

UNIVERSITY OF ESSEX



Can peer coaching narrow the attainment gap of WP undergraduates?

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The undisputed benefits of mentoring:

Andrew's et al (2011) Study of Peer Mentoring in 6 Higher Education Institutions

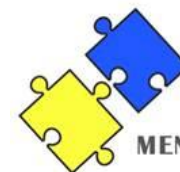
'Peer mentoring works by addressing fears about settling in and making friends and making the student feel as though they belong.'

(Griffin, 1995; Glaser, Hall and Halperin, 2006; Hill and Reddy, 2007) carried out a study into peer mentoring

Conclusion - 'Students who used the scheme reported higher levels of success in making the transition to University, were more likely to identify with the University community and found the program helpful in a number of aspects of adjustment to university life.'

Recommendations

'a dedicated team should be in place to ensure that a stringent mentor recruitment process and full training programme are offered'



Background to case study institution:

Mentoring & Coaching Unit - established programmes:

- Alumni mentoring (to improve employability of final year students)
- Disability mentoring programme
- Buddy mentor scheme (for international students)
- Several school based programmes (formerly Aimhigher)
- NSP mentoring (for widening participation students)

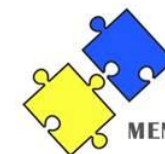
Exemplary Practice Provision:

- *Stringent recruitment process in place*
- *Thorough 2 day training programme culminating in an assessment*
- *Resources (handbooks, toolkits, contact logs)*
- *Ementoring system*
- *Regular coach support workshops*
- *Coachee induction/input into matching process*
- *Thorough evaluation process*
- *Certification offered*

Peer Coaching Definition

A facilitative, one to one, goal focused relationship between a more experienced and less experienced person where the emphasis is on asking open questions, listening, negotiating targets to both empower and promote self-efficacy in the coachee.

The coach would ideally refrain from 'advice giving' and the overall goal and agenda for the coaching sessions are set by the coachee.



Peer Mentoring » Peer Coaching :

Aims for Peer Coaching

- To help students balance social and academic life
- To help students to understand the requirements of their course
- To provide one to one support and motivation to succeed
- To raise academic performance

Methods adopted for research:

Mixed methodology (QUAN + QUAL):

Convergent parallel design using qualitative data to corroborate the quantitative findings

Quantitative data

- *to reveal quantifiable evidence of any benefits from peer coaching*
- *transforming some qualitative data to quants*
- *use of control group for comparison of academic performance*

Qualitative data

- *to reveal a deeper understanding of the quantitative data and coaching process*

Case Study Design:

Pre and post coaching data collected to determine impact.

- *student satisfaction*
- *confidence in ability to complete studies*
- *satisfaction with academic performance*
- *academic behaviours/self efficacy (Sander et al 2009)*

Module grades of coached and non-coached control group collected in semester A and B

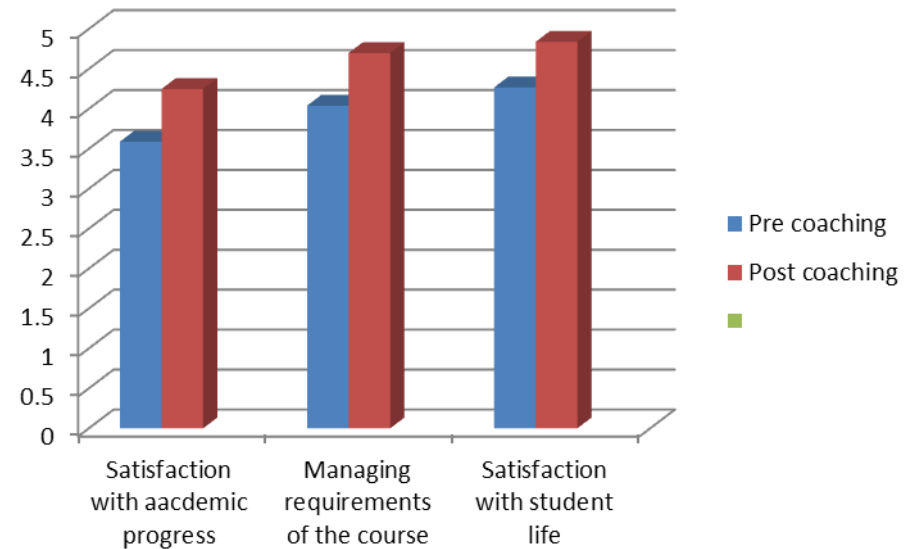
Included both open and closed items:

Reported level of support given on various topics such as planning, revision, motivation.....

