ASQ Survey Data Interpretation: A Quick Reference Guide

Understanding the ASQ Framework

The **Academic Skills Questionnaire (ASQ)** is a validated TASO instrument that measures four key dimensions of student academic experience using 5-point Likert scales (Strongly Disagree to Strongly Agree):

Dimension	Description	Example Applications
Academic Self-Efficacy	Students' confidence in their academic abilities	Trinity College Case Study and Somerville Skills Hub Case Study
Cognitive Strategies	Approaches to academic tasks and information processing	Trinity College Case Study and Somerville Skills Hub Case Study
Metacognitive Strategies	How students monitor and direct their learning	Trinity College Case Study and Somerville Skills Hub Case Study
Sense of Belonging	Connection to college and university communities	Trinity College Case Study and Somerville Skills Hub Case Study

For comprehensive background on ASQ validation and implementation, see the TASO FAQ document.
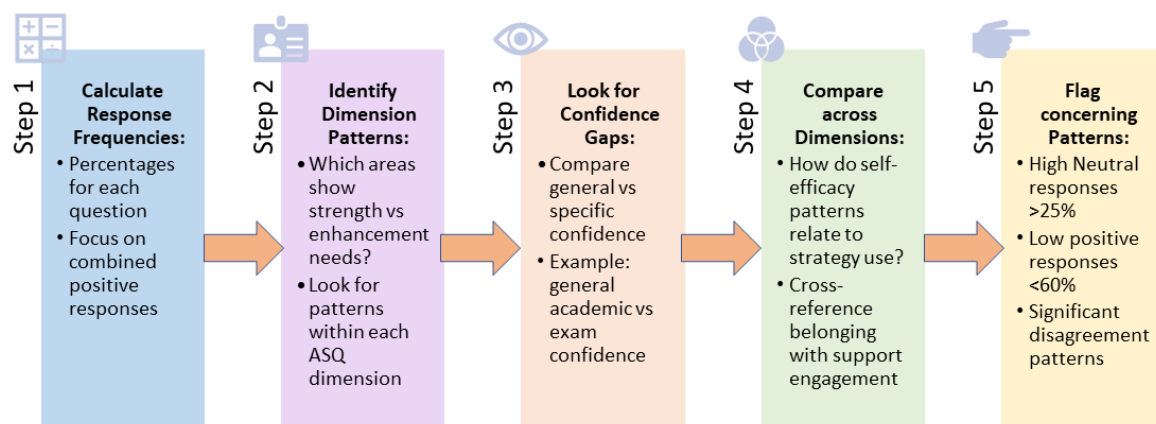
Statistical Analysis Foundations

These statistical concepts complement your existing analytical expertise by providing ASQ-specific interpretation frameworks:

Concept	Calculation	Typical Targets	Trinity Example
Response Distribution	% selecting each option (Strongly Agree → Strongly Disagree)	Balanced distribution	31.1% + 57.4% = 88.5% positive for general confidence
Combined Positive Responses	"Strongly Agree" + "Agree" percentages	>70% for healthy indicators	67.2% for task-specific confidence (indicating gap)

Concept	Calculation	Typical Targets	Trinity Example
Gap Analysis	Difference between related measures	<15% difference ideal	21.3% gap between general vs. specific confidence
Central Tendency Clustering	High neutral responses (>25%)	<20% neutral preferred	26.2% neutral on information evaluation skills

Essential Analysis Process: 5-Step Visual Framework

Step 1 — Calculate Response Frequencies:
• Percentages for each question
• Focus on combined positive responses

Step 2 — Identify Dimension Patterns:
• Which areas show strength vs enhancement needs?
• Look for patterns within each ASQ dimension

Step 3 — Look for Confidence Gaps:
• Compare general vs specific confidence
• Example: general academic vs exam confidence

Step 4 — Compare across Dimensions:
• How do self-efficacy patterns relate to strategy use?
• Cross-reference belonging with support engagement

Step 5 — Flag concerning Patterns:
• High Neutral responses >25%
• Low positive responses <60%
• Significant disagreement patterns

Interpreting Results: Visual Indicator Framework

🟢 **Positive Indicators**

Pattern	Threshold	What This Means in Practice
High Combined Positive	>75% agree/strongly agree	Students feel confident and capable in this area
Low Disagreement	<10% disagree/strongly disagree	Broad consensus on positive experiences
Strong Belonging-Support Correlation	High belonging + high support use	Students feel connected AND access resources
Metacognitive-Action Alignment	High strategy awareness + high implementation	Students know effective methods AND use them

🔴 **Areas for Enhancement**

Pattern	Threshold	Recommended Focus
Low Combined Positive	<60% agree/strongly agree	Targeted intervention needed

Pattern	Threshold	Recommended Focus
High Uncertainty	>25% neither agree/disagree	Clarify support pathways and expectations
Confidence Gaps	>15% difference between general/specific	Bridge abstract confidence to practical skills
Strategy-Implementation Gap	High awareness, low use	Address barriers to implementing known strategies

College-Specific Integration Framework

Question Type	Integration Method	Trinity College Example
Support Engagement	Cross-reference with ASQ confidence levels	Students accessing ASDL showed 15% higher task-specific confidence
Satisfaction Measures	Compare college vs. university belonging scores	88% college satisfaction vs. 72% university satisfaction
Academic Transition	Analyse alongside self-efficacy by year group	First years: 67% confidence, Final years: 89% confidence
Resource Awareness	Correlate awareness with strategy implementation	High awareness but only 45% regular use of study skills resources

