Computing in key stage 4
Determining the way forward

The survey of CAS members Key findings
Survey June 2017; analysis July 2017; published August 2017

Findings

1 Introduction

In March 2017, the CAS Board and working group identified concern about the teaching and assessment of computing at key stage 4. As a result, the CAS Assessment working group surveyed CAS members about the computing qualification landscape, to identify areas of concern, and explore issues relating to the assessment of computing at key stage 4. This report briefly summarises the findings of the survey, which were presented at the CAS Assessment working group meeting in Cambridge in July 2017. The survey is structured as follows:

- **Participant information**. Information about participants' teaching background was collected. Had a greater number of CAS members responded to the questionnaire, it would have been possible to analyse responses by different subgroups of teacher (e.g. by region). However, since fewer than 100 members responded, this type of analysis was not conducted.

- **Purpose of qualifications**. Members were asked about the purpose of computing qualifications to provide context to support any recommendations.

- **Delivery of qualifications.** Members were asked: what factors encouraged or discouraged them to offer qualifications; what factors limiting uptake; and what were the challenges associated with delivering computing qualifications.

- **Assessment methods.** Members were asked for their views on different assessment models.

- **Qualification availability.** Members were surveyed on the impact of accountability measures on provision, and the range of qualifications which they thought should be available in computing.

1.1 Method

The questionnaire was developed through discussions at the CAS Assessment Working Group meetings in Manchester and Birmingham in May 2017. The questionnaire was further refined by a subset of the group, and piloted by three teachers. The questionnaire was open for approximately 3 weeks in June 2017.

1.2 Participants

The survey was advertised to CAS members. All participants had registered with CAS as members. No questions were compulsory, so there are different numbers of responses for different questions.

2 Results

Results are presented question by question.

2.1 How familiar are you with the following qualifications?

The majority of respondents were familiar with the legacy and reformed GCSEs, and had experience of teaching the ECDL, or had read the specification. Of the vocational/technical qualifications, the OCR Level 1/2 Cambridge National Certificate in IT was the most commonly taught.

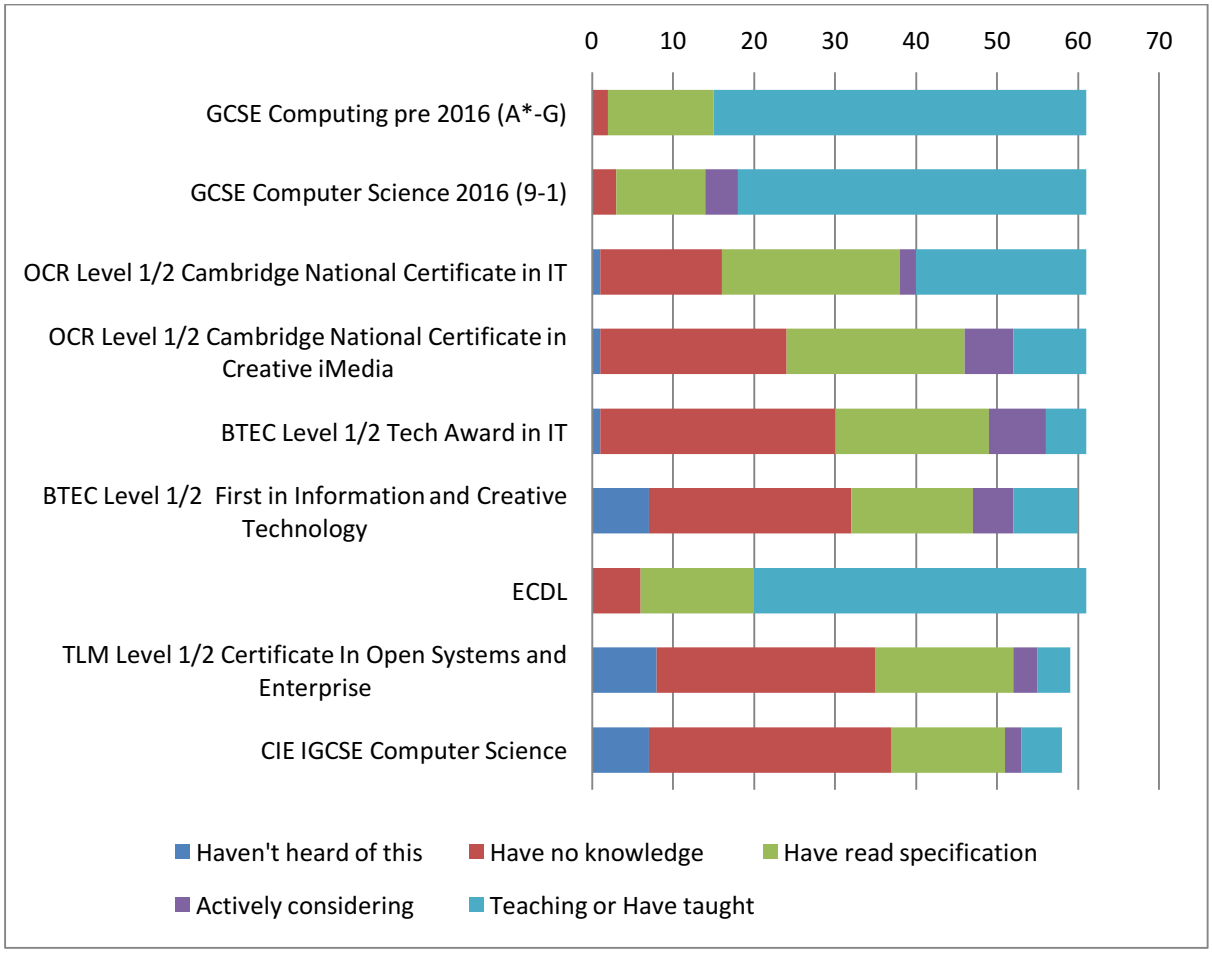

Figure 1: Familiarity with qualifications.

Table 1: Familiarity with qualifications.

Qualification	Haven't heard of this	Have no knowledge	Have read specification	Actively considering	Teaching or Have taught	(blank)	Grand Total
GCSE Computing pre 2016 (A*-G)		2	13		46		61
GCSE Computer Science 2016 (9-1)		3	11	4	43		61
OCR Level 1/2 Cambridge National Certificate in IT	1	15	22	2	21		61
OCR Level 1/2 Cambridge National Certificate in Creative iMedia	1	23	22	6	9		61
BTEC Level 1/2 Tech Award in IT	1	29	19	7	5		61
BTEC Level 1/2 First in Information and Creative Technology	7	25	15	5	8		60

ECDL		6	14		41		61
TLM Level 1/2 Certificate In Open Systems and Enterprise	8	27	17	3	4		59
CIE IGCSE Computer Science	7	30	14	2	5		58

Others: CiDA, Digital Technology CCEA, OCR Technicals in Information Technology Level 2, Applied ICT, AVCE, GNVQ, DIDA, AIDA.

2.2 What is your role in your school? (select all that are appropriate)

Respondents were typically subject leaders for computing or ICT.

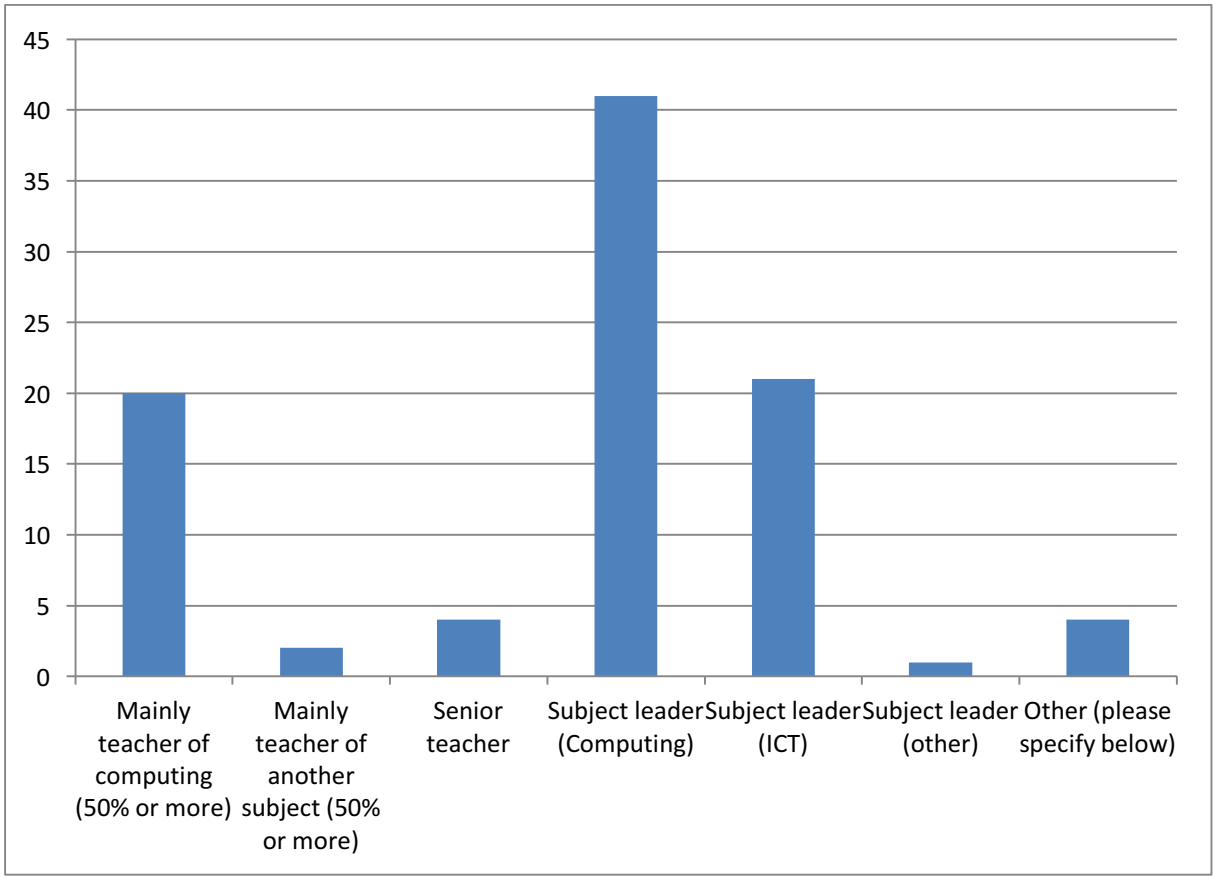

Figure 2: Respondents' role in their school.

