

THINKING CRITICALLY, GROWING PURPOSEFULLY

October
3-6, 2022

COLUMBIA STATE
COMMUNITY COLLEGE





COLUMBIA
STATE COMMUNITY
COLLEGE

Quality Enhancement Plan



SACSCOC Onsite Reaffirmation Visit
October 3-6, 2022

Table of Contents

I.	Executive Summary.....	4
II.	About Columbia State Community College.....	5
III.	Identification of the QEP Topic (7.2a).....	6
IV.	QEP Development with Broad-based Support (7.2b).....	18
V.	Student Learning & Program Success Outcomes (7.2c).....	20
	Student Learning Outcomes:	22
	Program Success Outcomes:.....	22
VI.	Literature Review & Best Practices.....	23
VII.	Actions to be Implemented (7.2d)	28
	Actions to Support Goal 1	30
	Actions to Support Goal 2	33
VIII.	Organization Structure to Support the QEP (7.2d).....	34
IX.	Resources (7.2d).....	36
X.	Timeline (7.2d).....	39
XI.	Assessment (7.2e).....	43
XII.	References	47
XIII.	Appendices	50
	Appendix A: Topic Identification White Papers	50
	Appendix B: Formative Critical Thinking Rubric.....	59
	Appendix C: QEP Research Team - Summary of Meetings	60
	Appendix D: QEP Steering Committee – Summary of Meetings	61
	Appendix E: Marketing and Outreach Efforts.....	63
	Appendix F: COLS 101 – Critical Thinking Module.....	64
	Appendix G: Critical Thinking Course Proposal Requirements	65
	Appendix H: Sample Critical Thinking Course Proposal.....	66
	Appendix I: Sample ENGL 1010 Pre-Post Assessment Items	68
	Appendix J: Sample ENGL 1010 Formative Task.....	70
	Appendix K: Sample ENGL 1010 Essay Assignment (Definitions).....	71

I. Executive Summary

QEP Title: “Thinking Critically, Growing Purposefully”

Institution: Columbia State Community College

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The chosen QEP corresponds with both the college’s mission statement and the first goal of the Strategic Plan. The mission statement is as follows: “Columbia State Community College nurtures success and positively changes lives through teaching, learning and service.” The first goal of the college’s Strategic Plan is Student Success. The QEP aims (1) to increase students’ critical thinking skills within the context of specific courses and overall; (2) to provide more professional development opportunities for faculty targeting teaching and implementation of critical thinking assignments into their courses.

Student Learning Outcomes:

- Students will sustain a clear position by identifying various points of view.
- Students will gather credible and relevant evidence.
- Students will identify and explain key concepts in their specific disciplines.
- Students will identify significant assumptions of both their own as well as others’ reasoning.
- Students will analyze and interpret evidence to obtain thoughtful and logical conclusions.
- Students will distinguish probable from improbable implications.

Program Success Outcomes:

- The number of students enrolled in critical thinking courses will increase to reach 70% of currently enrolled students by completion of the program.
- Student attitudes towards critical thinking implementation at the college, as assessed by CCSSE (Community College Survey of Student Engagement) and complementary internal survey item average scores, will increase by 15% by completion of the program.
- Average student performance on the critical thinking score of the ETS Proficiency Exam (administered as the colleges exit exam) will increase by 0.33 standard deviations.
- The percentage of faculty teaching critical thinking courses will increase to reach 30% by completion of the program.
- Faculty attitudes towards critical thinking implementation at the college, as assessed by average scores on internal survey items, will increase over the life of the program.
- 60% of full-time faculty will have participated in a professional development event or utilized critical thinking resources by completion of the program.

Implementation Strategies:

- Introduce ETS (Educational Testing Service) Proficiency Profile Exam into COLS 101.
- Target gateway courses to be piloted as critical thinking classes with subsequent implementation at each campus and via distance education.
- Implement interdisciplinary critical thinking rubric into all critical thinking courses.
- Analyze Pre-Post Summative Assessments targeting subskills of the formative assessment rubric.
- Analyze Student Survey (CCSSE/Internal Survey) and Faculty Survey (Internal Survey) Data.
- Compare entry ETS exam scores with the ETS college exit exam to assess students’ growth.
- Offer pedagogical workshops for faculty via annual “Critical Thinking Development Day.”
- Develop web-repository of critical thinking resources for faculty, employees, and students.

Columbia State’s QEP is committed to enhancing students’ critical thinking and providing faculty with the resources and training to create a culture of learning and success.

II. About Columbia State Community College

Columbia State Community College was established in 1966 as the first community college in Tennessee (*Our History*, Columbia State Community College). It services nine counties and has five campuses: Columbia, Williamson, Lewisburg, Lawrence, and Clifton. The college offers degrees in Associate of Arts (A.A.), Associate of Sciences (A.S.), Associate of Science in Teaching (A.S.T.), Associate of Applied Science (A.A.S.) as well as technical certificates. There are over 80 advising pathways (*Our History*). From a 100% Nursing Licensure Passing Rate (2019-2020) to a 99% Job Placement Rate for A.A.S. and technical certificate graduates (2019-2020), it is no surprise that Columbia State won Tennessee Board of Regents (TBR) Soar Award Community College of the Year 2020-2021 (*Highlights*, 2022).

Columbia State is committed to student success and identifies its core values as follows:

- Access
- Community
- Diversity
- Equity
- Excellence
- Innovation
- Integrity
- Learning
- Respect
- Success (*Strategic Planning Manual 2020-2030, p.4*)

The college provides numerous opportunities to enhance student growth and success both inside and outside the classroom. The Columbia State Beta Kappa Theta chapter of Phi Theta Kappa, an International Honor Society, is a Five-Star chapter. The Columbia State chapter Eta Beta of Sigma Kappa Delta, a National English Honor Society, is an Ivy Chapter (2019-2020, 2021-2022), making it one of the most outstanding chapters throughout the nation out of over 140 chapters (*Recognition*, Sigma Kappa Delta). There are over 20 clubs and organizations available to students with Columbia State allowing students to create additional clubs as interests and needs arise (*Campus Life*, 2022).

The Columbia State faculty are experts in their field and devoted to student success. The faculty at Columbia State are dedicated professionals from within the three divisions of Humanities and Social Sciences (HASS), Science, Technology and Math (STM), and Health Sciences (HS). In fact, Associate Professor of Biology, Dr. Elvira Eivazova, won Community College Faculty Member of the Year 2022 TBR Soar Award (*2022 SOAR Winners*). Jeff Hardin, Professor of English, recently published his seventh book of poetry *Watermark* in 2022. He is an award-winning poet, having received in 2015 the Donald

Justice Prize and in 2017 the X. J. Kennedy Prize (*Columbia State Professor Publishes Seventh Poetry Collection*). Many faculty participate in the Humanities and Social Sciences Lecture Series, the American History Lecture Series, or STM lecture series. Several faculty serve as sponsors to student clubs and honor societies. These are only some of the ways faculty are actively engaged with the culture of learning at Columbia State Community College.

III. Identification of the QEP Topic (7.2a)

To help ensure that the college's QEP topic had broad-based support and focused on a data-driven selection of learning outcomes or success measures, the college created a QEP Research Team with a mandate to (1) research potential topics and areas of improvement in student learning outcomes or student success and (2) guide the college selection process of the QEP topic. The QEP Research Team, which differs some in membership and roles from the QEP Steering Committee created a year later, was selected based on a broad representation of college departments and divisions, and included the following members:

- Dr. Ryan Badeau (Chair), Assistant Professor of Physics
- Dr. Lacey Benns, Professor of Communication
- Dr. Jessica Evans, Assistant Professor of English
- Dr. Harry Djunaidi, Director of Institutional Research
- Wes Dulaney, Assistant Professor of Biology
- Dr. Victoria Gay, Dean of Humanities and Social Sciences
- Dr. Michelle Koenig, Dean for Access, Regional Services, & Southern Campuses
- Dr. Dearl Lampley, Vice President of Williamson Campus & External Services
- Dr. Matthew Muterspaugh, Dean of Science/Technology/Math
- Dr. Susan Russell, Professor of Nursing
- Andrew Wright, Associate Professor of Mathematics

The QEP Research Team was established in Fall 2020. After initial meetings and guidance from the Vice President for Academic Affairs, the committee began work on reviewing college data and researching potential QEP topics in October 2020. In the first meetings of the committee (Appendix C), emphasis was placed on two simultaneous data-gathering efforts: an exploratory review of potential topics considered as part of prior SACSCOC QEP topic proposals, and an analysis of internal student success measures and student learning outcomes.

As part of identifying success measures and learning outcomes, the committee reviewed student performance data from the highly-enrolled courses, student performance in gateway courses, student survey data from the CCSSE (Community College Survey of Student Engagement) and SENSE (Survey of Entering Student Engagement) surveys, student performance on the graduate exit exam, and student

retention and progression measures. These data analysis efforts built on top of prior and ongoing institutional review efforts and considered findings from the college's annual Institutional Effectiveness Report and Strategic Enrollment Management (SEM) teams, such as the SEM team's recently completed inventory of gateway courses. These gateway courses are critical courses where early success or failure are significantly linked to student progression and graduation and were identified by a college-wide process.

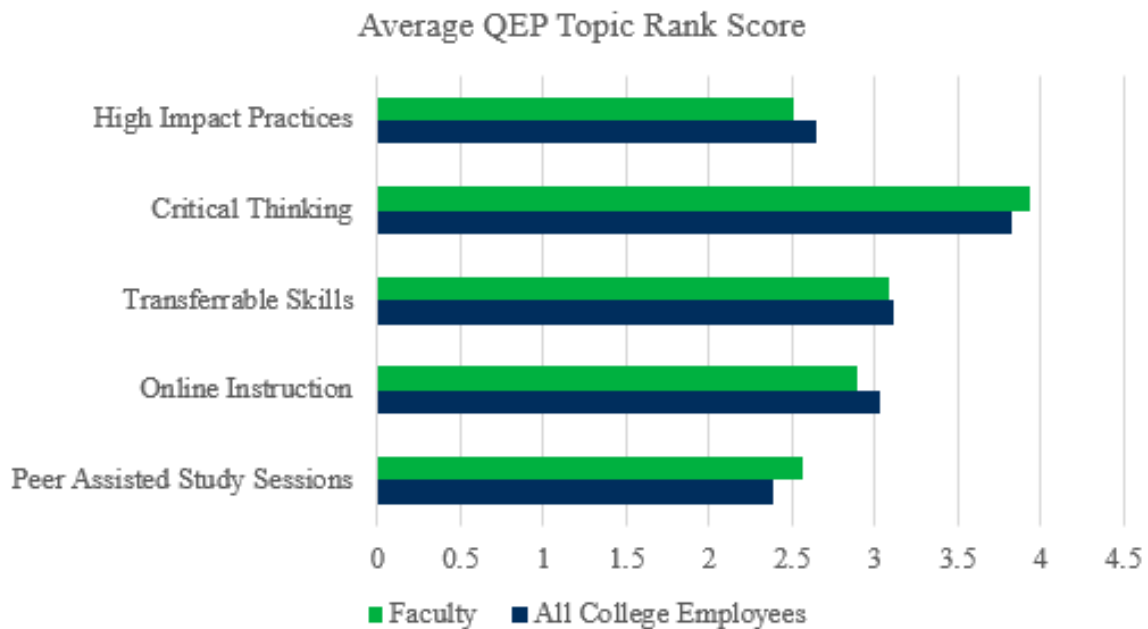
At the same time, the QEP Research Team conducted a review of QEP topics considered by similar institutions over the past ten-year period, with an emphasis on matching potential topics to opportunities for improvement in student success or learning outcomes identified by the internal review. In addition, preliminary efforts were made to investigate the feasibility for potential assessment tools and methodologies for each of the potential topics. Based on these efforts, the QEP Research Team proposed five broad topics for further consideration and refinement by the college community:

- Peer Assisted Study Sessions (focused on "gateway" courses)
- High Impact Practices (HIPs)
- Online Instruction
- Critical Thinking
- Transferable Skills ("Soft" Skills)

One of the challenges identified by the QEP Research Team early in the topic identification process was ensuring a method for broad-based input and topic refinement given the current institutional conditions implemented as a response to the COVID-19 pandemic. To ensure the safety of its students and staff, Columbia State Community College switched to virtual instruction for the Fall 2020 and Spring 2021 semesters with limited access to the college campuses. As such, the committee placed a high degree of emphasis on cyclically providing information and soliciting feedback from the college community throughout the process of topic selection. To provide a foundation for the larger college community regarding the QEP process and to initiate a college-wide discussion of QEP topics, an introductory FAQ and preliminary survey was sent to all college staff and faculty in November 2020. The brief FAQ presented an initial review of the QEP process, introduced the five broad topics recommended for consideration by the college, asked participants to rank and reflect on each of the topics in a preliminary survey, and described the follow-up process for feedback and narrowing down of the recommended topic. Over 100 college staff and faculty responded to the survey with thoughts on initial topic selection and recommendations.

Critical Thinking was the overall highest rated topic in the preliminary survey, both by faculty (part- and full-time) and by all college employees. The following graph shows the average rank score for each of the

QEP topics (a higher rank means participants ranked it as more needed than other topics). Faculty and college employees had overall similar results. In addition, the preliminary survey asked participants to indicate concerns they foresaw with the upcoming process of topic selection and implementation. The most highly-rated concerns were making sure that the QEP was (a) something that would secure student buy-in and (b) effective.

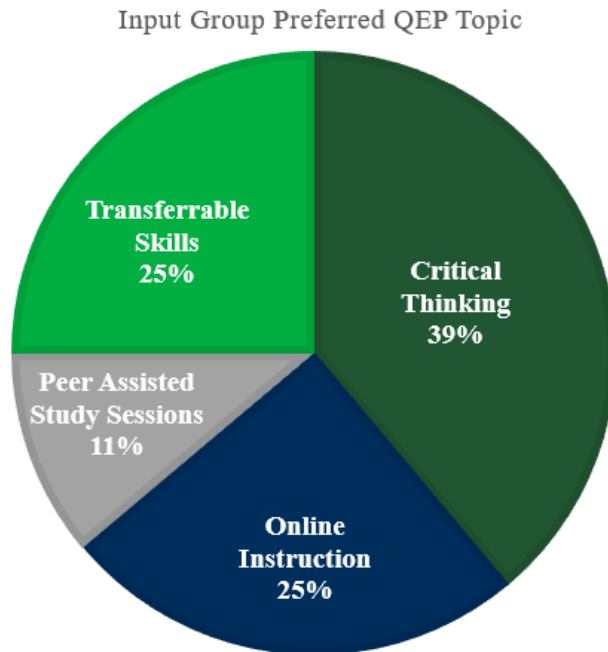


Average QEP Topic Rank Score from preliminary survey. Higher scores indicate higher overall ranking of topic.

Based on feedback provided in the preliminary survey and further review of institutional data, the QEP research team reduced the topic list for further consideration to Peer Assisted Study Sessions, Online Instruction, Critical Thinking, and Transferable Skills. A set of internal white papers (Appendix A) was created by the QEP Research Team that gave a brief description and proposed structure for implementation of each topic, a selection of the institutional data in support, links to resources and prior QEPs that had targeted similar topics, and a set of questions for further feedback to the committee. These white papers were distributed to all college staff and faculty, and an update on the QEP topic selection process was given via a college-wide address during the (virtual) Spring Convocation held in January 2021.

Virtual focus groups – titled “QEP Input Groups” – for faculty and staff were scheduled for four different dates and times in February 2021. The focus groups were advertised in the Convocation address, via outreach to Faculty Senate and division meetings, and through college-wide newsletter mailings. Over 80 faculty and staff members from across the college attended the QEP Input Groups, which were broken out

into small-group discussions moderated by QEP Research Team members. In addition to asking participants to consider the benefits and drawbacks from each QEP in targeting student learning or success outcomes, the research team solicited feedback on assessment feasibility, potential plans for implementation across divisions, and the likelihood of each topic securing lasting value for the college. The exit survey and discussions showed that critical thinking had the overall highest level of first-choice support (with a substantial number of participants indicating critical thinking was their second choice). The following graph shows the post-discussion ranking of those who participated in the QEP Input Group discussion. Summaries of the Input Group discussions are provided in the next section.



Chosen topics amongst Input Group participants from a post-discussion exit survey.

Based on the feedback provided in the discussion groups, the QEP Research Team narrowed the topics for further consideration to Critical Thinking, Online Instruction, and Transferable Skills. In March 2021, the QEP Research Team presented overviews to the Faculty Senate and the college Planning and Effectiveness Leadership Council on the status of topic selection and the results of the input group process.

Given the continued constraints of the COVID-19 pandemic, an online survey was developed to gather student input on potential QEP topics. The brief survey was framed in terms of how each QEP might affect the student experience and was distributed to all currently enrolled students. At close of the survey, 241 students had participated (with a response rate of 6.1%). When asked which QEP would have been most personally useful in supporting their learning, student choices were split between the three

categories (with a slight leaning toward online instruction). Further discussion of the survey results is included in the next section.

What kind of QEP do you think would enhance your learning the most?

ANSWER CHOICES	RESPONSES
A QEP to train your instructors on methods to improve your critical thinking skills and gives you direct objectives in your courses to enhance your critical thinking.	31.95% 77
A QEP to improve engagement and increase student success in online classes in an asynchronous (standalone without scheduled zoom meetings) online format.	36.10% 87
A QEP to build and assess transferable skills (leadership, teamwork, & emotional and cultural intelligence) resulting in awards of badges and recognitions worthy of use on resumes and job applications.	31.95% 77
TOTAL	241

Student responses to an online QEP survey. Students were asked to select which topic they thought would enhance their learning the most and explain why.

This section is intended to provide a brief collected summary of the institutional data (using excerpts from the previously distributed white papers) and feedback gathered in consideration of each of the final three proposed QEP topics. Each of the three final topics –Transferable Skills, Online Instruction, and Critical Thinking – are highlighted in turn.

