ALT Report on PVCC Graduates' Achievement of General Education Assessment (GEA) Learning Outcomes

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PARADISE VALLEY COMMUNITY COLLEGE
A **MARICOPA** COMMUNITY COLLEGE

About the Authors:

Dr. Felicia Ramírez

Felicia began her Maricopa journey as a student, earning her AA and graduating from Honors at GCC. She holds a B.A. & M.A. in Communication Studies and a Ed.D in Adult Education. She has been in the Communication Faculty at PVCC for 18 years, specializing in rhetorical strategies and effective speaking habits and has co-authored two communication textbooks. Felicia is Co-Chair of the Assessment for Learning Team (ALT), on the Advisory Team for Maricopa Assessment Committee (MAC), and part of the national team to increase equity for the Grand Challenges in Assessment. She is the Chair of the Critical Thinking Academy and the Maricopa Communication Instructional Council. Over the years, Felicia has been highly involved in HLC activities including serving on the steering team for the past two 10-year cycles, Co-Chair Criterion #1 & Criterion #4, Leading PVCC's Persistence and Completion Academy Team, presenting twice at the HLC Conference, participating in HLC workshops, and working on Maricopa's Bachelor Degree Assessment Team.

Michael Tyler

Michael has worked in the Institutional Effectiveness Office of PV for two years and has been an adjunct in the MCCCD system for over five years teaching in both the business and STEM departments at Rio Salado Community College. He holds a B.A. in Integrative Biology from UC Berkeley and an MBA from Thunderbird School of Global Management. Before higher education, he primarily worked in smaller tech companies building models and providing analytics for used goods, real estate, and small businesses.

Leonard Macias is English Faculty, has worked at Paradise Valley since 2014 and loves it! In fact, he has worked for MCCCD over the last 26 years. Leonard began at Rio Salado College in 1998 as a Testing Technician, then moved to advisement in 2005 and worked as an academic advisor until coming here to PV. Leonard loves working with students, and gets to continue to do that as faculty. He is a native Phoenician who loves his home state. He comes from a very, very large Latino family where most reside here in Arizona. Leonard has many interests that include reading various authors and genres, sports, fishing & camping. Some of the hats he wears at PV are Co-Chair of the ALT, Faculty Advisor for the Association of Hispanic and Latino- American Students (AHLAS), member of Maricopa Advisement Committee (MAC) and one of the Tri-Chairs for Criterion 4 for our upcoming HLC visit.
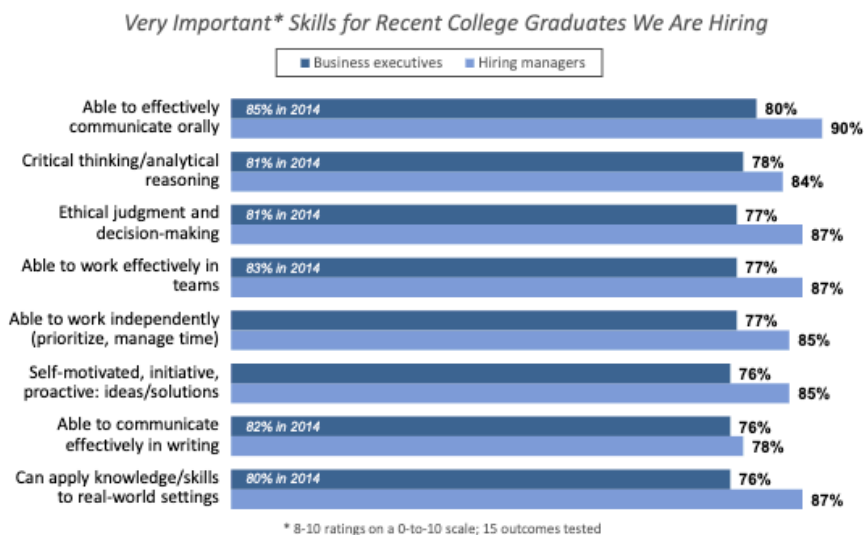
Marc Varner has been in website development since 2000, initially embracing it as a hobby before seamlessly transitioning it into a full-fledged career. His journey in this field began to take shape in 2008 when he joined PVCC (Paradise Valley Community College) as a Web Technician. In this role, Marc was responsible for implementing innovative website designs, as well as enhancing the functionality of existing ones. Over time, Marc's passion for web development evolved, leading him to explore Application Development. This transition, which occurred in 2013, marked a significant milestone in his career. Embracing the challenges of backend coding and database integration, Marc expanded his skills and expertise. Marc earned an Associate of Arts degree in Computer Information from PVCC, laying a solid foundation for his career aspirations. Building upon this, Marc pursued higher education and graduated with a bachelor's degree in Computer Information Management from NAU (Northern Arizona University) in 2013.

Overview:

As a learning centered college, one of the primary parts of our mission is to "educate the whole person" and over the years the Assessment for Learning Team (ALT) has led the efforts to both determine to what extent the college fulfills that mission and to promote changes that increase our capacity to do so better and thereby improve learning. A primary question at the heart of that issue has been…*What does a generally educated person need to be able to know and do?* The college and ALT is committed to providing state of the art general education learning opportunities because we believe students need them to be successful personally, academically, professionally, and civically. When designed and delivered well, general education courses help students develop authentic abilities and dispositions that prepare students for 21st century tasks, that are highly marketable, and that employers demand. According to a study by Hart Research Associates and the AAC&U (2015), 91% of employers surveyed "totally agree" that "a candidate's demonstrated capacity to think critically, communicate clearly, and solve complex problems is more important than his or her undergraduate major." In 2018, their online survey of Business Executives and Hiring Managers indicated which skills deemed most valuable (see chart below).

Hart Research Associates

The learning priorities that executives and hiring managers value most highly cut across majors.

Very Important* Skills for Recent College Graduates We Are Hiring

	Business executives	Hiring managers

Skill	Business executives	Hiring managers
Able to effectively communicate orally	80% (85% in 2014)	90%
Critical thinking/analytical reasoning	78% (81% in 2014)	84%
Ethical judgment and decision-making	77% (81% in 2014)	87%
Able to work effectively in teams	77% (83% in 2014)	87%
Able to work independently (prioritize, manage time)	77%	85%
Self-motivated, initiative, proactive: ideas/solutions	76%	85%
Able to communicate effectively in writing	76% (82% in 2014)	78%
Can apply knowledge/skills to real-world settings	76% (80% in 2014)	87%

* 8-10 ratings on a 0-to-10 scale; 15 outcomes tested

The results of the survey also showed that "executives and hiring managers perceive a gap of at least 40 points in importance versus preparedness in recent graduates' critical thinking and analytical reasoning skills, ability to apply knowledge and skills to the real world, oral communication skills, and self-motivation" (Hart Research Associates, 2028).

