	Red text and D (delta) indicate shortcomings and items for improvement
Goal A. To provide graduate students with an understanding of the processes of critical thinking and creativity, and with ways of helping others develop these processes in a variety of educational, professional, and social situations. Objective A1. Establish forms of evaluation of student process and outcomes that reflect the Program's educational philosophy.	
a. Document the achievement of this educational goal through a self-evaluation on the part of graduating students in which they take stock of i) ways they have translated what they have been learning into strategies, materials and interventions for use in their own settings, and ii) directions that need further development.	Exit self-assessment (http://cctrpp.wikispaces.umb.edu/ExitSelfAssessmentBlank) is a capstone requirement. (Online copies of these self-assessments are included on http://cctrpp.wikispaces.umb.edu/ExitSelfAssessment; password can be supplied to reviewers on request.)
b. Experiment with new, "authentic" evaluations for required CCT courses that provide more useful information about the course experience to the instructor, future students, and collegial reviewers, and allow current students to take stock of what they have learned about learning. (See also objectives A3c & d concerning making changes in response to these and other course evaluations.)	All CCT courses now employ the same narrative evaluation, http://cct.wikispaces.umb.edu/CourseEvaluationQuestions, that fulfills four goals: inform instructor to make changes; inform current students' future approaches to learning; inform future students about whether to take the course and how to approach it; inform external reviews of the instruction and course.
c. Compile documentation, especially capstone syntheses, that displays the range of ways graduates have become "constructive, reflective agents of change in education, work, social movements, science, [or the] creative arts."	Most capstone syntheses are made available on Scholarworks, https://scholarworks.umb.edu/cct_capstone/ http://cct.wikispaces.umb.edu/How+graduates+build+on+their+CCT+studies http://sicw.wikispaces.umb.edu/How+graduates+build+on+their+SICW+studies

d. Communicate with lapsed students to learn ways the CCT Program could serve students better; do the same for graduates and current students.	Survey as part of this AQUAD review (see II.F and Appendix G)
e. Institute expectation that students assemble reflective practice portfolios throughout their studies, with periodic presentation to and review by peers.	http://cctrpp.wikispaces.umb.edu (password can be supplied to reviewers on request). Several courses now include presentations of "Plans for Practice," (CCT601, 618, 630, 650, 688)
A2. Attract and retain qualified and diverse students to reliable Program offerings.	
a. Maintain new enrollments in CCT programs of study to an average of 12-15 matriculants per year, increasing the proportion of matriculants going on to graduate. Increase this target only if faculty and staff support are available.	Average (2010-18) = 11.3 (not including students in other programs that add the Certificate or transfers from CCT Certificate to M.A.), with an upward trend of 1.0 per year. Average (2013-18) = 13.2 Proportion graduating remains at similar level as for last review period, despite steps to improve this rate, http://www.cct.umb.edu/SupportToCompletion.html
b1. Promote the Science in a Changing World track made possible with advising input from faculty in CSM and CLA.	Promotion of SICW through: bookmarks distributed by the GPD at workshops and conferences; UMass online; and UMB website. However, relevant faculty from outside CCT have focused on their initiatives from their own unit.
b2. Coordinate with other Programs and tracks so that CCT courses can serve their students, e.g., http://candi.wikispaces.umb.edu/LTETtrack and possible CAGS in Ed. Leadership.	The Honors College (formerly Program) continues to list appropriate CCT/SICW courses for students to fulfill a research course requirement. (In 2014 CCT got the College to initiate an undergraduate Creative thinking course and recommended former CCT instructor, Nina Greenwald, to teach it.) In 2014 LTET students with a concentration in Applied Behavior Analysis could no longer take CCT courses after their ABA licensure requirements changed. In 2015 LTET stopped admitting new students. CCT initiated a concentration in "Transformative Education" to attract students who would have applied to LTET (http://bit.ly/CCTTE) and, in order for this to be more visible, sought to make this an official track. That proposal is on hold, but Δ could be reactivated. The Educational Leadership CAGS, if it still continues, has not directed students to CCT courses. A 2017 agreement with the new Transnational Cultural and Community Studies

