

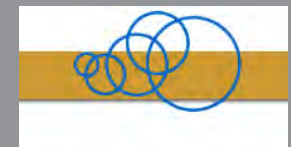


Making positive changes to students' learning experiences: A tailored professional development tool

www.monash/pats



Associate Professor Angela Carbone
Office of the Vice-Provost (Learning and Teaching)
Monash University



Sponsored by CADAD

Session overview

- Background
- A new form of Professional Development : *Peer Assisted Teaching Scheme*
 - goal-setting exercises,
 - analysis of informal student feedback
 - peer observation of teaching
- Findings and Outcomes

Background

- Director of Education Quality, Faculty of Information Technology (2008-2010)
- Quality control processes :
 - *unit guides,*
 - *grade distribution reports,*
 - *lecturer reflective summary reports,*
 - *Student evaluations*

Unit Evaluation Questions

- Item 1: The unit enabled me to achieve its learning objectives
- Item 2: I found the unit to be intellectually stimulating
- Item 3: The learning resources in this unit supported my studies
- Item 4: The feedback I received in this unit was helpful
- Item 5: Overall I was satisfied with the quality of this unit**

Two open-ended questions:

- What were the best aspects of the unit?
- What aspects of this unit are most in need of improvement?

University Targets

Colour Code	Interpretation	Unit Measure	Characteristics of unit response distribution	Targets
	Outstanding	"overall" item median ≥ 4.7	A considerable majority of responses are "strongly agree"	5% of units have medians ≥ 4.7
	Meeting aspirations	"overall" item median between 3.6 - 4.69	Responses are generally above "neutral", the great majority are "agree" or "strongly agree"	80% of units fall in this band
	Needing improvement	"overall" item median between 3.01 - 3.59	Responses are generally "neutral" or bimodal with no clear trend	10% of units fall in this band.
	Needing critical attention	"overall" item median ≤ 3.0	Responses generally below "neutral", majority "disagree" or "strongly disagree"	5% of units have medians ≤ 3.0

- Faculty targets
 - *Not more than 5% < 3.0*
 - *At least 75% of units ≥ 3.5*
 - *At least 25% >4.0*

Faculty Operational Plan (2008-2010)



**Monash -FIT
High percentage of
units in the RED**

- Less than 15% of academic staff hold a degree in university teaching and less than 12% hold a general education qualification (Bexley, et al. 2011)
- More than 70% of the academic workforce have not undertaken any teacher preparation program, not even a short course (Norton, 2103)



Graduate Certificate of Academic Practice/Higher Education



Workshops/ Training

Rapidly changing global higher education sector

- changes in learning modes through technological advances (such as blended and online learning), as well as MOOCS.
- Increase in students working part-time
- an increase in students from low socio-economic backgrounds,
- increasing casualisation of staff,
- For these reasons, many universities are now seeking new and innovative ways to ***professionalise the academic workforce*** and ensure the quality of university teaching and learning.



ZPD, Vygotsky, 1978

Situated Learning, Lave
1998

Benefits of PAL
(Green, 2011; Topping,
2001; Boud, 2001,
Arendale 2004; Hall et
al. 2005)

Brookfield (1995)

- Student lens
- Peer lens
- Self lens
- Informed by theory/research

'[T]he literature ... confirm[s] that, in general, discipline based programs or 'in-situ' training is a more effective setting for teacher preparation programs (TPPs).

*A number of studies also found that the effects of **TPPs were more significant** when they involved participation in **communities of practice, mentoring, reflective practice, and action learning**'*

(Chalmers et al, 2011,p4)

