EMEA

TO WHAT EXTENT DO YOUR PARENTS/GUARDIANS EDUCATE YOU ON CYBER SECURITY i.e. use of mobile devices, public WiFi etc.?



Student responses across EMEA

TO WHAT EXTENT DO YOUR PARENTS/GUARDIANS EDUCATE YOU ON CYBER SECURITY I.E. USE OF MOBILE DEVICES, PUBLIC WIFI ETC.?



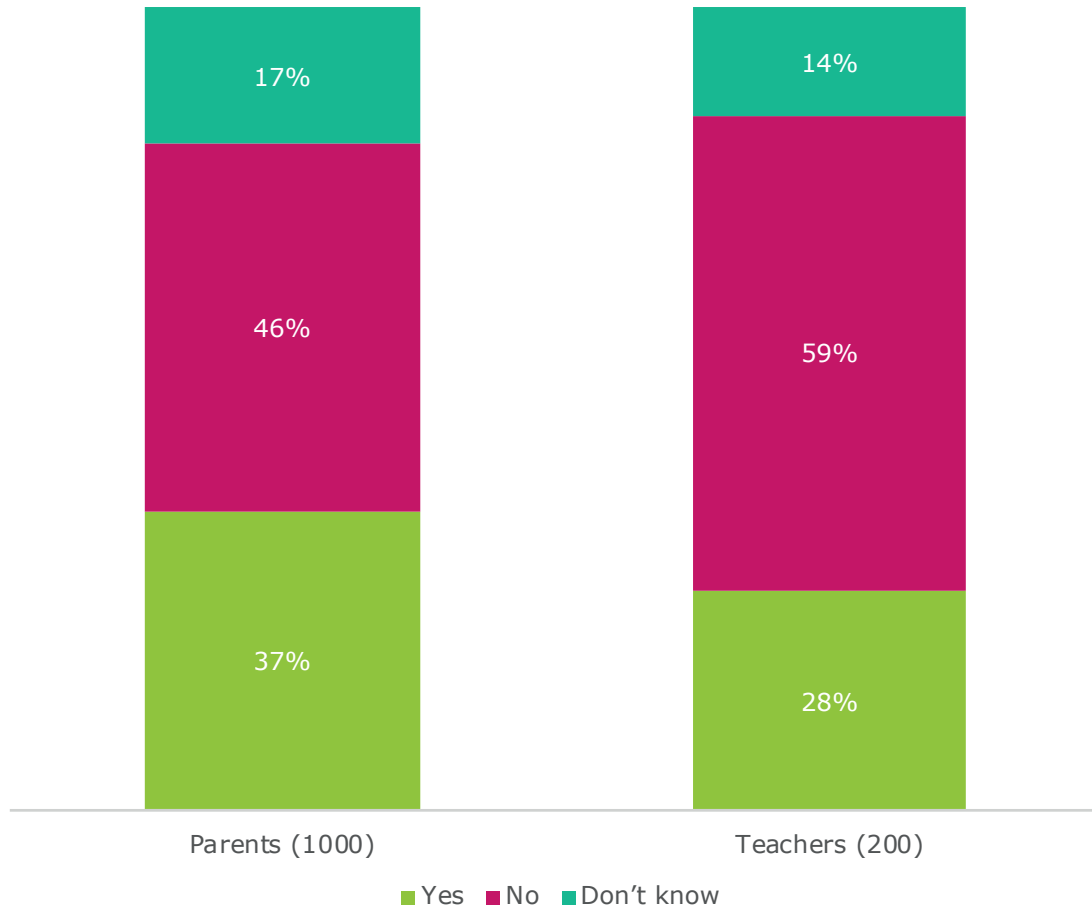
Student responses across EMEA compared with UK parents

Over eight in ten students (85%) report that their their parent/guardian educates them on cyber security. A similar proportion of UK parents (88%) said the same thing.

However, when asked what came to mind when they thought of cyber security, parents were more likely to cite broad concepts like 'internet', 'hacking' and 'security', rather than specifics such as 'phishing' 'theft' 'bullying' etc. This could throw into question the validity of the information being passed onto their children.

In addition, a higher percentage of students in Saudi Arabia (93%), Germany (93%) and the UAE (92%) stated that their parents educated them, either to a great extent or to some extent, on cyber security. The figures in the other countries were at least 10 percentage points lower.

WOULD YOU FEEL EQUIPPED TO ANSWER YOUR ELDEST CHILD'S OR STUDENTS' QUESTIONS AND/OR HELP THEM FIND MORE INFORMATION ON A CAREER IN CYBER SECURITY, IF THEY ASKED YOU?



UK parent and teacher responses

Although the previous graphs show that the majority of students are receiving some kind of cyber security education from their parents, the data suggests that, at least in the UK, neither parents or teachers are that confident in advising when it comes to careers advice in that sector. Just 37% of parents and 28% of teachers feel well enough equipped to answer questions and/or help with information on a cyber security career.

Given that just under a quarter (24%) of students report that they would ask their parents/guardians about a career in cyber security and over three in ten (32%) would ask their teacher/tutor, there is clearly a knowledge gap: around two thirds of UK parents (63%) and almost three-quarters of teachers (73%) don't feel equipped to answer questions and/or help their eldest child/students find more information on a career in cyber security. This may be because, unless they work in the industry, they have no sources of information on cyber security as a career on which to base their advice. If this is the picture in the UK, could it be a similar story in the rest of EMEA also?

2. EDUCATION AND CAREERS

The second section of the report builds on the general cyber security awareness we explored amongst students, parents and teachers in section one. In this section, we focus more on the decisions that students are making at school that could affect their future careers: which subjects they intend to study and are interested in; popular areas of IT; and awareness of career options within the cyber security field. Are there enough resources to point interested students in the direction of a job in the sector? What are the most relied upon sources of information? What sort of skills do students think are required to excel in a role in cyber, and are there any stereotypes - particularly for girls - holding them back from taking the plunge?

In the first instance, we asked students across EMEA which subjects they were planning to study in their next school or college term.

It should be noted that students are aged between 14 and 18 years old so will be taking a smaller number of subjects at the age of sixteen in some countries. For example, the data appears to show that Maths was the most popular subject overall but was much less popular in the UK. The same pattern continues across all subjects so it seems likely to be as a result of students specialising in fewer subjects in the UK as they enter their A'level years.

Interestingly, in the UK, Computing was more popular than Geography, Physics, History, Physical education and Foreign languages whereas it was the least popular subject in France, Germany, and Belgium. In the Netherlands only Physics was less popular. Perhaps unsurprisingly given other results, Computing was also more popular than a number of other subjects, such as Physical education, Foreign languages, Geography and History in both the UAE and Saudi Arabia.