To best meet the needs of our students and community, PVCC's Institutional Learning Outcomes (ILOs) are General Education Learning Outcomes (GEA). PVCC has made a significant and judicious investment in GEA and the outcomes, corresponding rubrics, and supporting materials represent in-depth research, college wide collaboration, professional development, and organizational learning spanning over 17 years. There are nine GEA learning areas including:

- **Civic Engagement**
- **Critical Reading**
- **Diversity & Global Awareness**
- **Information Literacy**
- **Personal Development and Wellness**
- **Problem Solving**
- **Oral Communication**
- **Technology**
- **Written Communication**

Each of these nine areas consist of learning outcomes and analytic rubrics with a total of forty-nine dimensions and guidelines for measuring each. Additionally, the rubrics have been expanded to differentiate between associates and bachelors levels of achievement. The outcomes reflect the unique culture of PVCC and its goals for positive social change. Since critical thinking is PVCC's core learning outcome, all of the rubrics are infused with critical thinking Intellectual Standards, stemming from the college's partnership with the Foundation for Critical Thinking and work through the Higher Learning Commission's Persistence and Completion Academy. Faculty across the college select GEA outcomes and measure them using the rubrics. Faculty choose dimensions from the rubrics and can even build a custom rubric containing multiple dimensions from multiple rubrics in the GEA Online Tool and enter scores for students in their classes. Faculty are empowered to analyze results directly since they can view aggregated results and make appropriate changes to improve learning. Results are further analyzed at various levels and GEA outcome achievement is tracked across the institution. In addition to scores, the curricular assessment form and three part process, is applied to GEA and is consistent with course and program requirements to document assessment projects and learning improvement stories. GEA Learning Outcomes are measured and reinforced in both courses designated by MCCCD as part of the Arizona General Education Curriculum (AGEC) and courses without the designation.

The GEA Online Tool is PVCC's custom assessment management software developed in 2009 by college IT and ALT and launched in 2010. IT and ALT have collaborated over the years to maintain and update the technology to meet the college's growing assessment needs, including the use of an assessment management software taxonomy to evaluate the Tool's effectiveness and need for expansion (Harrison & Braxton, 2018). The GEA Online Tool saves the colleges hundreds of thousands of dollars in annual software licensing fees, technical support, and training. The GEA Online tool works in connection with the (SIS) and Maricopa login. Only instructors have access to the students' learning outcome records. Once submitted and archived, student results are captured at class, course, or term levels thereby removing individually identifying information and protecting student privacy.
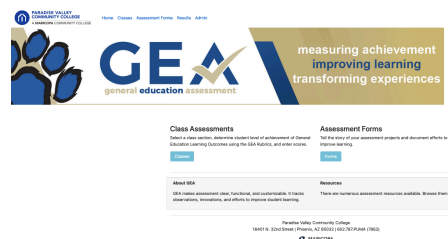
Purpose and Rationale:

The Assessment for Learning Team, which governs the assessment philosophies, processes, and practices at the college, has made a commitment to strive for cultural responsive/equity centered assessment. The team's work to think through assessment with an equity lens was featured among other approaches by assessment scholars (Phillips, Wu, Bloom, Jones, Janetski, Fu, Billman, Ramírez, & Opocyynski 2023). In its Charter (Ramírez & Macias, 2022), ALT states "When done well, assessment improves learning and serves as a catalyst for social justice. Equity and social justice are ambitious, yet necessary goals for curriculum and assessment design. In an effort to work towards these goals ALT will attempt to:

- Rely on varied sources of data and multiple measures to assess student learning.
- Disaggregate data, when possible, by race, ethnicity, age, first generation status, gender, student income, or other diverse student characteristics.
- Use data to advance more equitable outcomes for all students and structural change where necessary.
- Consider variations in how learners are experiencing the college while accounting for compositional diversity, numbers of students from historically underserved groups participating in various learning experiences (Hurtado & Halualani, 2014).
- Understand how learning conditions and assessment design impact students, their goals, and motivation while recognizing, preventing, or removing factors that negatively impact ability to succeed.
- Avoid deficit based, biased, or non-inclusive language in assessment instruments and reports
- Analyze how our own assumptions and/or positionalities influence our interpretation of learning outcomes, assessment results, and planned actions for improvement.
- When accessing or requesting personal identify information, consider whether demographic categories are inclusive
- Regularly review institutional learning outcomes and engage stakeholder groups.
- Be transparent about assessment processes and results.
- Foster inclusiveness and diversity within ALT membership."