Transferable Skills

Transferable skills are also known as portable, universal, or cross-functional skills and have been previously known as “soft skills.” Transferable skills are so called because they can be transferred among various careers and positions. Institutions such as Association of American Colleges and Universities (AACU) and the National Association of Colleges and Employers (NACE) identify lists of transferable skills that (in addition to subsuming Critical Thinking) includes:

- Ethical judgement and decision-making
- Ability to work in teams
- Ability to communicate effectively
- Leadership
- Emotional Intelligence
- Cultural Intelligence

A Transferable Skills QEP was tied with online instruction with 25% of faculty and staff selecting the topic as their overall choice during the QEP Input Groups. Transferable Skills was valued by faculty and staff as inherently useful in preparing students to be “global citizens,” “better employees,” and “better

communicators and collaborators.” In addition to broad value for transferable skills as a whole, faculty and staff indicated varied desires for subsets of the transferable skills. Cultural and emotional intelligence were highlighted by several faculty in terms of their value in encouraging students’ individual growth and self-improvement. Communication, group-work, and leadership were emphasized as important elements of business and communication curriculums that would have value applied across the broader college experience.

The main concerns raised by faculty and staff were in terms of assessment and scope. While assessment tools exist for a subset of these Transferable Skills (for example, emotional intelligence, cultural intelligence, and ethical decision-making have potential vetted assessment tools that the college could explore licensing), there was concern amongst faculty that assessment of the full set of transferable skills would be too broad, subjective, and instructor based. Moreover, while it might make sense from a student perspective to assess such skills in a communication or business course, there was concern that students in alternate courses – for example, Math 1530: Introductory Statistics – would not want to be frequently graded on their ability to work in a group or their leadership abilities within the class. To avoid that issue, some faculty suggested the possibility of either a discipline-linked capstone course that emphasized those skills as necessary for the different disciplines or an additional communication course that housed most of the related assessments and instruction.

Scope was the other main concern for a Transferable Skills QEP. While some faculty and staff envisioned transferable skills as a complementary set of aptitudes that should be addressed together across the curriculum, there was a considerable proportion of respondents who argued that targeting more than one or two skills would be unmanageably broad. In such cases, there was no strong agreement on which subset of transferable skills would be most beneficial to students or valuable for the college to pursue. When college members were asked to rank a subset of transferable skills in the preliminary survey from the fall, the results indicated a uniform distribution of desire for each of the potential sub-skills.

The student survey showed an interesting shift in how students ranked Transferable Skills based on how the question was framed. When students were asked, “What kind of QEP do you think would enhance your learning the most,” Columbia State students rated Critical Thinking and Transferable Skills equally (with only slightly more choosing Online Instruction). However, when the question was reframed as “Five years from now, which QEP do you think would help all students at Columbia State the most?” the number of students selecting Transferable Skills was significantly higher than the number who selected Online Instruction or Critical Thinking. A review of student explanations for their choices shows a strong emphasis on employability and value for the workplace – an emphasis which was more pronounced when students were asked to think about value added for other students. In particular, the badge and

certification language included in the statement describing the Transferable Skills QEP was cited by a sizable number of students as the main driving motivation for selection of the Transferable Skills QEP. Students placed value on a potential QEP providing them with a means to improve their resumes and distinguish themselves from their peers.

Online Instruction

Online instruction modes often come with well-known logistical challenges and research-documented concessions. National trends indicate decreased student success outcomes (such as the number of students earning an A, B, or C), lowered student-reported engagement, and lower retention rates in online formats compared to traditional face-to-face instructional modes. These challenges are of particular interest to the college, as improving student retention and performance in gateway courses have been identified as key goals of institutional planning efforts. The following table lists course passing and fail rates for all courses offered from Fall 2015 to Fall 2020 aggregated by instructional method: Traditional (Conventional), DVC (Desktop Video Conferencing), Hybrid, or Online. Results from the 5-year period show slightly lower passing rates for alternate formats versus traditional instruction.

	Traditional	DVC	Hybrid	Online	TN eCampus
PASS	87%	80%	82%	80%	71%
FAIL	9%	14%	13%	12%	20%

Pass/fail rates for all courses from Fall 2015 to Fall 2020. Pass defined as A, B, C, D (and P for P/F courses). Fail includes both FA and F.

As part of the support voiced in the QEP Input Groups for an Online Instruction QEP, faculty and staff frequently expected an increased demand for online courses in the coming years – and often indicated a belief that the trend may be accelerated by the COVID-19 pandemic and recent college efforts to provide virtual instruction. Along with increased course demand, many faculty and staff suggested that there was an opportunity to improve student success via enhancing online offerings through a combination of professional development, standardization of online course formats, and development of additional student-facing resources that support those interested in taking an online course (technology trainings, student technology assessments, supplemental tutoring, etc.). In addition, an increase of in-house course offerings was viewed as a strategy to further improve student retention and progression rates, given the lowered success rates across TN e-Campus courses. Finally, it was noted that the college already has

made preliminary efforts that would support such a QEP – such as launching an Online Instruction task force.

However, there were concerns from faculty and staff that even with increased offerings of online courses, the proportion of students enrolled in an online course will remain a smaller percentage than those in conventional classes – indicating a limited ceiling for the impacts of the QEP for the college. This is exacerbated by the fact that many students at the college are still limited in their access to technology, suggesting further equity issues for broad implementation of such a QEP.

There were also significant college infrastructure concerns. Focused expansion of online offerings – or improvements in a considerable number of existing online courses – would require a significantly more extensive online support staff than is currently in place at the college. Maintenance of online accessibility requirements becomes a considerable logistical concern that limits the scale at which courses can be revised or created within the life cycle of the QEP. The issue of assessment was also raised by multiple participants, with the question of whether course grade in an online course was a strong enough assessment tool to verify the success of any QEP initiatives. Assessment was also coupled with a concern that potential gains in student success due to improvements in course materials may be negated by an inability to guarantee (or adequately increase) quality student participation.

When asked, “What kind of QEP do you think would enhance your learning the most?,” Columbia State students indicated a slight inclination overall for an online instruction QEP (87 votes to 77 votes each for Critical Thinking and Transferable Skills). When the question was reframed as, “Five years from now, which QEP do you think would help all students at Columbia State the most?,” the number of students selecting online instruction decreased so that it was tied with Critical Thinking (and ranked behind Transferable Skills). As such, the small trend in student choice toward online instruction was driven in part by their recent experiences because of the COVID-19 pandemic. Such an effect shows up in student explanations of their choice on the survey as well – many students highlighted difficulties focusing on schoolwork or doing well in virtual classes over the past year as key reasons for supporting an online instruction QEP. While some students attributed these difficulties to issues with the course structure or content, many student comments attributed the difficulty to issues with self-motivation and a desire for being on campus versus live streaming over Zoom. Taken together, student responses suggest (1) an opportunity to improve student success in online courses by improving student engagement in the course and (2) a desire by students to shift back to the regular classroom when possible. The latter might suggest limited college-wide benefits for a long-term QEP focused solely on online instruction.

Critical Thinking

Critical Thinking is one of the most frequent topics selected by 2-year institutions for a QEP and for good reason – the ability to analyze and interpret relevant information and apply it to novel situations and problems is often ranked as one of the most desired skills by employers and cited as a key instructional goal across disciplines.

The ETS Proficiency Profile – administered to students in the college’s current exit examination as a general education assessment item – measures students’ critical thinking abilities as one of its sub-scores. The range for the ETS critical thinking sub-score is 100-130. As shown in the following table of mean critical thinking scores, performance by CSCC graduates is similar to cohort institution averages and shows potential for improvement. Over the five-year period of 2016-2021, Columbia State students had an overall combined critical thinking mean score of 110.5 with a combined standard deviation of 6.2. For comparison, the reported comparative mean score represents the combined average of cohort institutions overall critical thinking mean scores (and the comparative SD represents the standard deviation in these institution-level means). While the Columbia State mean score has been slightly *above* the mean score of comparative institutions, it is often well within the corresponding institution standard deviation.

Mean Critical Thinking Sub-score on ETS Proficiency Profile (Range 100-130)					
Year	Columbia State # of Students	Columbia State Mean Score	Columbia State SD	Comparative Mean Score †	Comparative SD ‡
2020-2021*	734	110.2	6.4	109.6	1.7
2019-2020	381	111.0	6.3	109.6	1.7
2018-2019	688	112.3	6.0	109.7	1.8
2017-2018	681	110.8	6.0	110.1	1.7
2016-2017	575	111.5	6.0	110.2	1.5

*ETS Proficiency Profile was administered virtually.

†Comparative mean scores of associate’s colleges calculated as 5-year averages (i.e., 2016-2021).

‡Comparative standard deviation based on institution mean scores for associate’s colleges.

Moreover, as shown in the table of ETS Proficiency Classifications, less than 5% of Columbia State students have earned the category ranking of “Proficient” in critical thinking each year (a success rate comparable to other cohort institutions). In addition to improving student performance to the proficient level, there is a need to move students from “Not Proficient” to “Marginal.”

ETS Critical Thinking Proficiency Classification						
Year	Columbia State Community College			Comparable Institutions		
	Proficient	Marginal	Not Proficient	Proficient	Marginal	Not Proficient
2020-2021*	3%	9%	88%	3%	7%	90%
2019-2020	5%	21%	75%	3%	7%	90%
2018-2019	2%	20%	79%	3%	17%	81%

The college administers the CCSSE for all current students on an alternating-year schedule. The relevant critical thinking survey items (5b-5f, 11d) and their corresponding mean scores are provided in the table on the following page for the past four survey administrations (2015, 2017, 2019, 2021). Over this period, the college's mean scores on these selected items have fluctuated slightly above and below cohort means – only one year-item reached statistical significance. Taken together, the selection of survey means indicates that on average students view “some”-to-“quite a bit” of emphasis on the corresponding critical thinking categories at the college and a composite score just slightly below cohort mean. As such, there is an opportunity to improve student perceptions of critical thinking as a significant institutional focus.

During the QEP Input Groups with college faculty and staff, participants emphasized the importance of Critical Thinking both as a generalizable life skill and as a crucial component for success in the college classroom. The ability to think critically about course material is intimately linked with student success. On the other hand, the extremely poor performance on the college exit-exam in terms of “proficiency” ratings was a frequent area of concern – both in terms of what it represents as a crucial area for improvement in student learning outcomes, and to the exam's authenticity as an overall assessment of critical thinking. As such, developing a complementary system of critical thinking assessment was one of the most frequently cited concerns. To this, multiple suggestions were made to improve the assessment of critical thinking across the college as part of the QEP, including discipline specific-learning objectives, pre-post assessments, and alternative standardized critical thinking exams, such as the Critical Thinking Assessment Test (CAT) developed by Tennessee Tech University.

Faculty and staff highly valued that a critical thinking QEP was both scalable over time and across college disciplines (the QEP could start in a limited sub-set of gateway courses and/or the first-year experience and could be extended across disciplines at college over the life of the program). In addition to avoiding the implementation issues of unduly burdening one or two departments at the college, a QEP focused on Critical Thinking presents opportunity for college-wide buy-in. Faculty and staff also noted that a college-wide emphasis on Critical Thinking complements other already existing initiatives at the college (such as the revitalization of an Honors program) and aligned well with potential upcoming essential learning outcomes for general education courses focused on critical thinking from the Tennessee Board of Regents.

An additional area of concern from faculty and staff was that although worthwhile, Critical Thinking might be an intimidating topic for students – with suggestions that we think carefully about the courses where we introduce the QEP and how we market a Critical Thinking initiative to students. In the student survey, the most frequently cited reason for selecting Critical Thinking was its inherent value as a life skill – student responses viewed critical thinking as a key acquisition of a college education. In addition,

CCSSE Critical Thinking Mean Scores

During the current school year, how much has your coursework at this college emphasized the following mental activities? (1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much)

[Item 5b] Analyzing the basic elements of an idea, experience, or theory.

Year	Columbia State Mean	Medium College Mean	Cohort Mean	CSCC – Cohort
2021	3.01	2.99	2.98	+0.03
2019	2.89	2.93	2.93	-0.04
2017	2.84	2.90	2.91	-0.07
2015	2.97	2.92	2.93	+0.04

[Item 5c] Synthesizing and organizing ideas, information, or experiences in new ways.

Year	Columbia State Mean	Medium College Mean	Cohort Mean	CSCC – Cohort
2021	2.94	2.96	2.95	-0.01
2019	2.79	2.90	2.89	-0.10
2017	2.84	2.90	2.91	-0.07
2015	2.77	2.80	2.80	-0.03

[Item 5d] Making judgements about the value or soundness of information, arguments, or methods.

Year	Columbia State Mean	Medium College Mean	Cohort Mean	CSCC – Cohort
2021	2.75	2.73	2.72	+0.03
2019	2.62	2.66	2.66	-0.04
2017	2.80	2.87	2.88	-0.08
2015	2.65	2.63	2.64	+0.01

[Item 5e] Applying theories or concepts to practical problems or in new situations.

Year	Columbia State Mean	Medium College Mean	Cohort Mean	CSCC – Cohort
2021	2.90	2.86	2.84	+0.06
2019	2.68	2.76	2.76	-0.08
2017	2.79	2.74	2.75	+0.04
2015	2.65	2.74	2.74	-0.09

[Item 5f] Using information you have read or heard to perform a new skill.

Year	Columbia State Mean	Medium College Mean	Cohort Mean	CSCC – Cohort
2021	2.96	2.96	2.94	+0.02
2019	2.75	2.88	2.88	-0.13
2017	2.81	2.84	2.86	-0.05
2015	2.68 [†]	2.87	2.87 [†]	-0.19 [†]

How much has your experience at this college contributed to your knowledge, skills and personal development in the following areas? (1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much)

[Item 11d (12e on 2015 survey)] Thinking critically and analytically.

Year	Columbia State Mean	Medium College Mean	Cohort Mean	CSCC – Cohort
2021	3.09	3.07	3.05	+0.04
2019	2.83	2.96	2.96	-0.13
2017	2.88	2.93	2.94	-0.06
2015	2.92	2.98	2.98	-0.06

[†]Statistically-significant, 2-tailed T-Test.

students valued adding direct objectives focused on critical thinking skills as part of a course – and corresponding instruction that helped students to meet them. However, multiple students went further to indicate that this is an area for improvement for the college – specifically in terms of providing objectives and instructional activities that help them practice their critical thinking skills. This may suggest both the opportunity for professional development on critical thinking interventions and that students also value critical thinking – if they can see how it applies and will be assessed within a given course.

Topic Selection Results

Based on the cumulative results of the QEP selection process, the QEP Research Team recommended that the college select Critical Thinking for the next Columbia State Community College Quality Enhancement Plan. Critical Thinking was consistently ranked highest throughout the selection process by college employees and staff. Critical Thinking was supported as a QEP topic by students who viewed the topic as an inherently valuable part of their education and an improvable area of their learning experience at Columbia State. There is room for refinement in instructional techniques and assessment methodologies and a clear need to improve student performance based on college exit exam data. A QEP focused on Critical Thinking dovetails closely with anticipated updates to Tennessee Board of Regents learning outcomes for general education courses. An emphasis on Critical Thinking within the classroom mirrors the ever-present need for critical thinking in an age of over-saturated misinformation and demanding, adaptable careers. Throughout the topic selection process, college employees emphasized a desire to select a QEP that can be “equally embraced and fairly distributed across all disciplines” and “becomes a lasting part of the culture of the college.” Critical Thinking is a timely, scalable, fitting, and worthwhile focus for the colleges next QEP topic.

After the topic was approved by the President’s Cabinet based on the QEP Research Team’s recommendation, a new QEP Steering Committee with two co-directors was created to further develop and research the topic and goals on critical thinking (refer to Appendix D for a summary of meetings). Several of the former committee members chose to continue working on the QEP Steering Committee and some new members were added as well with the idea of continuing a broad-based representation of the college and its various disciplines:

- Co-Directors: Dr. Ryan Badeau, Assistant Professor of Physics, and Dr. Jessica Evans, Assistant Professor of English
- Jacqueline Basile, Instructor of Nursing
- Dr. Lacey Benns, Professor of Speech, Communication, and Theatre
- Dr. Elvira Eivazova, Associate Professor of Biology
- Dr. Barry Gidcomb, Professor of History and Faculty Senate President
- Dr. Sharon Grigsby, Instructor of Education

- Dr. Erin Kealey, *ex-officio*, Associate Professor of Philosophy
- Joni Lenig, *ex-officio*, Vice President of Academic Affairs
- Christina Loucks, Instructor of English
- Greg Mewbourn, Associate Professor of History
- Ryan Moore, Network and Systems Analyst
- Dr. Matthew Muterspaugh, Dean of STEM
- Dr. Michael Pollack, Associate Professor of Mathematics
- Anne Scott, Library Director
- Cara Sutherland, Associate Professor of Mathematics
- Glenna Winters, Professional and Instructional Development Specialist
- Benjamin Womer, Assistant Professor of Economics

IV. QEP Development with Broad-based Support (7.2b)

The QEP co-directors, Dr. Ryan Badeau and Dr. Jessica Evans, wanted the future QEP to be interdisciplinary and involve the entire campus in developing its objectives. Thus, the QEP co-directors created an interdisciplinary Steering Committee consisting of representatives from each division: Science, Technology, and Mathematics, Humanities and Social Sciences, and Health Sciences. Support staff of IT and Online Campus were also added to the committee.

In addition to the Steering Committee, the QEP leads held numerous focus groups and updates throughout the year (2021-2022) to receive broad-based support, input, and feedback on identifying and creating the QEP. A brief overview of groups that were consulted to further develop the QEP is as follows:

- Faculty Senate—many of our Steering Committee members represented the QEP initiatives to those in our Faculty Senate so that all faculty needs, concerns, and input could be considered and implemented into the development of the college QEP initiative.
- Convocation—all employees (faculty and staff) were presented with updates concerning the development of the QEP and were provided with opportunities to give feedback and input into its creation.
- QEP Question and Answer Session—during our in-service week, faculty and staff were invited to see a glimpse at our implementation timeline and progress on the development of our QEP and to provide feedback and input in a smaller group size so that ideas or concerns could be shared with QEP leads.
- Support Staff Focus Group Meeting—key support staff, such as college advisors, counselors, and student engagement directors were invited to share their ideas of how the QEP relates to them and how we can bring better student and employee awareness of our upcoming QEP and its significance.

