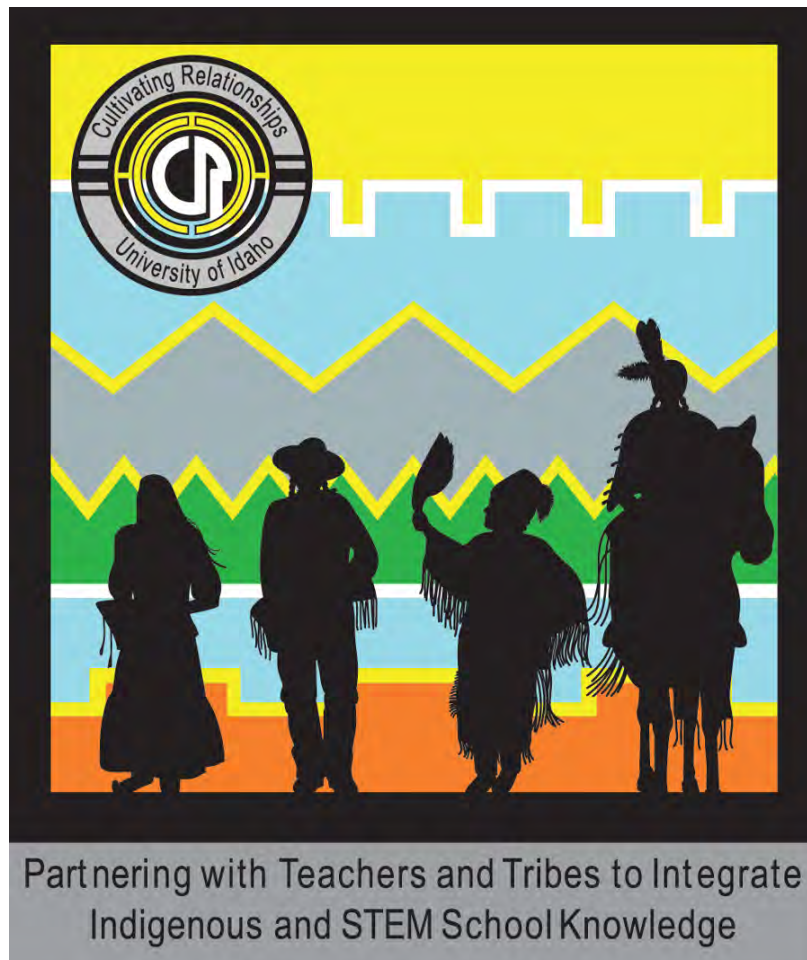


Cultivating Relationships Teacher Participant Handbook 2023-2026



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University of Idaho

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Program Contact Info

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Welcome

Welcome to Cultivating Relationships. This handbook will provide an overview of program philosophies, procedures, participant expectations, and certificate requirements for teachers who have enrolled in the Cultivating Relationships professional development certification program.

We welcome your interest in joining this innovative approach to STEM professional development for K-12 teachers in schools serving Indigenous and rural youth. Cultivating Relationship (CR) calls attention to cultural perspectives, our lived experiences, and evidence from Indigenous Knowledge Systems which tell us that knowledge is much more diverse than what is presented in most STEM classrooms. Past research has shown STEM lessons ignore Indigenous principles that shaped thousands of years of sustainable land and water relationships and management practices.

Teachers rarely come into K-12 classrooms with an understanding of Indigenous peoples, Tribal Nations, or a sense of how important Indigenous relationship to the land is. To address this gap, CR centers relationships between Teachers-Tribes-Universities to facilitate a new kind of information sharing with teachers to apply in the classroom. CR teachers are critical thinkers and active learners. CR pushes teachers into new experiences with local partnerships and university support throughout a comprehensive cohort-based certificate process. In CR, we approach learning as place-based *and* as multi-sited; for those reasons the CR certificate process prioritizes learning with specific Tribal Nations, local lands and waters *and* learning with a network of teacher colleagues from different

landscapes in Idaho and Arizona.

CR teachers are immersed in experiential and on-line learning of Indigenous approaches to scientific fields and land and water stewardship. Throughout the CR certificate, teachers are expected to use their knowledge to create STEM teaching lessons and to study their own, and their students learning. CR collaborators believe teachers are important intellectuals and advocates for future generations. Upon completion of the CR certificate, CR teachers join a research process that aims to determine promising practices for braiding Indigenous knowledge and STEM content into contemporary teaching methods and contexts.