	program directs attention of students from each program to the other. Combined BA/MA programs for the regular CCT track and the Science in a Changing World (SICW) track were approved in 2014 and are beginning to be publicized through the Honors College. Δ More publicity, especially to boost the SICW cohort.
c. Maintain a reliable roster of CCT courses allowing students to define specific areas in which they explore their CCT-related interests, especially the certificate foci of Creative Thinking at Work and Science in a Changing World.	http://cct.wikispaces.umb.edu/Courses A reliable roster of 24 courses, with each course offered at least once on a 2-year cycle, http://cct.wikispaces.umb.edu/futureyears Course plans are made with students to ensure that they take the required and desired courses when they are offered. (Exceptions to the two-year cycle are Critical Thinking, Creative Thinking, and the final three research and engagement courses.) One substitution is routinely allowed: Metacognition instead of Cognitive Psychology.
d. Maintain course enrollments that ensure that no more than one course per year is cancelled for lack of sufficient enrollment.	To ensure that CCT courses would have sufficient enrollment to run and to hold the average registration per course steady, most online-only sections have been phased out in favor of the hybrid sections. Most courses have been shifted onto a two-year cycle with a view to increasing average registration per course given the pressures at UMB to increase net revenue.
e. Review and streamline the published course offerings so the Graduate Catalog reflects closely what is available on a regular basis.	Done. http://catalog.umb.edu/
(g. See Objective A1d.)	
h. Maintain a system of advising current and prospective students that attends both to general issues about CCT studies and students' particular concerns.	Handbook: http://cct.wikispaces.umb.edu/file/view/CCTStudentHandbook.pdf New admits email: tba and interviews done with all. Check-ins: mid-program & end of semester. D Follow up with students who don't schedule one or don't submit RPP mid-program Streamlined database allows core faculty to review comments on admission and course plans while advising Monthly news includes reminders: http://cct.wikispaces.umb.edu/News
i. Make effective use of computers and other technologies to recruit and advise students.	Online booking and conduct of office hours leads to well-used office hours. D Understand problems that arose in CAPS plan to use Salesforce
j. Maintain or increase the i) quality and ii)	Average undergraduate GPA has risen significantly since last reviews.

diversity of students admitted to and retained and graduated by the Program.	Transformative Education concentration attracts educators of color, http://bit.ly/CCTTE D Turn concentration into track and publicize
A3. Develop and revise Program offerings in emerging areas of social relevance, faculty specialization, and use of educational technology.	
a. Develop and offer regularly courses that involve critical and creative thinking in the areas of i) science in the context of conceptual development and social change/ science, technology and values, including environmental studies ii) creative thinking at work, including both putting one's creative thinking into practice and changing one's workplace interactions & organization.	http://cct.wikispaces.umb.edu/Courses and http://cct.wikispaces.umb.edu/futureyears
b. Establish foci for promotion of the certificate program, "Science in a Changing World," and "Creative Thinking at Work," to be offered in collaboration with CAPS and a CCT outreach unit.	Publicity bookmarks produced. Δ Remember to distribute them at all talks or events CCT outreach unit has not been convened during the period under review. Δ Drop objectives that imply an active CCT outreach unit.
c. Review the Program requirements and content of required courses to complement and adjust new directions in CCT offerings.	Metacognition now alternates with Cognitive Psychology; the former is accepted as a substitute. Children and Science has been renamed Conceptual Change and Learning. Liberal and Interdisciplinary Studies concentration is designed for promotion of CCT as a general studies Master's degree. Δ Promotion of LAIS is needed. Transformative Education concentration allows additional substitutions to suit educators, http://bit.ly/CCTTE. Δ Make this into a formal track. The possibility of a doctoral program in partnership with MassArt led to revival with an adjusted name of CCT615, Holistic and Transformative Teaching, and the piloting as a seminar in critical thinking or Design for Living Complexities (2016).
d. Review and revise the content of courses to	Collaborative Explorations versions of Creative Thinking (Fall 2013), Critical