ALT has been working to put this commitment into action and apply the strategies listed. The data analysis in this report is an effort to **disaggregate learning outcome data by key demographic groups**, **use data to advance more equitable outcomes**, and **be transparent about assessment results**.
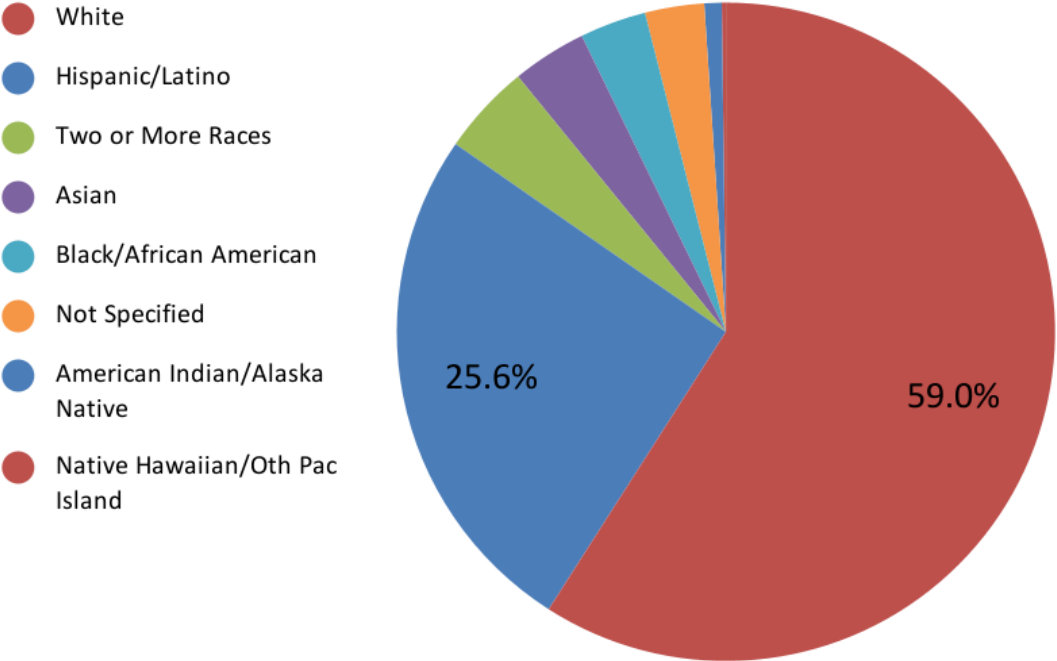
According to assessment scholars, "Knowing what patterns might affect different populations in your programs is the first step in improving them. While it is true that some situational factors that your students face may be beyond your control, disaggregating data provides programs with a way to evaluate the effectiveness of equity efforts within the contexts that you do control" (UWM, 2021). The team wanted to explore what could be learned by disaggregating student learning outcome data and then make assessment consequential by identifying potential opportunities for improvement and taking action.

Methodology & Sample Population:

The team selected the PVCC graduating classes of 2021 and 2022 for analysis. During these two years there were a total of 1977 students who completed a degree or certificate at the college. The team used the college student ID numbers to identify and match students to their records in the GEA Online Tool. **Out of the 1977 graduates, 1060 students had a record of being assessed in the GEA Online Tool, representing 53.4% of the graduating cohorts.** Students with a record in the GEA Online Tool indicates that the student was assessed while enrolled in a class at the college and that a faculty member measured the student's achievement of the GEA Learning Outcomes using the rubrics and entered a score into the GEA Online Tool on at least one occasion. Records indicating that the cohort of students graduating in years 2021 and 2022 contained records ranging from 2018-2023.

The sample population of graduates is representative of PVCC's overall student population.

2021-2022 Graduate Demographics

Legend:
- White
- Hispanic/Latino
- Two or More Races
- Asian
- Black/African American
- Not Specified
- American Indian/Alaska Native
- Native Hawaiian/Oth Pac Island

25.6%

59.0%

Results:

We analyzed the top classes and the top course prefixes. The results showed that assessment of GEA learning outcomes for the graduating cohort is occurring across disciplines at the college.

Class and Frequency of Assessments for Years 2018-2023		
Rank	Class	Count
1	NUR252	192
2	COM225	87
3	CRE101	85
4	CIS105	64
5	NUR152	43
6	CHM130LL, NUR172	41
7	ARH101, ENG102, PSY101	38
8	BIO205	36
9	ENG101	34
10	CPD150	32
11	ARH102, BIO181, BPC110	31
12	COM100, SOC212	30
13	NUR283	27
14	COM110	21
15	BIO160, HON201, MKT271	20
GBS151		17
ASB211		16
EDU292, FON241		15
ARH100, HCR240		13
CPD250, GLG101, MAT220, THF130		11
CHM130, CPD160, MHL153, PHY111,SOC270, THP112		10
CPD102AB, PHY101, THE111		9
AJS258, CHM152AA, EMT104, PHY112, PSY240		8
BIO156, CHM236AA, DAH100, MAT230, THF115, THP217		7
FON242, FYE103, HES100, IFS201, MHL155, THE220		6
AST101, ARH201, CAP220, CIS120DC, CIS120DF, FYE101, HES210, MAT105, MAT114, MAT151, MAT218, PHI105		5
AST111, BIO202, CIS233DA, CHM151AA, CHM235AA, CPD104, ENG091, LDR101, THP214,		4
AST112, BIO201, CIS150AB, COM263, MAT115, MTC155, PSY231, THP212		3
ACC111, AST294AB, CHM236, CHM236LL, CIS133DA, CRW150, CRW270, EDU222, EDU291, EXS101, FSC258, HUM205, MAT150, MTC106, MTC156, MTC240, MUC109, RDG100		2
ART100, ART111, ART117, ART167, ART262, CPD104, CPD298AA, CRW176, CRW190, ECN211, EDU221, EMT258, ENH221, ENH222, ENH280, EXS218, HIS101, HUM108, MAT103, MHL143, MTC130, MTC205, MTC206, MUC110, MUC194, MUP158, PME191, SSH111, SWU258, THP151, THP235, THP268,		1

The top thirteen prefixes with instances of assessment are dispersed across academic divisions, indicating that general education assessment is a college-wide effort.

Top 13 Course Prefixes with Highest Instances of GEA Assessment of 2021-2022 PVCC Graduates
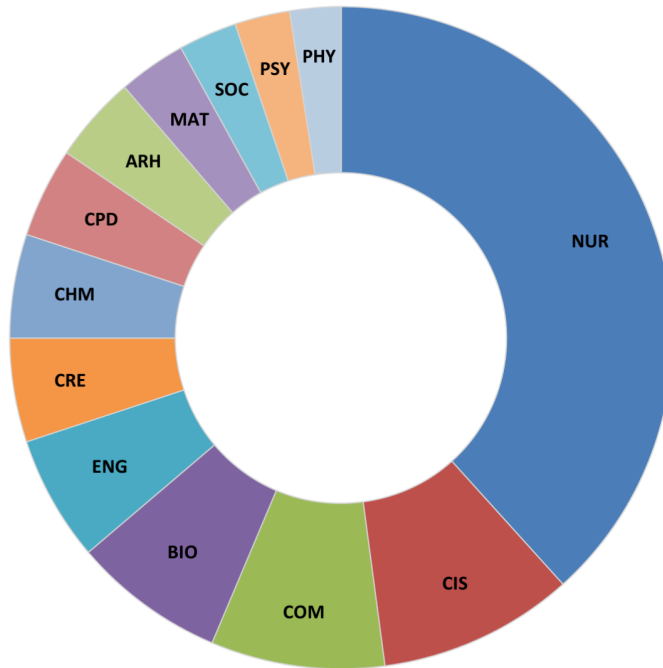

All of the nine GEA rubrics were applied to the sample graduating cohorts. The Problem Solving, Technology, and Oral Communication Rubrics had the highest frequency of application.

