

**Implementation of **PASS**  
to enhance the experience  
of our (~ 480) Biosciences  
undergraduates.**

**Evaluation after two years  
(2005-2007).**

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# Outline

- What is PASS? How does it work?
- Aims for implementing PASS in FLS
- The perceived benefits of PASS by all participants
- Academic benefits for regular participants
- The benefits for leaders
- Problems encountered
- Have the aims of PASS been met?
- Future of PASS

# What is PASS

- Peer Assisted Study Scheme.
- Derived from the American concepts of SI (Supplemental Instruction).
- 2<sup>nd</sup> or final year UG volunteers trained by SI supervisors as '**PASS leaders**' to facilitate '**PASS sessions**' for groups of 1<sup>st</sup> year students weekly
- The sessions are timetabled but attendance is not compulsory.

# How does PASS work in FLS?

- All UG1 students are allocated a PASS group (~15 students) and two PASS leaders.
- Each group meets for 1 hour/week (timetabled) to discuss:
  - Academic topics [burning deadlines, lectures, course work, tutorial work, study skills]
  - Non course related topics (social, pastoral) = **mentoring**, especially in Freshers' week
  - Course related topics [course expectations in year 1, 2 or 3, placement year]
- Leaders facilitate discussion, they do not teach.
- Free agenda, but activities are suggested.

# Aims for implementing PASS

→ To Enhance our students experience

To assist with:

- transition from A-level to University life.
- learning (student-centered approach to promote self-directed learning in a meaning-oriented manner)
- the development of study skills and transferable skills (both UG1 and leaders)

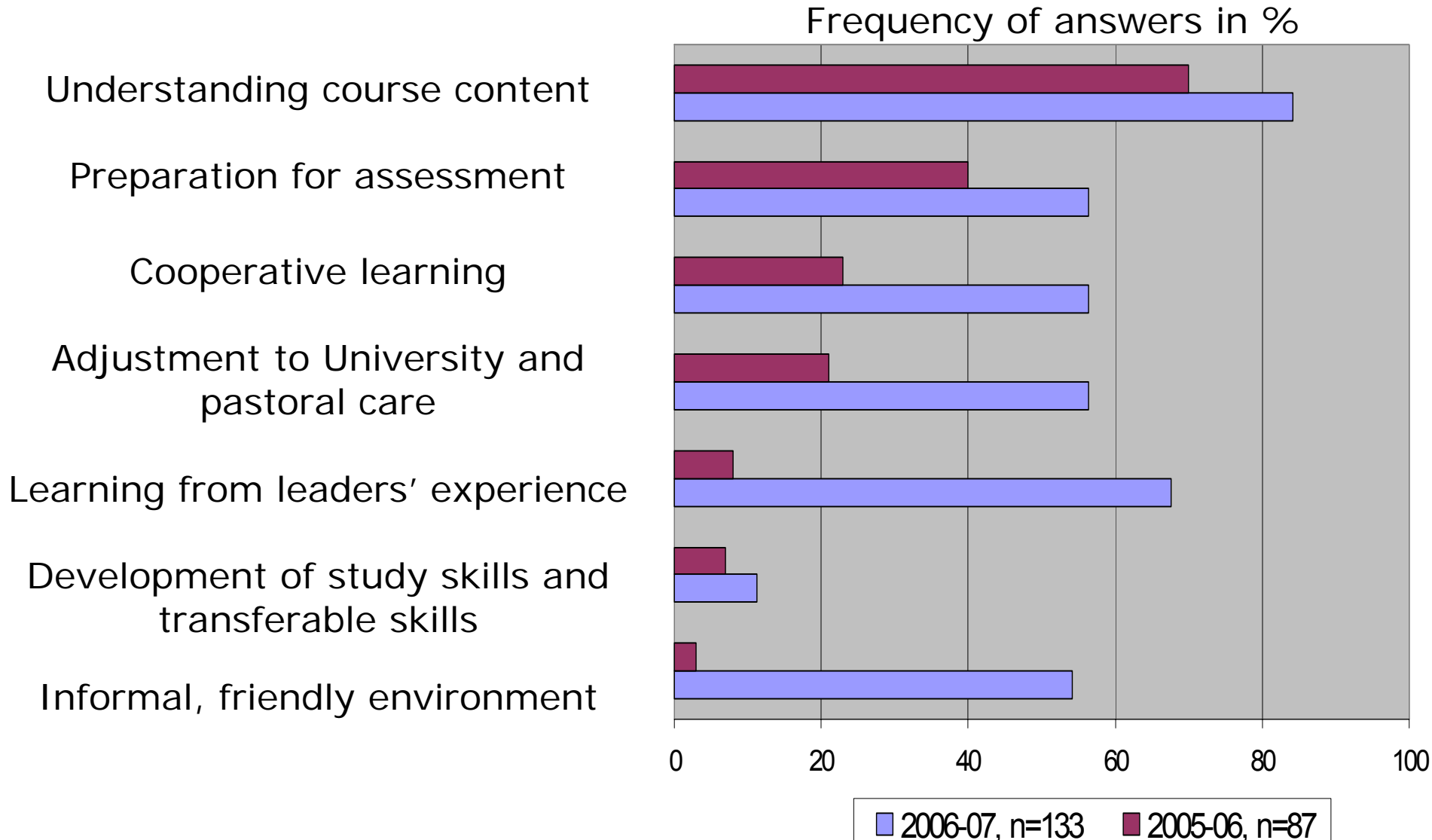
To provide opportunities for:

