

Physics NSS 2011-12 Results analysis

Background

The data shown in this report are derived from making a comparison between the NSS results for the survey taken in 2011 and those for 2012. The survey comprises 22 questions covering various aspects of a student's study in the Department. The questions that are used in the survey are shown in Table 1. The students are given five options ranging from "Strongly disagree" through to "Strongly agree". The responses in each category are then reported as a percentage of the number of students who completed the question.

The survey is run by IPSOS MORI and is open to all graduating students and for the results to be made publically available for that year, two criteria must be satisfied: 23 students must complete the survey and 50 % of the eligible students must complete the survey. If neither of these conditions is met then the results for the year are combined with those from the previous year to produce an aggregate set of data which is then released on the HEFCE and Unistats websites.

The Department was told in May 2012 by the University team that monitors the completion rate of the survey that 23 Physics students had completed the survey, out of an eligible 27 students. When the data were released IPSOS MORI reported that only 22 students had completed the survey. As a consequence the data obtained for the 2012 survey was combined with that for 2011. To obtain a true reflection of the student responses for 2012 I have taken the combined response for 2012 and removed the 2011 responses.

The degrees covered by the physics grouping are MSci Physics, MSci Applied Physics, MSci Photonics, MSci Physics with Visual Simulation, MSci Physics and Mathematical Finance, MSci Biophysics, BSc Physics, BSc Applied Physics, BSc Laser Physics and Optoelectronics and BSc Mathematics and Physics. The BSc Physics with Teaching degree is covered under the initial teaching training grouping.

Headline Figures

Student Overall Satisfaction for Physics students only 100 %

Student Overall Satisfaction for JACS Physics grouping (includes Maths and Physics) 95 % Places us joint 1st in Scotland and Joint 8th in the UK. (1 with 100 %; 3 with 97 %; 4 with 96 %).

Although "Feedback and Assessment" scores are low, comparable to sector, there has been a significant shift from "Strongly disagree" and "Disagree" to "Neutral".

Analysis

Table 3 shows a comparison between the NSS responses for 2011 and 2012. The data indicates that the results obtained for 2012 are comparable for those for 2011.

Areas where we do well are the "Teaching on my course" and the "Learning resources" categories and this comes down to the general enthusiasm of the staff and the provision of well equipped research labs for students to undertake their final year projects.

From the data shown it would appear that "Feedback and Assessment" (Q5 – Q9) is still an issue. A comparison of the Department's responses with those of the Physics sector is shown in Table 4. From this table it is evident that there is an issue across the whole community with "Feedback and Assessment".

It should be noted that the data shown in Table 4 indicates that for nearly all aspects of the survey the Department is performing either above or very close to the sector. The major exception is again "Feedback and Assessment".

To look at the number of students who "Strongly disagreed" or "Disagreed" with the provision of "Feedback and Assessment" Tables 5 and 6 show the total percentage of students who essentially are dissatisfied with the "Feedback and Assessment" provided by the Department. Table 5 compares the Department's responses for 2011 and 2012, whilst Table 6 compares the Department's 2012 performance with that of the Sector. Given the low percentages associated with the responses to Q5 – Q9 for 2012 it is surprising to see that level of dissatisfaction is substantially lower for 2012 when compared with both 2011 and the Sector 2012 responses. It would appear that in 2012 the main reason for low "Feedback and Assessment" scores was because of neutral responses from the students. To further improve our "Feedback and Assessment" scores we must now find ways of moving the neutral students to "Agree" or better.

The data shown in Table 5 also shows areas where the Department must improve. These are "Academic Support", "Organisation and Management" and "Personal Development" areas.

The Department is in the process of addressing potential "Academic Support" support issues by asking all students to see their PDAs when after each diet of examinations, as the new degree structure roles out replacing all the advisers of study for each year with one adviser of study for that year.

In terms of "Organisation and Management" the Department believes that some of the poor response to Q13 and Q15 comes from the confusion brought about by the new timetabling system at the start of 2011 as well as timetable clashes between Physics and Mathematics classes taken by the Mathematics and Physics students. With the shift to 20-credits the potential for clashes has been reduced and the Departmental

timetable coordinators for both Physics and Mathematics meet in the summer of 2012 to ensure that no clashes occurred in years 1 to 4 timetables.

Compared with 2011 and the Sector it would appear that our some of our students feel that we have not helped their personal development, despite providing opportunities for students to develop their problem solving skill, communication skills, through poster, oral and written report based presentations. I am not sure how we address this.

Given that the Department recruits primarily from Scotland Tables 7 and 8 compare our performance with the other Scottish institutions. Heriot Watt is not included as its results were also an aggregation.