Frequency of Rubric Usage Among 2021-2022 PVCC Graduates During 2018-2022	
GEA Rubric	Total Count
Problem Solving	1459
Technology	941
Oral Communication	869
Critical Reading	715
Written Communication	621
Personal Development & Wellness	361
Information Literacy	265
Diversity & Global Awareness	212
Civic Engagement	94

*The Critical Thinking Rubric has 111 instances of assessment, however this rubric was retired when critical thinking was infused into all the other Rubrics. (Fl18-Sp19)

Range of Level of Achievement per GEA Rubric

Looking at the distribution of scores across rubrics, the box plot below shows a heavy weighting towards the 2.0 end of the scale. Civic Engagement had the widest range of values, while Personal Development & Wellness and Information Literacy had the least. The majority of graduating students achieved at or close to a 2.0 when assessed - "meets or exceeds expectations."
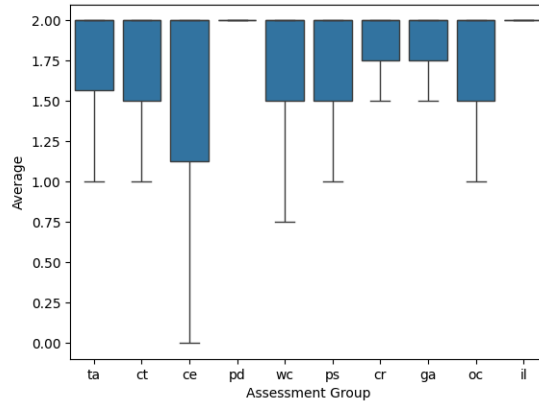
Comparing Mean Scores Across the College

The mean scores for the graduating cohorts were compared to the mean scores for the total scores entered in GEA during the 2021-2022 academic year. The results showed that graduates' means scores were higher than the overall college means scores for all GEA Learning Outcome areas.

2021-2022 GEA Rubric Mean Scores for Total College and Graduating Cohorts
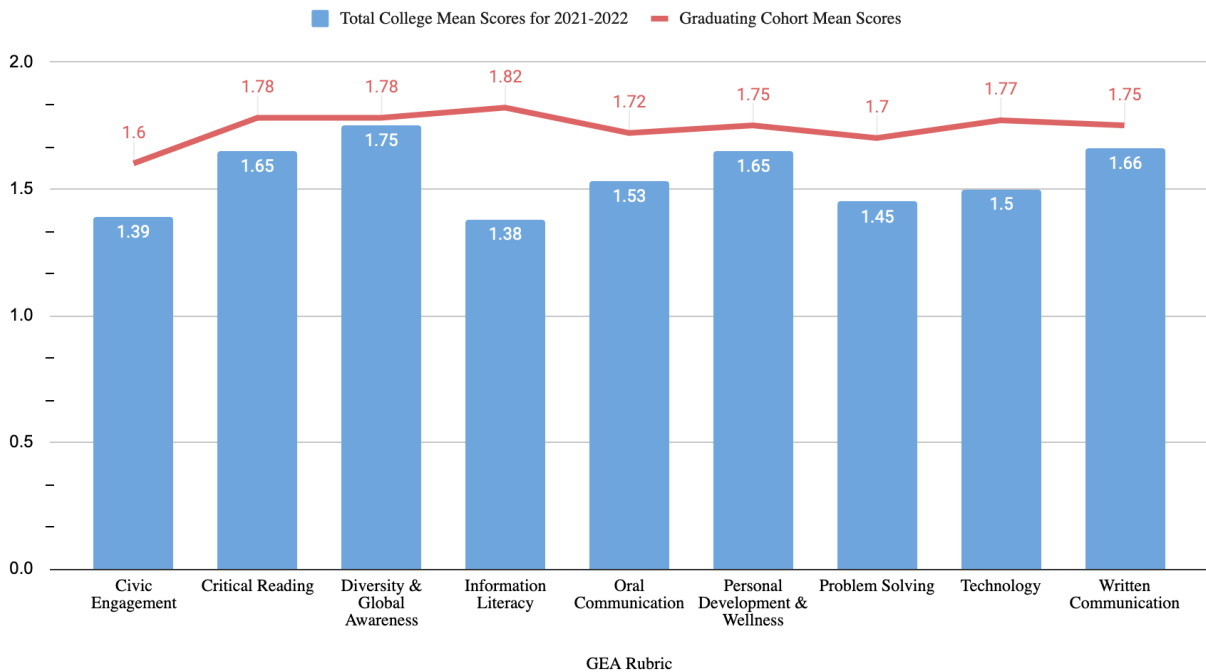
Small Sample Student Group Results

While the team is wary of drawing conclusions based on small sample sizes, we do believe it is important to recognize results from the analysis across student groups and to be inclusive in the report. Students identifying as "Black/African American", "Asian", and "American Indian/Alaskan Native" represented a smaller percentage of the sampled cohort.

Self-Reported Race/Ethnicity	Total	Assessed	count	Percent Assessed
American Indian/ Alaska Native	17	No	13	23.5%
		Yes	4	
Asian	73	No	33	54.8%
		Yes	40	
Black/African American	65	No	50	23.1%
		Yes	15	
Hispanic/Latino	511	No	327	36.0%
		Yes	184	
Native Hawaiian/Oth Pac Island	4	No	4	0.0%
		Yes	0	
Not Specified	58	No	37	36.2%
		Yes	21	
Two or More Races	89	No	56	37.1%
		Yes	33	
White	1178	No	787	33.2%
		Yes	391	

Students identifying as "Black/African American" scored high on Critical Reading and Technology and scored low on Personal Development and Wellness and Problem Solving.

Students identifying as "American Indian/Alaskan Native" scored high on most areas with the exceptions of Oral Communication and Personal Development and Wellness.

Students identifying as "Asian" scored high on all areas with the exception of Civic Engagement.

T-Test to Check for Gaps in Assessment Results Among Hispanic and Non-Hispanic Students

A T-Test is an inferential statistical test that compares the means of two populations. The null hypothesis states there is no difference between the two populations. A statistically significant difference ($P < 0.05$) rejects the null hypothesis and demonstrates a difference in the two populations.