- peer interaction (UG1-UG1; UG1-leaders; leaders-leaders)
- UG1 to get a clear view of course expectations
- generate real time feedback about 1st year course

# The benefits of PASS as perceived by participants

Qualitative study (cohort survey  
with open questions)

# Promotion of meaning-oriented learning versus assessment-driven learning



## "Preparation, Assistance, Study, Skills"

- *"It was helpful to go over lecture content with other first years at our own pace. It is the only opportunities to discuss difficult topics as a group."*
- *"The sessions were more interesting than lectures. The leaders were nice and I felt able to talk to them about my difficulties in my studies."*
- *"It helped me with questions I needed answering, was something different and offered me a different method of learning. I met people and had a laugh."*
- *"Material you don't understand gets explained by someone different (i.e. Another student not the PASS Leaders as they didn't actually help to explain anything)"*
- *"A place where you can discuss ideas."*



# PASS = safety net

→ enhanced experience for everyone

- *“Knowledge that there is a safety net if you have any problems.”*
- *“If I missed a lecture I could catch up on my notes and I could ask the rest of the group questions about things I didn’t understand.”*
- *“I went to get help with any problems I had and also to hear what problems my fellow course mates were having and to see how they were doing.”*
- *“I received help on work that I was stuck on and could also judge how my peers were finding the work to compare with my own experiences.”*

# The benefits for REGULAR participants

Evaluation of academic  
performance as a function of  
PASS attendance

# Regular participation to PASS = better academic performance

- In year 1, alternance unit-specific / free agenda → regular participants (PASS  $\geq 4$ ) showed improved results compared to three control groups (PASS not offered, PASS=0, PASS=1-3) for 6/6 units.
  - Lower fail rate
  - Significantly higher mean mark
  - Higher rate of 1<sup>st</sup> class marks
- In year 2: free agenda only, but the difficult units were discussed often (comparable) → same results for 4/5 units. (biochemistry not discussed in PASS)

The benefits for leaders.

The real winners?

Qualitative analysis.

Closed questions and  
interviews

# The winners from day 1

- **Skill development:** communication, team management, mentoring, team working, organisation, time management, **using own initiative**, etc.
- **Academic development:** revision of material, more self-aware as a learner
- **Personal development:** more confident, valued by the Faculty staff (for some, more focused and motivated).

## Leaders' view

- *"The main benefit I have got from PASS is the ability to ask the right questions in order to find an answer, a technique that I find can be applied very successfully to my own study."*
- *"I've gained so much from being a PASS leader, much more than I ever imagined when I signed up. Not only have I met lots of people, both student and staff, but I've also made friends and developed a lot of skills by not even realising."*

Problems encountered?

Attendance in semester 2.