Table 1: NSS Subject groupings and Questions

The teaching on my course	
Q1	Staff are good at explaining things.
Q2	Staff have made the subject interesting.
Q3	Staff are enthusiastic about what they are teaching.
Q4	The course is intellectually stimulating.
Assessment and feedback	
Q5	The criteria used in marking have been clear in advance.
Q6	Assessment arrangements and marking have been fair.
Q7	Feedback on my work has been prompt.
Q8	I have received detailed comments on my work.
Q9	Feedback on my work has helped me clarify things I did not understand.
Academic support	
Q10	I have received sufficient advice and support with my studies.
Q11	I have been able to contact staff when I needed to.
Q12	Good advice was available when I needed to make study choices.
Organisation and management	
Q13	The timetable works efficiently as far as my activities are concerned.
Q14	Any changes in the course or teaching have been communicated effectively.
Q15	The course is well organised and is running smoothly.
Learning resources	
Q16	The library resources and services are good enough for my needs.
Q17	I have been able to access general IT resources when I needed to.
Q18	I have been able to access specialised equipment, facilities or room when I needed to.
Personal development	
Q19	The course has helped me present myself with confidence.
Q20	My communication skills have improved.
Q21	As a result of the course, I feel confident in tackling unfamiliar problems.
Q22	Overall, I am satisfied with the quality of the course.

Table 2: below shows the numbers of students who responded for each question.

		Number answer 2011 (eligible 39)						Number Answer 2012 (eligible 27)					
		S Dis	Dis	Neu	Ag	S Ag	Num	S Dis	Dis	Neu	Ag	S Ag	Num
Teach Quality	Q1	0	0	1	19	11	31	0	0	1	12	9	22
	Q2	0	2	3	9	17	31	0	2	1	10	9	22
	Q3	0	0	1	16	14	31	0	0	3	10	10	22
	Q4	0	0	2	9	20	31	0	1	0	8	13	22
Assess and Feed	Q5	0	4	2	18	7	31	0	0	3	7	12	22
	Q6	0	0	1	23	7	31	0	0	1	9	12	22
	Q7	2	5	2	14	8	31	0	0	6	8	7	22
	Q8	1	8	3	15	4	31	0	2	8	7	5	22
	Q9	1	4	4	9	13	31	0	1	7	6	7	22
Acad Supp	Q10	1	0	0	12	18	31	0	1	0	8	13	22
	Q11	0	0	1	12	18	31	0	1	0	7	14	22
	Q12	0	0	1	11	19	31	1	2	1	6	13	22
Org + Man	Q13	0	1	1	16	13	31	1	2	1	9	9	22
	Q14	2	2	2	15	10	31	1	0	1	8	12	21
	Q15	1	3	5	9	13	31	1	2	1	8	9	22
Resour ces	Q16	0	0	0	8	23	31	0	0	1	3	18	22
	Q17	0	0	0	5	26	31	0	0	1	4	18	22
	Q18	0	0	2	9	18	29	0	0	3	4	14	21
Pers Dev	Q19	2	1	3	13	12	31	1	2	1	7	10	22
	Q20	0	0	6	10	15	31	1	2	0	9	11	22
	Q21	0	1	4	10	16	31	1	2	1	9	9	22
OS	Q22	0	1	0	11	19	31	0	1	1	6	15	22

Table 3: Comparison between 2011 and 2012 results for students who are satisfied and very satisfied per question

