

Modern statistical models for the analysis of Likert scale student evaluations of teaching to inform curriculum conversations

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REFRAME: QUT'S EVALUATION FRAMEWORK

Reframe: QUT's Evaluation Framework

Reframe is changing our approach to the evaluation of courses, units, teaching and student experience at QUT. We are moving away from a single survey tool to a richer, more holistic and customisable approach.

This approach will help our academics design and deliver high-quality learning experiences, and review the impact of their teaching practice on student learning. Through it, we will also be able to provide more timely access to specialised support and meet external reporting requirements.

The Framework consists of:

Personal evaluation strategy



a personal strategy you develop annually using the University endorsed suite of evaluation tools: Automated or Self-selected

academic staff are expected to annually engage in evaluation, drawing on multiple sources of qualitative and quantitative data

evaluation needs to be targeted to focus on the impact on student learning

Automated unit and learning evaluation activities

Pulse survey

student teaching team



- ▶ early in the unit (usually Week 4)
- ▶ centrally delivered and open for 2 weeks
- ▶ 3 questions + 1 extended comment
- ▶ formative with results given to key stakeholders

Insight survey

student teaching team



- ▶ opens at the end of the teaching period (usually Week 13)
- ▶ centrally delivered and open for 4 weeks
- ▶ 3 questions + 1 extended comment
- ▶ student evaluation flows through to all stakeholders including TEQSA for institutional reporting

Unit exit survey

student



- ▶ automatically and centrally delivered to students when they withdraw from a unit
- ▶ students can rank their top 3 reasons out of a list of 7 reasons for withdrawal
- ▶ Includes 1 extended comment
- ▶ results flow through to key stakeholders

Self-selected, endorsed evaluation suite

Tailored survey

student teaching team industry



select from a bank of questions to gather feedback from students, peers or industry (currently consists of a Tailored teacher survey; includes 1 standard scale item, up to 5 optional questions + 1 extended comment)

Peer review

peer teaching team



ask a peer to review your teaching practice, materials or assessment items

Instant response

student teaching team peer



use Instant response tools and activities to collect and review student or peer feedback quickly and directly

Existing data



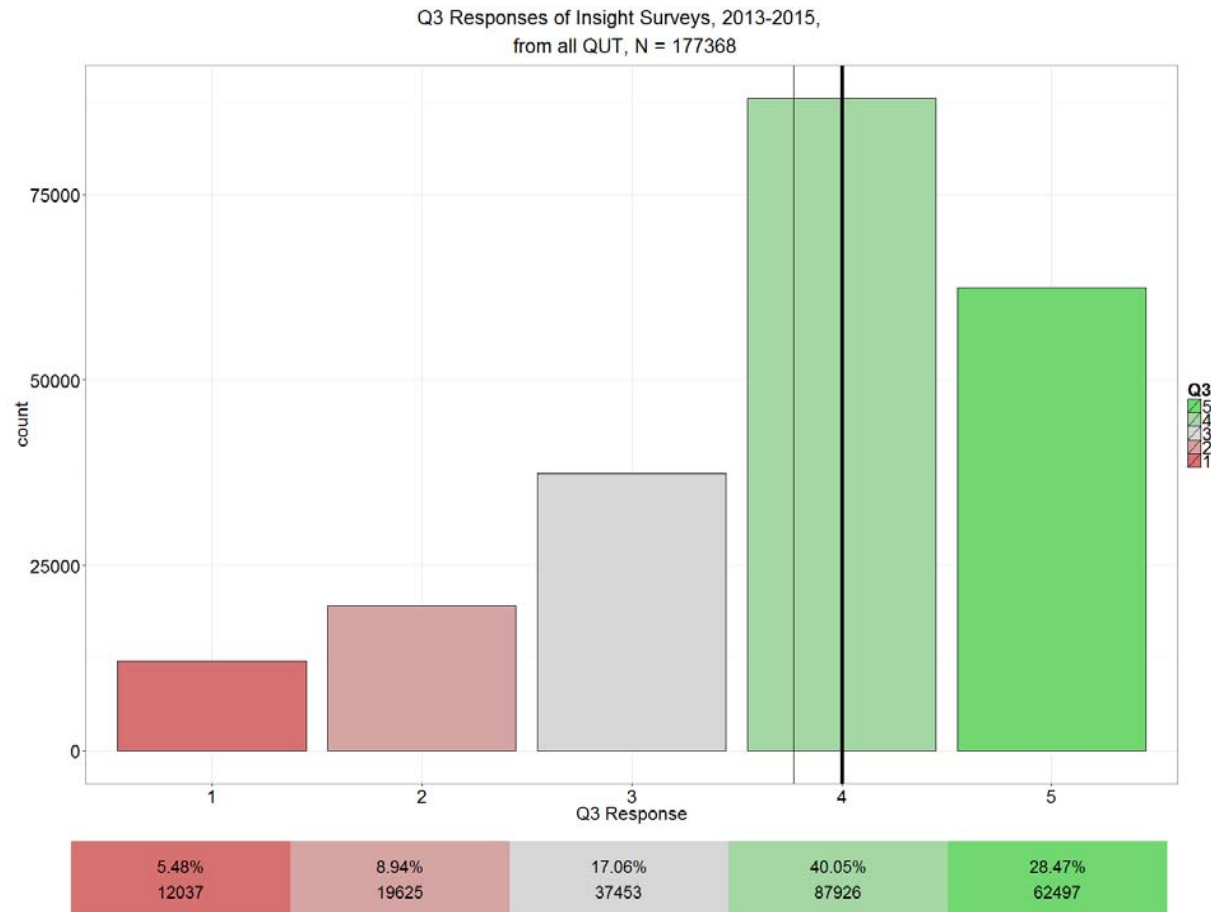
use current unit reports, course reports and other available data to review your progress and impact on student learning

Customised approach



document your use of customised approaches to evaluate your unit, teaching and impact on student learning

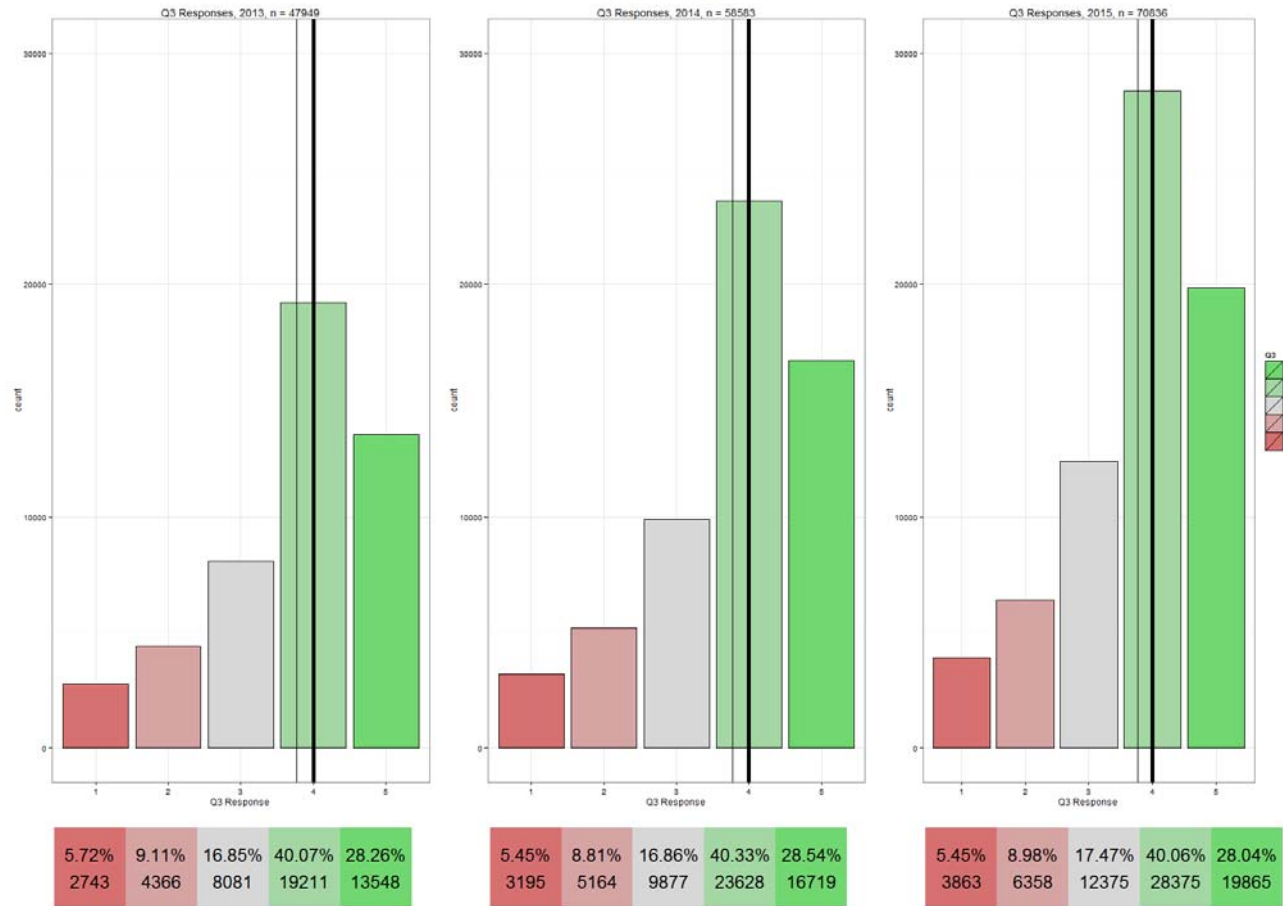
TRADITIONAL REPRESENTATION OF STUDENT FEEDBACK SURVEYS



The thick line represents the median (average) of the data and the thin line represents the middle data point with 68.52% agree/strongly agree.