	What subjects are you going to be studying when your next school/sixth form college term starts?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Mathematics	69.8%	55.0%	81.0%	85.2%	67.6%	71.4%	69.4%	73.4%
English language	65.2%	44.4%	70.8%	90.6%	61.2%	77.0%	63.2%	70.2%
History	48.4%	26.5%	79.2%	71.6%	62.6%	45.2%	32.0%	43.4%
Biology	47.6%	32.2%	44.8%	70.8%	47.8%	46.8%	50.0%	56.2%
Physical education	47.4%	25.1%	62.4%	78.2%	57.2%	54.4%	39.0%	38.0%
Chemistry	45.6%	33.3%	52.0%	64.2%	36.2%	36.8%	53.4%	55.8%
Geography	42.4%	21.8%	74.0%	46.8%	58.6%	39.2%	34.4%	42.2%
Physics	42.1%	26.9%	63.4%	63.8%	43.2%	5.2%	52.8%	54.4%
Foreign languages	39.0%	18.4%	75.4%	78.2%	42.6%	35.8%	18.4%	24.6%
Computing	35.1%	28.3%	31.2%	42.8%	34.6%	26.2%	43.0%	46.4%

Student responses across EMEA



Although the data suggests that students have a lack of awareness of cyber security as a career, 32% of students are broadly considering IT as one of their top five career choices. Parents and teachers in the UK are also thinking about a role in IT for their children and pupils, with 27% and 32% respectively citing this as an option.

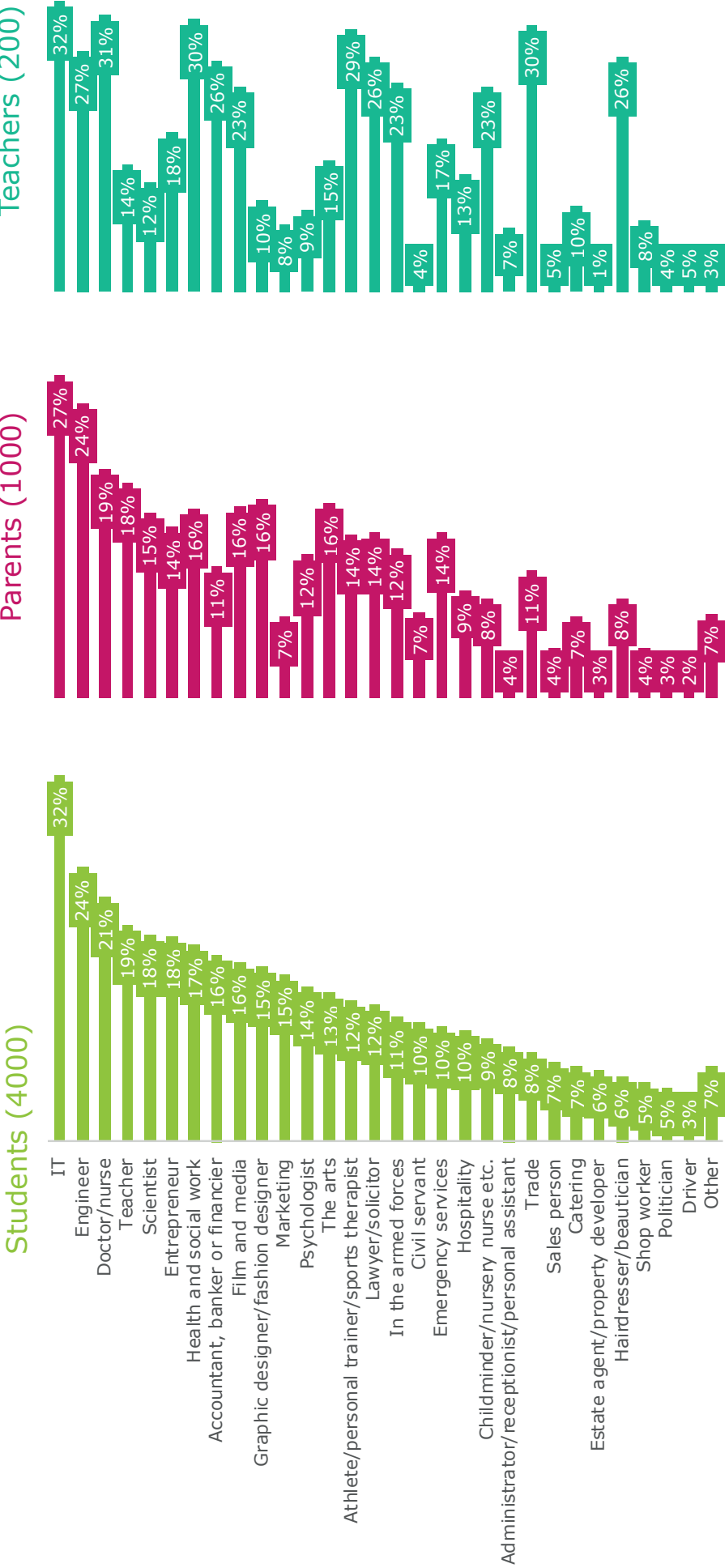
We further drill down into this question on pp24-25.

	What careers are you currently interested in?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
IT (including cyber security, IT support, coding, computer engineer etc.)	32.1%	26.9%	30.2%	32.8%	23.2%	24.2%	46.0%	46.8%
Engineer (excluding computer engineer)	24.0%	19.8%	21.6%	24.0%	20.4%	11.2%	37.2%	37.8%
Doctor/nurse	21.4%	15.6%	16.6%	16.8%	18.6%	15.8%	29.8%	42.6%
Teacher	18.9%	17.9%	20.6%	24.4%	18.8%	18.8%	14.0%	19.0%
Scientist	18.0%	16.2%	21.4%	17.4%	20.0%	15.0%	18.6%	19.4%
Entrepreneur	17.9%	14.9%	13.4%	14.2%	15.4%	18.2%	29.0%	23.4%
Health and social work (carer, social worker etc.)	17.2%	17.7%	11.8%	18.6%	20.6%	17.6%	14.8%	18.8%
Accountant, banker or financier	16.4%	16.3%	11.4%	13.6%	10.8%	10.8%	27.4%	24.8%
Film and media (including director, producer, journalist, television presenter etc.)	15.7%	15.6%	14.6%	19.8%	14.0%	16.2%	17.2%	12.6%
Graphic designer/fashion designer	15.3%	16.8%	8.8%	22.0%	10.8%	14.2%	19.8%	12.8%
Marketing	14.6%	8.6%	16.4%	19.6%	12.6%	10.8%	19.6%	20.8%
Psychologist	13.5%	15.1%	11.6%	19.4%	13.2%	14.4%	9.0%	10.2%
The arts (artist, musician, actor etc.)	13.0%	15.6%	11.8%	18.6%	10.0%	10.6%	9.4%	12.0%
Athlete/personal trainer/sports therapist	12.4%	13.0%	9.2%	11.8%	14.0%	13.6%	11.2%	13.4%
Lawyer/solicitor	12.1%	12.8%	15.2%	14.8%	10.6%	12.4%	9.4%	8.6%

