



# **NSS scores: What do they really mean?**

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Institutional Research Conference  
8-9 July 2009



# The National Student Survey: What is it?



- An annual survey since 2005 completed by final year students
- Captures the views of students on 6 dimensions of teaching quality and overall satisfaction with a course
  - Teaching & learning
  - Assessment & feedback
  - Academic support
  - Organisation & management
  - Learning resources
  - Personal development

# The National Student Survey: How is it used?

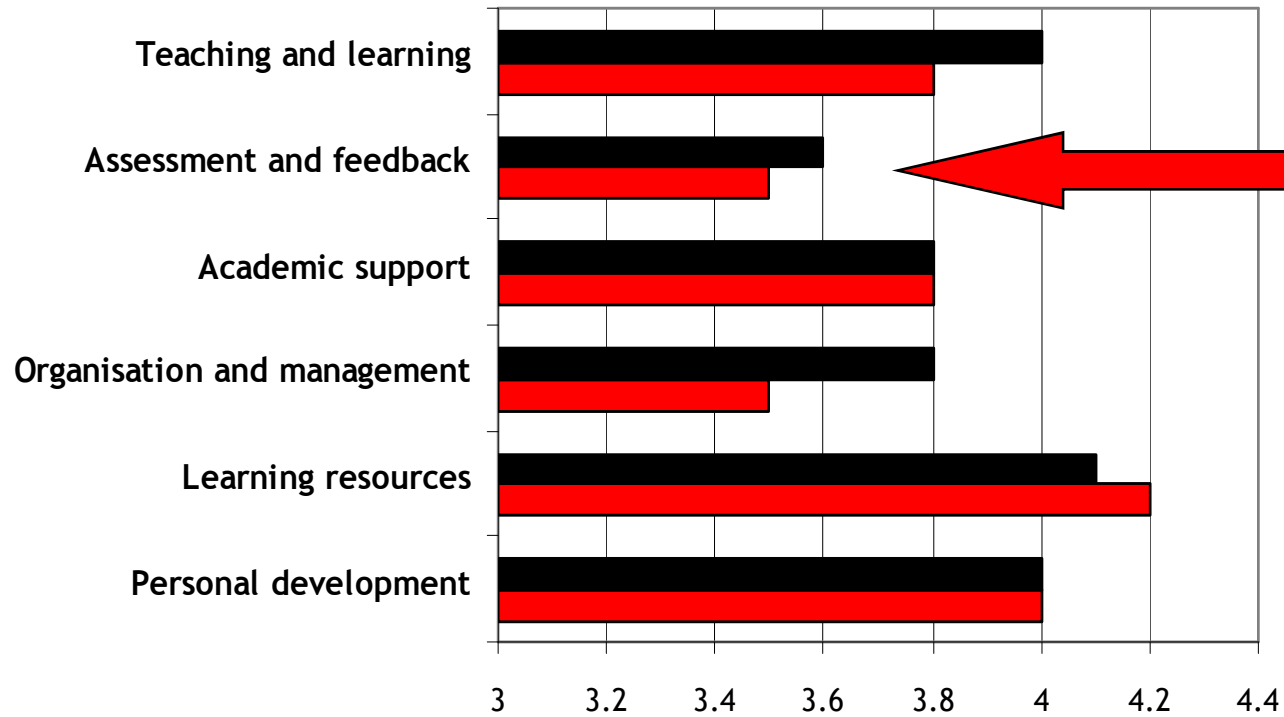


- Surridge (2006)

“The National Student Survey offers an extremely rich resource for understanding student experiences in higher education...for individual institutions to understand the responses of their own students.” (p. 9)

- Taken by HEIs and prospective students as an indication of teaching and course quality
- Drives course development, informs decisions on maintaining and improving standards within HEIs

# Southampton Solent University NSS 2007



■ SSU Average ■ Sector Average

5=Definitely agree, 3=Neither agree nor disagree, 1=Definitely disagree

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## SSU's response to NSS 2007

- TQEF allocated by HEFCE to SSU used to:

“... improve the understanding of student perception and their engagement with important aspects of their learning experience so that improvements might be made.”