- Student Leadership Focus Group Meeting—students are the central concern of Columbia State’s QEP. The goal is to further develop students’ learning skills by increasing their ability to be critical thinkers. The co-directors wanted student feedback from a representative student group, including student leaders of the Student Government Association (SGA), Phi Theta Kappa, and Sigma Kappa Delta as well as nontraditional students who may have different perspectives from the average college student. The students were provided with an overview of the QEP, and they were extremely excited. They saw key relevance to improving their learning and performing well in future jobs after graduation. One of the insights provided was that by placing an ETS Proficiency Exam in COLS 101 and providing students with their scores that this will enable students to see their individual growth and development while at Columbia State. It will also allow students to work on improving those scores for their college Exit Exam. In fact, the student group pointed out the Exit Exam was often a surprise for a lot of graduating students so that this would also allow them to see a clear connection from their entrance into Columbia State and their exit. Students saw a need and purpose of focusing on critical thinking and believed that instructors who were trained in pedagogical practices along with the implementation of a college-wide standard critical thinking rubric would improve and enrich their learning experience.
- COLS 101 Director Meeting—QEP co-directors collaborated with College Success Director Meredith McCoy on how to implement critical thinking and the ETS proficiency exam revamping the current first-year COLS 101 course. Director McCoy was on board and saw the relevance of needing to frontload important subjects, especially critical thinking, to the earlier part of the College Success schedule. This course also provides planners, so it was decided that this would be a great opportunity to promote our QEP poster, logo, and description to incoming students. Director McCoy shared a concern about having enough ETS Proficiency exams so that all COLS students had the same course experience since the initial budget covered the cost of 1,000 exams but may not have covered all students. This concern was relayed to Vice President of Academic Affairs, Joni Lenig, and the QEP committee was approved to have additional funding to cover initial ETS costs in COLS 101 since it is most likely only to be an estimated amount of 200 more tests needed. The number of tests is understandably trial based as the amount needed may need to be adapted each year. Director McCoy approved this, and Columbia State is happy to offer students a cohesive first-year experience with critical thinking implementation.
- President Cabinet—QEP co-directors remained in collaboration and provided regular updates to the President’s Cabinet throughout the course of the development of the QEP. In particular, QEP co-directors identified the needs of personnel (faculty to teach and develop critical thinking courses as well as IT support staff to develop online rubrics and track student progress), events

(such as Critical Thinking Development Day to offer pedagogical training for faculty on the effective implementation of critical thinking as well as receiving professional development hours), and monetary support (such as the need to purchase the ETS Proficiency exam as a pre-test in COLS 101 and membership for faculty with the Foundation for Critical Thinking).

- QEP co-directors coordinated with the Online Education Task Force to identify ways to increase critical thinking in online courses as well.
- All employees were invited by the Steering Committee to submit logo ideas for the QEP. The winning phrase was “Thinking Critically, Growing Purposefully” and is now the memorable branding of Columbia State’s QEP.
- All students were invited to submit their own artistic representation of the QEP’s phrase “Thinking Critically, Growing Purposefully” as a part of the Columbia State Art Contest, which was held in Spring 2022. Marketing promoted the contest to all students asking for submissions for the QEP poster and logo design. The winning poster design was so well liked by the committee that it was decided to have a similar logo designed by the same talented student. (Pictures of the student designed artwork are on the front cover page.)

V. Student Learning & Program Success Outcomes (7.2c)

The Steering Committee and co-directors held several meetings in the Fall of 2021 to identify key component critical thinking skills and develop a corresponding interdisciplinary critical thinking rubric for their assessment. The QEP directors conducted further research on effective implementation of critical thinking, student learning outcomes, and potential supporting critical thinking rubrics. Some (not all) of those consulted were Association of American Colleges and University, Cornell University, University of Louisville, Florida State University, Motlow State Community College, Tennessee Tech University, and the Foundation for Critical Thinking. The latter two were further pursued by the QEP co-directors.

In December 2021, one of the QEP co-directors communicated via email with Lisa Sabend, Executive Assistant to the President, Coordinator for Community Outreach, from the Foundation for Critical Thinking. Coordinator Sabend provided information about membership and training for faculty as well as an institution.

Also in December 2021, both QEP co-directors attended SACSCOC conference where one of the co-directors communicated with ETS and Territorium on assessing and identifying students’ critical thinking skills to help further develop our QEP implementation and assessment process.

In January 2022, both QEP coordinators had a Zoom meeting with Dr. Ada Haynes Director for the Center for Assessment and Improvement of Learning, Professor of Sociology, from Tennessee Tech University to discuss their implantation of critical thinking, particularly in relation to their own Critical Thinking test and their identified critical thinking skills referred to as CAT skills. This CAT skills check list was shared with the QEP co-directors and helped in the development of the QEP.

Throughout this process, the co-directors identified the importance of connecting the rubric to the QEP student learning outcomes. Over the course of multiple meetings, the Steering Committee and co-directors narrowed the discussion of student learning outcomes to a set of component critical thinking skills (see the final student learning outcomes listed on the next page) and ultimately adopted a corresponding interdisciplinary critical thinking rubric (see Appendix B) based upon rubrics from the Foundation for Critical Thinking. Although the committee valued elements of other rubrics (such as the AACU critical thinking rubric) and other corresponding component critical thinking skill categorizations, the rubric for the Foundation for Critical Thinking closely aligned with the component skills identified by committee members as important elements of critical thinking within their disciplines. For example, the recognition of discipline-specific concepts within novel contexts was identified as a key critical thinking component skill explicitly denoted by the Foundation for Critical Thinking rubric. The committee members attempted to apply the rubric to a critical thinking task in their discipline to test its interdisciplinary effectiveness and applicability. Subsequent committee discussion led to further clarifications (such as the removal of some categories from the original Foundation for Critical Thinking rubric to emphasize the set of learning outcomes agreed upon by the committee). The Steering Committee collaborated with Online Campus Director Glenna Winters on making this rubric ADA compliant.

The final set of student learning outcomes meets with the college mission to “nurture success and positively change lives through teaching, learning and service” and Columbia State’s first goal of the Strategic Plan “Student Success” that also corresponds to TBR’s Student Success priority. To support the core student learning outcomes, the QEP Steering Committee also established clear measures of program success upon implementation of the QEP. This complementary set of program success outcomes targets and measures faculty and student involvement in the QEP, faculty and student attitudes toward instruction of critical thinking implementation at the college, and overall student critical thinking performance as assessed by the ETS Proficiency Exam. The full lists of student learning outcomes and program success outcomes are provided on the following page.

Student Learning Outcomes:

1. Students will sustain a clear position by identifying various points of view.
2. Students will gather credible and relevant evidence.
3. Students will identify and explain key concepts in their specific disciplines.
4. Students will identify significant assumptions of both their own as well as others' reasoning.
5. Students will analyze and interpret evidence to obtain thoughtful and logical conclusions.
6. Students will distinguish probable from improbable implications.

Program Success Outcomes:

1. The number of students enrolled in critical thinking courses will increase to reach 70% of currently enrolled students by completion of the program.
2. Student attitudes towards critical thinking implementation at the college, as assessed by CCSSE (Community College Survey of Student Engagement) and complementary internal survey item average scores, will increase by 15% by completion of the program.
3. Average student performance on the critical thinking score of the ETS Proficiency Exam (administered as the colleges exit exam) will increase by 0.33 standard deviations.
4. The percentage of faculty teaching critical thinking courses will increase to reach 30% by completion of the program.
5. Faculty attitudes towards critical thinking implementation at the college, as assessed by average scores on internal survey items, will increase over the life of the program.
6. 60% of full-time faculty will have participated in a professional development event or utilized critical thinking resources by completion of the program.

VI. Literature Review & Best Practices

Critical Thinking is considered the primary emphasis of a college education by college faculty. In the 2007-2008 National Norm Survey conducted by the Higher Education Research Institute, over 99% of college faculty selected critical thinking as a key benefit of such an education – a higher percentage than even the acquisition of discipline specific knowledge (DeAngelo 2009). Employers view critical thinking as an essential skill for the modern worker, with only a few skills such as oral communication and teamwork cited more frequently (Falling Short? College Learning and Career Success 2015). Critical Thinking has been a key domain of research for many scholarly traditions: education, psychology, philosophy; and each field has established their own terminology and theoretical frameworks to encapsulate and operationalize it. Whether viewed from the lens of the classroom or the career, “Critical Thinking” is almost universally valued; but perhaps because of its importance, it is difficult to arrive at a singular agreed-upon conception of critical thinking in literary scholarship.

Therefore, this review focuses on three questions in turn: 1) What are common focal elements of critical thinking – across disciplines and research traditions – that can be used to define critical thinking for instruction and assessment in differing academic domains across the college? 2) What research-based tools and practices support assessment of critical thinking, and how do they assess it? 3) How can critical thinking skills be improved within the context of the college classroom?

In a 1990 report sponsored by the American Philosophical Association, Peter Facione described the results of a 46-scholar panel representing experts from philosophy, education, social and physical sciences – motivated by the Delphi Method for qualitative research — to arrive at a consensus of critical thinking criteria for instruction and assessment. They created the following consensus statement defining critical thinking: “We understand critical thinking to be purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgement is based” (p. 3).

In addition, the report goes on to establish three main points of emphasis: critical thinking includes component skills that can be assessed in some form (interpretation, analysis, evaluation, inference, explanation, self-regulation); critical thinking is dependent on dispositions of the thinker; and critical thinking is predicated on domain specific knowledge and context. The report notes in particular, “...while CT skills themselves transcend specific subjects or disciplines, exercising them successfully in certain context demands domain-specific knowledge, some of which may concern specific methods and techniques used to make reasonable judgements...” (p. 10).

The importance of the disposition of the thinker is emphasized in further work by Facione (2000) and again in work by Paul and Elder (2010, 2011). In Facione (2000), the authors describe seven characterological attributes that arose out of work towards creating the California Critical Thinking Disposition Inventory (CCTDI): truth-seeking, open-mindedness, analyticity, systematicity, critical thinking self-confidence, inquisitiveness, and maturity of judgement (p. 74). The claim is that strong critical thinking is built upon a dispositional foundation of these elements. The “antithesis of the ideal” would represent a thinker who could have some level of cognitive ability with critical thinking sub-skills but otherwise lack the disposition to motivate their application.

In a series of five columns spanning over a two-year period, Paul and Elder succinctly describe a series of competency standards in support of critical thinking (2010, 2011, 2012). The earlier columns focus on cognitive sub-skills and corresponding student outcomes identified in their research as essential elements of critical thinking. For example, Paul and Elder’s standard three of “Information, Data, Evidence, and Experience” lists among its corresponding student outcomes: “...students distinguish relevant from irrelevant information when reasoning...” and “students demonstrate understanding of the difference between information and inferences drawn from that information.” (Paul & Elder, 2011). The later columns extend the discussion of critical thinking competency standards to include dispositions such as fairmindedness, intellectual humility, intellectual courage, and intellectual empathy (Elder & Paul, 2012). The common thread of this disposition research is a recognition of the importance – via correlation with critical thinking performance – for the student to value careful reasoning, to be open to new information and perspectives that challenge one’s own predisposition, and to be motivated to follow-through on the cognitive components of critical thought.

Dispositions in support of critical thinking are not sufficient; critical thinking competency must be developed – a task which van Gelder (2005) suggests requires explicit practice and comes with multiple common pitfalls. Those pitfalls include that students can master critical thinking by instruction on only its theory without direct practice, that students can master critical thinking by imitation of examples of critical thought, or that improvement in critical thinking can be achieved without any knowledge of critical thinking theory itself. Instead, van Gelder argues that opportunities of practice for critical thought (of enough duration and depth to rival the commitment of Karl Ericsson’s deliberate expert practice) are essential (p. 43). Critical thinking activities should task the student with exercising critical thinking sub-skills, present opportunities within the discipline context, and notably scaffold for transfer to novel contexts – a task that van Gelder admits is difficult, while simultaneously arguing that it is possible and to be pursued. In addition, students should receive “close guidance and timely, accurate feedback on performance” and that “improvement demands acquiring some theory...[as] knowledge of the theory

allows you to perceive more of what is going on” (p. 44). van Gelder proposes argument maps as one such example task in support of developing critical thinking skills.

The degree to which critical thinking competencies can transfer across domains is intimately intertwined with the question of whether critical thinking instruction is better presented in its own general education course or embedded directly in discipline-specific instruction. Abrami et al. (2008) conducted a meta-analysis of 117 critical thinking instructional interventions. The authors categorized the instructional interventions into four categories developed by Ennis’ (1989) and based on the degree to which the critical thinking instruction was explicit and/or embedded directly into discipline-specific instruction: *general* (critical thinking abilities are taught separately from content, often in an entirely different course, and not embedded with discipline-specific content), *infusion* (critical thinking skills and dispositions are made explicit as course objectives within a discipline-specific course focused on deep mastery of course subject material), *immersion* (critical thinking abilities are not explicitly taught or made explicit, but students are tasked with critical thought-provoking tasks), and *mixed* (a combination of the general approach and either infusion or immersion approaches where students experience both subject-specific critical thinking instruction and a separate course or module aimed at teaching general principles of critical thinking). Overall, the mixed method had the largest effect ($g+$ of 0.94), followed by infusion (0.54) and general methods (0.38); immersion had the smallest effect size (0.09) – suggesting the importance of explicit instruction and delineation of critical thinking objectives (p. 1118). The meta-analysis suggested two other important findings. First, interventions were most effective in studies when instructors received advanced training and professional development related to the implementation of the critical thinking objectives (p. 1121). Second, collaboration among students while developing critical thinking skills resulted in a small positive effect.

Additional literature reviews and meta-analyses demonstrate that critical thinking interventions have the potential – but not guarantee – to yield measurable improvements in student critical thinking performance (Pithers & Soden 2000, Behar-Horenstein 2011, Lai 2011, Huber & Kuncel 2016). In particular, Behar-Horenstein conducted a similar meta-analysis to the work done by Abrami et al. (using 42 studies and the Ennis categorization of interventions) and duplicated the finding that immersion instruction methods resulted in the smallest critical thinking gains. This finding reinforces the importance of explicit instruction in critical thinking within a course as opposed to treating critical thinking as an implicit objective. The intervention techniques explored varied and included concept mapping, scenario-based course exercise, active learning techniques, problem-based learning, inquiry-based learning, question-based approach, guided practice, computer-assisted instruction, web-based bulletin boards and online instruction (Behar-Horenstein 2011, p. 30). Interestingly the authors noted widespread inconsistency

within the individual intervention methods – no single method was either always effective or always ineffective. The authors suggested experimental confounds – such as testing effects, maturation, as well as limited sample sizes and treatment lengths as possible explanations for the discrepancies (p. 34).

Although exact definitions and outcomes in the literature vary, key findings are that component critical thinking skills can be identified and improved, critical thinking is intertwined with student dispositions, and critical thinking seems to have the greatest likelihood for gains when objectives are explicit and there are extensive opportunities for student practice (Lai 2011). Interventions targeting critical thinking in the classroom have the potential to improve student critical thinking performance – but the success of these initiatives can vary with the manner in which the critical thinking materials are provided, student and faculty dispositions, faculty training and development, and the quality of the critical thinking assessment instruments.

How are these gains in critical thinking assessed? Liu, Frankel, and Roohr published a report identifying the state of critical thinking assessment in higher education (2014). As part of this report, Liu, Frankel, and Roohr provided an inventory of widely adopted assessment instruments, including:

- California Critical Thinking Skills Test (CCTST)
- California Critical Thinking Disposition Inventory (CCTDI)
- Watson-Glaser Critical Thinking Appraisal (WGCTA)
- Ennis-Weir Critical Thinking Essay Test
- Cornell Critical Thinking Test (CCTT)
- ETS Proficiency Profile
- Collegiate Learning Assessment+ (CLA+)
- Collegiate Assessment of Academic Proficiency (CAAP)
- Halpern Critical Thinking Assessment

Lieu, Frankel, and Roohr note that most of these assessment items are based on selected-response question formats such as multiple-choice or Likert-scales. The exceptions to this structure are the CLA+ and HCTA (which use a combination of constructed response and multiple-choice formats) and the Ennis-Weid test which is essay based. While the CCTDI is uniquely focused on measuring students' critical thinking dispositions, many of these instruments seek to assess and report on critical thinking in terms of student performance on multiple different sub-skill tasks, the most common of which are: analysis, evaluation, inference, logical deduction, and inductive reasoning. Liu, Frankel, and Roohr identify a key trade off here – the use of subscales for component skills in critical thinking is often framed as a positive attribute for the supposed ability to show specific strengths or weaknesses in a test-takers critical thinking. However, prior research has found that critical thinking sub-scales often have low internal consistency (p. 7). The authors lay out several axes of design for consideration in the selection of a critical thinking assessment instrument: authenticity vs. psychometric quality, instructional value versus standardization,

institutional versus individual use, and generalized versus domain-specific assessment. Other commonly used assessment tools not included in the Liu inventory are the CAT (Critical-thinking Assessment Test), which is based on constructive-responses and the HEIghTen critical thinking assessment (which has been developed more recently).

Given the aforementioned discussion of critical thinking component skills, assessment via national validated instruments or critical thinking rubrics, as well as multiple potential implementation strategies, what does the literature recommend as interventions for best practice in critical thinking instruction?