In the armed forces (Army, Navy, RAF, Marines etc.)	10.9%	11.7%	16.4%	10.8%	9.8%	7.4%	9.6%	9.6%
Civil servant	10.4%	6.5%	16.6%	16.4%	7.0%	4.4%	12.4%	13.0%
Emergency services (fireman, paramed- ic, policeman etc.)	10.0%	11.6%	9.8%	12.2%	12.2%	8.8%	6.8%	7.0%
Hospitality (event planner, hotel manager, restaurant manager, cinema manager etc.)	9.8%	8.3%	8.0%	9.0%	7.4%	15.6%	12.0%	9.8%
Childminder/nurs- ery nurse etc.	9.0%	9.5%	6.2%	15.8%	13.2%	9.6%	3.2%	5.0%
Administrator/re- ceptionist/personal assistant	8.4%	4.9%	7.4%	6.8%	11.8%	8.8%	12.2%	10.2%
Trade (electrician, plumber, mechanic, builder, carpenter, furniture maker etc.)	7.9%	11.1%	6.8%	10.6%	10.6%	7.0%	2.8%	3.0%
Sales person	7.0%	4.7%	15.8%	6.0%	10.0%	7.0%	3.6%	4.0%
Catering (including chef, baker etc.)	6.5%	7.7%	7.0%	2.4%	6.2%	6.2%	7.6%	7.4%
Estate agent/prop- erty developer	6.3%	4.4%	7.8%	11.0%	6.8%	6.8%	4.8%	4.2%
Hairdresser/beau- tician	5.7%	8.6%	4.0%	3.4%	7.2%	8.6%	2.4%	2.4%
Shop worker	5.2%	5.1%	8.8%	4.2%	8.2%	6.4%	2.0%	1.6%
Politician	4.7%	4.0%	5.8%	7.6%	3.6%	4.4%	3.4%	4.8%
Driver (lorry, taxi, delivery, bus, train etc.)	2.8%	3.0%	3.0%	2.2%	3.4%	4.2%	1.2%	2.0%
Other (please speci- fy)	6.5%	8.5%	7.6%	4.2%	7.6%	9.8%	4.6%	1.2%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

WHAT CAREERS ARE YOU CURRENTLY INTERESTED IN?



Student responses across EMEA plus UK parents and teachers

	What area(s) of IT are you interested in?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Creating apps or software (i.e. coding and developing/creating apps or software including games)	61.3%	64.7%	53.0%	59.8%	67.0%	66.1%	57.8%	62.2%
IT system design (both networks and systems)	52.3%	52.4%	46.4%	51.2%	50.4%	43.8%	61.3%	53.2%
Cyber security (the protection of computer systems and their data)	49.5%	42.4%	36.4%	50.6%	45.2%	42.1%	57.8%	63.1%
Artificial intelligence and/or robotics	48.8%	46.1%	59.6%	61.6%	38.3%	37.2%	50.0%	45.9%
Repairing and maintenance (i.e. IT or tech support of networks, systems and hardware etc.)	37.6%	35.7%	33.1%	36.6%	35.7%	21.5%	42.2%	48.1%
Other (please specify)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Base	1283	269	151	164	115	121	230	233

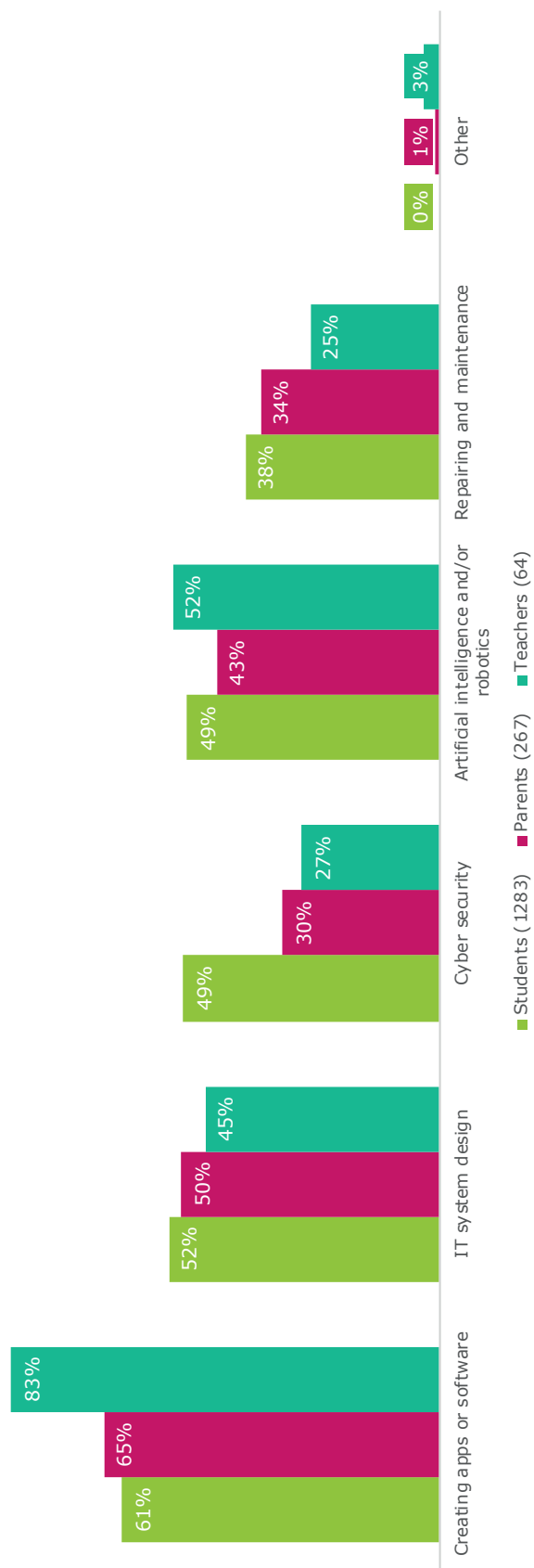
Students across EMEA currently interested in a career in IT

Of those students who have an interest in a career in IT (1283 respondents), creating apps or software is the most likely specific area of IT which they are interested in overall. Cyber security was the third area of IT in which students were specifically interested as a career, among that group.

There are some interesting country variations however. For instance, in Saudi Arabia, cyber security was the top IT career choice. It was also joint second as a career option in the UAE. In France cyber security ranked low and artificial intelligence/robotics was the top IT career choice.

Given that approaching two-thirds of students (65.5%) said they might be more interested in cyber security as a career if they knew more about it (see p24), increasing their knowledge and understanding of cyber security could improve the chances of it being an area they are interested in and perhaps an area they would consider as a career.

WHAT AREA(S) OF IT ARE YOU INTERESTED IN?



