



# Peer Coaching in Higher Education:

*A case study of exemplary practice to demonstrate the impact on student grades*

***Dr Jill Andreanoff***

# A Quick Poll of your understanding of Coaching & Mentoring.....

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# The Undisputed Success of Mentoring & Coaching

## **Andrews 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)**

*‘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.’*

## **Recommendations**

*‘A **dedicated team** or individual should be in place to ensure a **stringent recruitment** process and a **full training programme** is offered’*

## **Need for Clarity When Measuring Success**

*Woodd (1997) ‘what is being measured or offered as an ingredient in success is not clearly conceptualised’.*

*Gibson (2005) and Chao (2009) reproach others for not clarifying the precise definition of the support in their studies.*

*Jacobi (1991) and D’Abate, Eddy and Tannenbaum (2003) report that the lack of clarity in the terms makes it difficult to compare and contrast the different interventions and determine whether they were successful or not*

**IS COACHING THE BEST INTERVENTION TO MEET THE OBJECTIVES?**

# Exemplary Practice Provision:

- *Stringent recruitment process in place including application form / interview*
  - *What qualities do you feel are required for successful coaching?*
  - *What skills/expertise do you have that will make you a successful coach?*
  - *What difficulties do you think the learners may bring to the coaching sessions?*
  - *Give an example of how you have used a coaching approach to support others.*
- *Thorough 2 day training programme culminating in an assessment*
  - *an introduction to the coaching programme objectives*
  - *the skills required for successful coaching*
  - *communication skills development (effective questioning, active listening, non-verbal cues)*
  - *action planning within the coaching context/ goal setting / giving and receiving feedback*
  - *implementation of coaching tools or models appropriate to context*
  - *record keeping and contracting (consider accreditation)*
- *Resources*
  - *Handbook to be used as a reminder of the training*
  - *Toolkit designed specifically for the coaching objectives (academic attainment, well being...)*
  - *Contact Log – to record the context of the coaching sessions*
  - *Learning Log – to promote reflective practice*

# Exemplary Practice Provision:

- *Ementoring (including platform if appropriate)*
  - *Appropriate training to identify the advantages – record of dialogue*
  - *Highlight the challenges (needs more perseverance to engage, lack of flow in dialogue etc)*
  - *Tips for overcoming challenges*
  
- *Coachee Recruitment / Induction*
  - *Targeted and rigorous application process*
  - *Involvement in matching process using Coach Profiles (can include in training programme)*
  
- *Coaching Support Workshops*
  - *Themed to address common issues (lack of engagement, 3 strike rule, ‘visitor’ relationships)*
  - *Maintaining momentum in the relationship, bringing the relationship to a close*
  - *Opportunity for further CPD - e.g. Solution Focused Approaches*
  - *Introduce more coaching tools (based on mid-way feedback)*
  - *Individual support (drop-ins or develop a self-supporting group)*
  
- *Evaluation Process*
  - *Based on coaching programme objectives – incorporate into coachee application form*
  - *Sander and Sanders Academic Behavioural Confidence Scale (pre and post coaching)*

A Quick Poll of your thoughts on how much time is needed to coordinate a peer coaching programme.....

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# Typical Number of Hours to Deliver a Programme

TYPE OF PROGRAMME	NUMBER OF MENTORS/COACHES	NUMBER OF MENTEES/COACHEES	COORDINATOR HOURS
Peer Coaching for Undergraduates	90	160	500 over 35 weeks (15 hrs per week)
Staff Coaching	18	24	250 over 30 weeks (8 hrs per week)
Alumni E-Mentoring	50	50	60 over 40 weeks (9 hrs per week)
School Pupil Mentoring	30	150 (in 5 schools)	600 over 20 weeks (30 hrs per week)

*NB. Front Loaded Hours*

# Requirements to Measure Success

- Kulik, Kulik and Shwalb (1983) 'only 12% of studies are of acceptable methodological quality'
- Capstick (2004) & Medd (2012) call for studies of a more 'quantitatively robust nature'
- **Clear aims and objectives for intervention**
- **Be explicit about the process**
  
