

# things to think about... teaching and learning in higher education





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John Lea July 2012

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# things to think about... teaching and learning in higher education

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These eleven themes are presented as an open invitation to debate and discuss the issues they raise, either in a seminar format, or in the form of personal self-reflection. They are also an invitation to experiment with pedagogical ideas, and to engage with the broader battle of ideas about the nature and purpose of higher education.

I invite people to share what has emerged through their engagement with these themes. Please visit www.canterbury.ac.uk/ lteu/77things or contact me at: john.lea@ canterbury.ac.uk

#### John Lea

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N.B. The term 'assessment' is used throughout in the conventional UK way with an emphasis on the setting and marking of tasks rather than the measurement of their effectiveness, but all dimensions might be inferred, assuming some degree of interchangeability between 'assessment' and 'evaluation' as pedagogical terms. PART

# 7 things that the best college teachers do...

From the work of Ken Bain

1:1 "Outstanding teachers know their subjects extremely well ... and have used their knowledge to develop techniques for grasping fundamental principles and organizing concepts that others can use to begin building their own understanding and abilities."

1:2 "...they begin [their planning] with questions about student learning objectives rather than what the teacher will do."

1:3 "They avoid objectives that are arbitrarily tied to the course and favor those that embody the kind of thinking and acting expected for life."

1:4 When they teach, they work with "authentic tasks that will challenge them [their students] to grapple with ideas, rethink their assumptions, and examine their mental modes of reality". 1:5 They have a strong trust in students; that they want to learn, and display openness, and "talk about their own intellectual journey".

1:6 They have some systematic program "to assess their own efforts and to make appropriate changes ... constantly trying to improve their own efforts to foster students' development, and never completely satisfied with what they had already achieved".

> 1:7 They have a strong commitment to the academic community: "they were mere contributors to a learning environment that demanded attention from a fellowship of scholars".

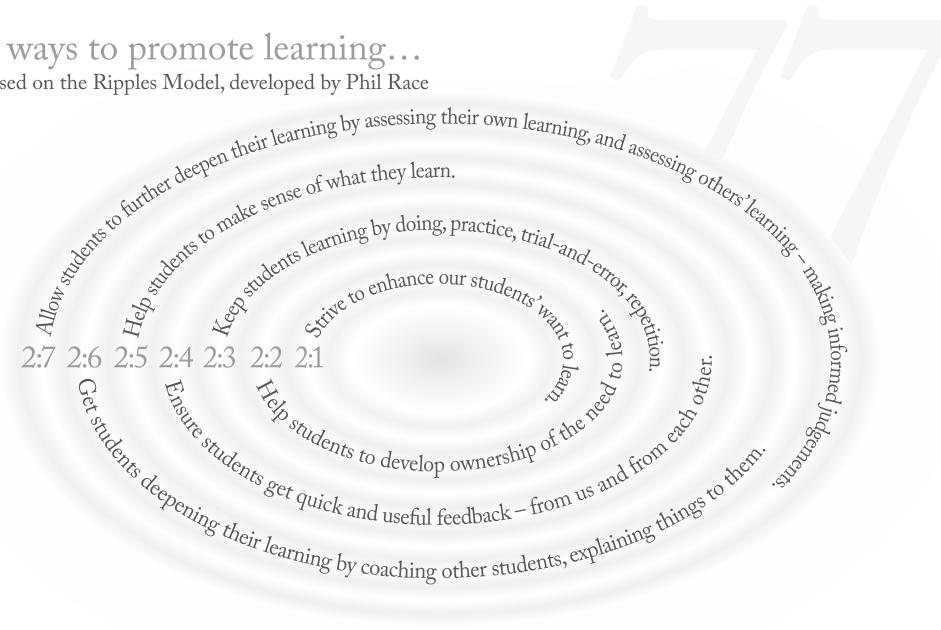
#### From:

Bain, K. (2004) *What the best college teachers do.* Cambridge, MA: Harvard University Press. (all quotations from pages 15-20)

## 7 ways to promote learning...

PART

Based on the Ripples Model, developed by Phil Race



Adapted from: Race, P. (2010) Making learning happen. London: Sage. (includes advice on how to help these things happen)

Some further reading: Hunt, L. and Chalmers, D. (eds) (2012) University teaching in focus: a learning-centred approach. London: Routledge.