- In their review of educational research, Pithers & Soden (2000) argue the potential merits of problem-based learning: explicit practice with ill-defined problems requires identification of the main issue, important assumptions, and the acquisition of missing but necessary information. Potential applications of problem-based learning include the use of Fermi problems in STEM disciplines (Arleback and Albarracin 2019), ill-structured case scenarios in nursing (Seibert 2021), or case studies in business (Snyder and Snyder 2008).
- Written and oral reflection and argumentation tasks are often considered as one of the most effective interventions by college instructors (Bezanilla et al. 2019) – particularly when the task asks students to conduct a concept map, argument map, or argumentative analysis of another work. From the student perspective, Tsui (1999) found that writing intensive tasks and course interventions were positively associated with students' self-reported growth in critical thinking.
- Two-part (staged) writing assignments were also explored in a lower-division political science course (Cavdar and Doe 2012) where students were tasked with identifying implicit assumptions and examining the strength of political arguments. The authors argue that the effectiveness of the task is linked with the use of a critical thinking rubric that helped emphasize critical thinking objectives, and cyclical feedback in the writing process.
- Bissel and Lemons argue for formative discipline specific critical thinking problems (Bissel and Lemons 2006) that interweave critical thinking skills and domain-specific knowledge.
- Mao et al. (2022) explores the effectiveness of game-based instruction across 20 studies and finds a positive effect on student's critical thinking, with the largest positive effects for role-play – though critical thinking disposition improved more often than critical thinking competencies.

VII. Actions to be Implemented (7.2d)

The “Thinking Critically, Growing Purposefully” QEP has two goals: (1) to increase students’ critical thinking skills within the context of specific courses and overall (2) to provide more professional development opportunities for faculty targeting teaching and implementation of critical thinking.

GOAL ①

Increase students’ critical thinking skills within the context of specific courses and overall.



GOAL ②

Provide professional development opportunities for faculty to teach and implement critical thinking assignments.

GOALS

①

Increase students' critical thinking skills within the context of specific courses and overall.

②

Provide professional development opportunities for faculty to teach and implement critical thinking assignments.



ACTIONS

- Implement critical thinking sections of gateway courses
- Implement introductory critical thinking module & ETS Pre-test in COLS 101
- Incentivize Exit Exam Performance
- Increase awareness through COLS planner program, student-focused web resources, and outreach

- Provide workshops & training in collaboration with the Foundation for Critical Thinking & Tennessee Tech University
- Launch annual "Critical Thinking Development Day"
- Establish internal digital repository with instructional resources and sample materials



ASSESSMENTS & INDICATORS

Within Course

Pre-test

Formative Rubric Assignments

Post-test

Program Level

ETS Pre-test in COLS 101

ETS Exit Exam

CCSSE & Internal Survey



- Internal Faculty Survey
- Adoption & Professional Development Enrollment Metrics
- Repository Access Data

OUTCOMES

Student Learning Outcomes:

- SLO 1 - Points of View
- SLO 2 - Evidence
- SLO 3 - Concepts
- SLO 4 - Assumptions
- SLO 5 - Analysis
- SLO 6 - Implications

Program Success Outcomes:

- PSO 1 - Student Enrollment
- PSO 2 - Student Attitudes
- PSO 3 - ETS Performance

Program Success Outcomes:

- PSO 4 - Faculty Enrollment
- PSO 5 - Faculty Attitudes
- PSO 6 - Faculty Development



Actions to Support Goal 1

In support of Goal 1 – to increase student’s critical thinking skills within the context of specific courses and overall – the college will implement critical thinking interventions and assessments in select gateway courses through a staggered cycle of development – pilot – implementation. The specific courses targeted for this initiative have been selected based on ongoing work at the college to assess and track student performance in early gateway courses along with resulting student persistence toward degree objectives and completion. As part of those ongoing efforts, the college’s Strategic Enrollment Management (SEM) Team created a database of gateway courses for each degree pathway based on feedback from faculty at the college as well as data and guidance from the Tennessee Board of Regents. The QEP Steering Committee built upon the work of the SEM team and selected the following list of potential gateway courses to target for implementation for the QEP:

- *ENGL 1010 – English Composition I*
- *MATH 1530 – Introductory Statistics*
- *HIST 2010 – Early United States History*
- *COMM 2025 – Fundamentals of Communication*
- *PHYS 2110 – Calculus-based Physics I*
- *SOCI 1010 – Introduction to Sociology*
- *PSYC 1030 – Introduction to Psychology*
- ENGL 1020 – English Composition II
- BIOL 2010 – Human Anatomy & Physiology I
- CHEM 1110 – General Chemistry I
- HIST 2020 – Modern United States History
- MATH 1910 – Calculus I

Courses listed in italics have undergone preliminary discussions for a lead faculty member (see the following organization structure discussion in Section VIII) and scheduling for implementation (see Section X); the remaining courses are listed here as potential candidates that have been identified by the QEP Steering Committee due to their importance as key gateway courses in multiple degree pathways but have not yet been scheduled for implementation.

An analysis for the past five academic years of student enrollment in these target courses is provided in the data table on the next page. In addition to serving as key gateway courses identified by SEM review (and by the Tennessee Board of Regents as courses in which student success serves as a predictor of persistence towards degree completion) – the combined course-list was chosen to ensure that it would reach most of the college’s student population in any given year upon full implementation of the QEP. The italicized sub-list of courses – intended to be in place by Spring 2025 – will result in approximately 70-80% of the student population enrolled in at least one critical thinking course each year; the full list of currently targeted courses will extend the reach of the initiative to 80-90% of students.

Columbia State Community College Targeted Course Enrollments for Past Five Academic Years

Courses in *italics* have undergone discussions for a lead faculty member and schedule for implementation.

Course	FA17 – SU18	FA18 – SU19	FA19 – SU20	FA20 – SU21	FA21 – SU22
<i>ENGL 1010</i>	2489	2854	2780	2583	2408
<i>MATH 1530</i>	1755	1964	1874	1687	1557
<i>HIST 2010</i>	1057	1027	1077	1038	907
<i>COMM 2025</i>	N/A	1202	1499	1412	1270
<i>PHYS 2110</i>	67	83	82	49	52
<i>SOCI 1010</i>	655	607	659	587	504
<i>PSYC 1030</i>	1115	1150	1232	1098	835
ENGL 1020	1731	1837	1948	1832	1569
BIOL 2010	898	957	949	778	674
CHEM 1110	392	398	353	376	311
HIST 2020	882	1050	1026	1007	854
MATH 1910	228	288	235	200	195
Total Student Enrollment – Fall Semesters					
	FA17	FA18	FA19	FA20	FA21
	5938	6221	6313	5926	5385
Number of unique students who took ≥ 1 of the <i>italicized</i> courses each year.					
	FA17 – SU18	FA18 – SU19	FA19 – SU20	FA20 – SU21	FA21 – SP22
	4111 (69.2%)	4781 (76.9%)	4949 (78.4%)	4766 (80.4%)	3977 (73.9%)
Number of unique students who took ≥ 1 of the full list of courses each year.					
	FA17 – SU18	FA18 – SU19	FA19 – SU20	FA20 – SU21	FA21 – SP22
	4939 (83.2%)	5506 (88.5%)	5549 (87.9%)	5427 (91.6%)	4489 (83.4%)

Before a particular course comes onboard as a critical thinking designated course, a lead faculty member will be responsible for drafting a course-specific intervention and assessment plan – including adapting the college-wide critical thinking rubric (see Appendix B) and template materials provided in Online Campus – and submitting the plan for approval (see Appendix H for an example). The college-wide critical thinking rubric directly corresponds with the student learning outcomes identified in Section V. Budget considerations have been authorized to provide a small stipend to lead faculty members for this work (see Section IX – Resources).

The course will undergo a pilot offering in a single section and review before having the course materials extended to other sections in following semesters. This pilot offering – along with any subsequent offerings – will be identified by a critical thinking designation in the college schedule of courses each

term. Upon full course approval, any faculty member teaching that critical thinking designated course must then use the critical thinking rubric to grade those assignments, implement the approved pre- and post-test assessments, administer a student survey, and complete the faculty survey at the end of the course. This will allow faculty from each department to have consistent curriculum of critical thinking in their discipline. It will also provide assessment materials to the QEP leads, allowing for adaptations to take place if the need arises.

The college is making changes to its introductory student success course, COLS 101 – College Success, to support the critical thinking designated courses and emphasize critical thinking as a key part of the college trajectory. On the instruction side, this will include changes to the content presented in COLS 101 to include a module targeting critical thinking (see Appendix F). This module will include a research-based description of critical thinking, discussion of the applicability of critical thinking as a desired skill for future coursework and employment, an assignment for students to take a pre-test administration of the ETS Proficiency Profile and review their critical thinking proficiency score, and a forward look at how critical thinking coursework targeting the student learning outcomes will help prepare them for the college's exit exam (the ETS Profile) and future success.

In addition to providing students an important measurement and opportunity for reflection, the aspiration is for the pre-test administration to draw the current application of the ETS Proficiency Profile used by the college as an exit exam into a clearer trajectory for students. Since students now know where they are starting, the finish line – the general education exit exam and completion of their coursework – now represents a more meaningful bookend. Moreover, the college is making additional changes to the exit exam administration itself by creating an incentive program to support strong exit exam performance. High performing students will earn certification designating their exceptional performance, while a wider band of students will have a chance to win scholarship funds (drawn at random from graduating students scoring above the national mean in the critical thinking subscore). The goal of the drawing for funds is to provide incentive to help encourage those students who may not otherwise perform at the top of the class but are still capable of improvement.

The college will seek to further foster this critical thinking trajectory in additional ways. First, to emphasize critical thinking amongst the student population, students will be presented with promotional branding and information about critical thinking and the importance of the QEP as part of the COLS planner provided for all students enrolled in COLS 101. These college planners contain additional valuable information about college functions and schedules. For the duration of the QEP, the COLS 101 planner will prominently feature the QEP logo “Thinking Critically, Growing Purposefully” along with information about the QEP such as the student learning outcomes, the college-wide rubric, and a narrative

detailing the importance of critical thinking for future coursework and careers. The college will launch a public-facing webpage with additional information about the QEP and a resource section for students with tips for emphasizing their critical thinking coursework in college applications and resumes. Outreach events through student organization events will further emphasize the importance of critical thinking to the college and to student success.

Actions to Support Goal 2

The foundation of support for students – in their pursuit of gains in critical thinking performance – depends upon fortification of the college’s instructors. Therefore, the second core goal of the QEP is to expand professional development opportunities for college faculty and staff targeting the instruction and assessment of critical thinking. The college has allocated funding to expand professional development opportunities through three main avenues: 1) to deliver outside resources and information about best practices, 2) to provide presentations and development opportunities from critical thinking experts and 3) to create internal critical thinking development opportunities for faculty and staff. For the initial stages of the QEP, the QEP Steering Committee has decided to start with two main offerings for professional development – a college-wide subscription to the Foundation for Critical Thinking and a combination of presentation and workshop collaborations with critical thinking experts such as the Tennessee Tech University (TTU) creators of the Critical-thinking Assessment Test (CAT). Later years may employ other professional development speakers or programs.

In addition, the college will launch an annual “Critical Thinking Development Day.” This annual event is geared toward promoting collaboration amongst full-time and part-time faculty at Columbia State Community College and facilitating the creation and distribution of effective critical thinking course materials. This event will be held during the in-service period for college faculty and staff, supported with funding for food and workshop resources from the allocated QEP budget, and combine a guest lecture/presentation from a critical thinking expert with time windows for faculty and staff to collaborate on creating research-based critical thinking materials. To encourage the distribution of effective materials, there will also be opportunities for faculty to share effective critical thinking interventions and practices from their own classes with other faculty and adjunct instructors.

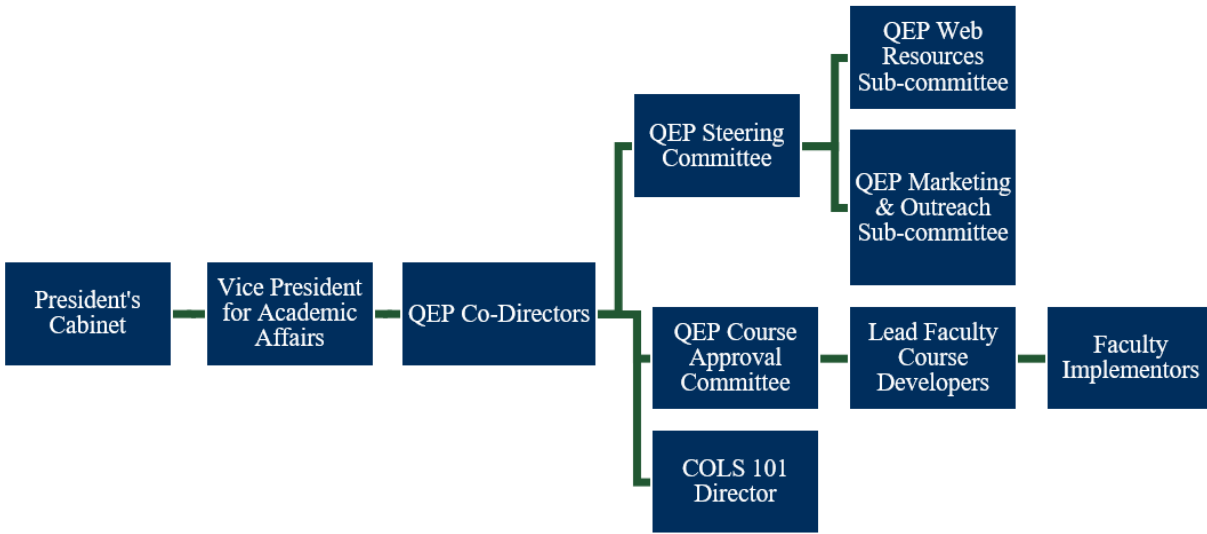
The college will help facilitate the creation and distribution of critical thinking course materials through the development of a centralized online repository within Online Campus (D2L). The goal of this repository is two-fold: (1) it will ensure that faculty have access to example materials from other critical thinking courses as well as templates to efficiently create new critical thinking course elements and (2) it will anchor continuity of the project among multiple instructors within the same disciplines. In addition to

providing an editable and ADA-compliant implementation of the college-wide critical thinking rubric, this repository will house template pages for web-enhanced courses for critical thinking objectives, syllabus statements, and example tasks and applications of the rubric. Faculty who are not currently involved with the critical thinking initiative will also be able to easily “opt in” to the primary repository.

Finally, the college will highlight the work of critical thinking lead faculty and critical thinking courses in college-wide newsletter mailings and convocation gatherings, provide trainings for faculty on using Online Campus tools like the web-version of the critical thinking rubric, and provide advising materials so that college advisors can help students to understand the rationale of critical thinking designated courses and motivate students to pursue them.

VIII. Organization Structure to Support the QEP (7.2d)

Columbia State Community College has established the necessary leadership positions and supporting administrative structure to guide the “Thinking Critically, Growing Purposefully” QEP initiative. An overview of the college’s QEP organizational structure is provided in the following chart. Two faculty members – representing the STM and HASS divisions at the college – will oversee the guidance of the program as co-directors. The QEP co-directors report to the Vice President for Academic Affairs and are supported by an interdisciplinary Steering Committee. Over the five-year QEP period, the QEP Steering Committee is tasked to identify and provide professional development opportunities for college faculty and staff, to collect and analyze student learning and success outcome data, to curate an online resource repository for faculty and staff to be housed within Online Campus, and to develop and provide information, marketing, and resources to students and college community members in support of the QEP. As necessary, the QEP Steering Committee will establish sub-committees – and recruit members as part of the college’s annual revisions of committee guidelines – to target specific QEP-related tasks. For the first year of the program the QEP Steering Committee has established two sub-committees, targeting early development tasks with online resources and QEP marketing and outreach efforts. As the initiative develops, an additional committee – a Data Team that incorporates members from the Institutional Effectiveness and Research and Information Technology departments at the college – will be formed to help distribute leadership and monitoring of the QEP. This QEP Data Team will report their findings to the QEP co-directors.



Current organizational chart for QEP leadership and administration.

On the instructional side, the college is establishing a QEP Course Approval Committee. The QEP Course Approval Committee will be responsible for approving and providing feedback on the intervention and assessment plan of new courses targeted for inclusion in the QEP. Membership will consist of the two QEP co-directors, rotating members of the QEP Steering Committee, rotating members of the college Curriculum and General Education Committees, the Vice President for Academic Affairs, and the Assistant Vice President for Faculty, Curriculum and Programs.

To bring a course onboard, the lead faculty member responsible for the development of that course will submit a brief narrative describing the novel instructional interventions targeting critical thinking, along with the formative assessment items and multiple-choice summative items to their corresponding division dean. Upon approval, the pilot plan will be submitted to the QEP Course Approval Committee for review at its semesterly meeting. Then, after the pilot semester, the lead faculty for the course will provide an update to the QEP Course Approval Committee – detailing any further changes necessary before the course is prepared for broader implementation beyond the pilot section.

For the first year of the program, the QEP Course Approval Committee will hold a joint meeting with the college’s General Education Committee (*non-voting, advisory role*) to review the developed QEP pilot proposals. The goal of this effort is to help quickly disseminate knowledge of the QEP development and approval process and identify any valuable revisions early in the life of the program.

IX. Resources (7.2d)

In February 2022, the QEP Steering Committee drafted a preliminary budget and submitted it to the President’s Cabinet for review and approval. The Cabinet approved the preliminary funding allocation for the QEP on 3/4/22. As shown in the table on the following page, the QEP budget will support the QEP throughout its lifetime with allocations for elements, such as (1) release time for QEP leadership, (2) re-allocation of support staff, (3) professional development opportunities through an annual “Critical Thinking Development Day,” (4) additional supporting workshops and resources, (5) an expanded pre-testing effort via the ETS Proficiency Profile, (6) an exit exam incentive program for students, (7) faculty incentives for development of critical thinking resources and pilots of critical thinking course assessments, and (8) a marketing budget that includes the student-focused elements like the student-led art contest and distribution of student planners with QEP-related imagery and information. Each of the items included in the budget table are described briefly in the following section.

Critical Thinking Development Day: The annual Critical Thinking Development Day is essential for accomplishing Goal 2 of our QEP: *provide more professional development opportunities for faculty targeting teaching and implementation of critical thinking assignments into their courses*. The amount provided should cover estimated costs of the guest speaker, lunch boxes, and workshop materials.

