

Lecturers' views on the nature and relevance of qualitative feedback collected at a Maths Support Centre

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Overview

- Why should an MSC collect qualitative data on students' visits?
- What type of qualitative data should an MSC collect?
 - What should be captured in this data?
 - What level of detail is required?
 - Who is the data for?
- What is the most efficient and effective way of collecting this data?
- In what ways can this qualitative data be used to improve the support offered to students?

MSC Database

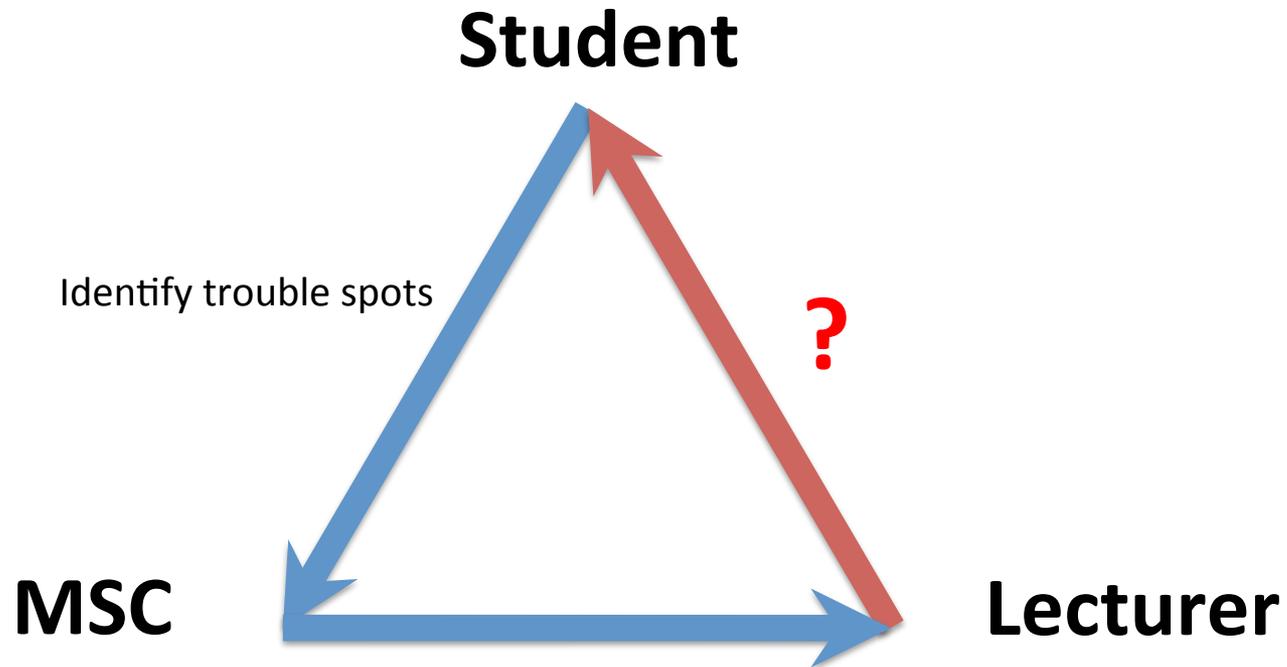
Support Centre x

mathsupportcentre.ucd.ie/index.xhtml

Apps Add to ownCloud

| | | | |
|------------------------|-----------------|---|---|
| 11:28:51 AM | | (application and rules) | quite know what it meant so didn't know where to start looking. went through characteristic equations and directed student to some good online notes. How to approach a problem that looked very difficult but once you got started actually turned out to be pretty straightforward. How to approach problems like this in the future. |
| 2/23/2015, 11:58:11 AM | Differentiation | Differentiation (application and rules) | Hot to find general solutions to homogeneous and non homogeneous ODEs. We went through all the possibilities (real distinct, repeated and complex roots etc), and what solutions to pick and why each one is a good idea and how you could figure it out yourself. Did same with non homogeneous equations. Student seemed ok then. |
| 2/23/2015, 2:53:58 PM | Integration | Integration | working on solving odes using the integrating factor method, limits of the solutions and also integration by parts. |
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| 2/23/2015, 2:53:58 PM | Integration | Integration | working on solving odes using the integrating factor method, limits of the solutions and also integration by parts. |
| 2/23/2015, 3:24:11 PM | Sim. equations | Sim. equations (word problems) | Working on solving odes, integration by parts and solving equations using the integration factor method. Solving non-homogeneous second order equations using a particular solution and a homogeneous one. |