INSIGHT Q3 (2013-2015)

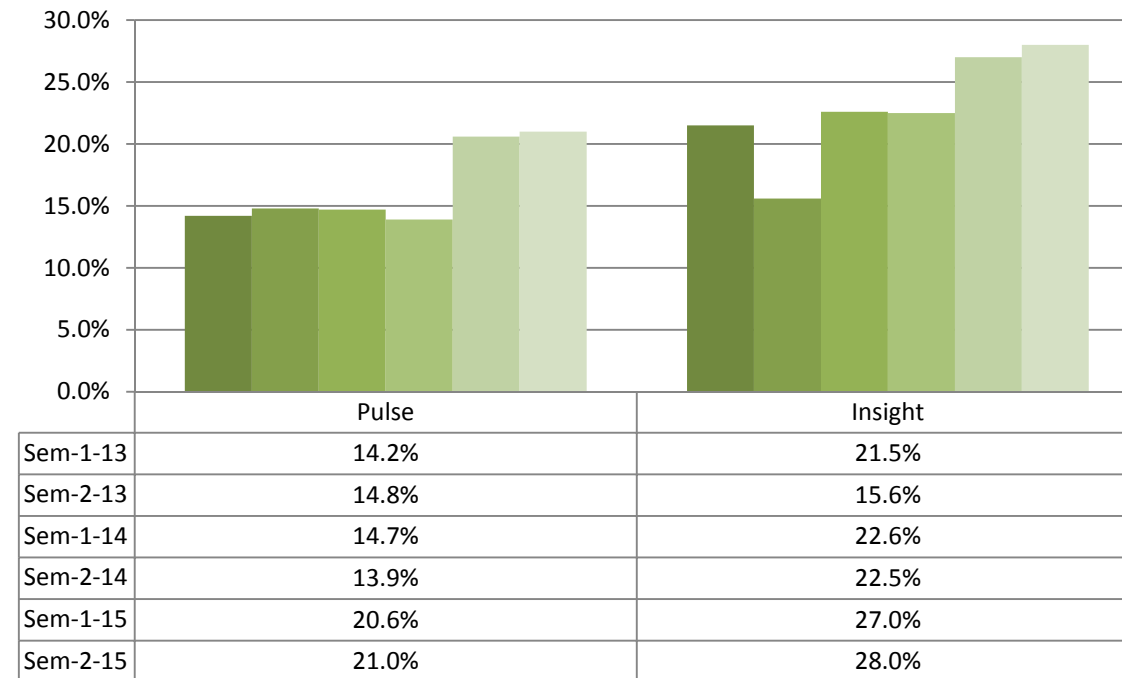
Q3 Responses of Insight Surveys, from all QUT,
N = 177368



The total number of responses is increasing each year, yet the proportion of responses to each option for Q3 are very consistent.

INSIGHT Q3 BY YEAR

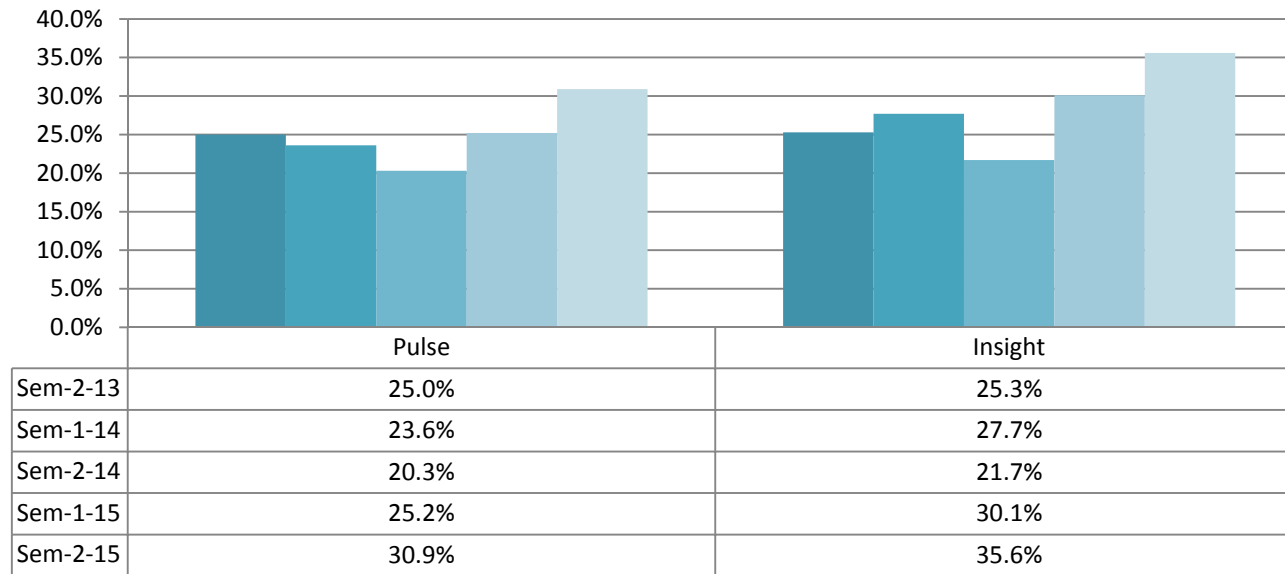
Student response rates for Pulse and Insight 2013-2015



Student response rates continue to increase over the period.

STUDENT SURVEY RESPONSE RATES

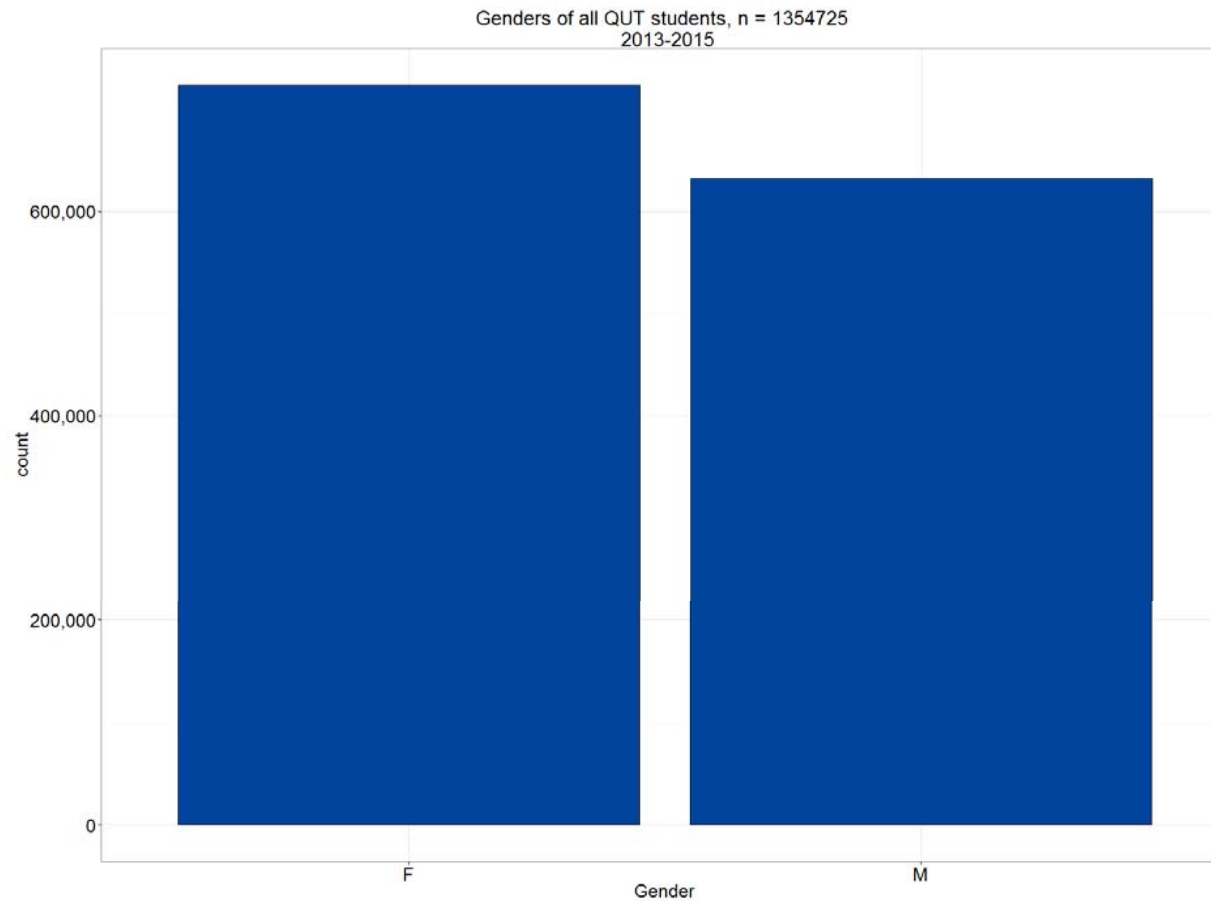
Staff response rates for Pulse and Insight 2013-2015



Staff response rates continue to increase over the period.

