

On-screen Assessment: What does the public think?

By Evie Matthews - Policy Analyst

October 2022

Executive summary

On-screen assessment (OSA) is in a critical stage of trials and pilots, and many in the education sphere want assessment formats to be diversified.

Whilst implementation and infrastructural challenges are being tackled, perceptive barriers are also an important consideration for policymakers.

To help discern the public appetite for OSA, this report outlines findings from a recent survey on a nationally representative sample of the adult population in England.

The principal takeaway from the survey is that there is a relatively high degree of support for OSA among young people in and outside of education, as well as parents of children aged 18 and under.

These are naturally the groups that have a current or recent experience with – or directly observe the effects of – paper-based assessment.

Therefore, it is likely that increasing support for OSA relies on exposing individuals to existent assessment practices, and the transformative role that technology could play in making testing formats more reliable and inclusive for students.

1. Introduction

The vast majority of GCSE and A-level exams in England have always been assessed using pen and paper. However, there is growing interest in the potential for greater usage of on-screen assessment (OSA).

This interest reflects potential benefits of OSA over pen-and-paper in terms of reliability, resilience and efficiency, as well as its purported environmental impact and ability to improve student experience.

Trialling new ways to engage students sitting assessments is paramount in maintaining public confidence and the overall currency of GCSE and A-Levels by assuring stakeholders that qualifications are a reliable representation of students' abilities.

However, it is also in policymakers' best interest to identify scepticism surrounding the move to OSA for these same reasons.

In order to explore public attitudes – and the potential opportunity costs of implementing OSA – AQA commissioned an independent survey that was taken by members of the general population in England.

About the survey

In March 2022, Savanta ComRes - an independent polling company – conducted a series of questions to a nationally representative sample of 2,336 people in England, aged 18 and over.

Respondents were asked a series of questions relating to OSA, including:

- Familiarity with OSA
- Perceived risks and benefits of implementing OSA

Given that many members of the public minimal experience of A-Level qualifications after 16, the questions were focused on GCSEs.

The survey was structured using closed-ended questions for comparability purposes, and most questions asked respondents to rank their agreement with a statement using a Likert Scale (Strongly Disagree to Don't Know).

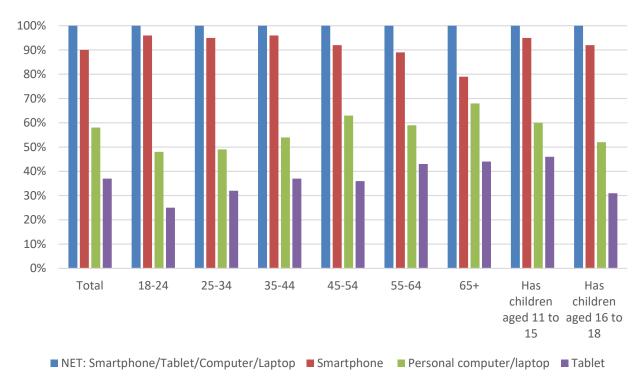
The sample sizes for the main sub-groups of interest in this report are as follows:

	Total			Age				Parent statu		
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18	
Sample size	2336	248	399	378	395	367	549	315	172	

2. Experience of technology and on-screen assessment

The survey began by asking respondents about the use of technology in respondents' everyday lives, and if they had any prior experience with OSA.

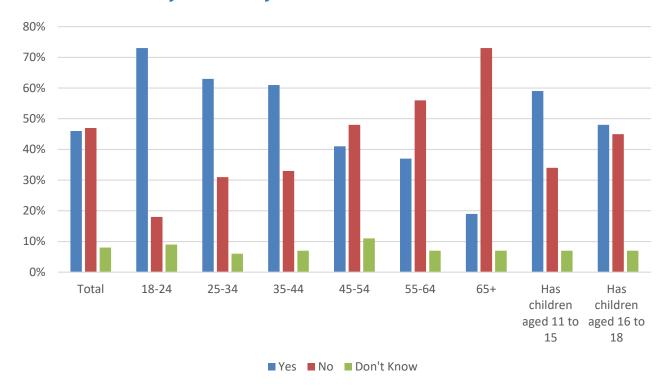
Statement 1: "Which of the following do you use on an everyday basis? [Select all those that apply]".



