

# Celebrating Quantitative Connections: QR across the Liberal Arts Disciplines

Corri Taylor, QR Program  
Wellesley College

# “Only Connect”: Forster

Only connect! That was the whole of her sermon.

Only connect the prose and the passion, and both will be exalted,

And human love will be seen at its height.

Live in fragments no longer.

Only connect....

--E.M. Forster, *Howards End*



# “Only Connect”: Cronon



William Cronon's article in  
*The American Scholar*,  
Autumn 1998

on the meaning and use of a liberal arts education (to nurture human freedom and personal growth) and on the qualities of a liberally-educated person

# How does one recognize liberally educated people?

1. They listen and they hear.
2. They read and they understand.
3. They can talk with anyone.
4. They can write clearly and persuasively and movingly.
5. They can solve a wide variety of puzzles and problems.
6. They respect rigor not so much for its own sake but as a way of seeking truth.
7. They practice humility, tolerance, and self-criticism.
8. They understand how to get things done in the world.
9. They nurture and empower the people around them.
10. They follow E.M. Forster's injunction from *Howards End*: "Only connect..."

# Proficiencies from a Liberal Arts Curriculum

Curriculum is designed to help students

- ~ learn to obtain information
- ~ critically analyze what they read, hear, and see
- ~process information, solve problems, and make decisions
- ~communicate clearly and persuasively in writing, orally, and visually

# “Only Connect” Q-version

Only connect! That was the whole of her **lunch talk.**

Only connect the prose and the **quantitative evidence**, and both will be exalted,

And human **understanding** will be seen at its height.

Live in fragments no longer.

Only connect....

-- Corri Taylor, QRU luncheon

# How does one recognize “Quirk”-y liberally educated people?

1. They listen to quantitative arguments.
  2. They read and they understand quantitative subjects.
  3. They can talk with anyone about quantitative topics.
  4. They can write clearly and persuasively and movingly by providing quantitative evidence.
  5. They can solve a wide variety of quantitative puzzles and problems.
- ....
10. They celebrate quantitative connections!



# Wellesley's QR Program

Two part QR requirement:

1. Basic skills requirement (first year)
2. QR overlay course requirement

# QR Overlay Courses in....

Astronomy	Economics
Biology	Education
Chemistry	Philosophy
Computer Sciences	Political Science
Geology	Psychology
Mathematics	and
Physics	Sociology