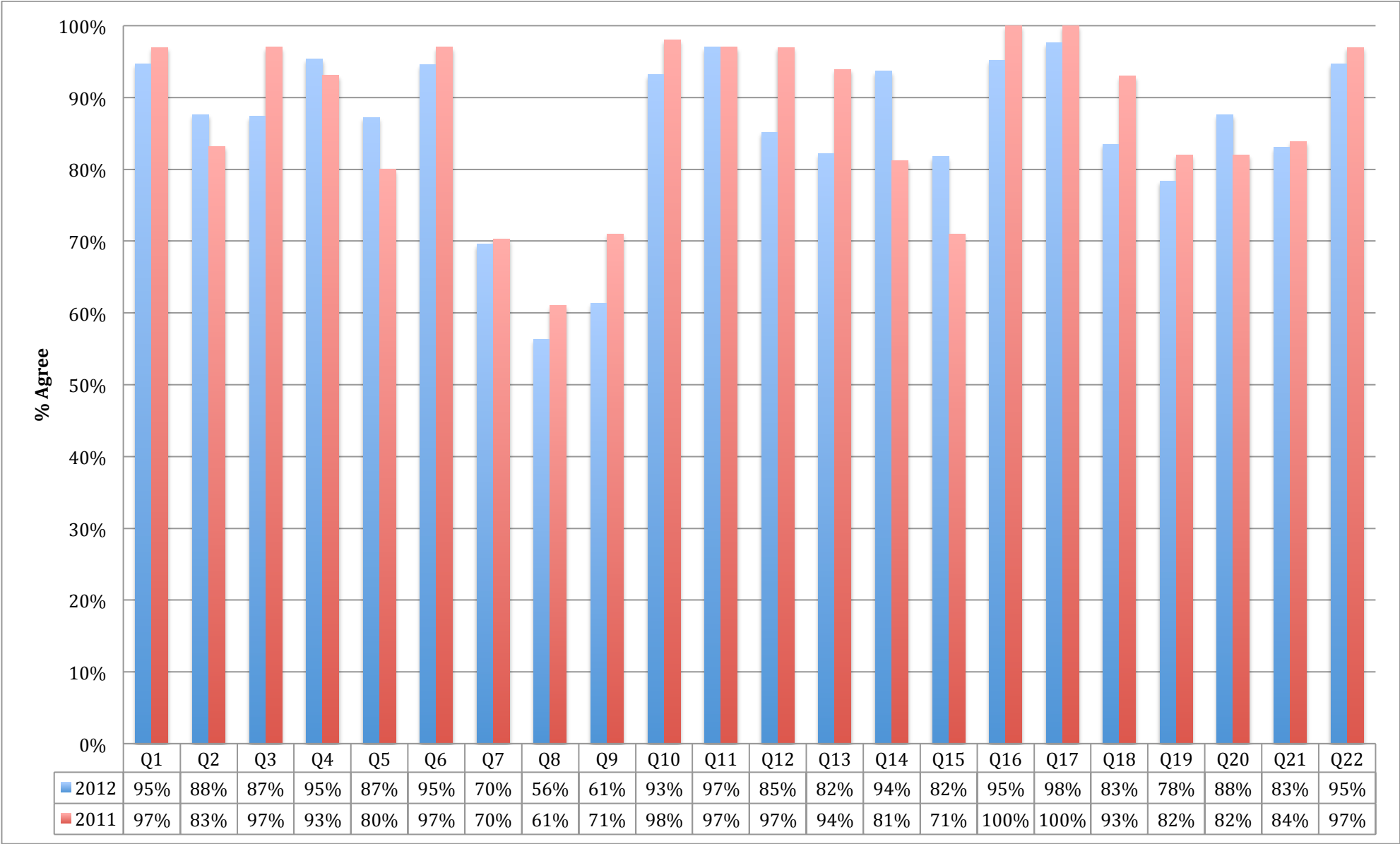


Table 4: Comparison between Strathclyde 2012 NSS results and all Sector 2012 NSS results

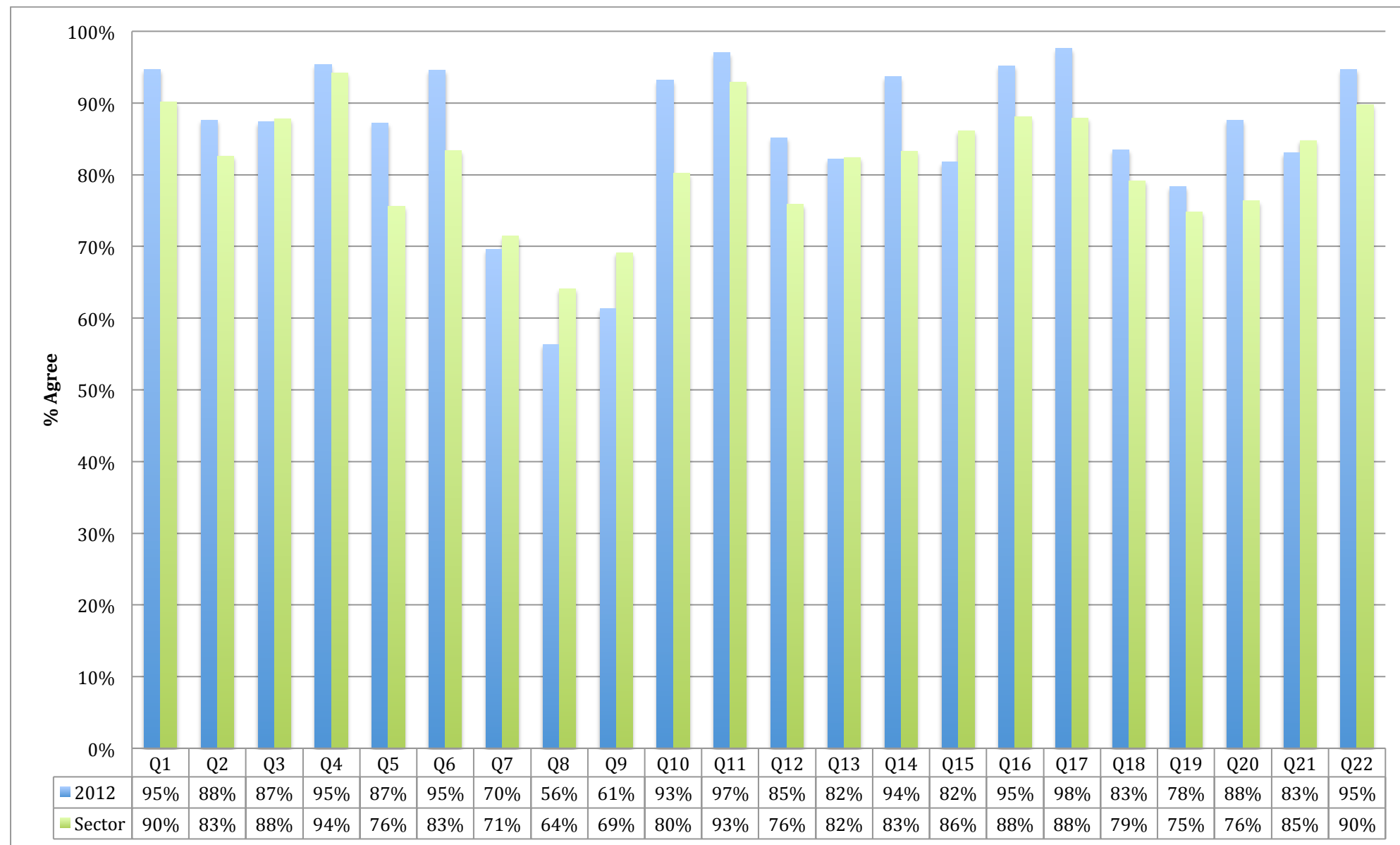


Table 5: Comparison of 2012 and 2011 NSS response for students who have indicated that they either “Strongly Disagree” or “Disagree” to a specific NSS question.