Tennant, M., McMullen, C. and Kaczynski, D. (2010) Teaching, learning and research in higher education. London: Routledge.

## 3 7 basic principles of assessment...

3:1 Assessment should be aligned with learning outcomes and learning and teaching strategies ... the choice of learning and teaching strategies and assessment tasks should enable the learning outcomes to be effectively met (see Biggs on constructive alignment).

3:2 Assessment should be transparent and measurable ... the assignment brief should be clear to students, and it should be clear what will be the nature of the required 'understanding'.

3:3 Assessment should be balanced between the formative and the summative ...students should be provided with some tasks where they can practice the required skills, and be provided with developmental feedback, in advance of any final assessment of their abilities.

> 3:4 Assessment should be valid, reliable, and manageable ...it should be clear that any task will actually measure the achievement of a learning outcome; that the ability could be repeated with the same outcome and judged equally by different assessors; and is reasonable for students to achieve in the time frame and for assessors to mark in the time frame.

**3:5** Assessment should be authentic and inclusive ...assessments should measure meaningful and significant activities for students; should enable students to produce something which is clearly theirs (e.g. should not invite cutting and pasting from an internet source); and should enable all students to effectively engage with the tasks and demonstrate their learning.

## 3:6 Assessment should draw on all learning domains and be as varied as possible

...assessors should be mindful of measuring achievements in the cognitive, affective and psychomotor domains wherever possible, and try to ensure that students don't keep experiencing the same type of assessment task.

## 3:7 Assessment should actively involve students wherever possible

...if feasible students should be offered choices of assessment tasks; be given opportunities to actively understand assessment criteria; and be provided with opportunities to assess their own and their peers' work.

### Further reading:

Baume, D. (2009) *Writing and using good learning outcomes*. Leeds: Leeds Met Press. Available from: http://www.leedsmet.ac.uk/alt/index\_publications.htm

Biggs, J. Available at: http://www.johnbiggs.com.au/academic.html (Accessed: 22 June 2012).

Gosling, D. and Moon, J. (2001) *How to use learning outcomes and assessment criteria*. London: SEEC.

Hussey, T. and Smith, P. (2002) 'The trouble with learning outcomes', *Active Learning in Higher Education*, 3(3), pp. 220–233. Sage journals [Online]. Available at: http://alh.sagepub.com/cgi/content/abstract/3/3/220 (Accessed: 22 June 2012).

Oxford Brookes University *Assessment*. Available at: http://www.brookes.ac.uk/ services/ocsld/resources/assessment.html (Accessed: 22 June 2012).

PART

## 7 principles of effective feedback...

From the work of David Nicol and Debra MacFarlane-Dick

Effective feedback...

4:1 helps clarify what good performance is (goals, criteria, expected standards);

"...there must be a reasonable degree of overlap between the task goals in the mind of the student and the goals originally set by the teachers." (p. 65)

4:2 facilitates the development of reflection and selfassessment in learning;

"...teachers need to create more structured opportunities for self-monitoring and the judging of progression to goals." (p. 66) 4:5 encourages positive motivational beliefs and selfesteem;

"Feedback can have a positive or negative effect on motivation and on self-esteem." (p. 71)  $\,$ 

4:6 provides opportunities to close the gap between the current and desired performance; "Unless students are able to use...feedback to produce improved work ...

neither they nor those giving the feedback will know if it has been effective." (p. 73)

4:3 delivers high-quality information to students about their learning; "...feedback comments from teachers should in some way help to scaffold the development of learner self-regulation." (p. 69)

4:4 encourages teacher and peer dialogue around learning;

"...there is a great deal of evidence that students do not understand the feedback they are given." (p. 70)

4:7 provides information to teachers that can be used to help shape the teaching. "...teachers...need good data about how students are progressing." (p. 73)

#### References:

Bryan, C. and Clegg, K. (eds) (2006) *Innovative assessment in higher education*. London: Routledge.

Nicol, D. and MacFarlane-Dick, D. (2004) *Rethinking formative assessment in HE*. Available at: http://www.heacademy.ac.uk/resources/detail/assessment/ web0015\_rethinking\_formative\_assessment\_in\_he (Accessed: 22 June 2012).