Professional Workshops and Resources: This budget item covers continual institutional membership to the Critical Thinking Community, which costs \$3,600 yearly (*Membership Fees, 2022*). This would potentially be offered each year to our college, providing them with critical thinking resources led by experts in the field. In addition to this and the Critical Thinking Developing day, an additional workshop led by critical thinking scholars (some possibilities under consideration are Tennessee Tech University and The Foundation for Critical Thinking) would be offered to faculty developers who are working on piloting critical thinking courses in their various disciplines. This additional workshop would be offered on a bi-annual method, allowing more time for faculty to develop their materials and on-board their departments. Workshops like this could cost approximately \$5,995-\$6,995 for 25 faculty members to be able to participate according to personal email correspondence with Lisa Sabend, Executive Assistant to the President of The Foundation for Critical Thinking.

QEP Leadership Release Time: The QEP co-directors are provided with 3 credit hour release time to be able to accomplish their additional responsibilities of overseeing, organizing, and implementing the QEP throughout the life of the program. The summer 2022 stipend is provided for the co-directors to be able to work on revising the QEP proposal for submission by the end of the summer.

Proposed QEP Budget Approved by Cabinet on 3/4/22	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	Total
Human Resources							
Annual Critical Thinking Development Day	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000		\$20,000
Professional Development Workshops & Resources	\$3,600	\$10,600	\$3,600	\$10,600	\$3,600		\$32,000
QEP Co-director (x2) Summer Stipend (3-hour equivalent)	\$9,200						\$9,200
QEP Co-director (x2) Fall/Spring Release Time (3-hr/semester)	\$19,500	\$19,500	\$19,500	\$19,500	\$19,500	\$19,500	\$117,000
Cost of part-time faculty for QEP Co-director replacement	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$25,200
Faculty Incentives for Development of Course Materials	\$2,000	\$2,000	\$2,000	\$2,000			\$8,000
Faculty Incentive for Pilot Implementation	\$1,000	\$1,000	\$1,000	\$1,000			\$4,000
Reassignment of Professional Staff Time	\$30,250	\$30,250	\$30,250	\$30,250	\$30,250	\$30,250	\$181,500
Assessment Costs							
ETS Pre-test Online (Pre-assessment)	\$15,500	\$15,500	\$15,500				\$46,500
Incentives for Students Performance on ETS Post-test	\$1,750	\$1,750	\$1,750	\$1,750	\$1,750	\$1,750	\$10,500
Marketing Budget							
Marketing Budget (Flyers, promotional materials)	\$11,475						\$11,475
COLS 101 Planners	\$2,125	\$2,125	\$2,125	\$2,125	\$2,125	\$2,125	\$12,750
Operating Resources Technology							
Supplies, copies	\$2,750	\$2,750	\$2,750	\$2,750	\$2,750	\$2,750	\$16,500
Total Cost							\$494,625

Faculty Incentives: This budget item is to provide incentive to those faculty lead developers who will be spending additional time developing their courses to meet the standards of a critical thinking course and receive approval from the QEP Course Approval Committee.

Reassignment of Professional Staff Time: Estimate is based on job-role adjustments due to the additional tasks that would be placed upon specific staff members, such as Glenna Winters, who oversees the Online Campus course shells, and Ryan Moore, who is an IT specialist that can help us track student's enrollment and progress throughout their time at Columbia State.

ETS Pre-Test: The need for a pre-test of the ETS is essential for assessing the progress of students from their entry to their exit at Columbia State.

Exit Exam Incentives: Currently, there is not an actual incentive for students to perform well on the ETS Exit Exam. It is important that students begin to take this exam more seriously so that it can be more effectively assessed as to their actual knowledge and abilities. The QEP Steering Committee decided that it was important to provide student incentives in the form of special recognition for top performance levels and a chance to win a scholarship if they place above the national mean in the critical thinking subscore. This budget amount is for both the recognition, potential certificates, and cash incentives to increase student interest and engagement in the ETS Exit Exam.

Marketing: Marketing budget is necessary to inform students and college employees of the upcoming QEP, what it is, and how it relates to them (refer to Appendix E).

COLS 101 Planner Program: The COLS 101 planners are an excellent and significant place for incoming students to know Columbia State's commitment to the QEP and to know what that plan is and how they can benefit from it. The cost to provide COLS planners to a typical semester enrollment of COLS 101 is approximately \$8500. The QEP budget will provide an additional 25% in funding (\$2125) to allow for custom cover imagery, additional informational pages, and branding.

Operating Resources: Supplies and copies may be needed throughout the program, so a small amount was set aside for potential costs of these supplies.

X. Timeline (7.2d)

The college is committed to “growing purposefully” – a prominent point of feedback from faculty and staff in the QEP topic selection process was that the eventual topic should be one that could grow across disciplines. Therefore, the college is establishing a timeline to gradually expand the QEP program throughout the life of the QEP, while allowing opportunities for revisions and adjustments. The overall proposed timeline is indicated in the diagram on the following pages.

The first course to be developed as a critical thinking course is the COLS 101 class for incoming first-year students (see Appendix F for an example of an instructor guide to addressing Critical Thinking as a module of the class). This is where the ETS Proficiency Exam as a pre-test assessment will be offered along with a module teaching students about the importance of developing their critical thinking skills and ways to begin that development. This class will be implemented for the first time with the ETS Proficiency Exam in Fall 2022 to see where students are currently at in their critical thinking abilities. It will be implemented in all COLS 101 course sections (a population of over 1,000 students). The ETS Proficiency Profile will continue to be offered as a pre-test in COLS 101 for three years (through Fall 2025) at which point the college will evaluate its value and effectiveness. Based on this review, the college will decide to continue with the ETS Profile as the college pre-test or to replace it with an internal alternative (potentially developed by the college in collaboration with Tennessee Tech University).

The Fall 2022-Spring 2023 academic year will also establish the first QEP Course Approval Committee as part of the college committee guidelines. The QEP Course Approval Committee will meet at least once in early Fall 2022 and twice in Spring 2023 to review the proposals and performance of the first courses targeted for pilot implementation – ENGL 1010 and HIST 2010 for pilot in Spring 2023, and PHYS 2110 and PSYC 1030 in Fall 2023. The QEP Course Approval Committee will then continue to meet on a semesterly schedule to review upcoming pilot proposals and subsequent performance reports prior to expanded implementation, with membership updated during the annual revision of committee guidelines (see Appendices G and H for the requirements and a sample course proposal guidelines to be considered by the Approval Committee).

Professional Development opportunities will begin in the Fall 2022-Spring 2023 academic year and continue annually throughout the life of the QEP. This includes the establishment of the internal “Critical Thinking Development Day,” which will have its inaugural session during the Convocation week of Spring 2023. Along with continual annual professional development offered through the college-wide Foundation for Critical Thinking membership (or similar resources), an in-depth 2-day workshop for 20-25 QEP lead faculty is currently scheduled for Fall 2023, with another offering to occur in 2025-2026.

The current schedule anticipates the creation and full implementation of the COLS 101 critical thinking module and 7 general education courses (ENGL 1010, HIST 2010, PHYS 2110, SOCI 1010, PSYC 1030, COMM 2025, MATH 1530) by the end of the Fall 2024-Spring 2025 academic year. Based on progress in achieving these implementations, the intent is to then extend the program to additional gateway courses based on lead faculty availability and course success measures. The college is also exploring the possibility of including several higher-level course offerings – in particular the Health Sciences programs, where there has been indicated interest at the college in targeting the critical thinking learning outcomes.

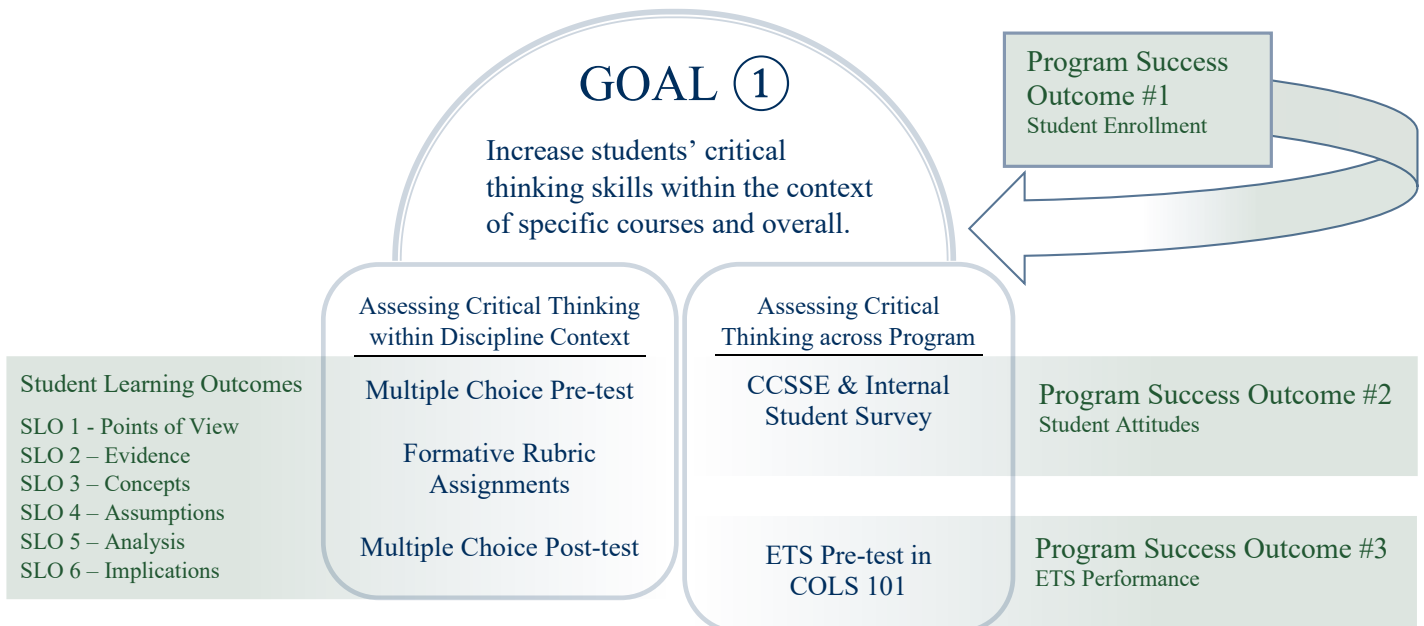
QEP Development Timeline			
Year	Semester	Item	Person(s) Responsible
2022-2023	Summer	Prepare and submit SACSCOC QEP Report	QEP Co-Directors, QEP Steering Committee, Vice President for Academic Affairs, President’s Cabinet
		Order marketing materials and prepare campus signage	Marketing & Outreach Sub-Committee, Director of Communications
		Launch public QEP information webpages	Web Resources Sub-Committee
	Fall	Launch ETS pre-test & module in COLS 101	COLS 101 Director, QEP Steering Committee, Director of Testing Services, COLS Faculty
		Launch Critical Thinking Planners – COLS 101	COLS 101 Director, QEP Co-Directors, COLS Faculty
		Provide initial membership access to Foundation for Critical Thinking resources	QEP Steering Committee
		Form QEP Approval Committee	Vice President Academic Affairs
		Establish online QEP repository (for faculty)	Web Resources Sub-Committee
		Onsite visit (October 3-6)	QEP Co-Directors and Steering Committee
		ENGL 1010/HIST 2010 proposals submitted/approved	Faculty Course Developers - ENGL/HIST, QEP Course Approval Committee
	Spring	ENGL 1010/HIST 2010 pilot offerings	Faculty Course Developers - ENGL/HIST
		ENGL 1010/HIST 2010 pilot summary and revision reports (submitted at end of semester)	Faculty Course Developers - ENGL/HIST, QEP Course Approval Committee
		Launch student-facing QEP webpages	Web Resources Sub-Committee
		Launch ETS post-test incentives	Vice President Academic Affairs, Director of Testing Services
		Form Data Team	QEP Co-directors, Vice President Academic Affairs
		Launch first annual “Critical Thinking Development Day” – with invited expert speaker	QEP Co-Directors and Steering Committee
		PHYS 2110/PSYC 1030 proposals submitted/approved	Faculty Course Developers (PHYS/PSYC), QEP Course Approval Committee
		Administer CCSSE	Associate VP and Director of Institutional Effectiveness/Research
Administer Faculty Survey		QEP Co-Directors and Steering Committee	
Explore revision of COLS 101 – Critical Thinking Module		COLS 101 Director, QEP Co-Directors and Steering Committee	

2023-2024	Fall	Review 2022-2023 ETS pre-post test data, CCSSE, and Faculty Surveys collected in Spring 2023	QEP Data Team, QEP Steering Committee
		ENGL 1010/HIST 2010 course expansion	ENGL/HIST Faculty
		PHYS 2110/PSYC 1030 pilot offerings	PHYS/PSYC Faculty Course Developers
		PHYS 2110/PSYC 1030 pilot summary and revision reports (submitted at end of semester)	Faculty Course Developers (PHYS/PSYC), QEP Approval Committee
		Offer 2-day workshop for critical thinking course developers	QEP Co-Directors and QEP Steering Committee
		SOCI 1010/COMM 2025 proposals submitted/approved	Faculty Developers and QEP Approval Committee
	Spring	PHYS 2110/PSYC 1030 course expansion	PHYS/PSYC Faculty
		SOCI 1010/COMM 2025 pilot offerings	SOCI/COMM Faculty Developers
		SOCI 1010/COMM 2025 pilot summary and revision reports (submitted at end of semester)	SOCI/COMM Faculty Developers, QEP Approval Committee
		Critical Thinking Development Day	QEP Co-Directors and QEP Steering Committee
		Math 1530 proposal submitted/approved	MATH Faculty Developer(s) and QEP Approval Committee
		Administer Internal Student Survey	QEP Co-Directors and Steering Committee
Administer Faculty Survey	QEP Co-Directors and Steering Committee		
2024-2025	Fall	Review 2023-2024 ETS pre-post data/in-course data, internal student and faculty survey data collected in Spring 2024	QEP Data Team, QEP Steering Committee
		SOCI 1010/COMM 2025 course expansion	SOCI/COMM Faculty
		MATH 1530 pilot offering	MATH Faculty Developer(s)
		MATH 1530 pilot summary and revision reports (submitted at end of semester)	Faculty Developers and QEP Approval Committee
		Evaluate ETS Pre-test for continued administration or substitution	QEP Data Team, QEP Steering Committee
	Spring	MATH 1530 course expansion	MATH Faculty
		Critical Thinking Development Day	QEP Co-Directors and QEP Steering Committee
		Pilot and extend to other key gateway courses	Faculty Course Developers, QEP Course Approval Committee
		Administer CCSSE	Associate VP and Director of Institutional Effectiveness/Research
		Administer Faculty Survey	QEP Co-Directors and Steering Committee

2025-2028	Offer 2-day workshop for critical thinking course developers	QEP Co-Directors and QEP Steering Committee
	Pilot and extend to other key gateway and upper-level courses (Health Sciences)	Faculty Course Developers, QEP Course Approval Committee
	Critical Thinking Development Day	QEP Co-Directors and QEP Steering Committee
	Review ETS post data/in-course data, CCSSE, Internal Student and Faculty Survey	QEP Data Team, QEP Steering Committee
	Administer CCSSE (odd year) OR Internal Student Survey (even year)	Associate VP and Director of Institutional Effectiveness/Research
	Administer Faculty Survey	QEP Co-Directors and Steering Committee
2028	Prepare and submit QEP Summary Report	QEP Co-Directors, QEP Steering Committee, Vice President Academic Affairs, President’s Cabinet

XI. Assessment (7.2e)

The QEP co-directors attended SACSCOC conferences in Summer 2021 and December 2021 and participated in many sessions on developing the QEP, particularly the assessment plan. Based on extensive collaboration with the Steering Committee and President’s Cabinet, the co-directors decided to create an assessment plan that assesses the program at two scales: (a) within the context of specific courses and (b) overall across the college trajectory. The graphic below demonstrates the levels of assessment to be used in measuring students’ critical thinking skills throughout the course of the program.



Assessment of critical thinking over the college curriculum will be based primarily on the ETS Proficiency Profile – which is already used by the college as an exit exam to assess certain general education outcomes and will now be expanded in administration to gather pre-program data. To provide a baseline measurement of critical thinking ability and to more cleanly tie the college exit exam into the student trajectory, the ETS Proficiency Profile and a corresponding motivation of critical thinking will be implemented in COLS 101: College Success, the college’s first-year-experience course. Efforts to support the exit exam as an authentic measure of student ability will also be implemented, such as an increased visibility of strong student performance (potentially through web-site acknowledgement, certification designation, or similar initiatives) and availability of scholarship funds.

Supplemental attitudinal data regarding the student experience with critical thinking will be provided via the CCSSE (question items 5b-f and 11d; see table below for item summary) and an internal student survey. The CCSSE is administered at the college once every two years. To complement the CCSSE data in off-years, students will complete the internal survey targeting the restricted set of relevant question items (5b-f, 11d) and additional critical thinking-related attitudinal items.