For each assessment area, the Hispanic and Non-Hispanic populations were compared. For almost all the assessment areas no significant difference was found in the testing results. In Written Communication, the resulting P-Value was 0.034, below the standard 0.05 threshold. There is a significant difference in the test results for hispanic vs non hispanic populations. Hispanic students score lower, as seen by the following graph of the two population's scores. If the two populations were not statistically different, you would expect a similar peak in distribution as seen in the same graph of hispanic versus non hispanic students for the technology rubric.
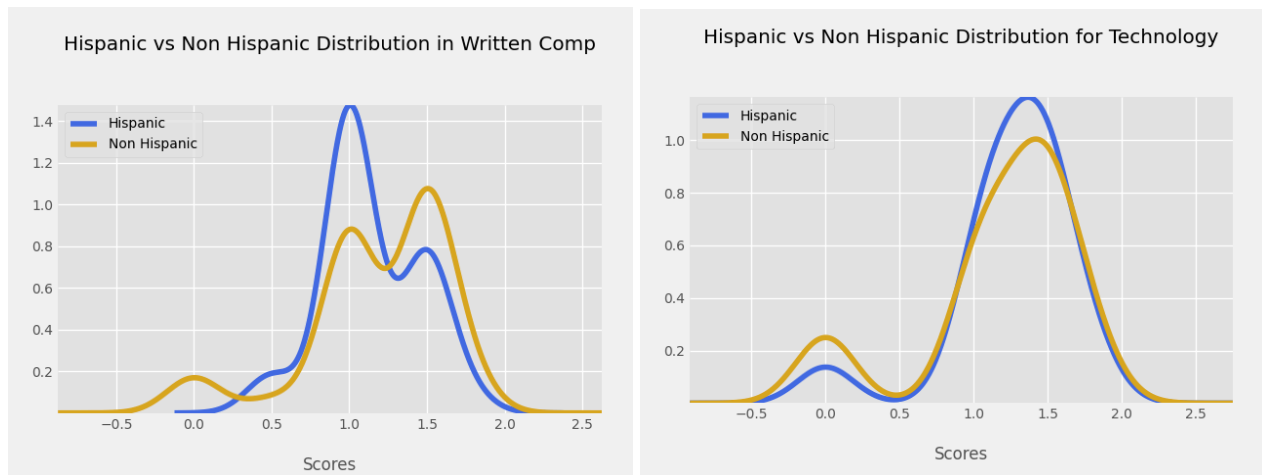

Written Communication

Since there is a significant difference in the test results for Hispanic vs Non-Hispanic populations in the GEA area of Written Communication, the team decided to take a closer look at the Written Communication results. Upon closer investigation of the Written Communication area, results from 2019-2022 (the team revoked scores form 2018 because the Written Communication Rubric was modified in 2019) showed that the top three, or most applied, specific dimensions measured were: (1) Supporting Ideas with Evidence, (2) Development, and (3) Introduction and Purpose.

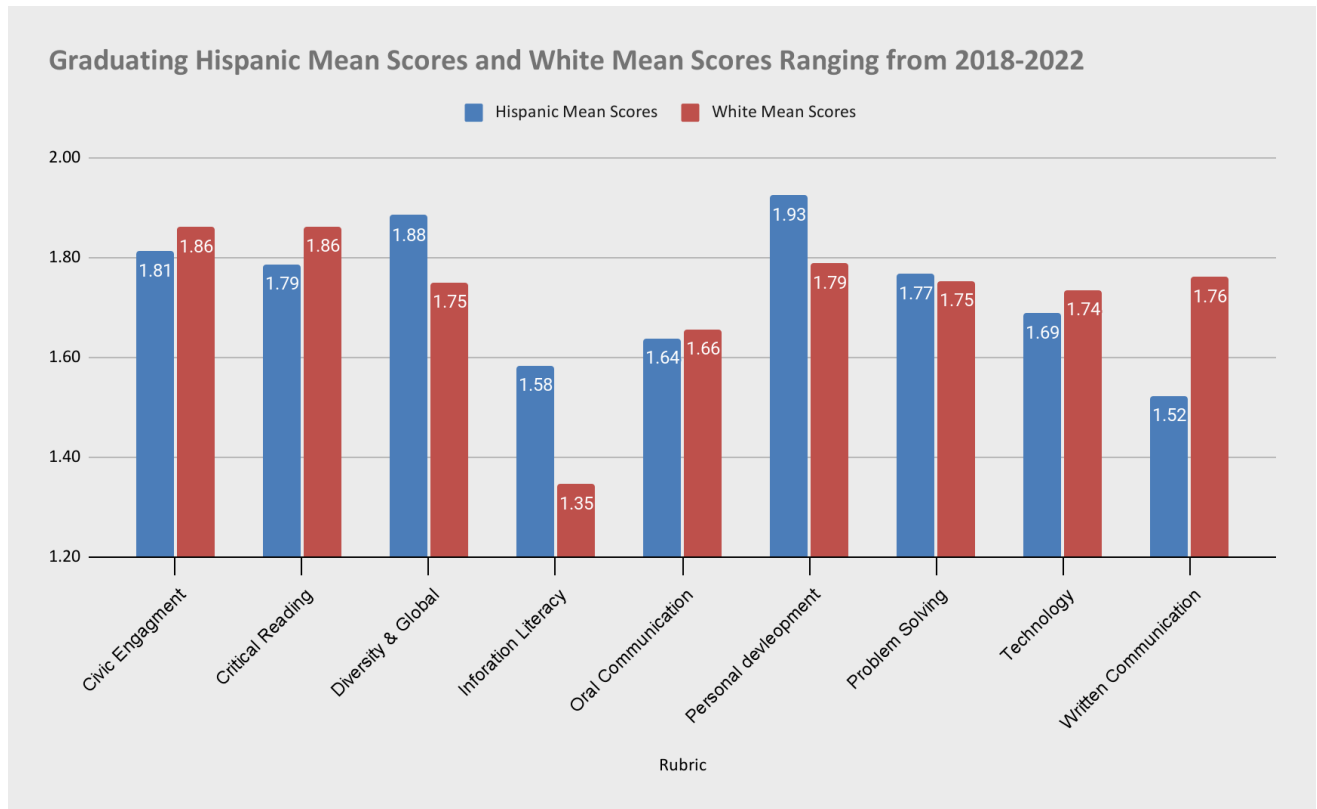**PVCC General Education Written Communication Rubric**