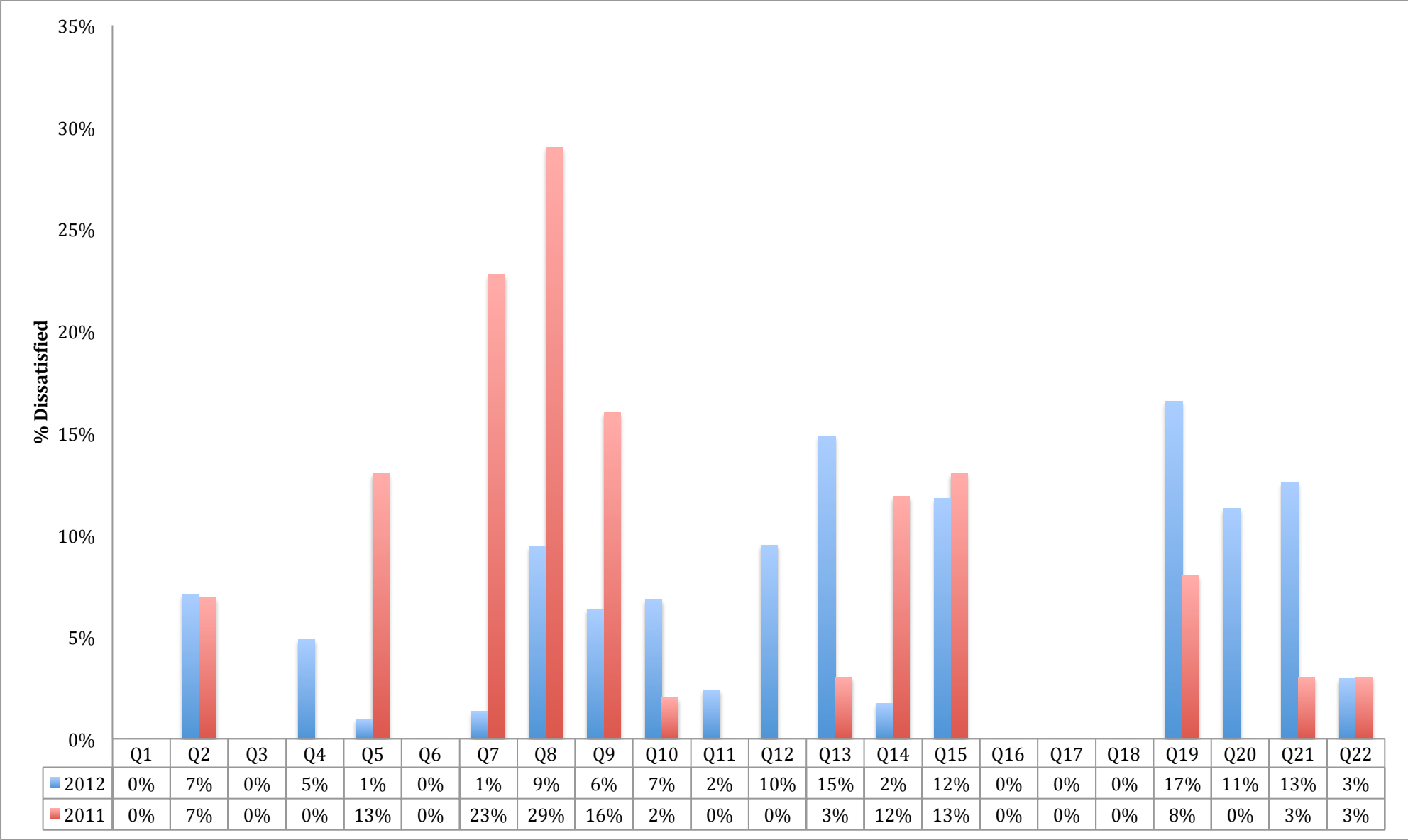


Table 6: Comparison of the Department’s 2012 NSS responses and the Sector 2012 NSS responses for students who have indicated that they either “Strongly Disagree” or “Disagree” to a specific NSS question.