## 7 exhortations to student engagement...

PART

5:1 Set learning tasks which actively promote forms of 'deep learning' (Marton and Saljo, 1976, and see Ramsden 10:2).

5:2 Invite students to adopt forms of research-mindedness and a scholarly approach to learning (see 7).

5:3 Encourage students to be actively involved in forms of self-assessment (see 3:7).

5:4 Provide some 'empty' modules or curriculum 'space' where students can negotiate their own learning outcomes (see Barnett and Coate, 2004).

5:5 Encourage students to see themselves not as passive consumers of knowledge but as active producers of knowledge (see Neary and Winn, 2009). 5:6 Ask students to see a degree as a process, taking them from dependency (on teachers and their teaching) towards autonomy (in directing their own learning) (see Rogers, 1994).

5:7 Invite students to ask not what their university has done for them but what they have done for their university.

#### References:

Barnett, R. and Coate, K. (2004) *Engaging the curriculum in higher education*. Maidenhead: Open University Press.

Marton, F. and Saljo, R. (1976) 'On qualitative differences in learning - 1: outcome and process', *British Journal of Educational Psychology*, 46, pp. 4-11.

Marton, F. and Saljo, R. (1976) 'On qualitative differences in learning - 2: outcome as a function of the learner's conception of the task', *British Journal of Educational Psychology*, 46, pp. 115-27.

Neary, M. and Winn, J. (2009) 'Student as producer: reinventing the student experience in higher education', in Bell, L., Stevenson, H. and Neary, M. *The future of higher education*. London: Continuum. pp. 192-210.

Rogers, C. (1994) *Freedom to learn*. 3rd edn. New York: Prentice Hall.

## 7 continua to position yourself on...

#### 6:1 from pedagogy to andragogy (Knowles, 1973 [2011])

How much do you feel you need to tell students what they need to know, and how much can you instead facilitate learning through sharing knowledge and understanding?

6:2 from the didactic to the participatory (Brandes and Ginnis, 1996) How much do you agree with the proposition that students always learn more when they are actively involved in their learning?

#### 6:3 from assessment of learning to assessment for learning (see 3:3) How much would you say that the courses you are teaching on are more concerned with assessing the learning that students have demonstrated, rather than promoting their further learning?

### 6:4 from surface learning to deep learning (see 5:1)

To what extent would you agree that although we all say we want to foster forms of deep learning, we often (perhaps inadvertently) produce forms of surface learning (and/or strategic learning) – through, for example, producing too many learning outcomes; over assessment; and asking students to undertake too many courses/modules?

### 6:5 from dependency to autonomy (see 5:6)

How much would you agree with the statement that a degree course should be seen as one which takes undergraduates from a form of dependency (on teachers and their teaching) to one of autonomy – where students learn to direct their own learning?

## 6:6 from students as consumers to students as producers (see 5:5)

How far do you think it's possible to see undergraduate students as producers (possibly co-producers, or creators) of knowledge, rather than as simply consumers of it, or should this be left to post-graduate work only?

### 6:7 from training to education (see Young, 2008)

What (if anything) do you think distinguishes the kind of professional learning which takes place in a university from the forms of job training which take place outside of it?

#### References:

Brandes, D. and Ginnis, P. (1996) *A guide to student centred learning*. London: Nelson-Thornes.

Knowles, M., Holton, E. and Swanson, R. (2011) *The adult learner*. 7th edn. London: Taylor & Francis.

Young, M.F.D. (2008) *Bringing knowledge back in*. London: Routledge. (especially chapters 9, 10 and 11)

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### PART

## 7 7 relationships with research to contemplate...

### 7:1 there's teaching AND research...

where the two have little connection; some people are good at one and some at the other; often what one is researching has no connection with one's teaching; often it's pure luck that the two come together in some meaningful way.

### 7:2 there's research LED teaching...

where one teaches a course which is directly related to one's research interests; indeed, the course may have been designed because of that research expertise. Students benefit from this because the teacher is able to bring groundbreaking or frontier knowledge to the classroom.