# **“Celebrating QR Connections”**

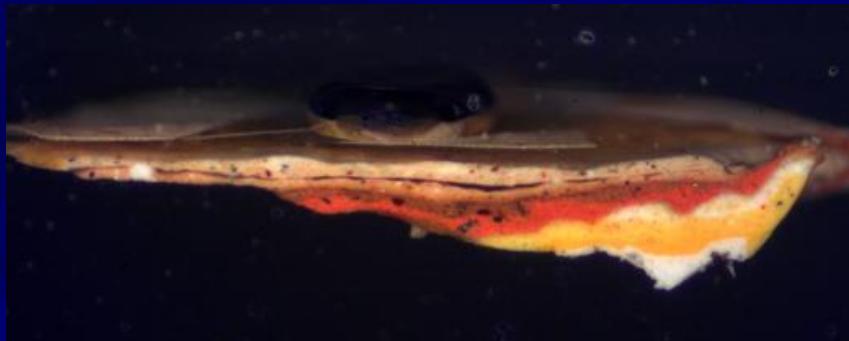
## **Series at Wellesley College**

**QR & Art**

**QR & Biology**

**QR & Forensic Evidence**

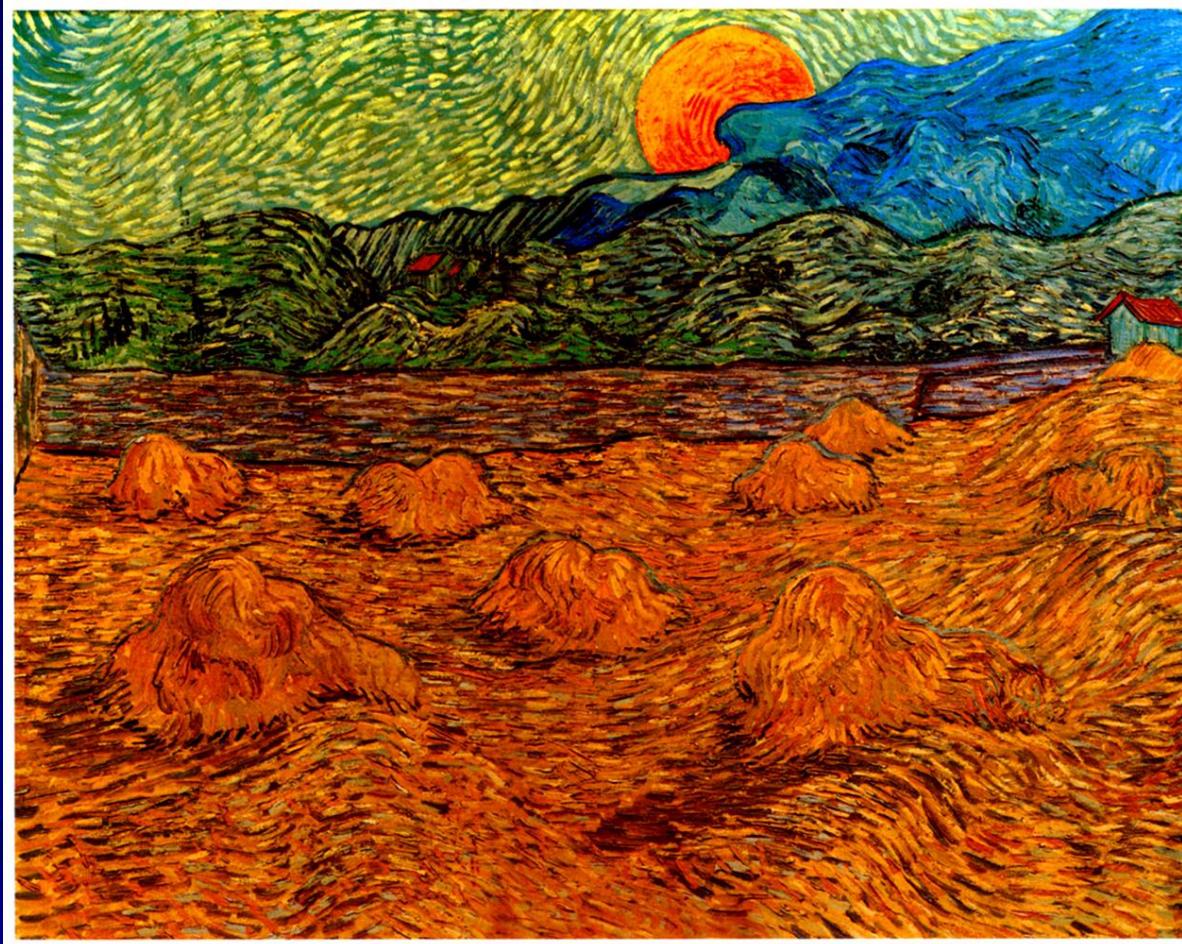
# QR & Art: Khandekar



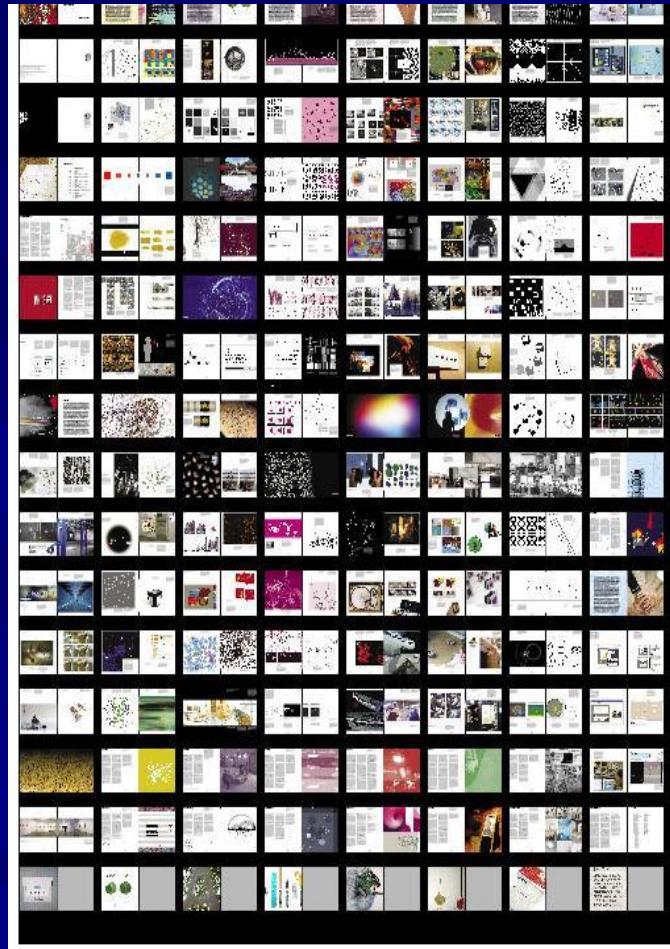
How does the cross-section above inform us about how to preserve the painting to the right?



