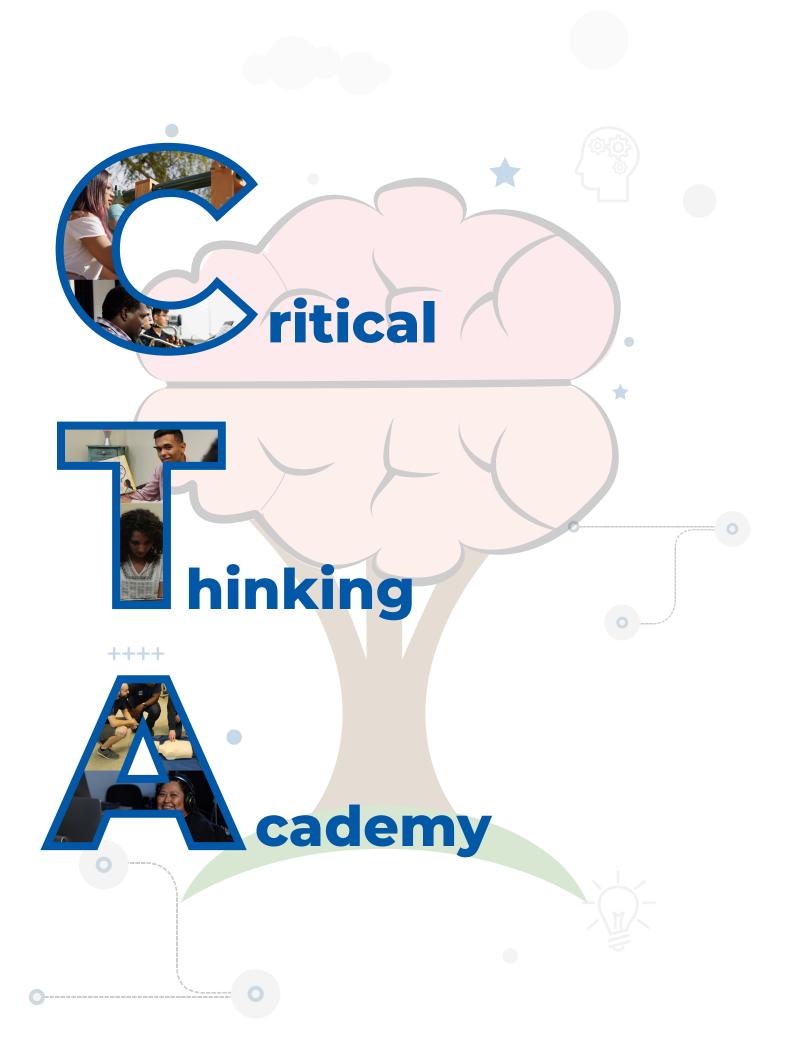


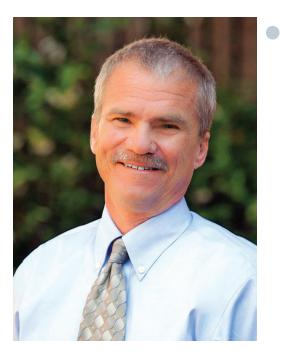
PVCC's Commitment to Student Success: The Critical Thinking Academy, Vol. 2







President's Message



I was pleased to attend the Higher Learning Commission's Persistence and Completion Academy Results Forum at which time, Felicia Ramirez, Christine Tabone, and Heather Stevens presented the findings from our Critical Thinking Academy project. PVCC was one of the only cohort college/university teams that identified and completed a project that focused solely on student learning as the most important lever to improve overall student success. Our initial findings show a promising link and connection between increased levels of critical thinking in the classroom and improved levels of successful course completion and overall persistence.

As we look ahead, there are three opportunities to further the application of critical thinking pedagogy as a student success strategy: 1) scale the level of faculty who complete the Critical Thinking Academy training thus dramatically increasing the number of course sections with embedded critical thinking; 2) expand the application of critical thinking pedagogy into co-curricular spaces; and 3) align and co-deliver the Critical Thinking Academy strategies with other student success initiatives such as Guided Pathways and Equity NOW. PVCC's motto "The Power of Learning" is certainly evident as critical thinking, active and engaged learning approaches yield greater student success outcomes.

-- Dr. Paul Dale, President PVCC

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Student Success at a Learning Centered College

A defining principle of the College is our unwavering commitment to being learning centered (Mission, Vision, Values, PVCC). In order to stay true to learning centered ideals, the college must "take responsibility for student success" (O'Banion, T. 1997). "Learning at PVCC means increasing the capacity of our students, employees, and our organization to achieve the knowledge, skills, attitudes, and values that will enable success" (Learning Centered College in Action, PVCC). Student success requires a collaboration between learning facilitators and learners. When students are engaged in higher order, reflective, integrated, and collaborative learning experiences, meaningful learning occurs and motivation to succeed may increase.

