

# How to Build a Learning Community

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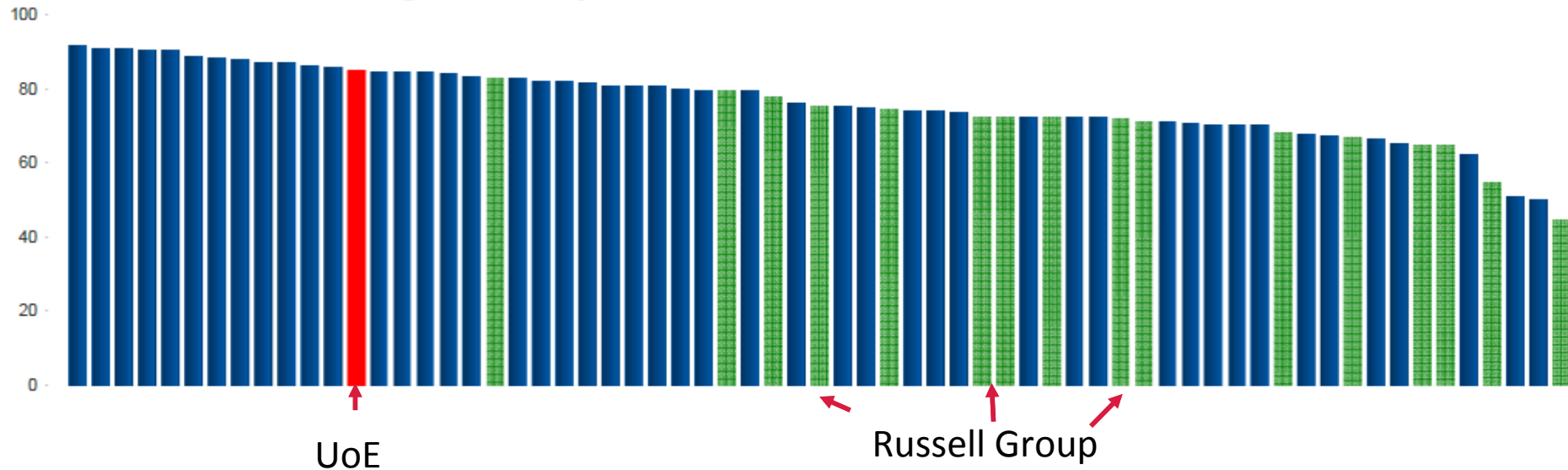


THE UNIVERSITY *of* EDINBURGH  
School of Mathematics



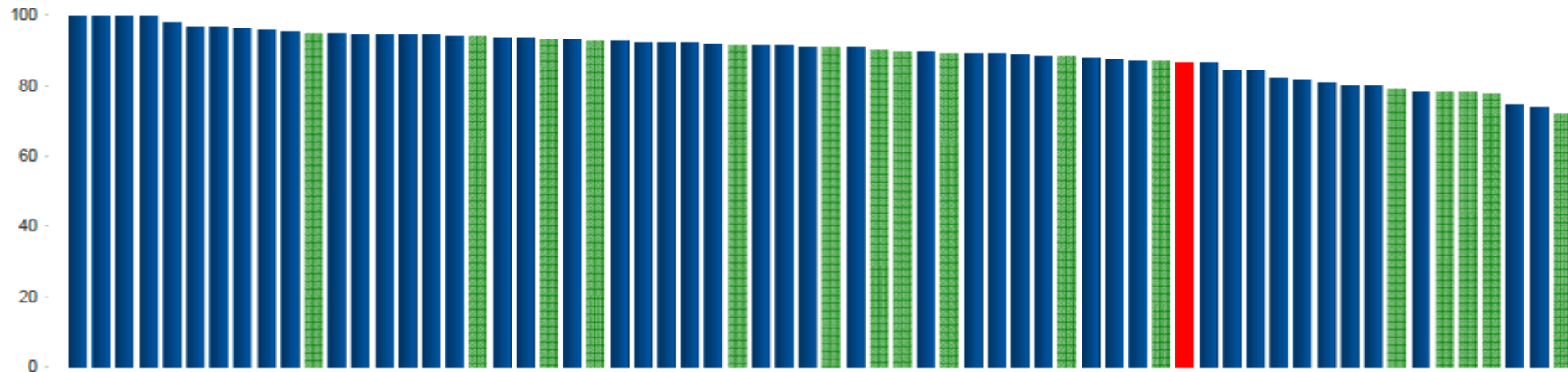
# National Student Survey Results 2017

Learning Community for UUK institutions: Mathematics and Statistics



# National Student Survey Results 2017

Overall Satisfaction for UUK institutions: Mathematics and Statistics



# Why learning community?

“...participating in a learning community is positively linked to engagement as well as student self-reported outcomes and overall satisfaction...”