Table 2: Respondents' role in their school.

Role	Frequency
Mainly teacher of computing (50% or more)	20
Mainly teacher of another subject (50% or more)	2
Senior teacher	4
Subject leader (Computing)	41
Subject leader (ICT)	21
Subject leader (other)	1
Other (please specify below)	4
Total	93

2.3 What type of school or college do you work in?

The majority of respondents worked in either comprehensive or non-selective schools. Although the percentage of respondents from independent schools appears to be larger than the percentage of independent nationally, this is reasonably representative of the percentage of independent schools offering GCSE computer science nationally – estimate based on Gill, 2017.

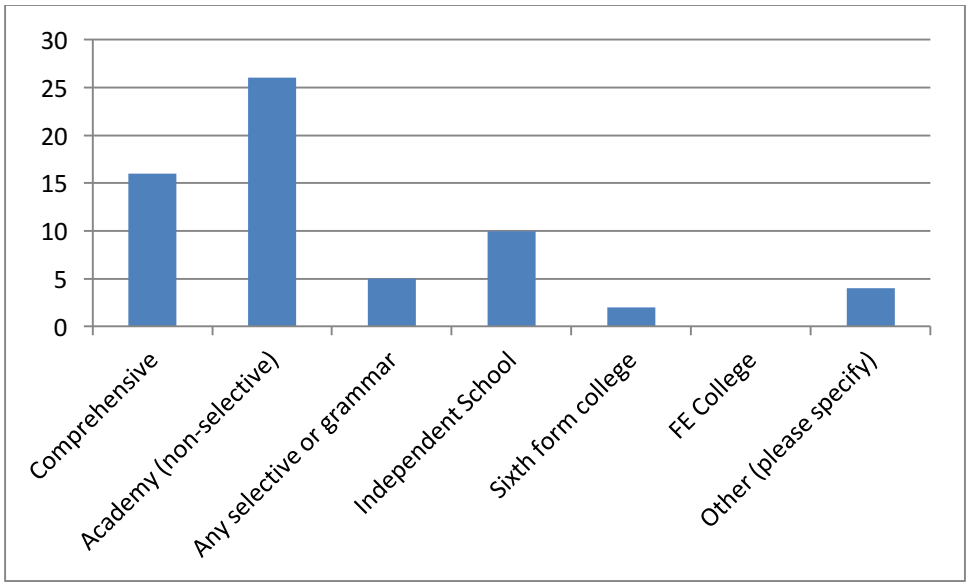

Figure 3: School or college type.

Table 3: School or college type.

School Type	Frequency
Comprehensive	16
Academy (non-selective)	26
Any selective or grammar	5
Independent School	10
Sixth form college	2
FE College	0
Other (please specify)	4

2.4 What is the age range of students in your school?

The majority of respondents taught in 11-18 schools, but with a significant minority of respondents who taught in 11-16 schools.

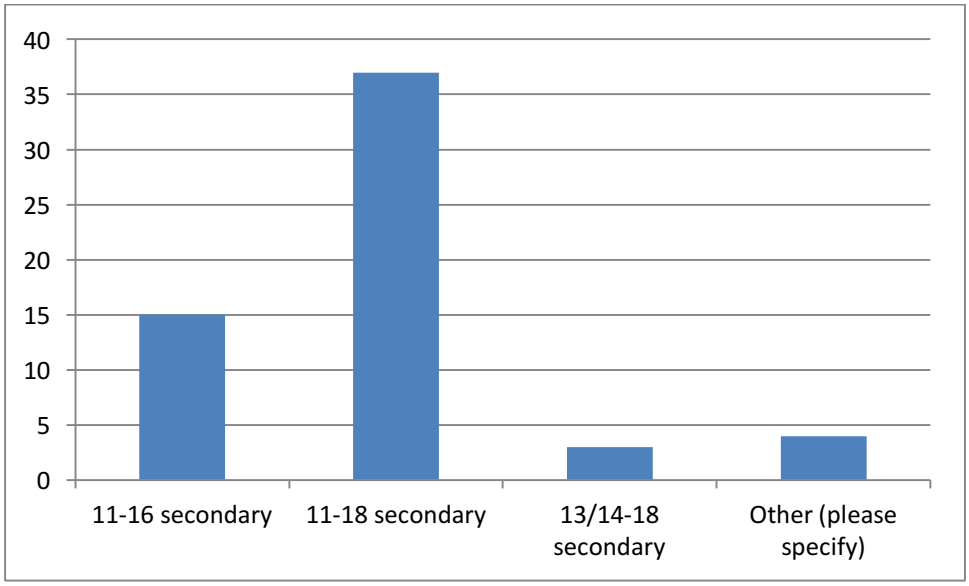

Figure 4: Age range of students in respondents' schools.

Table 4: Age range of students in respondents' schools.

Age Range	Frequency
11-16 secondary	15
11-18 secondary	37
13/14-18 secondary	3
Other (please specify)	4
Grand Total	59

2.5 How would you describe your background? (Please select all that apply)

Participants were asked to describe their subject background. Just over half of respondents had a degree in either computer science or IT/ICT. However, the majority had had teacher training specialising in either computer science or IT/ICT, and nearly all considered themselves to be specialist teachers of computer science or IT/ICT.

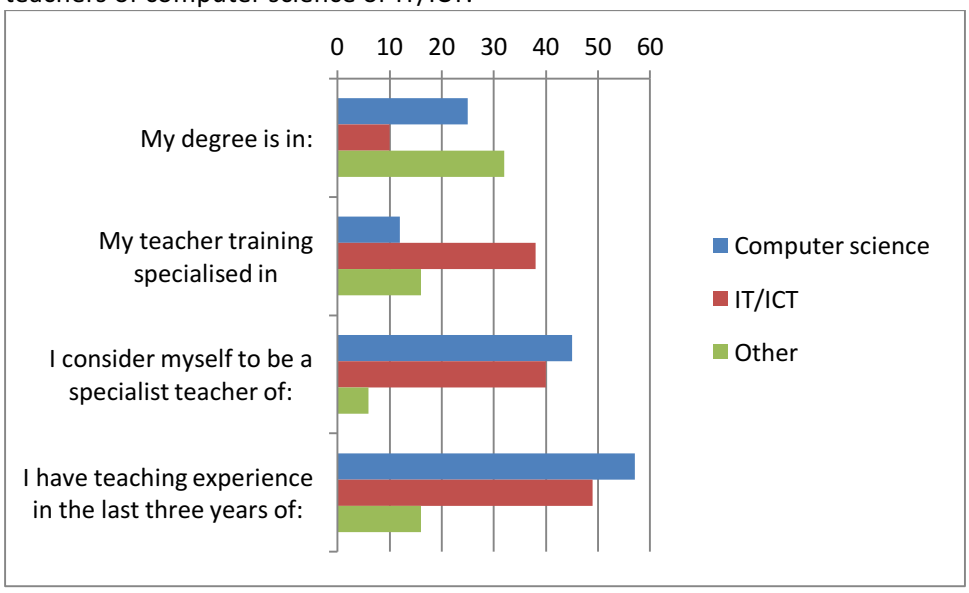

Figure 5: Respondents' subject background.

Table 5: Respondents' subject background.

	My degree is in:	My teacher training specialised in	I consider myself to be a specialist teacher of:	I have teaching experience in the last three years of:
Computer science	25	12	45	57
IT/ICT	10	38	40	49
Other	32	16	6	16

Respondents indicated that they mostly felt confident to teach IT/ICT and computer science qualifications, though were less confident teaching at this level outside a qualification. Furthermore, respondents were less likely to be confident to teach computer science post-16 compared to IT/ICT.

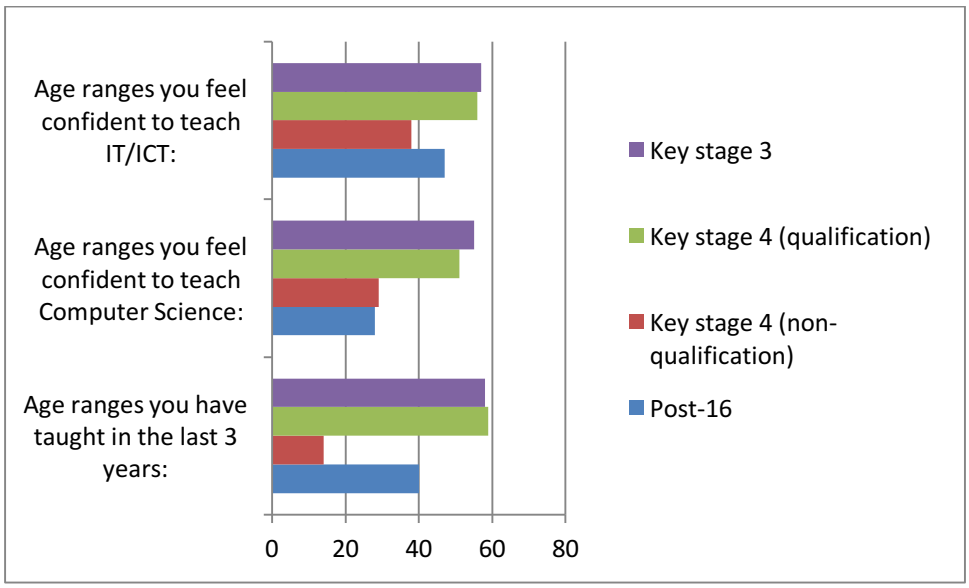

Figure 6: Age ranges respondents feel confident to teach.