Dimension	Score = 2: meets or exceeds standards for competency	Score = 1: needs improvement	Score = 0: does not meet minimum standards for competence
Introduction and Purpose	Demonstrates an *accurate/definitive* understanding of context and audience. Purpose is *relevant* and *clear*ly indicates the writer's objective or stance.	Demonstrates a questionable understanding of context and audience. Purpose is *relevant*, but vague.	Demonstrates an obscure awareness of context and audience. Purpose is unrelated and vague.
Development	Completes all of the following: 1. presents a *logical* progression of ideas 2. includes *precise* transitions to connect ideas 3. fully develops ideas that reflect the complexities of the topic (*depth*)	Completes two of the following: 1. presents a *logical* progression of ideas 2. includes *precise* transitions to connect ideas 3. fully develops ideas that reflect the complexities of the topic (*depth*)	Completes 1 or none of the following: 1. presents a *logical* progression of ideas 2. includes *precise* transitions to connect ideas 3. fully develops ideas that reflect the complexities of the topic (*depth*)
Supporting Ideas with Evidence	Includes supporting information that is *significant* and *relevant* to the topic. Presents evidence in a *fair* and unbiased manner.	Includes supporting information that is seemingly trivial yet somewhat *relevant* to the topic. Presents evidence in a *fair* and unbiased manner.	Includes supporting information that is trivial and unrelated to the topic and/or fails to support ideas with evidence. Presents evidence in a unfair and biased manner.
Mechanics	There are very few, if any, grammatical or punctuation errors. Vocabulary is *accurate* and *precise*. Sentence structures are *clear*.	There are several grammatical and/or punctuation errors. Vocabulary is adequate, but lacks precision. Sentence structures are vague.	There are numerous and serious grammatical and punctuation errors. Vocabulary is inadequate and simplistic. Sentence structures are faulty; the meaning is unclear.
Format	All or most of the format guidelines were *accurately* applied, including any applicable source documentation.	Some of the format guidelines were *accurately* applied, including any applicable source documentation.	Few or none of the format guidelines were *accurately* applied, including any applicable source documentation.

The following chart shows frequency of Written Communication Rubric dimensions assessed by class.
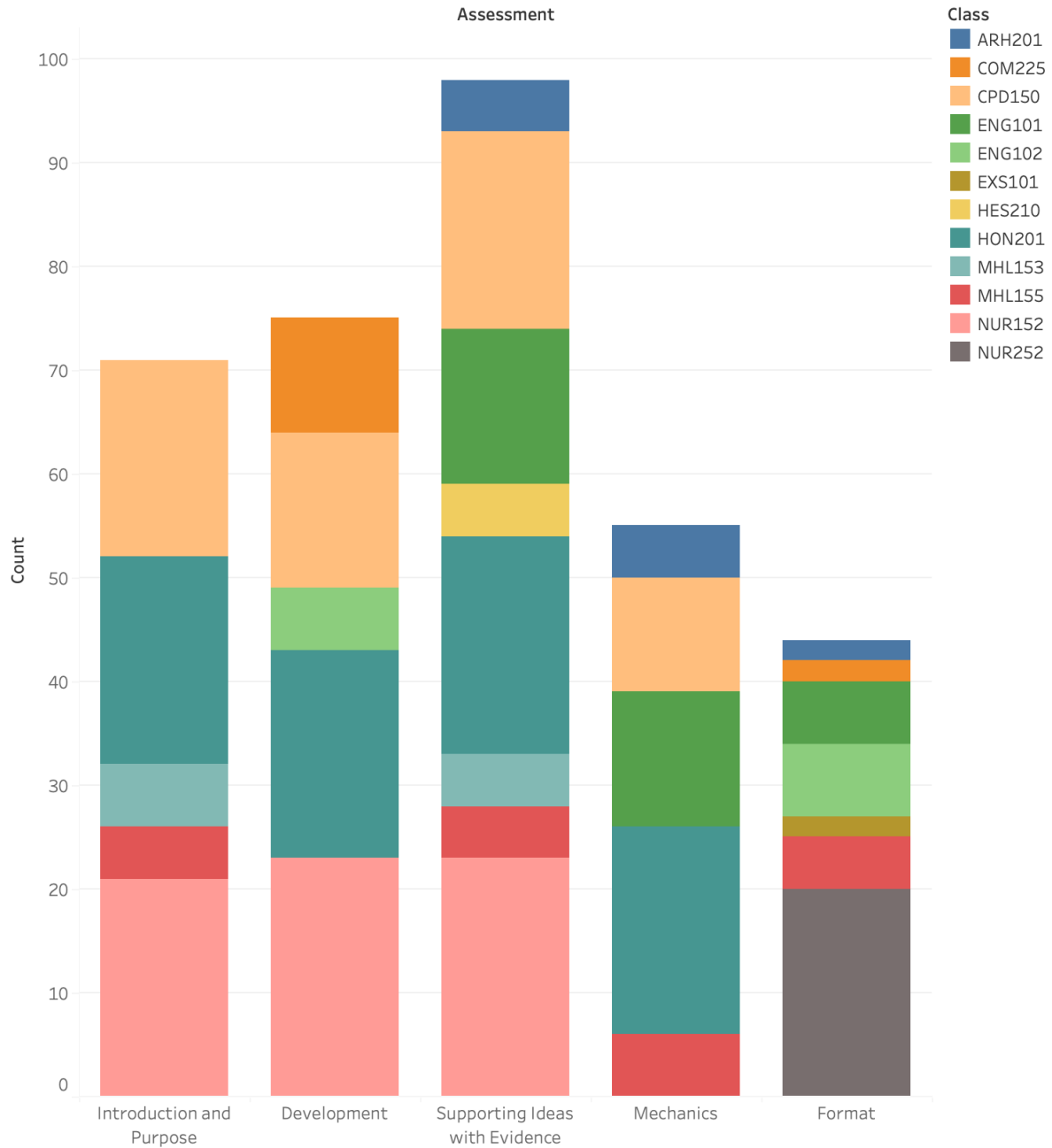
Means Scores for Hispanic and White Students

Students identifying as "Hispanic" and "White" made up the majority of the sample population. When analyzing the results for these two groups we noticed that the mean scores for Hispanic students were higher in some areas and that the mean scores for White students were higher in other areas. Specifically, Hispanic students experienced a higher level of achievement for Diversity & Global Awareness, Information Literacy, and Personal Development & Wellness.

