Reciprocal peer critiquing reconsidered

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 $\underline{\text{http://www.psy.gla.ac.uk/}{\sim}\text{steve/talks/ltc09a.html}}$

http://www.psy.gla.ac.uk/~steve/rap/principles.html

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Introduction

This talk presents and relates several elements:

- A. An example of good practice
- B. A broad concept about the relationship of theory and good practice
- C. Possible extensions to the recipe (the practice)
- D. An extra, social constructivist, principle?

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My current recipe for RPC

Psychology level 3 undergraduates.

Done twice, first with past (already marked) work; second for new coursework before submission.

- Students bring in and exchange work
- Prefaced by 1-3 questions they particularly want comments on
- Each critiques 2 others, address criteria plus the questions; rubric: best and worst feature
- Round table, F2F feedback, tutor chairing

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My current recipe (2)

Always goes down well with my students, once they've done it.

See Morrow (2006) for evidence.

Most enthusiastic about seeing how other students write, but also about getting feedback.

Perhaps best indicator is that having done it the first time, they commit to finishing the next bit of work a week early to allow time to do it then.

New / overall principle

The chief idea derives from Sadler (1989): that to achieve well on a task e.g. essay writing, students must fully understand the assessment criteria. Otherwise they can't do it, nor can understand any feedback relative to those criteria.

A major tactic is to have students exercise the criteria in a different way: by applying them to others' work (rather than just generating material that satisfies them).

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Great designs vs. principles

Common L-designs may be based mainly on one principle. (An Alexander type pattern could be viewed as one principle plus one example implementation.)

But great learning designs appear simple & coherent, whilst ticking a lot of boxes (satisfying many principles) at once. (Actually, this is true of design in all fields.)

One view is that great designs appear magically from genius. But in L-designs, it may be possible to incrementally improve them e.g. I added author prefaced questions.

Case 1: Redhead

Redhead (unpublished). MSc in Information management and preparation (Digital Archiving).

- 2 hour class before projects are launched:
 Students decide the marking criteria for the projects
- Projects creating an archive (mostly external placements)
- Write reports
- Students reciprocally critique each others' draft reports
- · Revise reports, submit final version
- Staff summative grading.

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Case 1: Redhead (b)

Boxes ticked = principles enacted:

· Learners decide criteria

[Peer formative assessment against the criteria]

- Exercise the criteria from the other "side"
- The peer voice
- Feedback then used in revising the draft
- Staff summative judgment

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Reciprocal peer critiquing: boxes ticked

Boxes ticked = principles enacted:

- Peer assessment (the peer voice)
- · Exercise the criteria from another viewpoint
- Peers see each others' work (resource for remedies)
- See how own and others' work compares in quality
- Learners proactive in formulating feedback questions
- Can act on feedback directly (in 2nd application)
- F2F delivery means dialogue around feedback, and not just clarification but multi-party discussion.
- Multiple opinions on same work: information on variability
- Teacher scaffolds first RPC, then leaves it to the learners

Nicol's 7

Good feedback practice (by teachers to learners on their work):

- $\sqrt{\ }$ 1. helps clarify what good performance is (goals, criteria, expected standards);
- $\sqrt{2}$. facilitates the development of self-assessment (reflection) in learning;
- $\sqrt{3}$. delivers high quality information to students about their learning;
- √ 4. encourages teacher and peer dialogue around learning;
- 5. encourages positive motivational beliefs and self-esteem;
- √ 6. provides opportunities to close the gap between current and desired performance;
 - 7. provides information to teachers that can be used to help shape the teaching.

David Nicol & Debra Macfarlane-Dick (2006) "Formative assessment and selfregulated learning: A model and seven principles of good feedback practice" <u>Studies in Higher Education</u> vol.31 no.2 pp.199-218

Gibbs' extra 4

Assessment activities support student learning if they:

- 1. Capture sufficient study time and effort (in & out of class)
- 2. Are spread evenly across topics and weeks
- $\sqrt{3}$. Lead to productive learning activity (deep rather than surface learning)
- \surd 4. Communicate clear and high expectations.

Gibbs, G and Simpson, C. (2004) "Conditions under which assessment supports students' learning" <u>Learning and Teaching in Higher Education</u> vol.1 pp.3-31.

Chickering & Gamson 7

- 1. Encourages contacts between students and faculty.
- √ 2. Develops reciprocity & cooperation among students.
- $\sqrt{}$ 3. Uses active learning techniques.
- $\sqrt{}$ 4. Gives prompt feedback.
 - 5. Emphasizes time on task.
 - 6. Communicates high expectations.
- $(\sqrt{\ })$ 7. Respects diverse talents and ways of learning.

Arthur W. Chickering and Zelda F. Gamson (1987) "Seven principles for good practice in undergraduate education" <u>American Association of Higher Education</u> Bulletin pp.3-7

NSS A&F subscale

National student survey: subscale on assessment and feedback.

- √ 5. The criteria used in marking have been clear in advance.
 - 6. Assessment arrangements and marking have been fair
 - 7. Feedback on my work has been prompt
- $\sqrt{8}$. I have received detailed comments on my work

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Possible improvements

- Use a pro-forma for the prefaced author questions?
- Student-generated content: get our students to value each others' work more by creating a repository and index so they can access it.

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Big scale RPC

As described, it works for groups of 4-6.

But there is software, and numerous papers reporting experience, on how to do it with big classes (60, 600, ..)

Quintin Cutts has some local experience;

John Hamer: google "Aropa peer"

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Sadler's new approach

Up to now, I've gone with the idea that we should be explicit about marking criteria, and exercise students on them so they understand them better.

Sadler in recent work takes the view that for essays there is an irreducible subjective component that cannot be articulated.

He has trialled exercises where students are required to critique other students' work with NO criteria.

The important finding is that they come up with much the same issues as staff do: ?true constructivist L&T?

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Science version?

Up to now, I've only talked about critiquing essays, for which human judgment (and uncertainty) seem inherent. Would RPC be useful for science assignments?

In fact, perhaps. A classic problem with science students is that if (as is usual) the task requires a number to be calculated, they put down a number with no reasons, no "working" or derivation. Thus beneath the surface of a black& white topic are the same issues of providing explanations and reasons for your conclusions.

RCP reverses the learner's role, hoping to get them to appreciate in a new way why explanations are required. Judging the adequacy for a human reader of a derivation is essentially like judging an essay.

Another new principle

RPC also satisfies a new principle I'm formulating (and exploring in other kinds of student activities):

For a student to make an informed decision on whether to adopt a practice, they have to experience it. The implication then is to require that they experience it at least once; then leave it to them to decide whether to adopt it into their unsupervised solo practice.

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The Vygotskian idea

Social constructivists, following Vygotsky, believe that for every form of thought there is a prefiguring type of conversation. That is where learners first grasp and start to join in this new type of dialogue; and later internalise it and so come to do it solo.

I make my students first exchange RPC comments round a table, F2F, with me there. This establishes the tone required: not hostile, not vapidly polite.

Then they can (do) RPC without me there.

(This works without the irresponsibly glib, hostile, vacuous reviews often got with anonymous software-mediated RPC.)

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The Vygotskian idea (2)

A still more graduated sequence might be:

- Teacher models the kind of comment that's appropriate
- Not an individual student but a group combine to produce a critique
- Solo students then produce critiques,

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A place to stop

Questions on?:

The general idea of box-ticking vs. great designs The current reciprocal peer critiquing Possible improvements

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For the slides, handout etc. see:

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