Table 6: Age ranges respondents feel confident to teach.

Age ranges taught	Post-16	Key stage 4 (non-qualification)	Key stage 4 (qualification)	Key stage 3
Age ranges you have taught in the last 3 years:	40	14	59	58
Age ranges you feel confident to teach Computer Science:	28	29	51	55
Age ranges you feel confident to teach IT/ICT:	47	38	56	57

2.6 In your opinion, considering the whole KS4 cohort, why should students take an academic qualification in Computing or Computer Science at key stage 4?

Over half of respondents thought that every reason was important or very important. Developing interest in the subject, and developing computational thinking were considered to be the most important aims for studying computing or computer science at key stage 4, with developing digital literacy and programming skills considered to be nearly as important. Overall, progression to A level, employment, university or apprenticeships were considered to be important or very important by over half of respondents.

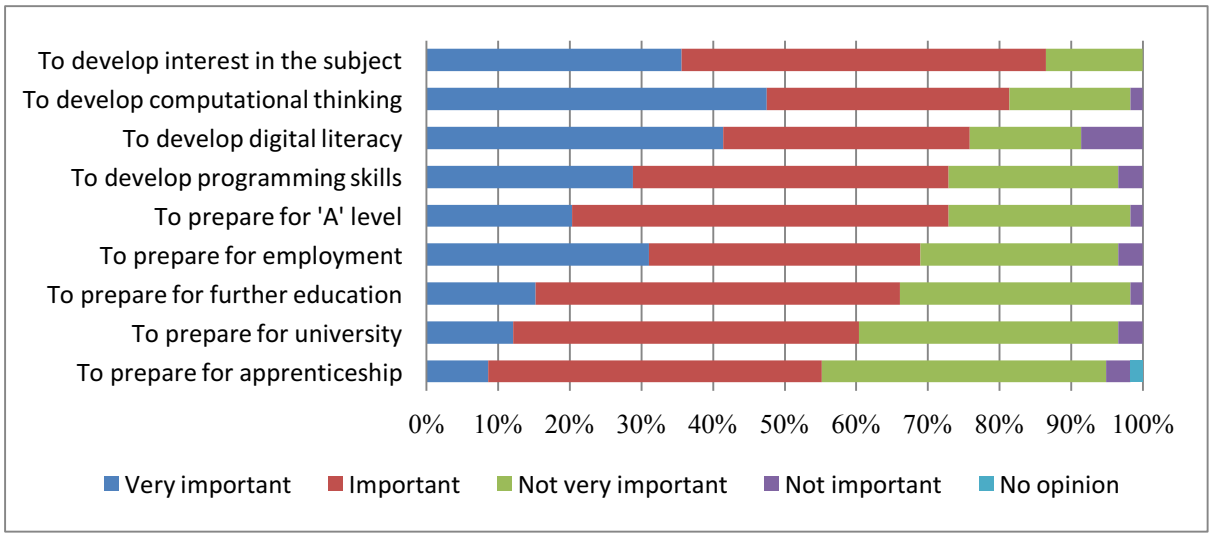

Figure 7: Why should students take an academic qualification in computing or computer science?

Other comments included: for enjoyment, to support modern careers in other areas.

Table 7: Why should students take an academic qualification in computing or computer science?

Reason	Very important	Important	Not very important	Not important	No opinion	Grand Total
To develop interest in the subject	21	30	8	0	0	59
To develop computational thinking	28	20	10	1	0	59
To develop digital literacy	24	20	9	5	0	58
To prepare for 'A' level	12	31	15	1	0	59
To develop programming skills	17	26	14	2	0	59
To prepare for employment	18	22	16	2	0	58
To prepare for further education	9	30	19	1	0	59
To prepare for university	7	28	21	2	0	58
To prepare for apprenticeship	5	27	23	2	1	58

2.7 In your opinion, why should students take a technical or vocational qualification in ICT/IT at key stage 4?

As expected, compared to GCSE computing/computer science, preparation for employment and apprenticeships was more likely to be considered to be important or very important. However, developing digital literacy was most likely to be rated as important or very important. Developing interest in the subject, although only the fourth most important reason for taking a technical or vocational qualification in ICT/IT, was still rated as important or very important by the same percentage of respondents as for academic qualifications in computer science. Similar ratings were also given for progression to further study or employment. However, developing computational thinking and programming skills was less likely to be considered important for vocational qualifications in ICT/IT compared to academic qualifications in computer science.

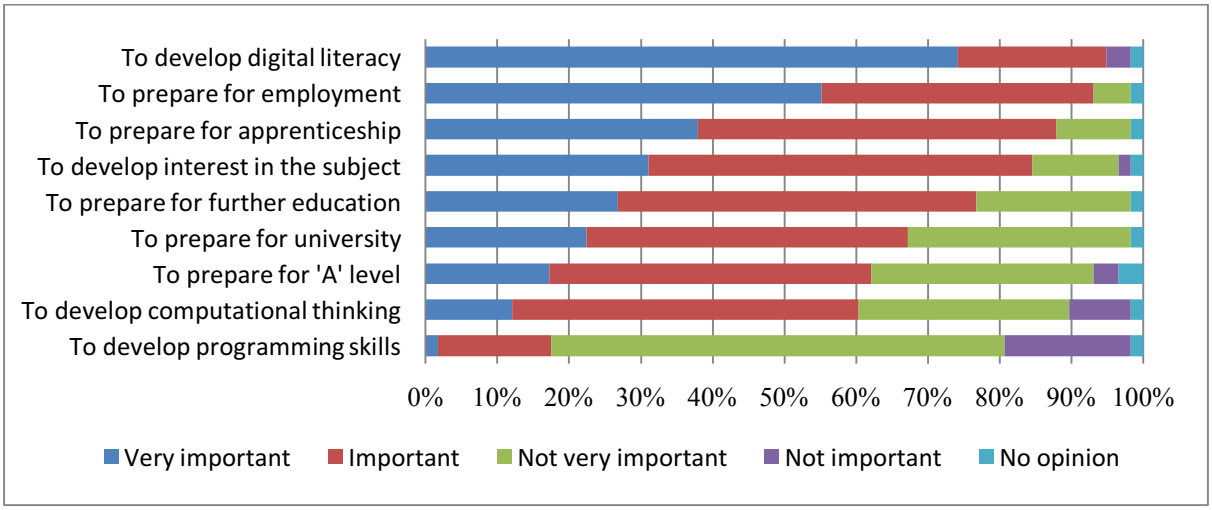

Figure 8: Why should students take a technical or vocational qualification in ICT/IT?

Other comments: learning how to use IT software and hardware is more important than being able to program.

Table 8: Why should students take a technical or vocational qualification in ICT/IT?

Reason	Very important	Important	Not very important	Not important	No opinion	Grand Total	Imp
To develop digital literacy	43	12		2	1	58	55
To prepare for employment	32	22	3		1	58	54
To prepare for apprenticeship	22	29	6		1	58	51
To develop interest in the subject	18	31	7	1	1	58	49
To prepare for further education	15	28	12		1	56	43
To prepare for university	13	26	18		1	58	39
To prepare for 'A' level	10	26	18	2	2	58	36
To develop computational thinking	7	28	17	5	1	58	35
To develop programming skills	1	9	36	10	1	57	10

2.8 For your current students, which qualifications have you offered?

Participants were asked which qualifications they have offered to their current Y9, and whether students in Y10 and Y11 were studying for these qualifications. Respondents were most likely to indicate that they offered the GCSE in computer science/computing. Entries for the ECDL are much lower for Y10 and Y9 students. Uptake of vocational/technical options was relatively low, and evenly spread across the range of qualifications suggested.

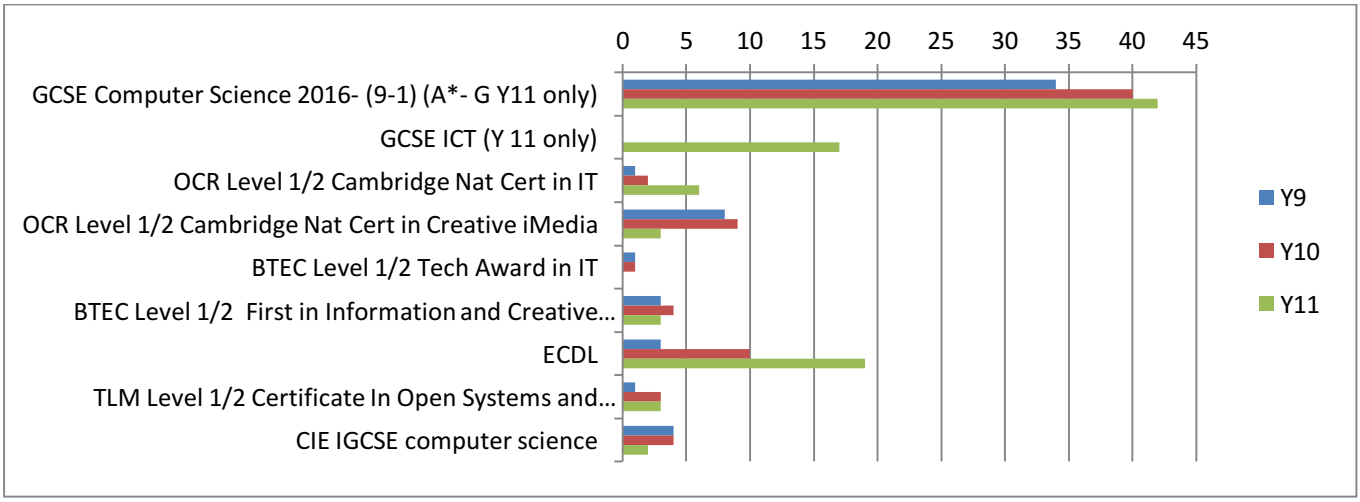

Figure 9: Which qualifications have you offered to each year group.