PVCC's commitment to student success led to the college's participation in the 2015 Higher Learning Commission (HLC) Persistence and Completion Academy, which "provides participating institutions a structured, mentor-facilitated, four-year program aimed at evaluating and improving student persistence and completion rates" (HLC, 2017). A team set out an exploratory project to gain a better understanding of how to increase persistence and completion by means of improving learning conditions. The goal of our project was *to increase persistence and completion by enhancing engagement to foster higher order thinking in curricular, co-curricular, and support services.*

The Significance of Critical Thinking

Improvement in learning conditions related to critical thinking is necessary for future workforce needs and economic competitiveness. Many employers agree that the capacity for critical thinking and problem solving are more important than a candidate's major (Hart Research Associates, 2015). While both employers and students agree that critical thinking is important, students tend to perceive that they are more prepared in many general education skills, including critical thinking, than employers find them to be (Hart Research Associates, 2015). A shift is needed to move from teaching what to think to helping students learn how to think and reason well.

When fostering critical thinking, colleges should stress learning activities that support the whole student. Shoem, Modey, and St. John (2017) reported that students leave college "without a fundamental sense of who they are, the purpose of life, and their inner selves" - elements that many feel are essential to college education and personal wellness (p. 4).

The college has been conducting research related to critical thinking, focusing on the teaching and learning of critical thinking, and measuring student achievement of this outcome for over a decade. We found that faculty had varying levels of understanding of critical thinking and abilities to foster it. It became clear that professional development related to the teaching and learning of critical thinking was needed.

The Purpose of Critical Thinking Academy

The Critical Thinking Academy was created to provide training and build a community of practice centered on critical thinking and student engagement. Learning facilitators studied critical thinking, designed critical thinking learning activities, and actively engage students in experiences correlated with retention and graduation (National Survey of Student Engagement, Indiana University, 2015).

To provide students with a systematic way of thinking about the various subjects and problems they encounter, learning facilitators applied the Paul-Elder framework of fairminded critical thinking (CriticalThinking.org). The Paul-Elder Framework is exceptional because of intellectual standards that enable students to assess their own thinking and the emphasis on fairmindedness, which guides learners and educators to use critical and creative thinking in unbiased and equitable ways.

Results

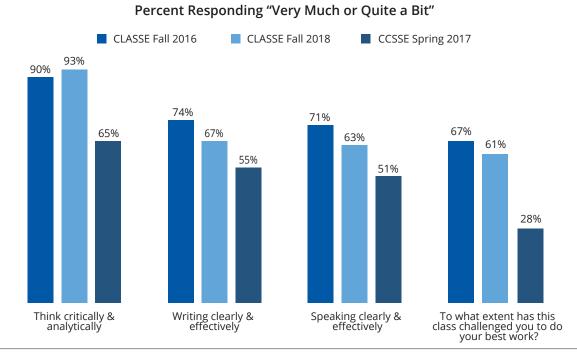
Two cohorts have completed the professional development program. Cohort #1 consisted of 15 faculty who participated from Spring 2016 to Spring 2017. Cohort #2 consisted of 7 faculty, representatives from Admissions & Records, the V.P. of Student Affairs, the Director of the Center for Teaching and Learning, Honors Program, and directors of early college programs (ACE/Hoop of Learning) who participated from Fall 2017 to Spring 2019.

As part of the posttest for each cohort, learning facilitators administered the Classroom Survey of Student Engagement (CLASSE) with the approval of Indiana State University School of Education. The CLASSE was selected as an assessment instrument for the project to see if faculty perceived efforts to engage matched students perception of impact of engagement. The results from CLASSE were then compared to the same and/or similar items on the Community College Survey of Student Engagement (CCSSE) administered across the college in Spring 2017.



CLASSE & CCSSE Connections Engagement Indicator Student Effort

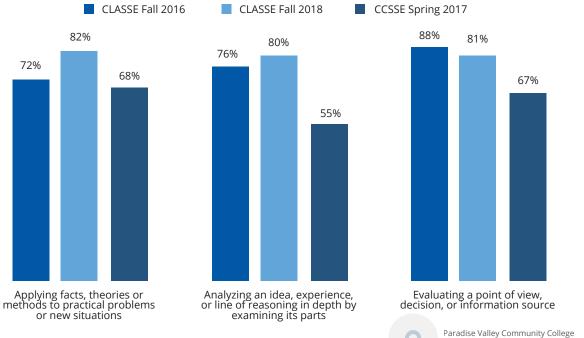
"How much has the class contributed to your knowledge/skills/develpment in the following?"