Thank you for joining the CR team.



University of Idaho teachers participating in harvesting first foods with the Coeur d'Alene Tribe's Department of Natural Resources.

Who We Are

There are four partner sites participating in this project along with the University of Idaho. Please refer to the CR website for team members' complete biographies:

<https://www.uidaho.edu/ed/resources/pdo/cr>



Dr. Vanessa
Anthony-Stevens



Dr. Karla Eitel



Dr. Philip Stevens



Dr. Chris Hamilton



Dr. Brant Miller



Shanny Spang Gion



Jessica Matsaw



Dr. Sammy Matsaw



Dr. Laticia Herkshan



Caj Matheson



Jordyn Nomee (Pluff)



Gina Baughn



Nikki Lewis



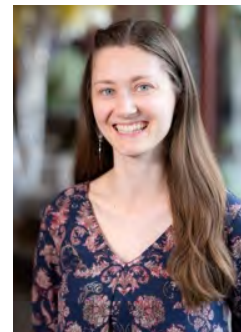
Alicia Wheeler



Joyce McFarland



Dr. Lisa Eutsey



Angela Jacobson

Fast Facts

- Cultivating Relationships is a multi-year collaborative project, led by the University of Idaho, along with four **Tribal partners**:
 - Coeur d'Alene Tribe (Caj Matheson, Jordyn Nomee, Gina Baughn)
 - Nez Perce Tribe (Joyce McFarland, Alicia Wheeler)
 - Shoshone-Bannock Tribes (Jessica Matsaw, Sammy Matsaw, Laticia Herkshan)
 - San Carlos Apache Tribe (Philip Stevens, Nikki Lewis, Lisa Eutsey)
- **Tribal partners will host cohorts of up to 8 teachers** per team for the 2023-24 academic year (32 teachers total will participate across all Tribal partner sites)
- **Tribal partners will lead local immersive Indigenous STEM-based workshops**:
 - Immersion in summer 2023 (may be multi-week)
 - Two workshops in fall 2023 and two in spring 2024
- **Teachers will earn a professional certificate** entitled *Cultivating Relationships: Indigenous Land-Based Education Certificate* (15 credits)
 - Professional development credits are required by the State for Teacher Certificate renewal (6 credits are required every five years for ID teacher certification renewal / 6 credits are required every six years for AZ teacher certification renewal)
- **Teachers will complete online modules** on Tribal sovereignty, Indigenous Pedagogies, Indigenous STEM, and Curriculum design and applications.
- **Teachers will present a curriculum portfolio** in summer 2024 at an all-sites gathering at the University of Idaho's McCall Field Campus (McCall Outdoor Science School, referred to as MOSS)
- **Teachers will participate in research** on teacher application of certificate learning in their K-12 classrooms upon completion of the 15-credit certificate.

General Timeline

The timeline below illustrates the basic flow of the Cultivating Relationships program for all tribal partner sites. Your partner site will present you with a detailed version of this timeline specific to your cohort's planned activities. Many partners have also posted their detailed timelines on the CR website pages.