Table 9: Which qualifications have you offered to each year group.

Qualification	Y9	Y10	Y11
GCSE Computer Science 2016- (9-1) (A*- G Y11 only)	34	40	42
GCSE ICT (Y 11 only)			17
OCR Level 1/2 Cambridge National Certificate in IT	1	2	6
OCR Level 1/2 Cambridge National Certificate in Creative iMedia	8	9	3
BTEC Level 1/2 Tech Award in IT	1	1	0
BTEC Level 1/2 First in Information and Creative Technology	3	4	3
ECDL	3	10	19
TLM Level 1/2 Certificate In Open Systems and Enterprise	1	3	3
CIE IGCSE computer science	4	4	2

2.9 To what extent did the following factors encourage or discourage you to offer the new GCSE Computer Science (9-1)?

Staff knowledge, confidence and availability were among the factors which encouraged respondents to offer GCSE computer science (9-1). However, since the questionnaire was only sent to GCSE computer science or IT/ICT teachers, this is perhaps not surprising. Supporting progression to A level encouraged teachers to offer the new GCSE computer science. The level of difficulty or demand discouraged about 40% of respondents.

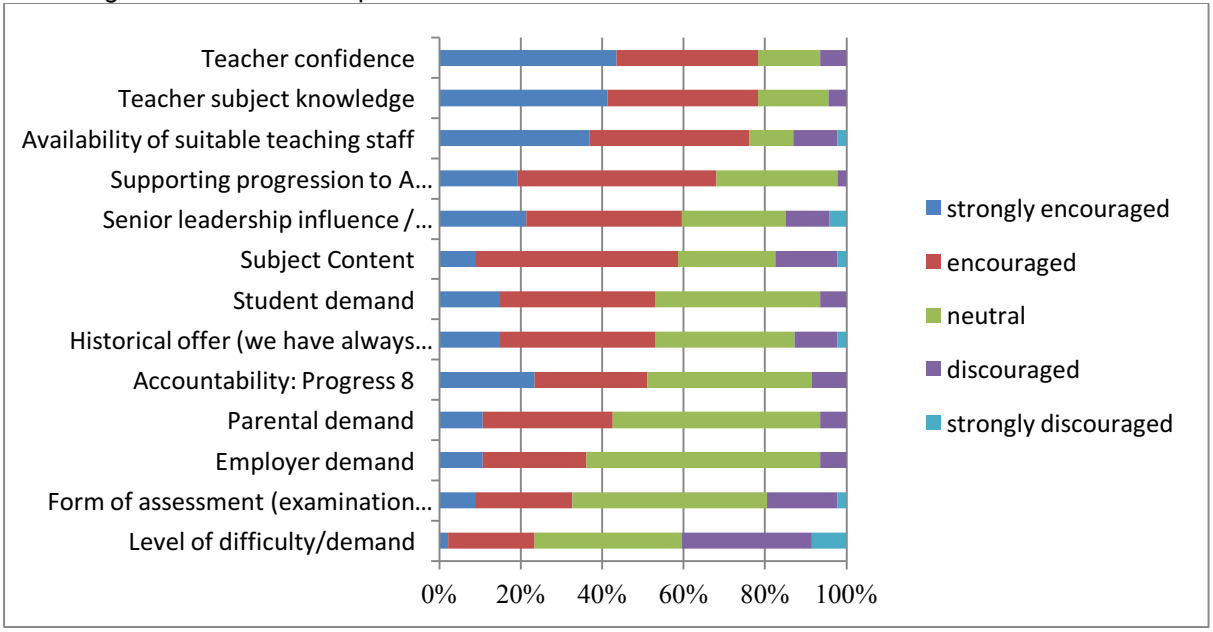

Figure 10: Factors which encouraged or discouraged teachers to offer GCSE computer science (9-1) qualifications.

Table 10: Factors which encouraged or discouraged teachers to offer GCSE computer science (9-1) qualifications.

Factor	strongly encouraged	encouraged	neutral	discouraged	strongly discouraged	Total
Teacher subject knowledge	19	17	8	2		46
Teacher confidence	20	16	7	3		46
Availability of suitable teaching staff	17	18	5	5	1	46
Supporting progression to A level/other qualifications	9	23	14	1		47
Senior leadership influence / School policy	10	18	12	5	2	47
Subject Content	4	23	11	7	1	46
Historical offer (we have always offered CS)	7	18	16	5	1	47
Student demand	7	18	19	3		47
Accountability: Progress 8	11	13	19	4		47
Parental demand	5	15	24	3		47
Employer demand	5	12	27	3		47
Form of assessment (examination and coursework)	4	11	22	8	1	46
Level of difficulty/demand	1	10	17	15	4	47

2.10 To what extent did the following factors encourage or discourage you to offer vocational/technical qualifications in Computing or ICT?

In contrast to GCSE computer science (9-1), the level of difficulty or demand was more likely to encourage respondents to offer vocational/technical qualifications in computing or ICT. Even though vocational/technical qualifications are not necessarily designed to directly support progression to an A level, still about half of respondents indicated that supporting progression to A level encouraged them to offer these qualifications. Similarly, respondents were more positive about the forms of assessment for vocational/technical qualifications compared to GCSE computer science (9-1).

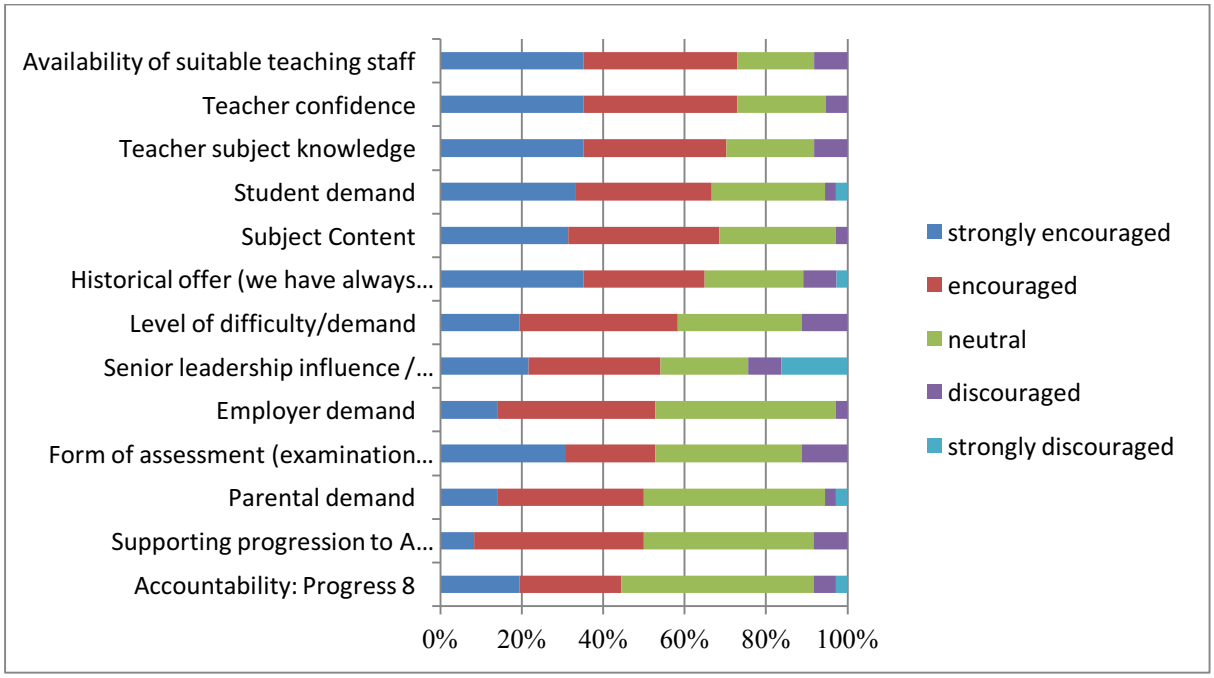

Figure 11: Factors which encouraged or discouraged teachers to offer vocational/technical qualifications in computing or ICT.

Table 11: Factors which encouraged or discouraged teachers to offer vocational/technical qualifications in computing or ICT.

Factor	strongly encouraged	encouraged	neutral	discouraged	strongly discouraged	Total
Teacher confidence	13	14	8	2		37
Availability of suitable teaching staff	13	14	7	3		37
Teacher subject knowledge	13	13	8	3		37
Historical offer (we have always offered a vocational option)	13	11	9	3	1	37
Subject Content	11	13	10	1		35
Student demand	12	12	10	1	1	36
Level of difficulty/demand	7	14	11	4		36
Senior leadership influence / School policy	8	12	8	3	6	37
Form of assessment (examination and coursework)	11	8	13	4		36
Employer demand	5	14	16	1		36
Supporting progression to A level/other qualifications	3	15	15	3		36
Parental demand	5	13	16	1	1	36
Accountability: Progress 8	7	9	17	2	1	36

2.11 What factors, if any, limit the number of pupils taking a computing qualification in your school or college at key stage 4?

Option constraints were considered to be an important limiting factor for the number of pupils taking a computing qualification. Members of the CAS Assessment Working Group suggested that GCSE computer science (9-1) is often put in the same option block as separate sciences, so students are forced to choose between taking three separate sciences and GCSE computer science. Additionally, a shortage of teachers limited the number of students who could take a computing qualification. Relatively few respondents indicated that a shortage of accommodation (e.g. computing laboratories) or technical support was a limiting factor.