PASS= 4-10	Semester 1	Semester 2
2005-06	23%	23% (new students)
2006-07	32%	2% (same students)

Very low attendance in semester 2 is of concern because it impairs the Leaders experience (disheartening).

It also raises two questions:

- Is PASS run as effectively as can be in semester 2?
- Is PASS actually needed in semester 2?



## Typical reasons for low attendance (open questions) – 115 responses. **(2005-06)**

- Frustrations raised by unproductive cooperative learning 29%
- Misconceptions about PASS (expecting to be taught) 28%
- PASS not being helpful 25%
- Inconvenient scheduling 21%
- Lack of structure: 65% (2006-07) (n=130)

# Aims for implementing PASS

→ To Enhance our students experience

To assist with:

- transition from A-level to University life. ✓
- learning (student-centered approach to promote self-directed learning in a meaning-oriented manner) ✓
- the development of study skills and transferable skills (both UG1 and **leaders**) ✓ (35→70→100)

To provide opportunities for:

- peer interaction (UG1-UG1; UG1-leaders; leaders-leaders) ✓
- UG1 to get a clear view of course expectations ✓
- generate real time feedback about 1st year course ✓

# What we like about PASS

- Flexible scheme
- Benefits from day 1 for leaders
- Benefits for all UG1, even though they may not fully engage with it.
- Scheme easily self perpetuated because student led
- Huge potential not fully explored/exploited yet

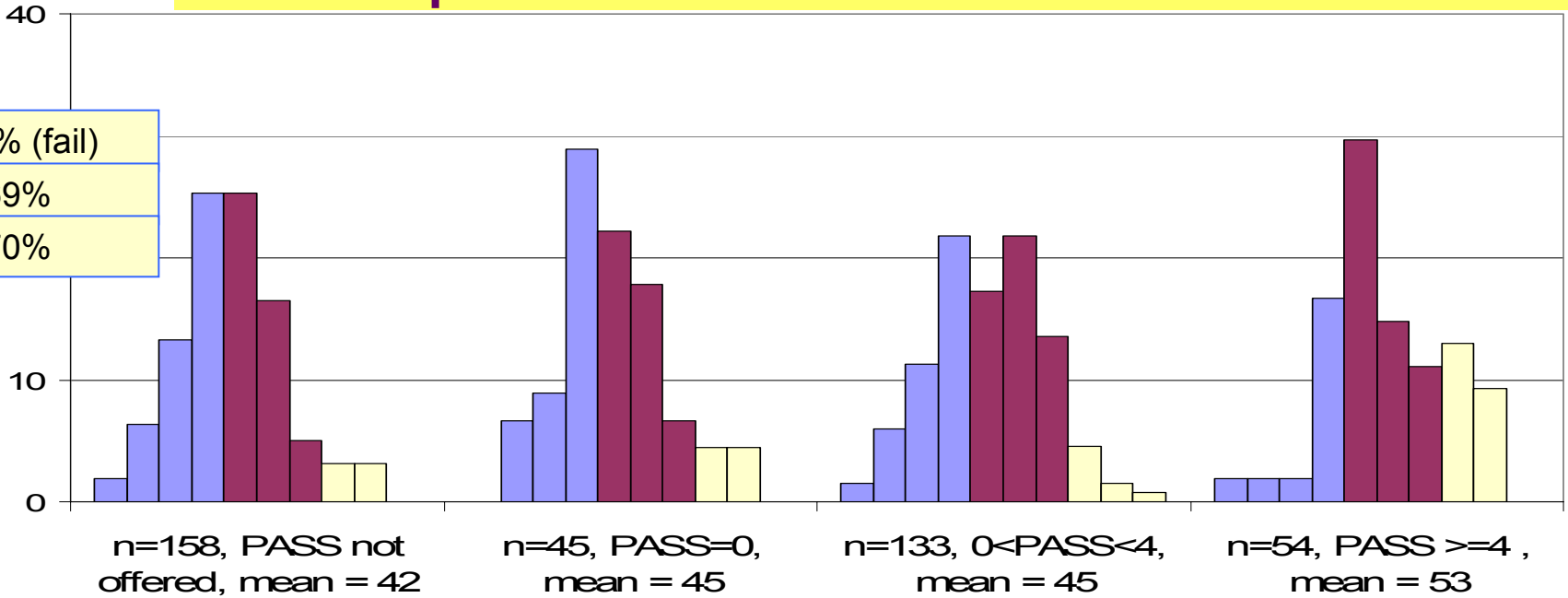
# Future

- The scheme will become more and more student led.
- Generation of a bank of activities
- Use PASS to assist promoting PDP
- Use a workshop/theme system in semester 2?
- More emphasis placed on study skills to enhance the semester 2 programme?
- Mini PASS for year 2 students?
- Special PASS action for overseas student?