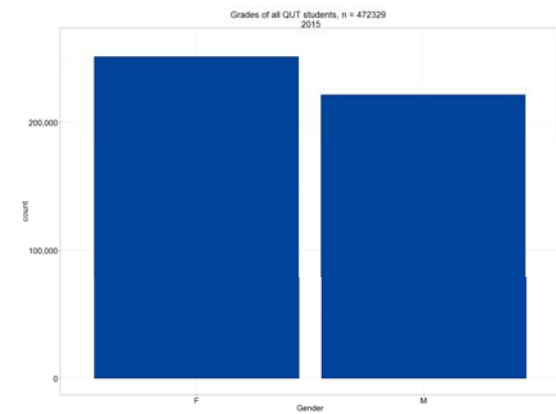
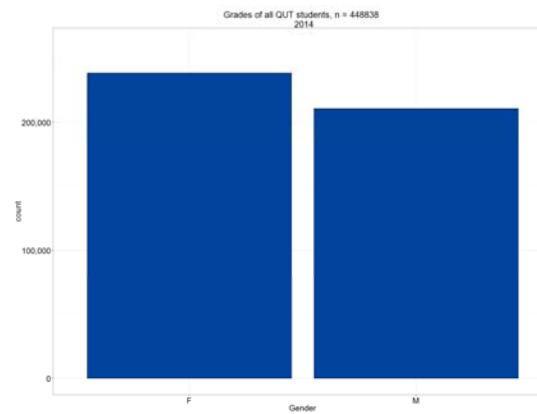
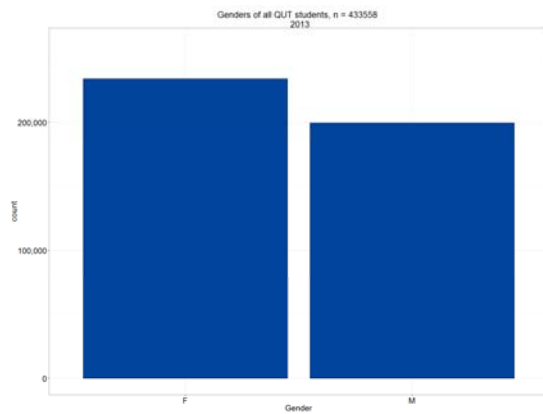
STAFF RESPONSE RATES

MODERN STATISTICAL METHODS TO ANALYSE STUDENT EVALUATIONS



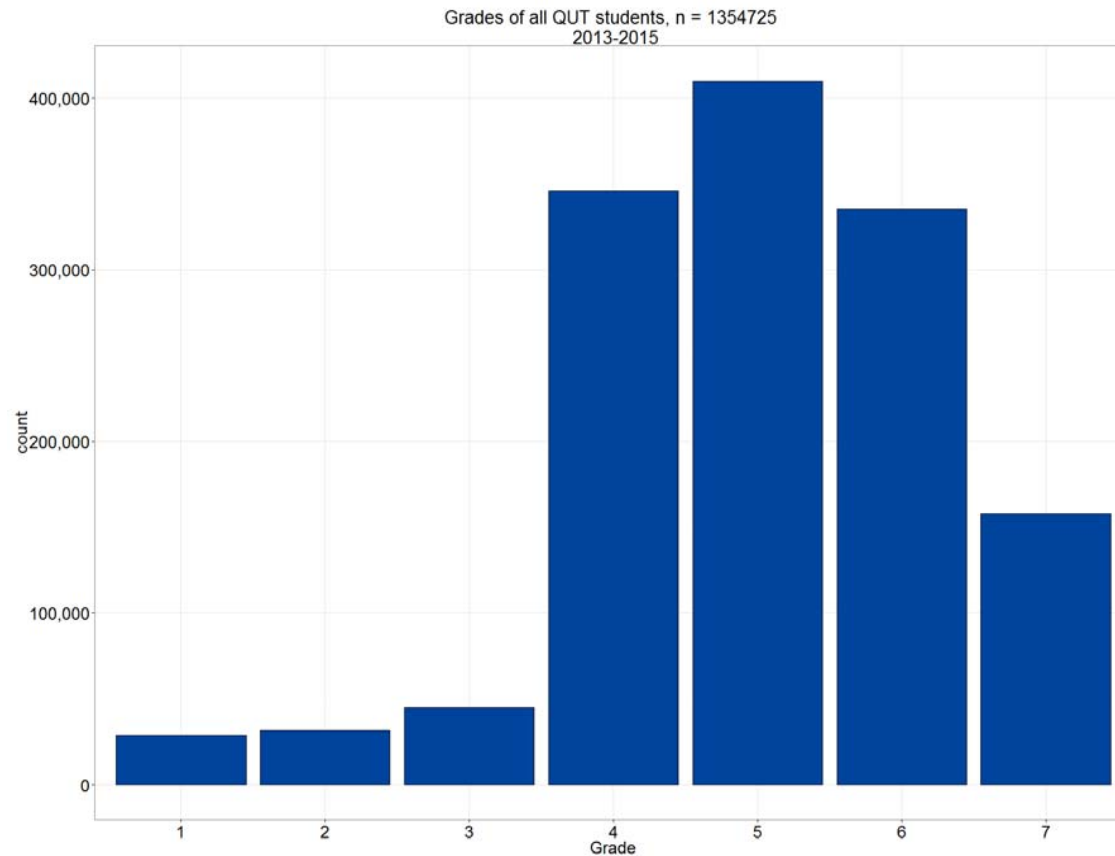
Female is represented on the left, male on the right.

STUDENT COHORT BY GENDER



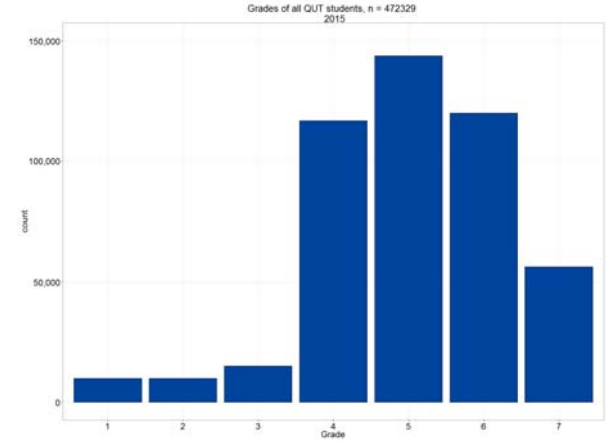
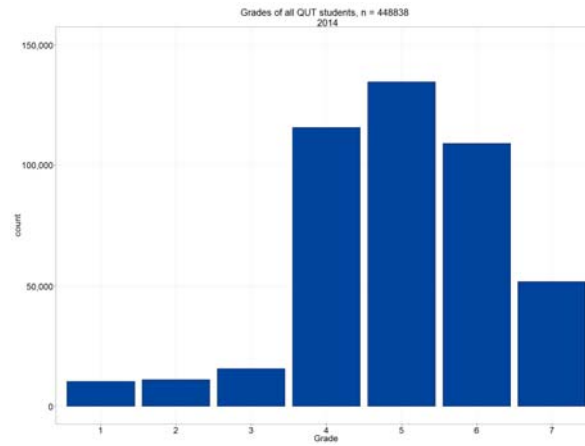
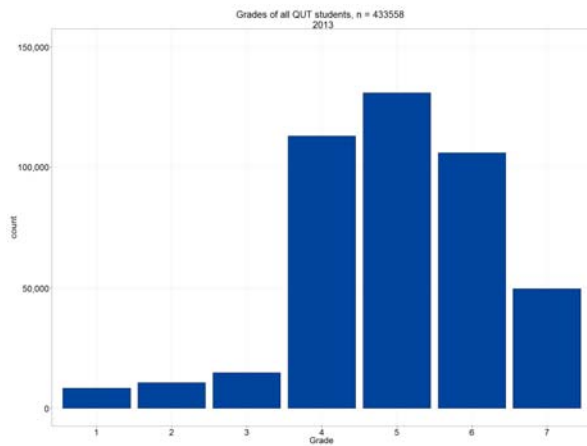
As the ratio between genders are similar across years, this suggests that the population of students are stable in terms of gender.

STUDENT COHORT BY GENDER BY YEAR



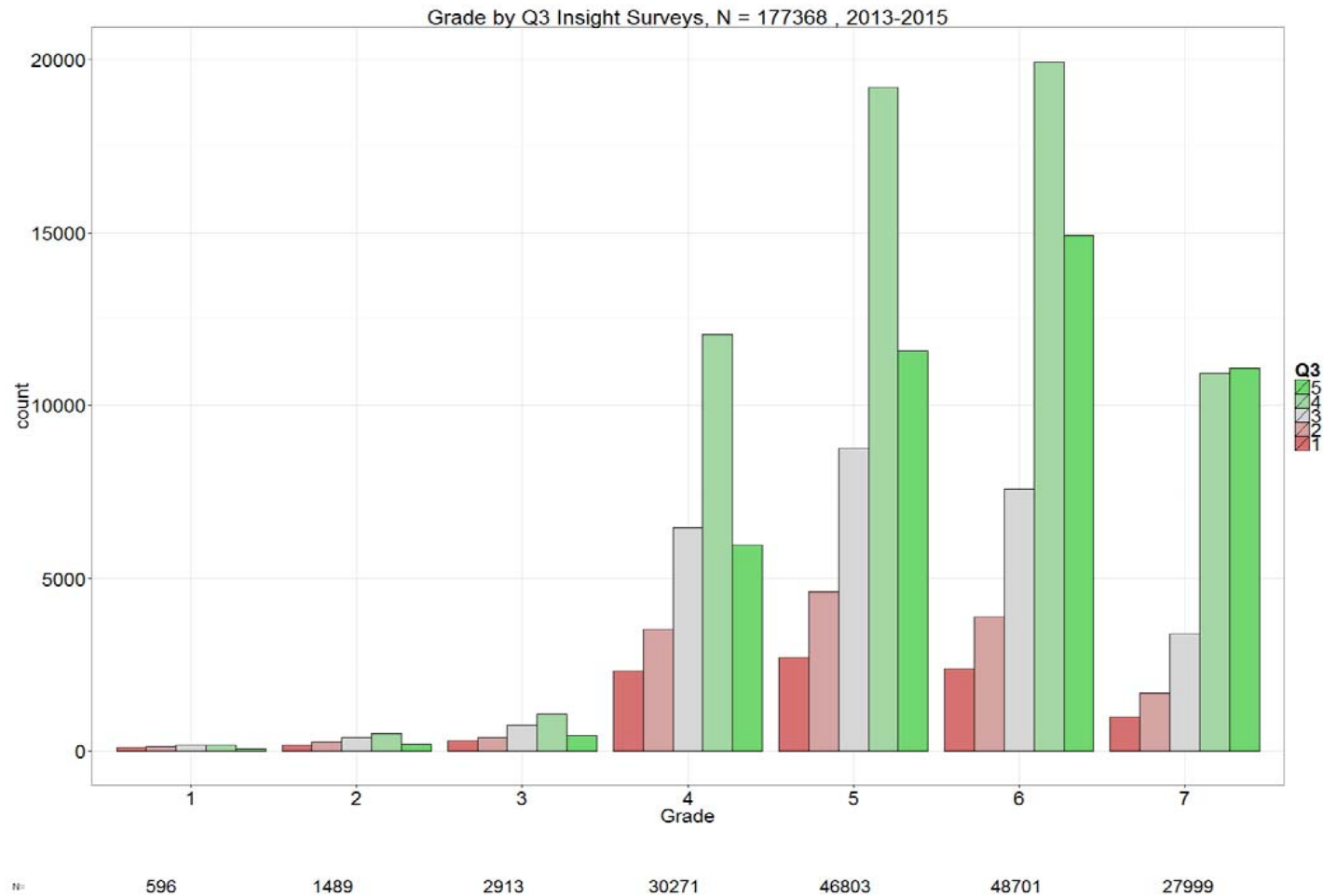
Individual unit outcomes for every post-census enrolment over the period.