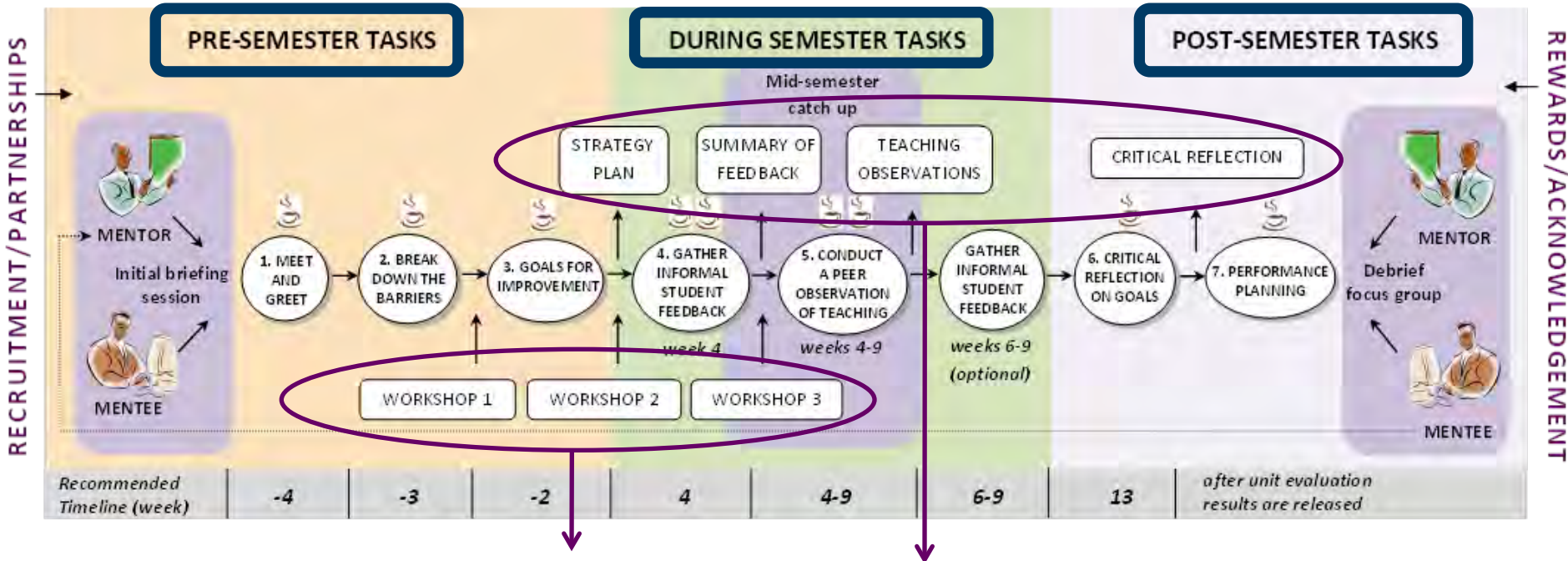
What is Peer Assisted Teaching Scheme (PATs)?

PATS is a scheme uses a partnership scheme to:

- improve learning experience and learning outcomes
- enhance the quality of teaching
- build leadership capacity amongst teachers



PATS Process



Example OPVCLT workshops:

1. Interactive teaching
2. Teaching with technology
3. Peer Observation/Review of Teaching

Deliverables:

1. Strategy
2. Summary of feedback
3. Peer Observation/Review of Teaching
4. Critical Reflection

The PATS journey

- 1 faculty
- 10 participants
- 5 units
- 150 students

2008-2009

Pilot PATS in
FIT

- 1 institution
- 42 participants
- 21 units
- 1000 students

2010-2011

Trialed scheme
across Monash
University.
*(Carbone, 2011;
Carbone, Wong &
Ceddia, 2011; Carbone
& Ceddia, 2012)*

- 5 institutions
- 57 participants
- 41 units
- 2500 students

2011-2012

Improve PATS
resources and
processes and
trial across five
universities
*(Carbone, 2012;
Carbone 2013)*

- 14 institutions
- 100 academics
- 64 units
- tbc students

2012-current

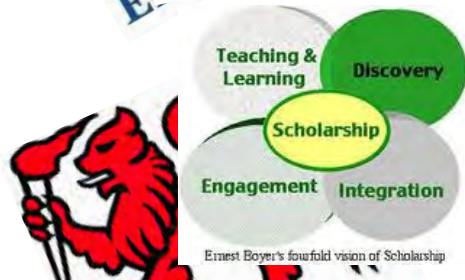
Developing
excellence
across the
Australian
Higher
Education
Sector
(Carbone et al 2013)