Student responses across EMEA compared with UK parents and teachers

	How aware are you of cyber security career opportunities in general?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Very aware – I've looked into it myself	11.5%	8.9%	9.2%	17.2%	6.4%	3.6%	18.4%	19.0%
Somewhat aware – I've heard of it/it's been mentioned to me	33.8%	30.5%	43.6%	34.4%	23.4%	24.6%	43.0%	40.2%
Not very aware – I've seen it mentioned but didn't really know what it was	33.4%	36.6%	29.6%	26.8%	39.2%	42.2%	27.0%	29.0%
Not aware at all – never heard of it before now	15.5%	19.1%	13.2%	16.8%	19.4%	21.2%	7.4%	7.8%
Don't know	5.9%	4.9%	4.4%	4.8%	11.6%	8.4%	4.2%	4.0%
Base	4000	1000	500	500	500	500	500	500

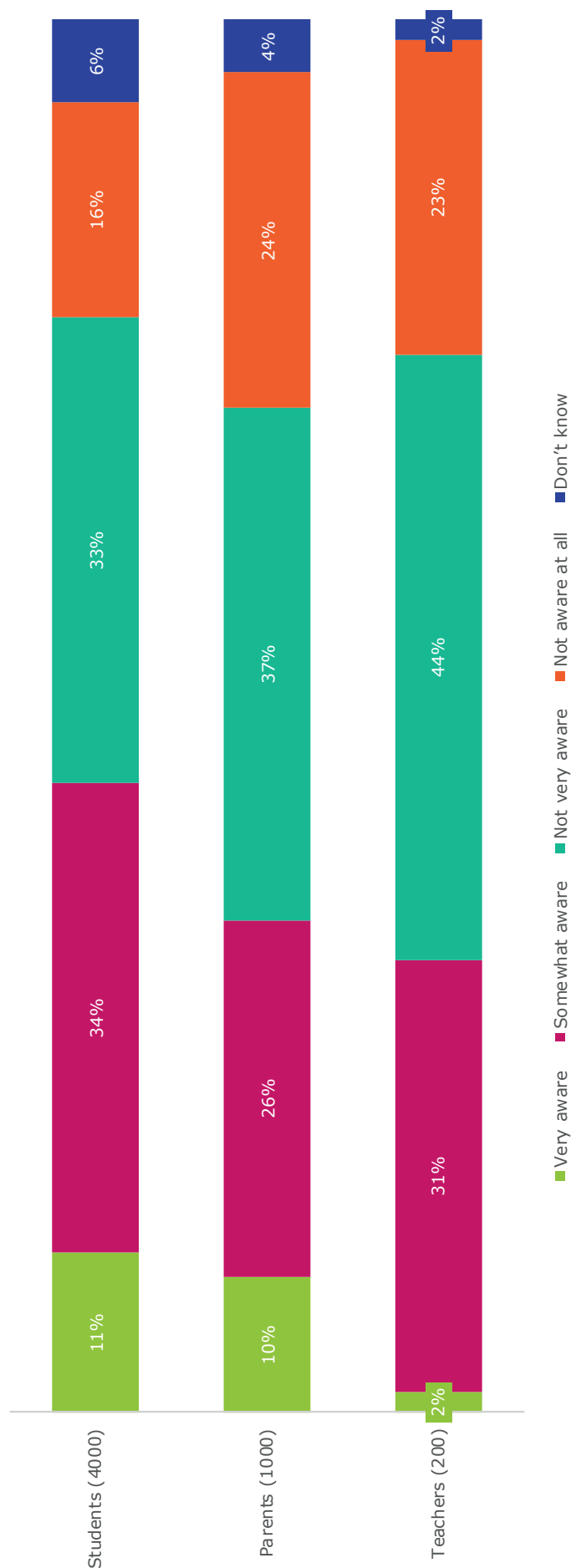
Student responses across EMEA

Awareness of cyber security career opportunities is low, with only 45.2% of students reporting that they are either very or somewhat aware of career opportunities in cyber security. This is even lower for UK parents and teachers, with only 36% and 33% reporting this respectively.

The pattern of higher cyber security awareness and education in both the UAE and Saudi Arabia is again seen here, with 61.4% of students in the UAE and 59.2% in Saudi Arabia saying that they are either very or somewhat aware of careers in cyber security. This compares with lows of 29.8% in Belgium and 28.2% in the Netherlands.

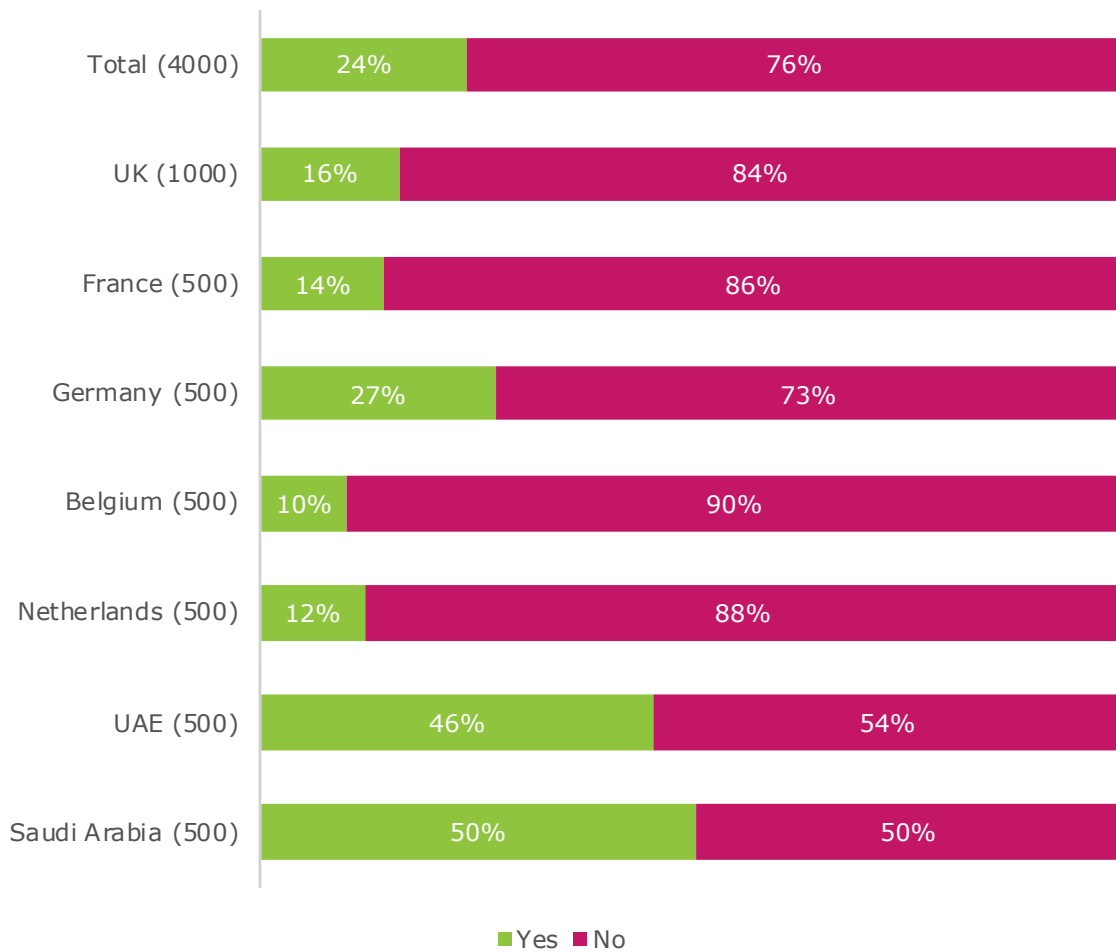
The data shows that there is an urgent requirement to raise awareness of career opportunities in cyber security, over traditional and better-known IT roles. This will not only benefit the individual - by boosting knowledge of general cyber hygiene - but also the wider industry, by helping to address the current cyber security skills gap.