All respondents use at least one IT device on a daily basis, with smartphones the most popular accessory across all age groups. Tablets were universally the least-used device.

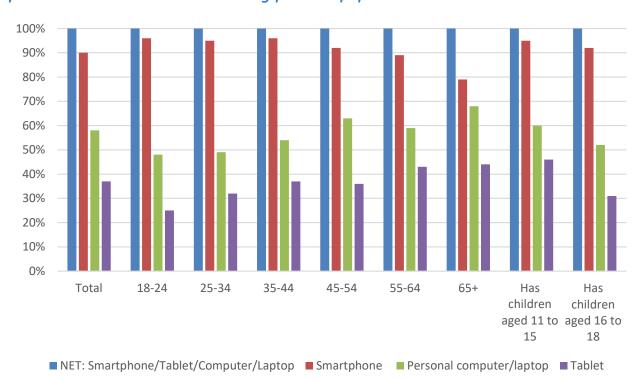
Having established typical usage of technology among respondents, the survey then explored experience of on-screen assessment.

Statement 2: "Have you taken any form of test or assessment on-screen?"



As may be expected, familiarity with OSA varies considerably by age; older respondents are less likely to have sat an OSA compared to respondents aged 18-44.

Respondents were then asked about their preferences regarding on-screen versus pen-and-paper assessment.



Statement 3: "If you had to take a test or assessment of some kind, would you prefer to take it on-screen or using pen and paper?"

Across all age groups, OSA was the preferred method to sit an assessment. Whilst opinions are slightly more mixed for the over 65s, there is still a 17 percentage point gap between the respondents who preferred to sit an on-screen versus paper-based assessment (48% versus 31%).

Overall, at least half of respondents across different age groups believe that OSA is preferable to being assessed using pen and paper.

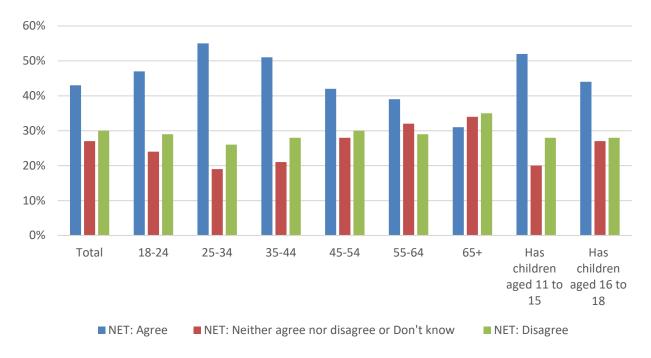
Interestingly, as data in the Appendix shows, the geographic region of respondents also explained some of the variance in responses, with people residing in London, the North West and the South East more likely to report a preference for OSA.

3. On-screen assessment and GCSEs

GCSEs are the mainstream academic qualification taken at the end of Key Stage 4 by most young people in England.

Respondents to the survey were asked several questions regarding their strength of agreement with statements about the potential use of OSA in GCSE exams in England.

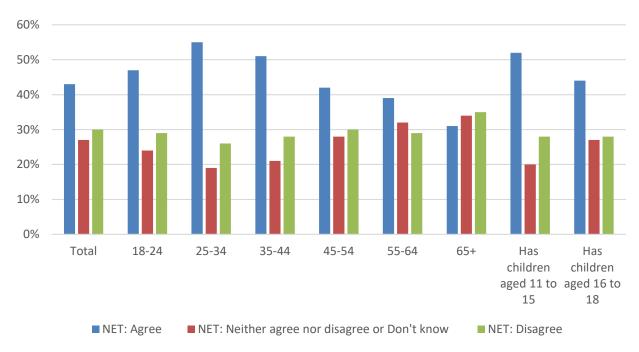
Statement 4: "In the future, most GCSE exams in England should be taken on-screen instead of using pen and paper"



Opinions as to whether GCSEs should mostly be assessed on-screen were mixed. However, among those aged 18-64, those who agreed with statement noticeably outnumbered those who disagreed or were unsure.