“In the context of the NSS, investigate student perceptions so that we are better able to understand their responses and the issues associated with **assessment and feedback...**”

## Our study: Background (1)

- **NSS (Assessment & Feedback) is not in line with the other NSS scales**
- Consistently, HEIs receive less positive ratings on this scale compared to the other scales (SurrIDGE, 2008)
- This is one of the NSS scales that is least related to students' overall perceptions of course quality (SurrIDGE, 2006)
- In developing the NSS, this scale had “less strong statistical properties” than other scales (HEFCE, 2004).

## Our study: Background (2)

- **NSS (A+F) was one of 3 NSS scales on which SSU scored below sector average on the NSS 2007**
- **External examiners suggest SSU tutors are providing good feedback - quality and quantity (Lim et al. 2008)**
- **NSS (A+F): What do the scores mean?**

# Our study

- **Research questions**

- What are our final year students' perceptions of assessment and feedback at Solent?
- How do our students' perceptions relate to their NSS (A+F) scores?

- **Research methodology**

- Quantitative and qualitative data collection
- Perceptions of assessment and feedback *across* the year
- 6 undergraduate courses, 3 faculties



# Participants

- **$N = 163$** 
  - Mean age at entry = 20.0 years
  - 49% ( $n = 79$ ) male, 47% ( $n = 76$ ) female
  - 81% ( $n = 132$ ) UK students
  - 92% ( $n = 150$ ) full-time
  - 39% ( $n = 64$ ) FMAS, 29% ( $n = 48$ ) FBSE, 26% ( $n = 42$ ) FTEC

# Materials

- **Student Assessment & Feedback Questionnaire**

- Assessment Experience Questionnaire (Gibbs and Simpson 2003)
  - Sections 2 - 5
- Experiences of Teaching and Learning Questionnaire (Entwistle *et al.* 2003)
  - Items 31 - 35
- Sheffield Hallam University Questionnaire (Glover 2004)
- Davies and Julal

# Materials

- **NSS (Assessment & Feedback)**
  1. The criteria used in marking have been clear in advance.
  2. Assessment arrangements and marking have been fair.
  3. Feedback on my work has been prompt.
  4. I have received detailed comments on my work.
  5. Feedback on my work has helped me clarify things I did not understand.
- 5-point response scale ( 5 = Definitely agree, 1 = Definitely disagree)
- Score = mean response to statements

# Procedure

- **Data collection**

- Pilot: November 2008
- Main: December 2008 - March 2009
- Completed during teaching sessions
- Average response rate: 54% (40 - 78%)

# Follow-up focus groups

- Students' current experiences of assessment and feedback.
- Elaborate upon responses to the NSS (A+F) statements
- Pilot: November/December 2008
- Main: January - March 2009
- 38 volunteers

# Data analysis

- **Quantitative - questionnaire data**
  - Principal components analysis
    - Rotations (Oblim with Kaiser Normalisation)
  - Correlational analyses
- **Qualitative - focus group data**
  - Independent researcher, Roz Collins
  - Verbatim imported to NVIVO
  - Grounded approach (Glaser and Strauss 1967)

# Principal components analysis: Students' perceptions of assessment

Communalities > .40 Factors explain 60% of total variance	% of variance
<b>Support and encouragement</b> E.g., Staff have given me the support I need to help me complete assessments.	29.9
<b>Alignment of assessment to unit material</b> E.g., When I tackle an assessment it has not been at all clear what would count as a successful answer.	10.9
<b>Amount and timing of assessments</b> E.g., There have been too many assessments on my course.	10.1
<b>Difficulty of assessments</b> E.g., The assessments have not been very challenging.	9.0

# Correlations between students' perceptions of assessment and NSS (A+F)

- Higher NSS (A+F) scores were associated with perceptions of
  - more support and encouragement with assessments ( $r = .56$ )
  - greater alignment between assessments and unit materials ( $r = -.17$ )
  - fewer assessments and well-spaced deadlines ( $r = -.26$ )
  - assessments that were not difficult ( $r = -.29$ )