# QR & Art: The Olsons



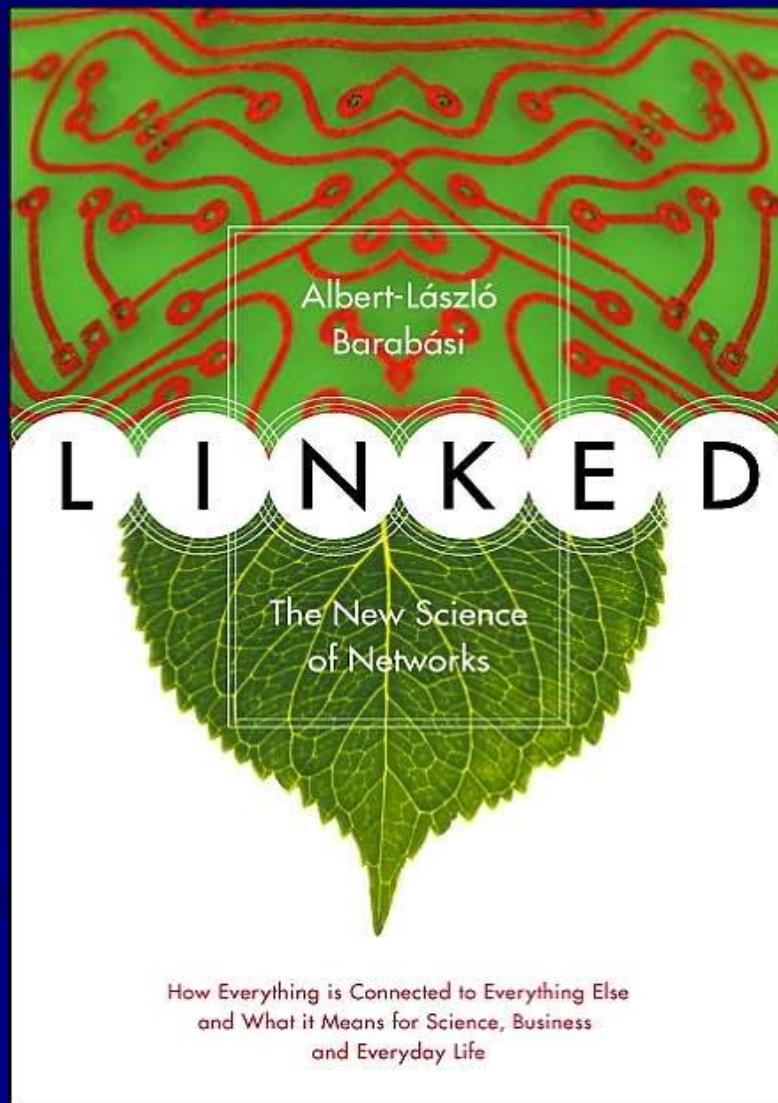
# QR & Art: Maeda



# QR & Art: Beyer



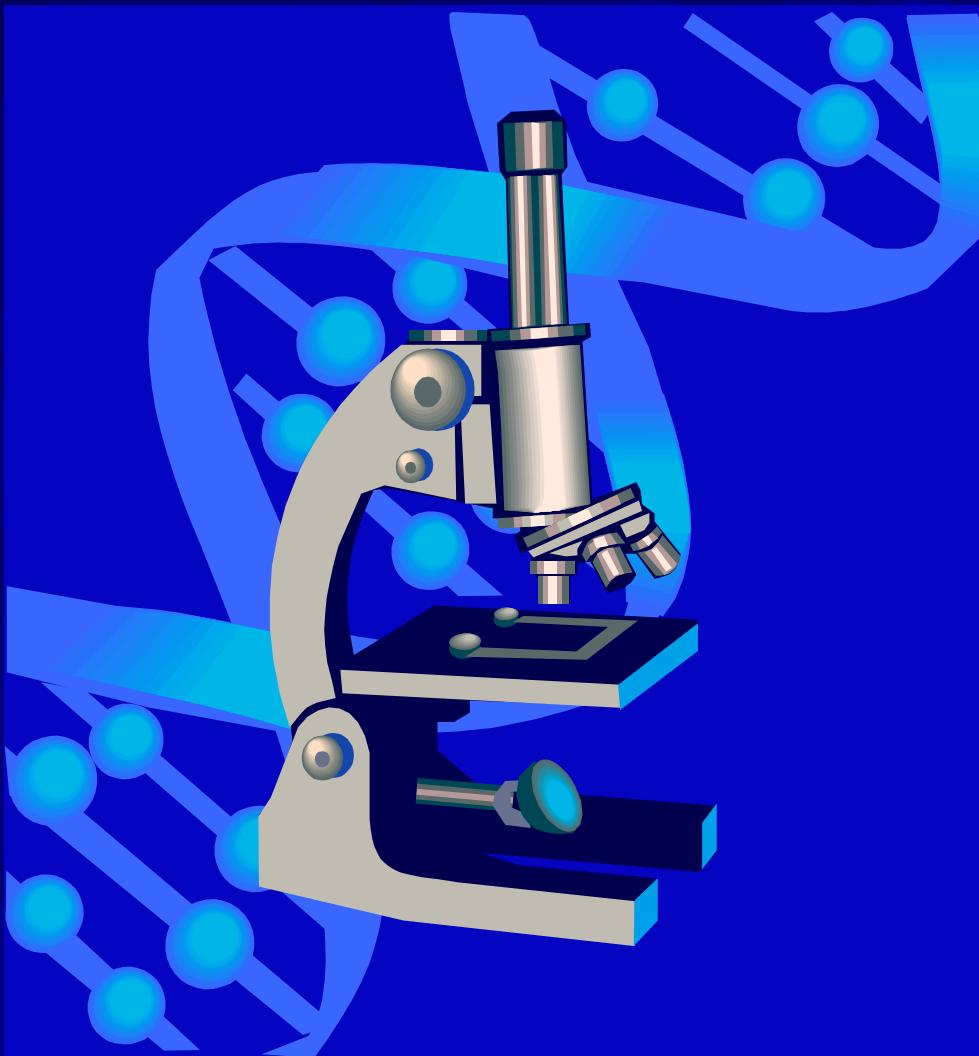
# QR & Biology: Barabasi



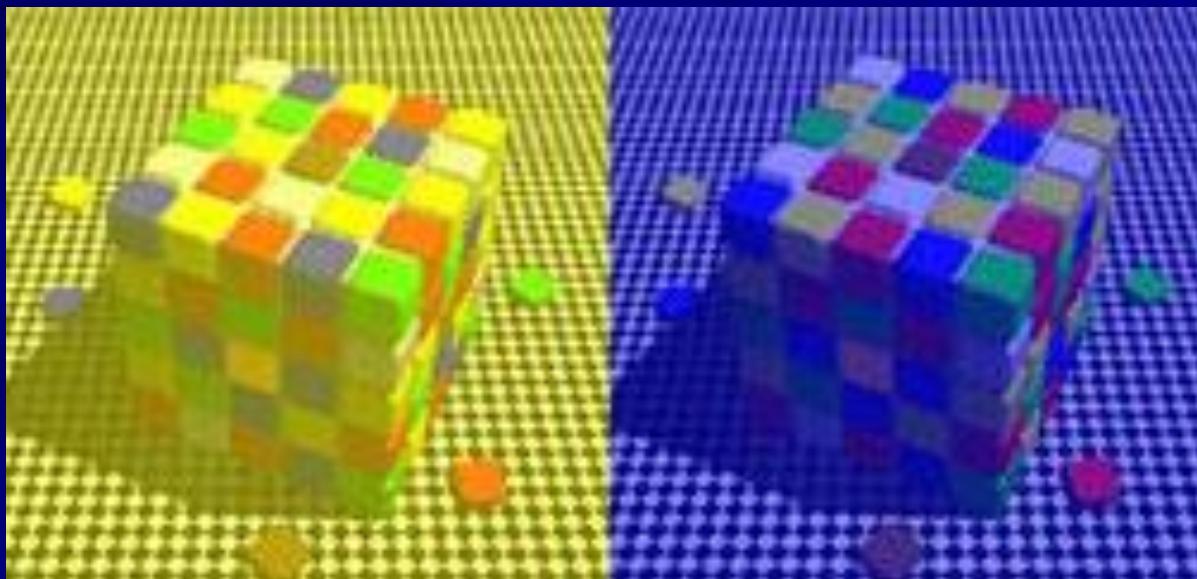
# QR & Biology: Nowak



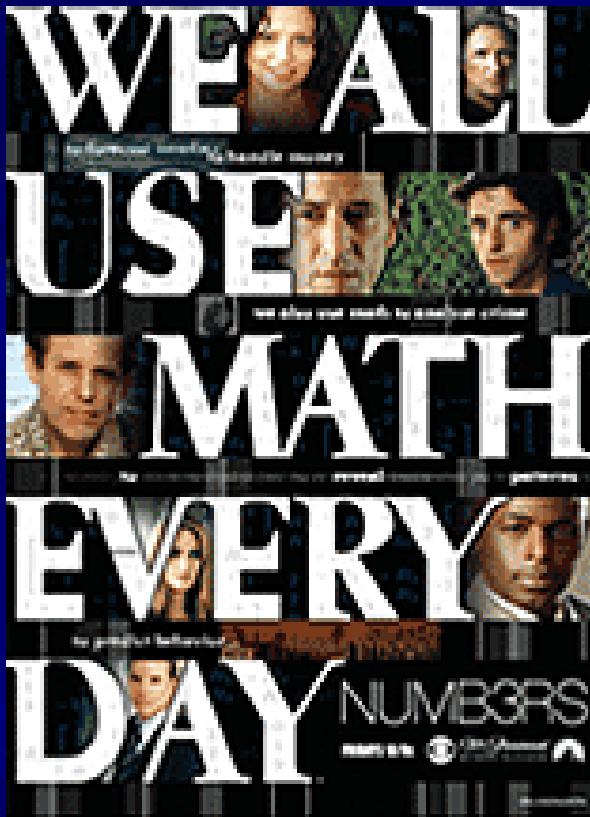
# QR & Biology: Regev



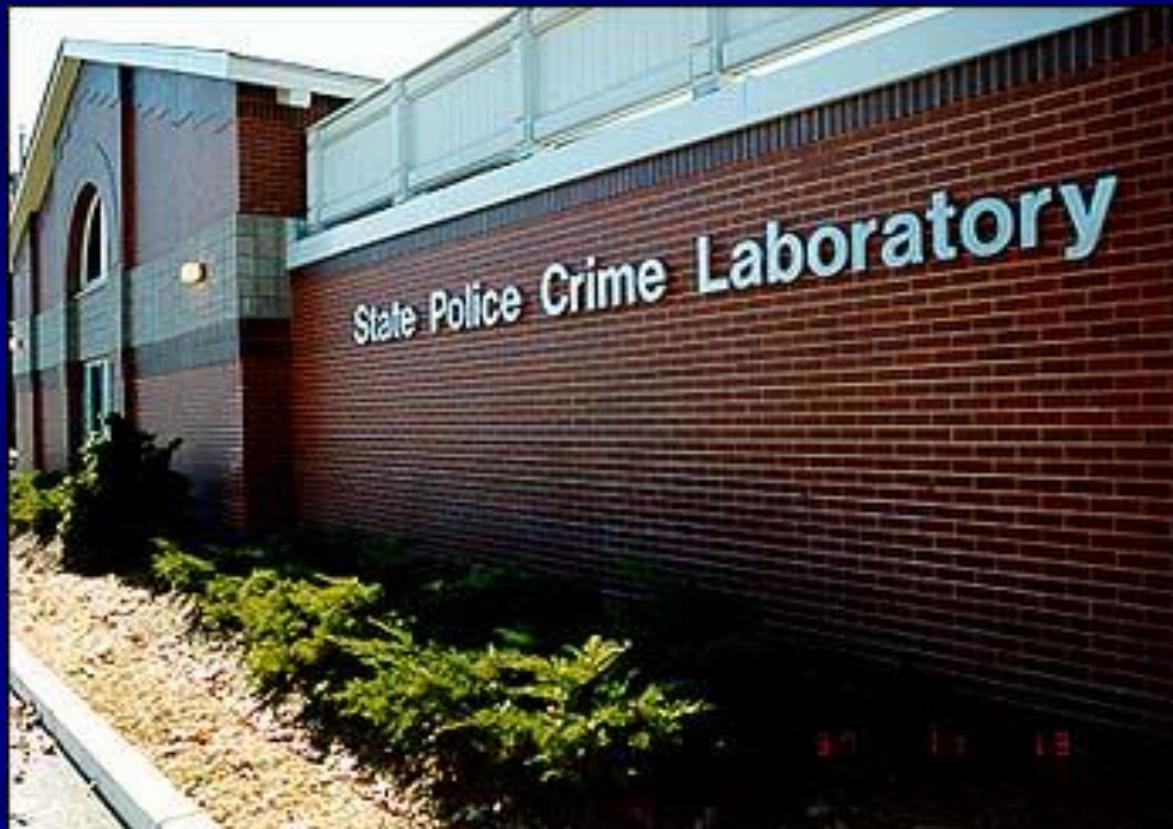
# QR & Biology: Purves



# QR & Forensic Evidence: Louden



# QR & Forensic Evidence: Selavka



