

ANNUAL FACULTY REPORT AND EVALUATION OF PROFESSIONAL ACTIVITIES
For the period September 1, 2017 to August 31, 2018

Name: **Peter J. Taylor**

Date: September 1, 2018

Department: Curriculum & Instruction

School: U. Mass. Boston

Rank: Professor

Highest degree and date: Ph. D. 1985

Years at present rank: 12

Date of first UMass Appointment: 9/1/98

Overview

My *research and writing* focused on two overlapping areas: a. Critical Thinking about Life Sciences in their Social Context: five peer-reviewed publications (three as sole author), 1 co-edited anthology (in press), 1 presentation, 6 working papers on Scholarworks, and 19 blog posts; and b. Educational Innovation: 1 book chapter, 3 presentations, and 20 blog posts.

My *teaching* for '16-17 included two required CCT capstone courses, one required core course for regular CCT track, and two required core courses for Science in a Changing World track (one with Public Policy). I was general advisor for 46 CCT students (with J. Szteiter's help) and 1 LTET M.Ed. student, capstone synthesis advisor or reader for 18 CCT & LTET students (13 of whom completed their degrees), and a dissertation advisor for 3 PhD students in Portugal (one of whom will defend in September).

My *service* centered on: a. directing the CCT Program, which included an AQUAD self-study and review, as well as the many and varied tasks of a GPD; b. chairing the College Personnel Committee for CAPS; c. reviewing manuscripts; d. producing an anthology and another author's book manuscript for publication; and e. hosting a professional development studio for CCT alums and other month-long online communities for inquiry and discussion.

II. TeachingA. Courses, including independent study (include number, credits, enrollments):

Fall 17

Course	Course Name	# Credits	# Students
CrCrTh 601	Critical Thinking	3	11
CrCrTh 650*	Mathematical Thinking	3	7
CrCrTh 692	Processes of Research & Engagement	3	16
PPol 795	Independent studies	3	2
CLR	Directing Critical & Creative Thinking Program		

Spring 18

Course	Course Name	# Credits	# Students
PPol 749/ CrCrTh 649	Scientific and Political Change	3	11
CrCrTh 694	Synthesis seminar	3	7

CLR	Directing Critical & Creative Thinking Program		
CLR*	Directing Science, Technology & Values Program		

Summer 18

Course	Course Name	# Credits	# Students
CrCrTh 611*	Design for Living Complexities	3	10

* overloads

B. Describe any major changes in your teaching approach or responsibilities:

A record number of matriculants joined the CCT Program in 2017: Advising numbers increased by around 10 compared to previous years; student numbers in my capstone and pre-capstone courses were larger than the regular capacity; I had to pick up as an overload a core course for the Science in a Changing World track that had not not expected to run (CrCrTh 650).

Fall 2017: New syllabus for CrCrTh 650, Mathematical Thinking

The new format of the course has two strands, taking up half the time of each session. The first strand is centered on 4-week "collaborative explorations" (CEs), a variant of project-based learning that begin from a scenario or case in which the issues are real but the problems are not well defined, which leads participants to shape their own directions of inquiry and develop their skills as investigators and teachers (in the broadest sense of the word). The CE format is designed to allow each student to

- undertake intensive reading in the area of mathematical thinking and learn from other students through their annotated bibliography entries, presentations, and written products;
- shape a path and final products for each CE that link closely with your personal interests; and
- see yourselves as contributors to ongoing development of the field, especially by sharing of products with future students on the blog and (optional) with the wider public on a google+ community (and eventually perhaps a book).

The second strand involves activities or discussion based on shared readings around key concepts or issues in the field. Each activity promotes a way to improve mathematical thinking, but allows for insights about one's thinking to emerge in its own way. Plus-Delta feedback at end of most activities fosters the formation of these insights as well as future improvements of the activity for future offerings of the course. Indeed, the instructor, whose mathematical thinking was formed in the 1960s and early 70s, is looking to students' inquiries in the CEs as well as feedback on the activities to help him clarify what are the most important ways that people's needs and capacities for mathematical thinking have shifted since then.

Summer 2018:

Mentored co-instructor, Bobby Ricketts, in teaching CrCrTh 611 Design for Living Complexities, with a view to his teaching the course on his own the next time it is offered.