It is also noticeable that half of parents with children aged 11 to 15 (52%) and 16 to 18 (44%) – i.e., who have children preparing for high-stakes examinations – agree with the statement.

Statement 5: "Making GCSE exams on-screen assessments should be a priority for the government"



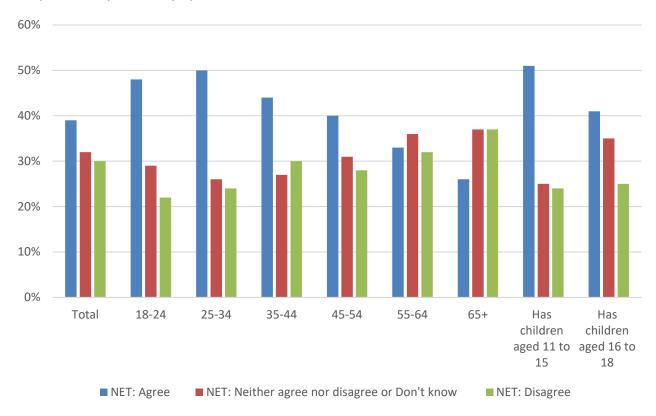
Around a quarter to a half of respondents believed that OSA should be a priority for the government.

Interestingly, those aged 25-34 and parents of secondary school-aged children agreed with the statement the most. This indicates that groups with a stake in education – i.e. those who have recently completed education or are parenting someone completing an academic qualification – are more likely to support the policy prioritisation of OSA in GCSEs.

4. On-screen assessment in Exams

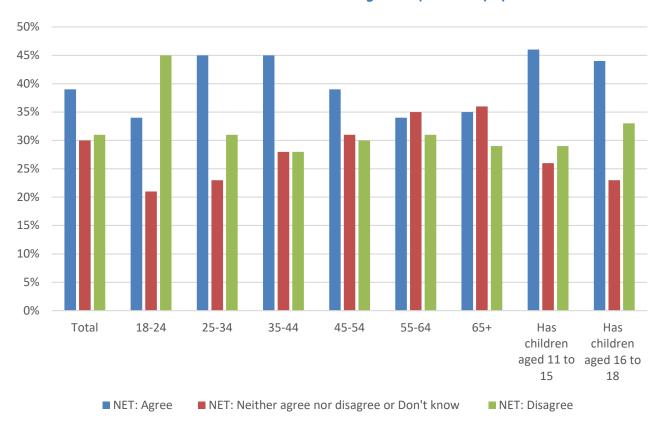
The second half of the survey probed public perceptions of OSA versus pen-and-paper assessments in relation to key attributes of assessments such as reliability and fairness.

Statement 6: "OSA provides a more reliable assessment of what young people know compared to pen and paper exams"



Perceptions of the reliability of OSA relative to pen-and-paper were mixed. Among younger age groups, the proportion of students agreeing with the statement outweighed those who disagreed. However, this outcome was reversed among those aged 65+.

It is also noticeable that agreement is high among respondents with children aged 18 or under (49%).