# Principal components analysis: Students' perceptions of feedback

Communalities > .54 Factors explain 65% of total variance	% of variance
<b>Feed-forward</b> E.g., The feedback has shown me how to do better next time.	31.3
<b>Attendance to feedback</b> E.g., I have used the feedback to go back over what I have done in the assessment.	9.7
<b>Understanding of feedback</b> E.g., I have not understood some of the feedback.	7.8
<b>Comparative feedback</b> E.g., The feedback has mainly told me how well I am doing in relation to other students on my course.	4.6

## Students' perceptions of feedback, cont.

	% of variance
<b>Amount of feedback</b> E.g., On this course, I have received plenty of feedback on how I am doing.	4.1
<b>Timing of feedback</b> E.g., Whatever feedback I have received comes back too late to be useful	4.0
<b>Legibility of written feedback</b> E.g., Written feedback on my assessment has always been legible	3.6

# Correlations between students' perceptions of feedback and NSS (A+F)

- Higher NSS (A+F) scores were associated with perceptions of
  - feedback that can feed forward ( $r = .64$ )
  - greater attendance to feedback ( $r = .19$ )
  - greater understanding of the feedback ( $r = -.45$ )
  - knowing how well they were doing in comparison to their peers ( $r = .27$ )
  - receiving plenty of feedback ( $r = .76$ )
  - feedback being quick ( $r = -.59$ )
  - being able to read the handwritten feedback ( $r = .35$ )

# Results - Regression analysis: Predicting NSS (A+F) from students' perceptions of assessment and feedback

- **Criterion variable**
  - NSS (A+F) score
- **Predictor variables**
  - 4 assessment factors, 7 feedback factors
- **Probability of F-to-enter = .05**
- **Probability of F-to-remove = .10**

# Predicting NSS (A+F) from students' perceptions of assessment and feedback

<i>Predictors</i>	<i>B Step 1</i>	<i>B Step 2</i>	<i>B Step 3</i>
Amount of feedback	.76	.58	.52
Feed-forward		.35	.25
Timing of feedback			-.24
<i>Change in R<sup>2</sup></i>	.57	.09	.04
<i>F of change (df)</i>	212.88 (1, 161)	41.30 (1, 160)	20.24 (1, 159)

Total  $R^2 = .70$  (Adj.  $R^2 = .69$ )  $F$  of model (3, 159) = 121.56,  $p < .001$

Durbin-Watson = 1.93, VIFs < 2.00

# Predicting NSS (A+F) from students' perceptions of assessment and feedback

- **NSS (A+F) scores are best explained by students' perceptions of**
  - The amount of feedback they receive (57% of variance explained)
  - Whether feedback can be used to **feed-forward** (9% of variance)
  - The **timing of feedback** (4% of variance)