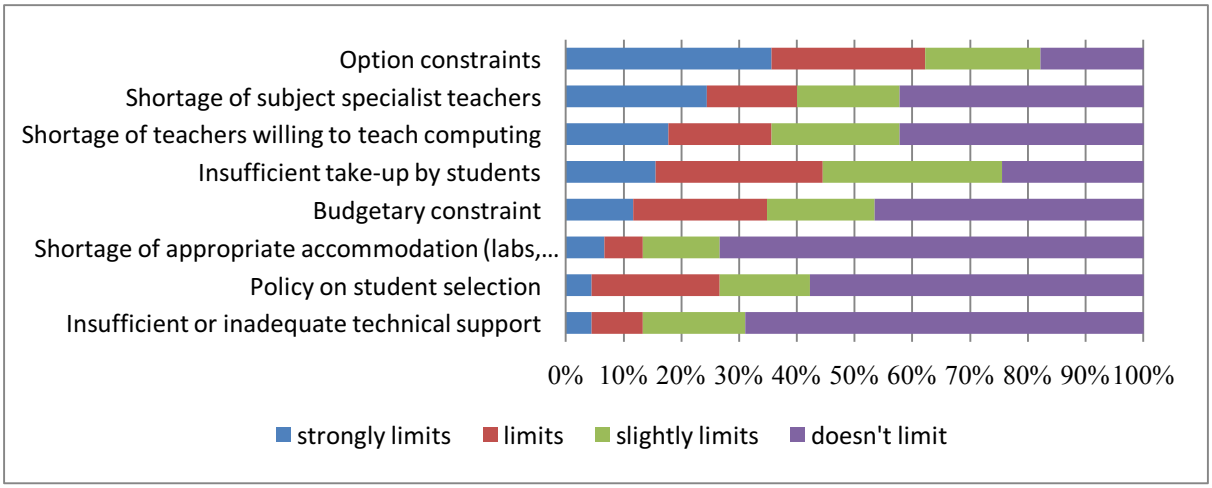

Figure 12: Factors limiting the number of pupils taking a computing qualification in your school or college at key stage 4.

Table 12: Factors limiting the number of pupils taking a computing qualification in your school or college at key stage 4.

Factor	strongly limits	limits	slightly limits	doesn't limit	Grand Total
Option constraints	16	12	9	8	47
Shortage of subject specialist teachers	11	7	8	19	47
Shortage of teachers willing to teach computing	8	8	10	19	47
Insufficient take-up by students	7	13	14	11	45
Budgetary constraint	5	10	8	20	45
Shortage of appropriate accommodation (labs, etc.)	3	3	6	33	47
Insufficient or inadequate technical support	2	4	8	31	47
Policy on student selection	2	10	7	26	45

2.12 What factors influence students' decisions to take a qualification in Computer Science/IT at key stage 4?

Student experience of the subject at key stage 3 was considered to exert a strong influence on students' decisions to take a computing qualification at key stage 4, or not, as was the level of interest in the subject, and an understanding of what the subject entails. Respondents believed that factors relating to the teachers such as their enthusiasm and the profile of the computing department were also important. Forms of assessment, while considered important by a substantial minority of respondents, were considered to be relatively less important.

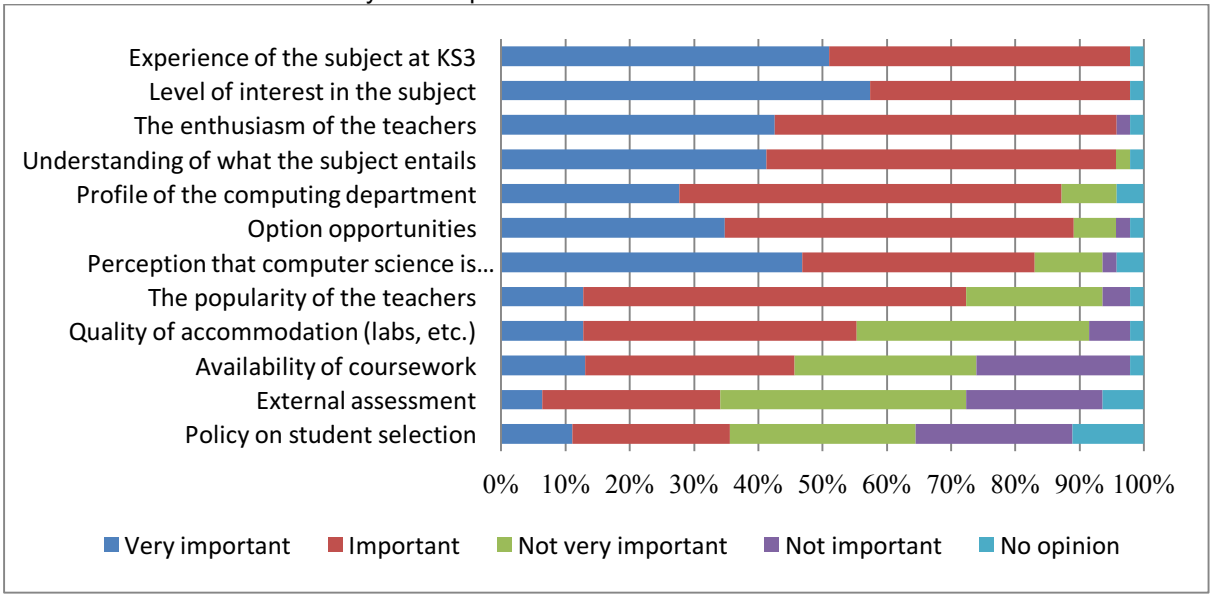

Figure 13: Factors influence student decisions to take a qualification in computer science/IT at key stage 4.

Table 13: Factors influence student decisions to take a qualification in computer science/IT at key stage 4.

Factor	Very import-ant	Import-ant	Not very import-ant	Not import-ant	No opinion	Grand Total
Level of interest in the subject	27	19			1	47
Experience of the subject at KS3	24	22			1	47
The enthusiasm of the teachers	20	25		1	1	47
Understanding of what the subject entails	19	25	1		1	46
Option opportunities	16	25	3	1	1	46
Profile of the computing department	13	28	4		2	47
Perception that computer science is difficult/demanding	22	17	5	1	2	47
The popularity of the teachers	6	28	10	2	1	47
Quality of accommodation (labs, etc.)	6	20	17	3	1	47
Availability of coursework	6	15	13	11	1	46
Policy on student selection	5	11	13	11	5	45
External assessment	3	13	18	10	3	47

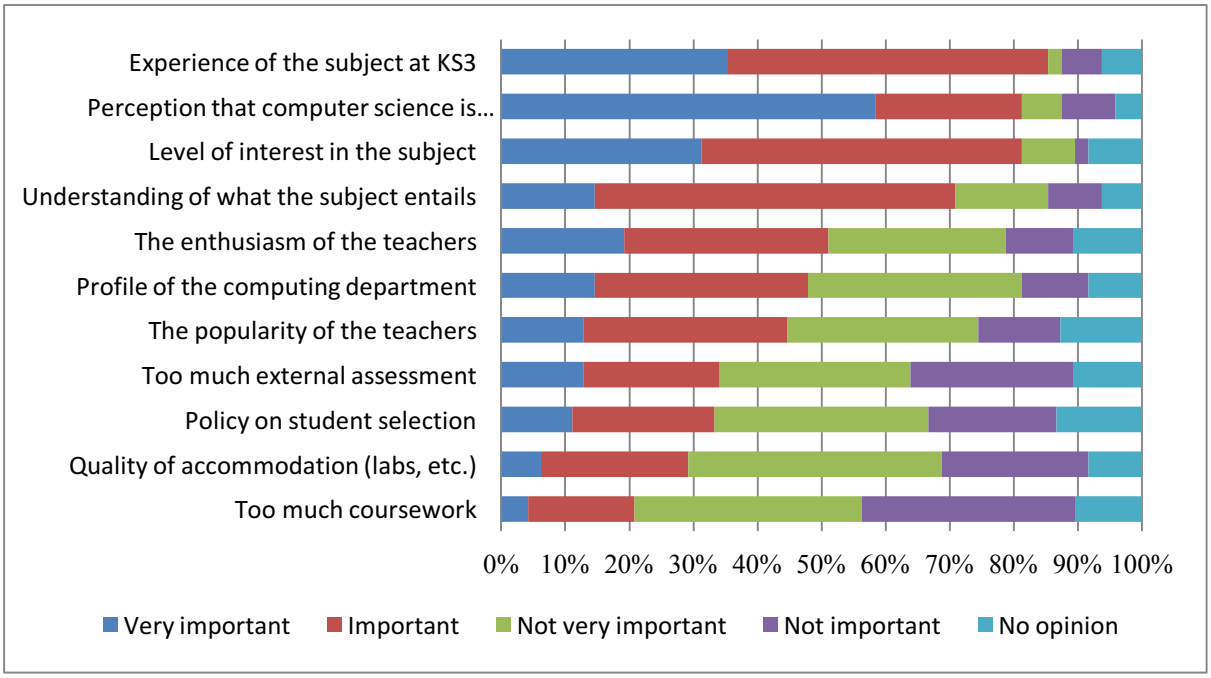

Figure 14: Factors influence student decisions not to take a qualification in computer science/IT at key stage 4.

Table 14: Factors influence student decisions not to take a qualification in computer science/IT at key stage 4.