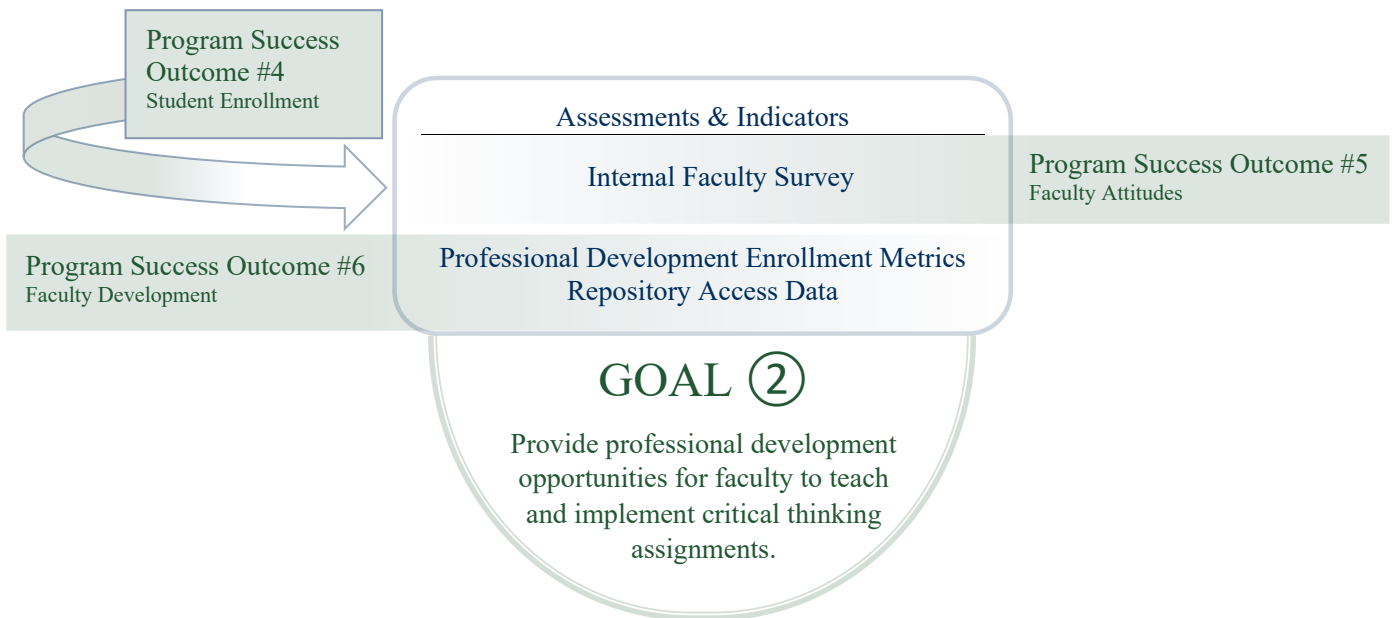
CCSSE Critical Thinking Items
During the current school year, how much has your coursework at this college emphasized the following mental activities? (1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much)
5b. Analyzing the basic elements of an idea, experience, or theory.
5c. Synthesizing and organizing ideas, information, or experiences in new ways.
5d. Making judgements about the value or soundness of information, arguments, or methods.
5e. Applying theories or concepts to practical problems or in new situations.
5f. Using information you have read or heard to perform a new skill.
How much has your experience at this college contributed to your knowledge, skills and personal development in the following areas? (1 = Very little, 2 = Some, 3 = Quite a bit, 4 = Very much)
11d. Thinking critically and analytically.

Assessment of student Critical Thinking within the context of a specific course or discipline will be conducted via the (a) formative, college-wide, ADA compliant Critical Thinking rubric (Appendix B) and (b) course-specific Critical Thinking multiple choice questions targeting the student learning outcomes denoted by the Critical Thinking rubric. One of the key advantages of the college-wide rubric is it provides the opportunity to emphasize the student learning outcomes across disciplines – establishing a common reference and expectations for students as they progress through their coursework. As such, the rubric has been set up to directly denote the subskills for a task associated with the student learning

outcomes listed in Section V. Although an individual application of the rubric is given some flexibility to address a subset of the full learning outcomes (pick 4 of 6), all the student learning outcomes will be addressed by at least one formative assessment in the course (see preliminary sample assignments in Appendices J and K). In addition, to assess the effectiveness of the collected formative assignments, each course will include a set of multiple-choice questions – to be administered pre- and post- course instruction – that target the complete set of learning outcomes (see sample in Appendix I). These course-specific assessment items will be developed and reviewed as part of piloting a new Critical Thinking course.

The student learning outcomes and corresponding formative and summative assessments at the course-level – and program success outcomes of ETS performance (PSO-3) and student attitudes (PSO-2) at the program level – form the foundation of the assessment plan for Goal 1: *Increase students’ critical thinking skills within the context of specific courses and overall.* There are many benefits of the current assessment plan: (1) it is adaptable for all divisions and departments (2) it gives consistent evaluation criteria for clarity for both students and faculty (3) it builds upon the existing assessment structures already in place at the college in a sustainable way (4) it provides both broad-spectrum critical thinking performance data as well as discipline specific data (5) it does not overly increase faculty workload and (6) it implements both formative and summative types of assessment.

The success of these outcomes depends on the involvement of college faculty and the pursuit of Goal 2: *Provide professional development opportunities to teach and implement critical thinking assignments.*



As such, the college will assess its progress towards faculty development (PSO-6) via metrics in college-provided professional development opportunities – such as the Critical Thinking Development Day and series of 2-day workshops – as well as faculty access statistics for the online repository of critical thinking resources. In addition, faculty instructors of critical thinking designated courses will be required to complete a survey to monitor faculty’s familiarity with critical thinking pedagogy, confidence in its application, and perception of student’s overall growth and comprehension of critical thinking in the classroom (PSO-5).

Progress in “growing purposefully” will be assessed by compliance with the program success outcomes of PSO-1 (student enrollment) and PSO-4 (faculty enrollment). The QEP Data Team will track and report annual student enrollment in critical thinking courses and the percentage of faculty teaching those sections. These serve as measures on college progress in implementing the diverse set of critical thinking courses and expanding the roster of students participating in these courses.

XII. References

- Abrami, P. C., Bernard, R. M., Borokhovski, E., Wade, A., Surkes, M. A., Tamim, R., & Zhang, D. (2008). Instructional interventions affecting critical thinking skills and dispositions: A stage 1 Meta-Analysis. *Review of Educational Research*, 78(4), 1102–1134. <https://doi.org/10.3102/0034654308326084>
- Ärleböck, J. B., & Albarracín, L. (2019). The use and potential of Fermi problems in the STEM disciplines to support the development of twenty-first century competencies. *ZDM*, 51(6), 979–990. <https://doi.org/10.1007/s11858-019-01075-3>
- Associates, H. R. (2015). Falling short? College learning and career success. *Association of American Colleges and Universities*.
- Behar-Horenstein, L. S., & Niu, L. (2011). Teaching critical thinking skills in higher education: A review of the literature. *Journal of College Teaching & Learning (TLC)*, 8(2).
- Bezanilla, M. J., Fernández-Nogueira, D., Poblete, M., & Galindo-Domínguez, H. (2019). Methodologies for teaching-learning critical thinking in higher education: The teacher's view. *Thinking Skills and Creativity*, 33, 100584. <https://doi.org/https://doi.org/10.1016/j.tsc.2019.100584>
- Bissell, A. N., & Lemons, P. P. (2006). A New Method for Assessing Critical Thinking in the Classroom. *BioScience*, 56(1), 66–72. [https://doi.org/10.1641/0006-3568\(2006\)056\[0066:ANMFAC\]2.0.CO;2](https://doi.org/10.1641/0006-3568(2006)056[0066:ANMFAC]2.0.CO;2)
- Campus Life*. Columbia State Community College. (n.d.). Retrieved June 27, 2022, from <https://www.columbiastate.edu/campus-life/>
- Çavdar, G., & Doe, S. (2012). Learning through Writing: Teaching Critical Thinking Skills in Writing Assignments. *PS: Political Science & Politics*, 45(2), 298–306. <https://doi.org/DOI:10.1017/S1049096511002137>
- Columbia State Professor Publishes Seventh Poetry Collection*. Columbia State Community College. (2022, April 25). News Columbia State Community College. Retrieved June 27, 2022, from https://www.columbiastate.edu/news/details/2022/04/columbia_state_professor_publishes_seventh_poetry_collection.html
- DeAngelo, L., Hurtado, S., Pryor, J. H., Kelly, K. R., Santos, J. L., & Korn, W. S. (2009). The American college teacher: National norms for the 2007-2008 HERI faculty survey. *Los Angeles: Higher Education Research Institute, UCLA*.
- Elder, L., & Paul, R. (2010). Critical Thinking: Competency Standards Essential for the Cultivation of Intellectual Skills, Part 1. *Journal of Developmental Education*, 34(2), 38–39. <http://www.jstor.org/stable/42775362>
- Elder, L., & Paul, R. (2012). Critical Thinking: Competency Standards Essential to the Cultivation of Intellectual Skills, Part 4. *Journal of Developmental Education*, 35(3), 30–31. <http://www.jstor.org/stable/42775403>
- Facione, P. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction (The Delphi Report)*.

Facione, P. A. (2000). The Disposition Toward Critical Thinking: Its Character, Measurement, and Relationship to Critical Thinking Skill. *Informal Logic*, 20(1). <https://doi.org/10.22329/il.v20i1.2254>

Highlights. Columbia State Community College. (n.d.). Retrieved June 27, 2022, from <https://www.columbiastate.edu/index.html>

Huber, C. R., & Kuncel, N. R. (2016). Does College Teach Critical Thinking? A Meta-Analysis. *Review of Educational Research*, 86(2), 431–468. <http://www.jstor.org/stable/24752860>

Lai, E. R. (2011). Critical thinking: A literature review. *Pearson's Research Reports*, 6(1), 40–41.

Liu, O. L., Frankel, L., & Roohr, K. C. (2014). Assessing Critical Thinking in Higher Education: Current State and Directions for Next-Generation Assessment. *ETS Research Report Series*, 2014(1), 1–23. <https://doi.org/10.1002/ETS2.12009>

Liu, O. L., Mao, L., Frankel, L., & Xu, J. (2016). Assessing critical thinking in higher education: the HEIghten™ approach and preliminary validity evidence. *Assessment & Evaluation in Higher Education*, 41(5), 677–694. <https://doi.org/10.1080/02602938.2016.1168358>

Mao, W., Cui, Y., Chiu, M. M., & Lei, H. (2021). Effects of Game-Based Learning on Students' Critical Thinking: A Meta-Analysis. *Journal of Educational Computing Research*, 59(8), 1682–1708. <https://doi.org/10.1177/07356331211007098>

Membership Fees. The Critical Thinking Community. (n.d.). Retrieved July 15, 2022, from <https://community.criticalthinking.org/membershipFees.php>.

Our History. Columbia State Community College. (n.d.). Retrieved June 27, 2022, from <https://www.columbiastate.edu/about-us/our-history.html>

Paul, R., & Elder, L. (2011a). Critical Thinking: Competency Standards Essential for the Cultivation of Intellectual Skills, Part 2. *Journal of Developmental Education*, 35(1), 36–37. <http://www.jstor.org/stable/42775855>

Paul, R., & Elder, L. (2011b). Critical Thinking: Competency Standards Essential for the Cultivation of Intellectual Skills, Part 3. *Journal of Developmental Education*, 35(2), 34–35. <http://www.jstor.org/stable/42775947>

Paul, R., & Elder, L. (2012). Critical Thinking: Competency Standards Essential to the Cultivation of Intellectual Skills, Part 5. *Journal of Developmental Education*, 36(1), 30–31. <http://www.jstor.org/stable/42775414>

Pithers, R. T., & Soden, R. (2000). Critical thinking in education: a review. *Educational Research*, 42(3), 237–249. <https://doi.org/10.1080/001318800440579>

Recognition. Sigma Kappa Delta The National English Honor Society for Two-Year Colleges. (n.d.). Retrieved June 27, 2022, from <https://www.english2.org/recognition.php>

Seibert, S. A. (2021). Problem-based learning: A strategy to foster generation Z's critical thinking and perseverance. *Teaching and Learning in Nursing*, 16(1), 85–88. <https://doi.org/https://doi.org/10.1016/j.teln.2020.09.002>

Snyder, L. G., & Snyder, M. J. (2008). Teaching critical thinking and problem solving skills. *The Journal of Research in Business Education*, 50(2), 90.

Strategic Plan 2020-2030. Columbia State Community College. (n.d.). Retrieved June 27, 2022, from <https://www.columbiastate.edu/about-us/documents19/7.1c-2020-Planning-Manual.pdf>

Tsui, L. (1999). Courses and instruction affecting critical thinking. *Research in Higher Education*, 40(2), 185–200.

2022 Soar Award Winners. Tennessee Board of Regents. (n.d.). Retrieved June 27, 2022, from <https://www.tbr.edu/external-affairs/soar>

van Gelder, T. (2005). Teaching Critical Thinking: Some Lessons from Cognitive Science. *College Teaching*, 53(1), 41–46. <http://www.jstor.org/stable/27559216>

XIII. Appendices

Appendix A: Topic Identification White Papers

The following series of two-page white papers – each detailing one of the 4 four finalist topics of consideration – were presented to college faculty and staff as part of the topic identification process. College employees were asked to review the white papers prior to attending college-wide focus groups discussing each potential QEP topic, their supporting data, and implementations. Over 80 faculty and staff attended the virtual feedback groups to discuss the potential topics.

The four final topics of consideration were:

- Critical Thinking
- Transferable Skills
- Peer Assisted Tutoring
- Online Instruction



Quality Enhancement Plan (QEP) – Potential Topic Flyer

PASS: Peer Assisted Study Sessions

Peer Assisted Study Session or "PASS" programs are designed to provide instructional support and increased feedback to students by utilizing student peer tutors to facilitate supplemental student-led study sessions alongside a given course. These student peer tutors are selected based on previous successful performance in the class of interest. As part of the program, student tutors attend the given course to keep current on course progress, make connections to the current students, and help assist with class activities and discussions as applicable. The student tutors lead additional supplemental sessions to complement regular instruction. As such, these efforts are often called supplemental instruction programs and have shown strong success in both increasing student engagement and student course performance.

Research has shown that PASS programs typically lead to an average increase of half-a-letter-grade in course performance and a significant decrease in the number of students who earn a D, F or withdraw from a course.

Supporting Institutional Data

A key element of the SACSCOC criteria for selection and implementation of a QEP is that the QEP should be "directly related to – and arise out of – institutional planning and evaluation processes." The following data points, committee recommendations, and college findings are some of the support for implementing a QEP focused on the development and gradual expansion of a PASS program.

- Results from the SENSE and CCSSE (Community College Survey of Student Engagement) surveys show that the college has ranked slightly below average (a normalized score of 50) for comparable institutions for "Active and Collaborative Learning" and "Support for Learners."

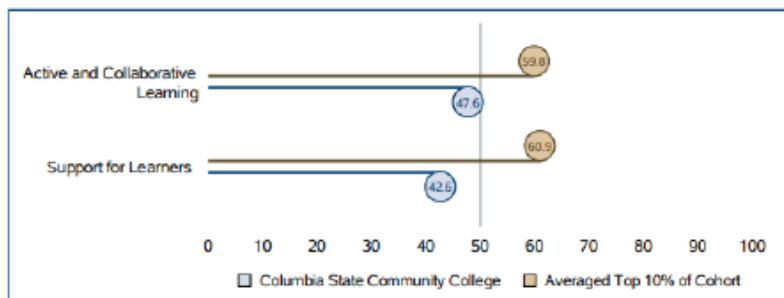


Figure 1. Figure excerpt from 2019 CCSSE Summary Report for CSCC vs a "Medium Colleges" Cohort.

- Ongoing data analysis efforts from the college's SEM (Strategic Enrollment Management) team show that student retention is a critical area of focus for the college. Students who do poorly in "gateway courses" are more at risk to withdraw without finishing their degree. A PASS program targeted specifically at key gateway courses has the potential to help students progress successfully towards their degree.



Quality Enhancement Plan (QEP) – Potential Topic Flyer

What Could a “Peer Assisted Tutoring” QEP look like?

Columbia State already has an excellent tutoring framework and corresponding support staff in the form of the Teaching & Learning Center that could provide a foundation for augmenting current student-tutor offerings and implementing a PASS program. In addition, opportunities exist for Columbia State to consider and adopt existing frameworks and materials for implementing a PASS program, such as via an established PASS program such as those offered by MTSU or UMKC.

Initial stages of the QEP could focus on pilot implementation in specific, targeted “gateway” courses, with expansion to other disciplines over the duration of the program.

Examples of related Quality Enhancement Plans & programs

The following links provide an example of prior QEP efforts that have implemented a PASS program, as well as institutions and programs focused on peer-assisted study session implementations and resources.

- Example QEP: Students Providing Alternative Resources for Knowledge (SPARK)
<https://sacsoc.org/app/uploads/2020/12/GuilfordTechnicalCommunityCollegeQEPSummary.pdf>
- Examples of PASS programs & college website
Middle Tennessee State University: <https://www.mtsu.edu/si/>
- The International Center for Supplemental Instruction: University of Missouri-Kansas City
<https://info.umkc.edu/si/>

Potential questions & useful feedback

Upcoming college focus groups will ask you to consider and rank each potential QEP topic, in order to help make a final recommendation to President’s Cabinet. Some potential questions related to a potential PASS QEP to consider as part of the upcoming feedback process:

- Overall, how interested are you in the college pursuing a PASS program as the next QEP topic?
- For faculty: would you be interested in implementing a PASS tutor for your discipline? What would a supplemental instruction section look like in your discipline?
- What suggestions or concerns would you have for assisting and/or training students to lead peer-assisted study groups?
- What suggestions or concerns do you have regarding promoting the PASS program to students?
- What additional difficulties do you envision in implementing a PASS program, either within your specific discipline or for the college at large?



Critical Thinking

Critical Thinking is one of the most frequent topics selected by 2-year institutions for a QEP for good reason – the ability to analyze and interpret relevant information and apply it to novel situations and problems is often ranked as one of the most desired skills by employers and cited as a key instructional goal across disciplines. Recent national surveys have found that college faculty endorse critical thinking as *the* most important goal of undergraduate education (DeAngelo et al., 2009).

Although the precise definition of critical thinking varies slightly across disciplines and authors, the standard conception is careful structured reasoning that assesses the assumptions and information available and through deliberate processes applies that information to a novel situation, problem, or decision. Research suggests that a combination of direct instruction coupled with corresponding instructional interventions that seek to provide students with practice in applying critical thinking can lead to measurable improvements in student critical thinking abilities within a discipline.

Supporting Institutional Data

A key element of the SACSCOC criteria for selection and implementation of a QEP is that the QEP should be “directly related to – and arise out of – institutional planning and evaluation processes.” The following data suggests that critical thinking is a potential target for a QEP.

- The ETS Proficiency Profile – administered to students in the college’s exit examination – assesses students’ critical thinking abilities. Performance by CSCC graduates is similar to cohort institution averages and shows potential for improvement.

For 2018-2019, on a standardized scale of 100 – 130 (130 being the highest), Columbia State students scored an average score of 112.3 with a standard deviation of 6.0. The cohort average for that year was 110.1 with a standard deviation of 1.7.

