OPPOSITES ATTRACT: CONNECTING SCIENCE AND LITERATURE

An Experience of Embedded Librarianship

Leila Philip – Associate Professor, English Department
Barbara Merolli – Science Librarian
College of the Holy Cross, Worcester, MA
INCEPTION OF IDEA

Barbara

• Previous Collaboration with “Art in Color” course
• Looking for another opportunity for non-traditional collaboration

Leila

• Inspiration for writing science class
• Hideaway office in science complex – immersion in science environment
• ‘Negate the thing that people assume’
  Rodney Brooks MIT Robotics Scientist
OPPOSITES ATTRACT: WRITING SCIENCE ENGLISH 211

Aesthetic Credo:

“A writer should have the precision of a poet and the imagination of a scientist.”

Vladimir Nabokov

- Creative Writing Workshop
- Study ways in which writers can make use of science as a topic and muse
- Asks the questions:
  - What are the questions that science asks?
  - What are the questions that literature asks?
  - What is the overlap of the two?
- 15 week course – 2.5 hours once a week
COURSE OVERVIEW - READINGS

- *The Best American Science and Nature Writing 2012* by Dan Ariely and Tim Folger, editors.
- *Writer, M.D.: The Best Contemporary Fiction and Nonfiction by Doctors* by Leah Kaminsky
- *The Immortal Life of Henrietta Lacks* by Rebecca Skloot
- *The Lives of a Cell* by Lewis Thomas
- *Flight Maps* by Jennifer Price
- *The Practice of Creative Writing* by Heather Sellers
- Tuesday Science section of the *New York Times*
COURSE OVERVIEW - ASSIGNMENTS

Writing

- 5 Short weekly and bi-weekly writing assignments: “warm-ups”
- 2 Longer works of science writing
- Expand and revise one of the longer works
- Process portfolio – notes, drafts, exercises, annotated readings, supporting materials

“Happening” – Science Library

- Students take ownership of design and implementation
- Poster with passage from one of writing works
- Read a passage from one of writing works
- Participate in planning, organizing and promoting the event
STUDENT PROFILE

2012

- 4 science majors (1 pre-med)
- 3 English majors

2013

- 10 Pre-Med
- 1 Environmental Studies
- 1 English
A writer should have the precision of a poet
and the imagination of a scientist

-- Vladimir Nabokov
Opposites Attract
2013

When my younger sister Cara was born, the doctors initially thought she had Down Syndrome because of her first love and attention to others. As it turned out, she didn't have Downs, but she did have to deal with developmental delays. She often walked on tiptoes months and months after she was born, and she had to develop her sense of balance. In the end, she also had a number of other health complications, including heart defects and hearing loss. Her life was a perfect storm, but she was able to triumph over it with her strength of character and determination. She was a true inspiration to us all.

Frank Barbaresi

The silver hair carried with it the same story, repeated the perfect circle. "No, no," said a passerby, "I've never seen that kind of hair before. It's so unique!" The boy smiled, feeling a sense of pride knowing that his hair was one of a kind. As he continued his journey, he couldn't help but feel a sense of belonging, knowing that he was part of a special tribe.

Paige Carr

Tina Jones

Liz McHale

Mary McVay

Mary J. O'Keefe

Caroline Rockey

Kevin Wil

Mad Zelevsky

Professor Lea Philip

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Kevin Wall

Caroline Rockey

I do not know her diagnosis, but there he the bed in room 3H-4, the floor number. "Who has radius or someone away," I said. When she sees me, her face seems pale. Sound of a heart too weak to keep her stable. Listen to my heart, it's not normal. She's had a stroke. She's been at the hospital for a few days, but they can't find the cause. She has a hard time breathing, and her heart is working overtime. She's been in intensive care twice.

Mary J. O'Keefe

Frank K. Barbaresi
Stars were just beginning to appear in the pink-purple sky as the minivan rolled through the town. A refreshing breeze swept across the road, allowing the passengers to roll their windows down. In the distance, across the leathery river, the lights of the city blinked in and out of sight. In Oct. 16, Out. The car’s headlights illuminated the pavement, cracked and overgrown with grass and large slabs of foundation of houses that were simply no longer there. A fever stood in the distance as a somber icon of what had stood this neighborhood five years before. Now, each of the decrepit, water-damaged houses that survived were marked with a large spray-painted “X,” the four quadrants relayed critical information: the date the house had been searched, by whom, the hazards that remained inside, and the dead bodies found. A low dog behind a chain-link fence half-covered in weeds watched the van silently glide through the Lower 9th Ward.