CADAD



EXAMPLES



PATS FINDINGS & OUTCOMES

- Better student learning experience seen through positive changes in unit evaluations
- Better overall faculty performance
- Supportive, collegial PATS experience
- Career progression, award nomination
- Scholarship of L&T publications and grant funding
- Overcoming barriers to making improvements
- Setting clear and targeted teaching improvement goals with strategies
- Engaging in the student voice and understanding areas that need attention



Peer Assisted Teaching Scheme

<http://www.monash.edu/pats>

Eg: Positive changes to unit evaluation results

Table 1: PATS Pilot in FIT unit evaluation results 2008-2012

Unit	Pre-PATS			Post-PATS		
	UW-Item 5 Median	Enrolment	Responses	UW-Item 5 Median	Enrolment	Responses
FIT 1_09	2.86	59	25	4.33	20	16
FIT 2_09	2.11	38	20	3.50	30	12
FIT 3_09	3.00	57	23	3.56	49	25
FIT 4_09	2.50	24	7	3.67	30	5
FIT 5*_09	NEW UNIT			4.36	25	16
FIT 6_10	3.00	48	8	2.92	40	17
FIT 7_10	3.00	167	64	3.28	131	46
FIT 8_10	2.50	70	16	4.30	40	10
FIT 7*_11	3.28	131	46	3.89	60	19
FIT 9_11	3.56	70	19	3.75	60	26
FIT 10_11	3.56	114	38	3.8	152	56
FIT 11_12	First time teaching the unit			4.0	37	25
FIT 12_12	2.0	43	24	3.9	108	54
FIT 13_12	3.0	135	84	3.9	52	34
FIT 14_12	3.0	142	57	3.5	32	14
FIT 15_12	3.3	289	110	3.6	353	111

(Carbone, Wong and Ceddia 2011; Carbone, Ross & Ceddia 2013)

Overall faculty (IT) performance

Unsolicited Email

Hi Ange,

... I just wanted to let you know that all your hard work has paid off.

Cheers,

*Academic Staff member
Faculty of Information*

12/5/2012

1. The **Faculty was ranked fifth in the university** – the highest ranking achieved in the last 5 years;
2. Our unit evaluations have been improving constantly, and we have the **lowest percentage of units** now in the “needing improvement” category since 2009. Additionally, we have the highest proportion of units considered “outstanding” since 2009.
3. We have the **highest response rate (45%)** across the University. This should mean our performance data is quite reliable.