keep them up to date with current scholarship and practice.	Thinking (Fall 2015, 2017), Mathematical Thinking (Fall 2017) have helped in updating the materials and processes in these courses. Biology in Society (Fall 2012) materials have been assembled with a view to publication of a book (http://crcrth645.wikispaces.umb.edu/Chapters). Δ Collaborative Explorations planned for early 2018 to help bring new theory into Scientific and Political Change course. Creative Thinking to be converted from traditional online to hybrid format in summer and fall of 2018.
e. Make educationally justified and sustainable choices about when and how to integrate computers and other technologies, including online and distance education, into the teaching of CCT courses and requirements for students.	Regular 2 ¾ hour weekly class sessions that combine face-to-face and online students using google hangout, collaborate, and zoom. Class routines that ensure equal access to discussion and build community, http://cct.wikispaces.umb.edu/CIT24Oct17 Students are expected to develop a number of computer and research competencies, http://cct.wikispaces.umb.edu/competencies , before a mid-program check-in. Δ Maintaining cross-postings among the various social media sites associated with the Program or its faculty
B. To establish planning parameters that allow CCT faculty to determine the best use of their experience and energies and adjust operations to work within those parameters.	
B1. Set parameters for CCT's operations that conform to resources available (primarily in CEHD, CAPS, CLA) and institutional guidelines.	
a. College endorsement of CCT's Mission and plans.	Memorandum of Understanding for move of Program's home from CEHD to UC (now CAPS) (Appendix B). Δ Foster understanding in CAPS of the Program's mission so that effective promotion for the M.A. and Certificates can be designed to supplement the existing paths applicants take to find the Program.
b. Level of CCT course offerings	Enrollment is phasing out from the LTET non-licensure M.Ed. program whose students had often used CCT courses. To ensure that CCT courses would have sufficient enrollment to run and to hold the average registration per course steady,

	most online-only sections were phased out in favor of the hybrid sections. Most courses have been shifted onto a two-year cycle with a view to increasing average registration per course given the pressures at UMB to increase net revenue. Course plans are made with students to ensure that they take the required and desired courses when they are offered.
c. Number of full-time lines with primary responsibility to CCT, and replacement when faculty are on leave. (Having two full-time lines is particularly important for CCT's mission and for the full realization of this plan, as is the continuation of the CAPS-funded assistant director position.)	One full-time tenured faculty member dedicated to the Program. One full-time professional staff member with teaching responsibilities (equivalent to a lecturer, non-tenure track, with administrative responsibilities). Support for new hires as envisioned in MOU has stalled. Δ Revival of the 50% position that CAPS assigned to SICW and CCT in the period 2011-15 would allow for an increase in admissions and a reduction in many loose ends (see IIG and IIA for financial justification).
d. Expected student numbers in the CCT Program and courses	CCT annual target for matriculants 15-18 has been met in recent years. Δ Keeping enrollments not higher than the longstanding caps for the final three research and engagement courses, which were set to make the courses work well (and reduce the problem of students finishing courses but not their capstone).
e. Emphasize synthesis options that allow students to finish during the final synthesis semester, or during the following 12 months.	D Low cap to capstone synthesis course that allows instructor to support students to finish during the final synthesis semester, or during the following 12 months.
f. Cross-college institutional arrangements to recognize the CLA/CSM faculty who work in CCT, secure continuing CLA/CSM contributions, and include those faculty in promotion and other reviews for CCT faculty in CEHD	Δ Adjust objective to include CEHD faculty member who works in CCT and to match the reality that only one CLA faculty member is involved in CCT. Δ Adjust objective to support future involvement by non-CAPS faculty in the Program.
g. Support for part-time faculty	Δ Support needed for revision and updating of longstanding online courses
h. Administrative and budgetary support, to facilitate smooth day-to-day running of the Program and outreach to create conduits that bring in new students.	Annual budget as specified in MOU has been discontinued. See g. above
B2. Achieve recognition of CCT's mission and the other planning parameters by other units, in	Δ Adjust objectives below to reflect move of CCT's home to CAPS.