INDIVIDUAL UNIT GRADE OUTCOMES



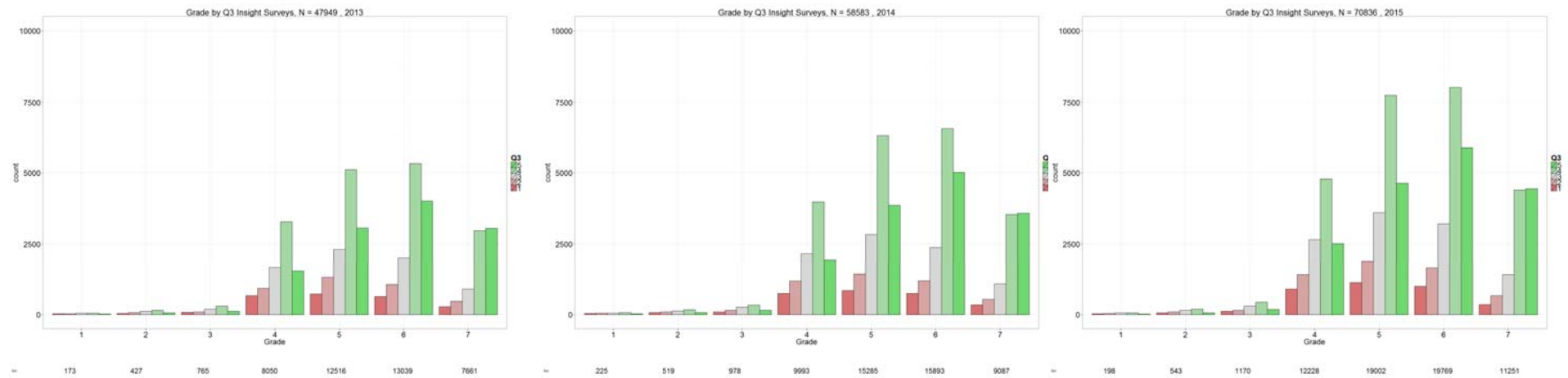
As the ratio between grades are similar across years, this suggests that the population of students are stable in terms of grades.

INDIVIDUAL UNIT GRADE OUTCOMES BY YEAR



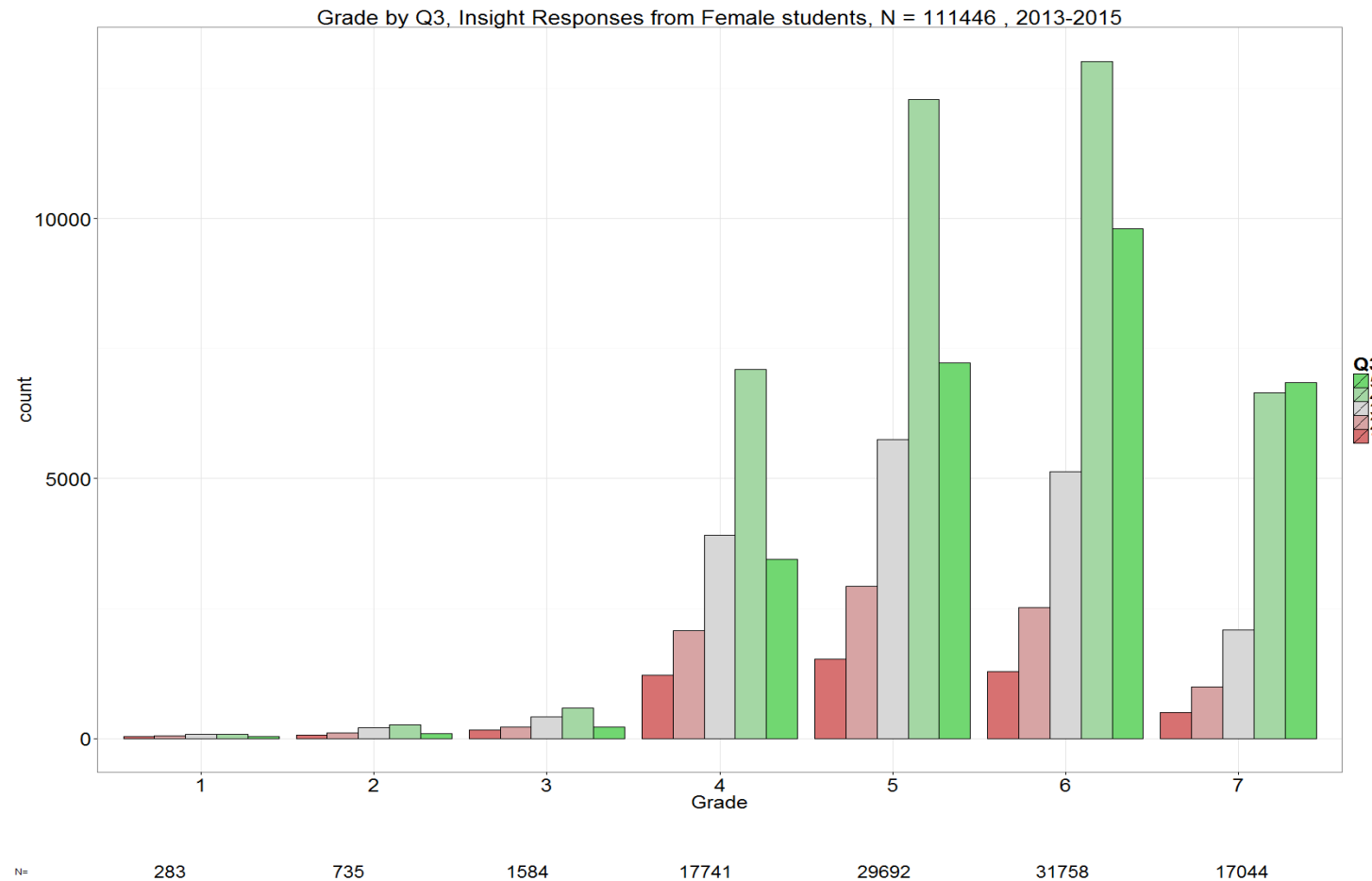
The respondents are distributed across all grades together with distributed responses within each grade.

GRADE BY INSIGHT Q3



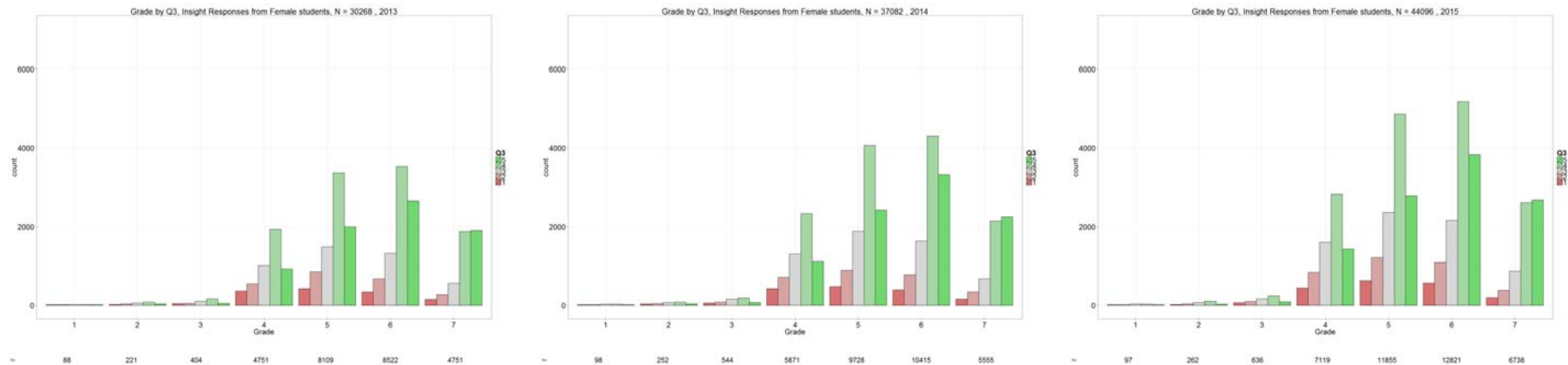
The total number of respondents are increasing and the majority of responses come from students with passing grades.