HOW AWARE ARE YOU OF CYBER SECURITY CAREER OPPORTUNITIES IN GENERAL?



Student responses across EMEA compared with UK parents and teachers

HAVE YOU EVER CONSIDERED A CAREER IN CYBER SECURITY?



Student responses across EMEA

Following on from the previous question, we asked how many students had actually considered a career in cyber security. Half (50%) of students in Saudi Arabia said they have considered a career in cyber security. A similar proportion (46%) of those in the UAE say the same.

However, the number of respondents in the UK (16%), France (14%), the Netherlands (12%) and Belgium (10%) who have considered cyber security as a career is much lower.

Those in the Middle East are more likely to be taught about cyber security in school which could explain why they perceive this as being a realistic career path.

	Has cyber security been included in any of the careers guidance materials you have seen?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Yes	17.9%	13.1%	11.0%	18.6%	8.0%	8.6%	33.6%	37.0%
No	44.6%	57.7%	42.8%	50.8%	43.2%	43.4%	31.6%	29.2%
I've not seen careers guidance materials	27.7%	20.2%	35.0%	23.6%	35.4%	32.8%	26.4%	28.0%
Don't know	9.9%	9.0%	11.2%	7.0%	13.4%	15.2%	8.4%	5.8%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

We next asked students more specifically about careers guidance. The results indicate that once again the UAE and Saudi Arabia are leading the charge, this time in positioning cyber security as a desirable career. Both countries seem to have a joined-up approach to cyber security awareness across all areas of education that should pay dividends in the next few years.

When asked if they knew more about cyber security, would they be more likely to consider it as a job, almost two-thirds of students overall (65.4%) said they either completely agreed or somewhat agreed. This was lower in the Netherlands and Belgium but still showed that around 50% of students in those two countries felt they didn't have enough knowledge to consider cyber security as a potential career.

	If I knew more about cyber security I might be more interested in it as a job							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Completely agree	20.4%	16.2%	11.8%	14.2%	11.8%	7.6%	41.2%	44.4%
Somewhat agree	45.0%	47.3%	52.4%	45.8%	40.6%	39.8%	44.0%	43.0%
Somewhat disagree	16.7%	16.4%	16.2%	22.8%	23.2%	25.4%	7.6%	5.8%
Completely disagree	9.1%	9.9%	9.2%	9.8%	10.6%	16.8%	3.4%	3.0%
Don't know	8.8%	10.2%	10.4%	7.4%	13.8%	10.4%	3.8%	3.8%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

	What do you think are the top three skills you would need to work in cyber security?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Computer science	45.6%	51.2%	29.8%	50.0%	33.6%	40.0%	51.0%	57.6%
An interest in cyber security	43.3%	42.4%	42.2%	44.4%	47.4%	41.8%	42.6%	42.8%
Coding/program-ming	40.5%	41.3%	41.2%	42.4%	42.6%	45.4%	36.0%	34.0%
Problem solving and logic	33.7%	39.8%	26.0%	42.8%	32.6%	31.8%	32.0%	24.4%
Thinking like a cy-ber-criminal/hacker	31.7%	27.8%	40.2%	22.0%	43.2%	41.2%	28.2%	23.0%
Analytical mind	29.2%	28.4%	35.0%	23.0%	28.8%	29.0%	32.4%	28.4%
Keep up to date with the current cyber security news	22.6%	19.2%	25.0%	16.8%	23.6%	23.6%	25.0%	28.6%
Maths	19.1%	19.1%	15.6%	23.2%	19.2%	19.2%	17.6%	19.6%
Thinking outside the box	15.4%	15.9%	14.0%	13.4%	9.2%	12.0%	18.0%	24.8%
Methodical and detail oriented	14.7%	11.0%	22.6%	19.6%	12.6%	8.8%	16.0%	16.2%
Other (please specify)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Don't know	1.5%	1.3%	2.8%	0.8%	2.4%	2.4%	0.4%	0.2%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

Displaying a combination of responses ranked first, second and third

When asked what top three skills are needed to work in cyber security:

- 46% of students placed computer science in their top three
- 43% of students placed an interest in cyber security in their top three
- 41% of students placed coding/programming in their top three

Very few chose attributes such as 'out of the box thinking' and 'methodical' which are also important aptitudes and sometimes prized by cyber security employers above traditional skills such as computing experience/coding etc.

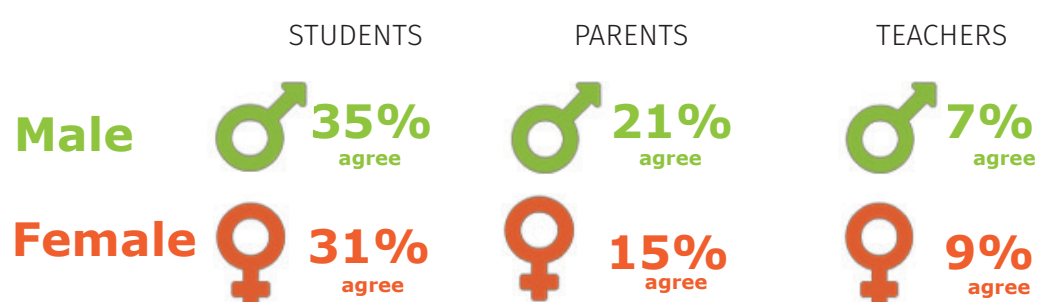
GENDER STEREOTYPES IN CYBER SECURITY

Cyber security (and IT in general) has perhaps traditionally been seen as a career that is better suited to boys than girls. However, the survey results indicate that the iGen is beginning to break down the stereotype of the all-male cyber security world, with only 32% of EMEA students agreeing, either completely or somewhat, that cyber security is a job that is better suited to boys than girls. This needs to continue to improve of course, with numbers of girls still low in computing classes in many countries.

However, girls are increasingly being encouraged to take up an interest in computing at school. And programmes conducted by SANS have already indicated that girls excel in areas of cyber security such as cryptography, whilst boys tend to be better in other areas in cyber. Hopefully this generation will succeed in closing the gender gap in IT more generally and cyber security more specifically.

	Working in cyber security is a job which is better suited for boys than girls							
	Total	UK	France	Germany	Belgium	Netherlands	UAE	Saudi Arabia
Completely agree	11.2%	6.8%	7.8%	11.8%	7.4%	7.2%	19.8%	22.0%
Somewhat agree	21.5%	20.0%	19.8%	24.2%	17.2%	20.6%	21.0%	29.4%
Somewhat disagree	27.1%	25.4%	25.0%	27.8%	31.2%	31.6%	24.8%	25.8%
Completely disagree	32.7%	37.2%	38.8%	32.0%	35.4%	33.6%	30.0%	17.4%
Don't know	7.5%	10.6%	8.6%	4.2%	8.8%	7.0%	4.4%	5.4%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA



Analysis showing the percentage of EMEA student and UK parent and teacher respondents who agree that working in cyber security is a job which is better suited for boys than girls. Responses split by gender.