CLASSE & CCSSE Connections

Engagement Indicator: Higher Order Learning "About how often has the work for this class emphasized the following?"

Percent Responding "Very Much or Quite a Bit"



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| Student Experience - Perceived Gains | CLASSE Fall 2016/Fall 2018 PVCC Administration | | Fall 2016 | | CLASSE Fall 2016/Fall 2018 PVCC Administration | | |
|---|--|-----------------------------|--------------------------|-----|---|------------------------------|--|
| | How much has this class contributed to knowledge/skills/development in: | Very Much or Quite a Bit | | | How much has this class contributed to knowledge/skills/development in: | | |
| | Thinking critically & analytically | 90% | 93% | 65% | Thinking critically & analytically | | |
| | Writing clearly & effectively | 74% | 67% | 55% | Writing clearly & effectively | No Benchmark Focus | |
| | Analyzing numerical & statistical info | 49% | 44% | 54% | Analyzing numerical & statistical info | | |
| | Acquiring job or work-related knowledge & skill | 67% | 54% | 36% | Acquiring job or work-related knowledge & skill | | |
| | Working effectively with others | 83% | 67% | 56% | Working effectively with others | | |
| Higher Order Learning | About how often has the work for this class emphasized the following? | Very Little | | | How much has your coursework at this college emphasized the following mental activities? | | |
| | Memorizing course material: | 8% | 14% | 10% | Memorizing facts/ideas/methods from courses/ reading to repeat them | | |
| | Applying facts, theories or methods to practical problems or new situation | Very Much or Quite a Bit | | | Applying theories or concepts to practical | | |
| | | 72% | 82% | 68% | | | |
| | Analyzing an idea, experience, or line of reasoning in depth by examining its parts | 76% | 80% | 55% | Analyzing the basic theme elements of an idea, experience, or theory | Academic Challenge | |
| | Evaluating a point of view, decision or info source | 83% | 81% | 67% | Making judgements about the value or soundness of information, arguments, or methods | | |
| | Forming a new idea or understanding from various pieces of information | 84% | 68% | 69% | Forming a new idea or understanding from various pieces of information | | |
| Learning with Peers | About how often have you done the following in this class? | Very Often or Often | | | During the current academic year, about how often have you done each of the following? | | |
| | Worked with other students on course projects or assignments | 59% | 53% | 28% | Worked with other students on projects during class | Active & Collaborative | |
| Student Effort | Asked questions or contributed to course discussions in other ways | 64% | 50% | 64% | Asked questions in class or contributed to class discussions | Learning | |
| | Given a class presentation | 56% | 43% | 39% | Made a class presentation | | |
| | Prepared two or more drafts of a paper or assignment before turning it in | 45% | 36% | 44% | Prepared two or more drafts of a paper or assignment before turning it in | Student | |
| | Come to class without completing readings or assignments | 48% | Never 38% | 28% | Come to class without completing readings or assignments | Effort | |
| | To what extent has this class challenged you to do your best work? | | ry Muo allengi 61% | | How much have exams at PVCC challenged you to do your best work this year? | Academic Challenge | |

The Faculty participating in the Critical Thinking Academy taught at least one section from the following courses:

PSY101, CIS105, GBS151, COM225, COM263, PHI101, CRE101, ENG101, ENG091/108, HON190, RDG081, ARH100, IFS201, AST112, BIO156, PHY112, EDU222

In Fall 2016 there were 297 completing one of the courses participating in the Academy. In Fall 2018, there were 289 students completing one of the courses in the Academy.

Fair-minded Critical Thinking is the Essence of General Education

Perhaps one of the most powerful results of the project has been infusing critical thinking standards into the institutional learning outcomes. This change represents an intentional effort to place critical thinking at the heart of learning, a practical way to create a more integrated experience for learners, and a courageous choice to uphold the college's commitment to personal growth and positive social change (Mission, Vision, and Values).



Civic Engagement: Fair-minded critical thinkers are concerned about the welfare of others. They analyze their own egocentric tendencies that are self-serving and consider the impact of sociocentrism, tendencies that are group serving. They question to determine whether actions are helpful or harmful.



Critical Reading: Fair-minded critical thinkers are critical readers who read purposefully and actively. They seek meaning by reading beneath the surface and ask questions to clarify meaning and challenge assumptions. Critical readers clearly explain and accurately apply information they read.



Diversity and Global Awareness: Fair-minded critical thinkers are aware of biases, keep an open mind, and interact effectively and appropriately in a diverse, multicultural, and global society.



Information Literacy: Fair-minded critical thinkers determine information needed, establish a precise scope of research, and evaluate information and sources critically. They understand the legal and moral ramifications of violating intellectual property laws; therefore, they access, use, and cite sources properly.