and beyond CEHD.	
a. Circulate the CCT Mission statement, with an appendix on the planning parameters once they are set/settled	--
b. Invite CEHD leaders and other faculty to briefings or forums on CCT	--
b2. Timely attention to possibilities for additional or joint lines.	--
c. Explore possibilities and make the case for institutional support at UMass Boston of CCT's mission outside CEHD.	--
c2. Timely advocacy for continuation of CLA commitments when core faculty are on leave or retire.	This objective dropped with move of CCT's home to CAPS
B3. Institute measures for recruitment, advising, and other administrative tasks (such as preparing for program reviews) that preserve time and attention for instructional needs and scholarship.	Δ See loose ends (IIA) and B1.c above
a. Keep procedures well-documented, transparent, and consistent in case CCT is a dissatisfied student ever takes legal action.	Student handbook, http://cct.wikispaces.umb.edu/file/view/CCTStudentHandbook.pdf Graduate catalog, now online, http://catalog.umb.edu/content.php?catoid=14&navoid=1777
C. To contribute to increased cross-program collaboration in the GCE.	
C1. Participate in a. the operations of the Learning, Teaching and Educational Transformation (non-licensure) track of the M.Ed. program; and b. infusing CCT into other M.Ed. programs.	GPD co-coordinated LTET until admissions were closed, but continues to see students through to graduation. Δ Turn Transformative Education concentration into track and publicize, http://bit.ly/CCTTE

C2. Establish a forum for cooperation among the mid-career professional development-oriented MA programs, in particular, contributing ideas and referring students to each others' teacher-research and research preparation courses.	--
C3. Play a significant role in a strong and distinctive CEHD/UMB contribution to innovation in undergraduate and graduate math. and science education, a role that combines CCT's emphases on conceptual change in students and understanding science in its social context (see A3ai).	Publicity to M.Ed. advisors has not yielded students given that for-licensure M.Ed. do not have electives. Δ Share innovations and insights with faculty behind CEHD/UMB contribution to innovation in undergraduate and graduate math. and science education
C4. Contribute to the evolution of CEHD course evaluations and streamlining of procedures for passing on the results in a form that faculty can use to develop their teaching (see A1b).	See A1.b Δ Adjust this objective now that CCT is not in CEHD. (In any case, CEHD evaluations have been standardized.)
C5. Promote CCT outreach efforts (see E below) through joint publicity and shared sponsorship where appropriate with other UMB centers and projects.	--
C6. Harmonize CCT goals with those of the Professional Education Unit (PEU), centered in the CEHD	Δ Drop this objective now that CCT's home is in CAPS
D. To contribute to increased collaboration with and contributions to other units within the	

University	
D1. CCT faculty offer two presentations per year on teaching innovation through the Center for Innovative Teaching and other forums.	E.g., http://cct.wikispaces.umb.edu/CIT24Oct17 Δ Reduce objective to one per year.
D2. CCT faculty members take an active role in supporting further development of the undergraduate Program in Science, Technology and Values, the Environmental Studies Program, and the interdisciplinary Honors College [formerly Program].	GPD helped in development (and naming) of new undergraduate minor in Science, Medicine, and Society, which may supercede STV. Environmental Studies is no longer a cross-unit program. Certain CCT courses continue to serve as Research courses for Honors. GPD contributes to Honors International epidemics course each time it is offered.
D3. Enlist faculty from within the University to teach CCT courses, advise students, and participate in other Program activities to replace faculty members previously teaching for CCT, but no longer doing so.	CCT/SICW has moved to become streamlined and self-sufficient, that is, making do without new faculty input from other units. As noted in the self-study: "During the review period members of the original organizing committee for the SICW track were drawn into leadership roles in other units and program development initiatives. They and the other faculty affiliates have not been mobilized in advising or instructional roles. New UMB faculty members in social, historical, and philosophical studies of science have focused their attention on undergraduate education, including a new undergraduate minor, Science, Medicine, and Society."
D4. CCT faculty members take an active role in new developments in Environmental and Science Education at UMass Boston.	SICW is now the main focus for CCT faculty in this area.
D5. Collaborate in the projects and initiatives of other UMB centers and projects.	--
E. To undertake outreach beyond UMB that builds on the professional strengths of the part-time faculty and growing network of graduates, as well as the regular faculty.	