7:3 there's research ORIENTATED teaching where one integrates the latest research findings into one's teaching, but in the form of co-coordinating others' research findings, rather than being an active researcher oneself.

#### 7:4 there's research INFORMED teaching (RIT)

where the teaching itself (pedagogical methods) is informed by research into their effectiveness, i.e. pedagogical research and subject-based research now have a 'tandemlike' relationship.

### 7:5 there's teachers as ACTION researchers

where university teachers engage in practitioner research themselves, seeing colleagues and students as collaborators in pedagogical experiments, and action research projects.

### 7:6 there's research MINDED teaching

where teachers introduce students to discipline-based research methods, and discuss the means by which subject-based research was conducted, and actively encourage students to discuss the uses and limitations of research methods, and the epistemological foundations to disciplinebased knowledge.

> 7:7 there's students AS researchers where teachers actively encourage students to undertake their own undergraduate research projects; and/or, where students learn about research methods by actively using those methods, rather than just evaluating other peoples' use of those methods.

### Further reading:

Healey, M. and Jenkins, A. (2009) *Developing undergraduate research and inquiry*. York: HEA. Available at: http://www.heacademy. ac.uk/assets/documents/resources/ publications/DevelopingUndergraduate\_ Final.pdf (Accessed: 22 June 2012).

Jenkins, A. and Healey, M. (2005) Institutional strategies to link teaching and research. York: HEA. Available at: http://www. heacademy.ac.uk/assets/documents/research/ Institutional\_strategies.pdf (Accessed: 22 June 2012).

## PART

## 8 7 thorny questions to reflect on...

Ask a selection of experienced colleagues the following questions:

### 8:1 on personal development planning (PDP) and employability...

What do you consider to be the role of employability and personal development planning in an undergraduate degree, and how are they being advanced in the courses you work on?

### 8:2 on student satisfaction and participation...

What do you consider to be the role of student surveys (like the National Student Survey in the UK or the National Survey of Student Engagement in the US) and are there limits to student participation in academic matters?

### 8:3 on blended learning...

What do you understand by the term 'blended learning', and how is it being advanced on the courses you work on?

#### 8:4 on continuous professional development (CPD)...

Are university teachers best developed from within their own disciplines, and do you think your subject area has its own distinct subject pedagogy and how would you articulate this?

### 8:5 on sustainability...

Do you think that sustainability is a matter for the university curriculum, or an extra curricula matter, or neither; regardless, how is it being advanced on the courses you work on?

### 8.6 on inter-cultural learning...

How far would you go in the direction of accommodating cross-cultural differences in your curriculum (for international and domestic students), or do you feel comfortable demanding a degree of assimilation?

### 8:7 on integrity...

What do you consider should be the role of research ethics committees in the university, and should similar committees exist for learning and teaching and curriculum matters, or is the effect always to undermine academic freedom?

Collate the answers, and consider your own view by way of comparison.

Are there any noticeable differences, by age, sex, faculty, etc., etc?

## 7 books to do battle with...

9:1 Plato *The Republic* (circa 360 BC)...

in which Plato produces the famous similes of 'the divided line' and 'the cave' to distinguish between two orders of reality – episteme – conceptual, knowledge (the forms) and the 'doxa' of mere opinion, and how philosopher kings should be educated in the Academy to be the custodians of universal and unchanging knowledge.

## 9:2 John Henry Newman *The Idea of the University* (1852)...

in which Newman famously argues that the university's rasion d'etre is to promote an intellectual education rather than a moral one; to disseminate universal knowledge, rather than discover it; and to pursue that knowledge for its own sake, rather than as a means to another end.

## 9:3 John Dewey *Democracy and Education* (1916)...

in which Dewey carves out a pragmatic approach to education, in response to the one-sidedness of the traditional 'bookish' approach, and its equally flawed purely practical alternative, and demonstrates the error in framing an educational curriculum which is divorced from the inquisitive ways in which children naturally learn.

### 9:4 Allan Bloom *The Closing of the* American Mind (1987)...

in which Bloom defends the role of reason in the university, and the study of Man and the search for what is Universal, in opposition to what he sees as the rising tide of misguided forms of multiculturalism, and the pursuit of social engineering projects.