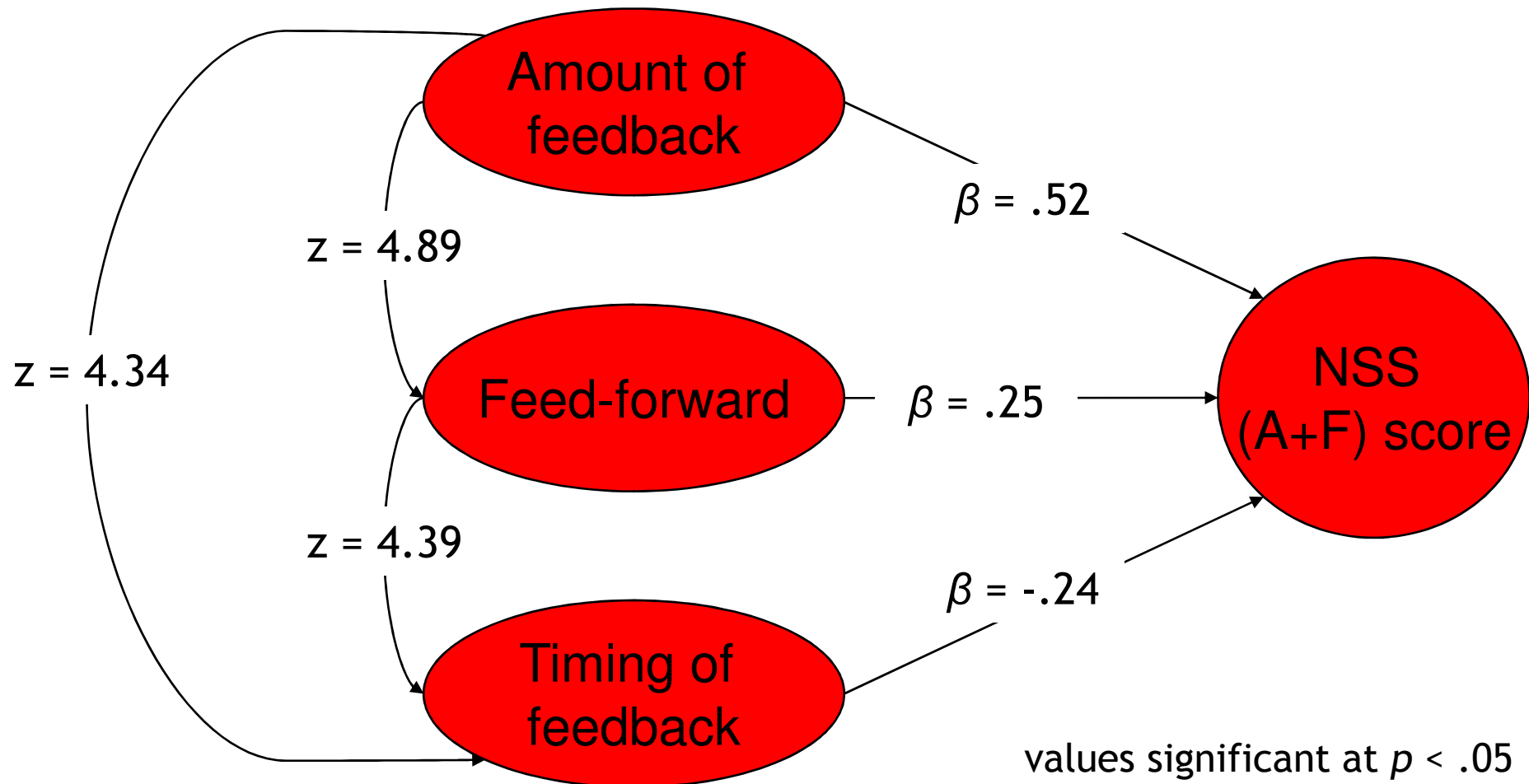
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# Predicting NSS (A+F) from students' perceptions of assessment and feedback





# Discussion: What do NSS(A+F) scores mean?

- For our students, they mean their perceptions of feedback

NSS Item	Factor
Feedback on my work has been prompt.	Timing of feedback
I have received detailed comments on my work.	Amount of feedback
Feedback on my work has helped me clarify things I did not understand.	<i>Feed-forward?</i>

# Aligning with focus group comments

**Greater feedback on dissertation** - supervisor discusses feedback - really important for level 3 dissertation - if you don't understand it's important

Project proposal - tutor refused drafts - wouldn't mark them - first time to choose title, not sure what we're doing, didn't get to hand it in as draft first

The dissertation represented 1/3rd of the year - we expect 60% extra feedback - not allowed to get formative feedback on some units - some lecturers say 'I do not double mark!'

When asked when was the most useful feedback given, they agreed that between the proposal and literary review so they knew the direction was good or not

That there should be continuity which would help in the case that if they've failed on the proposal they need to know so that **they have a chance to know how to continue**

Amount and detail

Dissertation-specific

Timing

# What do NSS(A+F) scores mean?

- **Inter-relations between students' perceptions and their NSS(A+F) rating**
  - Not just about providing more feedback,
    - it has to be useful to feed-forward, and
    - it has to be prompt.
  - Not just about feeding forward,
    - it has to be prompt.

**Thank you for listening**

**Any questions?**

# Evaluation

## • Strengths

- Good participation and engagement by course teams (students and academics)
- Coverage
  - Multiple disciplines
  - Range of courses
  - Different course sizes
  - Proportions of home and international students

## • Limitations

- SAFQ
  - No 'not applicable' option
  - Potential order effects
  - Overlapping feedback items
- Focus groups
  - Small numbers in some
  - Not all courses participated
- No Warsash students

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