Oral Communication: Fair-minded critical thinkers speak clearly and competently, respect the audience, value multiple perspectives, and engender equality. They help others understand the complexity of subjects by emphasizing significant points, presenting information logically, and supporting ideas with reliable evidence.



Personal Development and Wellness: Fair-minded critical thinkers recognize that thinking impacts every aspect of their lives. They take command of their thoughts in order to make healthy choices. They understand that becoming a fairminded critical thinker takes time and practice and commit to continual improvement.



Problem Solving: Fair-minded critical thinkers identify significant issues to address and problems to solve. They use sound reasoning to develop key questions; determine the information needed; draw logical conclusions based on the information; and propose plausible and equitable solutions.



Technology: Fair-minded critical thinkers make logical decisions about when and how to use technology. They recognize that the standards of clarity and accuracy apply to all modes of communication, including electronic communication. When using technology, critical thinkers use good judgement when communicating information about themselves. They demonstrate fairness by considering the impact of electronic communication and making content equally accessible.



Written Communication: Fair-minded critical thinkers write clearly and purposely, respect the audience, value multiple perspectives, and promote equality. They help others understand the complexity of subjects by emphasizing significant points, presenting information logically, and supporting ideas with reliable evidence.



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What's Next for The Critical Thinking Academy

The Critical Thinking Academy was created to provide training and build a community of practice centered on critical thinking and student engagement. Learning facilitators studied critical thinking, designed critical thinking learning activities, and actively engage students in experiences correlated with retention and graduation (National Survey of Student Engagement, Indiana University, 2015).

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Pictured above (Left to Right): Christine Tabone - English Faculty, Assessment for Learning Co-Chair Dr. Felica Ramirez - Communication Falculty, Academic for Learning Co-Chair Heather Stevens - Senior Research and Planning Analyst Dr. Paul Dale - President, Paradise Valley Community College

The work is challenging, but we are energized by our students' and their potential for growth. As we prepare for the 2020's, we are excited to create learning environments in which students can: pose questions that are relevant to them, think through new concepts that help them grow, solve problems that matter, collaborate with others to gain deeper understanding, and discover the joy of becoming an educated person.

Celebrating and Appreciating a Commitment to Critical Thinking

We are proud to work alongside inspirational colleagues who are passionate about fostering critical thinking.

Frank Amaparo Doug Berry Courtney Billy Darra Browning Kelly Fitzsimmons-Burton Sharlene Celeskey Ana Chandler Dionna Colly Paula Crossman Kishore Dash Cynthia Diefert Casey Durandet Cranston Forte Ian Jeffs Tommy Johnston Gary Kellgren Meggin Kirk Raji Lauffer Julie Lazzara Leonard Macias Don McCorkindale Carolyn Miller Trisha Montgomery Leila Palis Vanessa Phan Reese Pierceall Heather Stevens Jenny Weitz Beth Whiteman Amy Woodbeck

We would like to thank the Critical Thinking Academy participants for their open mindedness, dedication, and creativity.

Sincerely,

Felicia Ramirez and Christine Tabone, Co-Chairs Critical Thinking Academy

References

Classroom Survey of Student Engagement (CLASSE). (2019). Center for Post-Secondary Research Indiana University Bloomington School of Education. Retrieved from nsse.indiana.edu/html/classroom_survey_of_student_engagement.cfm

Elder, L. & Paul, R. (2009). *The Aspiring Thinker's Guide to Critical Thinking. Tomales,* Ca: The Foundation for Critical Thinking.

Hart Research Associates. (2015). *Falling Short? College Learning and Career Success.* Washington, DC: Association of American Colleges and Universities.

Higher Learning Commission. (2019). *Open Pathway Quality Initiative: Official HLC Procedure.* Retrieved from download.hlcommission.org/QualityInitiativeProcess_PRC.pdf

Learning Centered College in Action. Paradise Valley Community College. Retrieved from www.paradisevalley.edu/learning-centered-college/learning-centered-college-action

Persistence and Completion Academy Experience. (2017). Higher Learning Commision. Retrieved from www.hlcommission.org/Programs-Events/persistence-completion-academy-experience.html.

Mission, Vision, Values. Paradise Valley Community College. Retrieved from www.paradisevalley.edu/about/mission.

National Survey of Student Engagement. (2014). From Benchmarks to Engagement Indicators and High-Impact Practices. Retrieved from nsse.indiana.edu/html/engagment_indicators.cfm.

O'Banion, T. (1997). *A Learning College for the 21st Century*. Phoenix, AZ: American Council on Education and The Oryx Press.

Shoem, D., Modey, C., & St. John, E. P. (2017). *Teaching the Whole Student: Engaged with Heart, Mind, and Spirit.* Sterling, VA: Stylus Publishing.



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