## 9:5 Carl Rogers *The Carl Rogers Reader* (edited in 1989)...

in which Rogers outlines the case for a humanistic – as opposed to a purely cognitive or behaviourist – approach to education, in which significant learning is to the fore, and where teachers are asked to see themselves first and foremost as facilitators of others' learning, in the quest to create the autonomous learner who is free to learn.

## 9:6 Ernest Boyer Scholarship Reconsidered (1991)...

in which Boyer outlines the four scholarships which are pursued in the university – of discovery, of integration, of application, and of teaching – and asks that each be seen as having equal importance, and that academics are provided with opportunities to pursue – in a career – all four, rather than becoming experts in only one.

### 9:7 Stefan Collini *What are*

Universities for? (2012)... in which Collini takes on the UK government's decision to marketise higher education, allied with its narrowly defined model of the university as an engine of economic growth, defending in the process the importance of the role of the humanities in human understanding, and a university education as a social good.

PART

# 10 7 guides to have on the shelf...

10:1 a comprehensive (highly practical) handbook Fry, H., Ketteridge, S. and Marshall, S. (2008) *A handbook for teaching and learning in higher education*. 3rd edn. London: Routledge.

10:2 a comprehensive (more conceptual) handbook Ramsden, P. (2003) *Learning to teach in higher education*. London: Routledge.

10:3 on getting started Race, P. (2009) In at the deep end: starting to teach in higher education. 2nd edn. Leeds: Leeds Met Press. Available from: http://www.leedsmet.ac.uk/alt/ index\_publications.htm (Accessed: 22 June 2012)

10:4 on successful pedagogical interventions Mortiboys, A. (2010) *How to be an effective teacher in higher education: answers to lecturers' questions.* Maidenhead: Open University Press.

### 10:5 on assessment

Gibbs, G. (2010) Using assessment to support student learning. Leeds: Leeds Met Press. Available from: http://www.leedsmet.ac.uk/alt/index\_publications.htm (Accessed: 22 June 2012)

> 10:6 on curriculum design Baume, D. (2011) Course design for increased student satisfaction. Leeds: Leeds Met Press. Available from: http://www.leedsmet.ac.uk/alt/ index\_publications.htm (Accessed: 22 June 2012)

10:7 on measuring quality in HE

Gibbs, G. (2010) *Dimensions of quality*. York: HEA. Available at: http://www. heacademy.ac.uk/resources/detail/ ourwork/evidence\_informed\_practice/ Dimensions\_of\_Quality (Accessed: 22 June 2012)

### Further reading:

One or several of the Routledge *Key Guides for Effective Teaching in Higher Education*, a series of books edited by Kate Exley. See http://www. routledge.com/books/series/SE0746/ (Accessed: 22 June 2012)

One or several of the *SEDA Specials* on topics in higher education. See http://www.seda.ac.uk/ publications.html (Accessed: 22 June 2012)

# **11** 7 simple classroom experiments to try...

## 11:1 The one minute assessment paper (from the US)

At the end of a lecture ask students to write down on one side of a sheet of paper the most significant thing they learnt in the previous hour, and on the other side the thing that most troubled them – the muddiest point. At the beginning of the next session address the comments from the sheets of paper.

## 11:2 Setting a problem-based learning task

Put students to work in small groups by presenting them with a problem which relates to their module – either content or learning related. Take feedback from each group on how they would have solved the problem.

11:3 Walking through an assessment grid Take time out in a session to walk students through the assessment criteria for the module, pausing for questions, and to give examples.

## 11:4 Interrogating some lecture notes and/ or slides

Sometime before you are due to give a lecture take a look at your own notes or slides and ask yourself how much of the content could be presented in the form of a pre-read, podcast, or handout. Concentrate in the actual session on what is left. 11:5 Providing a top, middle, and bottom assignment Give over a seminar to handing out three assignments from previous cohorts of students, without names, or create fictitious ones, and ask students to mark them – what feedback would they have given and what mark would they have given? Share the results in discussion and in handout form, and provide the actual feedback and mark that was given for each assignment.

11:6 Offering a group tutorial Rather than providing detailed written feedback to each student on their assignment, simply justify the mark, and spend a group tutorial on discussing the whole cohort's achievements – without identifying particular students' assignments.