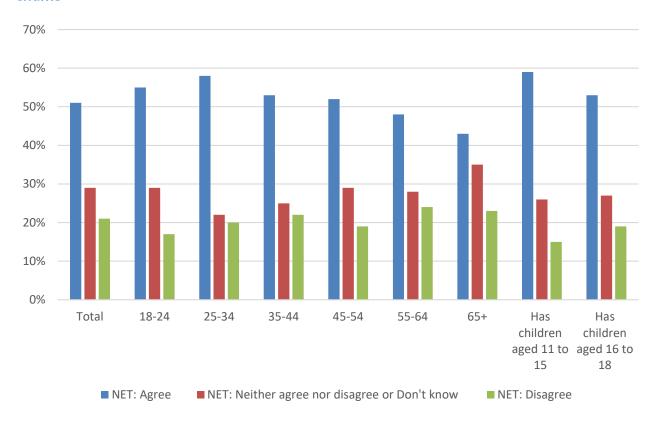


Statement 7: "OSA would be safer from cheating than pen and paper exams"

Opinions on whether OSA would be safe from cheating were also mixed, with a sizeable percentage of respondents in each group (ranging from 21-36%) not holding a fixed position.

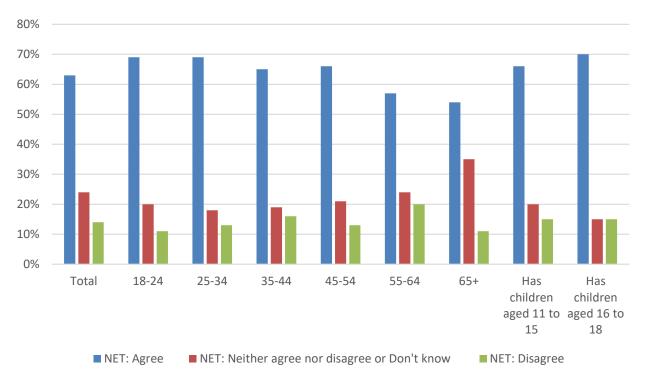
This may be unsurprising given that respondents will have informed their responses with different pieces of information and opinions that do not necessarily stem from experience of sitting an OSA.

Statement 8: "OSA would be better preparation for the real world than pen and paper exams"



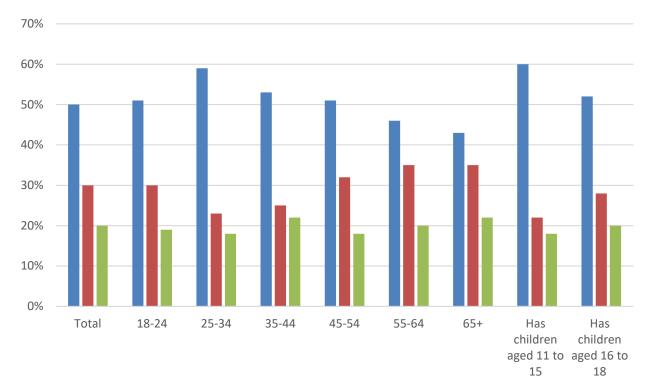
More respondents agreed that OSA would represent better preparation for the 'real world' than penand-paper assessments. This is likely due to respondents' own experiences and the relevance of on-screen devices – such as laptops, computers, and tablets - in the workplace. As the data in the Appendix shows, around 1 in 2 (54%) of employed respondents agreed that OSA is better preparation for the real world.

Statement 9: "OSA would be better for the environment than pen and paper exams"



There was strong agreement that OSA would have environmental benefits relative to traditional exams.

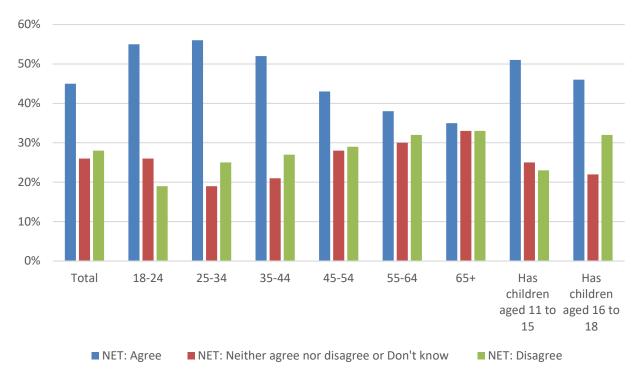
Statement 10: "OSA would be more engaging for students than pen and paper exams"



Agreement that OSA could improve engagement relative to pen and paper exams was highest among younger respondents and respondents with children aged 11 to 18 (i.e., preparing for Level 2 or 3 qualifications).

