PASS @ Ulster

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Why Do Students Attend Peer Assisted Study Programs?
An Application of the Theory of Planned Behaviour
This year, the Schools of Psychology, Law and Computing and Intelligent Systems have piloted the PASS initiative within the University of Ulster. Early indications suggest that the scheme is already having a positive effect on performance. For example, mean module marks have increased significantly.
Background

Qualitative comments also suggest that PASS is aiding the transition process by allowing students to build supportive networks. As a consequence, the scheme has already been extended to Economics and there are plans for the School of Nursing to join the group in September 2011.
However, it is acknowledged that for students to reap the benefits they need to expend a certain quality of effort and non-attendance amongst some students is still an issue of concern.
Background

Whilst attendance may be viewed as a relatively crude measure of engagement in that it can only ever be indicative of participation and does not necessarily consider the quality of involvement, it has been found to be an important variable in determining student success (Douglas, 2008).
Background

It therefore seems feasible to suggest that those who aren’t attending aren’t engaging and as a consequence are likely to do less well.

As such, there is a need to explore attendance at PASS sessions so that we might find better ways to engage students in the learning process.
Background

Whilst there is no conclusive evidence to suggest that characteristics that students bring with them such as gender, ethnicity or ability levels will influence the extent to which they engage as students (see Trowler and Trowler, 2010), there is some evidence to suggest that other factors might contribute to their interest and level of engagement in learning. For example, economic and social pressures (Longhurst, 1999), dissatisfaction with courses and teachers and peer influences (Brewster & Fager, 2000) may all play a role.
Background

Clearly, these influences will be more important for some students than for others and an understanding of the most salient issues for a particular student population will be fundamental in shaping the design and delivery of a programme.

However, perhaps surprisingly, despite the rhetoric on the value of student engagement, there is little evidence to suggest that students are engaged in issues beyond their own learning. Consequently, there is a need to involve them more directly in shaping the design and delivery of the curriculum.
Aim

With this in mind, this study employed the Theory of Planned Behaviour (TPB), a socio-psychological framework to predict and explain attendance at peer assisted study sessions.

More specifically, the aim was to identify the factors influencing students' attitudes and motivations to engage with the process, to assess their relative importance and to inform its future delivery.
The Theory of Planned Behaviour

The TPB has been found to be a very useful model for predicting and explaining behaviour and more recently, for designing behavioural change interventions.

It works on the premise that the best way to explore behaviour is to measure behavioural intention, which in turn is seen to be a function of four independent variables notably, attitudes, subjective norm (influence of significant others), perceived control and self-efficacy.
The Theory of Planned Behaviour

Each of these variables are based on a set of underlying beliefs.

By measuring these beliefs we can explore why people hold certain attitudes, for example, why students choose to engage in peer assisted study, which in turn can provide valuable information for informing the future delivery of the programme.
The Theory of Planned Behaviour

Using the theory to change behaviour:

- Conduct an elicitation study to identify modal salient beliefs and use these to construct a TPB type questionnaire.
- Administer questionnaire to a sample of people drawn from the target population to identify the determinants of the target behaviour.
- Develop an intervention based on the questionnaire components most strongly associate with the target behaviour.
- Evaluate the intervention pre and post test using the questionnaire.
Method

- **Elicitation Study**: Beliefs were elicited by conducting one to one interviews with 12 first year students and evaluated in conjunction with the results obtained from a series of focus groups conducted with students in 3 separate disciplines.

- **Questionnaire Survey**: The information elicited from the elicitation study was used to construct an Ajzen and Fishbein questionnaire. The questionnaire was designed to assess key TPB constructs including both direct and belief-based measures.
Elicitation Study

Questions were of the form:

- What do you consider are the advantages and/or disadvantages of attending PASS sessions?

- Are there any groups or people who would approve and/or disapprove of you attending PASS sessions?

- What factors might encourage and/or prevent you from attending PASS sessions?
Results of Elicitation Study

**Advantages**/disadvantages of attending PASS sessions:

'Going to PASS means we get a chance to look over our notes and gain a better understanding of what has been taught in lectures. Hopefully that will pay off when we get our results'

'I wouldn’t have made some of my friends if it wasn’t for PASS’. Its good because you have time when you can talk openly to each other about the course and our work because we wouldn’t do it any other time'
Results of Elicitation Study

Advantages/disadvantages of attending PASS sessions:

"It’s hard to go to PASS when we have so much work to do at times, we definitely don’t need any extra"

"I guess it would be better if more students went but I know some people are really worried about all the work they have to do and going to additional things just stresses them out"
Results of Elicitation Study

Groups or people who would approve/disapprove of you attending PASS sessions:

"Our PASS leaders are really nice and easy to talk to. If we don’t want to ask a lecturer something in front of everyone in class we can just ask them at PASS”

"My Dad would expect me to take every opportunity I had to try my best to get a good grade in my degree, so I guess that would include going to PASS”
Results of Elicitation Study

Factors that might encourage/prevent you from attending PASS sessions:

“I wish there was more structure to the classes, that would definitely make me go more. Sometimes they (PASS leaders) don’t know what to do with us”

“I think it works well if it is done well if you know what I mean. If the leaders are doing what they are meant to be doing it works, but when they are just having a chat or messing around there isn’t much point on you going, you could do better on your own”
Results of Elicitation Study

Attitudinal Beliefs:
- Gain a better understanding of course material
- Make friends
- Prevent me from getting on with other things

Normative Beliefs:
- My friends
- My PASS leaders

Control Beliefs:
- An organised structure to PASS
- Previous experience of PASS
- Feeling embarrassed or uncomfortable
The Questionnaire

Intentions:

- Intention is a measure of the extent to which an individual is motivated to attend PASS.
- The mean of three items ('I intend/will try/have decided to attend PASS'); Cronbach’s alpha = 0.89.
The Questionnaire

**Attitudes:**

- Attitudes represent a person’s feelings and beliefs about attending PASS.

- The direct measure: the mean of four items (e.g. Enjoyable/unenjoyable; valuable/worthless); Cronbach’s alpha = 0.94.

- The belief-based measure: the product of 11 outcome evaluations (e.g. gaining a better understanding of course material, making friends, becoming more familiar with the department) and the corresponding behavioural beliefs.
The Questionnaire

Subjective norm:

- A measure of the extent to which an individual perceives significant people in their life to endorse attendance at PASS

- The direct measure: three items (‘people who are important to me think I should/would approve/want me to attend PASS. . .’); Cronbach’s alpha = 0.76.

- The belief-based measure: the product of 4 normative beliefs (i.e. partner, family, others in PASS group, PASS leaders) and the corresponding motivations to comply.
Self-efficacy:

- A measure of the extent to which an individual believes he/she has the confidence/ability to attend PASS
- The mean of three items ('I believe I have the ability/am capable/am confident that I will attend PASS'); Cronbach's alpha = 0.88.
The Questionnaire

Perceived Control:

- A measure of the respondent’s judgement about the extent to which his/her decision to attend PASS is influenced by factors outside his/her control.

- The direct measure: mean of three items (e.g. ‘whether or not I attend PASS is entirely up to me’); Cronbach’s alpha = 0.54.

- The belief-based measure: product of 15 belief strength items (e.g. previous experience of PASS, an organised structure to PASS, feeling embarrassed or uncomfortable) and the corresponding power statement.
Results

Some general findings:

- 76% of students reported to have previously attended more than 4 PASS sessions; 57.4% had attended all of them and only 11% had attended only one.

- 76% of students declared an intention to continue attending PASS regularly; 63% said it was 'extremely likely' that they would try.
% of Students attending PASS in Psychology per week in semester 1
Results (continued)

Predicting intentions:

- Together the independent variables produced a multiple correlation of .831, accounting for 69% of the variance in intention \([F(4,68) = 37.98, p<0.01]\).

- The standardised regression coefficients showed that attitude, subjective norm and self-efficacy were all significant predictors of intention.
Results (continued)

Understanding intentions:
Further correlation analyses suggested the following factors were instrumental in the decision to attend PASS:

- **Attitudes**: being able to ask more questions / better understanding of course material / achieving better results / learning from other students / making friends
Results (continued)

Significant others:
- Partner / Classmates / Family / PASS leaders
Results (continued)

**Control:**

- Previous experience of PASS / Effective PASS leaders / a more organised structure / lack of motivation
Average Assessment Marks For PSY131 from 08/09 to 10/11

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<tr>
<td>Coursework Mean</td>
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<tr>
<td>Exam Mean</td>
<td>47</td>
<td>50</td>
<td>58</td>
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<td>Total Mean</td>
<td>51</td>
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# Impact of PASS on Math's II Results

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<th>Mean Mark %</th>
<th>% of Students with mark &lt;=40% (Fail)</th>
<th>% of Students with mark &gt;=70% (First)</th>
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<tr>
<td>Occasional Attenders (&lt;4)</td>
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<td>23</td>
<td>30</td>
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<tr>
<td>Regular Attenders (&gt;5)</td>
<td>87</td>
<td>0</td>
<td>23</td>
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Summary of Findings

Findings suggest that PASS is serving to:

- Enhance academic performance by providing opportunities for students to clarify their learning
- Aid the transition process by allowing students to build supportive networks

Moreover, attendance seems to be influenced by:

- The belief that it will facilitate learning
- Effective PASS leaders and a coherent structure to sessions
- The influence of one’s significant others
Summary of Findings

The main implications:

- Highlight academic and social benefits in promotional materials
- Acknowledge the role of one’s significant others when promoting PASS
- Careful recruitment, training and on-going support for PASS leaders
- Increased emphasis on planning to ensure a coherent structure to PASS sessions
Future Directions

The next stage will be to:

- Implement the recommendations that have emerged from this study and conduct a more detailed evaluation, perhaps using the TPB to guide the process.

- Explore the development of employability skills for PASS leaders.
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