Factor	Very import-ant	Import-ant	Not very important	Not import-ant	No opinion	Grand Total
Experience of the subject at KS3	17	24	1	3	3	48
Level of interest in the subject	15	24	4	1	4	48
Perception that computer science is difficult/demanding	28	11	3	4	2	48
Understanding of what the subject entails	7	27	7	4	3	48
The enthusiasm of the teachers	9	15	13	5	5	47
Profile of the computing department	7	16	16	5	4	48
The popularity of the teachers	6	15	14	6	6	47
Too much external assessment	6	10	14	12	5	47
Policy on student selection	5	10	15	9	6	45
Quality of accommodation (labs, etc.)	3	11	19	11	4	48
Too much coursework	2	8	17	16	5	48

2.13 How does your school decide who should take qualifications in computer science/ICT?

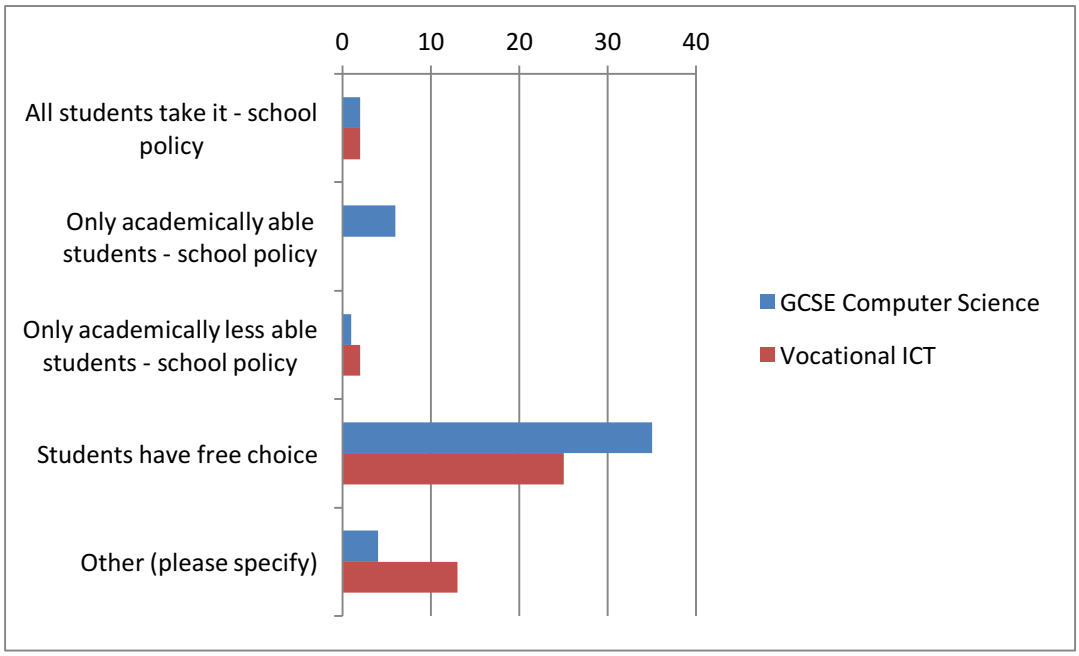

Figure 15: School policy on who should take qualifications in computer science/ICT.

Table 15: School policy on who should take qualifications in computer science/ICT.

Qualification	GCSE Computer Science	Vocational ICT	Grand Total
All students take it - school policy	2	2	4
Only academically able students - school policy	6		6
Only academically less able students - school policy	1	2	3
Students have free choice	35	25	60
Other (please specify)	4	13	17

2.14 To what extent do you agree with these statements relating to the delivery of computing qualifications?

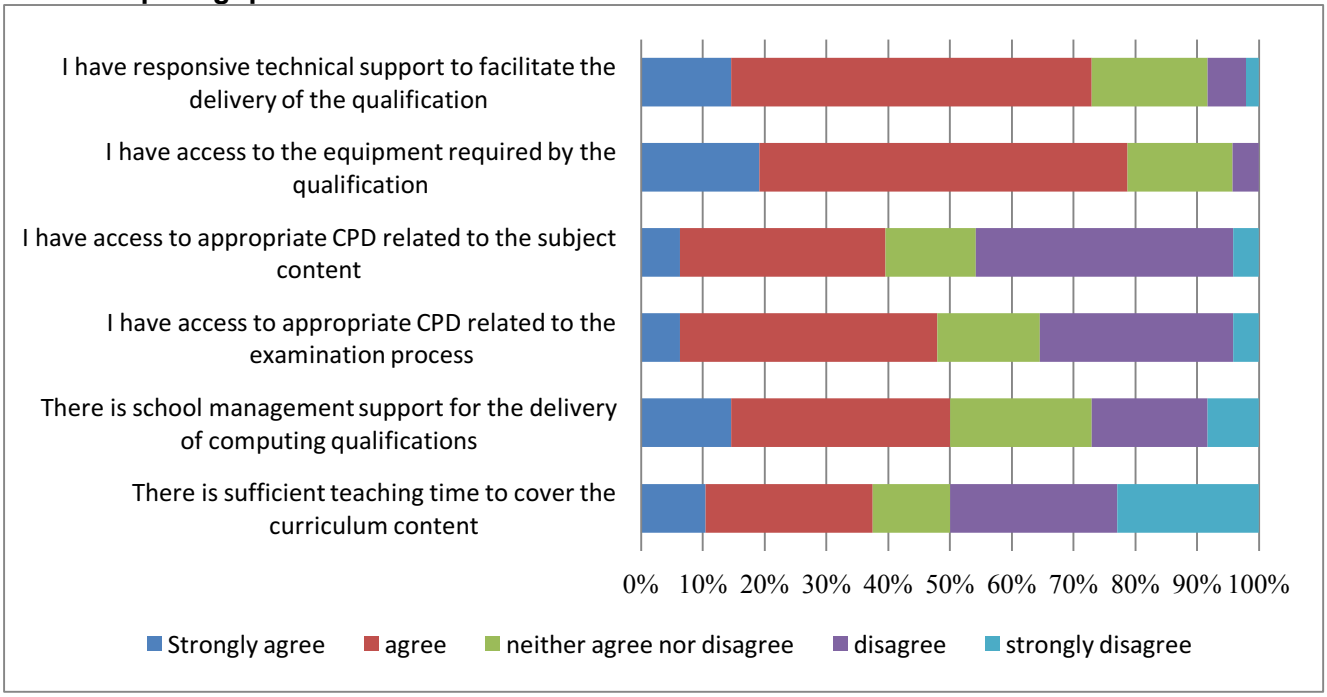

Figure 17: Statements on the delivery of key stage 4 computing qualifications.

Table 17: Statements on the delivery of key stage 4 computing qualifications.

Statement	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	Grand Total
There is sufficient teaching time to cover the curriculum content	5	13	6	13	11	48
There is school management support for the delivery of computing qualifications	7	17	11	9	4	48
I have access to appropriate CPD related to the examination process	3	20	8	15	2	48
I have access to appropriate CPD related to the subject content	3	16	7	20	2	48
I have access to the equipment required by the qualification	9	28	8	2		47
I have responsive technical support to facilitate the delivery of the qualification	7	28	9	3	1	48

2.15 A range of different assessment models are currently used to assess computing at key stage 4. To what extent do you think that the following assessment models could have a positive or negative impact on teaching and learning?

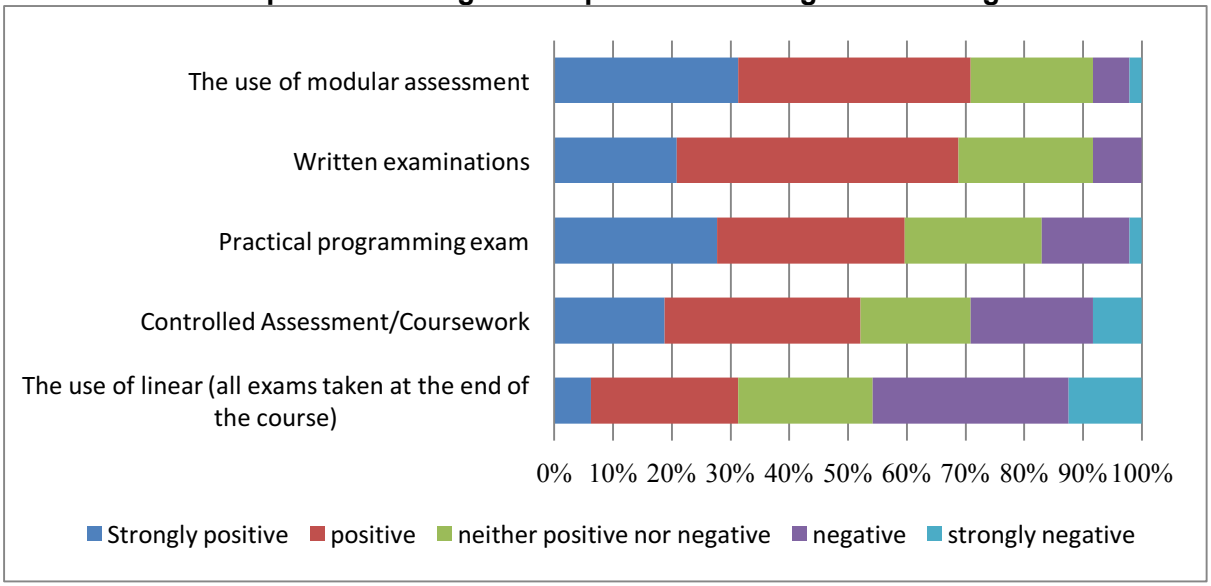

Figure 18: Impact of assessment models on teaching and learning.

Table 18: Impact of assessment models on teaching and learning.