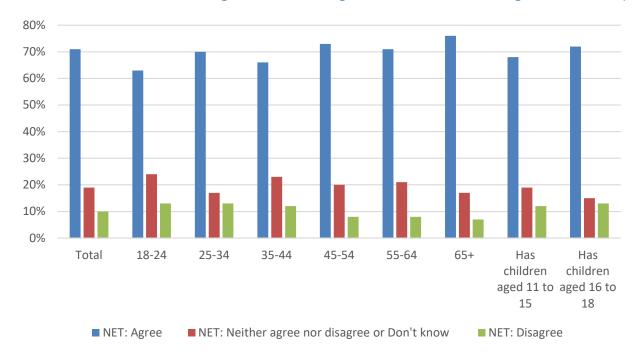
However, agreement with the statement was still moderate among the older age groups.

Statement 11: "OSA would be more accessible to a wider range of students than pen and paper exam"



Opinions about OSA and accessibility were varied. Agreement with the statement was lowest among respondents aged 54 and over (35-38%).

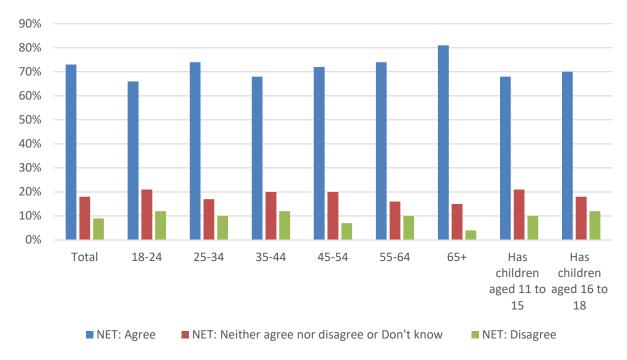
Statement 12: "OSA would give an advantage to students who are good with computers"



Respondents were then asked about a common concern raised about OSA: a perceived advantage that may be afforded to those students with better IT skills.

In contrast to other questions in the survey, responses were polarised. Around two thirds to three quarters of respondents across each age category demonstrated concern that OSA would advantage students who have better than average computer skills.

Statement 13: "OSA would disadvantage students who have had less access to technology at home than others"



In a similar vein, variable access to IT in the home environment has sometimes been raised as a source of concern around the use of OSA in exams.

Once again, the survey revealed concern that OSA could create a less equal playing field among respondents.

5. Conclusion

This report has explored public attitudes toward OSA in the context of growing interest in the application of OSA in high-stakes exams in England.

The findings point to some key considerations relevant to policymakers and stakeholders.

Interest in sitting an on-screen assessment

Overall, the findings demonstrate that there is an appetite for the adoption of OSA in GCSEs in England. This presumably reflects the growing role that IT devices and digital technologies have in everyday life.

However, it could also stem from a general interest in diversifying assessment practises and ensuring there is choice for students who may be disadvantaged by particular modes (e.g. paper-based) assessment formats.

Older versus younger demographics

Across multiple questions, age was typically a key predictor of responses, with older generations demonstrating clear reservations regarding the benefit of OSA compared to younger groups.

In many ways, this result may be expected and suggests that people who use, or have previously used, technology in the classroom are more confident of its benefits and relevance to assessment.

Furthermore, younger respondents who have not sat high-stake OSAs at GCSE and A-Level may nevertheless have experienced OSA in other contexts and for other qualifications, such as the Driver and Vehicle Standards Agency (DVLA) theory driving test.