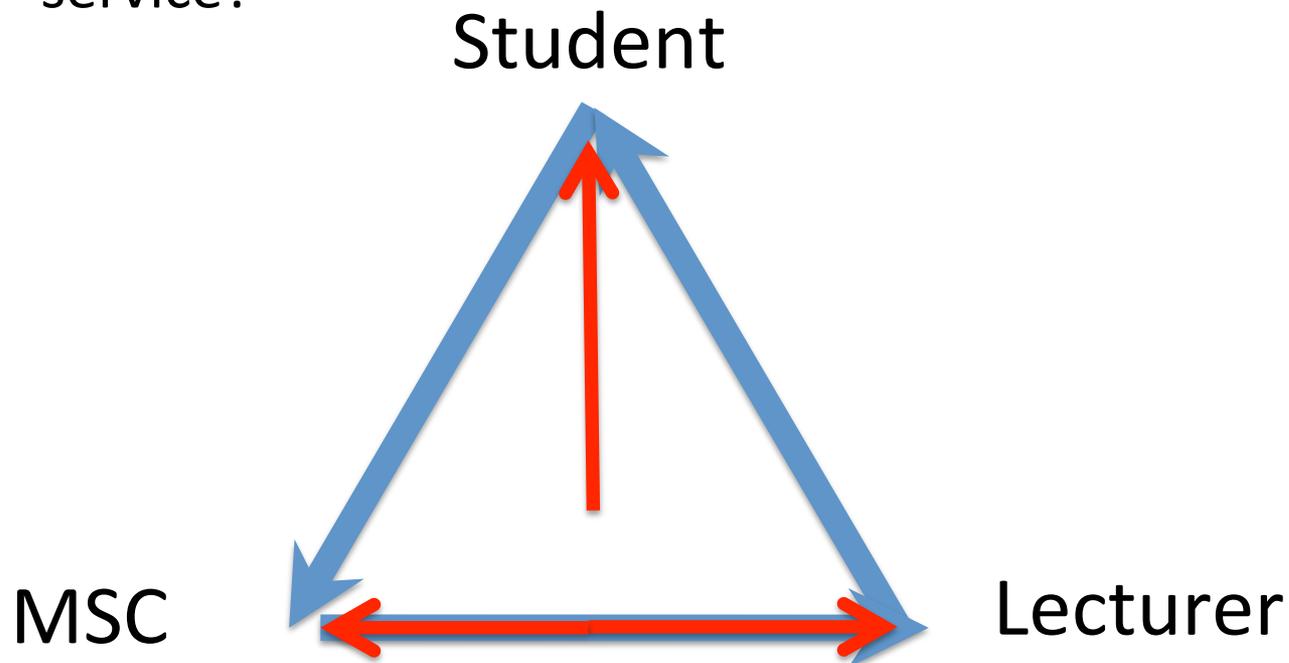
MSC Feedback Triangle



- Number of students
- Nature of query
- Length of visit
- Real time

Research Questions

- 1 In what ways, if any, do lecturers find the feedback provided by the MSC on students' visits, useful?
- 2 As a result of discussing the nature of the MSC feedback with the lecturer can the MSC improve its service?



Interview 1

Aims:

Check usage of system

General chat on MSC services

Show comments to see if they made sense

Interview 1

Outcomes:

Difficulty with access

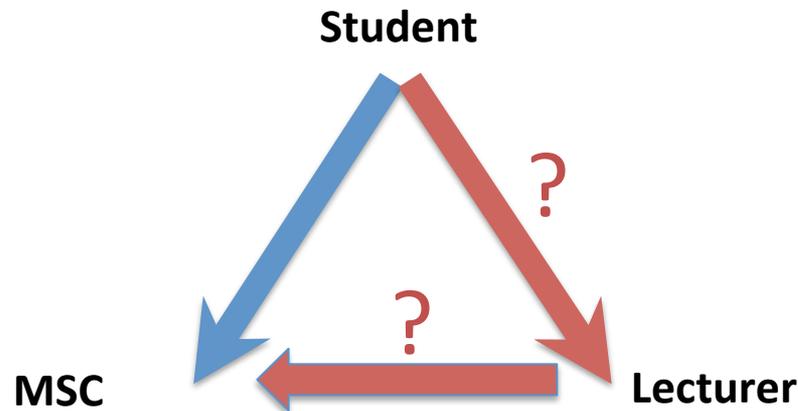
Interviewer speaking too much!

