Reciprocal peer critiquing reconsidered

Steve Draper

http://www.psy.gla.ac.uk/~steve/talks/mcr2.html
http://www.psy.gla.ac.uk/~steve/rap/principles.html

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Introduction

This talk presents and relates several elements:

A. How I myself do RPC: 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 again)

D. Other theories relevant to RPC
An extra, social constructivist, principle?

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Part 1: The particular technique (practice)

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My current recipe for RPC

Reciprocal Peer Critiquing (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

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.

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Prompt sheet

Criterion 1: quality of literature research
What's good?
What could be improved?

Criterion 2: quality of the write-up
i.e. well presented and clearly structured?
What's good?
What could be improved?

Criterion 3: quality of Critical analysis
What's good?
What could be improved?

Prompt sheet 2

This rubric was for an English course:

What is the issue that the draft is addressing? Is it interesting, or do you care?

Say what you think is the argument of the draft. If the argument is not clear, suggest what a possible argument might be.

What reasons does the writer offer to support the argument? (You may like to break down the argument into quasi-syllogistic premises or to identify a Toulmin-style warrant for the argument).

Suggest a counterargument to the argument of the draft. This comment may, alternatively, point out unexamined assumptions and/or missing or unacknowledged evidence.

Identify a characteristic sentence of the writer. Say what you think is good about this sentence, or how this sentence can be improved (your chosen sentence may simply identify a repeated writing fault)

Part 2:
The relationship of theory to practice; of a good design to "principles"

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New / overall principle

The chief idea derives from Sadler (1989): that to perform 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 general strategy 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). I.e. to critique instead of only being critiqued.

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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.
(Mark Russell, Hertfordshire)

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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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Case 2: 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 5/7

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

√ 1. helps clarify what good performance is (goals, criteria, expected standards);

√ 2. facilitates the development of self-assessment (reflection) in learning;

√ 3. delivers high quality information to students about their learning;

√ 4. encourages teacher and peer dialogue around learning;
<This could be improved further>

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 self-regulated learning: A model and seven principles of good feedback practice" Studies in Higher Education vol.31 no.2 pp.199-218

Gibbs' extra 2/4

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

√3. Lead to productive learning activity (deep rather than surface learning)

√ 4. Communicate clear and high expectations.

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

Chickering & Gamson 3.5/7

1. Encourages contacts between students and faculty.

√ 2. Develops reciprocity & cooperation among students.

√ 3. Uses active learning techniques.

√ 4. Gives prompt feedback.

5. Emphasizes time on task.

6. Communicates high expectations.

(√) 7. Respects diverse talents and ways of learning.

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

NSS A&F subscale (5 items) 3/5

UK National Student Survey:
its 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

√ 8. I have received detailed comments on my work

√ 9. Feedback on my work has helped me clarify things I did not understand.

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NSSE A&F items (8) 2.5 or 4.5/8

USA National Survey of Student Engagement:
its (few) 8 items on assessment and feedback.

√ Asked other people to read something you wrote to see if it was clear to them.

· Worked harder as a result of feedback **from an instructor**

√ Asked **your instructor** for comments and criticisms about your academic performance

[Estimates of gains]

√? Writing clearly and effectively

√ Discussed grades or assignments **with an instructor**

· Received prompt feedback from faculty on your academic performance

√ Quality of relationships with other students

Rowntree 10/17

Rowntree's book ends with 17 recommendations.
RPC is neutral for 6, ticks 9, excels at 1, and contradicts 1.

X 10. Report feedback/marks only to learner (not in public)

√√ 7. Markers may have quite different perceptions. Report divergence

It ticks 1,5,6,7,9,11,12,13,14,15, including:
1. Articulate the assessment criteria
5. Give learner feedback on their qualities as well as on the product
9. Support portfolios, that include both products and judgments
11. Emphasise learners' strengths, but mention weaknesses
12. Multi-dimensional marks, not portmanteau grades

New principles (2)

RPC also satisfies significant principles not in the lists above.

1. Cost: should be cheap (in staff time etc.)

2. Informed consent. 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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Types of principles: recap (review of box ticking perspective)

Aim: Learners need a better understanding of criteria

Main tactic: "opposite angle": give not only receive critiques

Other gains: Box ticking as above

Incremental improvements: costing almost nothing more but ticking more boxes

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Types of principles: Different types

Principles express a mixture of kinds of thing:

- Symptoms / problems e.g. Learners don't use feedback
- Measures of merit or success e.g. Criteria are understood
- Generic remedies (tactics) e.g. "opposite angle", student generated content, ..
- The main actors in the remedy (Ts vs. Ls) e.g. peer interaction, Ts write explicit criteria, Ls ask for specific feedback

and the main organisers (Ts vs. Ls)

e.g. Ts chair RCP feedback, Ls deliver drafts early to allow RCP

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Part 3: Practice again

Variations, generalising to other contexts

A. More small incremental improvements to make
B. What about groups of 100 not 5?
C. Scaffolding sequence for repeated RPC
D. What about Science not essay-based subjects?
E. Critiquing without criteria

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Possible incremental 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.
- Get them to mark up typos as well as the main marking criteria. I.e. emphasise direct formative utility, not only understanding of the criteria
- Try "reader feedback": drill students in expressing feedback as only their personal response and feelings.

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Big scale RPC

What about big classes?
As described, it works for groups of 2-6.

1. I've done it in a lecture group of 90 for short (100-200 word) passages: swap with neighbour and do RCP

2. Use software to manage it.
There is free 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"

3. Speed RPC-ing?

Scaffolding sequence for RPC?

Possibly, it could be good to introduce students to this in stages. For example:

1. Tutor "models" the kind of comment appropriate
2. Small groups compose joint critiques
3. Solo students deliver critiques F2F
4. Solo students deliver this by email etc.
5. Informal (self-organised) student use

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Science version?

That's all about essay based subjects: what about science?
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

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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Part 4:

Other theories relevant to RPC

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Alternative reasons for RPC

Peer interaction has generic advantages:
Peer voice, not Teacher's: better attuned explanations
Cheaper, more available
Peers make you think critically about reasons

Managing the emotional impact of feedback: not judging the person but expressing the reader's feelings and impressions.

Peter Elbow: need for both criteria- and reader-based feedback

General L-design principles of 1) understanding something by reversing its use. 2) Part-whole training.

Sadler: essay criteria are irreducibly implicit (so must use human judges, not written criteria)

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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 (and often 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) [repeat]

Possibly, it would be good to introduce students to this by a still more graduated sequence. For example:

1. Tutor "models" the kind of comment appropriate
2. Small groups compose joint critiques
3. Solo students deliver critiques F2F
4. Solo students deliver this by email etc.
5. Informal (self-organised) student use

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Anonymous vs. F2F feedback

Pro-anonymous: data protection, privacy

Pro-face to face:

- More useful and serious critiques are elicited
- Dialogue for clarification of what the feedback means
- Dialogue of a more open-ended and multi-party kind
- Get feedback on the feedback you gave
- Hear critical issues directed to others but relevant to self.

Part 5:

The evidence: a puzzle

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Evidence

Morrow (2006) found strong student attitude support, but strongest for being able to see others' work.
That's also what I find repeatedly in oral feedback.
This doesn't exactly match published theories of feedback.

Price et al (2007) found the same.

Students believe it's useful; and show their belief in behaviour: doing it voluntarily.
But it's not clear how to measure learning gains.

Not least because the gains may only be far in the future and certainly NOT on the current piece of work.

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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:
http://www.psy.gla.ac.uk/~steve/talks/mcr2.html
http://www.psy.gla.ac.uk/~steve/rap/principles.html

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