In turn, the relevance of age indicates that building support for OSA is not insurmountable, and could be redressed by increasing familiarity and exposure to the role of digital technologies in assessment.

Parental status and support for OSA

Parents with secondary-school aged children (11-15) repeatedly demonstrated high levels of support across various question areas compared to other groups in the sample.

This is an important consideration, particularly for policymakers, and suggests that parents watching their children complete Level 2 and/or 3 qualifications would support efforts to diversify assessment formats available to students.

Digital literacy and fairness

The fairness of OSA - and its impact on different types of students – emerged as a key concern across all groups.

Moving forward, it is important that policymakers and exam boards acknowledge these concerns when discussing OSA.

This could be achieved by investigating students with poorer digital literacy skills and/or less access to technology, and how their experiences with OSA compares to paper-based assessment.

Policy Implications

Overall, our survey highlights there is a general preference for sitting OSA – even among those respondents who are only familiar with paper-based assessment.

However, whilst there is public interest to capitalise on, policymakers should also be mindful of common concerns that may grow as the transition to OSA intensifies.

For example, it may be worthwhile communicating how digital literacy skills – i.e., the ability to use a computer or type – affects suitability for sitting an OSA.

By coordinating an informed discussion on how OSA is devised – and its validity in measuring pupils' attainment with different technological skills – policymakers may be able to build a stronger case for introducing OSA in high-stakes exams in England.

Appendix: Data tables

Statement 1: "Which of the following do you use on an everyday basis? [Select all those that apply]".

	Total		Age						Parental status		
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18		
NET: Smartphone Tablet/ Computer/ Laptop	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Smartphone	90%	96%	95%	96%	92%	89%	79%	95%	92%		
Personal computer/ laptop	58%	48%	49%	54%	63%	59%	68%	60%	52%		
Tablet	37%	25%	32%	37%	36%	43%	44%	46%	31%		

Statement 2: "Have you taken any form of test or assessment on-screen?".

	Total	Age						Parental status		
		18-24	25-34	35-44	45-54	55-64	64+	Has children aged 11 to 15	Has children aged 16 to 18	
Yes	46%	73%	63%	61%	41%	37%	19%	59%	48%	
No	47%	18%	31%	33%	48%	56%	73%	34%	45%	
Don't know	8%	9%	6%	7%	11%	7%	7%	7%	7%	

Statement 3: "If you had to take a test or assessment of some kind, would you prefer to take it on-screen or using pen and paper?".

	Total Age							Parental status		
		18-24	25-34	35-44	45-54	55-64	64+	Has children aged 11 to 15	Has children aged 16 to 18	
On-screen	60%	59%	69%	67%	64%	59%	48%	69%	61%	
Using pen and paper	29%	35%	25%	30%	26%	27%	31%	27%	32%	
Don't know	11%	6%	6%	4%	10%	14%	20%	5%	7%	

	North- West	North- East	Yorkshire and the Humber	West Midlands	East Midlands	South- West	South East	Eastern	London
On-screen	64%	59%	58%	54%	59%	58%	63%	59%	63%
Using pen and paper	27%	30%	33%	35%	30%	27%	29%	26%	26%
Don't know	9%	11%	10%	11%	11%	15%	8%	15%	10%

Statement 4: "In the future, most GCSE exams in England should be taken on-screen instead of using pen and paper?".

	Total			Age		Parenta status			
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	12%	12%	11%	9%	14%	15%	12%	11%	8%
Somewhat disagree	18%	17%	16%	20%	16%	15%	23%	17%	20%
Neither agree nor disagree	25%	23%	18%	19%	25%	29%	31%	18%	25%
Somewhat agree	28%	27%	34%	34%	27%	27%	23%	29%	25%
Strongly agree	15%	20%	21%	16%	15%	12%	8%	23%	19%
Don't know	2%	1%	1%	2%	3%	3%	3%	2%	2%
NET: Agree	43%	47%	55%	51%	42%	29%	31%	52%	44%
NET: Disagree	30%	29%	26%	28%	30%	29%	35%	28%	28%

Statement 5: "Making GCSE exams on-screen assessments should be a priority for the government?".