E1. Maintain the CCT Network as an outreach unit, building on its original prospectus, with goals of	
• organizing, in a sustainable fashion, personal & professional development, community building, and educational-innovation activities beyond the formal CCT program of studies.	CCT Network, a.k.a., CCT Open Houses are now organized by the Program, not by an outreach unit.
• supplementing students' education through the involvement of alums.	See above
• continuing alums' education by their involvement in the education of students and each other.	http://cct.wikispaces.umb.edu/CCTNetwork
E2. Involve the outreach unit in the foci for the certificate program (see A3b).	--
E3. Add at least one project or activity under the outreach unit each year that serves communities beyond UMass Boston.	--
E4. Expand the network of CCT graduates involved in the unit each year.	--
E5. Make other contributions to teaching critical thinking about the life and environmental sciences.	http://sicw.wikispaces.com/infrastructure
E6. Undertake outreach and community service through other channels.	
F. To support CCT faculty and students in research on and publication of their distinctive	

contributions to the fields of critical and creative thinking.	
F1. Establish and maintain a website and wiki of techniques and illustrative cases that CCT faculty members have developed in courses and other forums (see A2f & E5).	http://cct.wikispaces.com/Tools+and+Processes
F2. Prepare a prospectus for publication of a fieldbook of these techniques and cases.	Taylor, P. J. and J. Szteiter (2012). Taking Yourself Seriously: Processes of Research Engagement. Arlington, MA, The Pumping Station. Revised edition, including processes for collaboration and workshops, being prepared for submission to a new publisher.
F3a. Establish a process to identify students whose synthesis research may lead to publications, and establish advising relationships to support them in preparing manuscripts for publication. F3b. Draw attention to pdf versions of syntheses available through CCT website and UMB curriculum library.	a. A series of 4-week online collaborative explorations (CEs) (and one 4-day workshop) have been held in 2016-17 for alums to help them produce the kinds of research, writing, and proposals for funding that they might be doing if they had been admitted to a doctoral program, https://wp.me/p1gwfa-Yu b. https://scholarworks.umb.edu/cct_capstone/
F4. Draw wider attention to the works in progress of individual CCT faculty members and to the resulting publications.	https://scholarworks.umb.edu/cct_ccrp/ and https://scholarworks.umb.edu/cct_sicw/
G. To evaluate and continue developing the Program.	
G1. Constitute an advisory group, which would meet twice a year to give advice to both CCT and its outreach unit, help keep CCT faculty abreast of new developments, and monitor the	--

support and resources CCT and the outreach unit provide each other. Constitute a second advisory group for the SICW track (as required for Prof. Science Masters certification).	
G2. Review and revise this planning document at the first meeting of the Advisory Group and then on an annual basis.	--
G3. Arrange facilitated, participatory planning sessions so as to enhance the participation and investment of CCT faculty in the resulting plans.	--
a. Such planning sessions and regular faculty meetings apply the following criteria to any proposed new initiatives:	
i) we are able to do what we've already committed to, which includes serving the students we have and doing so without adding unagreed-on burdens on each other as colleagues; and	
ii) any initiative is based on a plan with clear goals/objectives that addresses a) and includes a chance to take-stock afterwards to learn from how well we met the goals.	
b. Articulate priorities for core faculty's work in light of operating parameters (see goal B) and subject these to periodical revision or reaffirmation."	Δ Revival of the 50% position that CAPS assigned to SICW and CCT in the period 2011-15 would allow for an increase in admissions and a reduction in the loose ends listed in II.G.
G4. Develop and begin to implement a strategic plan for increasing the social diversity of CCT students and for CCT courses to address	No explicit plan developed. (Review of efforts during last review period: http://cct.wikispaces.umb.edu/DiversityPlanning)

the issues that diversity and inequality raise for understanding thinking and reflecting on practice.	
G5. Prepare a plan for establishing CCT as a place to train and support activists, concerned scientists, and other citizens in community-based research.	--
G6. Use evaluations (see A1a&b) and feedback from lapsed students (see A1d) to revise and improve CCT courses and other operations; ditto for graduates and current students.	See III.A.
G7. Arrange a survey of CCT graduates each AQUAD cycle to document ways their CCT experience has influenced their career development.	See II.F.