3. OWNERSHIP OF DEVICES AND THEIR SECURITY

In the third and final section of the report, we examine how students are practically securing their personal devices, how secure or insecure they believe these devices are and why. We also asked UK parents whether they have an understanding or grasp of their children's digital footprint on these devices, and what role they have to play in securing their kids' safety. We conclude with observations from students on what they believe the risks are to their own personal safety, as well as more broadly for society at large.

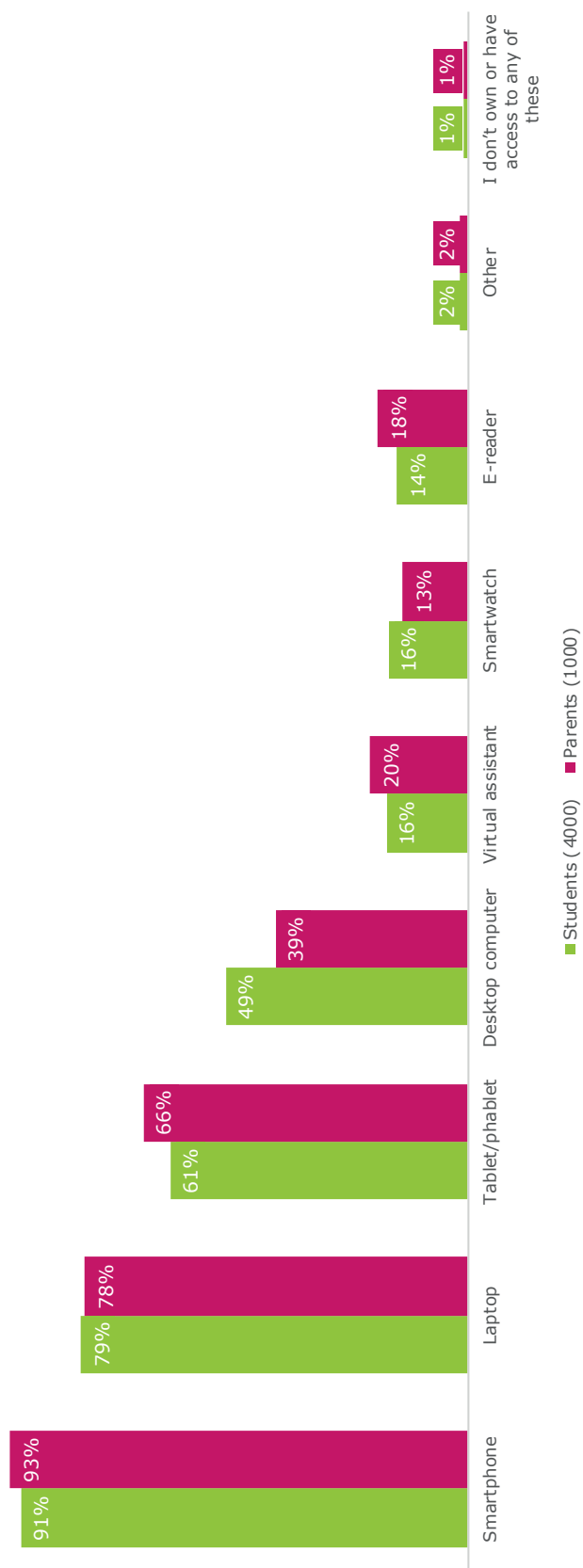
	Do you own or have access to any of the following devices?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Smartphone	90.9%	91.7%	90.8%	92.4%	94.6%	93.4%	87.0%	85.8%
Laptop	78.7%	79.3%	76.0%	75.4%	79.6%	85.8%	78.6%	75.8%
Tablet/phablet	60.6%	64.8%	54.0%	57.8%	65.8%	60.0%	62.6%	54.6%
Desktop computer	49.1%	45.5%	50.4%	59.2%	44.2%	40.6%	52.4%	55.2%
Virtual assistant	16.5%	21.4%	14.6%	23.0%	13.8%	5.6%	15.6%	16.4%
Smartwatch	16.0%	14.5%	14.4%	16.0%	12.6%	6.2%	22.2%	27.6%
E-reader (e.g. Kindle, Kobo etc.)	14.4%	20.4%	9.8%	23.0%	9.8%	13.2%	8.8%	9.4%
Other	1.7%	1.6%	1.4%	2.0%	2.2%	2.0%	1.2%	1.2%
I don't own or have	0.7%	0.8%	0.8%	0.0%	0.2%	0.2%	2.0%	0.8%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA

The majority of students report that they own or have access to at least one device, including a smartphone (91%), laptop (79%) and/or tablet/phablet (61%).

With internet enabled devices being so prominent in everyday life and the increasing news coverage of data breaches and cyber attacks, it makes sense that the security of these devices should be front of mind.

DO YOU OWN OR HAVE ACCESS TO ANY OF THE FOLLOWING DEVICES?



All student and parent respondents (base numbers in chart)

	Overall, how would you rate the security of the devices you own/have access to?							
	Total	UK	France	Germany	Belgium	Netherlands	UAE	Saudi Arabia
Very secure	21.8%	26.7%	10.1%	31.2%	13.0%	14.2%	24.9%	27.6%
Somewhat secure	59.9%	60.0%	61.7%	55.4%	61.5%	64.5%	58.2%	57.9%
Not very secure	11.9%	6.6%	20.0%	9.4%	17.8%	13.6%	11.6%	9.9%
Not secure at all	1.0%	0.8%	1.0%	1.2%	1.2%	0.8%	1.2%	1.0%
Don't know	5.4%	5.9%	7.3%	2.8%	6.4%	6.8%	4.1%	3.6%
Base	3972	992	496	500	499	499	490	496

Students who own or have access to at least one device across EMEA

Across the seven countries surveyed, it seems that confidence in the security of respondents' devices is relatively high, with over four in five students (82%) believing the devices they own or have access to are either very or somewhat secure.

This demonstrates that respondents think they understand what it takes to make a device secure but given the complicated nature of threats being faced online today, is this confidence misplaced?

We then questioned students who rated these devices as secure in more detail in order to try and get a deeper understanding of why they felt these devices were secure.