GRADE BY INSIGHT Q3 BY YEAR



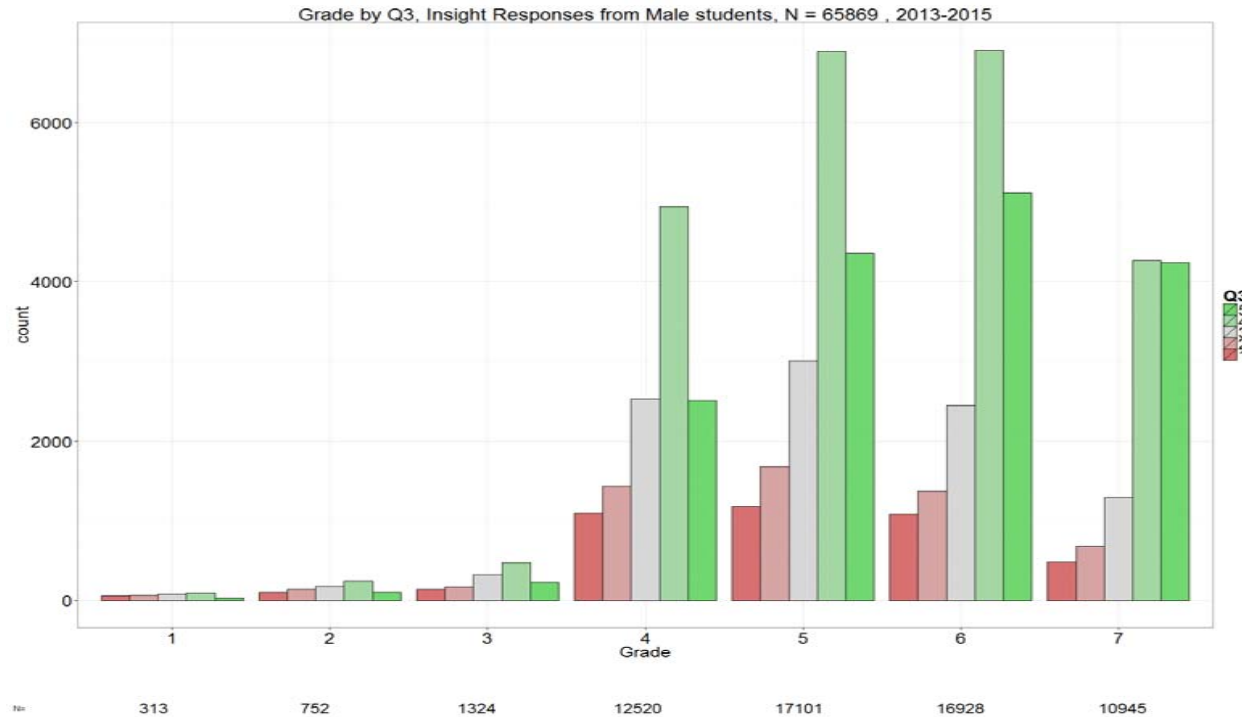
The female respondents are representative of each grade and each option of response is represented of each grade.

GRADE BY INSIGHT Q3 FOR FEMALES



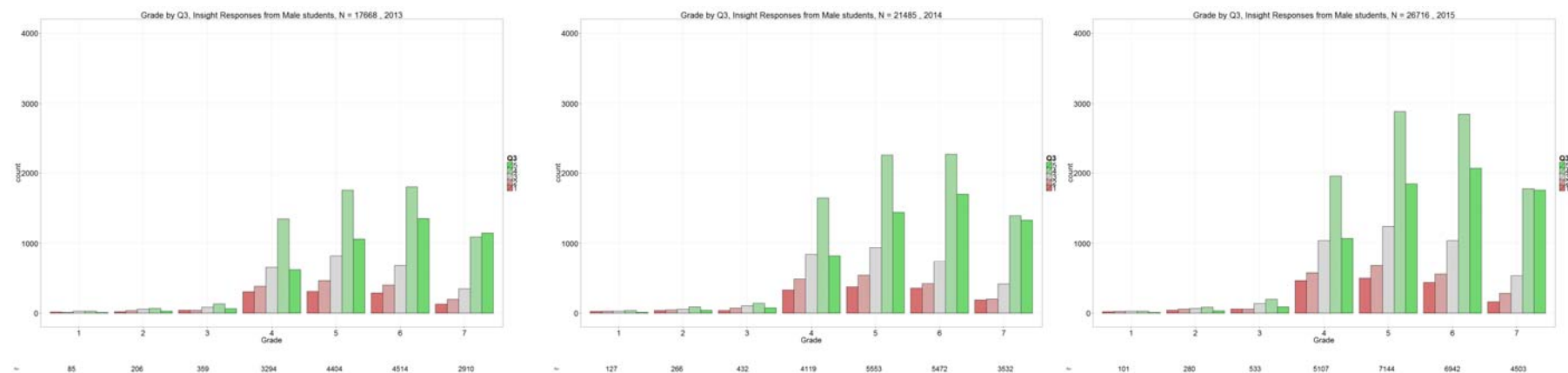
The total number of female respondents are increasing and the majority of responses come from students with passing grades.

GRADE BY INSIGHT Q3 FOR FEMALES BY YEAR



The male respondents are representative of each grade and each option of response is represented of each grade.

GRADE BY INSIGHT Q3 FOR MALES

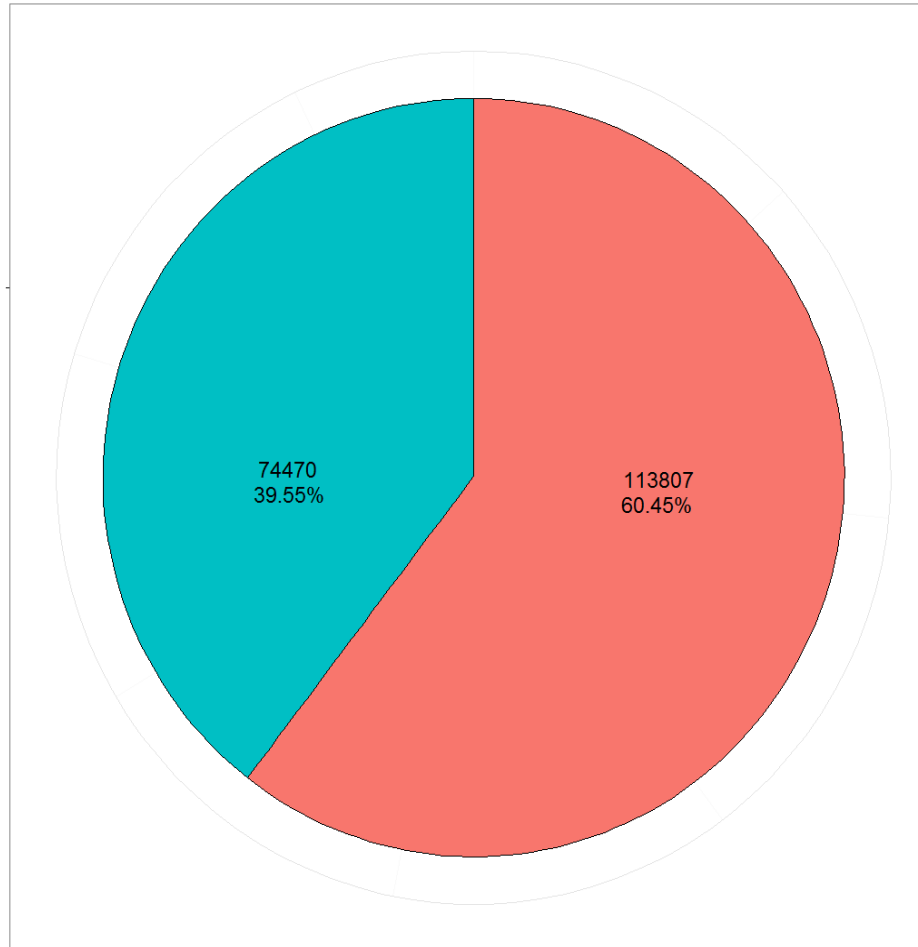


The total number of male respondents are increasing and the majority of responses come from students with passing grades.

GRADE BY INSIGHT Q3 FOR MALES BY YEAR

Response of Individual Students, All QUT student data N = 188277 , 2013 - 2015

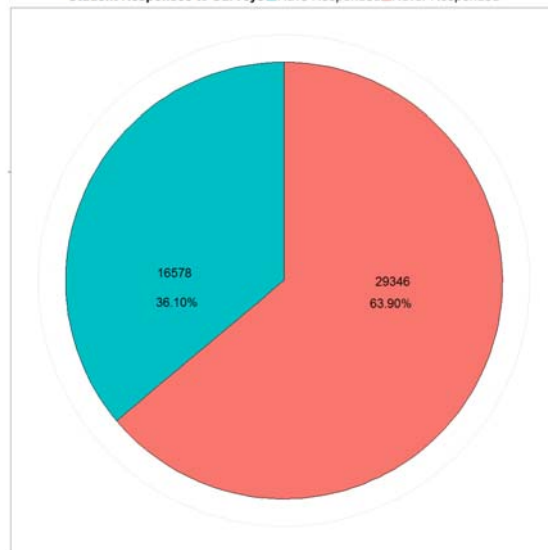
Student Responses to Surveys Have Responded Never Responded



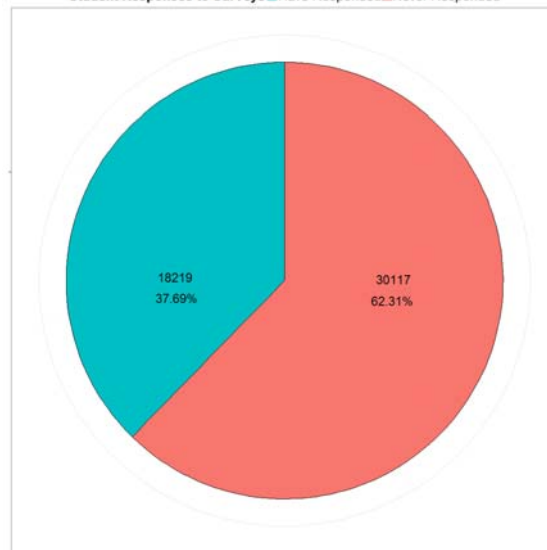
39.55% of individual students responded to at least one survey.