Graphic titled "Graduating Hispanic Mean Scores and White Mean Scores Ranging from 2018-2022" with legend: Hispanic Mean Scores (blue), White Mean Scores (red).

Rubric	Hispanic Mean Scores	White Mean Scores
Civic Engagment	1.81	1.86
Critical Reading	1.79	1.86
Diversity & Global	1.88	1.75
Inforation Literacy	1.58	1.35
Oral Communication	1.64	1.66
Personal development	1.93	1.79
Problem Solving	1.77	1.75
Technology	1.69	1.74
Written Communication	1.52	1.76

Discussion & Recommendations:

The results of this analysis are overall very positive and there are three key findings: (1) Disaggregation of learning outcome data is feasible, viable, and fruitful, (2) Distribution of level of achievement of outcomes was the same across demographics for nearly all GEA Learning Outcome areas, (3) An equity gap seems to exist between Hispanic students and Non-Hispanic students in the GEA area of Written Communication.

#1: Disaggregation of learning outcome data is feasible, viable, and fruitful.

This was the college's first comprehensive attempt to disaggregate student learning outcomes data across key student groups. The analysis confirmed that disaggregation of learning outcome data is possible and can provide meaningful information to inform assessment related decisions. We learned that the GEA Rubrics are being applied across student groups at the college in a manner that allows for detailed analysis and that instances of assessment are occurring at a rate for

graduates that, although could be higher, is large enough to identify patterns and draw concussions. Current assessment practices and technology are sufficiently capturing learning outcome data. Although highest among Nursing courses, distribution of instances of assessment is occurring across academic disciplines and prefixes.

#2: Distribution of level of achievement of outcomes was the same across demographics for nearly all GEA Learning Outcome areas.

Distribution of level of achievement of general education learning outcomes was the same across student demographics for eight of the nine GEA Rubrics including Civic Engagement, Critical Reading, Diversity & Global Awareness, Information Literacy, Oral Communication, Personal Development & Wellness, Problem Solving, and Technology. In particular, results indicate that Hispanic students are experiencing a similar level of achievement for General Education Learning Outcomes as Non-Hispanic students with the exception of Written Communication. Results are limited to the time period 2018-2022 and to the 2021 & 2022 graduating cohorts, so further analysis of future years and cohorts are needed. Yet results may be an indication, at least among this particular sample group, that the PVCC GEA Rubrics generally do not disproportionately benefit any single group of students and/or may equally serve all students. ALT has been mindful of the potential benefits of rubrics and has promoted the use of the GEA Rubrics to create more equitable learning conditions. Evidence suggests that use of rubrics in higher education with equity because rubrics offer the possibility of more objective, consistent evaluation; offer transparency by providing clear, accessible benchmarks, and offer a means of improving students' self-efficacy because they help students to identify skills they need to develop to excel (Ragupathi & Lee, 2020). Results may indicate that ALT and the College's investment in GEA and the Rubrics leads to positive outcomes for graduates and students across the college.

#3: An equity gap seems to exist between Hispanic students and Non-Hispanic students in the GEA area of Written Communication.

As mentioned above, results indicated that Hispanic students are experiencing a similar level of achievement for General Education Learning Outcomes as Non-Hispanic students with the exception of Written Communication. Positive results for Hispanic students on 89% of the GEA outcomes is promising. Hispanic students scored the highest on Personal Development & Wellness (mean score 1.93) and Diversity & Global Awareness (mean score 1.88). However the results do suggest that an equity gap may exist between Hispanic students and Non-Hispanic students for Written Communication. We do not know why this gap exists.

We warn against automatically assuming that the results indicate a lower level of writing competence among Hispanic students. Montenegro and Jankowski (2020) suggest "Consider the noise added to data on a particular learning outcome if collected results are not a demonstration of students' learning on that particular outcome but are instead based on social capital related to navigating assessment tasks?" Perhaps there are elements related to the written communication activities or assignments that influence the results. There may also be other factors such as interrater reliability when applying the rubrics, time in the student life cycle when students are being assessed, hidden barriers to accessing resources, or prior learning experiences related to writing.

A separate analysis conducted by ALT in January 2024, showed that the area of Written Communication was also an exception, along with Information Literacy, when looking at mean scores of GEA Learning Outcomes disaggregated by the number of general education courses completed by students.

Perecentage of Students that Meet or Exceed Minimum Standards on GEA Rubrics 2022-2023
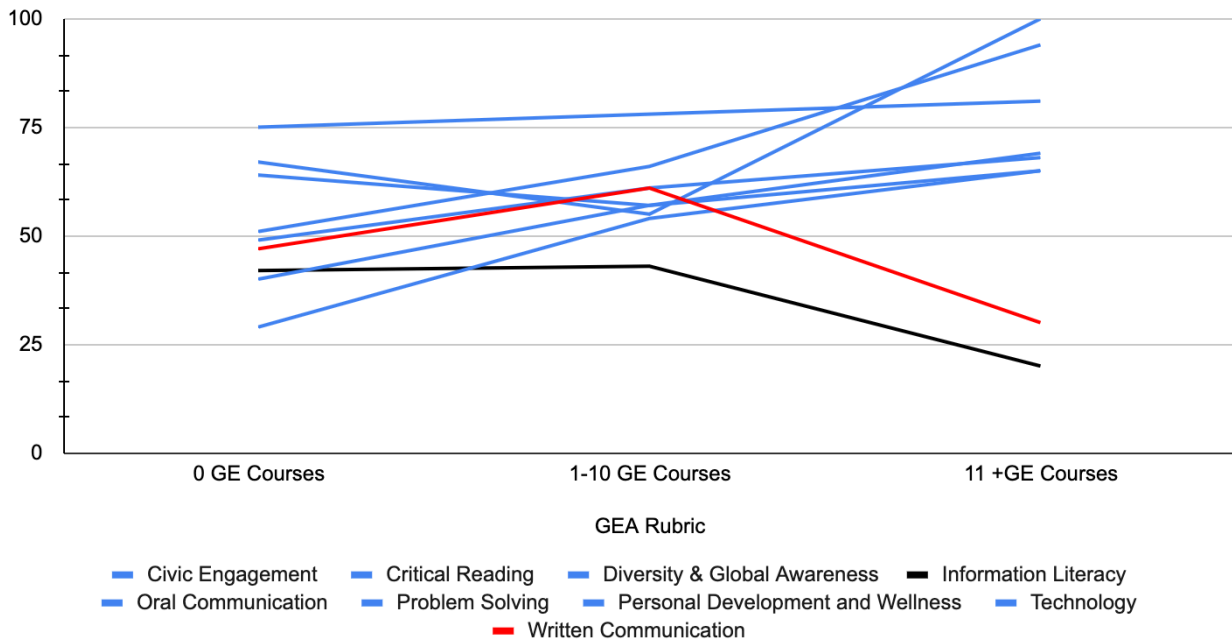
Based on these finding, the team recommends the following next steps:

- Share results widely and engage stakeholders in dialogue to construct shared knowledge around general education assessment and ideas for continued improvement.
    - Foster safe-space for these conversations to occur.
    - Engage faculty in prefix areas with high levels of instances of assessment (ie: NUR).
- Explore options for improving written communication, in particular among Hispanic students, and re-measure in the next cycle.
    - As a Hispanic Serving Institution, this is a key step in demonstrating "institutional commitment and intentionality to SERVE Latino students while fulfilling the institution's mission and strategy as well as creating an institutional culture where Latino students thrive" (Excelencia in Education, 2024).
    - Renew efforts to apply for the Seal of Excelencia.
- Make disaggregation of graduates' level of achievement of GEA Learning Outcomes systematic.

- ○ Write up the protocol for the analysis and run it on a scheduled cycle every 2 or 3 years. Additional analysis from ranges of years over time will allow us to identify patterns and check for signs of improvement.
  - ○ Consider expanding analysis to AGEC completion.
  - ○ Consider expanding to look at other student groups (ie: part time, 1st generation)
- ● Invest in and improve the college's data analysis capacity.
  - ○ This type of work requires collaboration between skilled assessment, IE/IR, IT, and Assessment professionals.
  - ○ The team has concerns about the sustainability of this work without a properly staffed and trained team.
  - ○ Continue to gather and analyze data with a clear purpose in mind.

As the team shares this analysis and engages with groups across the college, this list will be amended and a more clear plan for moving forward can be created.

Conclusion:

This report has shown that the college has the systems in place to successfully disaggregate student learning outcome data and that based on the sample graduating cohorts, students achieve at relatively equal levels across racial/ethnic demographics on all GEA Learning Outcomes with the exception of Written Communication. We encourage open dialogue to help interrupt these results and identify what may be done to improve learning in this area.

As ALT continues to apply an equity-centered or social justice approach to assessment, the team should consider continuing to disaggregate data as a routine method to be used in combination with others. This report is a step in the right direction and continuing the practice will help improve the college's ability to best serve all of our students. ALT has a long tradition of striving for *consequential validity-* assessment that is valid because it has an impact, stimulates change, and is used for the purpose of improvement. Assessment scholars have noted that "the relationship between evidence and action is not always neat, rational, or linear. Moreover, the fact that evidence meets the highest possible psychometric standards may have no bearing on its effectiveness in promoting action on campus. And vice versa…" (Kuh, Ikenberry, Jankowski, Cain, Ewell, Hutchings, & Kinzie, 2015). The work preceding this analysis, the process of completing this data analysis, and the discussions that follow all matter in making assessment consequential, but perhaps what matters most for our learning centered institution…is what we do next.

Acknowledgements:

The results in this analysis reflect student work on assignments and activities in classes over time between 2018-2022. We are very proud of our college graduates and their accomplishments. Their open-mindedness and willingness to grow is key to making transformative learning experiences possible. We congratulate them for their individual and collective work.

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References:

Excelencia in Education. (2024).*Seal Serving Institutional Transformation Assessment (SSITA)*. https://sealofexcelencia.secure-platform.com/a/page/SSITA

GEA Rubric Packet: https://cdn.paradisevalley.edu/docs/employees/al/al-gea-packet.pdf

Harrison, J. M., & Braxton, S. N. (2018, September). Technology solutions to support assessment. (Occasional Paper No. 35). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA). https://www.learningoutcomesassessment.org/wp-content/uploads/2019/02/OccasionalPaper35.pdf

Hart Research Associates, on behalf of the Association of American Colleges & Universities (AAC&U). (2018). *Falling Short? College Learning and Career Success Selected Findings from Online Surveys of Employers and College Students*. Washington,DC: retrieved from https://dgmg81phhvh63.cloudfront.net/content/user-photos/Research/PDFs/2015employerstudentsurvey.pdf

Hart Research Associates, on behalf of the Association of American Colleges & Universities (AAC&U). (2018). *Fulfilling the American Dream: Liberal Education and the Future of Work Selected Findings from Online Surveys of Business Executives and Hiring Managers*. Washington,DC: retrieved from https://dgmg81phhvh63.cloudfront.net/content/user-photos/Research/PDFs/2018EmployerResearchReport.pdf

Kuh, G.D., Ikenberry, S.O., Jankowski, N.A., Cain, T.R., Ewell, P.T. Hutchings, P. & Kinzie, J. (2015). *Using Evidence of Student Learning to Improve Higher Education.* San Francisco, CA: Jossey-Boss, Wiley.

Montenegro, E., & Jankowski, N. A. (2020, January). A new decade for assessment: Embedding equity into assessment praxis (Occasional Paper No. 42). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

Phillips, G.A., Wu, S., Bloom, J.D., Jones, J.M., Janetski, B.K., Fu, J., Billman, J., Ramirez, F.A., & Opocyynski, R. (2023). Assessment professionals as change agents: Enhancing equity in our own backyard. Emerging Dialogues in Assessment. https://www.aalhe.org/emerging-dialogues---assessment-professionals-as-change-agents--enhancing-equity-in-our-own-backyard

Ramírez, F., & Macias, L. (2022). ALT Charter, Assessment Process and Cycle. Paradise Valley Community College.

UWM. (2021). Departmental Data and Equity: Disaggregation. University of Wisconsin Milwaukee, Retrieved from: https://uwm.edu/academicaffairs/wp-content/uploads/sites/32/2022/04/Departmental_Data_and_Equity.pdf