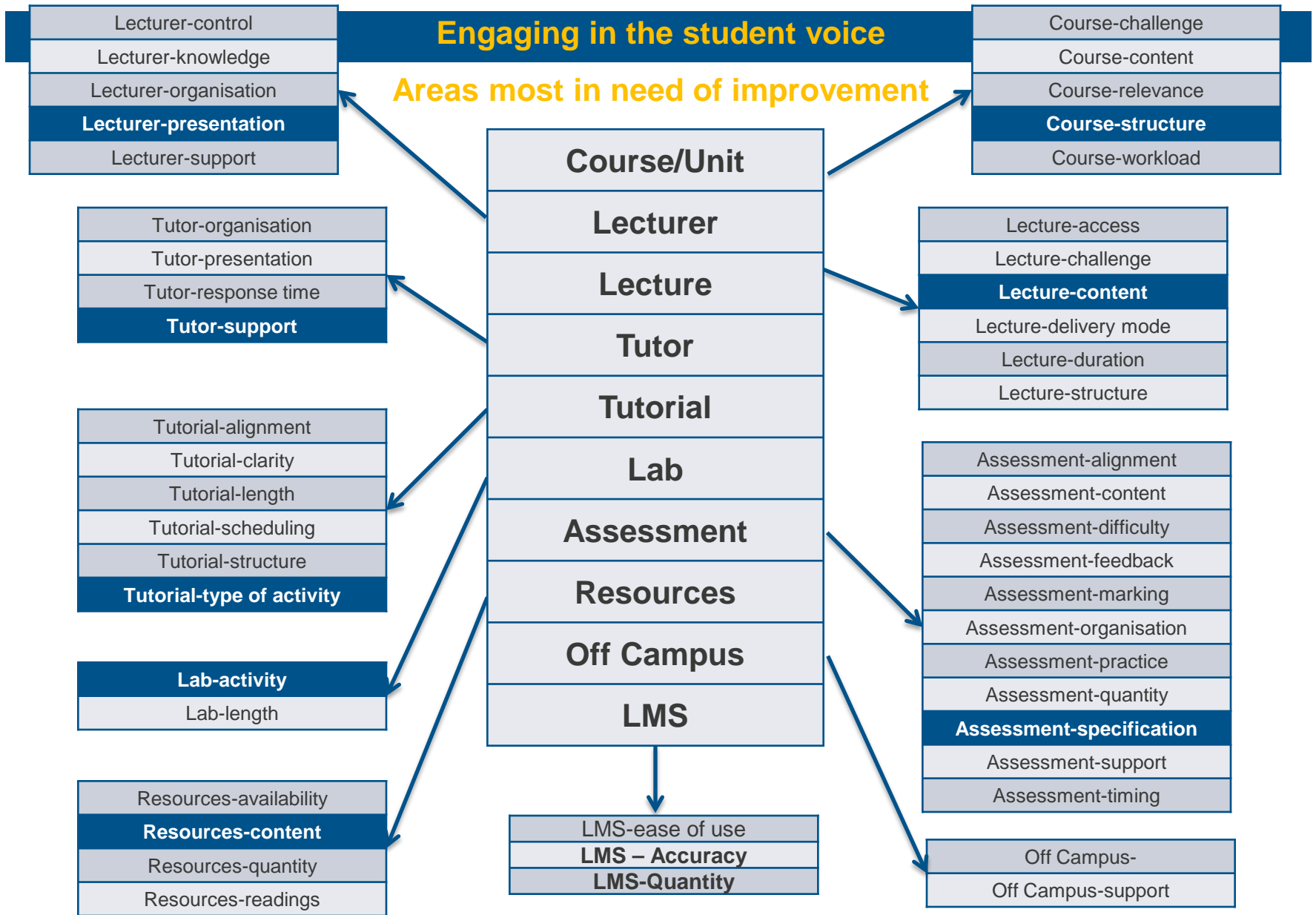
For many semesters a significant focus of our development efforts have been units that are, in university terminology, "in the red zone". Such units have been given **additional support in the form of** programs such as PATS. These efforts have paid off and together we have successfully managed to move many units out of this range....

Faculty of Information Technology Semester 1 Rankings

- 2008 ranked 9/10 (mean 3.61, Uni 3.79)*
- 2009 ranked 6/10 (median 3.91, Uni 3.94)
- 2010 ranked 7/10 (median 3.93, Uni 3.96)
- 2011 ranked 6/10 (median 3.97, Uni 3.97)

Faculty of Information Technology Semester 2 Rankings

- 2008 ranked 8/10 (mean 3.68, Uni 3.78)*
- 2009 ranked 8/10 (median 3.90, Uni 3.94)
- 2010 ranked 6/10 (median 3.95, Uni 3.99)
- 2011 ranked 5/10 (median 4.00, uni 3.99)



Carbone & Cedia, 2012; 2013; Carbone et al 2013

Positive conversations to improve teaching

Barriers

Personal
Student
Department/faculty
Institution

Goals and Strategies

Teacher, Course
Assessment, Activity
Administration, resources
Students



Publications

Conferences
Journal Articles
Proceedings



Creative L&T ideas



A dodgy literature review

Here is a situation
An HDR student submits a literature review to you which is
What advice would you give to the candidate?
What do you think of this response?
I would explain that a literature review is intended to be an
critical position vis-à-vis the literature

- No
 Yes
 Maybe

Submit

Unexpected Outcomes



- Mentees went on to become mentors



- Several mentors/mentees nominated for a teaching award



- Mentors granted promotion
- Mentors appointed in positions like Associate Deans (Learning and Teaching), HoS, Directors



- Mentees and mentors publishing innovations: eg: “conversation sim”
- Mentees and mentors submitting grant proposals



New flavours of PATS emerging

- Scholarship L&T
- Harnessing digital technologies
- Making good units even better

flavours[™]

PATS SUPPORT and RESOURCES

<http://monash.edu/pats>



Peer Assisted Teaching Scheme

PATS Website [http://www.monash.edu/pats]

- About PATS (background, partnership types, process and resources)
- Impact (changes in unit evaluations, video experiences of participants, outreach, publications)
- News and Events (newsletters, events and symposia)
- Online workbook (registration, PATS co-ordinator, PATS participants)

PEER ASSISTED TEACHING SCHEME (PATS)
Teachers Helping Teachers
Building Quality in Higher Education Courses

Australian Government
Office for Learning & Teaching

You are currently using guest access ([Login](#))

Home About PATS Impact of PATS News & Events Contact Us

Home ► What is PATS?