To see more details of how I responded to the evaluations and continued to develop my courses, refer to updates to Practitioner's Portfolio, <http://www.faculty.umb.edu/pjt/portfolioCourses-TOC.html>, for Review of Teaching and Courses.

C. (i) List separately Doctoral, Masters, Honor Thesis students who worked under your direction last year.

Completed Masters, as chair = 7:

- Alison Akell, "Cultivating the Mindset for Creative Output"
- Erik Anker, "An Identity-Based Roadmap from Racial Ignorance to Racial Awareness as a Template for General Anti-Discrimination Training"
- Andrew Blom, "Method theory: How to Find Meaning in literature and change your life"
- Shawna Flaherty, "Applying Critical Thinking Skills for Successful Pilot Projects"
- Denise Manning, "Advocating for Students and Families"
- Debra Moh, "Encouraging critical thinking in the Asian workplace help facilitate generational diversity"
- Bobby Ricketts, "Designing a Social Architecture for Personal Leadership in the 21st Century"

Completed Masters, as reader = 6

- Marisa Charley, Brad Kozel, Stephan McGuire, Amy McLaughlin-Hatch, Ray Symonds, Andrew Smith

Masters syntheses in progress, as major advisor = 3

- Rachael Layne, Sandra McCollin, Totsaporn Intarabumrung

Masters syntheses in progress, as reader = 3

- Paula Avila, Janell Burley Hofmann, Sinem Mankir Oztan

(ii) Number of students on whose committees you served.

Doctoral students in progress = 2 (University of Coimbra, Portugal)

D. What were your major responsibilities in advising and counseling last year?

I have been the advisor, with the support of CCT assistant director, Jeremy Szteiter, for all 46 CCT students, of whom 12 graduated with M.A. and 1 with Certificate. I continued end-of-semester check-ins to compensate for lack of in-person conversations now that most students take the Program from a distance. I have also been the advisor for 1 LTET M.Ed. student.

E. What were your major teaching and counseling activities last year which are not adequately covered in the previous sections?

Narrative evaluations, used for CCT courses in CAPS, are attached to this AFR.

	Numerical average ratings		Link to full narrative evaluations
	Course	Instructor	
			http://www.faculty.umb.edu/pjt/...
CrCrTh 601	4.4	4.5	601-17evals.pdf
CrCrTh 650	4.5	4.8	650-17evals.pdf
CrCrTh 692/PPol 795	4.75	4.9	692-17evals.pdf
CrCrTh 694	5	5	694-18evals.pdf
PPol 749/CrCrTh 649	4.6	4.9	749-18evals.pdf
CrCrTh 611	--	--	Not available yet

To see how I responded to the evaluations and continued to develop my courses, refer to updates to Practitioner's Portfolio, <http://www.faculty.umb.edu/pjt/portfolioCourses-TOC.html>, for Review of Teaching and Courses.

Continued an online “Studio for Connecting, Probing, Reflecting, and Creating” with selected graduates of the CCT Program, with a view to mentoring them to produce the kinds of research, writing, and proposals for funding that they might be doing if they had been admitted to a doctoral program that they found suitable for their intellectual development. 8 weekly meetings (=2 month-long “collaborative explorations”) and exchanges on a blog during 2017-18.

III. Research, Creative, or Professional Activity

@indicates listed in last year's AFR in the same category; # indicates senior author other than PJT

A. Research Activity

1. Completed (in print)

a. Books and monographs:

b. Textbooks:

c. Edited books:

c2. Edited journals:

d. Articles in journals:

@ “From Complexity to Construction to Intersecting Processes: Puzzles for theoretical and social inquiry,” *Ecological Complexity*, <https://doi.org/10.1016/j.ecocom.2017.06.006>

“The role of distributed health literacy in asthma integrated care: A public medical context from Portugal,” *International Journal of Integrated Care*, 18:18, <https://doi.org/10.5334/ijic.3301> (with L. Abreu, J.Nunes, S. Silva#)

e. Chapters in books or monographs:

“Nature and Nurture,” in N. Castree, M. Hulme and J. Proctor (Eds.) [The Companion to Environmental Studies](#). London: Routledge, 2018.