Validation of tutor data

Various forms of feedback

Research Questions

- 1 In what ways, if any, do lecturers find the feedback provided by the MSC on students' visits, useful?
- 2 As a result of discussing the nature of the MSC feedback with the lecturer can the MSC improve its service?
- 3 **How does a lecturer get feedback from large classes? (And where does the MSC feedback sit in the general context of this feedback?)**



Interview 2

Aims

Further validate the data

Checklist of feedback forms

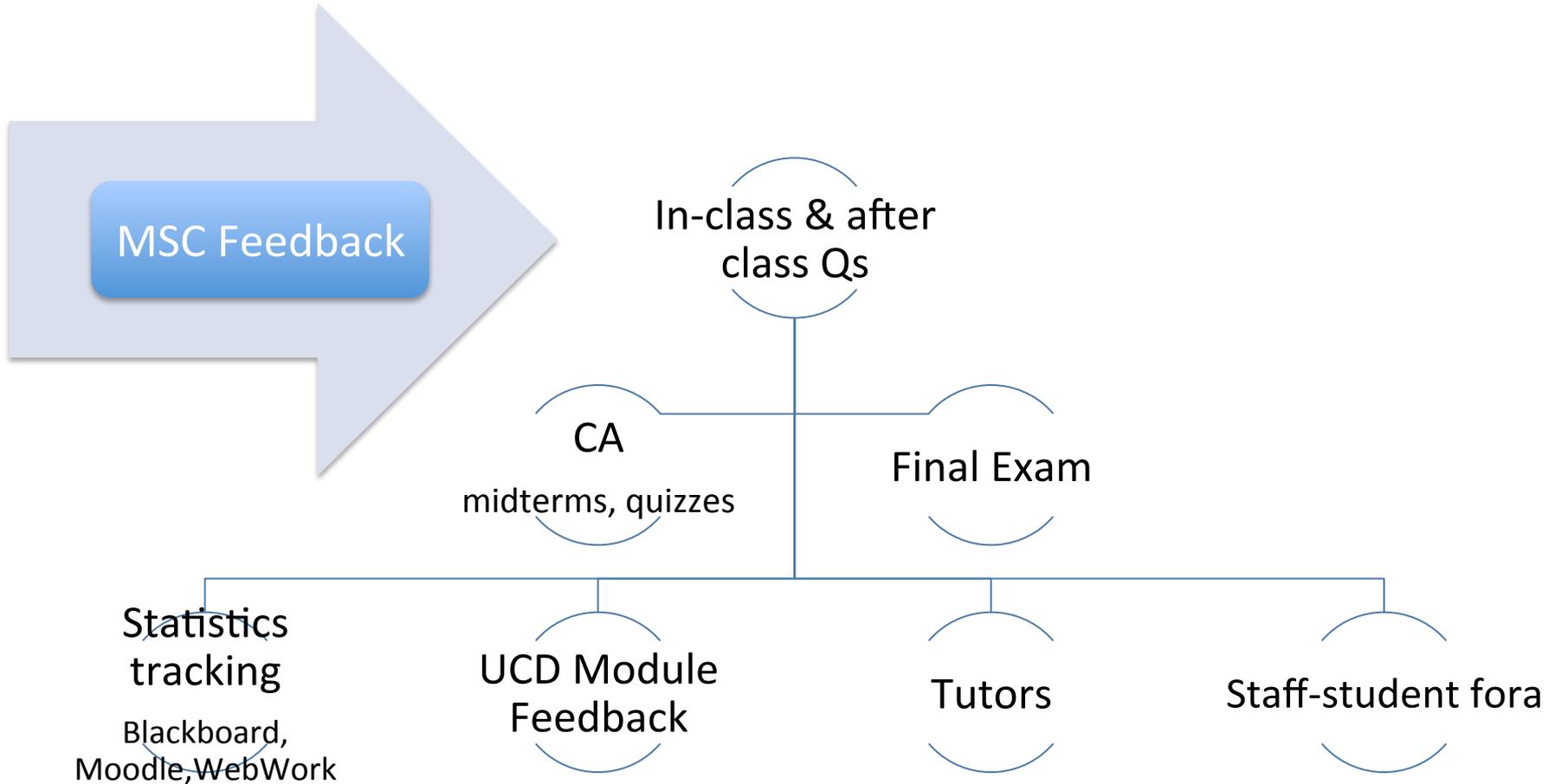
Outcomes

Validated tutor entries

Variety of ways in which lecturers *implicitly monitor* students' learning in large maths lectures