UNIQUE ENGAGEMENT IN SURVEYS

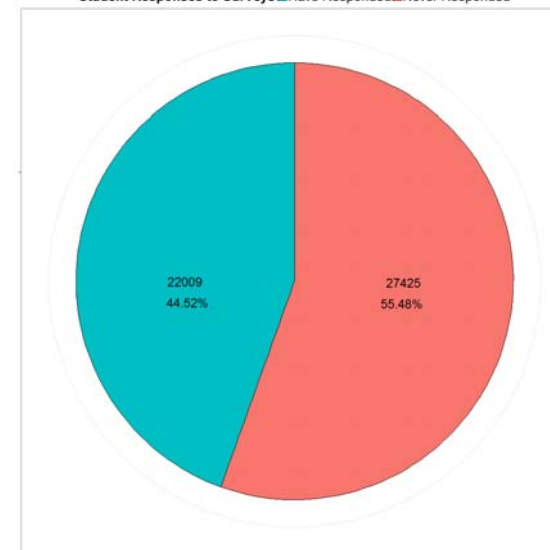
Response of Individual Students, All QUT student data N = 45924 , 2013
Student Responses to Surveys ■ Have Responded ■ Never Responded



Response of Individual Students, All QUT student data N = 48336 , 2014
Student Responses to Surveys ■ Have Responded ■ Never Responded

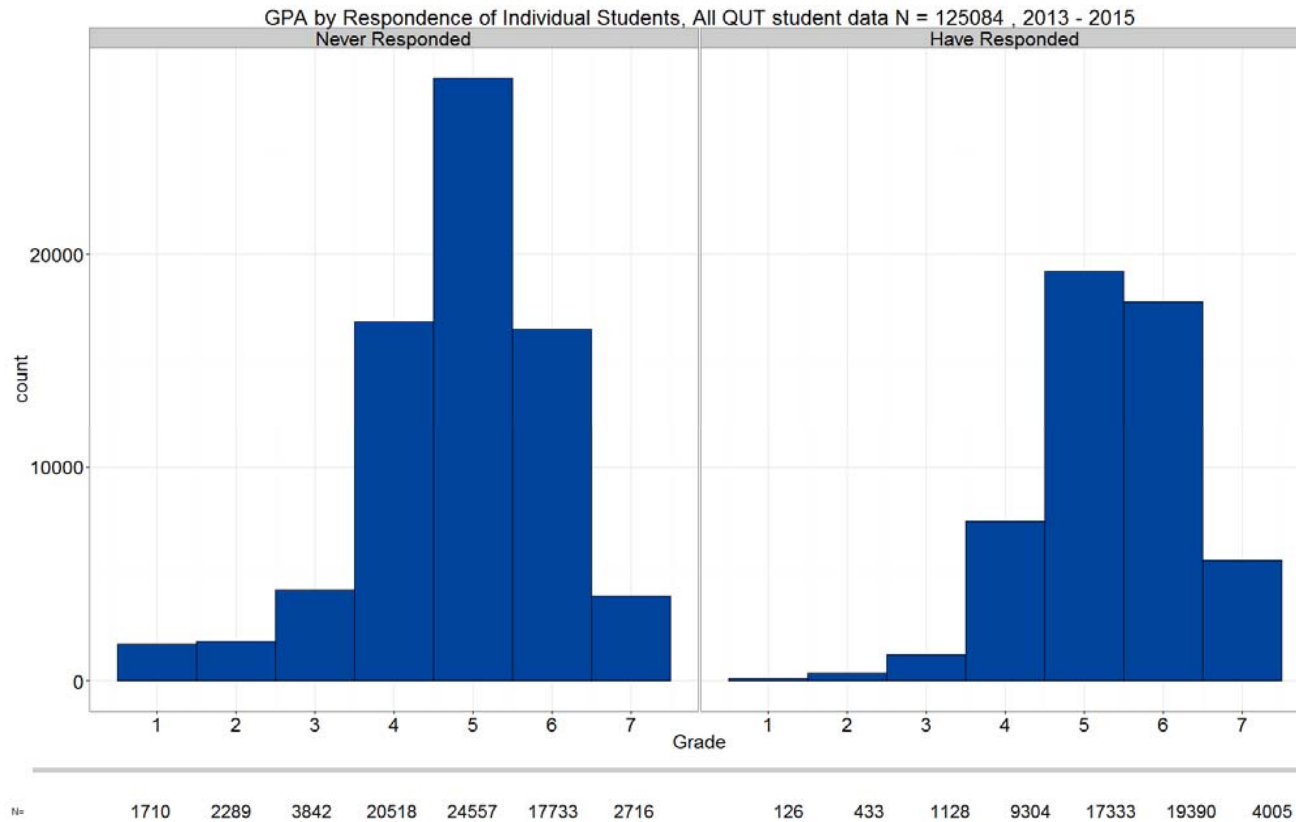


Response of Individual Students, All QUT student data N = 49434 , 2015
Student Responses to Surveys ■ Have Responded ■ Never Responded



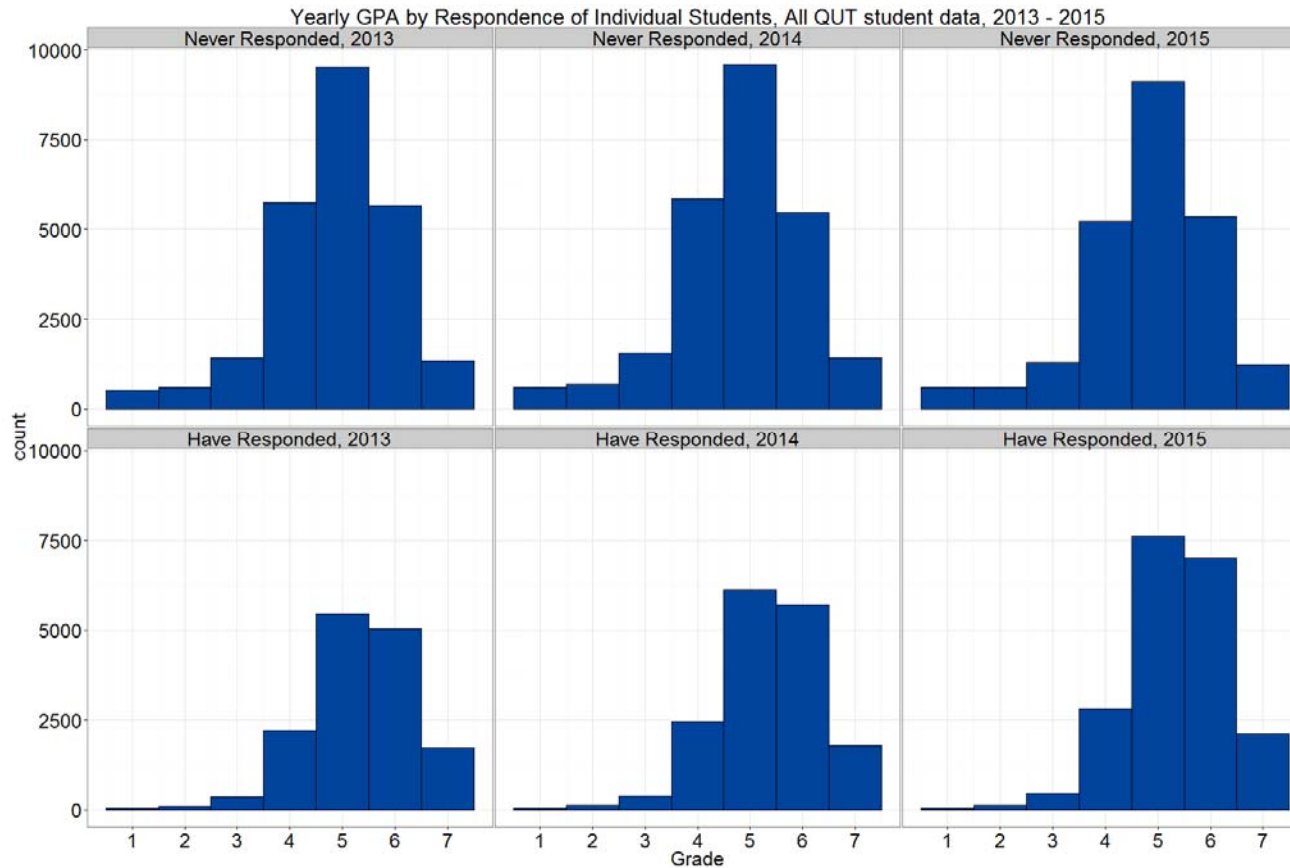
The number of individual students responding to surveys is increasing each year.