Kevin Wall

She stood in the window, staring at the Clippers. The game was well under way, but it was a losing effort, and she didn’t care. She was just waiting for the end of the season. Her life was a mess, and she knew it. She had lost her job, her husband, and her credit cards. She was in debt, and she knew it. She was in debt, and she knew it. She was in debt, and she knew it.

Mary O’Dwyer

I imagine it began this way. While I was getting ready for my last year at Fass School, reading Super and Marshall's Five Pencils and New Blossoms, a female black-legged tick was hanging in the corner of the roof, her parasitic body engorged with eggs and blood. Eventually, the eggs would hatch and emerge as nymphs. The nymphs would then molt into adults before attaching themselves to a host, such as a rabbit or a bird. The attaching tick would then detach itself from its host, leaving behind a blood-filled body.

Paige Carr

When my youngest sister Claire was born, the doctors initially thought she had Down Syndrome because of her short fingers and small nose. As it turned out, she did not have Down, but she did have to much developmental progress. She took her first steps at eighteen months, and when she could, her speech was hard to understand. Developmental-behavioral pediatricians eventually diagnosed her with Pervasive Developmental Disorder, Not Otherwise Specified (PDD-NOS). Claire is now a freshman in high school and does in a school-grade level. She struggles with money and has trouble. She is very hard working, but she is also has difficulty with her peers, preferring to spend time with younger children, or with her family. But I don’t really care in terms of her delays or social impairments. Instead, I marvel at her endless enthusiasm and creativity. I see how she puts her whole heart into everything she does and doesn’t care what others think. These are the qualities that I admire most about her.

Mary O’Dwyer

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Paige Carr
“Everyone off the bus!” yelled Rudy, our driver and tour guide. I followed the other wilderness-seeking tourists who began spilling out onto the dirt road. We were on our way to Denali National Park, driving 235 miles north of Anchorage. Off the bus I was immediately greeted by the strong August sun. I was ten years old and this was Alaska. But there were no igloos, no polar bears, and definitely no snow. I squinted into the distance trying to see the wilderness. Blue skies were dotted with cotton candy clouds, some of which were skewered by fierce mountain peaks rising in the distance. Beneath these giant peaks were gentle rolling hills, speckled by clusters of purple and white flowers. And there, directly in front of me, were endless rows of bushes hanging with ripe, luscious blueberries. I made it my mission to eat as many as possible.

Martin McNamara
READING EVENT

Publicity and Promotion

- Create a distribution list of invitees
- Save the date email announcement early in semester
- College events calendar – two months in advance
- Promotion posters distribute around campus: bulletin board, class buildings, student center, dining center, science and English depts., dormitories
- Electronic sign – student center
- Invitation - one week before event
- Final Announcement day before event
- Talk it up to friends and family
- Balloons – day of the event - use post cards with info on ribbons
OPPOSITES

ATTRACT

Exploring the Bond between Science and Literature

7:00 PM
Wednesday, April 18
Science Library

Come listen as seven students from Holy Cross’ first ever Science Writing Workshop along with Professor Leila Philip share passages from their science-inspired creative writing

FREE FOOD!  FREE COFFEE!  FREE SCIENCE!
OPPONENTS
+
ATTRACT

Connecting Science & Literature

7:00 PM
Thursday, April 18th
Science Library

Come listen as twelve students share passages from their science-inspired creative writing pieces

FREE FOOD!  FREE COFFEE!  FREE SCIENCE!
LOGISTICS

○ Create a timeline and distribute it often to everyone
○ Leading up to the reading event:
  • Librarian meet with class at next to last session
    ○ Refreshment requests
    ○ Poster printing schedule
    ○ Promotion activity schedule – final promo poster design, distribute posters, window painters, balloon distribution
  • Last class meeting – dress rehearsal in library
  • Professor – extensive preparation with students
    ○ Final edits of passage posters
    ○ Choosing passage for reading
    ○ Directing and rehearsing students
  • Librarian and staff need to be available and willing to shepherd non-scholastic activities as much as possible.
○ Allot ample time for activities – printing and mounting essay posters
○ Photos of space, promotional materials before anyone arrives
○ Posed photos of individual readers - Otherwise they will look asleep!
○ Professor – master of ceremonies
○ Librarian – hostess
○ Staff – photography and library operations
Library Preparation