- *a one to one or group intervention*
- *pre-determined agenda or coachee led?*
- *directive or non-directive approach / enquiry v advocacy*
- *Knight (2007)*
  - **Coactive Coaching** (*involving the persons whole life*)
  - **Cognitive Coaching** (*based upon reflection*)
- *expert or reciprocal model (Donegan, Ostrosky, Fowler, 2000)*
- *duration of programme*
- *frequency of meetings/sessions*

**'Tell me and I'll forget; show me and I may remember;  
involve me and I'll understand'**

# Conflicting Evidence

Sim (2003) - findings suggested that peers are perceived by students as the **least** useful partners in learning when compared to tutors and lecturers.

Bidgood, Jones, Hammond and Bithell (2010) - 3 year study of PAL programme reported improved social aspects of university life and satisfaction but little improvement with study skills or assignment preparation. (*Horizontal strand*)

Kyllonen (2012) suggests that non-cognitive skills are as important for academic success as academic readiness

***Self-efficacy is the key to success (plus student engagement - Tinto)***

**Richardson, Abraham, and Bond (2012) / McKenzie and Schweitzer (2001)**

Meta-analysis identified the strongest predictor of success was performance / academic self-efficacy

Consistent with the meta-analysis conducted by **Robbins, Lauver, Davis, Langlely and Carlstrom (2004)**

Retention is best predicted by academic goals, academic self-efficacy and academic-related skills  
(*true even after controlling for socioeconomic status, achievement test scores, and high school grades*)

# Mentoring & Coaching Unit Examples

- ***Alumni Mentoring/Graduate Futures (improve employability of final year students)***
- ***Disability Mentoring programme (Mental Health / Aspergers)***
- ***Buddy Mentor Scheme (for international students to help with integration)***
- ***Several school based programmes (formerly Aimhigher) – academic attainment...***
- ***National Scholarship Programme Mentoring (for widening participation students)***
- ***Leadership Coaching for Staff (improve well-being / resilience) - UH & UAL***
  - \*Over 300 mentors/coaches recruited and trained every year - Supporting over 450 people***
- ***Foundation Degree Mentoring (University of Durham) – prepare for BA/BSc study***

# Peer Coaching Aims & Objectives (case study): a 10-12 week intervention starting in January

**Aim:** to improve academic attainment (*initially Academic Mentoring*)

## **Objectives**

- help students balance social and academic life
- help students to understand the requirements of their course
- provide one to one support and motivation to succeed
- guide students to better engage with and implement tutor feedback
- support students in preparing/planning for exams and assignments

### ***Definition: Peer Coaching***

*A facilitative, goal focused relationship between a more experienced and less experienced student 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 is set by the coachee.*

*(based on Knight's Cognitive Coaching model)*

**\*\* *The impact of peer coaching on the academic performance of undergraduate students: a mixed methods study (2015) The Journal of Learning Development in Higher Education, Jill Andeanoff***

# Methods adopted for evaluation:

## **Mixed methodology (QUAN + QUAL):**

*Convergent parallel design using qualitative data to corroborate the quantitative findings*

### Quantitative data

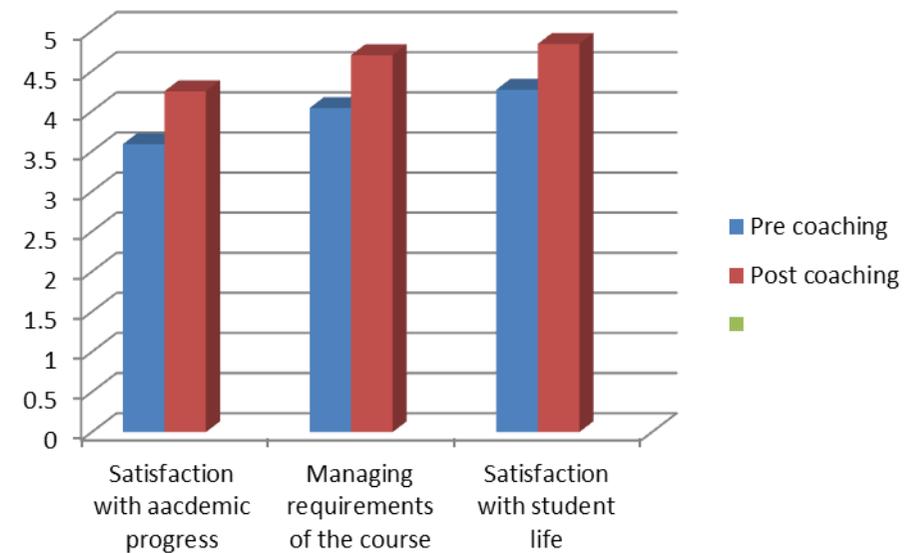
- *to reveal quantifiable evidence of any benefits from peer coaching (150)*
- *transforming some qualitative data to quants (Likert scales)*
- *use of control group for comparison of academic performance (93)*