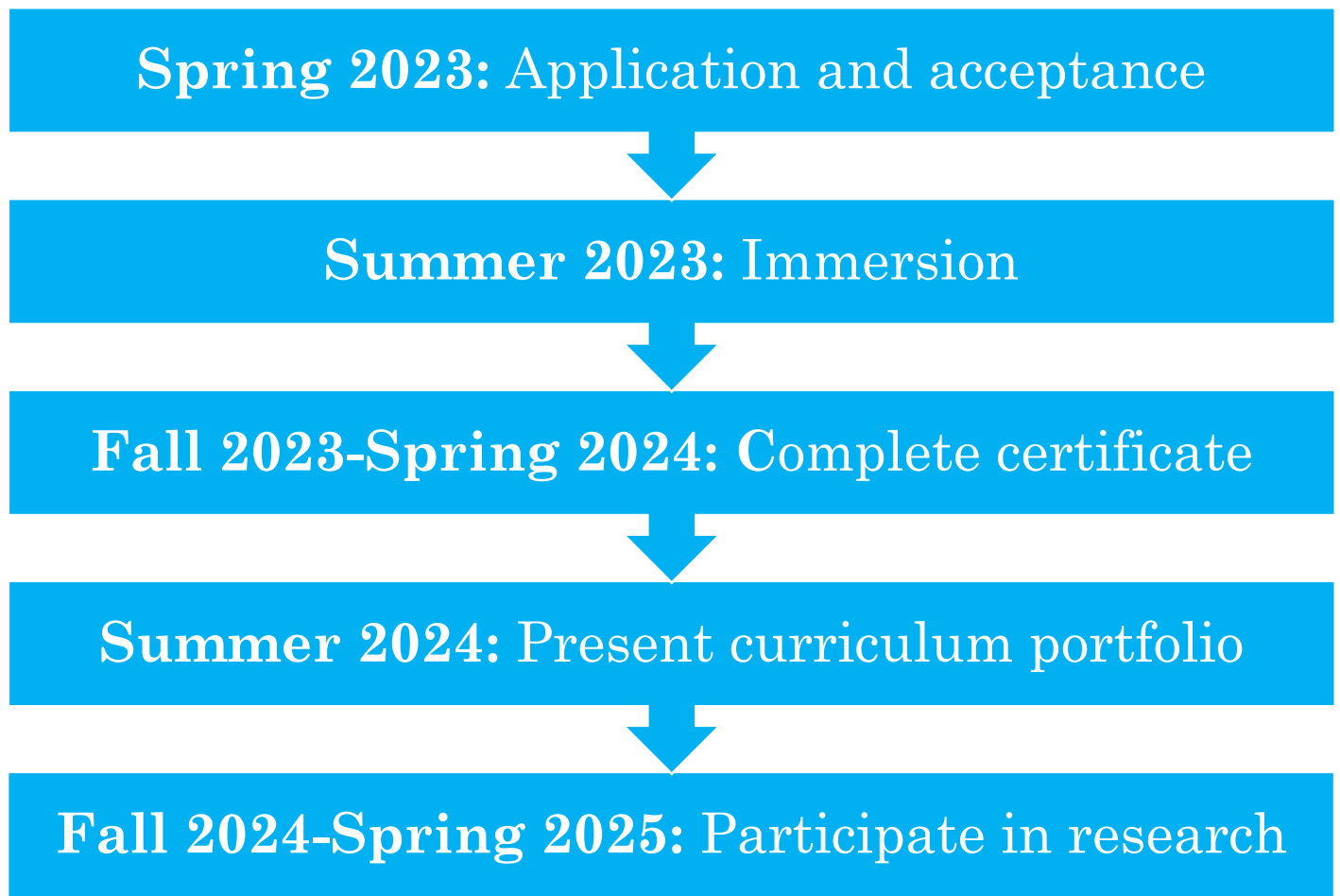


Figure 1: Cultivating Relationships (CR) Certificate Program General Timeline

3-Year Cultivating Relationships PD Certificate Program Outline

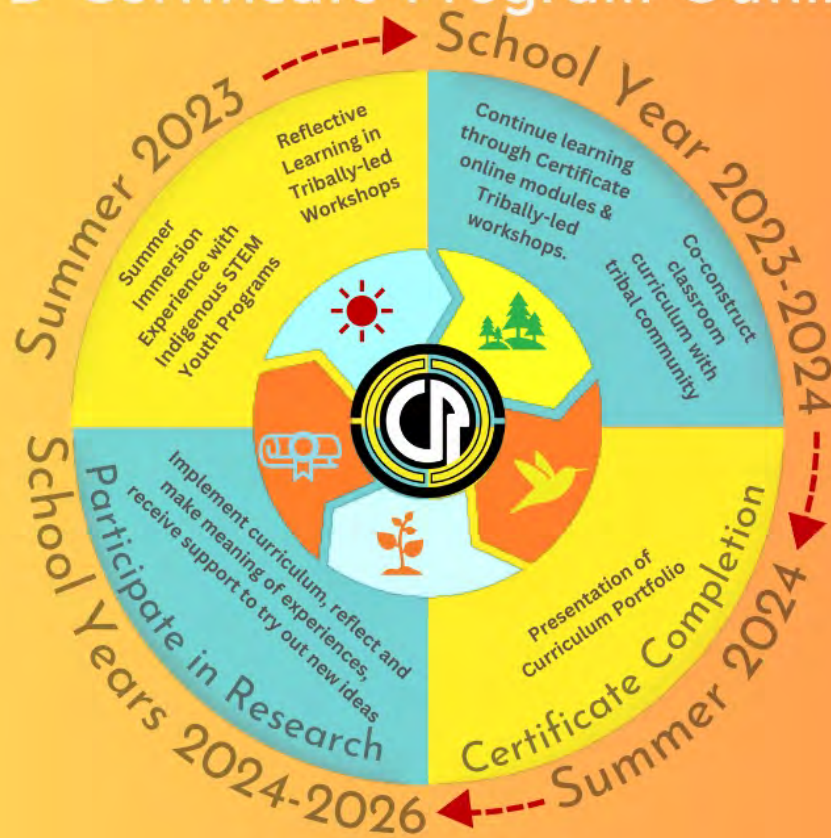


Figure 2: Cultivating Relationships (CR) Certificate Program Overview

Certificate Breakdown

Credits	Activity	Date/location	Semester/Year
6	Summer Immersion 2023	Local with your site team, dates and location specified by site team	Summer 2023
1	Tribal Sovereignty Module	Online via Canvas (8 weeks)	Fall 2023
1	Indigenous Pedagogies Module	Online via Canvas (8 weeks)	Fall 2023
1	Fall workshop 1	Local with your site team, dates and location specified by site team	Fall 2023
1	Fall workshop 2	Local with your site team, dates and location specified by site team	Fall 2023
1	Indigenous STEM module	Online via Canvas (8 weeks)	Spring 2024
1	Curricular Applications module	Online via Canvas (8 weeks)	Spring 2024
1	Spring workshop 1	Local with your site team, dates and location specified by site team	Spring 2024
1	Spring workshop 2	Local with your site team, dates and location specified by site team	Spring 2024
1	Curriculum Portfolio Presentation	McCall, ID (late May/early June)	Summer 2024

Table 1: Cultivating Relationships (CR) Professional Development Certificate Breakdown

Background theoretical basis for Cultivating Relationships

- **Indigenous science**
 - The historical origins of Indigenous science are unique to each Indigenous peoples (Whyte et al., 2016) and Indigenous perspectives are different from Western perspectives in that language, cultural mosaics, and mental models of nature are contextually dependent on cultural norms, values, and principles (Bang & Medin, 2007). Methods of Indigenous science are apparent in ecology, climate science, and biology, among other Western fields. Indigenous technologies are persistent and growing within Indigenous communities and reflect foundational principles of sustainability and dynamic relationality (Barajas Lopez & Bang, 2018).
- **Land pedagogy/land education**