However, less than 5% of Columbia State students earn the category ranking of “Proficient” in critical thinking each year (a success rate comparable to other cohort institutions).

- Results from the 2019 CCSSE (Community College Survey of Student Engagement) survey also indicates average performance in several “critical thinking”-related response items in comparison to our institutional cohort, such as “*Analyzing the elements of an idea, experience or theory*” or “*Making judgements about the value or soundness of information, arguments and methods.*”
- A Fall 2020 preliminary topic survey (110 respondents) of college faculty, administrative and support staff rated critical thinking as the most useful for students out of 5 potential topics.

What Could a “Critical Thinking” QEP look like?

Although critical thinking is one of the most frequent QEP topics selected by 2-year institutions, there is a great deal of variability in how such a QEP has historically been implemented– suggesting multiple possibilities for Columbia State. Some institutions have elected to embed their initiatives into a specific course, such as a First Year Experience course or major-specific capstone course. Others have attempted to implement critical thinking-focused interventions within courses across the curriculum. Similarly, assessment methods have ranged from in-house assignments, to standardized exams such as the ETS Proficiency Profile, to attitudinal surveys measuring students’ valuation and disposition towards critical thinking.

Columbia State could adopt one or both of these approaches. College Success (COLS 101) has the potential to be an excellent introductory context for the importance of critical thinking across disciplines and an introduction to generalizable research findings and structured critical thinking strategies. Critical thinking related learning outcomes within general education courses could be augmented with discipline-specific professional development based on current research-based best-practices. This could lead to the creation of collections of discipline-specific instructional interventions over the course of the QEP cycle.

Examples of related Quality Enhancement Plans & programs

The following links provide examples of prior QEP efforts focused on critical thinking.

- QUEST: Critical Thinking in the First Year Experience
[Motlow State Community College](#)
- Building Critical Thinkers Responsible for Life-long Learning
[Nashville State Technical Community College](#)
- Question Every Possibility – Think Critically
[Broward College](#)

Potential questions & useful feedback

Upcoming college focus groups will ask you to consider and rank each potential QEP topic, in order to help make a final recommendation to President’s Cabinet. Some potential questions to consider:

- Overall, how interested are you in the college pursuing a critical thinking QEP?
- What issues do you foresee in motivating students to adopt and participate in a critical thinking QEP?
- What suggestions or concerns do you have regarding assessing critical thinking specifically within your discipline? And for the college at large?
- What additional difficulties do you envision in implementing a critical thinking QEP across the college?



Quality Enhancement Plan (QEP) – Potential Topic Flyer

Transferrable Skills

Transferrable skills are also known as portable, universal, or cross-functional skills and have been previously known as “soft skills.” Transferrable skills are so called because they can be transferred among various careers and positions. While technology will change and students will switch jobs or careers, transferrable skills provide a basis of key competencies adaptable to multiple environments and job requirements.

Transferrable skills are often amongst the top skills identified by employers in their criteria for job applications. Institutions such as Association of American Colleges and Universities (AACU) and the National Association of Colleges and Employers (NACE) identify lists of transferrable skills that include:

- The ability to think effectively
- Ethical judgement and decision-making
- Ability to work in teams
- Ability to communicate effectively
- Leadership
- Emotional Intelligence
- Cultural Intelligence

In addition to helping our students better prepare for the demands of the workplace, a QEP focused on either a specific transferrable skill or subset of these skills has the potential to increase student engagement. Research has shown that student engagement and success increase when the subject is made relevant to employability and career success.

Supporting Institutional Data

A key element of the SACSCOC criteria for selection and implementation of a QEP is that the QEP should be “directly related to – and arise out of – institutional planning and evaluation processes.” In addition to aligning with the college’s values of leadership, diversity and success, a QEP targeting transferrable skills is supported by the following.

- Results from the 2019 CCSSE (Community College Survey of Student Engagement) surveys indicate average or slightly-below-average performance in several “Transferrable Skill”-related response items in comparison to our institutional cohort:

“Acquiring job or work-related knowledge and skills”

The college scored a 2.36 out of 4 (highest) vs 2.50 for the 2019 institutional cohort.

“Working effectively with others”

The college scored a 2.61 vs 2.81 for the 2019 cohort (statistically significant difference).

“Encouraging contact among students from different economic, social, and racial or ethnic backgrounds”

The college scored a 2.48 vs 2.67 for the 2019 cohort.

- Student retention is a key focus for the college. A transferrable-skills focused QEP would provide opportunities to motivate degree completion with connections to work-force employability and development.



Quality Enhancement Plan (QEP) – Potential Topic Flyer

What Could a “Transferrable Skills” QEP look like?

The implementation of a Transferrable Skills QEP will largely depend on which subset of transferrable skills are targeted. However, a common thread across similar QEP’s has been to combine instructor professional development with in-course exercises implemented across the general education curriculum, backed by assessment tools such as the Emotional Quotient Inventory (EQ-i), Intercultural Development Inventory (IDI), or embedded course assessments.

To help tie the transferrable skills QEP in as a core part of the curriculum, Columbia State could implement initial motivational and informational resources for students through College Success (COLS 101). On the instructor side, an online resource center could be formed to facilitate the sharing of instructional materials and exercises. Initial stages of the QEP could then focus on pilot implementation in a subset of courses, with expansion of both available resources and courses increasing over the duration of the QEP.

Examples of related Quality Enhancement Plans & programs

The following links provide examples of prior QEP efforts focused on a subset of transferrable skills.

- **Emotional Intelligence:** Learning Environment Adaptability Project (LEAP)
[McLennan Community College, Executive Summary](#)
- **Leadership:** Leadership and Career Capstone
[Concordia University, QEP Summary](#)
- **Cultural Intelligence:** Cultivating Personal and Social Responsibility for Student Success
[Blue Ridge Community College, Executive Summary](#)
- **General Skills:** LearningPlus+: Communication. Professionalism. Problem Solving. Teamwork.
[Virginia Highlands Community College, Executive Summary](#)

Potential questions & useful feedback

Upcoming college focus groups will ask you to consider and rank each potential QEP topic, in order to help make a final recommendation to President’s Cabinet. Some potential questions to consider:

- Overall, how interested are you in the college pursuing either a specific transferrable skill or combination?
- For faculty: Which of these transferrable skills would be most useful for your students? Do you foresee any being a difficulty for implementation within your domain?
- What suggestions or concerns do you have regarding promoting a Transferrable Skills QEP to students?
- What additional difficulties do you envision in implementing a Transferrable Skills QEP across the college?



Quality Enhancement Plan (QEP) – Potential Topic Flyer

Online Instruction

In many ways, the COVID-19 pandemic required Columbia State Community College to embark on a monumental enhancement of online course offerings, corresponding professional development, and instructional adaptation. Even before this seismic shift, a significant number of Columbia State's students were opting to take courses in an alternate format, whether fully online, via DVC, or within a hybrid structure. These online instruction modes often come with well-known logistical challenges and research-documented trade-offs. National trends indicate decreased student success outcomes (such as the number of students earning an A, B, or C), lowered student-reported engagement, and lower retention rates in online formats compared to traditional face-to-face instructional modes.

As Columbia State seeks to transition back to a combination of on-ground and online instructional offerings, there is an opportunity to formalize some of the lessons learned from the necessary and rapid expansion of online instruction and to improve institutional support, professional development, and student engagement in the context of online courses going forward. Columbia State has already initiated efforts such as the creation of the Online Education Task Force. Recent events may have accelerated a shift towards increased online offerings; a QEP targeting online instruction could help solidify the college's already-initiated efforts to improve those modes of instruction.

Supporting Institutional Data

A key element of the SACSCOC criteria for selection and implementation of a QEP is that the QEP should be "directly related to – and arise out of – institutional planning and evaluation processes." The following data suggests that the domain of online instruction is a potential target for a QEP.

- The following table lists course success and fail rates from Fall 2015 to Fall 2020 aggregated by instructional method: Traditional (Conventional), DVC, Hybrid, or Online. Results from the 5-year period show slightly lower passing rates for alternate formats versus traditional instruction.

	Traditional	DVC	Hybrid	Online	TN eCampus
PASS	87%	80%	82%	80%	71%
FAIL	9%	14%	13%	12%	20%

*Pass defined as A, B, C, D (and P for P/F courses). Fail includes both FA and F.
Remaining share of students per instructional method are withdrawals, incompletes, and audits.*

- Improving student retention and performance in gateway courses have been identified as key goals of institutional planning efforts. Online formats have historically represented additional challenges for retention and student success outcomes.



Quality Enhancement Plan (QEP) – Potential Topic Flyer

What Could a “Online Instruction” QEP look like?

Online instruction has been a common QEP topic – suggesting many possible pathways for study and implementation. Approaches have often targeted a combination of institutional support for online instruction (increased online support services, increased online tutoring, formal online-readiness courses, and embedded online-readiness materials in First Year Experiences), professional development and course improvement (including the development of research-based instructional materials, active engagement techniques, technologies, and shared ADA-compliant course material repositories), and explicit efforts to target student attitudinal and technical readiness (metacognitive instruction, mandated pre-assessments for online courses, and remediation modules for typical bottlenecks).

Columbia State could select, implement and track a subset of these approaches as part of a formal QEP. Assessment methods could include large-scale measures of effectiveness (student retention rates and course performance in online formats), evaluations of instructional methods and materials (pre-post tests on engagement activities in a course), and student attitudinal surveys (SENSE, CCSSE, and in-house surveys).

Examples of related Quality Enhancement Plans & programs

The following links provide examples of prior QEP efforts focused on online instruction.



- Online Learning @MCC
[Madisonville Community College](#)
- Preparing WCC for Online Success
[Wilkes Community College](#)
- Strengthening the Online Student Learning Environment
[Montgomery Community College](#)

Potential questions & useful feedback

Upcoming college focus groups will ask you to consider and rank each potential QEP topic, in order to help make a final recommendation to President’s Cabinet. Some potential questions to consider:

- Overall, how interested are you in the college pursuing an online instruction QEP?
- What issues do you foresee in motivating students to adopt and participate in tasks related to an online instruction QEP?
- What suggestions or concerns do you have regarding implementing and or assessing material related to online instruction specifically within your discipline? And for the college at large?

Appendix B: Formative Critical Thinking Rubric

 Critical thinking is the ability to analyze and interpret relevant information and apply it to novel situations and problems. 					
Criteria	Learning Outcome	Excellent Score 9 to 10 points	Satisfactory Score 7 to 8 Points	Below Satisfactory Score 5 to 6 Points	Unsatisfactory Score 0 to 4 points
Point of View	Students will sustain a clear position by identifying various points of view.	Identifies and evaluates relevant significant points of view; is fair in examining all relevant points of view	Identifies and evaluates some relevant points of view; is fair in examining those views	May identify other points of view but struggles with maintaining fairmindedness; may focus on irrelevant or insignificant points of view	Ignores or superficially evaluates alternate points of view; cannot separate own vested interests and feelings when evaluating other points of view
Information	Students will gather credible and relevant evidence.	Gathers sufficient, credible, relevant information: observations, statements, logic, data, facts, questions, graphs, themes, assertions, descriptions; includes information that opposes as well as supports the argued position; distinguishes between information and inferences drawn from that information	Gathers sufficient, credible, and relevant information; includes some information from opposing views; distinguishes between information and inferences drawn from it	Gathers some credible information, but not enough; some information may be irrelevant; omits significant information, including some strong counterarguments; sometimes confuses information and the inferences drawn from it	Relies on insufficient, irrelevant, or unreliable information; fails to identify or hastily dismisses strong, relevant counterarguments; confuses information and inferences drawn from that information
Concepts	Students will identify and explain key concepts in their specific disciplines.	Identifies and accurately explains/uses the relevant key concepts	Identifies and accurately explains and uses the key concepts, but not with as much depth and precision	Identifies some (not all) key concepts, but use of concepts is superficial and inaccurate at times	Misunderstands key concepts or ignores relevant key concepts altogether
Assumptions	Students will identify significant assumptions of both their own as well as others' reasoning.	Accurately identifies assumptions; makes assumptions that are consistent, reasonable, valid	Identifies assumptions; makes valid assumptions	Fails to identify assumptions, or fails to explain them, or the assumptions identified are irrelevant, not clearly stated, and/or invalid	Fails to identify assumptions; makes invalid assumptions
Analysis	Students will analyze and interpret evidence to obtain thoughtful and logical conclusions.	Follows where evidence and reason lead in order to obtain defensible, thoughtful, logical conclusions or solutions; makes deep rather than superficial inferences; makes inferences that are consistent with one another	Follows where evidence and reason lead to obtain justifiable, logical conclusions; makes valid inferences, but not with as much depth	Does follow some evidence to conclusions, but inferences are more often than not unclear, illogical, inconsistent, and/or superficial	Uses superficial, simplistic, or irrelevant reasons and unjustifiable claims; makes illogical, inconsistent inferences; exhibits closed-mindedness or hostility to reason; regardless of the evidence, maintains or defends views based on self-interest
Implications	Students will distinguish probable from improbable implications.	Identifies the most significant implications and consequences of the reasoning (whether positive and/or negative); distinguishes probable from improbable implications	Identifies significant implications and consequences and distinguishes probable from improbable implications, but not with as much insight and precision	Has trouble identifying significant implications and consequences; identifies improbable implications	Ignores significant implications and consequences of reasoning

Directions for instructors/assignment developers: Choose (at least) 4 criteria, adapt criteria descriptions to fit discipline and assignment context, and adjust criteria weights as necessary. Adapted from the Foundation for Critical Thinking Rubric, Paul & Elder.

Appendix C: QEP Research Team - Summary of Meetings

Date	Summary
10/1/2020	Introduced the timeline and mandate for the QEP Research Team. Reviewed how the college proceeded with its past QEP cycle. Provided a summary of prior QEP topics and project scopes at similar institutions. Discussed initial steps for consolidating institutional data and assessing viability for potential QEP topics. Asked members to create a broad list of potential topics and data sources for discussion in the next meeting.
10/23/2020	Reviewed summary of gathered data, including CCSSE, gateway course performance, performance data in top-enrolled courses by both demographics and course format. Reviewed current proposed list of broad categories for QEP investigation. Discussed question items to be included in a preliminary survey for faculty and staff for distribution in November.
12/11/2020	Reviewed SACSCOC rubric and research team timeline. Members shared information gathered from professional development opportunities at SACSCOC conferences. Discussed responses from preliminary QEP survey (110 responses across full-time, part-time faculty, college staff and administration). Noted strong support of Critical Thinking in the initial survey results – including tie-ins to industry recommendations of student skills and across departments. Voted to narrow the topic list to 4 topics of consideration: transferrable skills, online instruction, peer-assisted study sessions, and critical thinking. Proposed a series of white papers to be distributed to college members in preparation for college-wide focus groups in Spring 2021.
1/11/2021	Prepared materials for college-wide address and distribution as part of Convocation gathering. Proposed implementing part of the QEP in COLS 101. Reviewed sample formats, institutional data, and supporting information to include in internal white papers. Discussed format for internal QEP focus groups for faculty and staff.
1/29/2021	Members shared updates from a faculty senate meeting regarding the QEP. Approved white papers for distribution prior to focus group discussion. Discussed polling resources and schedule for focus groups. Decision was made to hold 4 virtual sessions, moderated by QEP Research Team members at various times in the week (including one over a weekend) to reach as large a constituent group as possible.
3/4/2021	Discussed feedback gathered from focus groups (over 80 faculty and staff participants). Critical thinking had clear, strong support across faculty departments and college staff. Removed peer assisted study sessions from further consideration based on focus group results. Examined and refined question items for student input on the remaining 3 QEP topics. Discussed upcoming preparation of a topic identification report to be provided to President's Cabinet and college constituents.
4/7/2021	Reviewed student survey data (provided previously and discussed by committee members via email) and the internal QEP topic identification report. The committee approved the final report to a) summarize the process and accumulated data supporting each of the potential QEP topics and b) unanimously recommend critical thinking as the next QEP topic for approval by President's Cabinet.

Meeting minutes and presentation files are available for review upon request.

Appendix D: QEP Steering Committee – Summary of Meetings

Date	Summary
8/17/2021	The committee decided to submit a four-page proposal to the Off-Site Committee for nonbinding feedback on the QEP. Dr. Patricia Payette, University of Louisville, was nominated as a choice for the outside lead reviewer. The committee discussed the upcoming Columbia State Art Contest to create student interest and ownership of the QEP.
9/24/2021	For part of this meeting, the committee divided into two groups STM and HASS in order to assess the proposed critical thinking rubric and whether it would work effectively for their division and departments. Then, the groups reconvened to share their findings. The results were that both groups approved the rubric but recommended lessening the number of categories and making it ADA compliant.
10/28/2021	Several members of the committee took the Exit Exam to evaluate its effectiveness and implementation of critical thinking prior to this meeting so that the committee could reconvene and discuss their observations. The consensus was that the ETS should be kept but incentivized for students as an Exit Exam and that the ETS should be administered as a pre-test in COLS 101. The committee reviewed the revised ADA compliant rubric by Glenna Winters, and it was positively received.
11/16/2021	There was an update on the meeting with the Online Education Task-Force and how task-force members are going to align their efforts to researching ways to incorporate critical thinking into online courses. The co-directors presented four assessment options to the committee and discussed each one with the committee. A vote was taken and option 4 was chosen. The committee also evaluated professional development options for faculty.
2/4/2022	Due to a close tie on the employee voting of the QEP logo, the committee discussed and voted on the final choice. “Thinking Critically, Growing Purposefully” was chosen. The committee discussed the proposed draft of the QEP budget to present to the President’s Cabinet. The committee also considered what type of marketing material needed to be gathered. A draft of the four-page nonbinding proposal to the Off-Site Committee was shared with the committee. In addition, members discussed the course pilot implementation timeline.
3/18/202	The top choices of the Columbia State Art Contest were shared with the committee and discussion of checking copyright issues was discussed and resolved. An update on the budget was given. It was approved by the President’s Cabinet with slight changes, which were shared with the committee. Two subcommittees were created: Web Resource and Marketing. A COLS 101 update was given, and it was shared that the targeted time of the pre-test ETS implementation would be Fall 2022. The need for additional focus groups was also briefly discussed and identified.
3/31/2022	The Marketing Subcommittee met via Zoom and created a list of promotional events and items. A list of potential events and items were sent to the subcommittee in advance so that members could add or remove items or events. Some events were added, and items were updated. The primary vendor that was chosen for several items was 4imprint.