**Any questions?**

# Genes and evolution (2006 & 2007). Academic performance as function of PASS.

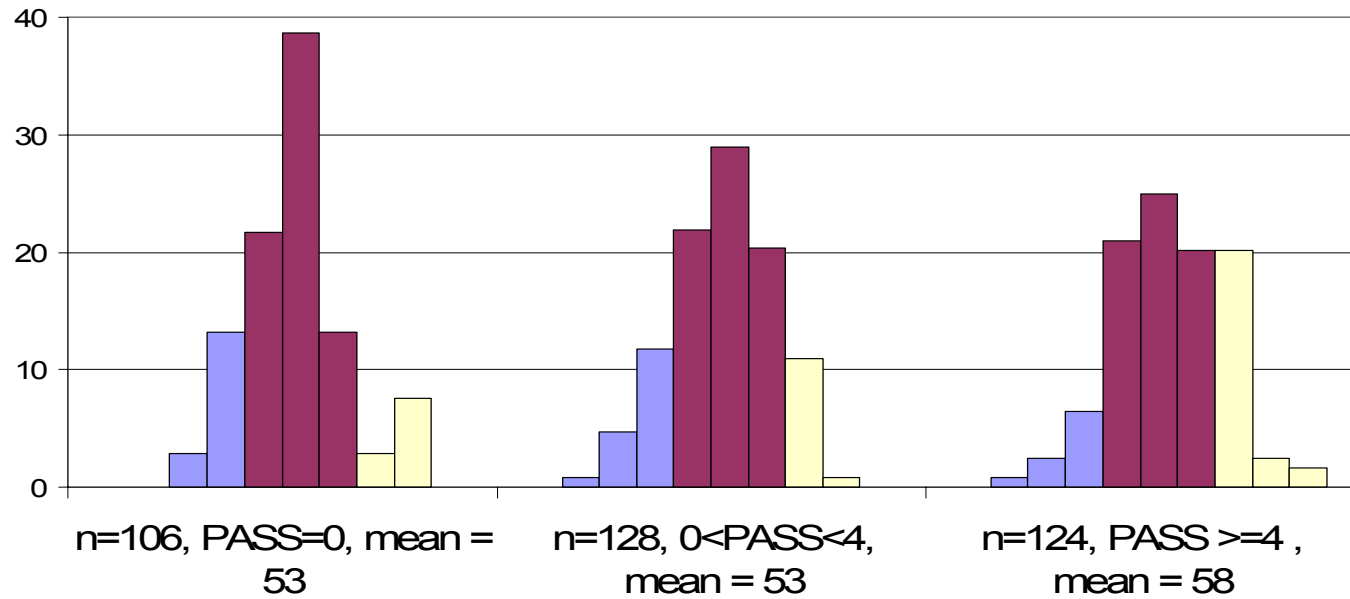
■ Mark <40% (fail)  
■ Mark 40-69%  
■ Mark >= 70%





























Profile of the regular participants:

- all type of students
- majority between 40 and 69%

Distribution skewed to the right → PASS boosts grades by 10%?



2005-06	Fail rate lower	Mean mark significantly higher	Rate of first class marks higher
Genes and evolution			
Biochemistry			
Biodiversity			Same as control
Body system	Same as control: Very low fail rate		
Molecular genetics			
Drugs: from molecules to man	Same as control: Very low fail rate		

2006-07	Fail rate lower 	Mean mark signi  y higher	Rate of first class mark  her
Genes and evolution			
Biochemistry	Same as control 	Same as control 	Same as control 
Biodiversity			
Body system	Same as control: Very  fail rate		
Molecular genetics			