	Why do you think your devices are secure?							
	Total	UK	France	Germany	Belgium	Netherlands	UAE	Saudi Arabia
The device has anti-virus software installed	67.8%	69.0%	70.2%	70.9%	65.6%	63.1%	71.3%	63.4%
I only download apps I trust	55.9%	56.6%	50.0%	55.4%	46.8%	52.2%	66.8%	61.1%
My parents/guardians check my device(s) regularly	30.0%	29.9%	26.4%	31.6%	28.5%	24.2%	37.1%	31.8%

I am able to spot suspicious activity	27.0%	30.6%	28.9%	26.8%	22.0%	18.1%	30.2%	27.6%
I never enter my personal information (name, e-mail address etc.)	25.0%	23.7%	22.5%	30.0%	19.6%	22.1%	29.7%	27.1%
My parents/guardians have parental controls activated on my device(s)	19.6%	23.3%	16.3%	10.9%	15.3%	13.5%	27.0%	25.9%
I always read privacy policies in full	19.0%	16.6%	16.0%	17.8%	12.1%	10.7%	28.5%	32.5%
Other (please specify)	0.2%	0.2%	0.0%	0.7%	0.3%	0.5%	0.0%	0.0%
Don't know, I just do	3.1%	2.8%	2.8%	4.2%	5.4%	5.3%	0.7%	0.9%
Base	3245	860	356	433	372	393	407	424

Students across EMEA who rated the devices they own or have access to as secure

The results were relatively consistent across all countries surveyed. Overall, 67.8% of students said they felt their devices were secure because they have anti-virus software installed (this was the top response across all countries). In addition, 55.9% of students said they only download apps they trust.

However, this must raise the question of what sort of apps students are downloading and trusting with their data? And what criteria are they basing these download decisions on? It also raises the question of what other security measures they have in place other than just anti-virus, which, alone, is insufficient to catch all of today's complex threats.

We then asked those students who felt their devices were insecure why they felt this way. Students were given a variety of options designed to test the depth of their knowledge of personal cyber security, to give an indication of where the potential gaps in knowledge lie.

	Why do you think your devices are insecure?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
I never read privacy policies in full	54.1%	41.1%	53.8%	56.6%	60.0%	56.9%	52.4%	57.4%
I never check the security of the apps I download	49.4%	52.1%	51.0%	30.2%	57.9%	41.7%	49.2%	57.4%
I enter my personal information if required (name, e-mail address etc.)	41.1%	37.0%	33.7%	39.6%	36.8%	43.1%	49.2%	57.4%
I am unable to spot suspicious activity	37.7%	28.8%	31.7%	54.7%	35.8%	37.5%	36.5%	50.0%
I don't have anti-virus software installed	32.5%	38.4%	34.6%	18.9%	25.3%	34.7%	36.5%	38.9%
My parents/guardians never check my phone	24.5%	24.7%	32.7%	26.4%	29.5%	25.0%	7.9%	16.7%
Other (please specify)	1.2%	1.4%	0.0%	3.8%	1.1%	1.4%	0.0%	1.9%
Don't know	2.1%	0.0%	3.8%	5.7%	1.1%	2.8%	0.0%	1.9%
Base	514	73	104	53	95	72	63	54

Students across EMEA who rated the devices they own or have access to as insecure

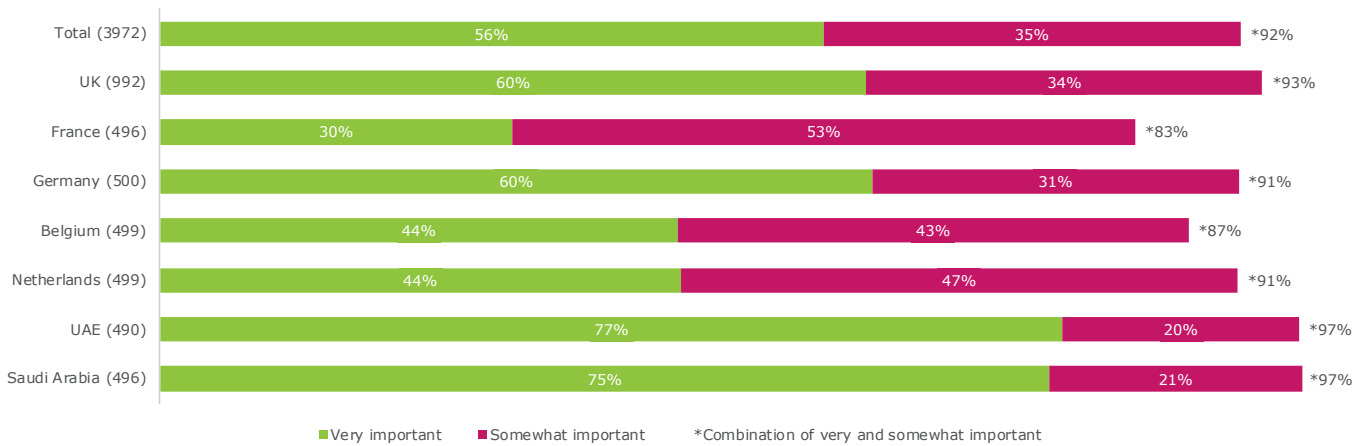
Ultimately, students believed their devices were insecure due to:

- Never reading privacy policies (54.1%)
- Not checking the security of apps they download (49.4%)

What's more, of UK parents who believe that the devices their eldest child owns or has access to are insecure, 45% admitted to never checking their eldest child's phone and/or never checking the security of the apps their kids download.

Given that the privacy policies are likely to hold vital information on how our personal data is being used, this is an important part of keeping devices secure - one that is currently being neglected. Only 19% of those students who did feel their devices were secure read policies in full and nearly four in ten (38%) students who felt their devices were insecure reported that they would be unable to spot suspicious activity. While there are clearly some more vigilant students across EMEA, there needs to be more of an effort amongst parents and teachers to help students grasp a better understanding of personal security hygiene.

HOW IMPORTANT IS THE SECURITY OF THE DEVICES YOU OWN/ HAVE ACCESS TO?



Students across EMEA who own or have access to a device

Only 56% of students overall said device security was very important. A further 35% said it was somewhat important, and 64% of parents said it was very important. Of student respondents who own or have access to a device, it is those in the UAE (77%) and Saudi Arabia (75%) who are the most likely to say that the security of the devices that they own/have access to is very important. If you add this figure to those who feel that it is at least somewhat important, the UAE and Saudi Arabia have near 100% scores for the importance of device security (both at 97%).

France, with 30% of respondents answering that device security was very important, scored considerably lower than the next lowest scorers, Belgium and the Netherlands which both came in at 44% very important. Those in Belgium and the Netherlands were also some of the least likely to have heard of cyber security, so it is perhaps no surprise that it is less valued in these countries.

Our penultimate question asked students to think about how a lack of device security could impact them - and their families - personally.

Students were offered a range of realistic, real-world scenarios and asked to pick which they felt were most likely to pose the biggest threat to their own security.