# QR & Forensic Evidence: Chung



# Wellesley's QR Initiatives

- ~Assessment, Basic Skills QR Course
- ~QR Overlay Courses: New Courses in Astronomy, Bio Stats, CS, Education, and Environmental Studies
- ~“Celebrating QR Connections” Series
- ~QR Tutoring
- ~Workshops for Center for Work & Service
- ~Pathways Summer Bridge Program

# Next priority for Wellesley

**QUANTITATIVE  
WRITING**  
(inspired by Carleton!)

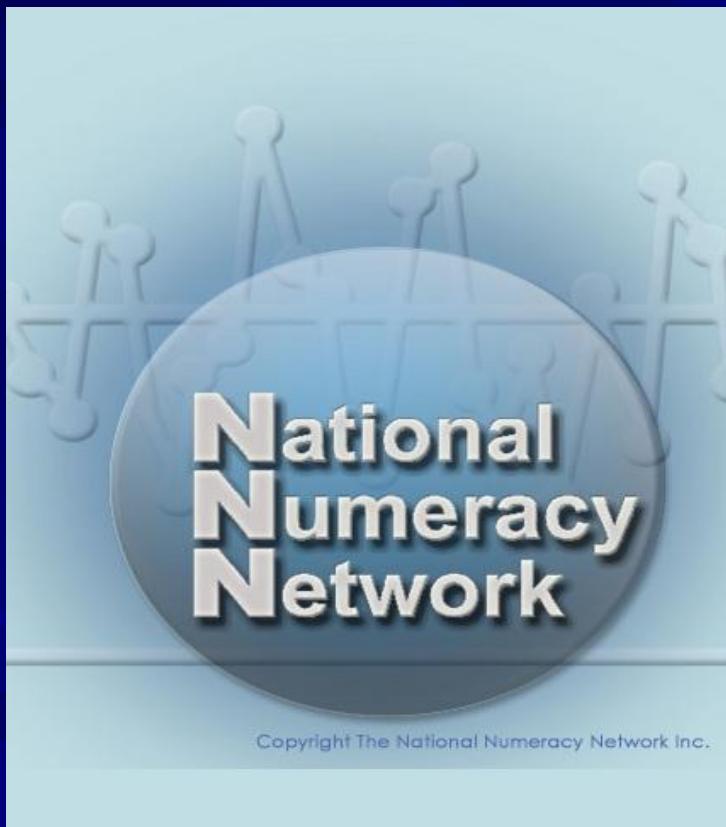
# Wellesley's Writing Program

- ~ First Year WRIT 125 classes
- ~ Capped at 15 students
- ~ Multiple sections on critical interpretation
- ~ Majority of sections deal with literature
- ~ Few WRIT 125 classes in quantitative fields – new one on environmental studies
- ~ Writing Program's self-study: need for more opportunities to do Q writing

# Inspiration from Carleton's QR Initiative

- ~Strong support from faculty and staff -- high participation in workshops (incl. QRU)
- ~Development of new FY seminars
- ~Course revisions with QR emphasis
- ~Rubrics for QR in writing portfolios
- ~SERC's on-line module on quantitative writing
- ~Other means of disseminating information on Q writing (thru NNN, etc.)

# QR Connections: Promoting QR Generally and Quantitative Writing Specifically



NNN's Vision

NNN's Mission  
Statement

# QR Connections

Carleton: a super-hub in the QR network