Rank of most valuable feedback modes

Feedback from large classes

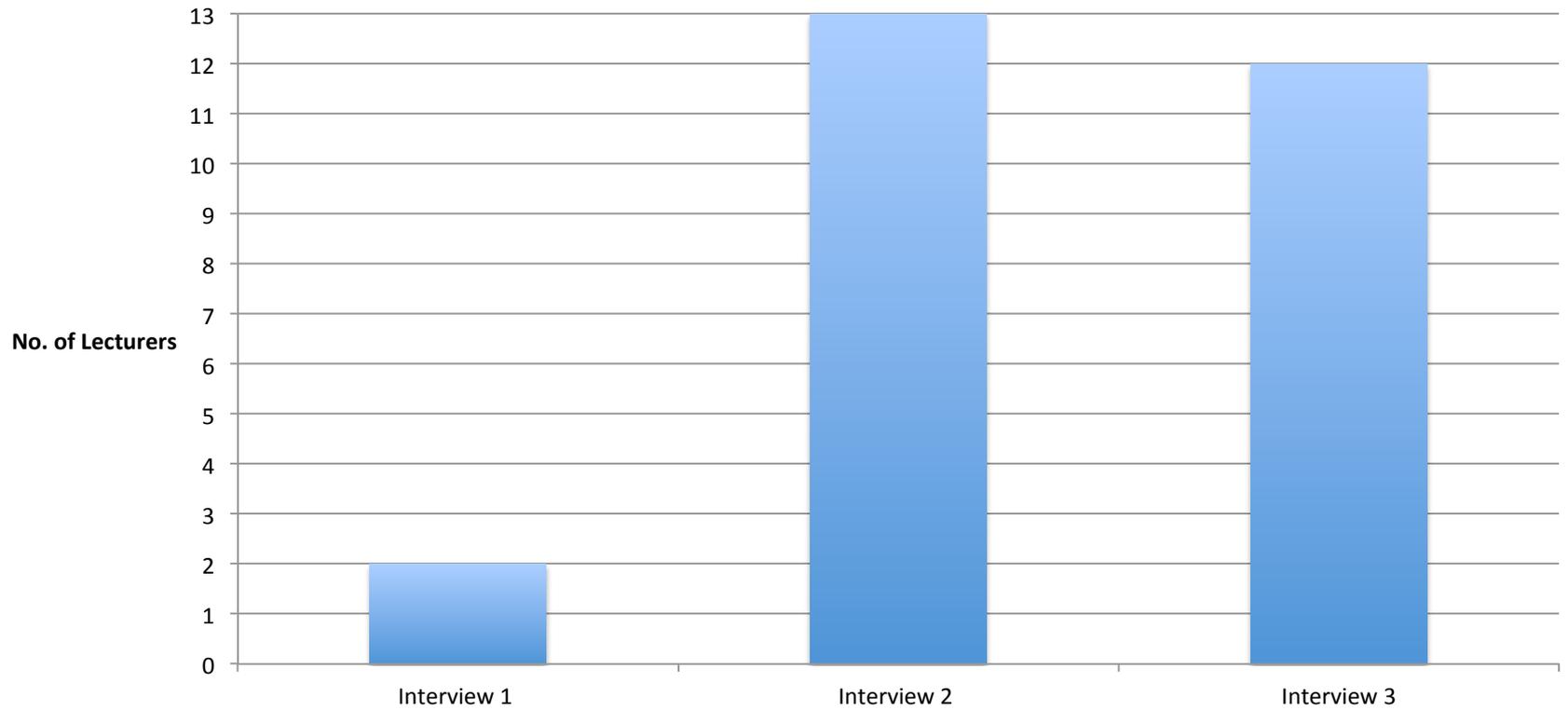


Interview 3

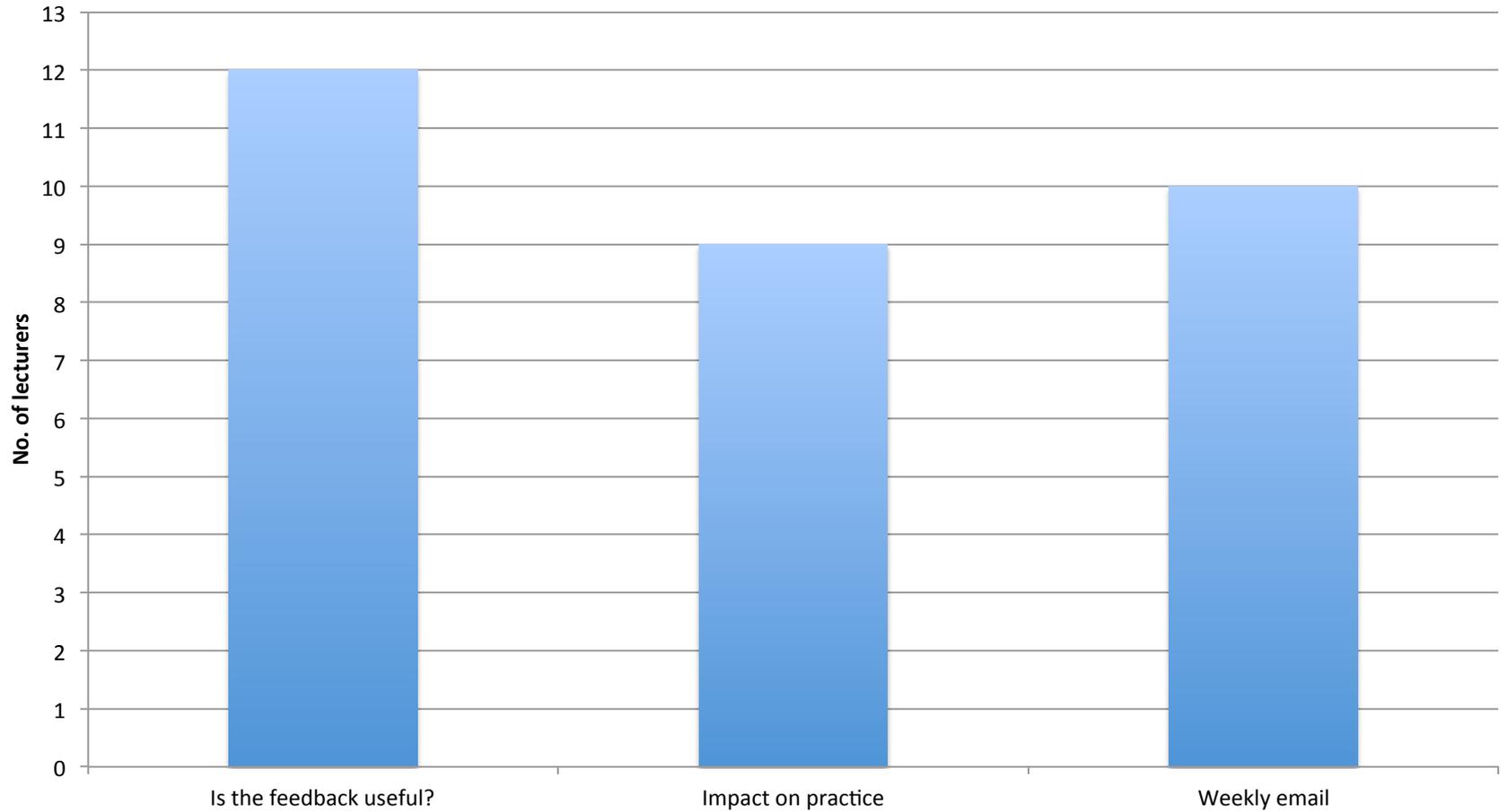
- 1 Lecturers find MSC feedback *useful* as it:
 - is content based, accurate & in real-time
 - more specific/detailed than other feedback
 - is closest to in-class and after-class questions
 - formative rather than summative
 - reassures; confirms what is covered in lectures
 - collates all the info in one place.
- 2 Some gave examples of how it had *impacted practice*.