	What do you think the biggest cyber security risks are to you and your family?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
The theft of my personal information, such as passwords, address, email addresses, date of birth	63.0%	67.7%	60.2%	61.4%	61.6%	59.2%	64.8%	61.6%
Someone accessing my bank account	59.1%	62.9%	58.8%	59.8%	60.8%	57.2%	55.0%	55.4%
Hackers infecting my devices with viruses so they don't operate as normal	56.7%	57.0%	60.4%	60.6%	57.6%	57.8%	51.0%	52.2%
Falling for an online or email scam or hoax	44.3%	47.6%	38.4%	37.2%	45.6%	41.8%	52.0%	44.4%
Cybercriminals imitating/pretending to be me on social media platforms	40.4%	36.1%	47.2%	39.8%	45.4%	33.6%	43.0%	42.2%
Hackers accessing my webcam	39.9%	33.3%	40.8%	39.0%	41.4%	33.6%	48.0%	49.8%
Being cyberbullied or catfished	34.7%	27.4%	43.8%	34.0%	39.4%	23.8%	42.8%	38.6%
Losing my device (phone, laptop, wearable etc.)	32.2%	31.3%	28.0%	32.2%	33.0%	27.8%	34.8%	39.2%
Hackers listening in to my conversations (via phone, Amazon Alexa etc.)	30.5%	28.9%	32.6%	31.4%	34.0%	23.2%	33.4%	31.2%
Other (please specify)	0.1%	0.0%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%
Don't know	4.4%	3.7%	3.6%	4.8%	5.6%	8.2%	2.4%	2.8%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA



WHAT DO YOU THINK THE BIGGEST CYBER SECURITY RISKS ARE TO YOU AND YOUR FAMILY?



Student responses across EMEA compared with UK parents and teachers

	What do you think the biggest cyber security risks are to the nation and society as a whole?							
	Total	UK	France	Germany	Belgium	Nether-lands	UAE	Saudi Arabia
Hackers leaking government/military intelligence that puts our country at risk	61.6%	63.4%	63.4%	53.6%	58.2%	63.2%	65.2%	62.2%
Hackers gaining access and taking control of transport systems (planes, trains, traffic control systems etc.)	58.7%	60.5%	57.8%	62.0%	56.8%	60.4%	54.8%	56.4%
Hackers accessing hospital systems connected to the internet (disrupting the operation of pace-makers and tools used by doctors)	54.9%	56.8%	53.4%	55.6%	53.0%	57.0%	52.2%	54.4%
Hackers accessing the national grid/ utilities and shutting down access to electricity, water etc.	54.9%	56.1%	56.6%	58.2%	50.8%	54.8%	52.0%	54.2%
Foreign nations spying on our country	48.5%	46.1%	49.6%	47.8%	41.2%	37.4%	59.6%	60.4%
Hackers infiltrating and disrupting the food supply chain	34.4%	33.8%	36.8%	39.2%	33.0%	31.6%	34.2%	33.0%
Hackers shutting down access to my favourite websites/ crashing the internet	32.4%	32.9%	33.0%	22.8%	33.0%	24.4%	42.4%	38.0%
Other (please specify)	0.2%	0.2%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%
Don't know	4.2%	2.6%	2.6%	4.0%	7.6%	5.4%	4.4%	4.0%
I've never thought about the risks cyber security poses to the nation and society as a whole	5.1%	6.7%	5.4%	3.8%	6.6%	7.2%	2.2%	1.8%
Base	4000	1000	500	500	500	500	500	500

Student responses across EMEA



WHAT DO YOU THINK THE BIGGEST CYBER SECURITY RISKS ARE TO THE NATION AND SOCIETY AS A WHOLE?



Student responses across emea compared with uk parents and teachers

But a lack of good cyber security knowledge and hygiene goes far beyond the personal devices of citizens. In 2018 headlines were awash with countless data breaches that saw businesses become the target of opportunistic cyber criminals, and led to the private data of millions of customers appearing on the dark web.

With this in mind, we asked students across EMEA what they believed were the biggest cyber security risks to their countries, and by extension to the world, in general. You can see their responses on pages 35 and 36.

Concerns around the biggest cyber security risks to students and their families were broadly similar across the seven countries surveyed. Theft of their personal information was the most likely threat across nearly all countries (63% overall). The next most popular concern overall was the risk of someone accessing their bank account (59%) although for France, Germany and the Netherlands, the risk of 'hackers infecting my devices with viruses so they don't operate as normal' was the second most likely risk.

When it comes to thinking about the risks to the nation and society as a whole, students felt the most likely risk was around hackers leaking government/military intelligence that puts the country at risk (62% overall).

The majority of national and societal risks are outside of the respondents' control and rely on trusting the government and the military to protect these areas. If trust is low then these are likely to be more of a concern for respondents than areas which impact them on a more personal level, where they feel that they are more in control.

CONCLUSIONS

AWARENESS

To summarise, the majority of students have heard of cyber security. This perhaps isn't a surprise given that nearly all students (99%) report that they have access to a device. Of those with access to a device, the security of these devices is important. Over nine in ten students (91%) report that the security of their devices is either very or somewhat important.

Cyber security is covered within the curriculum but to varying degrees, even within the same country. Of those who believe that cyber security is covered in the curriculum, the most common way of learning about it is as part of their IT lessons (according to 29% of students). Encouragingly, over eight in ten students (81%) report that they would be interested in learning more about cyber security, either as part of their school day and/or as an extra-curricular activity.

CAREERS

IT topped the list of career choices for students across EMEA (32%), as well as UK parents (27%) and teachers (32%). For students who are interested in IT as a potential career, creating apps or software is the most likely specific area of IT they are interested in (61% students).

This is compared with just under a quarter of EMEA students (24%) considering cyber security as a potential career. Even fewer UK parents (16%) and teachers (18%) considered this for their eldest child/ students. Of those students who haven't considered a career in cyber security, lack of interest in it is the top reason (28%).

Given that around two thirds of students across EMEA (65%) say that if they knew more about cyber security, they might be more interested in it as a job, there is definitely an opportunity to improve figures here. In the UK, 68% of parents and almost nine in ten teachers (89%) say the same.

Gender stereotypes which were once prevalent are becoming a thing of the past, with only the minority of UK parents (21% male/15% female) and teachers (7% male/9% female) agreeing that working in cyber security is a job which is better suited for boys than girls. Surprisingly more students feel that working in cyber is better suited to boys than girls (35% male/31% female) and it would be interesting to explore further what is behind this.

STUDENT COUNTRY ANALYSIS

Awareness among students from different countries varies, with students from Germany the most likely (92%) to have heard about cyber security, while overall, those in Belgium (76%) and the Netherlands (79%) were the least likely.

Of student respondents who own or have access to a device, overall the importance of securing these devices is high. Students in the UAE (77%) and Saudi Arabia (75%) are most likely to rate it as very important versus those from Belgium (44%) Netherlands (44%) and France (30%) who rated it relatively low.

Given that awareness of cyber security in Belgium and Netherlands is lower, it is then not a surprise to see that around half of student respondents (47% and 51% respectively) from both these countries report that they do not learn about cyber security at all in their day-to-day studies. This figure is much lower for students from the UAE (13%) and Saudi Arabia (13%).

This trend continues when looking at those students who would be interested in learning more about cyber security, with one in five (20%) students from the Netherlands reporting that they would not be interested, versus only 4% of students from Saudi Arabia and 3% from the UAE.

It is not therefore surprising that consideration of a career in cyber security also follows this trend: around half of those from the UAE (46%) and Saudi Arabia (50%) report that they have considered a career in cyber security, with only around one in ten students from Belgium (10%) and the Netherlands (12%) reporting this.