UNIQUE ENGAGEMENT BY YEAR



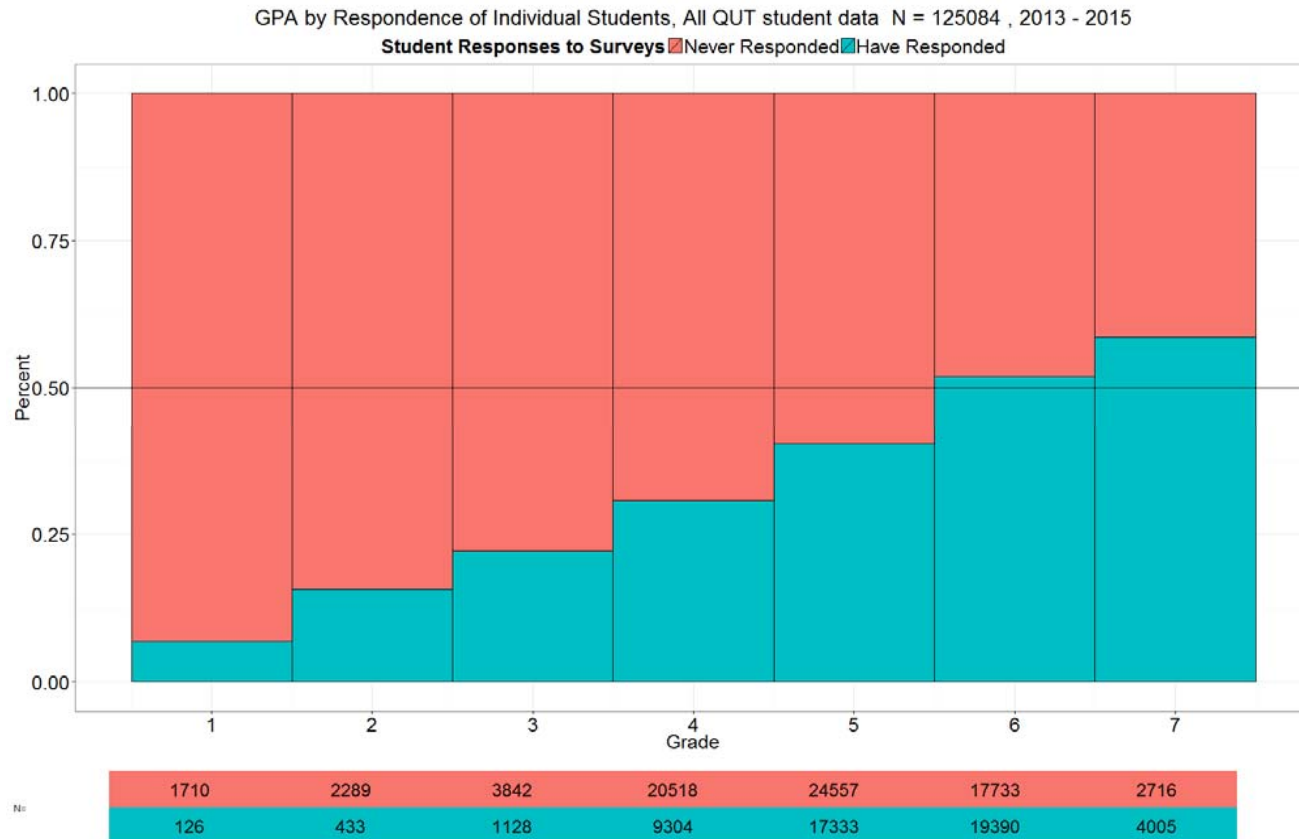
Never responded is on the left and responded is on the right.

GPA PROFILE OF RESPONDENTS



The number of students who achieve a grade point average of 5+ each year appear to be growing the most over the period.

GPA PROFILE OF RESPONDENTS BY YEAR



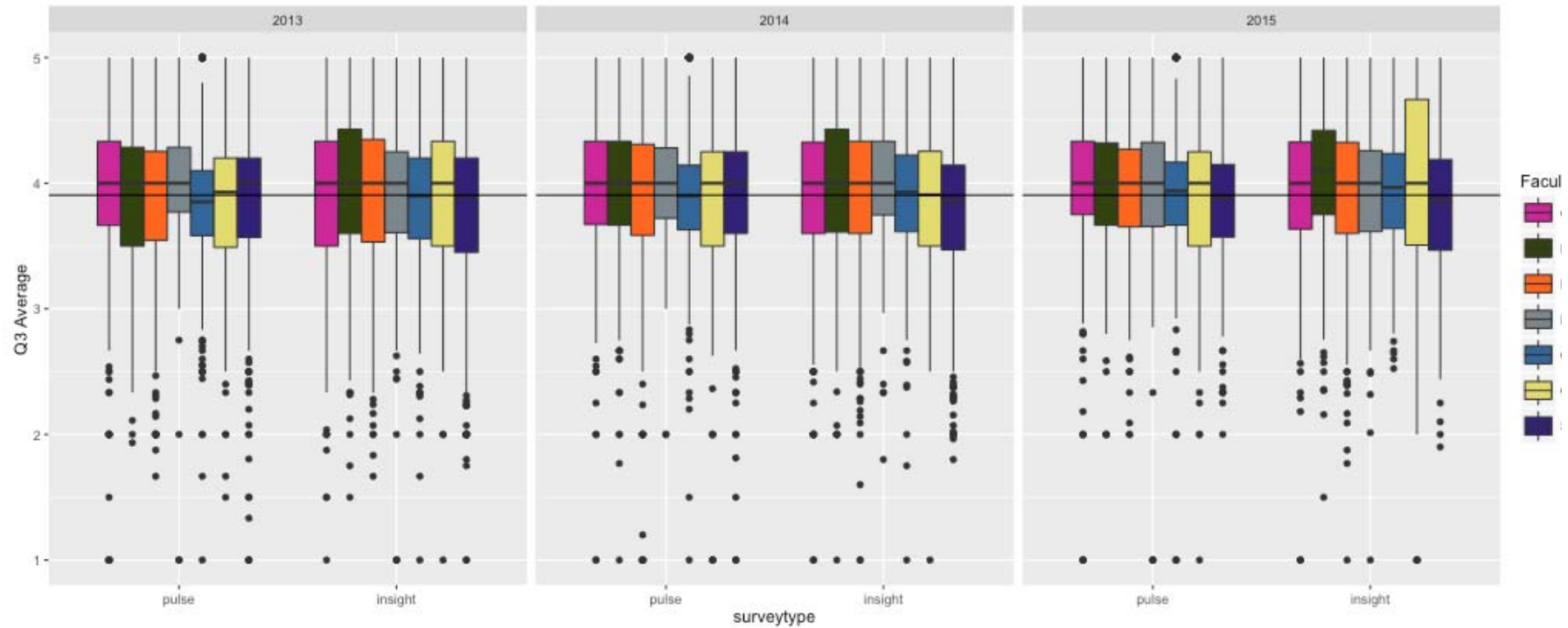
The grade point average profile of students indicates that respondents are representative of each GPA outcome.

GPA PROFILE OF RESPONDENTS



With an increasing number of responses over the period, there appears to be a linear relationship between GPA profile and survey completion.