4/8/2022 The Web-Resource Subcommittee met via Zoom and discussed how the QEP should be shared on the Columbia State website. It was decided that the QEP should have its own public-facing website with an informational video explaining the QEP and its importance to students. Online Campus was decided as the best place to store files and resources for faculty wanting to implement critical thinking assignments and activities. The Online Campus repository of teaching resources would be a special log in for faculty (not students). Future needs were also discussed.

7/20/2022 An overview of the upcoming deadlines was shared with the QEP Steering Committee. The committee discussed the changes to the Critical Thinking Rubric, and it was decided to add a fourth category for grading purposes and more consistency. It was also decided to adopt the language of Paul and Elder's rubric from The Foundation for Critical Thinking for the descriptive sub-categories. The QEP as a whole was discussed and set to a vote by the committee for submission to President's Cabinet. It passed unanimously. Dr. Badeau and Dr. Evans informed the committee of updates concerning the Online Campus version of the rubric, merchandising updates, and the making of the promotional QEP video. Two QEP Steering Committee meetings were scheduled for the in-service week for the Fall 2022 semester.

Meeting minutes and presentation files are available for review upon request.

Appendix E: Marketing and Outreach Efforts

Promotions, Events, and Outreach Strategies:

- COLS 101 planners with art contest winner's logo
- Posters on all campuses (Communications Office can do up to about 1,000 out of their budget)
- Flyers on all campuses (Communications Office) 11 x 17 for poster and 8 ½ x 11 for flyer
- Digital Signage
- Email blasts promoting it to students
- Survey on QEP to students
- Critical Thinking Booths during Welcome Week (have marketing materials and promotional materials, some balloons, and tablecloths to make it attractive to students)
- Phi Theta Kappa project to promote QEP
- Partner with Student Engagement on Student Activities
- Create a poetry contest with Sigma Kappa Delta on writing an acrostic poem on TCGP
- Mass Communication students assist with promoting the event under the guidance and instruction of professor and QEP co-directors
- Turn QEP poster into a screen saver or background (IT)
- Social Media posts
- E-newsletters to students

Initial Allocation for Marketing Items:

Item	Number Ordered	Item Cost	Estimated Shipping
Sticky Notes	1,000	\$470	TBD
Gel Pens with Stylus	2,000	\$1,420	\$57.47
5 Prong Highlighter	1,000	\$1,050	\$82.74
Water Bottles	1,000	\$1,970	\$267.54
Blankets	50	\$447	TBD
Stickers	1,000	\$200	TBD
Short Sleeve Tops	400	\$1,916	TBD
Stadium Cups	1,000	\$570	TBD
Total:	7,450	\$8,043	\$407.75+

Total Allocation Available: \$11,475

Appendix F: COLS 101 – Critical Thinking Module

COLS 101 Module #3 – Facilitator Guide Excerpt

- Discuss the importance of Critical Thinking
- Explain what the Quality Enhancement Plan (QEP) at Columbia State Community College is and how it will help them
 - A Quality Enhancement Plan is *a five-year program that is required for college accreditation and serves as an important part of developing college initiatives.*
 - Why Critical Thinking? *According to research, employee survey feedback, and student survey feedback, critical thinking was identified as one of the most important and needed skills at the college. Highly sought after in the current job market, critical thinking is crucial for students who seek employment in their chosen careers after graduation.*
 - What is Critical Thinking? *The definition of critical thinking varies, but the college's QEP defines it as "the ability to analyze and interpret relevant information and apply it to novel situations and problems."*
 - What is Columbia State's QEP called? *"Thinking Critically, Growing Purposefully."*
- Academic Mindset Activity
- Define Metacognition and its use in learning.
- Watch [Neuroplasticity Video](#) and discuss with class its connection to metacognition and critical thinking
- Watch [How to Study Effectively for School or College—Top 6 Science-Based Study Skills video](#)
- *Optional Team Activity:* Create a list of useful/good study activities or habits and why thinking about how they process information is important to their success as a student
- **Assignment:** ETS Proficiency Profile Exam to be taken outside of class time during the next week. Explain their grade on the assignment is not based on their score. They will receive full credit for completing the exam and uploading a screenshot of their completion to Online Campus (like what they did for SAP Part 1). Explain it is expected that they will improve over their time at Columbia State and should see a better score on their Exit Exam when they graduate. They do not need to stress about how well they do on the test for the class since it will not adversely affect their grade. It is meant to help them monitor their growth while at Columbia State.

Appendix G: Critical Thinking Course Proposal Requirements

Faculty who want to develop and pilot a critical thinking course should meet the following requirements:

1. Faculty must be full-time (9- month or 12-month faculty)
2. Faculty must submit a course proposal to the QEP Approval Committee that contains the following:
 - Course Name
 - Instructor Name
 - Targeted Pilot Semester
 - An overview of critical thinking course implementation
 - A Multiple-Choice Pre-Test to be administered at the beginning of the class (not for a grade) to assess students' current knowledge on course material in relation to critical thinking
 - A Multiple-Choice Post-Test to be administered at the end of the class (this is not for a grade and can be the same as the Pre-Test)
 - Agree to administer the Student Attitudinal Survey at the end of the course (not for a grade)
 - Identify at least three Critical Thinking exercises or implementations to place into the course
 - Agree to use the college-wide Critical Thinking Rubric for at least two assignments, identify what those assignments will be, and indicate targeted student learning outcomes (at least 4 of 6)
 - Agree to submit the pre-test, post-test, attitudinal data, an overall analysis of growth in critical thinking as measured by rubric assignments from within the class, and any changes to be implemented prior to next offering to the QEP Steering Committee in a timely fashion after the course has been completed.
3. Faculty must receive approval by the QEP Approval Committee before designation as a critical thinking course.
4. Faculty must agree to implement the following statement in their syllabi provided for students on the first day of class:

This course has received permission from the QEP Approval Committee to be designated as a critical thinking course. This means that at least two major assignments are specifically designed to correspond with the student learning outcomes detailed on the college-wide Critical Thinking Rubric. In addition, a pre-test will be administered toward the beginning of the class to assess students' incoming knowledge of course material in relation to the critical thinking student learning outcomes. Toward the end of the semester, a post-test will be administered to assess students' knowledge of critical thinking in this course. Students will also respond to an attitudinal survey to share their perceptions of the course's critical thinking implementation.

Appendix H: Sample Critical Thinking Course Proposal

ENGL 1010 Critical Thinking Course Proposal

Course: ENGL 1010

Faculty Name: Dr. Jessica Evans

Targeted Pilot Semester: Spring 2023

Course Overview: This course would contain the following critical thinking components:

- Essay 1—Critically Thinking about Definitions
- Essay 2—Critically Thinking about Media
- Essay 3—Critically Thinking about Literature
- Pre-Test on Critical Thinking in the discipline
- Post-Test on Critical Thinking in the discipline
- Student Attitudinal Survey
- Critical Thinking Exercise on Logical Fallacies
- Critical Thinking Exercise on Ethos, Logos, and Pathos
- Critical Thinking Exercise on Reliable and Unreliable Sources
- Critical Thinking Exercise Using Toulmin Logic
- Critical Thinking Exercise on Development of Narration
- Critical Thinking Exercise on Identifying Key Passages
- Grammar, Concepts, and Rhetoric Test (will include a lot of content from material in Critical Thinking Exercises)
- Final Exam (will also include material and content from Critical Thinking Exercises, Tests, Lectures, and In-Class Activities)
- Research Group Project (will evaluate students' ability to identify, comprehend, evaluate, and use reliable sources on a topic related to their learning course objectives)

All essays will be evaluated using the college's Critical Thinking Rubric. Sample assignments and exercises are provided as separate documents.

Upon approval, students will be notified of the emphasis placed on critical thinking in the course and will contain the following statement included in the course syllabus:

This course has received permission from the QEP Approval Committee to be designated as a critical thinking course. This means that at least two major assignments are specifically designed to correspond with the student learning outcomes detailed on the college-wide Critical Thinking Rubric. In addition, a pre-test will be administered toward the beginning of the class to assess students' incoming knowledge of course material in relation to the critical thinking student learning outcomes. Toward the end of the semester, a post-test will be administered to assess students' knowledge of critical thinking in this course. Students will also respond to an attitudinal survey to share their perceptions of the course's critical thinking implementation.

After the course has been completed, the pre-test, post-test data, and attitudinal survey will be provided to the QEP Steering Committee in a timely fashion. As developer and pilot of the

course, I can be available for questions, and I permit Columbia State Community College to use my course for future instructors of ENGL 1010.

Assignments Correspondence with Critical Thinking Rubric Learning Outcomes

Identify assignment and choose at least four Student Learning Outcomes (SLOs) from the college-wide Critical Thinking Rubric that you will use for grading the assignment.

Assignment	SLO #1: Point of View	SLO #2: Evidence	SLO #3: Concepts	SLO #4: Assumptions	SLO #5: Analysis	SLO #6: Implications
Essay 1— Critically Thinking about Definitions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Description: This assignment focuses on students' ability to engage in points of view while sustaining their own position (criterion 1), students' ability to gather credible and relevant information to sustain their argument (criterion 2), students' ability to define concepts, such as "classic," and place it in the larger picture (criterion 3), students' ability to identify significant assumptions in both their own and others reasoning (criterion 4), and students' ability to make logical and strongly supported interpretations and inferences forming a logical conclusion (criterion 5).</p>						
Essay 2— Critically Thinking about Media	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Description: This assignment focuses on students' ability to engage in points of view while sustaining their own position (criterion 1), students' ability to gather credible and relevant information to sustain their argument (criterion 2), students' ability to identify assumptions in the form of logical fallacies (criterion 4), students' ability to make logical and strongly supported interpretations and inferences forming a logical conclusion (criterion 5), and students' ability to identify implications and consequences of their reasoning and distinguish probably from improbable implications (criterion 6).</p>						
Essay 3— Critically Thinking about Literature	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Description: This assignment focuses on students' ability to engage in points of view while sustaining their own position (criterion 1), students' ability to gather credible and relevant information to sustain their argument (criterion 2), students' ability to make logical and strongly supported interpretations and inferences forming a logical conclusion (criterion 4), students' ability to make logical and strongly supported interpretations and inferences forming a logical conclusion (criterion 5), and students' ability to identify implications and consequences of their reasoning and distinguish probable from improbable implications (criterion 6).</p>						

Appendix I: Sample ENGL 1010 Pre-Post Assessment Items

1. What is the best example of critical thinking in an English course?
 - a. Correcting grammar and spelling errors
 - b. Providing clear sentence variety
 - c. Reading a text and successfully summarizing its key plot points
 - d. Analyzing a text and sustaining a clear position

2. What is the best definition of critical thinking?
 - a. The ability to think and make decisions for yourself
 - b. The ability to analyze and interpret relevant information and apply it to novel situations and problems
 - c. The ability to find critiques and flaws in others
 - d. The ability to think independently and critique other points of view in various situations

For numbers 3-7, read the italicized passages and answer the questions that follow about each passage.

Sally Mae is running for class president. Her platform is built on the concept that, as a straight "A" student and Spelling Bee Champion, that she is the best candidate. Her slogan is "Vote Smart: Vote for Sally Mae."

3. What kind of fallacy is Sally Mae guilty of?
 - a. Slippery Slope
 - b. Ad Hominem
 - c. Circular Reasoning
 - d. Jumping to a Conclusion

4. What is the best way that Sally Mae could strengthen her argument?
 - a. She could point out that she has effective communication skills, which are needed for a class president.
 - b. She could explain the importance of good grades.
 - c. She could bribe students to vote for her by telling them that she will make her Valedictorian speech short at graduation.
 - d. She could appeal to the majority by changing her logo to be more inclusive.

Billy is convinced that he is going to have to find a new job. He broke his foot this morning and was late for work. His boss had already told Billy that if he were late for work one more time that he would be fired. Now, Billy is going to be without a job, and without a job, he will not be able to pay the bills. If he cannot pay the bills, he is going to have to sell his house and move into a shelter. Billy's broken foot is causing him to become homeless.

5. What kind of fallacy is Billy guilty of?
 - a. Slippery Slope
 - b. Ad Hominem
 - c. Circular Reasoning
 - d. Jumping to a Conclusion

Both Bianca and Sandra want to be the city mayor. Sandra claims that if she is elected that she will implement a health plan to improve the health of senior citizens. Bianca criticizes Sandra's plan pointing out that Sandra is overweight, not a senior citizen, and a smoker, so she is unqualified to create and implement a health plan.

6. What fallacy is Bianca guilty of?
 - a. Slippery Slope
 - b. Ad Hominem
 - c. Circular Reasoning
 - d. Jumping to a Conclusion
7. How could Bianca create a logically sound argument against Sandra's proposal?
 - a. She should research the negative effects of smoking and cite reliable information
 - b. She should explain how Sandra's non-senior status invalidates the health plan
 - c. She should research the growth of weight problems in senior citizens and the dangers of smoking to prove Sandra's health plan is inadequate
 - d. She should research Sandra's proposed health plan to see if it addresses smoking and overeating
8. Although all of the following are important when writing an academic essay, which one is MOST important?
 - a. Not write in the first person when making an academic argument
 - b. Not write in the second person when making an academic argument
 - c. Include sentence variety
 - d. Distinguish probable from improbable implications.
9. What is a learning outcome that has the clearest correspondence between an English course and critical thinking?
 - a. Students will be able to effectively analyze and interpret evidence to obtain thoughtful and logical conclusions.
 - b. Students will be able to read difficult texts and summarize the key plot points of that text.
 - c. Students will be able to distinguish their own thoughts.
 - d. Students will be able to write effectively with proper grammar and sentence variety.
10. What writing term or practice best corresponds with the critical thinking goal to sustain a clear position?
 - a. Thesis
 - b. Hook
 - c. Works Cited
 - d. MLA format

Appendix J: Sample ENGL 1010 Formative Task

Critically Thinking about Ethos, Logos, and Pathos

The rhetorical appeals of **ethos** (credibility and authority), **logos** (logical evidence), and **pathos** (emotional appeal) can easily be remembered by the acronym ELP. Remember, “ELP will HELP” with your writing and ability to persuade an audience.

Identify the rhetorical appeal used in the following passages.

1. *Please consider hiring me for this position. As a single parent and sole provider for my family, I will be committed to doing this job to my best ability.*

Name of Rhetorical Appeal: _____

2. *Please consider hiring me for this position. As a college graduate with a Bachelor of Arts degree in English, I am knowledgeable in editing and marketing.*

Name of Rhetorical Appeal: _____

3. *Please consider hiring me for this position. I have attached samples of marketing materials that I have developed along with a proposed timeline of implementation if given this job.*

Name of Rhetorical Appeal: _____

In the following passage, identify what part is effectively implementing rhetorical appeals and what part needs revising. Answer the questions after reading the passage.

I would like to recommend Greg Houdini for the position of I.T. manager. As a Professor of Computer Science, I have taught Greg for two courses where he earned an “A,” excelling above his classmates. I am compassionate toward Greg’s loss of his great grandmother recently who passed away at 97 years old. I was surprised at his ability to continue the course under such a strain. Please consider giving Greg this job.

1. What rhetorical appeal was implemented effectively and in what part of the passage was it?
2. What rhetorical appeal was implemented ineffectively and in what part of the passage was it? Why was it ineffective?
3. How could this recommendation be improved?

Appendix K: Sample ENGL 1010 Essay Assignment (Definitions)

Description:

For this assignment, you will choose a film from the list below, watch it, and **argue whether the film meets the definition of a classic**. In the essay, you will need to (1) define what is a classic, (2) make a claim that the film either deserves or does not deserve to be considered a classic (3) provide evidence to back up your claim by analyzing the film.

You must explain why your position on the film's status as a classic (or not) is accurate. Also, remember to include in your essay at least one paragraph where you allude to your opponent's view (aka the counter argument) **and** how your position remains true (your rebuttal). Make sure you explain your reasoning. When you are analyzing the film, you might want to keep in mind the acting, writing, cinematography, etc. Also, make sure you watch all of the film that you choose. For you to find relevant information to support your thesis statement and draw a strong conclusion, you will have to watch the film closely.

Film Choices:

- *The Man Who Knew Too Much* (1934) (spy thriller)
- *Swing Time* (1936) (dance, romance, musical)
- *Mr. Smith Goes to Washington* (1939) (political drama)
- *The Third Man* (1949) (thriller)
- *The Quiet Man* (1952) (comedy-romance with fighting, set in Ireland)
- *The Man Who Shot Liberty Valence* (1962) (western)
- *The Great Escape* (1963) (war film)

Audience:

Your audience is an academic reader. Assume that your reader has seen the film but may not remember every detail, so do not worry about explaining the plot. If you want to include a brief overview, it belongs in your introduction but not throughout the essay. **A summary may result in a failing grade**. Remember that your reader is not interested in what happens in the film (he or she has already watched it) but wants to know *why* it deserves or does not deserve to be considered a classic.

Critical Thinking Assessment:

This assignment focuses on students' ability to engage in points of view while sustaining their own position (criterion 1), students' ability to gather credible and relevant information to sustain their argument (criterion 2), students' ability to define concepts, such as "classic," and place it in the larger picture (criterion 3), students' ability to identify significant assumptions in both their own and others reasoning (criterion 4), and students' ability to make logical and strongly supported interpretations and inferences forming a logical conclusion (criterion 5).

Requirements:

Your essay should be 3-5 full pages in MLA format (12-point font, Times New Roman, double spaced, etc.). You must include a Works Cited page (last page of the essay but does NOT count toward page length requirements) and have a clear thesis. Make sure it is in a .doc, .docx, or .pdf format. Remember to cite the film and any other source that you use with both in-text citations and a Works Cited.