“The genotype/phenotype distinction,” *Stanford Encyclopedia of Philosophy* (with R. Lewontin), <https://plato.stanford.edu/entries/genotype-phenotype/>, 2017.

f. Reviews, abstracts, pamphlets, newsletter articles.

f2. Introductions to edited journals

g. Papers presented at conferences and meetings which were published in the Proceedings:

2. Works Completed and Accepted for Publication:

[The Truth is the Whole: Essays in Honor of Richard Levins](#). Arlington MA: The Pumping Station, in press (ed. with T. Awerbach, M. Clark)

@“The hidden complexity of simple models, or Why theorists of all kinds should be troubled by unmodeled variables having dynamical lives of their own,” [The Truth is the Whole](#), ed. T. Awerbach, M. Clark, P. Taylor, Arlington MA: The Pumping Station, forthcoming.

@“Changing Science in Heterogeneous Environments,” for [The Truth is the Whole](#), ed. T. Awerbach, M. Clark, P. Taylor, Arlington MA: The Pumping Station, forthcoming.

"Distributed health literacy among people living with type 2 diabetes: defining levels of awareness and support," *Journal of Health & Social Care in the Community* (with L. Abreu, J.Nunes, S. Silva *), in press, <https://doi.org/10.1111/hsc.12465>.

“An invitation to explore unexamined shifts and variety in the meaning of genotype and phenotype, and their distinction,” *Philosophy, Theory, and Practice in Biology*, in press.

“Critical Epidemiological Literacy: Understanding Ideas Better When Placed in Relation to Alternatives” (accepted with minor revisions)

3. Works Completed and Submitted for Review:

4. Work in Progress:

@ “Five Fundamental Gaps In Nature-Nurture Science”

@ “Heterogeneity, not randomness, sets challenges for quantitative genetics and epidemiology: A response to Davey Smith’s ‘gloomy prospect’”

@ "What to do if we think that researchers have overlooked a significant issue for a long time? The case of quantitative genetics and underlying heterogeneity"

@ [Taking Yourself Seriously: Processes of Research and Engagement](#) (2nd edition)

“Design for Living Complexities” (100pp working paper)

“Now It Is Impossible 'Simply to Continue Along Previous Lines': A Partial Design Sketch of Enactable Social Theorizing” (57pp working paper)

B Creative Activity: Performances, shows, compositions, etc.

1. Completed. List works presented, performed, produced, or published in your professional specialization (creative writing; composing, designing, choreographing, performing, or producing works in the performing art; sculpting, or exhibiting work of arts, etc.). Arranging production and publication: an anthology of interdisciplinary essays in honor of Richard Levins ([The Truth is the Whole](#)), which evolved into a co-editorial role (almost completed); and the book manuscript of CCT instructor B. Schwendener ([Organic Music Theory](#)).

Initiating and hosting a forum for pre- and post-conference exchanges on “making sense of biographical changes [in the field of STS] in changing contexts,” <http://livesinsts.wordpress.com>

2. Completed but not yet presented, performed, produced, or published.

3. In Progress

C. Professional Activity not included in A or B above.

1. Completed. List such items as grant awards, papers presented but not published, panels chaired or participated in, editorship of a professional journal, participation on external review panels, review of manuscripts and texts, etc.

Grant awarded

Grant not awarded

Nomination of Science in a Changing World for the Infrastructure award of the Society for Social Studies of Science.

Application for the 2018 Roy S. Zuckerberg Chair (<https://wp.me/p1gwfa-15C>)

Papers presented and Workshops led

Papers

“Design for living complexities: An experiment in teaching critical thinking about design,” Society for Social Studies of Science, September 2017.

“Collaborative explorations,” Society for Social Studies of Science, August 2018

“Making visible a collage of radical scientists and critics,” Society for Social Studies of Science, August 2018

Workshop designer and facilitator:

“Synchronous online teaching: Enhancing learning while boosting enrollment,” Center for Innovative Teaching, University of Massachusetts, Boston, October 2017 (with J. Szteiter)

Working Papers etc. made available on the WWW

[Working Papers on Science in a Changing World](https://scholarworks.umb.edu/cct_sicw/)

(https://scholarworks.umb.edu/cct_sicw/)

Teaching for Epidemiological Literacy: Description, Prescription, and Critical Thinking, 2017

Five Fundamental Gaps In Nature-Nurture Science, 2014

Troubled by Heterogeneity? Control, Infrastructure & Participation in Social Epidemiology and Life Course Development, 2014

Heterogeneity and data analysis, 2011

Heterogeneity, control, social infrastructure, and possibilities of participation: Their interplay in modern understandings of heredity and in interpretation of science, 2011

Generating environmental knowledge and inquiry through workshop processes, 2001

2. In Progress. List such items as grant proposals submitted, invitations to deliver papers or chair panels, requests to review manuscripts and texts, etc.