	Total				Age		Parental status		
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	14%	18%	11%	11%	18%	15%	12%	12%	11%
Somewhat disagree	20%	19%	19%	22%	16%	18%	22%	19%	23%
Neither agree nor disagree	29%	27%	22%	25%	27%	34%	34%	24%	26%
Somewhat agree	24%	21%	21%	25%	24%	22%	20%	28%	22%
Strongly agree	12%	14%	15%	16%	13%	8%	7%	16%	17%
Don't know	2%	1%	1%	1%	2%	3%	4%	1%	1%
NET: Agree	35%	35%	46%	41%	37%	30%	27%	44%	39%
NET: Disagree	34%	37%	31%	33%	34%	34%	34%	31%	34%

Statement 6: "OSA provides a more reliable assessment of what young people know compared to pen and paper exams?".

	Total				Age			Parental status	
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	10%	8%	9%	8%	10%	15%	11%	8%	6%
Somewhat disagree	19%	15%	15%	22%	18%	17%	25%	15%	19%
Neither agree nor disagree	29%	26%	25%	26%	28%	33%	33%	24%	32%
Somewhat agree	26%	28%	31%	28%	27%	23%	20%	28%	25%
Strongly agree	13%	21%	19%	16%	13%	10%	6%	23%	15%
Don't know	3%	3%	1%	1%	3%	3%	4%	1%	3%
NET: Agree	39%	48%	50%	44%	40%	33%	26%	51%	41%
NET: Disagree	30%	22%	24%	30%	28%	32%	37%	24%	25%

Statement 7: "OSA would be safer from cheating than pen and paper exams?".

	Total			Age				Parental status		
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18	
Strongly disagree	12%	21%	12%	10%	12%	12%	11%	13%	16%	
Somewhat disagree	19%	24%	20%	18%	18%	18%	18%	16%	17%	
Neither agree nor disagree	27%	20%	22%	26%	28%	31%	31%	24%	22%	
Somewhat agree	24%	21%	26%	28%	19%	23%	24%	25%	27%	
Strongly agree	15%	12%	19%	17%	19%	11%	11%	20%	17%	
Don't know	3%	1%	1%	2%	3%	4%	5%	2%	1%	
NET: Agree	39%	34%	45%	45%	39%	34%	35%	46%	44%	
NET: Disagree	31%	45%	31%	28%	30%	31%	29%	29%	33%	

Statement 8: "OSA would be better preparation for the real world than pen and paper exams?".

	Total				Age	Parental status			
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	7%	7%	6%	8%	6%	10%	7%	7%	6%
Somewhat disagree	14%	10%	13%	14%	13%	13%	16%	9%	12%
Neither agree nor disagree	27%	27%	21%	25%	27%	27%	32%	25%	26%
Somewhat agree	32%	31%	33%	34%	33%	33%	29%	33%	34%
Strongly agree	19%	23%	26%	20%	19%	15%	14%	25%	19%
Don't know	2%	2%	1%	0%	2%	1%	3%	1%	1%
NET: Agree	51%	55%	58%	53%	52%	48%	43%	59%	53%
NET: Disagree	21%	17%	20%	22%	19%	24%	23%	15%	19%

	NET: Working	NET: Not Working
Strongly disagree	7%	7%
Somewhat disagree	14%	13%
Neither agree nor disagree	24%	29%
Somewhat agree	33%	32%
Strongly agree	21%	16%
Don't know	1%	4%
NET: Agree	54%	48%
NET: Disagree	21%	19%

Statement 9: "OSA would be better for the environment than pen and paper exams?".