Zhao, Kuh (2004)

# Shared responsibility

*Engaging students:* what staff and institutions do to engage students in educationally purposeful ways

*Students engaging:* what students do – effort spent studying, their motivation and involvement in the institution

Bryson (2014)

# NSS Learning Community Qs

- “I feel part of a community of staff and students”
- “I have had the right opportunities to work with other students as part of my course”

# Two aspects to learning community

- Feel part of a community
- Able to learn with others

# Opportunities to learn with other students

- Within the classroom
- Outwith the classroom



Outwith the classroom

# Drop-in help in MathsBase



Outwith the classroom

**PEER SUPPORT**

**OWN  
your  
MARKS**

**Study groups:  
MathPALS**



Outwith the classroom

Discussion Forums  
- [Piazza](#)

Within the classroom

# Collaborative Workshops in Teaching Studios





Within the classroom

Collaborative Workshops in Teaching Studios



Within the classroom

**Active Learning/Peer Instruction in Lectures**



# What about assessment?

# What about assessment?

- High-stakes vs low-stakes
- Group projects and presentations
- Two-stage tests



# Feeling part of a community

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- Informal interactions with staff/students
- Informed of the School's activities
- Opportunities to contribute to the School's activities
- Identifying as a mathematics student/professional attitudes towards subject

# Feeling part of a community

“..positive student-staff interaction and relationships are key to enhancing student motivation, engagement and academic performance”

Catherine Bovill, *engagED in Learning and Teaching Conversations*,  
2017

# Feeling part of a community

- Open days/visit days
- Set expectations about what we offer and what they will contribute
- Robust induction programme (developed with Abby Shovlin and Jenna Mann, IAD)
- Welcome meetings for each year group
- Physical environment important



**Study and socialise in  
MathsHub**

# Communicating a strong School/professional identity

- Newsletter from Head of School
- Publicity, Engagement and Outreach Committee
- Social Media
- General Interest Seminars



# Opportunities for students to contribute to their community

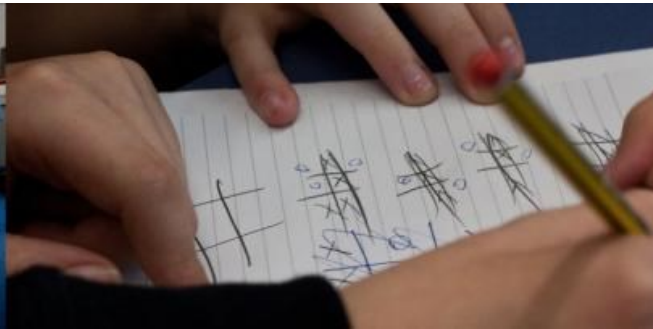
- MathPALS
- Outreach Team
- Student Ambassadors
- MathSoc
- Problem Solving Group
- Young Researchers' Association





# Opportunities for students to contribute to change and innovation

- Class Reps
- Student-Staff Liaison Committee
- Student Reps on Committees
- Students on interview panels
- Focus groups on policy changes





# Building a learning community - what doesn't work?

## Social events...worth it?

- MathSoc events
- End-of-exam BBQ
- General Interest Seminar & Reception
- Final-year pizza lunch
- Ceilidh
- Welcome Lecture & Reception

# Community of Practice

“University departments in research-intensive institutions that have a reputation for excellent teaching.....tend to have strong teaching micro-cultures that involve regular conversations about teaching and learning”

Catherine Bovill, *engagED in Learning and Teaching Conversations*, 2017

# Lessons learned

- Start early in the degree programme - induction is key
- Informal interactions with staff - more emphasis on learning than social
- Build group learning into classroom (but not for assessment!)
- Culture change takes time

# What next?

- Engaging the disengaged
- Bringing together diverse student groups

# Discussion & Questions

- Does your subject area have a strong learning community?  
What are the advantages and challenges?
- What good practice can you share/would you like to adopt?

# Acknowledgements

- Toby Bailey, Director of Teaching, SoM
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- Ross Galloway, Judy Hardy and the Physics Education Research Group

# References

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