D. Other Research, Creative, or Professional Activities not adequately covered in any of the previous sections. Format: include sufficient information to identify the activity in a complete manner.

Twitter sites continued, <http://twitter.com/CCReflect> and <http://twitter.com/ScienceChanges>

Blogs continued, Intersecting Processes -- complexity & change in environment, biomedicine & society, <http://pjt111.wordpress.com> (19 posts); Probe—Create Change—Reflect -- critical thinking & reflective practice, <http://pcrcr.wordpress.com/> (20 posts).

IV. SERVICE

A. University Service:

1. Departmental Service and Administrative Contributions

Curriculum & Instruction Department:

M.Ed. Learning, Teaching, and Educational Transformation (Non-licensure) track, assistant to director

Critical & Creative Thinking Program:

Director [see Box 1 for details]

(As director of CCT, I was chair of the following committees: the Program Committee, the Admissions Committee, and the Science in a Changing World track. I was also advisor to the CCT student organization, the CCT Forum, and the CCT alum organization, the CCT Network.)

Coordinator, "Science in a Changing World" graduate track [see Box 2 for details]

Box 1. CCT Program Administration (as GPD):

Major tasks in '17-18:

1. Complete AQUAD self-study and review process.
2. Develop or sustain the partnerships with other programs through which CCT has been able to offer a wider and more reliable roster of courses than possible if filled only with matriculated CCT students.
3. Carry on administration, advising, and program development without a second f/t faculty position dedicated to CCT. This involved supervising the assistant director, covering the tasks of the SICW track assistant coordinator and a new faculty member, given that both 50% positions have ended. The many and varied tasks to follow reflect two main priorities for CCT: The highest priority is providing the teaching, advising, mentoring, and a coherent program of study for students, and support for students & graduates in their intellectual, professional, and personal development. With a high proportion of students now taking the program online, this involves supervising instructors to bring online core courses up to date and continuation of end-of-semester check-ins for all students. The next highest priority for CCT is to attract applicants to the Program and advise them through to matriculation.

Admin & general student advising (with assistance of Jeremy Szteiter, assistant director):

1. Course schedule (online and f2f): Initial draft submitted, reviewed and revised final versions, served as watchdog for subsequent glitches.
2. Enrollment projections (& planning so level of offerings match)
3. Enrollment-boosting arrangements: Coordination with LTET, Honors College, Instructional Design, Public Policy, Nursing, TCCS, and GISD.
4. Continued CAPS partnership (incl. publicity, advising instructors for online, face-to-face, and hybrid sections, revision of pages on UMB website).

5. General student advising (incl. course plans from new students, update CCT student handbook, new student interviews, mid-program check-in, and end-of-semester check-ins)
6. Use of WISER (for student info [esp. for online courses] & registration).
7. Financial matters: budget for use of funds from CAPS to CCT (for guest speakers, stipends for synthesis readers, etc.)—adapt to lack of budget to 2017-18
8. Office admin & record keeping to prepare for program reviews (Database maintenance, preparing requested figures for annual reports, filing, wikis, google docs for workflow for program admin. and development)
9. Synthesis completion (incl. uploading of abstracts and full text pdf to ScholarWorks, assembling exit self-assessments, certifying capstone completion, follow up with students who did not finish during regular semester, initiatives to clear backlog of "ABD"s)
10. Website maintenance & revision of information on UMB website, <http://www.cct.umb.edu>, and accompanying wikis, <http://cct.wikispaces.umb.edu>, <http://sicw.wikispaces.umb.edu>. Prepare to move off wikispaces by January 2019.
11. Monthly News & Email communication with students & wider community, <http://cct.wikispaces.umb.edu/news>
12. Awards and nominations
13. Liaison with Graduate Studies (incl. GPD meetings) & other duties (as defined in GS manual for GPDs and Graduate Catalog)
14. Coordination with other Programs (esp. LTET non-licensure track, Instr. Design, TCCS & Honors College)