GPA PROFILE OF RESPONDENTS BY YEAR

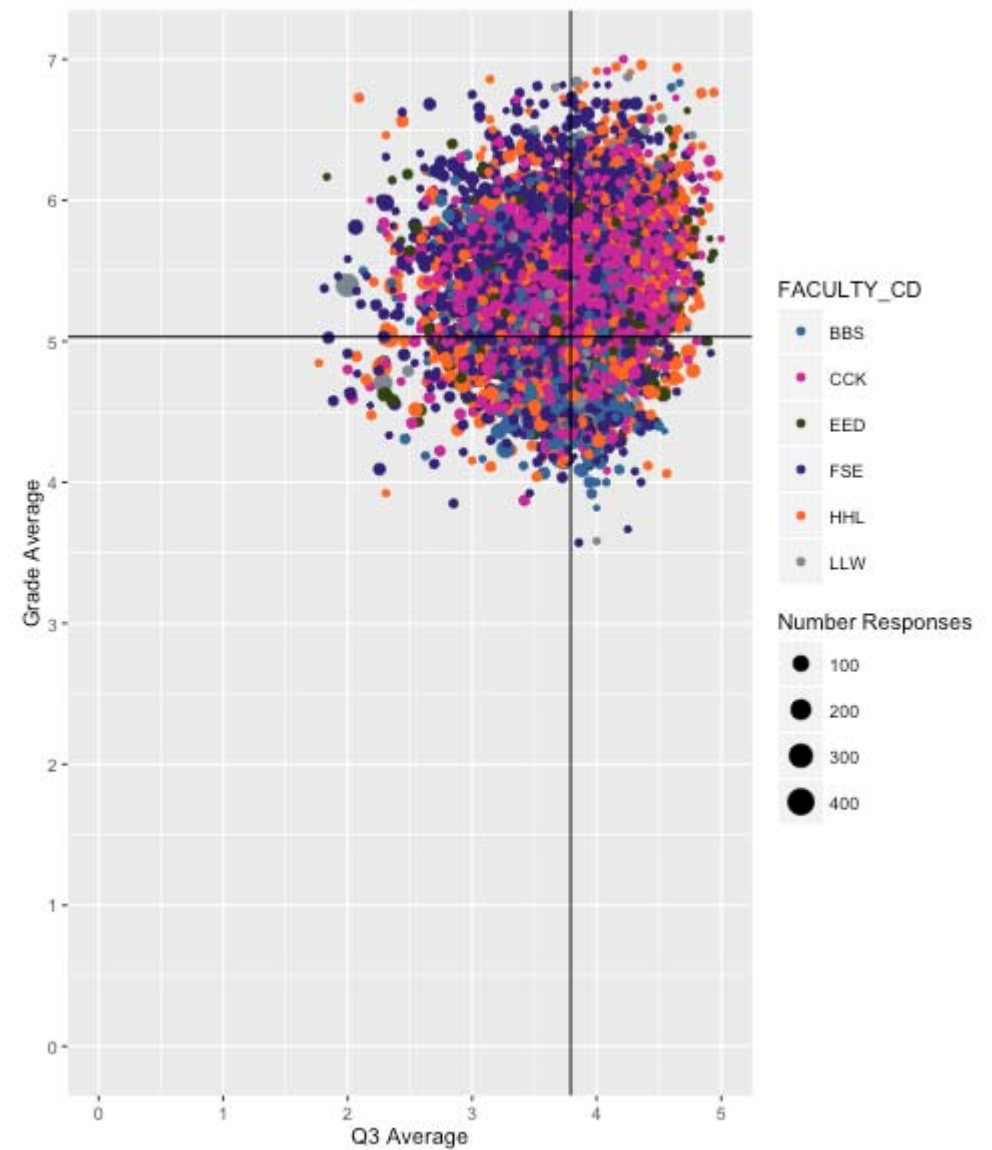


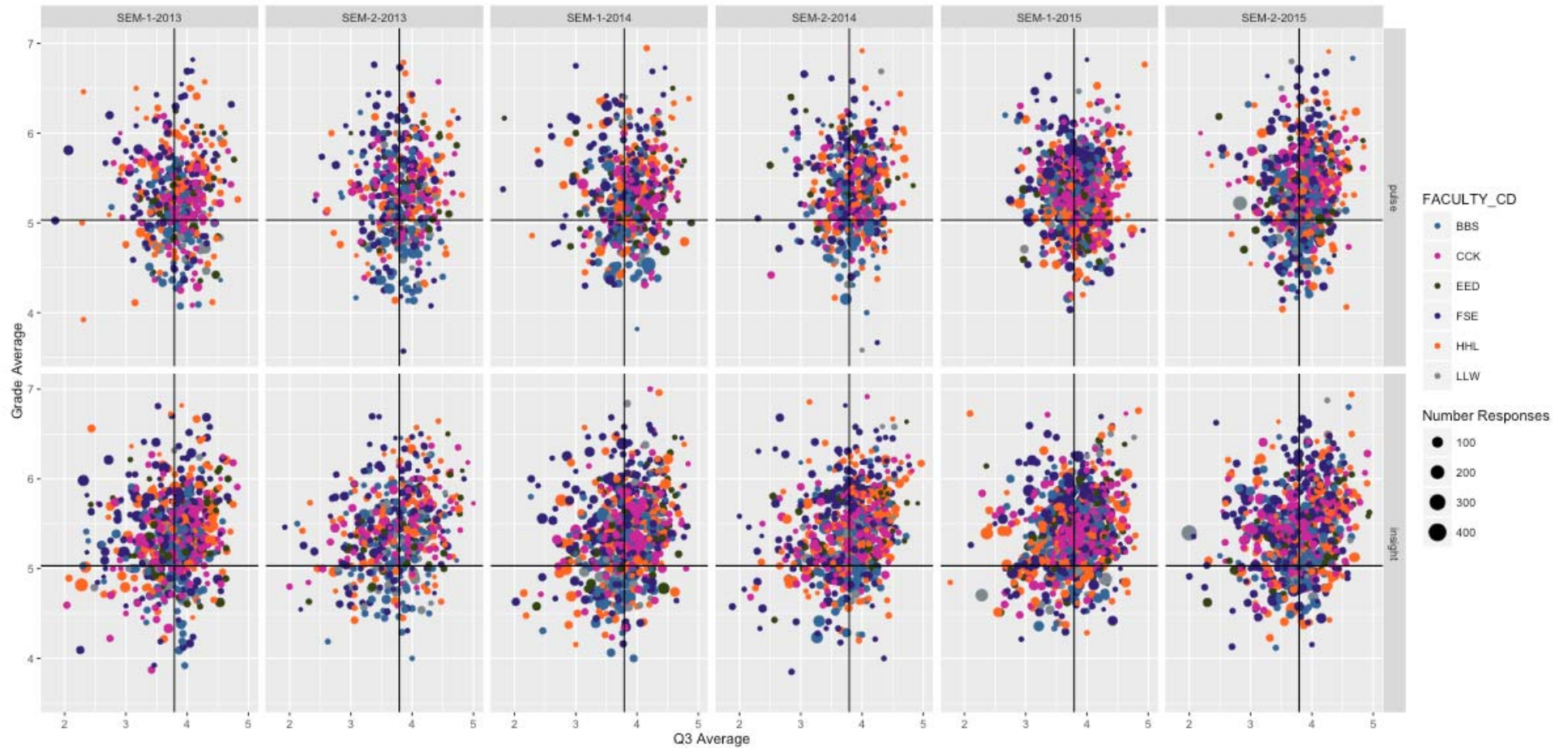
Pulse and Insight Q3 comparisons over the period by faculty

BOX AND WHISKER PLOTS

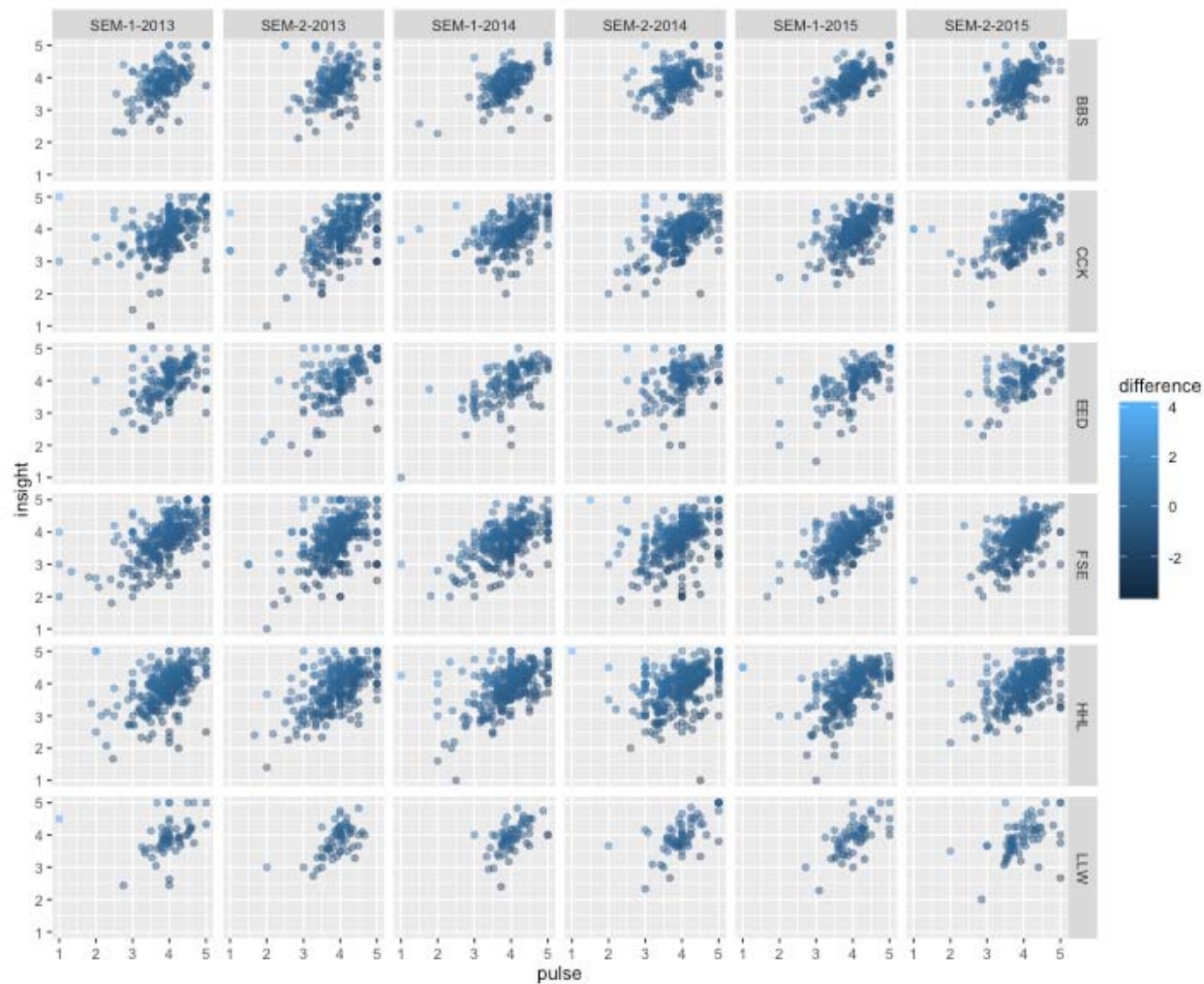
Includes Pulse and Insight Q3

QUT UNIT GRADE AVERAGE BY Q3 BY FACULTY

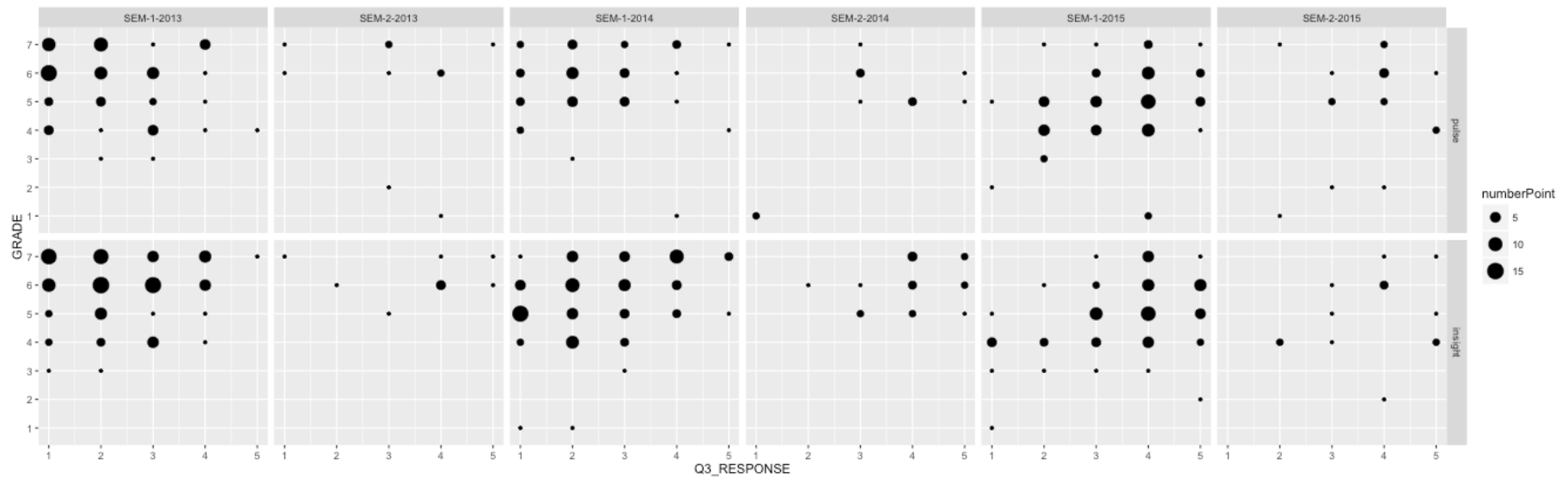




QUT PULSE AND INSIGHT Q3 SCATTER PLOTS BY UNIT AVERAGE GRADE



Q3 INSIGHT BY Q3 PULSE SCATTER PLOTS BY FACULTY OVER THE PERIOD



This unit received an intervention between Sem-2-2014 and Sem-1-2015.

AN INDIVIDUAL UNIT GRADE BY Q3 AND REPRESENTING NUMBER OF RESPONSES