Quick Visualisation Guide

Recommended Chart Types

Response Distribution Charts

- Use consistent colour scheme: Green (Strongly Agree) → Red (Strongly Disagree)
- Always include sample size: "n = X responses"
- Order logically: Strongly Agree → Strongly Disagree

Gap Analysis Charts

- Side-by-side bars for comparing general vs. specific measures
- Grouped bars for dimension comparisons across populations
- Highlight gaps >15% with annotations
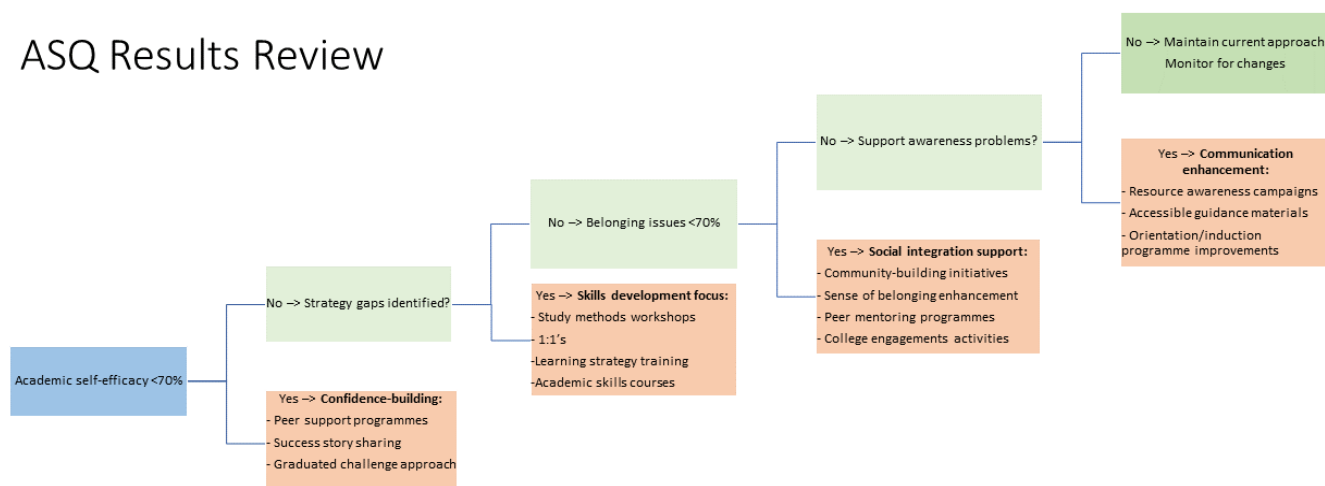
Sample Size Interpretation

Sample Size	Analytical Approach	Reporting Focus
n < 30	Focus on descriptive patterns and trends	Avoid percentage-based claims; emphasise themes
n = 30-100	Reliable for college-level trends	Identify patterns, note response rates
n > 100	Suitable for statistical comparisons	Enable subgroup analysis and correlations

Actionable Interpretation Framework

Pattern Identified	Likely Interpretation	Recommended Action	Trinity Example
High Self-Efficacy + Low Strategy Use	Confident but lacks specific academic skills	Skills workshops, study method training	Students confident generally but struggle with exam technique
Low Self-Efficacy + High Strategy Awareness	Knows what to do but lacks confidence	Confidence-building, peer support programs	Knows about resources but hesitant to use them
High Belonging + Low Support Engagement	Connected but unaware of resources	Improve communication, accessible guides	Feel part of college but don't know about ASDL
Low Belonging + High Academic Confidence	Social integration challenges	Community-building, peer mentoring	Academically capable but isolated

Decision Tree for Action

ASQ Results Review

Academic self-efficacy <70%

No –> Strategy gaps identified?

Yes –> **Confidence-building:**
- Peer support programmes
- Success story sharing
- Graduated challenge approach

No –> Belonging issues <70%

Yes –> **Skills development focus:**
- Study methods workshops
- 1:1's
- Learning strategy training
- Academic skills courses

No –> Support awareness problems?

Yes –> **Social integration support:**
- Community-building initiatives
- Sense of belonging enhancement
- Peer mentoring programmes
- College engagements activities

No –> Maintain current approach Monitor for changes

Yes –> **Communication enhancement:**
- Resource awareness campaigns
- Accessible guidance materials
- Orientation/induction programme improvements

Reporting Best Practices Checklist

☑ Essential Inclusions

- Response rates and sample demographics
- Combined positive percentages for each dimension
- Key patterns and significant gaps (>15%)
- Specific, actionable recommendations
- Context from college case studies where relevant

☑ Effective Highlighting

- Visual indicators (🟢 / 🔴) for quick interpretation
- Comparison with sector benchmarks where available
- Integration with qualitative insights (MSC stories)
- Clear connection between findings and recommendations

✖ Common Pitfalls to Avoid

- Over-interpreting small differences (<10%)
- Making causal claims from correlation data
- Ignoring high neutral response patterns
- Presenting results without actionable context

Resource Links and Support

For Statistical Analysis Support: Contact Student Data Insights, Education Policy Support
For ASQ Implementation Guidance: TASO ASQ Resource Hub
For Visual Tools: Consider PowerBI, Tableau, or Excel for creating the recommended chart types
For Case Study Examples: Review Trinity College, St Peter's College and Somerville College Skills Hub evaluation reports.

This guide builds on successful implementations at St Peter's College (Academic Writing Support), Trinity College (ASDL Evaluation), and Somerville College (Skills Hub Assessment). Two of these case studies demonstrate (Trinity and Somerville) effective integration of ASQ data with qualitative insights through Most Significant Change (MSC) methodology. The St Peter's College writing support case study solely used this MSC approach.