Assessment form	Strongly positive	positive	neither positive nor negative	negative	strongly negative	Grand Total
The use of modular assessment	15	19	10	3	1	48
Written examinations	10	23	11	4		48
Practical programming exam	13	15	11	7	1	47
Controlled Assessment/Coursework	9	16	9	10	4	48
The use of linear (all exams taken at the end of the course)	3	12	11	16	6	48

2.16 Which, if any, of these assessment methods do you think support reliable and valid assessment at key stage 4?

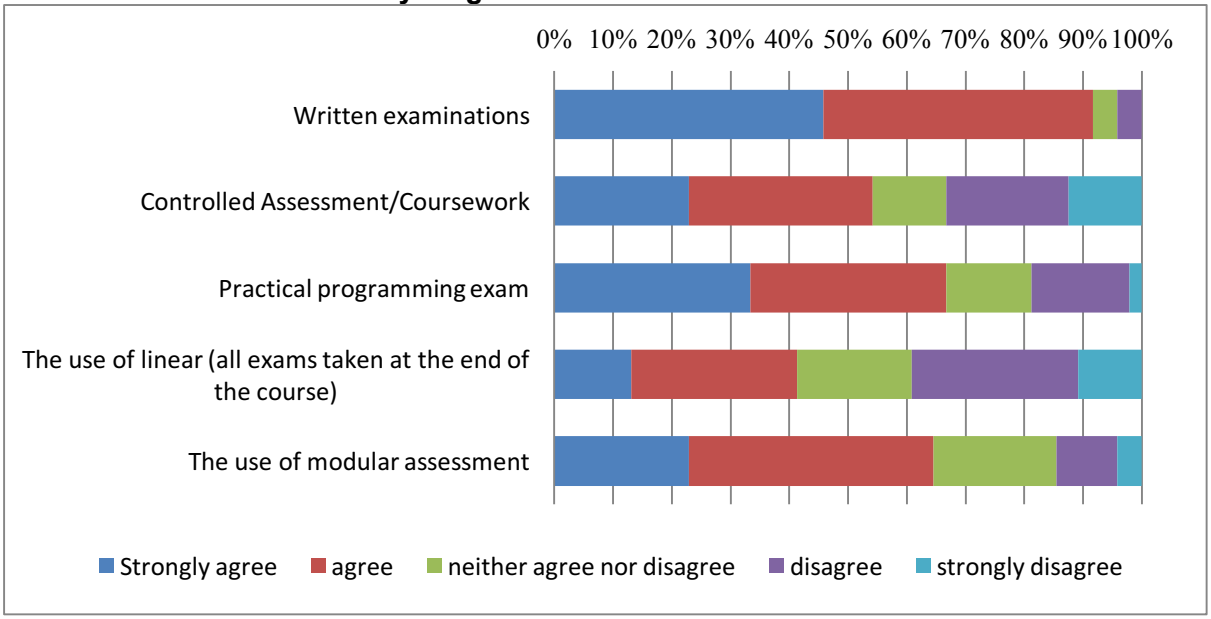

Figure 19: Impact of assessment methods on reliable and valid assessment at key stage 4.

Table 19: Impact of assessment methods on reliable and valid assessment at key stage 4.

Row Labels	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	Grand Total
Written examinations	22	22	2	2		48
Controlled Assessment/Coursework	11	15	6	10	6	48
Practical programming exam	16	16	7	8	1	48
The use of linear (all exams taken at the end of the course)	6	13	9	13	5	46
The use of modular assessment	11	20	10	5	2	48

2.17 What, if any, are the challenges associated with delivering NEA/coursework/controlled assessments at key stage 4?

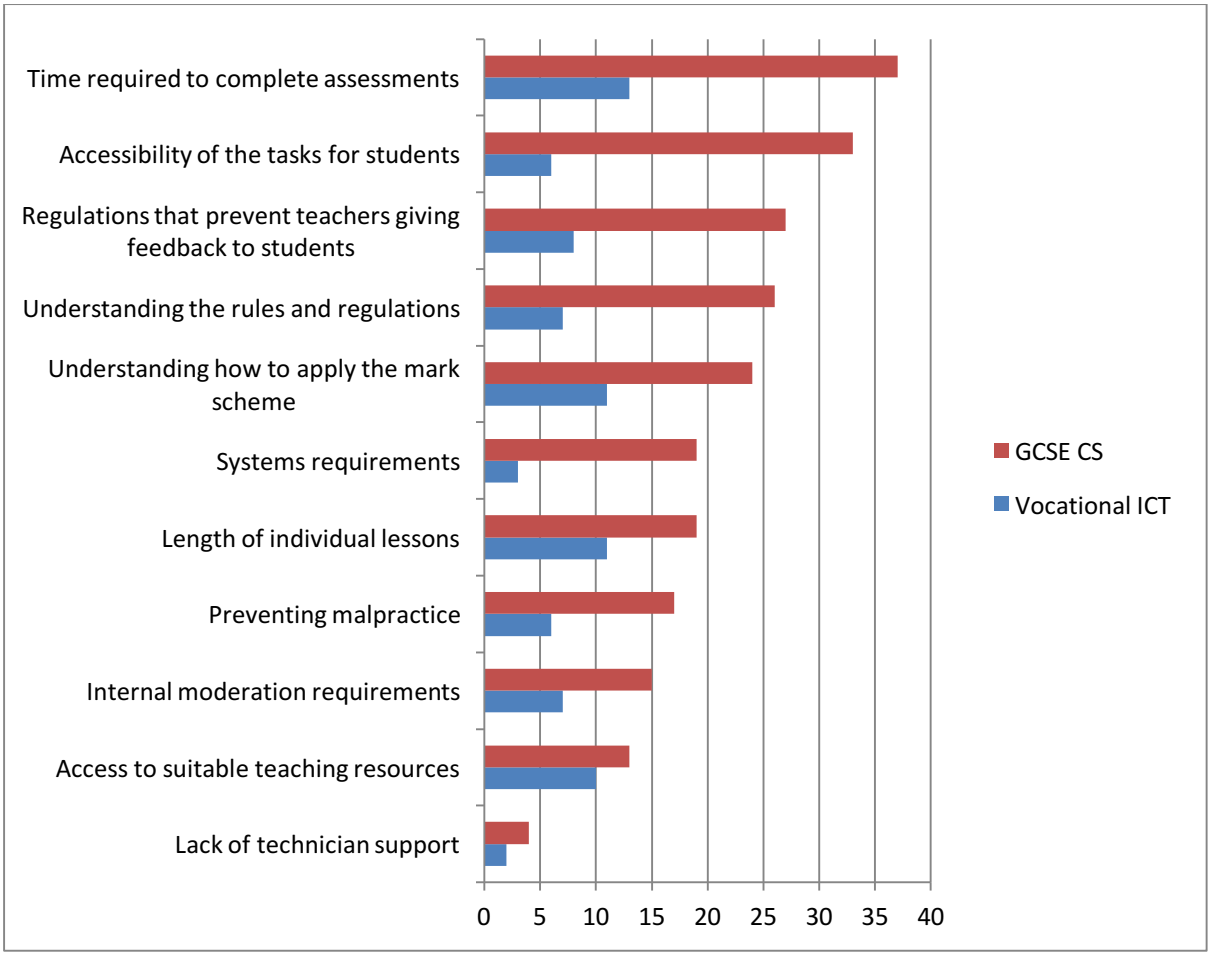

Figure 20: Challenges associated with delivering NEA/coursework/controlled assessments at key stage 4.

Table 20: Challenges associated with delivering NEA/coursework/controlled assessments at key stage 4.

	Vocational ICT	GCSE CS
Lack of technician support	**2**	4
Access to suitable teaching resources	**10**	13
Internal moderation requirements	**7**	**15**
Preventing malpractice	**6**	**17**
Length of individual lessons	**11**	**19**
Systems requirements	**3**	**19**
Understanding how to apply the mark scheme	**11**	24
Understanding the rules and regulations	**7**	26
Regulations that prevent teachers giving feedback to students	**8**	27
Accessibility of the tasks for students	**6**	33
Time required to complete assessments	**13**	**37**

2.18 The reformed science A levels and GCSEs have adopted a new model of assessment for practical skills that is not examined. Instead of completing a single assessment, students must complete practical activities from topics across the specification, rather than a fixed task set by the examination board. Performance on these activities does not count towards the main grade, except where assessed on the written papers. To what extent do you think it would be worth exploring alternative assessment models similar to science for computer science and ICT qualifications.

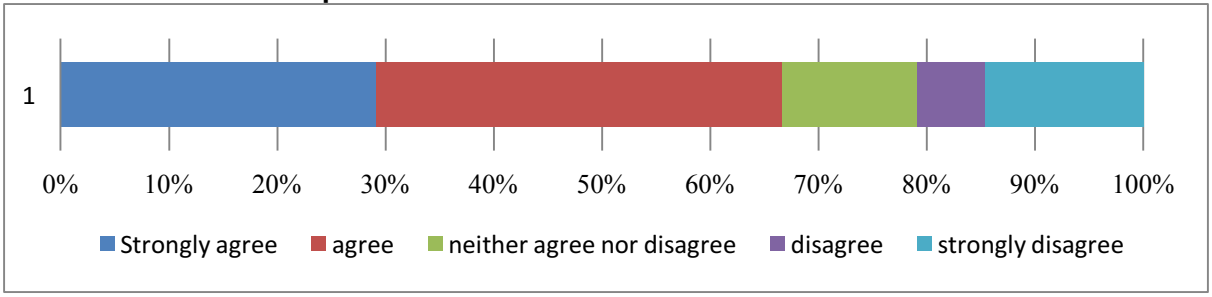

Figure 21: Level of agreement about exploring alternative assessment models similar to science for computer science and ICT qualifications.

Table 21: Level of agreement about exploring alternative assessment models similar to science for computer science and ICT qualifications.

Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	Grand Total
14	18	6	3	7	48

2.19 Is your school able to offer qualifications that are not on the current Progress 8 or similar accountability measure?

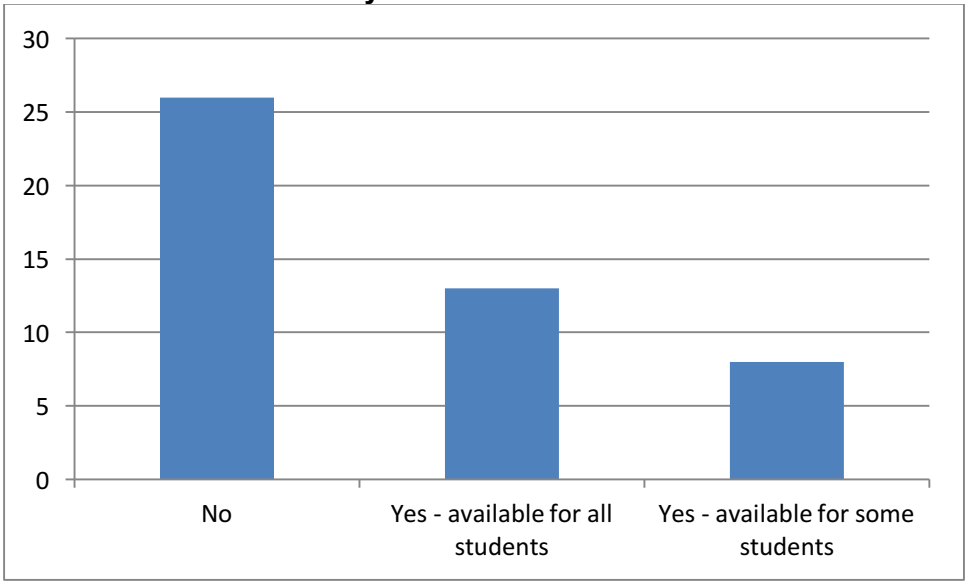

Figure 22: Ability of schools to offer qualifications that are not on the current Progress 8 or similar accountability measures.