Welcome

What is PATS?

PATS is an integrated quality enhancement process, executed as part of unit preparation and delivery, that provides a structured framework for academics to reinvigorate their units through collegial input, assistance and guidance.

MENTOR + MENTEE
RECIPROCAL PARTNERSHIP

The Scheme aims to inform and equip academics with skills and strategies to reinvigorate their units. It provides opportunities for teachers to share ideas; to discuss improvements and to develop future educational innovations. PATS brings together teachers and researchers with a common interest in building peer capacity to enhance learning and teaching.

A/Professor Angela Carbone (PhD)
Director, Education Excellence
Office of the Pro Vice-Chancellor
(Learning & Teaching)
Monash University
2012 OLT National Senior Teaching
Fellow

Angela Carbone: What is PATS?

Login

Username
Password
 Remember username
[Login](#)
[Create new account](#)
[Lost password?](#)

Calendar

August 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Tweeting with PATS

References

- Arendale, D. R. (2004). Pathways of persistence: A review of postsecondary peer cooperative learning programs. In *Best Practices for Access and Retention in Higher Education*. I. M. Duranczyk, J. L. Higbee and D. B. Lundell. Minneapolis, MN, Center for Research on Developmental Education and Urban Literacy, General College, University of Minnesota.: 27-42.
- Boud, D. (2001). Introduction: making the move to peer learning. *Peer learning in higher education. Learning from and with each other*. D. Boud, R. Cohen and J. Sampson. London, Kogan Page.
- Brookfield, S. (1995). "Becoming a critically reflective teacher". San Francisco: Jossey-Bass.
- Brownwell, S., & Tanner, K. (2012). Barriers to Faculty Pedagogical Change: Lack of Training, Time, Incentives, and Tensions with Professional Identity? *CBE—Life Sciences Education*, 11(Winter), 339-346.
- **Carbone, A.** (2011). Building peer assistance capacity in faculties to improve student satisfaction of units. *Proceedings of the 34th Annual International Conference, Higher Education Research Development Society Australasia (HERDSA)*, Gold Coast, Queensland 4-7 July 2011.
- **Carbone, A.**, Wong, J., Ceddia, J., (2011). A scheme for improving ICT units with critically low student satisfaction. *Proceedings of 16th Annual Innovation and Technology in Computer Science Education (ITiCSE'11) Darmstadt, Germany*, 27-29 June, 2011.
- **Carbone, A.**, and Ceddia, J. (2012) Common Areas for Improvement in ICT Units that have Critically Low Student Satisfaction, *Proceedings of the Fourteenth Australasian Computing Education Conference (ACE2012)*, Melbourne, Australia, 31 January - 3 February, 2012.
- **Carbone, A.** (2012) A Peer Assist Teaching Scheme – A Way of creating, sustaining and developing new connections. *Proceedings of the Annual International Conference of the Higher Education Research and Development Society of Australasia (HERDSA 2012)*, University of Tasmania, Hobart, Tasmania, (in press).
- **Carbone, A.** & Ceddia, J. (2013) Common Areas for Improvement in Physical Science Units that have Critically Low Student Satisfaction, *Learning and Teaching in Computing and Engineering*, (LaTiCE 2013), Macau, 21-24 March 2013.
- **Carbone, A.**, Ceddia, J., Simon, D'Souza, D., Mason, R. (2013) Common Concerns in Introductory Programming Courses, *Proceeding of the Fifteenth Australasian Computing Education Conference (ACE2013)*, Adelaide, South Australia, 29 January - 1 February, 2013