Use of ementoring system allowed close monitoring/raw data

Outcomes

Paired samples t-test



Mean increase from pre to post coaching :

- 0.74 - satisfaction with academic progress (large effect size)
- 0.74 - managing their course requirements (large effect size)
- 0.53 in satisfaction with student life (moderate effect size)

Sanders - self efficacy questionnaire (24 items)

- a 'large' statistically significant increase from pre to post coaching

QUESTION	Eta squared statistic
Study effectively on your own in independent/private study	.23
Produce your best work under examination conditions	.33
Respond to questions asked by lecturer in front of a full lecture theatre	.25
Manage your workload to meet coursework deadlines	.38
Give a presentation to a small group of fellow students	.17
Attain good grades in your work	.30
Ask lecturers questions about the material they are teaching, during a lecture	.19
Prepare thoroughly for tutorials	.17
Produce coursework at the required standard	.21
Ask for help if you don't understand	.14
Plan appropriate revision schedule	.26
Remain adequately motivated throughout	.29
Produce your best work in coursework assignments	.15

Student perceptions:

'She is amazing and such a great motivator'
(PAM student)

'It provides motivation and support when the going gets tough'
(Nursing student)

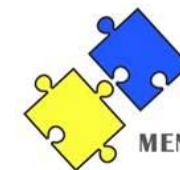
'I needed extra motivation and my coach gave it to me'
(Education student)

**Increased Confidence
and
Motivation**

'It helps students to keep motivated and to carry on'
(Pharmacy student)

'Whenever I'm with my peer coach she gives me this sort of confidence'
(Pharmacy student)

'It helped me with my confidence'
(Psychology student)



Many students directly attributed the coaching to improved academic grades:

'Towards the end I could see clearly that my grades, which at the start were at 2:1, went straight to a 1st which is what we aimed at achieving. So overall I would say that because of her support I am more confident in my academic work' **(Law student)**

'The programme provided me with crucial one on one support that I desperately needed to up my grades in my second semester. The programme provided me with valuable academic writing techniques from an experienced and lovely coach, whose advice I will take forward with me. I have gained a place at Cambridge University to complete a PGCE course'
(Education student)

'Without the coaching I would have got at least one grade lower' **(PAM student)**

'I was getting a first and a high 2:1 and now I'm getting a high first' **(Law student)**

'As a result I got a first in my Management for Business essay' **(Business School student)**

'It helped me boost my grades and confidence on assignment writing. It also gave me ideas on how to get better grades in the future'
(Education student)

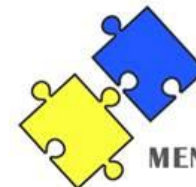
Module Grade Data

	Group	Number of Students	Mean Grade	Std. Deviation
Average Grade Overall	Coached	149	57.24	8.81
	Control	92	52.81	13.53
Average Grade Semester A	Coached	146	56.54	9.35
	Control	92	52.16	14.14
Average Grade Semester B	Coached	127	58.57	10.91
	Control	72	54.70	14.61

Independent t-tests to compare grades

A comparison of the overall average module grades of the coached group ($M = 57.24$, $SD = 8.8$) and the non-coached, control group ($M = 52.81$, $SD = 13.52$); $t(239) = 2.80$, $p = .006$ (two-tailed). The eta squared statistic was calculated to be .03 which demonstrated a **small but statistically significant** effect size overall.

Within the Business School only the independent t-test revealed that the overall module grades of the coached group ($M = 57.75$, $SD = 9.74$) and the non-coached group ($M = 51.38$, $SD = 12.66$); $t(72) = 2.44$, $p = .02$ (two tailed). The eta squared statistic was calculated to be .08 which demonstrates a **moderate effect size**.



The impact on differing levels of students

		Number of students	Semester A mean grade	Semester B mean grade	Difference from semester A to B
Students scoring < 40% in semester A	Coached group	3	29.1	49.0	+ 19.9
	Control group	10	31.8	38.2	+ 6.4
Students scoring < 50% in semester A	Coached Group	22	42.8	50.5	+ 7.7
	Control group	24	39.7	47.5	+ 7.8
Students scoring < 55% in semester A	Coached group	47	47.8	53.6	+ 5.8
	Control group	34	43.7	48.8	+ 5.1
Students scoring > 55% in semester A	Coached group	75	62.3	62.4	+ 0.1
	Control group	35	62.9	62.3	- 0.6

Greatest impact found for those students who are performing least well at the onset

The impact on different year groups

		Group	No.	Mean	Std Dev
Year 3	Average Grade	Coached	14	59.51	7.52
		Control	6	54.89	6.84
Year 2	Average Grade	Coached	52	56.48	7.61
		Control	39	53.99	14.03
Year 1	Average Grade	Coached	81	57.18	9.64
		Control	47	51.56	13.81

Greatest impact found for those students in their first year of study

Attrition Rates

In the control group it was found that by November a total of 19 out of 93 students had withdrawn making a total 20% of the students in that group.

In the coached group only 11 of the 150 students had withdrawn from their studies by the same date, a total of 7%.

- ❖ Could be accounted for by lower academic attainment of control group participants
- ❖ Similar findings to previous mentoring studies despite shorter duration of intervention

Conclusion

- Evidence suggests that peer coaching does impact on academic attainment although student perception of the 'improvement' is greater than the actual increase in performance.
- Self-efficacy, motivation and 'academic behaviour confidence' appear to be greatly increased through peer coaching – *evidence exists to suggest that these factors impact on student attainment.*
- Evidence to suggest that the peer coaches also benefit from improved grades as a result of being a peer coach.
- Exemplary practice is a probable key to success.
- Further research to investigate whether peer coaching is as beneficial for specific groups of students such as WP and BME undergraduates.

Thank you for listening

Any Questions?

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