### Qualitative data

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

# Outcomes (perception data)

## Paired sample t-tests



## 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 - satisfaction with student life (moderate effect size)

# Sander et al (2009) – academic behaviour 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)

# Student perceptions:

*'It was extremely important for me to have someone to go to other than my tutor to discuss issues I may have educationally but also socially as University was a completely new experience for me'*

**(Psychology student)**

*'It's the one to one help. You don't really get that sort of help at SE University'*

**(Business school student)**

## **One to One Support**

*'It feels less worrying talking to someone at your level rather than a teacher'*

**(Psychology student)**

*'I think knowing your coach is in your shoes, also studying, and around your age, as well, just helps. Just to know that she understands me'*

**(Law student)**

*'It is helpful because you are guided by someone not that much older than you who understands you and talks to you on your level'*

**(Humanities 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 1<sup>st</sup> 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 different year groups

		<b>Group</b>	<b>No.</b>	<b>Mean</b>	<b>Std Dev</b>
<b>Year 3</b>	<b>Average Grade</b>	<b>Coached</b>	14	59.51	7.52
		<b>Control</b>	6	54.89	6.84

		<b>Group</b>	<b>No.</b>	<b>Mean</b>	<b>Std Dev</b>
<b>Year 2</b>	<b>Average Grade</b>	<b>Coached</b>	52	56.48	7.61
		<b>Control</b>	39	53.99	14.03

		<b>Group</b>	<b>No.</b>	<b>Mean</b>	<b>Std Dev</b>
<b>Year 1</b>	<b>Average Grade</b>	<b>Coached</b>	81	57.18	9.64
		<b>Control</b>	47	51.56	13.81

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

# Differences found for gender

Gender		Group	N	Mean	Std. Deviation	Std. Error Mean
<b>MALE</b>	Average Grade	Coached	45	57.33	9.85	1.47
		<b>Non-coached</b>	<b>42</b>	<b>51.11</b>	<b>14.73</b>	<b>2.27</b>
<b>FEMALE</b>	Average Grade	Coached	104	57.20	8.37	0.82
		<b>Non-coached</b>	<b>50</b>	<b>54.24</b>	<b>12.40</b>	<b>1.75</b>

*Females in the control group made better progress than the males who were not coached.*

*Males who were coached made better progress than the females that received coaching*

# Attrition Rates (unintended outcome)

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%.

- ❖ Similar findings to previous mentoring studies despite shorter duration of intervention  
*(importance of stating the process/programme design)*

# Possible Applications

- Widening participation students – to narrow the attainment gap
- *BAME* – to narrow the attainment gap
- Other minority groups (model used successfully for mental health/disability)
- To address gender imbalance in specific subject areas
- To support International Students with successful integration

*Thank you for listening*

**Any Questions?**

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# Group Task

- What evidence is there to suggest that a coaching (or mentoring) programme is the best approach to achieve your objectives?
- What will be the challenges in setting up your intervention/scheme/programme?
- How will you overcome them? (SWOT analysis)
- Whose help/support can you enlist?
- Overview of your plan / timescales?

**Good practice is essential** – *use handout to develop your programme.*

What is the most relevant / appropriate thing you learned from today's session that you can utilise/implement/adapt for your own institution and why?

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