Some stats

Checked the System



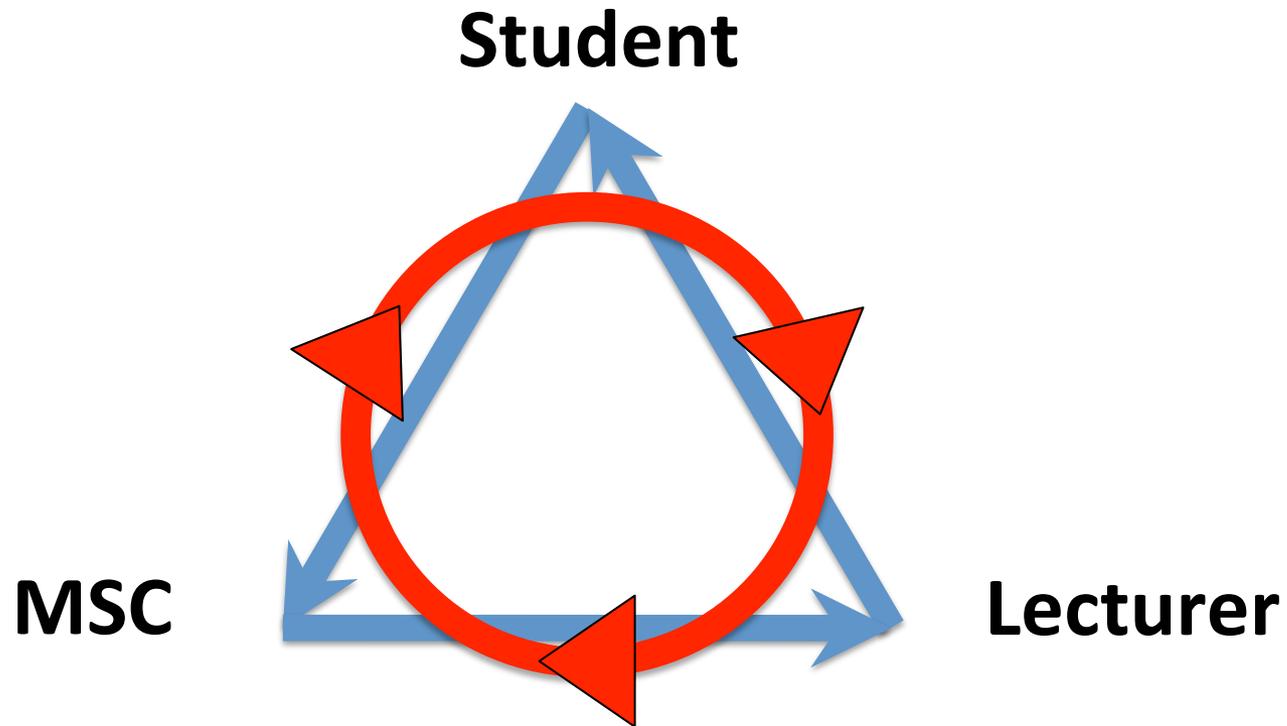
Some stats



Impact on practice

“It is more specific... you know what kind of exact type of question is being asked... So I mean it is the kind of feedback that would make me say “You know what, I will do that section in more depth” or “I will omit that”... it is not even just a topic but the part of a topic... whereas on the other kind of feedback you tend to get more generic style statements.”

Closing the Feedback Loop



Any questions?
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References

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- Bass, H. (2015). *Mathematics and Teaching*. I, Mathematician. Mathematical Association of America
- Speer, N., King, K., Howell, H. (2015). *Definitions of mathematical knowledge for teaching: using these constructs in research on secondary and college mathematics teachers*. *Journal of Math Teacher Education*