Table 22: Ability of schools to offer qualifications that are not on the current Progress 8 or similar accountability measures.

No	Yes - available for all students	Yes - available for some students	Grand Total
26	13	8	47

2.20 What range of computing qualifications do you think should be available at key stage 4? Please tick all that apply.

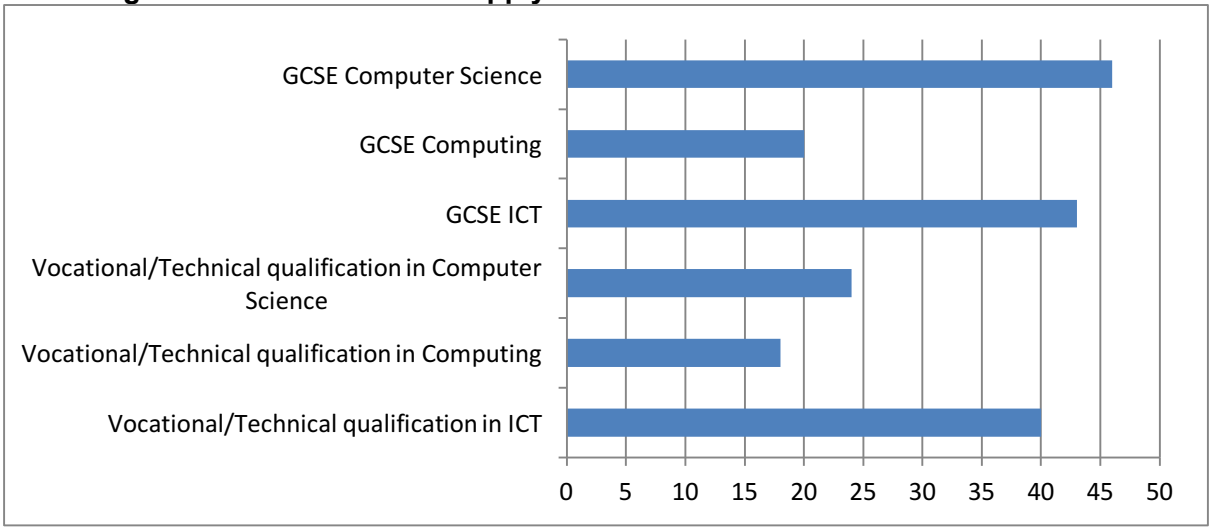

Figure 23: Range of computing qualifications which respondents think should be available at key stage 4.

Table 23: Range of computing qualifications which respondents think should be available at key stage 4.

48 respondents	
Vocational/Technical qualification in ICT	**40**
Vocational/Technical qualification in Computing	**18**
Vocational/Technical qualification in Computer Science	**24**
GCSE ICT	**43**
GCSE Computing	**20**
GCSE Computer Science	**46**

	Count of Response value
["GCSE Computer Science", "GCSE Computing", "GCSE ICT", "Vocational/Technical qualification in Computer Science", "Vocational/Technical qualification in Computing", "Vocational/Technical qualification in ICT"]	9
["GCSE Computer Science", "GCSE Computing", "GCSE ICT", "Vocational/Technical qualification in Computing", "Vocational/Technical qualification in ICT"]	1
["GCSE Computer Science", "GCSE Computing", "GCSE ICT", "Vocational/Technical qualification in ICT"]	4
["GCSE Computer Science", "GCSE Computing", "GCSE ICT"]	4
["GCSE Computer Science", "GCSE Computing", "Vocational/Technical qualification in ICT"]	1
["GCSE Computer Science", "GCSE ICT", "Vocational/Technical qualification in Computer Science", "Vocational/Technical qualification in Computing", "Vocational/Technical qualification in ICT"]	2

["GCSE Computer Science", "GCSE ICT", "Vocational/Technical qualification in Computer Science", "Vocational/Technical qualification in ICT"]	13
["GCSE Computer Science", "GCSE ICT", "Vocational/Technical qualification in Computing", "Vocational/Technical qualification in ICT", "Other (please specify)"]	2
["GCSE Computer Science", "GCSE ICT", "Vocational/Technical qualification in Computing", "Vocational/Technical qualification in ICT"]	2
["GCSE Computer Science", "GCSE ICT", "Vocational/Technical qualification in ICT"]	3
["GCSE Computer Science", "GCSE ICT"]	2
["GCSE Computer Science", "Vocational/Technical qualification in ICT"]	1
["GCSE Computer Science"]	2
["GCSE Computing", "Vocational/Technical qualification in Computing", "Vocational/Technical qualification in ICT"]	1
["GCSE ICT", "Vocational/Technical qualification in Computing", "Vocational/Technical qualification in ICT"]	1

2.21 Do you have any other comments about key stage 4 qualifications and assessments?

Benefits of ICT
Several respondents commented on the benefits of ICT.

> *Modular assessment worked. GCSE ICT needed reforming, not destroying. Now we are in a position where less students are taking computing related qualifications than previously. We all predicted this and nobody listened.*

> *Give school choices to learn real world ICT/Computing.*
> *The current offer is too narrow. Not all students are/want to be super geeks. They want to apply knowledge*

> *Al students must know how to drive the applications on a computer (i.e. ICT) and do basic fault finding for the computer and a home network, only those who WANT to should be studying Computer Science. Currently we have reverted (from September 2017) to a situation where students will be able to arrive at school in Year 9 and leave at the end of Year 13 NEVER having had a lesson in the use of ICT. A similar issue arises at primary and Middle schools now with the increased use of tablets. Should we really have to be teaching a 13 year old how to use a mouse?!! It has happened.*

> *I think the scrapping of GCSE ICT is a huge mistake. It certainly needed reforming to include content such as cyber security but without any ICT students are not equipped for further education, employment or university. ICT offers essential skills which are in high demand. ICT is also more creative and can offer students skills such as video, sound and image editing, website design (there is a skills shortage in this area) and animation. Students are now losing every day software skills which employers need employees to have. Year 7 are coming into secondary school with hardly any IT skills at all; they can't copy, paste, save, create documents etc. This is going to lead to a digitally illiterate population in a few years. IT skills should be taught but schools are dropping this subject due to the huge push by the DFE on Computer Science. All students will need good IT skills, very few will need to use programming, data representation, networking etc. after school. A new GCSE IT is needed - maybe covering digital marketing, cyber security and software skills?*

Assessment
Respondents expressed a range of views about assessment.

> *We do ECDL at yr9 to provide all of our students with a basic qualification and skills in digital literacy*
> *We use the CIE ICT iGCSE because it allows us to give a good grounding for people who may or may not go on to A Level but who will end up using computers in higher education and employment*
> *We use the OCR A Level Computer Science for those students who are interested and have the inclination and dedication to pursue the subject.*

> *NEA is a millstone around students and teacher's necks. The level of challenge involved is approximately equivalent to that on the first year of my CS degree, and the rules around feedback, resource banks, etc. are unenforceable. I firmly believe that many centres are guilty of malpractice under the current regulations and fear this will only be worse under the new regime. In some cases centres will be 'criminalised' for minor, or even appropriate, decisions regarding support and feedback for students. Some centres will go too far and provide support that is clearly overstepping the rules. This leave centres that stick rigidly to the rules at a disadvantage - and more importantly it leaves their students at a disadvantage. NEA should either be open ended, as was originally envisioned, with the freedom for pupils to work over a*

period of time in a realistic manner, or if this is not manageable or effective then the NEA should go. The new rules are stressful and scary for experienced and confident teachers - I cannot imagine how daunting it must be for those teachers who are not yet confident in delivering programming skills, computational thinking and justifying their results to a potentially aggressive and pressurising SLT.
The AQA A Level model of a practical exam is one that should be seriously considered. Not as a replacement to the Paper 2, as WJEC have done with their GCSE, but as a replacement for the NEA. This year's AQA AS Paper 1 was more accessible than the OCR SAM NEA for J276 and the level of expectation in the NEA is completely unrealistic.

The pace of change has been huge. Decisions have been made far too late in the academic year for teachers who have had to work very hard in holiday times to compensate. Communication from Exam Boards to teachers has not been good, leaving us with little information and too late on for us to act on it.

I think what is being asked in reasonable. I don't think that the teachers exist to be able to deliver the content.

I teach in Northern Ireland and don't know what Progress 8 is?
Hopefully we won't get a Sinn Fein Minister for Education - as if we do they will say we can't do English GCSEs and I will be stuff with the worrying specification CEA has made up...

Level of difficulty
Some respondents expressed concern about the level of difficulty of qualifications.

Too much content for the time available, especially considering the starting point of KS3 only being 1 hour per week. Both A-level and GCSE Computer Science are seen as too difficult by students and some of the content is painful/dull.

They are not popular because they are mainly deemed to be too hard compared to other option choices available.

Has become way too difficult since introduction. Programming projects do not fit into time available, leading to incomplete coverage of theory. Too much emphasis on computational thinking and pseudo code (which in the case on OCR is Python syntax without colons). Far too much content and very dry. We have managed to take an exciting sphere and make it as exciting as watching paint dry.

Frances Wilson
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John Woollard
August 2017