References

- **Carbone, A.** (2012). Opportunities and challenges faced in attempting to introduce a Peer Assisted Teaching Scheme to improve units with critically low student satisfaction, Higher Education Research Development (in press).
- Carbone, A., Ross, B., Ceddia J. (2013) Five years of Taps on Shoulders To PATS on Backs In ICT, Proceedings of 18th Annual Innovation and Technology in Computer Science Education (ITiCSE'13) University of Kent, Canterbury, England, 1-3 July
- **Carbone, A.** , Phelan, L., Ross, B., Cottman, C., Drew, S., Stoney, S., Lindsay, K., Readman, K. (2013) From taps on the shoulder to PATS on the back: Experiences engaging academics with the Peer Assisted Teaching Scheme, Studies in Higher Education (submitted for review)
- Chalmers, D., Stoney, S., Goody, A., Goerke, V., Gardiner, D. (2012) " Identification and implementation of indicators and measures of effectiveness of teaching preparation programs for academics in higher education" **Final Report 2012**
www.olt.gov.au/system/.../SP10_1840_Chalmers_appendices_2012_0.pdf
- DaRosa, D. A., Skeff, K., Friedland, J. A., Coburn, M., Cox, S., Pollart, S., . . . Smith, S. (2011). Barriers to Effective Teaching. *Academic Medicine*, 86(4), 453-459.
- Day, T., & Tosey, P. (2011). Beyond SMART? A new framework for goal setting. *The Curriculum Journal*, 22(4), 515-534.
- Dowell, D. A., & Neal, J., A. (1983). The validity and accuracy of student ratings of instruction: A reply to Peter A. Cohen. *The Journal of Higher Education*, 54(4), 459-463.
- Galbraith, C., Merrill, G., Kline, D. (2012) Are Student Evaluations of Teaching Effectiveness Valid for Measuring Student Learning Outcomes in Business Related Classes? A Neural Network and Bayesian Analyses. *Research in Higher Education* 53:353–374
- Gratch, A. (1998). "Beginning Teacher and Mentor Relationships." *Journal of Teacher Education* 49.
- Green, P (2011) National HE STEM Programme Project – Peer Assisted Learning: In and beyond the classroom. A Literature Review of Peer Assisted Learning (PAL) <http://www.hestem-sw.org.uk/project?id=13>

References

- Hall, K., Smith, M., Leigh, K., Draper, R.J., Bullough, R.V.Jr. and Sudweeks, R. (2005). "Measuring the self-efficacy of mentor teachers." *Academic Exchange Quarterly*.
- Knapper, C. (2008). *Changing Teaching Practice: strategies and barriers*. Paper presented at the Paper presented at Taking stock: Symposium on teaching and learning research in higher education, University of Guelph, Ontario.
- Kember, D. and Leung, D. Y. P. (2011). Disciplinary Differences in Student Ratings of Teaching Quality, *Research in Higher Education*, 52, 3, 278-299.
- Lave, J. & Wegner, E. (1991) *Situated Learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press
- Lizzio, A., Wilson, K., & Simons, R. (2002). University Students' Perceptions of the Learning Environment and Academic Outcomes: implications for theory and practice. *Studies in Higher Education*, 27(1), 27-52.
- Morton, A. (2003). Mentoring. In, *Continuing Professional Development Series*, No. 2. Learning & Teaching Support Network, York.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.
- Ramsden, P. (1991). A performance indicator of teaching quality: The Course Experience Questionnaire, *Studies in Higher Education*, 16, 2, 129-150.
- Sitzmann, T., Brown, K. G., Casper, W. J., Ely, K., & Zimmerman, R. D. (2008). A review and meta-analysis of the nomological network of trainee reactions. *Journal of Applied Psychology*, 93(2), 280-295
- Topping, K. J. (2001). *Peer assisted learning: A practical guide for teachers*. Cambridge, MA, Brookline Books.
- Trigwell, K., & Prosser, M. (1991). Improving the quality of student learning: the influence of learning context and student approaches to learning on learning outcomes. *Higher Education*, 22, 251-266
- Vygotsky, L.S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.

Questions



Associate Professor Angela Carbone
Director, Education Excellence
Office of the Pro Vice-Chancellor (Learning & Teaching)
angela.carbone@monash.edu
(03) 9903 4481

PATS Website:
monash.edu.au/pats