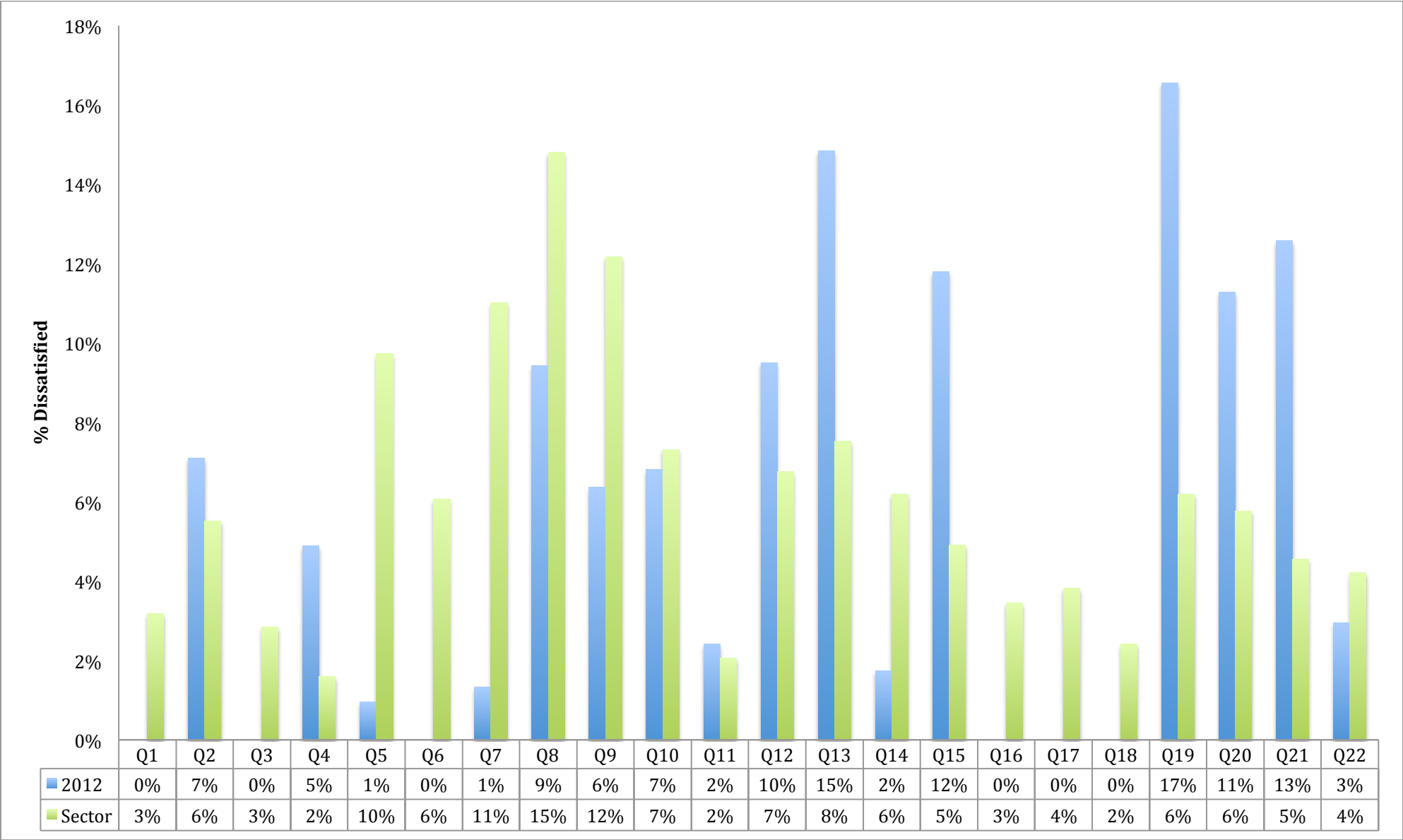


Table 7: Comparison with Scottish Institutions %Agree for each NSS question

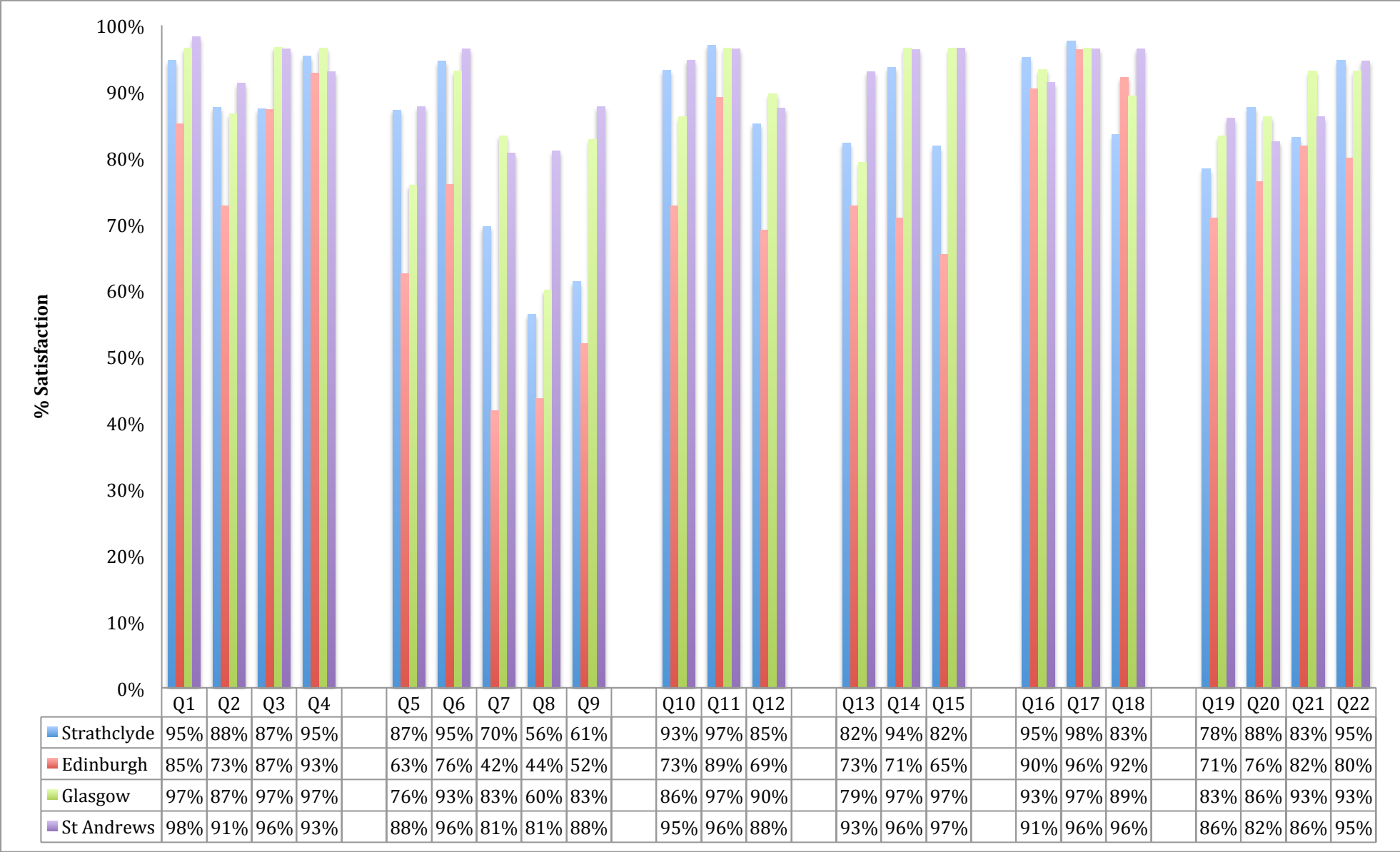