- Arrange for video taping
- Coordinate printing essay passage posters, passage poster, event poster
  - 3’ x 3’
- Mount essay posters in library
- Purchase refreshments and beverages
- Tablecloths, napkins, plates, utensils, cups, stirrers
- Flowers for centerpiece for food table
- Podium with light and microphone
- Mood lighting- lamps, dimmers
- Tables for refreshments and chairs for audience
- Trash cans
- Camera
NUTS AND BOLTS

How did we work together to pull this off?
Faculty and Librarian Collaboration

Librarian participated in 6 classroom sessions

- Introductions and obtain essay outlines
- Research (library) – Fact Colloquium
- Viewed and discussed films:
  - *South: Ernest Shackleton and the Endurance Expedition* directed by Frank Hurley (research in Antarctica)
  - *Fast, Cheap and Out of Control*, by Errol Morris (4 profiles)
- Guest speaker – biology professor discussed research
- Planning session for reading event

Dress Rehearsal conducted in Science Library
Faculty and Librarian Collaboration

• What made this collaboration easy and difficult for you to do?

• What can librarians do to encourage or entice faculty to include them in more collaborative efforts?

• How can librarians make it easier for faculty to embed a librarian into their courses?
Faculty and Librarian Collaboration

Librarian Challenges

- Be flexible & available to accommodate fluid syllabus
- Strike a balance between too much and too little in preparing for reading event
  - Student participation based on their availability
  - Student demands on faculty time to prepare
- Stick to librarian skills; don’t be the professor
FEEDBACK

○ Students
  ● Appreciate of opportunity
  ● Expanded their horizons and boosted confidence
  ● Unexpected Outcome: Need to leave more decisions to students – let students experience the process of creating list of things to do

○ Others
  ● Dean of Academics sent congratulatory message to all students
  ● Faculty expressed interest in doing similar collaborations

○ Professor
  ● Important to know the student population of the class
  ● Delicate timing balance to strike
    ○ Spring break issues
    ○ Fact Colloquium with librarian – time that students needed professor to be there
    ○ Happening should be earlier in the semester
    ○ Should be learning process, not final product

○ Librarian
  ● Students are most important – grade, GPA, one-shot at learning experience
  ● Professor work **REALLY HARD – especially week of the event**
  ● Student feedback is important to professor
  ● Takes trust of professor – take the time to build relationships
CONCLUSIONS

- Popular course among students
- Featured in Holy Cross magazine
- Great experience for the librarian
- Good publicity for library
- Led to three Town Hall events with Summer Science and Humanities research programs
When my younger sister Cara was born, the doctors initially thought she had Down Syndrome because of her flat face and almond-shaped eyes. As it turned out, she did not have Downs, but she did fail to reach developmental milestones. She did not walk until eighteen months, and when she did, her speech was hard to understand.

Developmental-behavioral pediatrics eventually diagnosed her with Pervasive Developmental Disorder, Not Otherwise Specified (PDD-NOS). Cara is now a freshman in high school and made on a third-grade level. She struggles to count money and to tell time. She also has difficulty socializing with her peers, preferring to spend time with younger children, or with my family. But I don’t think of Cara in terms of cognitive delays or social-asymptomatic behavior. I marvel at her endless enthusiasm and cheerful personality. I see how she puts her whole heart into everything she does and doesn’t care what others think. These are the qualities that I admire most about her.

Mary O’Dwyer

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Opposites Attract

2013

Frank Barboro
Paige Carr
Maiza Fox
Tessa Janus
Liacia McManus
Martin McNamara
Paul Mucci
Gavin O’Dwyer
Ryan Ravelo
Tama Rowley
Alessia Wall
Mall Zielinsky

The silver hair converged with the divot in the stone stairway, propelling the perfect disaster. "Oh my!" and with a loud thud, she came crashing to the ground, checking her face away from six sets of terrified eyes. The British grandmother rocked back and forth, clutching at her nose, too stunned to do much else. At first, it seemed as if we had just missed a catastrophe: there was no blood-curdling scream, and no blood at all. That is, until Vivienne suddenly shot up, moving hands away from her face. All at once, echoes of laughter echoed everywhere. My mother and I turned around the corridor where smoke and incense filled the air. She moved towards us, and the silver hair seemed to glow in the haze.}

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I do not know her name. SP 413, she lies motionless. I ask. When she was brought by her husband to this hospital, she was in her eighties. She was taken to the emergency room, where she was diagnosed with a stroke. They said she was not expected to survive. But she did.

A nurse came to my side. "I’m seven years old," I answer. She had been seventeen months before to an aggressive glioblastoma slowly.
CREDITS


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Assigned Readings


Additional Video: