

Inclusive Instruction

A Strengths & Needs Assessment
of the University of Arizona
School of Nutritional Sciences
and Wellness

Prepared by the UA Community Research, Evaluation & Development (CRED) Team
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Executive Summary

In fall 2023, the Diversity, Equity & Inclusion (DEI) committee of the School of Nutritional Sciences and Wellness (NSW) contracted the Community Research, Evaluation and Development (CRED) team to conduct a strength and needs assessment on inclusive educational practices in NSW, which, through a student survey and key informant interviews with staff and faculty, aimed to answer the following questions:

- What are students' reported experiences related to inclusive instructional practices in NSW?
- What do students report as strengths and facilitators to their learning, academic success, and professional readiness, as it relates to DEI?
- What do students report as challenges and barriers to their learning, academic success, and professional readiness, as it relates to DEI?
- How do student experiences differ based on key demographic characteristics?

A total of 160 NSW students and recent alumni completed a survey intended to assess their appraisals of the strengths and needs around inclusive instruction during their time as a student in NSW. A rich set of demographic questions were also asked to allow the 'outcome' variables to be explored for differences in sentiments from different student groups.

A total of 9 key informant interviews were completed with advising staff, student support staff, and faculty members. As trusted student contacts in NSW, key informants were asked about the strengths, challenges, and barriers they saw consistently emerging across the students they support to identify important trends and themes in students' experiences.

Below is a summary of the overall findings and recommendations, which are described in more detail throughout the report.

NSW Inclusive Instruction Strengths

- Faculty and staff serve as strong and passionate advocates for student needs, and there is a sense that many positive changes have already arisen from these collective efforts.
- With some important exceptions that are noted in the challenges, students report feeling similarly valued and fairly treated, regardless of their age, national origin, language of origin and whether or not they identify as a caregiver, first-generation student, or student from a low-income family.
- There are many inclusive instruction best practices that are commonplace in NSW, and many students feel valued and have deep affection and appreciation for their instructors.
- NSW leverages a variety of strategic instructional resources to support student learning.
- There is a commitment to improving the large online degree program.
- Across many of the quantitative indicators, Yuma students had high rates of reporting that best practices were the standard in their educational experiences.
- NSW is reported to have a fairly diverse student services and advising team and a comparatively good student to advisor ratio.

NSW Inclusive Instruction Needs and Challenges

- Across many of the survey items, students who self-identified as having a chronic mental or physical health condition rated their experiences more poorly.
- Low-income students were more likely to report having felt marginalized in NSW compared to non-low-income students.
- While Latinx and White students had comparably positive experiences, students identifying as Asian, Black or African American, American Indian or Alaska Native, Middle Eastern or North African, and/or Native Hawai`ian or Pacific Islander (analyzed in a single group because of relatively small numbers) had less positive experiences in some cases.
- Timeliness of instructor and advisor responses, especially for online students who are dependent on email for communication, is a barrier to student success. Challenges with communication were the top complaint among students in open-ended responses.
- Despite the tremendous success of the online program in attracting students, there are still many who perceive the online experience to have substantial shortcomings in comparison to the experiences offered to main campus and Yuma students.

Recommendations

Instruction in the School of Nutritional Sciences and Wellness

- Enact guidelines for timely feedback from instructors.
- Make it about people: Instructors should take time to get to know students and how their background influences their experience.
- Establish a centralized, publicized resource for students to learn about research and internship opportunities.
- Improve the processes for recruiting, supporting, and training undergraduate preceptors and graders.
- Enhance equity and transparency around paid opportunities for graduate students.
- Explore additional options for making sure students can experience the fun of NSW courses before they get overwhelmed by math and science courses and leave the school/major.
- Consider offering transparent alternatives about how long the undergraduate degree will realistically take.
- Continue to support instructors in finding ways to minimize course costs for students.

Instruction, Broadly

- Continue to advocate for semester-long (vs. only 5- or 7-week) course options for online students.
- Continue to work with other departments to increase the frequency of offerings of key courses.
- Advocate for improved processes for getting transfer credits evaluated and applied.
- Expand supports for all students to be successful in “pressure point” classes.
- Work with instructors to implement practices that allow for flexibility and accommodations, understanding that students will need different supports and may experience unforeseen circumstances.
- Support university-level changes for earlier registration windows.

UA Online Students

- Extend main campus supports to online students (e.g. tutoring, ThinkTank).
- Continue to build and enhance a positive, connected experience for online learners.
- Be intentional about adapting courses for online.
- Enhance the supports for instructors teaching online and offer course design resources across the department.
- Acknowledge and adapt for the more mature set of learners that typically dominate the online student base.
- Consider the limitations of online group work and focus on assignments and activities that align with best practices.

Yuma Students

- Develop and share with students a very clear way to complete the 2+2 in 4 years.

Inclusive Instruction Best Practices

- Integrate additional inclusive instruction best practices into course design efforts.

Advising

- Work towards having more advisors with smaller caseloads.
- Give students a way to request a new advisor if they don't feel their assigned one is a good fit.
- Allow flexibility in student/advisor meeting length.
- Save shared advising information in a central repository so it's not buried in emails.
- Enact guidelines for timely feedback from advisors.

General

- Make the good practices happening in the school systematic, not piecemeal.

Unique needs for specific students

- *International students:* Instructors should be aware that there may be customs issues for required equipment (e.g., for microbiology). For international students from a sponsoring agency, maximize communication and clear plans to advisors as much as possible, so that they can support students. These students get in tricky, time-sensitive situations because of agency requirements.
- *Transfer students:* Create, expand, and heavily advertise campus orientation activities for transfer students. The current perception is that transfer students on main campus miss the in-depth resource overview that 4-year students get in their first year.

About this Report

The **Diversity, Equity & Inclusion (DEI) committee of the School of Nutritional Sciences and Wellness (NSW)** at the University of Arizona (UA) seeks to advocate for intentional curricular, co-curricular, recruitment, support and engagement initiatives that foster a diverse, equitable and inclusive (DEI) environment where our full community can learn and thrive.

In February of 2023, NSW funds became available to develop an evaluation to advance understanding of DEI and use findings to take action in alignment with NSW's strategic planning process. Through a series of meetings within the DEI committee, and later with the Community Research, Evaluation and Development (CRED) team, the topic of **Inclusive Instruction** was prioritized as the primary subject of the project scope.

The CRED team (hereafter referred to as 'the evaluation team') was contracted to conduct a strength and needs assessment on inclusive educational practices in NSW, which, through a student survey and key informant interviews with staff and faculty, aimed to answer the following questions:

- What are students' reported **experiences related to inclusive instructional practices** in NSW?
- What do **students report as strengths and facilitators** to their learning, academic success, and professional readiness, as it relates to DEI?
- What do **students report as challenges and barriers** to their learning, academic success, and professional readiness, as it relates to DEI?
- How do student experiences differ based on key **demographic characteristics**?
- As trusted contacts in NSW, what **strengths, challenges, and/or barriers does the student advising team see** consistently emerging across the students they support?

Findings from this project will inform, but are not limited to, the following action steps:

- Identifying appropriate inclusive instruction practices and trainings for NSW faculty and instructors
- Directing efforts within the NSW Strategic Plan that align with best practices for inclusive instruction
- Providing insight and recommendations related to DEI efforts to the NSW Director, Associate Director, and School Advisory committee as the school continues to develop its future vision and direction

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Background

Changing demographics of UA students

According to the UA Student Factbook, Fall 2023 was noted as having one of the most diverse incoming first-year classes in University of Arizona's history. Nearly half 49% of students self-identified as races/ethnicities other than White. From 2022 to 2023, the university saw notable increases in the proportion of first-year students identifying as Native American (+22%), Black or African American (+10%), and Hispanic or Latinx (+7%).¹

In the College of Agriculture, Life, and Environmental Sciences (CALES), the number of undergraduate students over the age of 25 doubled between 2014 (n=332) and 2023 (n=665), increasing from 10% of the undergraduate CALES population to 14%. During this same time period, CALES also saw an increase in the proportion of undergraduate students identifying as a race other than White (38% to 43%).²

A growing number of students are seeking out online degrees, and University of Arizona has tapped into this interest. Between 2015 and 2023, enrollment in Arizona Online grew from just 362 students to 9,164 students, with undergraduate students making up a large proportion of this growth.³ Arizona Online students are largely considered post-traditional learners, with the majority working while pursuing their degree (85%), transfer students (73%), and identifying as first-generation (55%). A notable proportion are caregivers (42%), are Pell eligible (33%), and are military connected (27%).⁴ NSW is one of UA's biggest players in the UA Online sphere, with the school experiencing its own rapid growth in online students. According to the fall student census, half of all NSW students are enrolled in Arizona Online.

Why inclusive instruction matters

Modern college students come from a massive array of racial, ethnic, and cultural backgrounds and identify with diverse gender expressions, sexual orientations, and nationalities. They reflect different socioeconomic backgrounds, different age groups, and religious beliefs. They have varying abilities or disabilities and neurodiverse experiences. They hold different epistemologies and ways of thinking about the world. Students might commute to campus or be a distance learner. They may transfer in from another institution. They might be working full-time. They might be a parent or a caregiver. They might experience chronic health issues and have specific needs related to mental and physical wellness. They might have familial or community commitments that constrain their availability. They might learn better when offered different formats to process information like visual aids, audio, visual, and hands-on activities. Regardless of their background, students all deserve to learn and thrive as students, and feel a sense of connection to their degree program. Inclusive instruction helps to make this possible.

Defining inclusive instruction

Attention to inclusive instructional practices has grown as classrooms have diversified. These practices, drawing on concepts from universal design,⁵ cultural responsiveness,^{6,7} equity and inclusion, and servingness,⁸ are intended to minimize barriers to success for students of all abilities and help students, including those with non-traditional academic backgrounds, leverage their own expertise and experiences to enhance learning. As described by one university, "The objective of an inclusive classroom is for all students to be valued in the classroom for their diverse abilities, experiences and perspectives. This is accomplished through methods,

strategies and materials that are not only diverse... but also accessible (limiting barriers of access to all students).”⁹

This strengths and needs assessment explores the use of inclusive teaching practices that foster a sense of belonging and promote educational success for students of all backgrounds and experiences. To get a holistic sense of student experiences, the evaluation team defined instructional experiences broadly to include experiences and interactions with faculty, teaching assistants, advisors, and mentors, and in settings including their classes, internships, and research experiences.

In operationalizing these ideas, we drew heavily on materials from the [University of Michigan’s Inclusive Teaching resources](#). They define these five domains of inclusive instruction, rooted in research-based principles:¹⁰

5 Principles of Inclusive Instruction

- **Critical Engagement of Difference:** Acknowledging students’ different identities and experiences; leveraging student diversity as an asset for learning.
- **Academic Belonging:** Cultivating students’ sense of connection to and ability to see themselves in your course, a broader community of scholars, or the discipline.
- **Transparency:** Clearly communicating with students about expectations and norms; explaining purpose, task, and criteria for learning activities.
- **Structured Interactions:** Developing protocols or processes that support equitable access and contributions to interactive elements of the learning environment – and disrupt patterns that reinforce systemic inequities.
- **Flexibility:** Responding and adapting to students’ changing and diverse circumstances; engaging empathetically with student needs, both emerging and persistent; balancing intentional design and commitment to providing accommodations for equitable learning.

Methods

Positionality Statement

The evaluation team for this project is comprised of four people; three CRED team staff evaluators and one NSW undergraduate student evaluator hired to lend her expertise specifically for this project.

Our NSW undergraduate student is majoring in Nutritional Sciences with an emphasis in dietetics and minoring in Weight Inclusive Health. She is passionate about the environment, wildlife, and most importantly using her knowledge that she has gained through this program to help individuals with their wellbeing, both physically and mentally. As a student in Nutrition, she has her own experiences about inclusive practices within her classes, which helped her thrive working with the CRED team on the project. She contributed to survey design, data collection via interviews, qualitative coding, and analysis of open-ended responses.

The CRED team members are experienced in conducting strengths and needs assessments. All three have worked in education (including roles as K-12 teachers, university instructors, and student services

professionals), and one member is a doctoral student in higher education. One member worked on diversity, equity, and inclusion efforts at multiple colleges and universities, including working as research staff in the University of Arizona Mel and Enid Zuckerman College of Public Health supporting the Committee on Inclusion and Equity in implementing their Inclusive Excellence Action Plan.

Student Survey

Survey Design

The goals of the student survey were to 1) assess student appraisals of the strengths and needs around inclusive instruction during their time as a student in NSW and 2) record students' backgrounds and identities across a wide array of demographic categories. A rich set of demographic variables allows the 'outcome' variables to be explored for differences in sentiments from different student groups. For example, do first generation students feel differently about their experiences related to inclusive education than those students who are not first generation?

The questions and response options were informed by a number of sources, including:

- The Stanford University Inclusion, Diversity, Equity, and Access in a Learning Environment (IDEAL) study¹¹
- University of Arizona student data sources
- The University of Michigan Center for Research on Learning & Teaching's list of Equity-focused Teaching Strategies¹²
- The Inclusive Teaching Strategies Inventory-Student (ITSI-S) instrument¹³
- A formative discussion with the NSW DEI committee about their goals and priorities for the strengths and needs assessment and what topics they put under the umbrella of "inclusive instruction"

The evaluation team iteratively refined items for this particular assessment by simplifying language, focusing on those that would be readily understood by undergraduate students, and prioritizing items that would be actionable. A link to a copy of the student survey is included in the **Appendix**.

Data Collection

The survey (see **Appendix** for the instrument) was distributed in English using the Qualtrics survey platform. The online survey was open for about 5 weeks, from September 11 to October 16, 2023. The survey was originally slated to close on September 29, but the deadline was extended in hopes of getting additional responses. Response rates are shown in **Table 1**. Response rates.

The evaluation team shared the survey and recruitment materials, including emails, D2L posts, and slides, with advisors, key faculty, and the DEI committee, which includes student representation. We also asked these partners to share the survey with recent graduates, knowing that they could also be valuable sources of insight having completed the entire degree program. The survey was open to all students and recent alumni, including graduate, undergraduate, main campus, online, and distance campus students.

Per the advice of a faculty member, recruitment materials included a suggestion (and supporting materials) that instructors could offer extra credit for participation in the survey. A subsequent survey, not connected to

their anonymous survey, offered a certificate that noted the student’s participation in the survey which could be turned in to the instructor for extra credit.

The evaluation team provided weekly participation updates on Friday to the DEI committee. These updates included response rates from different campuses and degree programs with the goal of encouraging efforts to expand representation in any lower-response rate groups.

A total of 208 students and alumni began the survey. Of those, 5 (2%) failed the screener question (indicating they were not an NSW student). Another 3 indicated that they didn’t have a major or minor in NSW, and 40 (19%) skipped all of the questions focused on inclusive instruction. These respondents were all excluded from analyses.

Of the remaining 160 responses, 149 completed the full survey, though the 11 partial responses were included where they had relevant data.

Table 1. Response rates

	Survey participation count	Total from Fall 2023 student census	Response rate
Current student	160	1005	16%
Main Campus	50	487	10%
UA Online	99	501	20%
Yuma	10	13	77%
Full time	129	696	19%
Part time	27	309	9%
Bachelors	114	948	12%
Masters	35	40	88%
Doctoral	5	16	31%

Quantitative Analysis

Descriptive statistics were calculated in Excel for background demographic items. Partial responses were included where they had relevant data for a maximum sample size of 160. Quantitative results of the inclusive education items were summarized in the interactive Excel dashboard, discussed further in **Quantitative Results**.

For a selection of broad outcome variables (e.g., how happy the student is overall with their experience in nutrition, whether they feel valued or marginalized), we did more in-depth analyses to explore between-group differences. In these analyses, we used chi-squared tests, treating the Likert-type responses as categorical variables. The “prefer not to answer” category was excluded from results. Depending on the item, sometimes we explored bucketing demographic groups or responses for a specific contextual point. These groupings are noted, and Fisher’s Exact Tests were used for analyses of 2x2 tables.

Qualitative Analysis

Thematic coding based on the concepts of inclusive instruction was used to code the open-ended survey responses. A codebook was initially developed by a senior member of the evaluation team, drawing on key

aspects of the project. The four members of the evaluation team then independently coded items from each of the open-ended responses and compared results. Points of disagreement were discussed, and coders arrived at a consensus. Additional codes identified inductively through the coding process were also discussed, agreed upon, and added to the codebook. Coding was done by all members of the evaluation team using Text iQ, Qualtrics' text analysis tool, with additional checks for agreement on challenging items during weekly meetings.

Key Informant Interviews

Interview Guide Development

The goal of the key informant interviews was to gather input from key persons in NSW, focusing heavily but not exclusively on the student advising team, on the strengths, challenges, and barriers they saw consistently emerging across the students they support. As trusted student contacts in NSW, these individuals could provide robust qualitative information to identify important trends and themes in students' experiences.

An interview guide was developed to ensure consistency across interviewers. Where possible, interviews were scheduled in advance of the student survey dissemination, and interviewees were asked to provide feedback on the survey to ensure it addressed the primary goals of the project and was clear and accessible for students to complete. They were then asked a series of questions about the strengths, challenges, and barriers they saw in NSW related to inclusive instructional practices. A link to the interview guide is provided in the Appendix.

Data Collection

The DEI committee assisted with generating a list of key persons in NSW to interview. In addition to academic advising staff, the committee identified student support staff and faculty members who could speak to the broad challenges experienced by students in the school. Thirteen current and former employees were invited to participate in an interview. A total of 9 interviews were completed. All interviews were conducted on Zoom and interviewers transcribed interviewee responses in real-time. To ensure an accurate transcript, all interviews were also recorded and, when possible, a second evaluation team member participated in the interview as a second notetaker.

Qualitative Analysis

Summarizing the interviews along the project themes was done by one team member. This step was done after the other qualitative coding had been completed, thus capitalizing on the consensus around themes and coding from the collaborative efforts during the student survey coding. Zoom transcripts and videos were used to ensure accuracy of the quotations.

Survey Results

Sample demographics

The composition of the 160-student sample is highlighted in Tables 2 & 3.

Table 2. Demographics: Student Experience

Student Experience	Count	Proportion
Campus		
UA Online	99	62%
Main Campus (Tucson)	50	31%
Yuma	10	6%
Start year		
2022 and before	111	70%
2023	48	30%
Degree program		
Undergraduate	117	75%
Graduate (degree or certificate)	40	25%
Transfer status		
Didn't transfer	65	43%
From 2-year college	51	34%
From 4-year college	35	23%
Full or part time		
A full-time student	129	83%
A part-time student	27	17%
First generation student		
No	86	55%
Yes	71	45%
Work hours while a student		
<30 hours/week	61	39%
30+ hours/week	57	37%
Not working	37	24%

Table 3. Demographics: General Background

General demographics		Count	Proportion
Gender	Woman	142	89%
	Man	14	9%
	Another gender*	4	3%
Age	18-24	64	40%
	25+	85	53%
Race & Ethnicity (non-exclusive)			
	White or European	95	59%
	Hispanic or Latino/a	43	27%
	Asian or Asian American	17	11%
	All others*	22	14%
Caregiver			
	Not a caregiver	113	71%
	Caregivers (non-exclusive)	47	29%
	Caregiver for children	36	23%
	Caregiver for elders	11	7%
Low-income student			
	No	98	67%
	Yes	48	33%
Military affiliation (non-exclusive)			
	No affiliation	129	81%
	Veteran or dependent of veteran	19	12%
	Active duty, reserves, or dependent of active duty	14	9%
English is first language			
	Yes	138	86%
	No	22	14%
From the US			
	Yes	149	93%
	No	8	5%
Has chronic health issues			
	No	103	69%
	Yes	47	31%
Has a disability			
	No	138	86%
	Yes	20	13%

Notes: Race and ethnicity, caregiver status, and military affiliation have non-mutually exclusive categories, meaning that percents may sum to more than 100 as respondents could check multiple options. In some cases, percents sum to less than 100 because of missing data or "prefer not to answer" responses, which are not illustrated here.

*In instances of small numbers, categories were combined. Combined response options in the "another gender" category included agender, transgender, non-binary, genderqueer or genderfluid, and questioning or unsure. Combined response options in the "All others" race & ethnicity category included Black or African American, American Indian or Alaska Native, Middle Eastern or North African, Native Hawai'ian or Pacific Islander, and a write-in option.

Inclusive Instruction Results

Key findings from the survey related to inclusive instructional practices are visualized below. A priority of this project was to explore how these experiences may vary for students with different backgrounds. To maximize this ability, the evaluation team created two interactive dashboards (one for quantitative data, and one for the open-ended qualitative responses) where you can apply filters for different aspects of students' backgrounds and examine how responses to these indicators may change. Links to the interactive dashboards can be found in the Appendix.

Quantitative Results

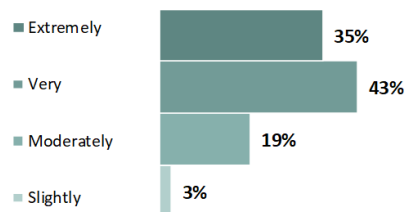
Overarching experience questions

Students were asked a series of general questions about their educational experiences as a student in NSW. The term 'instructor' was used throughout the survey to include all types of instructors, including professors, teaching assistants, and advisors. In addition to traditional classroom learning, students were also prompted to consider experiences in non-classroom learning settings (e.g., labs, research projects, placements, internships). The following figure was also included in the survey to prompt students to think broadly about instruction and not simply focus on experiences with professors.



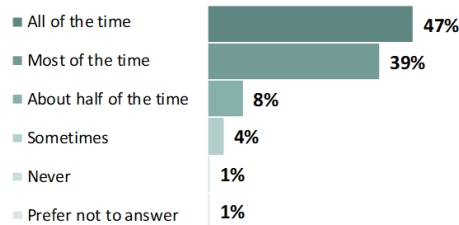
First, students were asked a broad question about how **happy** they are with their experience as a student in NSW, with options ranging from 'not at all' to 'extremely' happy. The majority of students surveyed (88%) said they're extremely or very happy, while about one-in-five (19%) said they're moderately happy and just 3% said they're slightly happy. No one reported that they were 'not at all' happy.

Overall, how **happy** have you been so far with your experience as a student in Nutrition?

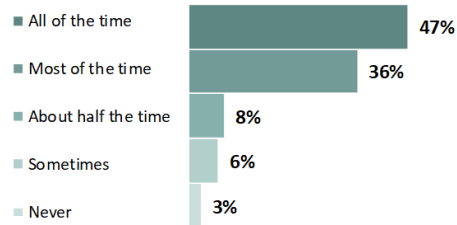


Overall, NSW students feel well-supported. The majority of students surveyed noted that all or most of the time they felt instructors were **approachable and supportive** (86%) and they felt **valued** as an individual (83%). Three-quarters (75%) of respondents agreed that course materials, expectations, and messages **considered their needs** (e.g., as a working student, a parent, an online/distance learner, etc.) all or most of the time. A similar proportion (78%) strongly agreed or agreed that they have access to the **resources, services, and programs** they need to navigate challenges and barriers.

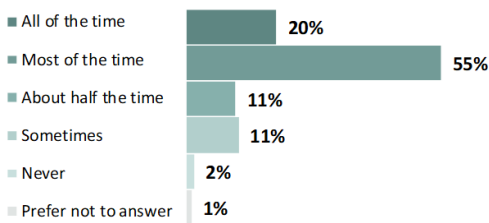
The instructors in Nutrition feel **approachable** and like they want to support me.



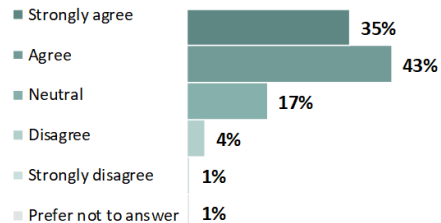
In Nutrition, I feel **valued** as an individual.



In Nutrition, how often have you felt that the course material, expectations, messages, etc. **considered your needs**?

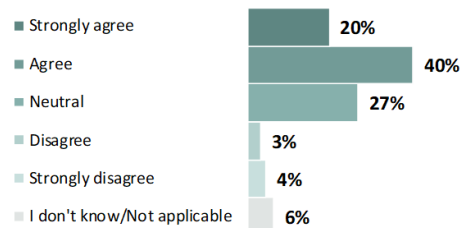


I have access to the **resources, services, and programs** I need in Nutrition to navigate challenges and barriers.

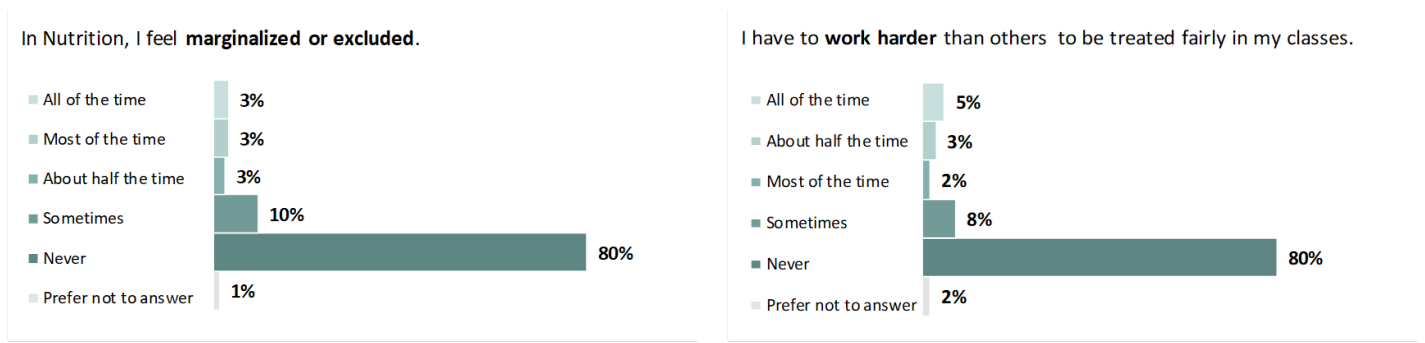


When asked whether they felt confident that they can set up a **meaningful research experience**, a notably smaller proportion strongly agreed or agreed (60%) and one-third (33%) selected either 'Neutral' (27%) or 'I don't know/Not applicable' (6%).

I feel confident that I can set up a meaningful **research experience** in Nutrition.



Students were also asked a few questions about challenging experiences in NSW; these were reverse-coded. When asked how often they felt **marginalized or excluded**, the majority of students said 'Never' (80%), though it is worth noting that 9% of students felt marginalized or excluded somewhere between 'Half of the time' and 'All of the time.' When asked if they have to **work harder than others** to be treated fairly in classes, students responded similarly, with the majority saying 'Never' (80%) but one-in-ten (10%) selecting between half of the time and all of the time.

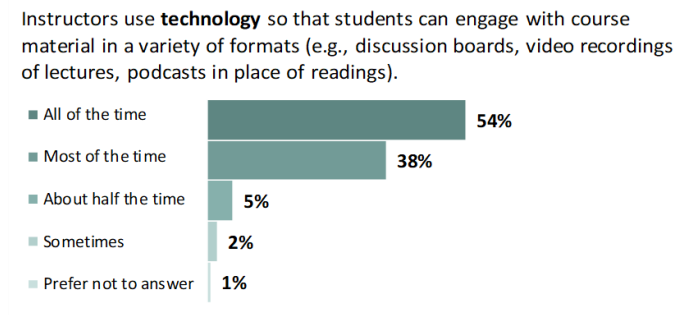


Inclusive best practice questions

Students were then asked a series of questions about different inclusive instruction best practices and asked to rate how often they experienced these best practices in NSW. Their responses were sorted by the percentage that selected either 'All of the time' or 'Most of the time' (included in parentheses) to understand the areas of strength and the opportunities for growth in inclusive instruction.

It is worth noting that across all items a majority of respondents selected 'All of the time' or 'Most of the time,' signaling that a large proportion of students who completed the survey agreed that these best practices are consistently being implemented in NSW.

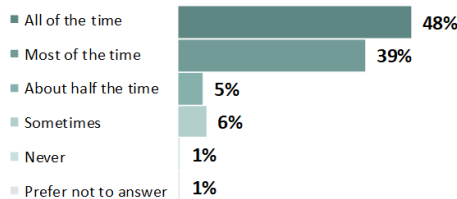
In terms of strengths, the inclusive best practice students experienced most frequently was instructors **using technology so students can engage with course material in a variety of formats** (e.g., discussion boards, video recordings of lectures, podcasts in place of readings), with 92% of students selecting all or most of the time.



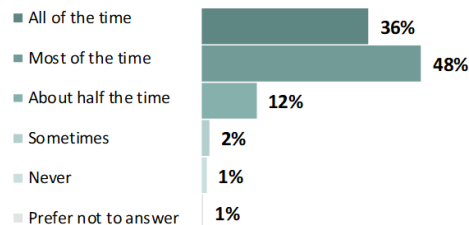
Other common best practices similarly focused on instructional practices utilized during the learning process that promoted engagement with and understanding of course material, including:

- Providing dedicated opportunities (e.g., time during class, dedicated office hours, online forms) for students to **ask questions about assignments and projects** (87%)
- Supplementing class sessions and reading assignments with **visual aids** (e.g., photographs, videos, diagrams, interactive simulations) (84%)
- Using a **variety of instructional formats** in addition to lectures (e.g., small groups, peer-assisted learning, hands-on activities) (81%)
- **Summarizing key points** and connecting them to larger course objectives (79%)

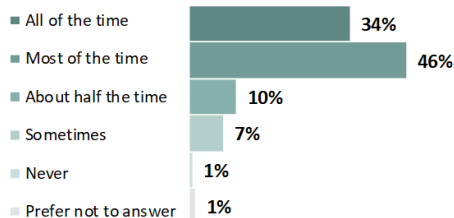
Instructors create dedicated opportunities (e.g., time during class, dedicated office hours, online forms) for students to **ask questions about assignments and projects**.



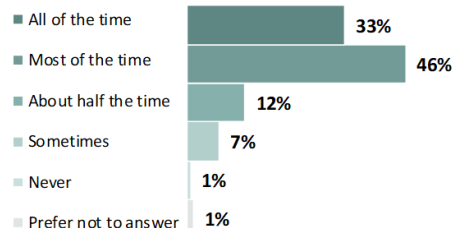
Instructors supplement class sessions and reading assignments with **visual aids** (e.g., photographs, videos, diagrams, interactive simulations).



Instructors use a **variety of instructional formats** in addition to lecture, such as small groups, peer-assisted learning, and hands-on activities.



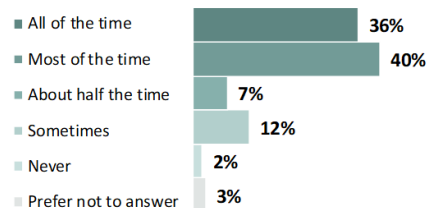
Instructors **summarize** key points and connect them to larger course objectives.



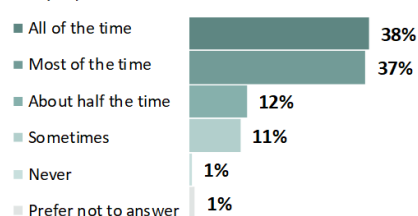
The next set of inclusive instruction best practices, focused more on students' experience and demonstration of knowledge, happened slightly less consistently.

- Creating dedicated opportunities (e.g., time during class, dedicated, office hours, online forms) for students to **provide feedback on their experience** and share ideas for improving it (76%)
- Giving opportunities to **demonstrate knowledge and skills** in ways other than traditional tests and exams (e.g., written essays, portfolios, discussion boards, video blogs) (75%)
- Offering guidance on how to **prioritize course tasks and requirements** (e.g., breakdown of points for graded assignments, key readings, attendance policies) (74%)

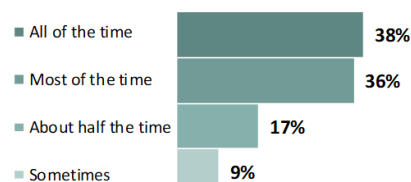
Instructors create dedicated opportunities (e.g., time during class, dedicated office hours, online forms) for students to **provide feedback** on their experience and share ideas for improving it.



Instructors give students the opportunity to demonstrate their knowledge and skills in ways **other than traditional tests and exams** (e.g., written essays, portfolios, discussion boards, video blogs).



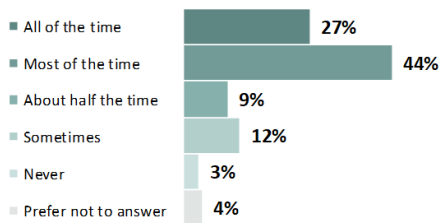
Instructors offer guidance on how students can **prioritize course tasks and requirements** (e.g., breakdown of points for graded assignments, key readings, attendance policies).



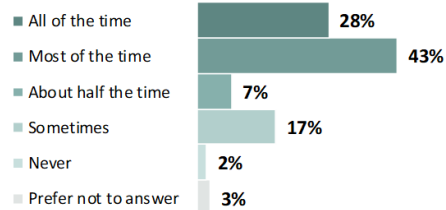
While, again, the majority of students agreed that this next set of best practices happened all or most of the time in NSW, it is worth noting that the following best practices, which relate to instructors connecting course concepts to a variety of communities and cultures and showing care and concern for students as people, were less common than practices related to course materials and assignments.

- Offering opportunities for students to consider the **relevance of course concepts** to the concerns of a variety of communities and cultures (71%)
- Providing clear guidance and student support understanding **unforeseen circumstances may arise** (e.g., turn in work late, leave class early) (71%)
- Asking about **students' backgrounds** at the beginning of the semester to better know them (71%)
- **Communicating concern** for students' well-being, and sharing information about campus resources (e.g., Campus Pantry, Counseling & Psychological Services, Sexual Assault Prevention & Awareness Center, Disability Resource Center) (68%)

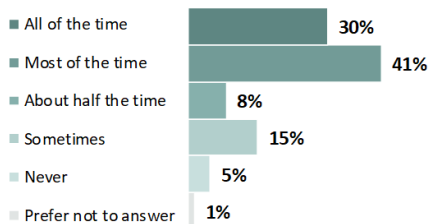
Instructors offer opportunities for students to consider the **relevance of course concepts** to the concerns of a variety of communities and cultures.



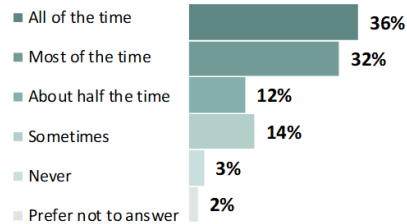
Instructors provide clear guidance and support student learning understanding that **unforeseen circumstances may arise** (e.g., turn in work late, leave class early).



Instructors ask about **students' backgrounds** at the beginning of the semester so they can better know us.



Instructors **communicate concern** for students' well-being, and share information about campus resources.

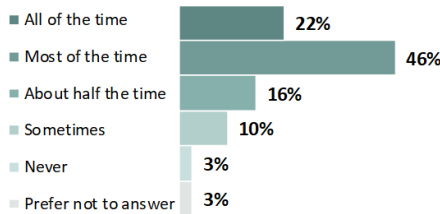


This last series of inclusive best practices were experienced least frequently by students who completed the survey. Inviting students to connect course concepts to their own background, knowledge, or expertise and emphasizing risk and mistakes as important parts of learning were rated as least common.

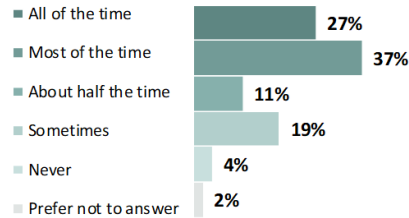
- Ensuring students feel okay when starting a new class **not knowing much about the topic** by finding a way to connect to what they do know (68%)
- Designing assignments and activities with both **real-time (live) and self-paced (flexible)** options for participation (64%)
- Choosing course materials and activities with a **range of student circumstances** in mind (e.g., physical abilities and disabilities, financial and technological resources, time commitments such as work or family care obligations) (59%)
- Inviting students to **connect course topics** to their own background, knowledge, or expertise (57%)

- Emphasizing that **risk and mistakes** can be important parts of any learning process and providing opportunities for **productive trial and error** (56%)

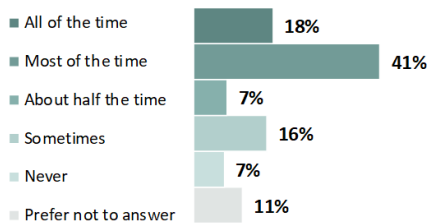
It feels okay when I start a new class **not knowing much about the topic**, because instructors find a way to connect what I do know.



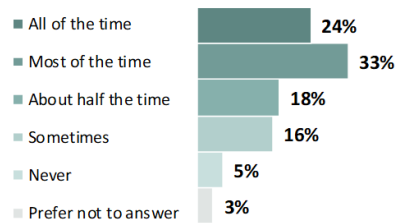
Instructors design assignments and activities with both **real-time (live)** and **self-paced (flexible)** options for participation.



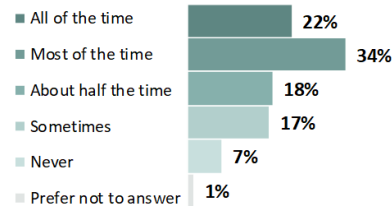
Instructors deliberately choose course materials and activities with a **range of student circumstances** in mind.



Students are invited to **connect course topics** with their own background, knowledge, or expertise.



Instructors emphasize that **risk and mistakes** can be important parts of any learning process and provide opportunities for **productive trial and error**.



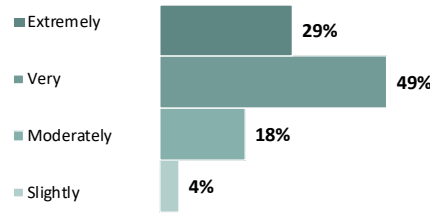
Demographic differences

When exploring differences in survey responses by demographics, students reported overall positive experiences across different indicators of identity. For example, in looking at the answers to the question, **“Overall, how happy have you been so far with your experience as a student in Nutrition?”**, answers didn’t markedly differ by group looking at graduate versus undergraduate, age, caregiver status, first-generation student status, low-income student status, whether the students identified as being from the US, or as native English speakers.

This question’s response did, however, differ by **campus**. Among online students, 29% reported being extremely happy with their student experience, compared to 47% of main campus and Yuma students ($p=.034$). The good news is that most of the difference was made up when looking at those who indicated they are “very” happy; if “extremely” and “very” happy are taken together, then results are similar across campuses.

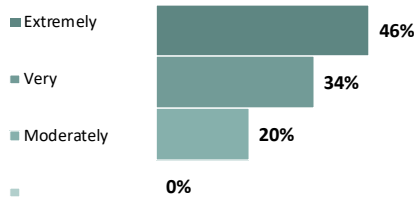
UA Online (n=98)

Overall, how **happy** have you been so far with your experience as a student in Nutrition?



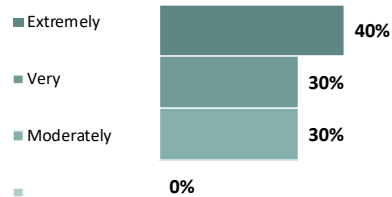
Main Campus (n=50)

Overall, how **happy** have you been so far with your experience as a student in Nutrition?



Yuma Campus (n=10)

Overall, how **happy** have you been so far with your experience as a student in Nutrition?

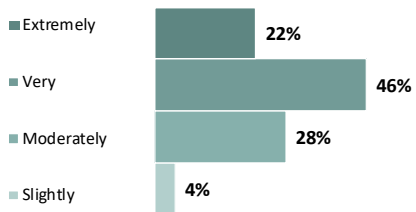


There were some additional groups of students who tended to report divergent experiences.

One such group is the group of students who indicated that they have a **chronic physical or mental health condition** (n=47). These students tended to report lower **happiness** with the program ($p=.0715$), lower feelings of being **valued** as an individual ($p=.003$), and higher feelings of **marginalization** ($p=.0566$) compared to students without chronic health conditions.

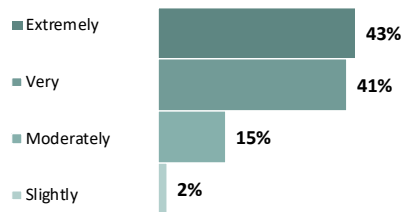
Chronic health condition (n=47)

Overall, how **happy** have you been so far with your experience as a student in Nutrition?



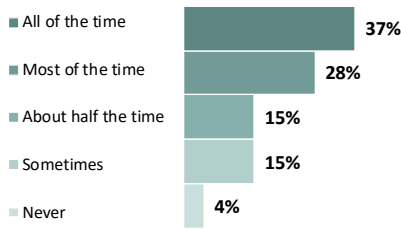
No chronic health condition (n=103)

Overall, how **happy** have you been so far with your experience as a student in Nutrition?



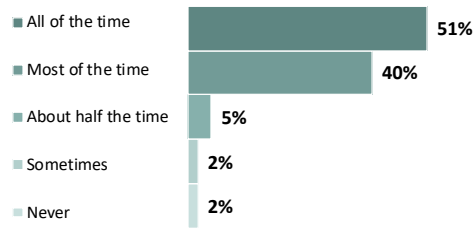
Chronic health condition (n=46)

In Nutrition, I feel **valued** as an individual.



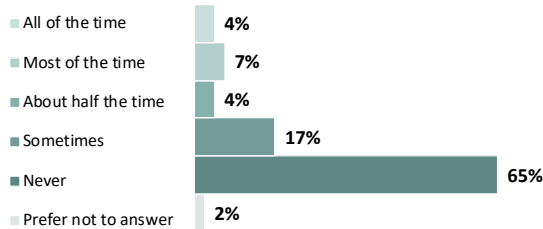
No chronic health condition (n=101)

In Nutrition, I feel **valued** as an individual.



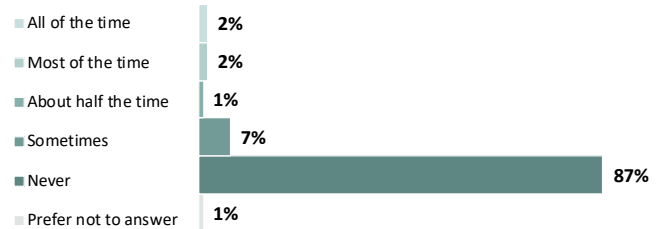
Chronic health condition (n=46)

In Nutrition, I feel **marginalized or excluded**.



No chronic health condition (n=101)

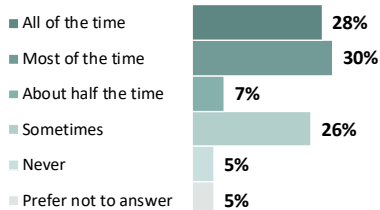
In Nutrition, I feel **marginalized or excluded**.



In addition to these overarching sentiments, students with **chronic health issues** tended to report lower rates of **inclusive practices**. For example, when asked whether “Instructors provide clear guidance and support student learning understanding that **unforeseen circumstances** may arise (e.g., turn in work late, leave class early),” 77% of students without chronic health conditions agreed this was true all or most of the time, compared to 58% of students with chronic health conditions ($p=.0461$ for binned responses). This patterning was also the case when asked whether “Instructors deliberately choose course materials and activities with a **range of student circumstances** in mind (e.g., physical abilities and disabilities, financial and technological resources, time commitments such as work or family care obligations)” (68% vs. 42%; $p=.003$).

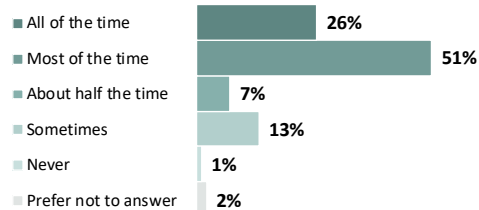
Chronic health condition (n=43)

Instructors provide clear guidance and support student learning understanding that **unforeseen circumstances may arise** (e.g., turn in work late, leave class early).



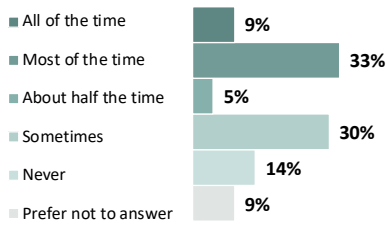
No chronic health condition (n=97)

Instructors provide clear guidance and support student learning understanding that **unforeseen circumstances may arise** (e.g., turn in work late, leave class early).



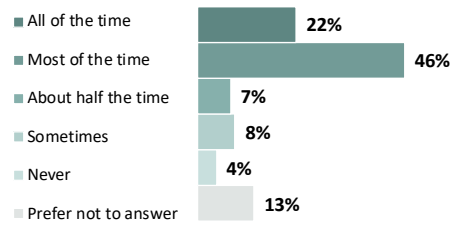
Chronic health condition (n=43)

Instructors deliberately choose course materials and activities with a **range of student circumstances** in mind.



No chronic health condition (n=96)

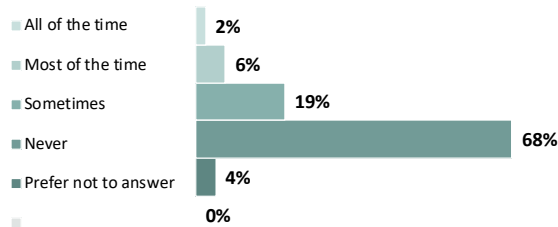
Instructors deliberately choose course materials and activities with a **range of student circumstances** in mind.



Students who identified as coming from **low-income** backgrounds also had some notable differences. While feelings of happiness and being valued were similar to other students, they reported more feelings of **marginalization**. Whereas only 14% of students not from low-income backgrounds reported ever having feelings of marginalization, that rate nearly doubled (28%) among students from low-income backgrounds ($p=.025$ for binned responses). This was mostly driven by the 19% of low-income students reporting feeling marginalized “sometimes.”

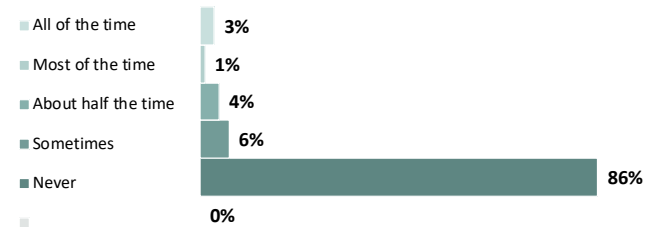
Low income (n=47)

In Nutrition, I feel **marginalized or excluded**.



Not low income (n=97)

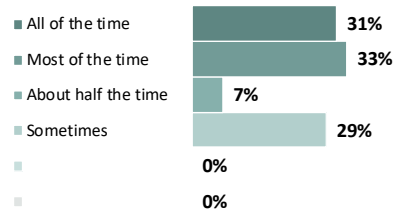
In Nutrition, I feel **marginalized or excluded**.



Like students with chronic health conditions, students from low-income backgrounds also reported differing experiences with guidance and support from instructors when **unforeseen circumstances** arose. Ten percent of non-low-income students reported only getting this support “sometimes” compared to 29% of low-income students.

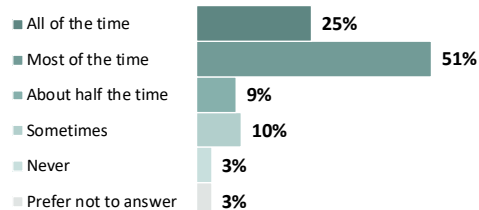
Low income (n=45)

Instructors provide clear guidance and support student learning understanding that **unforeseen circumstances may arise** (e.g., turn in work late, leave class early).



Not low income (n=97)

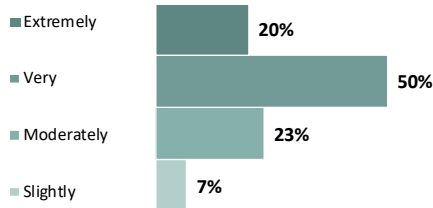
Instructors provide clear guidance and support student learning understanding that **unforeseen circumstances may arise** (e.g., turn in work late, leave class early).



Finally, **race/ethnicity** also appears to play a role in students' experiences in NSW. Because of small sample size, students reporting identities as Black or African American, American Indian or Alaska Native, Middle Eastern or North African, Native Hawai`ian or Pacific Islander, and a write-in option were recoded into an "Another race or ethnicity" category. The 30 students in this group tended to be less likely (20%) to report that they were "extremely **happy**" with their experience as a Nutrition student, compared to White or European and Hispanic or Latino/a students (40%, $p = .118$). This group also tended to report higher feelings of **marginalization** compared to White or European and Hispanic or Latino/a students ($p=.092$).

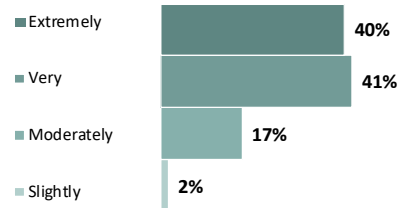
Another race or ethnicity (n=30)

Overall, how **happy** have you been so far with your experience as a student in Nutrition?



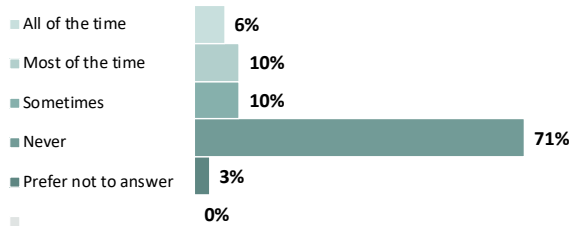
White/European and Hispanic/Latino/a (n=126)

Overall, how **happy** have you been so far with your experience as a student in Nutrition?



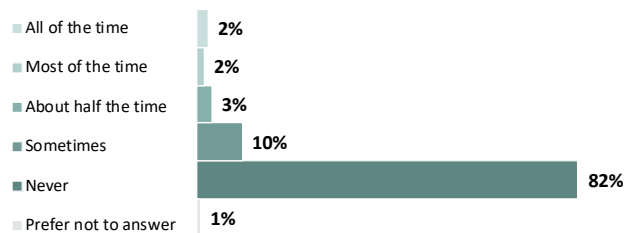
Another race or ethnicity (n=31)

In Nutrition, I feel **marginalized or excluded**.



White/European and Hispanic/Latino/a (n=123)

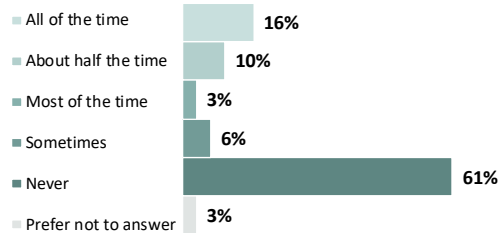
In Nutrition, I feel **marginalized or excluded**.



The majority (61%) of students who identified with another race or ethnicity indicated that they never have to work harder than others to be treated fairly in class. However, this was a notably lower proportion expressing that sentiment compared to Hispanic or Latino/a (83%) and White (86%) students.

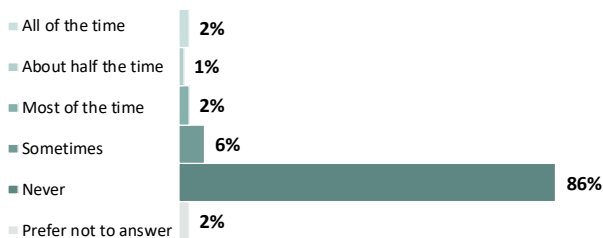
Another race or ethnicity (n=31)

I have to **work harder** than others to be treated fairly in my classes.



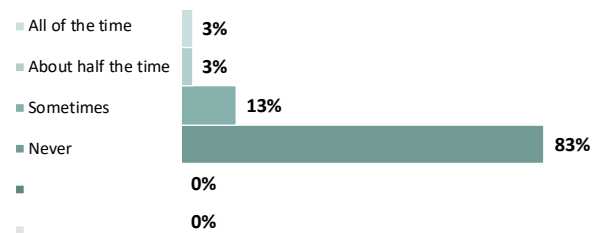
White/European (n=84)

I have to **work harder** than others to be treated fairly in my classes.



Hispanic/Latino/a (n=40)

I have to **work harder** than others to be treated fairly in my classes.



Qualitative results

The interactive qualitative data dashboard shows selected results from the open-ended questions of the student survey. Each tab in this dashboard corresponds with a different question in the survey, and most tabs allow you to filter responses by campus and education level. Responses in each tab are organized by primary themes, including sentiment (positive/negative), instructional best practices, themes identified in interviews with NSW staff and faculty, and inductive coding. Below are the key takeaways from the qualitative data. A link to the qualitative data dashboard can be found in the Appendix.

Valued. Students were asked to share about a time when they felt valued and supported in NSW. The most common theme was instructors making students feel welcomed, valued, and appreciated (n=17). Students also discussed how instructors granted accommodations requests and offered flexibility on assignments and deadlines (n=14) and created dedicated opportunities for students to ask for and receive help (n=13). Students noted the value of instructors considering a range of student needs and demographics when planning course materials and being responsive to unforeseen circumstances (n=12). They also appreciated when they were encouraged to share about themselves, their background, and how it connected to the course (n=11) and when instructors communicated concern for their well-being, including sharing information about campus resources (n=6).

Struggled. Students were also asked to share about a time when they struggled or didn't feel supported in NSW. The most common themes were instructors not providing timely or clear feedback on assignments and grades (n=12) or more generally not communicating or showing support (n=16). Students also expressed

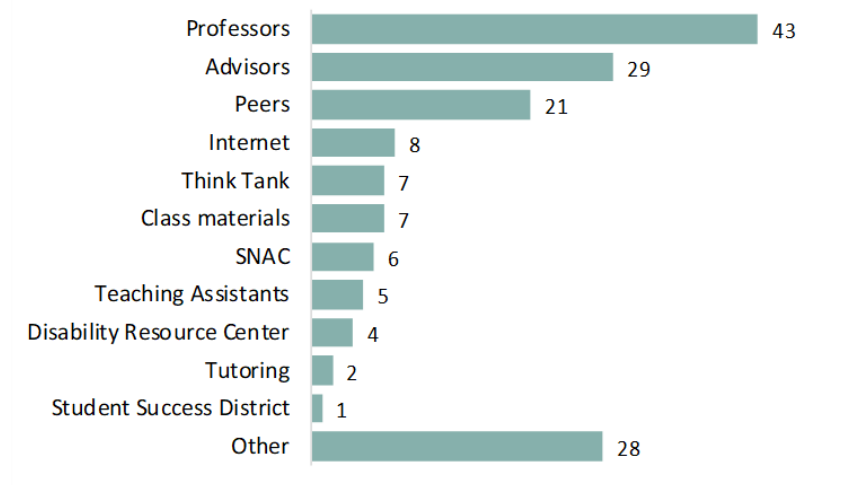
challenges with their advisors not communicating or showing adequate support (n=12). Students conveyed negative experiences with instructors who didn't consider a range of student needs and demographics when planning course materials, including considering cost (n=13). Some students also noted that they struggled with the workload in Nutrition, with some struggling with too much work and some finding that there was not enough meaningful work (n=8).

Peer experiences. In addition to sharing their own experiences, students were asked if they knew of someone else who had a particularly positive or negative experience in NSW. While many shared positive experiences among peers (n=15), a similar number of students shared negative experiences that were similar to the challenges they personally expressed in the previous question (n=16). Several online students disclosed that they did not have any connections with peers that they could describe (n=4).

Things to improve. For negative experiences shared in the previous questions, students were asked how things could have been improved. Several students referred to improved communication (n=7) and more understanding and support for their experience (n=6). A number of students provided specific feedback on improvements to their class experience, including more inclusive course content (e.g., trans-inclusive, weight-inclusive), clearer guidelines for assignments, and improved teaching approaches that are mindful of different learning styles.

Resources. Students were asked what resources they use and where they turn for help when they hit a challenge or barrier as an NSW student. Many students listed several resources in their response. The following figure shows the most common resources students noted. Several students (n=9) shared negative experiences of seeking resources and help, the majority of whom were online students (n=7).

Figure 1. Qualitative coding themes - Resources



Requesting Accommodations. Students were asked if they ever requested services or accommodations (e.g., extended testing time, extension on a deadline) in their NSW classes. If they did, they were asked about that experience. Most responses were related to requests for extensions on assignments due to unforeseen circumstances (e.g., sickness, bereavement). For the most part, students shared positive experiences (n=16), though some shared negative experiences when accommodations weren't granted (n=5).

TAs and Preceptors. Students were asked if they served as an instructor, teaching assistant (TA), or preceptor for a class in NSW. If they did, they were asked about that experience. Students largely shared positive experiences of serving as TAs or preceptors for NSW classes (n=25), including feeling adequately prepared for

their role, positive engagement with instructors, and generally enjoying the experience. Some students offered important feedback on ways their experience could have been improved (n=7), including areas for additional training – using D2L, grading, supporting students on assignments, emotional intelligence, conflict resolution, teaching/mentoring, organization, and communication.

Additional Thoughts. At the end of the survey, students were asked if there was anything else they wanted to share about their experience in Nutrition. Some students took the opportunity to further emphasize how positive their experience has been in Nutrition (n=10), while others shared additional feedback on challenging experiences and recommendations for improvements (n=10). Several students further emphasized the need for improved communication and flexibility from instructors (n=4).

Overall Findings

The following findings synthesize results from the student survey and the key informant interviews.

Inclusive Instruction Strengths

Throughout the data collection process, the evaluation team heard repeatedly about ways that NSW is engaged in continuous improvement and areas of excellence. These growth and strength areas include:

Champions of student success and well-being. Faculty and staff serve as strong and passionate advocates for student needs, and there is a sense that many positive changes have already arisen from these collective efforts. Members of the SNAC team have been especially influential in advocating for important improvements, such as adding more science courses and advocating for increases in course frequency/availability so that students can make timely progress to graduation.

Serving diverse populations of students. Across many of the student survey items, there were very few significant differences between how students from different backgrounds described their experiences in NSW. With some important exceptions that are noted in the challenges below, students report feeling similarly valued and fairly treated, regardless of their age, national origin, language of origin and whether or not they identify as a caregiver, first-generation student, or student from a low-income family. Latinx students generally report better or comparable answers to White students (e.g., 88% of Latinx students said they were valued all or most of the time as an individual compared to 84% of White students), an important accomplishment for a Hispanic Serving Institution.

Excellence in teaching. There are many inclusive practices that are already commonplace in NSW, and many students feel valued and have deep affection and appreciation for their instructors.

- Instructors see and acknowledge their students as whole people and ask students to connect their broader life experiences to the course materials.

“During my Freshman Year, I felt so valued and supported by [redacted]. She was incredibly supportive and understanding. Other teachers as well [redacted] made me feel like I could talk to them about my issues with school, or personal. They were willing to help me in any way possible and always suggested to meet them if I ever needed help with anything. I felt like a human being that someone noticed me and values me like a person and not just a student who needs to get the degree or does the assignments.”

– NSW Student

- Many instructors have made it a regular practice to promote resources for student wellness as part of their teaching.
- Weight-inclusive goals of the program are gaining awareness and becoming more widely implemented.
- Instructors find ways to minimize costs for students.

“One of my professors used a free textbook that was available online, which I appreciated so much because they clearly understood that we're already paying tens of thousands of dollars for tuition, so having to pay another \$200+ for a textbook that we only use for a short period of time causes unnecessary financial strain.”

– NSW Student

“For one of our assignments, we were asked to buy a cut of meat that was extremely expensive just for a lab. The professor changed the meat requirement to something that was cheaper, as well as offering a completely different lab if they had not started yet.”

– NSW Student

- Students describe NSW instructors as adept at working with students, including online students, and using an array of activities, assignments, and instructional approaches to engage learners.
- Many students shared ways in which their instructors were responsive when a student asked for an extension or other form of flexibility.
- TA and preceptor experiences are valued by students holding those positions.
- Sports nutrition classes were noted as especially well-reviewed by students. According to one source, those instructors “put so much work into wanting to engage learners, and they're so enthusiastic about it.”

Teaching and learning enhancements. NSW leverages a variety of strategic instructional resources to support student learning.

- One commonly cited enhancement was the hiring of an experiential learning coordinator to help students with placements.
- Other strengths include offering some main-campus classes in collaborative learning spaces, where students can engage directly with one another.
- Lab classes are “great for bringing the content [students are] learning about to life.”
- 1-unit success courses are valuable tools to ensure that students explore available UA or NSW resources.
- NSW is a strong user of the CALES Learning Lab, a helpful resource available to online, Yuma, and main campus students.

Ongoing improvements in the experiences of online students. There is a commitment to improving the large online degree program.

“We have come such a long way with online... I am hopeful. I’m happy to look at the progress we have done, but I think there’s still work to do.”

– NSW employee

- Recent years have brought advancements in classroom tools, graphics, recording technology, and the quality of online content. Instructor use of available technology is improving, reflecting a dedication to enhancing the online learning experience.
- There is a concerted effort to bring more initiatives to online students and increase parity of resources available to main-campus and online students.
- One exemplary initiative is the launch of the FLOURISH Ambassador program, specifically designed to give online students more connection with one another and NSW through events, coffee chats, communications, and peer mentorship.

Yuma (distance program) students appear especially nurtured through their experiences. Across many of the quantitative indicators, Yuma students had high rates of reporting that best practices were the standard in their educational experiences. For example, compared to other campuses, higher percentages of Yuma students said their instructors offered alternate ways to demonstrate knowledge (other than tests) and provided opportunities for productive trial and error. Furthermore, 60% feel their instructors always communicate concern for their well-being, compared to only 34% of students at the other campuses.

Strong student advising. NSW is reported to have a fairly diverse student services and advising team and a comparatively good student to advisor ratio. The advising team is described as empathetic of students in a wide array of situations.

- The SNAC space is a welcoming environment for on-campus students, and even instructors, and offers additional events and speaker series.
- Advisors invest in upfront conversations about program requirements and the expected time-to-completion during orientation conversations, and they provide students with video copies of the orientation so that they can return to it.
- The advising team also supports online students with a degree checklist, to help keep track of the many requirements of the program.

Inclusive Instruction Needs and Challenges

Looking across the information gathered through student surveys and key informant interviews, persistent points of challenges emerged. These challenges focused on the following issues.

Serving students with chronic health conditions. Across many of the survey items, students who self-identified as having a chronic mental or physical health condition rated their experiences more poorly. This includes lower proportions reporting that overall, they’ve been ‘extremely’ happy with their experiences, elevated rates of feeling marginalized and having to work harder to be treated fairly, and a lower sense of feeling valued.

Serving low-income students. Low-income students were more likely to report having felt marginalized in NSW compared to non-low-income students (28% versus 14%). Throughout open-ended questions, students

also discussed challenges with program costs, including costs related to tuition, textbooks, and other course materials.

Serving students from all racial and ethnic groups. While Latinx and White students had comparably positive experiences, students identifying as Asian, Black or African American, American Indian or Alaska Native, Middle Eastern or North African, and/or Native Hawai`ian or Pacific Islander (analyzed in a single group because of relatively small numbers) had less positive experiences in some cases. For example, this heterogeneous group tended to be less likely (20%) to report that they were extremely happy with their NSW experience compared to Latinx (38%) and White (42%) students. They were also more likely (16%) to report frequent (i.e., most or all of the time) experiences feeling marginalized compared to Latinx (0%) and White (6%) students. And although the majority (61%) indicate that they never have to work harder than others to be treated fairly in class, this is a notably lower proportion than Latinx (83%) and White (86%) students expressing that sentiment.

Issues with communication. Timeliness of instructor and advisor responses, especially for online students who are dependent on email for communication, is a barrier to student success. Challenges with communication were the top complaint among students in open-ended responses.

- Students want to feel connected and heard, and having communication disappear into a void is antithetical to these goals.
- Timely feedback on assignments is important so that students have enough time to course correct if they're doing things incorrectly. When feedback and/or grades aren't reported back to students quickly enough, especially in 7-week classes, the opportunity for students to learn from their initial mistakes disappears, making those early errors unnecessarily significant factors in their success.

The online student experience. According to the 2023 fall student census, online students make up the majority of students in NSW. Despite the tremendous success of the online program in attracting students, there are still many who perceive the online experience to have substantial shortcomings in comparison to the experiences offered to main campus and Yuma students. Online programs offer flexibility, but also isolation, where a student may find it difficult to build community and find supports and resources necessary to be successful. Online students (29%) tended to be less likely to describe themselves as extremely happy with their NSW experience compared to their main campus (47%) and Yuma (46%) peers.

- The online experience is dramatically different in terms of academic supports offered and opportunities to build community with other students.
- The condensed (5-7 week) classes can present real barriers to success for online students.
- In some cases, online students feel that they are teaching themselves or getting outdated, secondhand video content, originally generated by someone who isn't even their instructor.
- More could be done to acknowledge the additional life experiences that most online students bring to their classrooms, compared to the traditional age students more common in main campus classrooms.
- The opportunities for online students to participate in skill- and relationship-building activities like being a preceptor or TA are not equivalent to those of in-person students.

Recommendations

The following recommendations were identified by the evaluation team over the course of this project. They take a broad view of inclusive instruction, focusing on a wide array of factors related to student success and well-being. These recommendations are offered with the goal of minimizing barriers to all students receiving comparable opportunities for an enjoyable, humanizing, and rigorous experience as an NSW student.

The evaluation team also recognizes that this is a long list, and that tackling all of these issues may not be possible at once. It is also worth noting that this strength and needs assessment focused on the student experience. There are almost certainly additional issues and challenges that would arise if we surveyed instructors. It is important to acknowledge that there are additional factors at play (e.g., advisor and instructor workloads) in decisions about which recommendations are actionable, and that decision-making requires balancing a constellation of needs.

Here, it is our goal to document the range of these issues and provide some suggestions for how the issues could be addressed. Some of the proposed actions are relatively straightforward, and others are much more complex and/or resource intensive.

Instruction in the School of Nutritional Sciences and Wellness

Items raised here are generally items that NSW could have some control of, either via policies, practices, or procedures.

- **Enact guidelines for timely feedback from instructors.**

- a. Timely responses to emails and timely feedback on assignments are both critical, especially in short courses.

"I do not feel supported when I get no responses to my emails. Throughout my experience of U of A, I have always been an online student and I would say about 75% of the emails I have sent...have received no response and it makes me feel isolated and like [my professor] doesn't care about the education we are getting."

– NSW Student

"There is no guideline for instructors on you need to respond to students in x number of days, and that's the only way to communicate for online students."

- NSW Employee

“Students not getting a timely response [is] big for inclusion. Because if you have students who are caretakers, who have jobs, who are first generation college students, or they're already feeling imposter syndrome for whatever reason, and then they're reaching out and they're not getting --or they have a disability, I mean, any number of these marginalized or minoritized identities -- and then you're in a situation where it's very likely that has nothing to do with why you're not getting a response in a timely manner. But when a student doesn't get a response in a timely manner, and they already are maybe lacking some confidence or already feeling a little bit out of place -- when we can't deliver really prompt, timely service that often manifests in a lot of self-doubt. They might not feel as confident coming back asking those questions, they might feel that they're being singled out.”

- NSW Employee

b. Students should be able to expect a response to email within 2-3 business days.

i. This is especially important for online students, for whom digital communications are their only point of contact, and who generally lack a sense of community with classmates.

“Our students will wait an entire half of the semester without anything graded. Sometimes and they have no idea where they stand in the course. So, by the time they get to the halfway point, they don't have any grades posted, and they don't know if they should drop the course because they don't know where they stand. So, the drop deadlines are approaching and they're like If I'm getting the D, I'd like to drop this class, but I truly don't know... They could continue to do their homework incorrectly for an entire 4 weeks.”

– NSW Employee

“Just spoke to a student, great student, frustrated because an instructor would grade something right before the next thing was due – the next thing that was due required feedback from previous assignment. [In online courses] you don't have a lecture space to say, ‘Hey, I'm late on grading assignments; use this general feedback’ – communication is a big thing.”

– NSW Employee

c. Instructors may need additional support from graders, preceptors, or TAs to help manage the workload effectively.

i. Consider lowering enrollment thresholds for TA or grader support.

• **Make it about people: Instructors should take time to get to know students and how their background influences their experience.**

a. Offer orientations to instructors, especially those teaching online, about who their students are (i.e., how demographics in an online course may be different than in the main campus course) and their differing needs.

“It takes intentionality, and you really have to stretch yourself, to think creatively, to be an inclusive instructor. And I think that a lot of times we're not very inclusive and it's not like on a necessarily like a culturally marginalizing level. I think there's that, too. But I think a lot of our lack of inclusivity comes around understanding and designing learning that's responsive to our learners, based on their age, their location, and their mode- their preferred mode of education, of their degree with us.”

– NSW Employee

- b. Don't assume that the UA college experience or its processes are universally understood. Make all expectations explicit, early, and often.
 - i. For example, incoming transfer students may expect that their experiences at their first college will carry over at UA. In reality, the levels of support offered by a community college and UA can differ vastly.
- c. Provide advice and resources on how instructors teaching online can adapt their tones and instructional approaches to be mindful of students' life experiences. Support instructors in constructivist methods of teaching – where the instructors are experts in facilitating the co-creation of the knowledge and experiences that students already have to share.^{14, 15}

“Certain instructors teach some classes that touch a lot of students who have a tone or way of communicating that, ‘You are the child, and I am the teacher. You are the young/new person, and I am the experienced person.’ Any kind of adult learner is attuned to that kind of down-talking.”

– NSW Employee

“Sometimes I get into meetings where I'm presenting on Arizona Online Students. And I will get instructors IM me on the side saying like, ‘What is an Arizona online student? I think I've signed up to teach a course. And I don't even know what you're talking about...’ I don't think we do a great job of helping instructors know who their audience is, what can they expect and how to teach an online course.”

– NSW Employee

- **Establish a centralized, publicized resource for students to learn about research and internship opportunities.**
 - a. These are valuable opportunities for students, but key informants noted that it can be hard for any student to identify potential opportunities.
 - b. Make it clear which of these can be done remotely and strive for positions that can also include online students.
- **Improve the processes for recruiting, supporting, and training undergraduate preceptors and graders.**
 - a. As a school, define the roles & responsibilities of a preceptor, as there exists a lot of confusion around the differences between these roles.

- b. Create a process and/or platform where paid positions are posted centrally and advertised to all potentially interested students.

“We have this policy, or some guidelines internally, that are like used for quantifying how much support [an instructor is] going to get...But there's also not a systematic process for making those opportunities available to students. So, it's just very fragmented. So, like, if Instructor A is told, 'You're approved for a 5 hour/week undergraduate paid grader,' then that instructor is basically given a student worker line, and they're going to identify a person, hire them and offer that. And at the same time other students are applying for opportunities that aren't paid, not even knowing that any paid opportunity exists...it's just generally a mess.”

– NSW Employee

- c. Preceptorships are a major point of inequity across campuses. Online students pay per credit hour (i.e., they pay \$525 to be a preceptor), whereas main campus students have a flat rate for 12-18 credits. Online students want that experience, but it is a specific additional cost.

“We really depend on undergraduates to help with grading and kind of managing our large classes. Now, the majority of those students enroll as preceptors, and they get it for academic credit, and they basically work for us for free and that has never been an issue. But now it is a huge issue, because ...online students recognize this is an opportunity to get to know an instructor potentially get a reference or a letter of recommendation for grad school. They see it as an in. They either can't afford to do it, or they do -- they pay \$525 to work for us, for free doing work that we pay [other] students to do...that's really problematic.”

– NSW Employee

- i. GI Bill funding also does not cover the costs of these kinds of credits.

- d. All students working in these roles should receive uniform training.

“Along with that fragmented process, there is no consistent preparation that all of these graders and undergraduates go through. So, every instructor is onboarding and giving some background to those students. And it's really inconsistent in terms of what that looks like, not only for the student who's being engaged as a grader or preceptor, but also and what they're able to do in the classroom. A lot of these students have never been shown how to use D2L on the back end. They've never learned, really, about the code of academic integrity, but they're grading papers.”

– NSW Employee

“Some of the skills that benefit a student if they are a TA (i.e. emotional intelligence, conflict resolution, teaching/mentoring, organization, communication) I was already trained in, and some of it also came naturally to me. I regularly received the feedback that I was an exceptional, super-star TA. I was often given “free rein” or much more responsibility from the teachers and professors I worked with, because they trusted me. and the students were grateful for my presence. HOWEVER, again I was not ‘trained’ in these things as a TA for the college... and I could see that other TA’s were having issues where I was not.”

- NSW Student

- **Enhance equity and transparency around paid opportunities for graduate students.**

- a. As with undergraduate opportunities, create a process and/or platform where paid grader positions (available to PSM students) are systematically posted and advertised to all students.
- b. The paid grader experience is still very limited in terms of professional development compared to the responsibilities of a traditional teaching assistant (TA), so explore ways to make access to TA-ships more equitable across degrees.

“Our students, our department, historically, and continues to not have enough TAs to support our classes. And recently they started making more paid grader opportunities available to the Professional Science Masters students. Inequity #1: Professional Science Masters students get paid an hourly wage and the graduate student TAs have a full TA-ship with tuition remission and all of these things so right there, there’s an inequity in the opportunities and kind of compensation or benefit that we’re providing to those 2 different kinds of graduate students... our Professional Science Masters graduate students have almost no access to funding...there’s really no mechanism in place to say, we’re going to fund a couple of students in our online Professional Science Masters like we fund our main campus students and in exchange, they’re going to work for us.”

– NSW Employee

- **Explore additional options for making sure students can experience the fun of NSW courses before they get overwhelmed by math and science courses and leave the school/major.**

- a. There is a perception that the math-and-science-heavy curriculum (UA’s program is reported to be among the most strenuous in these requirements) presents a barrier to completion because the “meat” of the degree, when students really have a chance to delve into what they are passionate about, is front-loaded by so many other challenging math and science classes.

- **Consider offering transparent alternatives about how long the undergraduate degree will realistically take.**

- a. Systematically assess the issue by routinely reviewing data on how long students take to progress through the program, how many leave the degree, and how that may vary by student demographics (e.g., transfer students, first generation students, online students, etc.).
- b. Yuma students experience unique challenges with this, which are addressed under Unique needs for specific student groups.

“We have conversations about really [the Yuma program] being a 5-year degree. It is very difficult for many learners to complete this degree in 4 years. If a learner comes in and they’re in one of those pressure point courses, and they fail it the first time they take it, that sets them back at least one semester. So now we’re at 4 years and a semester and if they were to fail any other course, that could change their graduation rate. Math 100 is a great example. If they fail Math 100 that first semester as a freshman in the fall, they have to take it in the spring. Now, that’s added that extra semester to them.”

– NSW Employee

- **Continue to support instructors in finding ways to minimize course costs for students.**

- a. This includes required course textbooks and materials for lab courses.

Instruction, Broadly

These topics require cooperation and collaboration from entities outside NSW.

- 1. Continue to advocate for semester-long (vs. only 5- or 7-week) course options for online students.**

- a. Learning all the required material in certain 5- or 7-week classes is consistently mentioned as a barrier to success for students. In particular, respondents pointed to a need for longer physiology, chemistry, and college algebra classes.

“Our online learners move through those courses very fast, and it is incredibly difficult for them to finish that degree in that amount of time. The courses are not created for the timeframe that our online learners are expected to complete them. Math 100, Math 112. Those really need to be the full 16 week for our online learners. And some of our learners are learning that the hard way, and they’re having to take it as a full 16-week course.”

– NSW Employee

- b. When students do enroll in 7-week classes, ensure that they understand how this impacts drop/refund deadlines and financial aid.
- c. Students should have a choice. While condensed classes are often problematic, they also can be advantageous. For example, 7-week general education courses can help students catch up with their pacing - they allow students to get 18 credits in a semester while only taking 15 credits in a given week.

- 2. Continue to work with other departments to increase the frequency of offerings of key courses.**

- a. Sequential classes can substantially impact graduation timelines.

“We might be admitting a student in 7 Week 1 who desperately needs Gen Chem 1. But they’re not offering it. So now the student, really, their clock isn’t going to start until later. Because the chemistry sequence is what is kind of dictating their entire timeline.”

– NSW Employee

3. Advocate for improved processes for getting transfer credits evaluated and applied.

“The university has been very slow to make this a faster, more smooth process. And it’s just very clunky, and it adds this whole front-end burden to the student, it’s just stressful... it can really kind of taint the experience from day one.”

– NSW Employee

4. Expand supports for all students to be successful in “pressure point” classes.

- a. Advisors often hear from students that they are not feeling prepared for math and sciences (e.g., chemistry, microbiology, physiology).
- b. Some specific support for these classes exists, but they are not universally available to students in all modes (e.g., online students).
- c. Specifically examine pass/fail rates for online learners in pressure point classes.
- d. Poorer grades in these courses deter students from continuing in the degree program.

5. Work with instructors to implement practices that allow for flexibility and accommodations, understanding that students will need different supports and may experience unforeseen circumstances.

- a. Recognize that getting a formal diagnosis of a disability can require significant time and money. This may be a prohibitive burden for many students who nonetheless may benefit from accommodations.
- b. Instructors should also be encouraged to find ways to allow for flexibility and accommodations for students experiencing unforeseen circumstances without requiring formal documentation.
- c. While it is important for instructors to direct their students to campus resources like the Disability Resource Center, they should also be supported in incorporating universal design principles in their courses. [Universal design for learning](#) methods ensure that students have multiple formats and modalities to choose from to engage with course concepts and, ultimately, demonstrate their understanding.

6. Support university-level changes for earlier registration windows.

“ASU is going to start registering their students in September. We just got word from Office of the Registrar that our students at Arizona Online aren't going to be able to start registering until November 1st. And then November 1st, it's like your athletes, it's your military special circumstance type of thing. But now what's happened is our students are being pushed into Thanksgiving break, winter closure where there's no resources on campus and people start leaving. We're putting them at a disadvantage, especially those distance students. Because even if we did say, 'okay, we're going to work closure,' there's nobody on campus to help them.”

– NSW Employee

UA Online Students

The online degree programs are a huge component of NSW's offerings, with online students being the largest campus group in the 2023 student census. At the same time, online instruction is still unfamiliar to many instructors, and separation in space and time pose real challenges to engaging and supporting students.

"We have come such a long way with online... I am hopeful. I'm happy to look at the progress we have done, but I think there's still work to do."

– NSW Employee

1. Extend main campus supports to online students (e.g. tutoring, ThinkTank).

- a. This was one of the most commonly expressed needs to more equitably support online students.
 - i. In particular, chemistry tutoring exists for main campus but not online students (because it is a slightly different chemistry course).

"Are we using the right language in our emails that makes our online campus students feel like they're included in whatever resources we have. So, if we have learning specialists on board, are we advertising to our online students by saying we have virtual meetings available to you, we have meetings for different time zones? We weren't doing any of that... we were just assuming students would find the services on their own, or decipher for themselves, does this email apply to me or not apply to me? ... it has just been a constant ...assessment, every email, every course that gets added, I've been like, have you thought about how all the campuses would be impacted?"

– NSW Employee

2. Continue to build and enhance a positive, connected experience for online learners.

- a. In the student survey, when asked to describe a situation where they saw another student have a particularly positive or negative experience, one of the most common themes from online students was that they felt isolated and didn't have any meaningful interactions with their peers to be able to describe.
- b. If not already routine, have online classes implement a practice of having video or similar introductions so that a sense of a collaborative learning community can be built.

"We need to be a lot more innovative and current when we think about best practices for online education to really focus on, how can we assess this learning in a way that is appropriate and responsive to this learner. ... I think we're falling short in connecting with students."

– NSW Employee

"I would say from our main campus students, they're having a great experience. They are feeling valued. They're feeling like the work that they're doing in their courses matches the work that they want to do once they graduate from this program. It's our online learners that are really struggling. In my opinion, from what I'm seeing, it's almost like two sides of a coin. I can meet with, a learner here, on campus, in person, and it's, you know, rainbows and unicorns. And then I meet with an online learner. And it's the exact opposite. We're having completely different conversations."

– NSW Employee

3. Be intentional about adapting courses for online.

- a. Instructor-led video content is important to students. Online courses should be more than just self-paced reading & activity modules.

"[Main campus] students have some sort of lecture, and we're just not, you know, reading, content, and responding to it. And I think you know, that might make a student feel more like a university student versus kind of self-teaching...The online students – in terms of being inclusive – a lot of them feel like they're teaching themselves ... we can think about how can we make intuitive lectures for our online population that, you know still works for this platform, but also makes them feel like, you know, they're learning something as part of the class. And they're not basically just going to YouTube to teach themselves. And I've heard that plenty of times as 'I have to get on YouTube to go figure it out, and I'm basically teaching myself."

– NSW Employee

"So far in the graduate program (all online) there have been a handful of professors that don't introduce themselves and never have intentional face-time with the students. I think it would help me to learn and understand instruction if I knew more about the person teaching and the person, I have textual correspondences with. The instructions for assignments also feel really vague and confusing at times and I don't feel very supported in that regard. I know that I can talk to the program coordinators and that helps but some professors don't seem open to discourse. Something like a video introduction in the beginning and then video-recorded instructions for complex assignments would make the online experience much more manageable."

– NSW Student

- b. One suggested best practice is for instructors to regularly record specific videos with relevant instructions (e.g., shared Zoom screen navigating through the course website in real-time). For example, an instructor would post a video at the beginning of every weekly unit, saying, “OK, we have these 4 assignments, the first one you’re going to upload in the assignments tab, the second one you’re going to use the discussion tab.” As the interviewee described it -

“That was like everything to them. [Students] just felt so connected. They got to see their instructors’ face at the beginning of every week kind of explaining what the homework was about. But not every instructor does that, and so our students feel very disconnected from the instructions that are given... that’s an ongoing complaint.”

– NSW Employee

- c. For online course materials that were generated from an on-campus course, instructors should be mindful that any references to campus resources need to be adjusted or removed.
- d. Strive for equivalent offerings in course resources, regardless of the delivery mode.

“Our online learners do not feel that inclusive feeling that they should feel with this major, they feel very ... disconnected. ... Their courses offer different opportunities than are offered for main campus students. That adds to that feeling of not being valued or important as an online learner. So, an example might be, next week, Monday, there is a Math 112 in-person study session, in which learners get to take the first hour and take an actual practice test. In the second hour they have teaching assistants who will be in that space and go over the questions on the test with them to help them process and learn what they need to do differently on the exam on Thursday. It's out there on the Internet -- our online learners can see that that's happening on main campus -- but our online learners are not getting that same opportunity to take that practice exam, get feedback on the questions, and make changes before the exam. And that's just one example.”

– NSW Employee

“Online and main campus students talk to one another: The online students found out they were not given the same things as the main campus students. For example, the PowerPoints were not shared for online students, or they did not have as many review sessions.”

– NSW Employee

- e. When recycling materials from year to year and across instructors, updates and personalization are important.

*“That comes up a lot...’We got expired stuff. It doesn't feel good. I paid a lot for this course, and it feels like it was just kind of put together very without a lot of care and it doesn't feel like my instructor is even involved in this course at all. Like are they just sort of this human behind the computer that we email, but I don't know anything about them.’
There's that disconnect for sure.”*

– NSW Employee

4. Enhance the supports for instructors teaching online and offer course design resources across the department.

- a. Designing online courses is a particular skill, and while NSW does offer resources to online instructors, there is a sense that there is still much room for improvement (e.g., in making quality videos).

“I think we could find a better way of delivering that curriculum. But we don't. We just copy and paste from main campus to online.”

– NSW Employee

- b. Create template introductory activities in D2L that are available for faculty to integrate into their D2L courses.

5. Acknowledge and adapt for the more mature set of learners that typically dominate the online student base.

- a. Online learners are more likely than main campus learners to have dependents, full-time jobs, and other degrees. Online students can also be more likely to enroll with clarity in what they want to get from pursuing a Nutrition degree. It is important that online instructors embrace the idea that students can be graduation-oriented and also unable or unwilling to make school their top priority.

“This is university-wide, but our students will say that an instructor will email them and say, ‘You know, if you're...not going to make school your [top] priority, it's time to go.’ And for the student, it's like – ‘Absolutely school is not my priority. I have children and a full-time job. So, this is probably fourth on the list of my priorities.’ Rightfully so. That's the disconnect for us – it's that it's like a main campus - you're a student on main campus. You're 18 to 22. This should be your priority only...which I also don't know that that's true for a main campus student anymore. I think we have to kind of change our mindset.”

– NSW Employee

- b. Instructors should be mindful of the extensive life experience that online students are already bringing to the table.

“Our demographics in... the online space are just an older, more experienced student... Actually, a lot of them have advanced degrees in their career [and are] pivoting, and the curriculum is written in a way that speaks to a very brand-new student. So, we have like a prep class, where you built a resume for the first time and you do volunteer work that introduces you to soft skills so that you can be successful in the workplace. I don't think that that curriculum speaks to our students, and it feels condescending. So, the way that it's translated is it feels very condescending to our more advanced students or even just a student who's in their forties and they're like, 'Don't talk to me about knowing how to speak to somebody.'”

– NSW Employee

6. Consider the limitations of online group work and focus on assignments and activities that align with best practices.

- a. Collaborative activities that are designed to have students learn from one another and co-create knowledge can foster positive interdependence among students and increase learning,^{16,17} however, it is clear from NSW student feedback that groupwork is particularly burdensome and stressful for online students. From a logistical stand point, NSW students have expressed that coordinating with other students to work on something ‘live’ across time zones is not feasible.
- b. Use group work assignments and activities sparingly and only in ways that promote positive interdependence (i.e., highly structured collaborative learning) without putting students in the position of relying on one another for a grade. Make sure these assignments/activities are as accommodating as possible, as group work can present unintended, substantial logistical hurdles for online students.
- c. Design opportunities for asynchronous collaboration that builds connection, but also ensure that an individual student’s grade is not dependent on the work of another student.

Best practice example	Non-example
Collaborative activities where students are asked to engage with one another’s thoughts and perspectives via video, audio, text asynchronously	Group papers or presentations where 3-4 members are expected to evenly divide the work outside of a live class session

d. Keep group size to a maximum of 3-4 students.

i. This increases the likelihood that group members will be able to contribute equitably.¹⁸

“For our online students, it's like – ‘We have somebody who lives international and then on the East Coast, the West Coast and you're putting us all in a group to find a time that works for everybody when we are again caregivers, workers, we're military affiliated.’ It's nearly impossible. This brings up a lot of anxiety for our students and they've asked repeatedly over and over, ‘Can you get rid of group work in online?’”

- NSW Employee

“When asked to do group work, the groups are sometimes 5 people large, and it is virtually impossible to get 5 adults with jobs, kids, and living in different countries together enough to properly complete a group assignment. In my opinion, group project should be at max a 3-person group. This way, it is more possible to align 3 people's schedules to complete the project. We are all working or living crazy hours, so that it is why we are online students.”

– NSW Student

“I am expected to do a group project with people who live in time zones literally across the world (Dubai). I don't know them; we don't have the opportunity to truly collaborate. It's mostly just a massive pain, and we can only meet at 9pm on Sunday nights because of the time zones. I have four kids and a full-time job. I chose online school because it was supposed to be flexible. I do not want to participate in group projects, period. I don't have time.”

– NSW Student

Yuma Students

1. Develop and share with students a very clear way to complete the 2+2 in 4 years.

a. There is a sense that students are getting admitted into 2+2 programs without enough sciences. For example, if a student hasn't started chemistry, it's going to take 3 years to get through the required courses. This can be especially problematic financially, since a lot of scholarships just cover those 2-year transfers.

Inclusive Instruction Best Practices

1. Integrate additional inclusive instruction best practices into course design efforts.

- a. Several inclusive instruction best practices were rated as happening less frequently by students in the survey and could benefit from additional emphasis and training for instructors. These include -
 - i. Instructors emphasizing that risks and mistakes can be important parts of any learning process and providing opportunities for productive trial and error.
 - ii. Inviting students to connect course topics with their own background, knowledge, or expertise.

"I want to see more trans visibility in nutritional sciences. It would be amazing if there was a trans nutrition course or resources on nutrition for trans people. Especially since there are lots of trans people who suffer from eating disorders due to gender dysphoria."

– NSW Student

- i. Instructors deliberately choosing course materials and activities with a range of student circumstances in mind (e.g., physical abilities and disabilities, financial and technological resources, time commitments such as work or family care obligations).
- ii. Instructors designing assignments and activities with both real-time (live) and self-paced (flexible) options for participation.
- iii. Instructors creating a class culture where students feel okay starting a new class not knowing much about the topic and encouraging students to connect what they do know.
- iv. Instructors communicating concern for students' well-being, and sharing information about campus resources (e.g., Campus Pantry, Counseling & Psychological Services, Sexual Assault Prevention & Awareness Center, Disability Resource Center).
- v. Additionally, while incorporating discussions of diversity, equity and inclusion are important, it may need more explicit framing upfront and scaffolding throughout a course to understand the importance of DEI.

"Sometimes when classes have a huge emphasis on diversity, it can make students who are in the majority (for nutrition- white female) feel bad and like we bring nothing to the table."

– NSW Student

Advising

1. More advisors, smaller caseloads.

- a. Advisors are an essential support for students' success.

"Our students do provide feedback that they feel heard by their instructor, like when they when they do approach their instructor, they feel heard and that they instructor wants to help them. It's the disconnect between like – 'They want to help, but they don't know what to do to help me.' ... And usually then they pass them off to us as academic advisors to help, help them along."

– NSW Employee

- b. Advisors have workloads that can't routinely fit into a standard work week. Burnout appears prevalent.
- c. Advisor turnover is hard on students, they feel lost. Continuity in an advising is hugely helpful.
- d. Especially for online students who are already more likely to feel disconnected from campus and UA, it is a particularly big challenge when they can't even connect with an advisor.
- e. Advisors need more time to connect with individuals and learn about the students they're supporting to provide the best support possible.
- f. Smaller caseloads can also support advisors in being more proactive in identifying and reaching out to students in need.

2. Give students a way to request a new advisor if they don't feel their assigned one is a good fit.

- a. Feeling comfortable with an advisor can facilitate a student seeking necessary help and feeling seen.

3. Allow flexibility in student/advisor meeting length.

- a. Students may not all need or want 1-hour long meetings, and shorter meetings may help advisors in regularly or promptly connecting with more students.

4. Save shared advising information in a central repository so it's not buried in emails.

- a. Advisors are drowning in emails, and a lot of information is disseminated in email (resources, opportunities, etc.). It would be helpful to have these items exist in a place beyond email.
- b. Because turnover is a reality, new advisors don't have access to these past emails.
- c. If nothing else, consider a Box folder email address that is cc'd on all important policy emails as an accessible repository. Instructions are currently available on the "[Upload to Box Through Email](#)" page; note that only attachments are uploaded, not content in the body of emails.

5. Enact guidelines for timely feedback from advisors.

- a. Students should be able to expect a response to email within 2-3 business days.

General

1. Make the good practices happening in the school systematic, not piecemeal.

- a. There are a lot of great things happening at NSW, in terms of instruction, adaptations, advising, and passionate support for students. However, there is also a sense that these things are not necessarily active across the board in the school.

“At the systems level is where I think we're really falling short. It's like we've got countless testimonials of amazing things that are happening. But it's still that far too many people are slipping through the cracks because we don't have systems in place that are going to catch the vast majority.”

– NSW Employee

“We're doing some very progressive, very inclusive things that are centered on like health, equity and inclusive practice. But we actually haven't fully embedded that in the curriculum in a way that every student's going to be exposed to it. So, like, while we've got all this weight inclusive curriculum, we're still teaching clinical classes to students that have not really significantly changed the way that we're framing patients framing conditions, talking about obesity and chronic disease. There's still a lot of classes where students are reading very outdated papers and very generic textbook literature that's just really not meeting best practice when it comes to inclusivity. And so, there's like really cool things we're doing. But then we're also not embedding it in a way that it's having the maximum impact.”

– NSW Employee

Unique needs for specific student groups

International Students

- Instructors should be aware that there may be customs issues for required equipment (e.g., for microbiology).
- For international students from a sponsoring agency, maximize communication and clear plans to advisors as much as possible, so that they can support students. These students get in tricky, time-sensitive situations because of agency requirements.

Transfer Students

- Create, expand, and heavily advertise campus orientation activities for transfer students. The current perception is that transfer students on main campus miss the in-depth resource overview that 4-year students get in their first year.

Resources

The following resources, though not exhaustive of the many on- and off-campus resources available, provide useful starting points for addressing several of the recommendations outlined in this report.



UA Resources for Culturally Responsive Curriculum Development

Culturally Responsive Curriculum Development Institute

This is a week-long summer training and coaching experience available for faculty and instructors. The institute assists with redesigning existing courses through the use of inclusive instructional practices through the lens of being a Hispanic Serving Institution (HSI).

[Culturally Responsive Curriculum Development Institute Website](#)

University Center for Assessment, Teaching & Technology (UCATT)

This campus resource assists instructors with educational development, assessment, digital learning, instructional technologies and D2L, Multimedia and other instructional practices to improve courses across campus through evidence-based practices. UCATT [offers](#) professional development workshops, personalized consultations and online mini courses. If NSW is looking to create an online version of a course, it's possible to request support from the Instruction Design team to think through inclusive content and online course design.

UCATT offers many [teaching resources](#) including access to supports for course (re)development. Instructional Designer, Stephanie Tammen, specializes in course assessment, development and redesign through the lens of diversity, equity and inclusion. Stephanie is aware of the DEI efforts being made in the School of Nutrition and Wellness and is available to support in next steps. To take advantage of her supports, faculty/instructors or the DEI committee can reach out via email: stammen@arizona.edu.

[University Center for Assessment, Teaching & Technology Website](#)

College of Education's Gender and Racial Equity Toolkit

The College of Education at the University of Arizona developed a Gender and Racial Equity Toolkit to provide instructors with resources including statements for syllabi and pedagogical considerations.

To gain access to the Gender and Racial Equity Toolkit, go to d2l.arizona.edu. Login with your NetID and password. Click on "Discover" in the top pane and search for "Toolkit".



**Readings &
resources
around Inclusive
Instruction from
other
institutions**

The University of Michigan’s Equitable Teaching page offers links to a wide array of readings and resource. Here are some additional highlights from them:

This [Inventory of Inclusive Teaching Strategies](#) resource guide includes 54 concrete strategies for building an inclusive class.

[Setting the Tone for Inclusive Classrooms](#) presents five general practices for building inclusivity in the classroom.

Here are ideas on [Creating Inclusive Assignments and Assessments](#).

The [Practical Steps for Inclusive Teaching](#) resource guide provides practical ways for instructors to get to know students as individuals, design inclusive course content and material, allow multiple ways to demonstrate learning, and integrate a variety of student engagement techniques.

The [Addressing Common Obstructions to Inclusive Teaching](#) resource guide reviews potential “obstructions” instructors may have when it comes to creating an inclusive environment and suggestions on how to address them.

[Thinking specifically about online instruction](#), these are resources to for learning more about equity and inclusion in an online classroom and highlighting activities that actively promote equity in online classrooms. It also includes links to other institutions that are working to improve equity in online courses.

The Harvard Graduate School of Education offers 4 ‘module pathways’ around [educating for equity and inclusion](#), complete with real-life footage and additional reading links.



Universal Design for Learning (UDL)¹⁹ are principles and practices that instructors can employ to proactively eliminate barriers to learning and reduce the need for students to request course accommodations. This is because instructors are thinking ahead to attend to the accessibility of course materials and the physical space (when applicable). With Universal Design for Learning, course materials and practices are broadly available to all students in a way where students who may traditionally need course accommodations do not need to ask because the accommodations are already embedded within the course structure and plan for all.

Examples:

Universal Design for Learning

1. Providing multiple ways to engage with course content (e.g., readings, PowerPoints, audio, visual)
2. Moving away from timed-exams and assignments that focus on memorization
3. Providing students with choices and different ways to demonstrate knowledge that involve active learning (e.g., writing, visual, audio, independently, with others, self-directed)
4. Consistently giving students feedback on their work with opportunities for revision

Some helpful resources to engage in Universal Design for Learning Principles include:

[Disability Resource Center's UD @ UA Resource Bank](#)

[CAST's UDL ON CAMPUS: Universal Design for Learning in Higher Education](#)

[What is Universal Design for Learning \(UDL\)? \(6-minute video overview\)](#)

[Universal Design for Learning Checklist](#)

[Removing Learning Barriers with Universal Design for Learning \(UDL in a 41-minute podcast\)](#)

[Learning How to Learn by Oakley \(Active Learning via Coursera\)](#)



Culturally Responsive Pedagogy

Culturally responsive pedagogy requires instructors to think ahead to be inclusive to all students across gender, race, sexual orientation, class, national origin and disability among other identities and experiences. The goal is that individual students are able to see the relevance of course content and ways of knowing in connection to their own communities and lived experiences.

Examples:

1. Ensuring that course readings, examples and materials include folks who hold a variety of backgrounds and epistemologies/ways of knowing
2. Instructors actively engaging in learning about unconscious biases to identify opportunities for improvement in course materials, communication and attending to ways that students engage with one another



Inclusive Teaching Practices and Methods

Designing Groupwork²⁰ is a book that highlights a specific teaching method for highly-structured collaborative learning called Complex Instruction. This resource identifies specific concepts and things that instructors can intentionally incorporate into each lesson:

1. **Ease of entry (Low floor):** Anyone with little to no background could engage in the content and contribute meaningfully
2. **Room for deeper thinking (High Ceiling):** Students in the class with previous knowledge will have opportunities to think and engage on a deeper level
3. **Highly-structured activities:** Activities are thought out in great detail and instructions for students are thorough, intentionally requiring the contributions of all students (not just some).
4. **Positive interdependence:** Activities require students to learn from one another and practice soft skills like active listening, reading/responding to one another's ideas. The structure of activities create opportunities for collaboration and reciprocity among students in the class. To ensure positive interdependence is possible, limit group work to a maximum of 3-4 students per group.
5. **Multiple methods to engage with material:** Students are given choices about how to engage with course material or to demonstrate their understanding of course content (e.g., written, verbal, visual, audio, independently, in collaboration with others).
6. **Space for multiple people/perspectives:** Course content includes a variety of perspectives and identities that include folks from a wide array of identities including across abilities, race/ethnicity, gender identity, sexual orientation, nationality, etc. Activities and assessments make space for and encourage multiple perspectives and solutions to problems.
7. **Mitigates status and unconscious bias:** In addition to instructors actively learning about their own unconscious biases, the instructor designs activities understanding that students come in with their own unconscious biases. Some students who hold identities with more status or privilege may (perhaps unintentionally) dominate conversations and group activities. Instructors can design activities that require equitable contributions of all group members. Additionally, the instructor can foster reflective opportunities and actively address and intervene in issues concerning racism, sexism, homophobia, transphobia, ableism, and related forms of discrimination.
8. **Requires different types of knowing and make space for debate/opinion:** Activities and lessons focus on open-ended questions that provide the opportunity for multiple perspectives and solutions. Prompts from the instructor or within activities/assignments allow for students to share community/familial funds of knowledge.^{21,22}
9. **Addresses over/under participation:** Instructors plan ahead for the reality that students do not naturally participate equitably. The lesson itself is designed in a way that encourages all students to participate. Additionally, check points are built into the course for students to assess their own participation and set intentions for their group work (e.g., set an intention to share more or listen more after given time to reflect on a previous group activity).

10. **Empower students to make mistakes and value revision:** Mistakes are a valuable part of learning. Lessons focused on productive struggle encourage individuals and groups to make meaning of mistakes and to value revision.
11. **Feels intellectually worthwhile/relevant to students:** Activities and course content allow for students to connect the content to their areas of interest. Instructors continually solicit student feedback on course material and assignments to ensure that students feel that the activities and assignments are intellectually worthwhile and relevant.

Resources:

[Designing Groupwork \(Cohen and Lotan, 2014\)²³](#)

[What Inclusive Instructors Do \(Addy et al, 2023\)²⁴](#)

[inclusifiED website links to many resources \(books, articles, videos and podcasts\)](#)

[Complex Instruction Resources \(Stanford University\)](#)

[Why We Should Embrace Mistakes in School](#)



Scholarly works

Grier-Reed, T., & Williams-Wengerd, A. (2018). Integrating universal design, culturally sustaining practices, and constructivism to advance inclusive pedagogy in the undergraduate classroom. *Education Sciences*, 8(4), 167.

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Appendix

The following files can be found in a shared Box folder here -

<https://arizona.app.box.com/s/56t7zn5o7oy0te24dgicmr3y7rrwm4lw>

1. Student and Recent Alumni Survey Instrument
2. Key Informant Interview Guide
3. Quantitative Dashboard*
4. Qualitative Dashboard*

*For both of the Excel dashboards, please make sure you download a version to Excel desktop for full functionality.

If you have any trouble accessing any of these linked files, please email CRED@arizona.edu.

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