Table 8 Comparison with Scottish Institutions % Dissatisfied for each NSS Question.

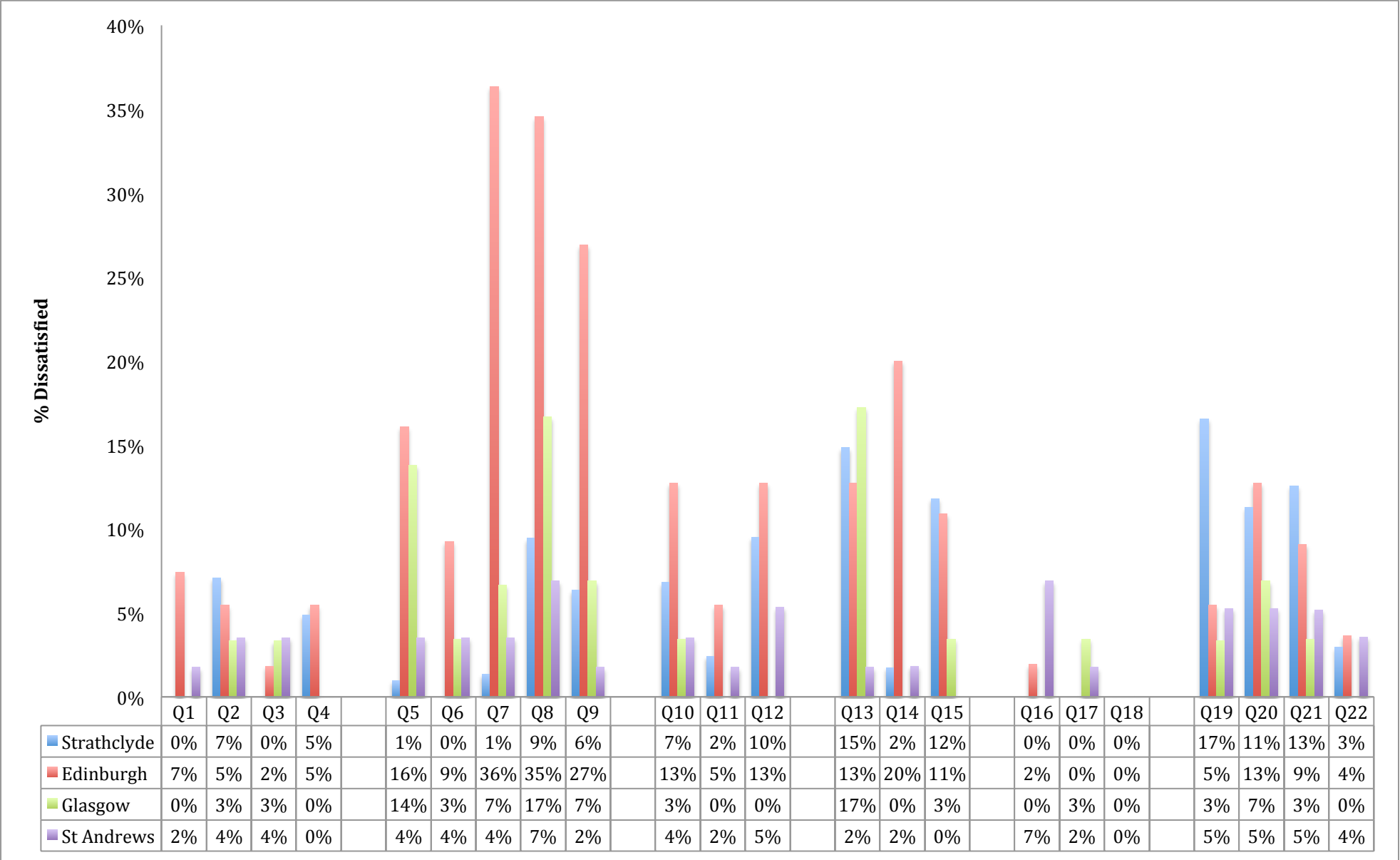
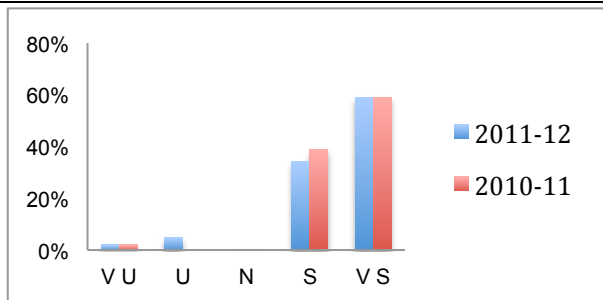