11:7 Talking to students about learning Take time out in class to ask students how their learning is progressing; what's working; what isn't; and how things might be enhanced from their perspective.

## Images and Acknowledgements

#### **CONTENTS PAGE:**

**Plato and Aristotle** from *The School Of Athens* (Raphael, circa 1509, Stanza della Segnatura, The Vatican)

"The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato."

Whitehead, A.N. (1979) *Process and reality*. London: Free Press. p. 39.

#### PART 1:

**Socrates**, from *The Death of Socrates* (David, 1787, New York: Metropolitan Museum of Art)

"Education is not an object (a mass of knowledge or information or skills) which can be unambiguously handed from the teacher to the student. Education is rather an activity of mind, a particular emotional and critical orientation towards experience."

Abbs, P. (1994) *The educational imperative: a defence of Socractic and aesthetic learning*. London: Falmer Press. p. 17.

#### **PART 3:**

#### **Robert Pirsig**

"The student's biggest problem was a slave mentality which had been built into him by years of a carrot-andwhip grading, a mule mentality which said, 'If you don't whip me, I won't work.' He didn't get whipped. He didn't work."

Pirsig, R. (1974) Zen and the art of motorcycle maintenance. London: Black Swan Books. p. 194.

Robert Pirsig, 1968. Photograph courtesy of robertpirsig.org. Used with permission.

#### PART 5: Carl Rogers

"I have come to feel that the only learning which significantly influences behaviour is self-discovered, selfappropriated learning... As a consequence of the above, I realize that I have lost interest in being a teacher."

Rogers, C. (1957) 'Personal thoughts on teaching and learning', reproduced in Kischenbaum, H. and Henderson V.L. (eds) (1989) *The Carl Rogers reader*. New York: Houghton Mifflin.

Photograph of Carl Rogers by John T. Wood, 1970, copyrighted, used with permission

#### **PART 7:**

#### Wilhelm von Humboldt

"The relationship between teacher and learner is ... completely different in higher education from what it is in schools. At the higher level, the teacher is not there for the sake of the student, both have their justification in the service of scholarship."

Humboldt, W. von (1810) 'On the spirit and organisational framework of intellectual institutions in Berlin', reproduced in *Minerva*, 8(2), April 1970, pp. 242-267.

Photograph of statue of Wilhelm von Humboldt, at the University of Berlin, by Adam Carr (public domain image)

#### **PART 9:**

#### John Henry Newman

"It [a university] is a place of teaching universal knowledge. This implies that its object is, on the one hand, intellectual, not moral, and, on the other, that it is the diffusion and extension of knowledge rather than the advancement. If its object were scientific and philosophical discovery, I do not see why a University should have students..."

Newman, J.H. (1982) *The idea of the University: edited* with an introduction and notes by Martin J. Svaglic. Notre Dame, IN: Notre Dame University Press. Preface. [Originally published in 1852].

#### PART 10: Telemachus and Mentor (Fabisch 1699 *Les Aventures de Télémaque*)

"The mentor is an authoritative guide, using worldly wisdom to encourage maturation. They help the protege enrich, clarify and hone their consciousness; they juggle hard reality and gleaming possibility."

Young, D. (2010) 'In moments like these, we need mentors', *The Sydney Morning Herald*, April 26. Available at: http://www.smh.com.au/opinion/ societyand-culture/in-moments-like-these-weneedmentors-20100425-tlix.html (Accessed: 22 June 2012).

#### **PART 11:**

#### John Dewey

"...when the schools depart from the educational conditions effective in the out-of-school environment, they necessarily substitute a bookish, a pseudointellectual spirit, for a social spirit."

Dewey, J. (1916) *Democracy and education*. Reprint, Milton Keynes: Simon and Brown. p. 25.

#### **THIS PAGE:**

#### bell hooks

"Home was the place where I was forced to conform to someone else's image of who and what I should be. School was the place where I could forget that self and, through ideas, reinvent myself."

hooks, b. (1994) *Teaching to transgress: education as the practice of freedom*. London: Routledge. p. 3.

bell hooks, 1995, photographed by Jill Krementz in Manhattan, NY; all rights reserved. Used with permission.

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