	Total				Age	Parental status			
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	4%	3%	2%	5%	4%	8%	4%	5%	4%
Somewhat disagree	9%	8%	11%	11%	9%	11%	6%	10%	11%
Neither agree nor disagree	22%	19%	17%	18%	19%	22%	31%	19%	14%
Somewhat agree	37%	31%	41%	37%	40%	34%	36%	33%	41%
Strongly agree	26%	38%	28%	28%	26%	23%	18%	32%	28%
Don't know	2%	1%	1%	1%	2%	2%	4%	1%	1%
NET: Agree	63%	69%	69%	65%	66%	57%	54%	66%	70%
NET: Disagree	14%	11%	13%	16%	13%	20%	11%	15%	15%

Statement 10: "OSA would be more engaging for students than pen and paper exams?".

	Total				Age		Parental status		
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	6%	7%	6%	3%	5%	9%	6%	7%	4%
Somewhat disagree	14%	13%	12%	18%	13%	10%	16%	11%	16%
Neither agree nor disagree	28%	29%	21%	24%	30%	33%	31%	22%	28%
Somewhat agree	33%	27%	36%	34%	33%	32%	34%	38%	36%
Strongly agree	17%	24%	23%	20%	18%	13%	9%	22%	16%
Don't know	2%	1%	2%	1%	2%	2%	4%	0%	0%
NET: Agree	50%	51%	59%	53%	51%	46%	43%	60%	52%
NET: Disagree	20%	19%	18%	22%	18%	20%	22%	18%	20%

Statement 11:" OSA would be more accessible to a wider range of students than pen and paper exam?".

	Total				Age	Parental status			
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	10%	8%	10%	6%	10%	15%	10%	9%	8%
Somewhat disagree	19%	11%	16%	22%	19%	17%	23%	15%	24%
Neither agree nor disagree	24%	23%	18%	19%	27%	28%	30%	23%	21%
Somewhat agree	29%	31%	32%	33%	28%	28%	26%	32%	29%
Strongly agree	16%	25%	24%	19%	14%	10%	9%	20%	17%
Don't know	2%	3%	1%	2%	1%	2%	3%	2%	1%
NET: Agree	45%	55%	56%	52%	42%	38%	35%	51%	46%
NET: Disagree	28%	19%	25%	27%	29%	32%	33%	23%	32%

Statement 12: "OSA would give an advantage to students who are good with computers?".

	Total				Age		Parental status		
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	2%	4%	4%	2%	2%	2%	1%	5%	5%
Somewhat disagree	7%	9%	9%	10%	6%	6%	6%	8%	8%
Neither agree nor disagree	18%	23%	16%	22%	19%	20%	14%	19%	15%
Somewhat agree	42%	36%	41%	39%	48%	42%	45%	39%	39%
Strongly agree	28%	27%	29%	27%	25%	29%	31%	29%	34%
Don't know	1%	1%	1%	1%	1%	1%	3%	0%	0%
NET: Agree	71%	63%	70%	66%	73%	71%	76%	68%	72%
NET: Disagree	10%	13%	13%	12%	8%	8%	7%	12%	13%

Statement 13: "OSA would disadvantage students who have had less access to technology at home than others".

	Total				Age	Parental status			
		18-24	25-34	35-44	45-54	55-64	65+	Has children aged 11 to 15	Has children aged 16 to 18
Strongly disagree	2%	4%	3%	2%	2%	3%	1%	2%	1%
Somewhat disagree	6%	8%	6%	9%	6%	7%	3%	8%	11%
Neither agree nor disagree	17%	21%	16%	20%	19%	15%	12%	20%	18%
Somewhat agree	41%	34%	39%	44%	42%	44%	43%	38%	37%
Strongly agree	32%	33%	35%	24%	30%	30%	38%	31%	33%
Don't know	1%	0%	1%	0%	1%	1%	3%	1%	0%
NET: Agree	73%	66%	74%	68%	72%	74%	81%	68%	70%
NET: Disagree	9%	12%	10%	12%	7%	10%	4%	10%	12%