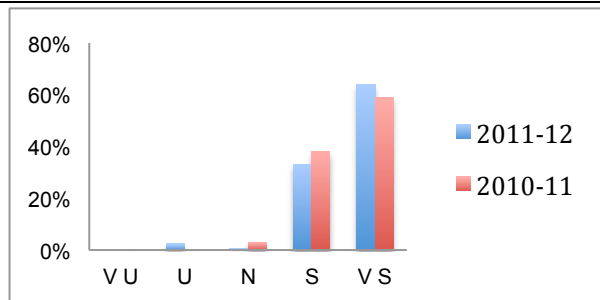
Table 9 Comparison between Physics 2011 and Physics 2012 on individual question basis
The next set of plots shows the comparison between this year's results and last year's individual question.

The Teaching on My Course																																					
<table><caption>Q1 Data</caption><thead><tr><th>Response</th><th>2011-12 (%)</th><th>2010-11 (%)</th></tr></thead><tbody><tr><td>V</td><td>0</td><td>0</td></tr><tr><td>U</td><td>0</td><td>0</td></tr><tr><td>N</td><td>5</td><td>2</td></tr><tr><td>S</td><td>55</td><td>62</td></tr><tr><td>VS</td><td>42</td><td>35</td></tr></tbody></table>	Response	2011-12 (%)	2010-11 (%)	V	0	0	U	0	0	N	5	2	S	55	62	VS	42	35	<table><caption>Q2 Data</caption><thead><tr><th>Response</th><th>2011-12 (%)</th><th>2010-11 (%)</th></tr></thead><tbody><tr><td>V</td><td>0</td><td>0</td></tr><tr><td>U</td><td>7</td><td>7</td></tr><tr><td>N</td><td>5</td><td>10</td></tr><tr><td>S</td><td>48</td><td>30</td></tr><tr><td>VS</td><td>40</td><td>55</td></tr></tbody></table>	Response	2011-12 (%)	2010-11 (%)	V	0	0	U	7	7	N	5	10	S	48	30	VS	40	55
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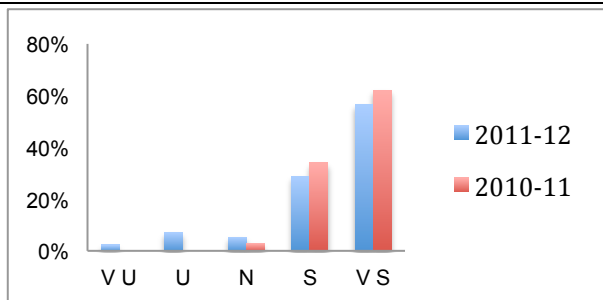
Academic Support