Recruitment Outreach and Program Development (with assistance of Jeremy Szteiter, assistant director):

15. Promote CCT courses to boost enrollment
16. Recruitment Outreach and Advising (incl. "CCT network" community-building initiative [monthly events (spring only in AY 17-18) to supplement students' education through the involvement of alums; see <http://cct.wikispaces.umb.edu/CCTNetwork>] & wiki updates, especially <http://cct.wikispaces.umb.edu/How+graduates+build+on+their+CCT+studies>)
17. CCT pre-admissions advising, admissions committee & liaison with Grad. Admissions
18. Open Houses, Special events (including UMB & Grad studies open houses & showcases)
19. Program Development subject to AQUAD plans (incl. faculty involvement in revising plans).
20. Creation or Involvement in online communities relevant to the Program's mission and development, e.g., <http://cct.wikispaces.com>, <http://sicw.wikispaces.com>, <http://bit.ly/CCRPgplus>, <http://bit.ly/SICWgplus> and <http://bit.ly/collabex> (Moving materials off these wikis in spring 2018 to websites.)
21. Promotion of accelerated BA-MA in regular and SICW tracks, <http://cct.wikispaces.umb.edu/BAMA>, <http://sicw.wikispaces.umb.edu/BAMA>
22. Editing Working Papers on Scholarworks, <http://scholarworks.umb.edu/cct/>

Box 2. "Science in a Changing World" graduate track Administration (as Coordinator):

In addition to #1-22 above for the CCT Program
Arranging Extra-curricular Activities (to build community and raise the profile of the track)
Mentoring new organizing group to continue of New England Workshop on Science and Social Change
Continuation of Science in a Changing World wiki, <http://sicw.wikispaces.umb.edu>

2. School, College, or University Service and Administrative Contributions

University:

Program in Science, Technology, and Values, Director (<http://www.stv.umb.edu>)
Public Policy Program, Faculty member, 2003- & Academic Affairs Committee, 2017-
College of Advancing & Professional Studies, College Personnel Committee (chair), 2013-

B. Service to Profession or Discipline:

Science as Culture, editorial board, 1997- ; manuscript review.
One tenure review (in progress) and Manuscript reviews: American Psychologist; Ecological Complexity;
Engaging Science, Technology, and Society; PLOS One; Science as Culture; Science Education;
Synthese, University of Massachusetts Press

C. Professionally Related Outreach Service to the Public

D. Other service activities or accomplishments not adequately covered in any of the previous sections.

V. Activities and accomplishments not adequately covered in any previous sections.

AFTER COMPLETING SECTIONS II THROUGH V, THE FACULTY MEMBER
FORWARDS ALL COPIES TO THE DEPARTMENT HEAD OR CHAIR

VI. Comments of the Department Personnel Committee (Please include the basis for
evaluation.)

—
Signature of the Chair of Personnel
Committee

VII. Comments of the Department Head or Chair (Please include the basis for evaluation.)

Signature of the Department Head or Chair

AFTER SECTIONS VI AND VII HAVE BEEN COMPLETED, THE DEPARTMENT HEAD
OR CHAIR RETURNS ALL COPIES TO THE FACULTY MEMBER.

VIII. I certify the accuracy of Sections I and V. In addition, I have read the comments in Sections VI and VII. (An additional statement, with appropriate copies, may be appended.)

Date

Signature of the Faculty Member

AFTER COMPLETING THIS SECTION, THE FACULTY MEMBER SENDS THREE COPIES TO THE DEPARTMENT HEAD OR CHAIR, WHO FORWARDS TWO COPIES TO THE DEAN.

IX. Dean's comments, if any.

Signature of the Dean

AFTER COMPLETING THIS SECTION, THE DEAN FORWARDS ONE COPY OF THIS FORM TO THE PROVOST. IF THE DEAN MAKES ANY COMMENTS, THE DEAN SHALL SEND A COPY OF THIS FINAL PAGE TO THE FACULTY MEMBER AND THE APPROPRIATE DEPARTMENT HEAD OR CHAIR WHEN THE DEAN FORWARDS THE COPY OF THE FORM TO THE PROVOST.