Q10 I have received sufficient advice and support with my studies

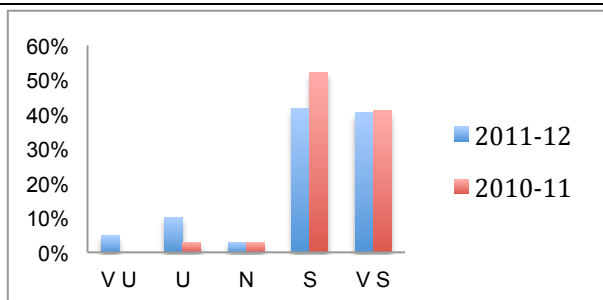


Q11 I have been able to contact staff when I needed to

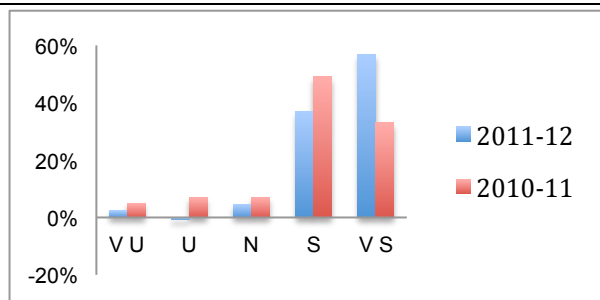


Q12 Good advice was available when I needed to make study choices

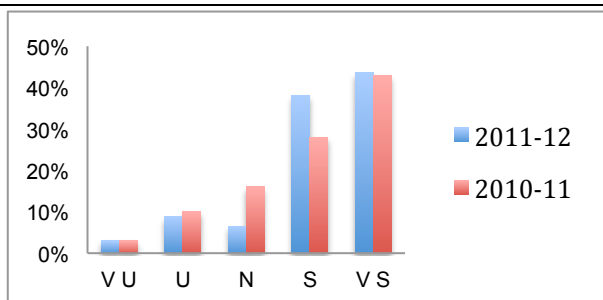
Organisation and Management



Q13 The timetable works efficiently as far as my activities are concerned

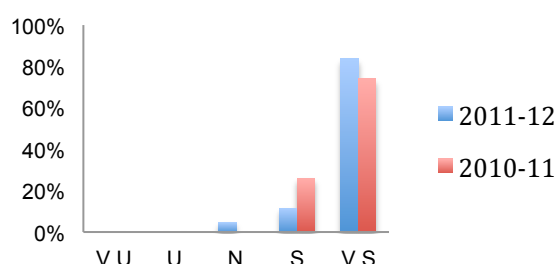


Q14 Any changes in the course or teaching have been communicated effectively

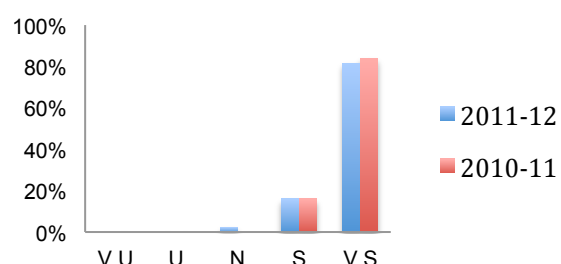


Q15 The course is well organised and is running smoothly

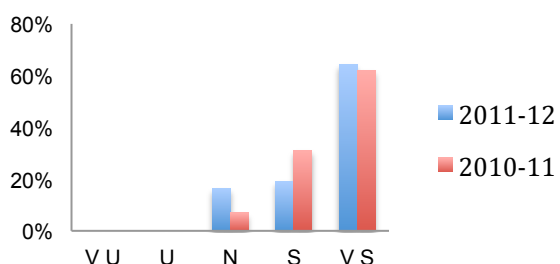
Learning resources



Q16 The library resources and services are good enough for my needs

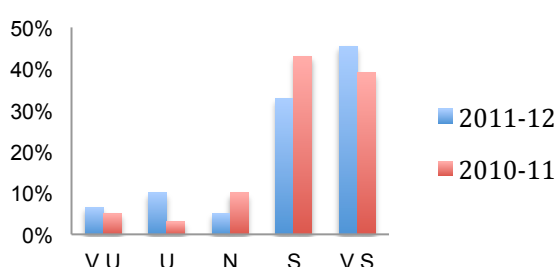


Q17 I have been able to access general IT resources when I needed to

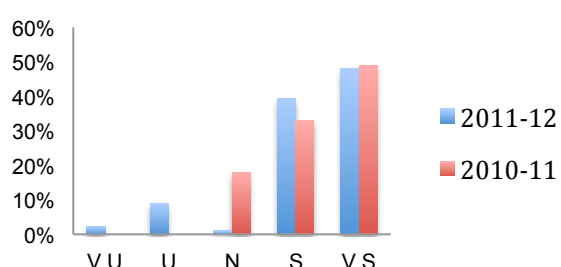


Q18 I have been able to access specialised equipment, facilities or rooms when I needed to

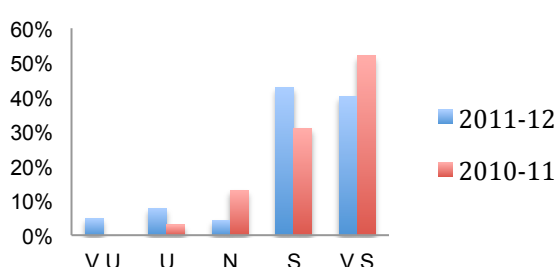
Personal Development



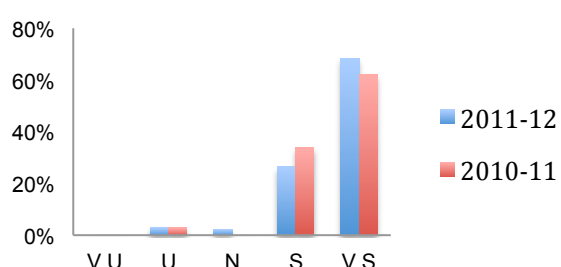
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Q22 Overall I am satisfied with the quality of the course