 - The concept of Land Education (McCoy et al., 2017) centers Indigenous STEM perspectives and local knowledge as ways of solving problems that have been excluded in modern Western contexts. The concept of Land in the Land Education literature states, “Land encompasses all water, earth, and air and is seen simultaneously to be an animate and spiritual being constantly in flux” (Styres et al., 2013, p. 37). Pedagogies of Land draw upon the interconnectedness and interdependence of relationships and bring into relief an understanding of the cultural positioning and subjectivities of Land relationships which shape and ground learners in environments and communities (Styres et al., 2013).
- **Coupled human-natural systems**
 - The concept of “Coupled Human-Natural Systems” (CHANS) recognizes the complexity that emerges when studies of social systems and ecological systems are coupled (Liu et al., 2007). We draw on research from the CHANS literature on how people with different epistemologies (beyond STEM learners) “know” climate and other environmental change. Importantly, we use CHANS to emphasize how Indigenous science knowledge are situated and anchored in the cultural milieus and ecosystems in which they are derived (Agrawal, 1995). CHANS is science shorthand for “it’s all related”. In CR, we use CHANS to elevate the broader idea that researchers in contemporary Western science are (finally) coming into step with Indigenous worldviews which already and always have conceptualized the world as interrelated.



Preparing to engage in river pedagogy, Middle Fork of the Salmon River, Idaho



Women teaching young girls how to build a traditional Apache family camp in San Carlos, Arizona



Teachers learning purpose and protocols in building traditional homes with the Nez Perce Cultural Preservation Program, Winchester, Idaho

Research Focus

Upon completion of the certificate, you will be invited to participate in research for the following two academic years with the University of Idaho research team.

The research is guided by the following questions:

Question 1:

How do teachers' attitudes towards multiple epistemologies in STEM change, and what sense and meaning do teachers make of multiple epistemologies in STEM after an Indigenous, land education certificate program?

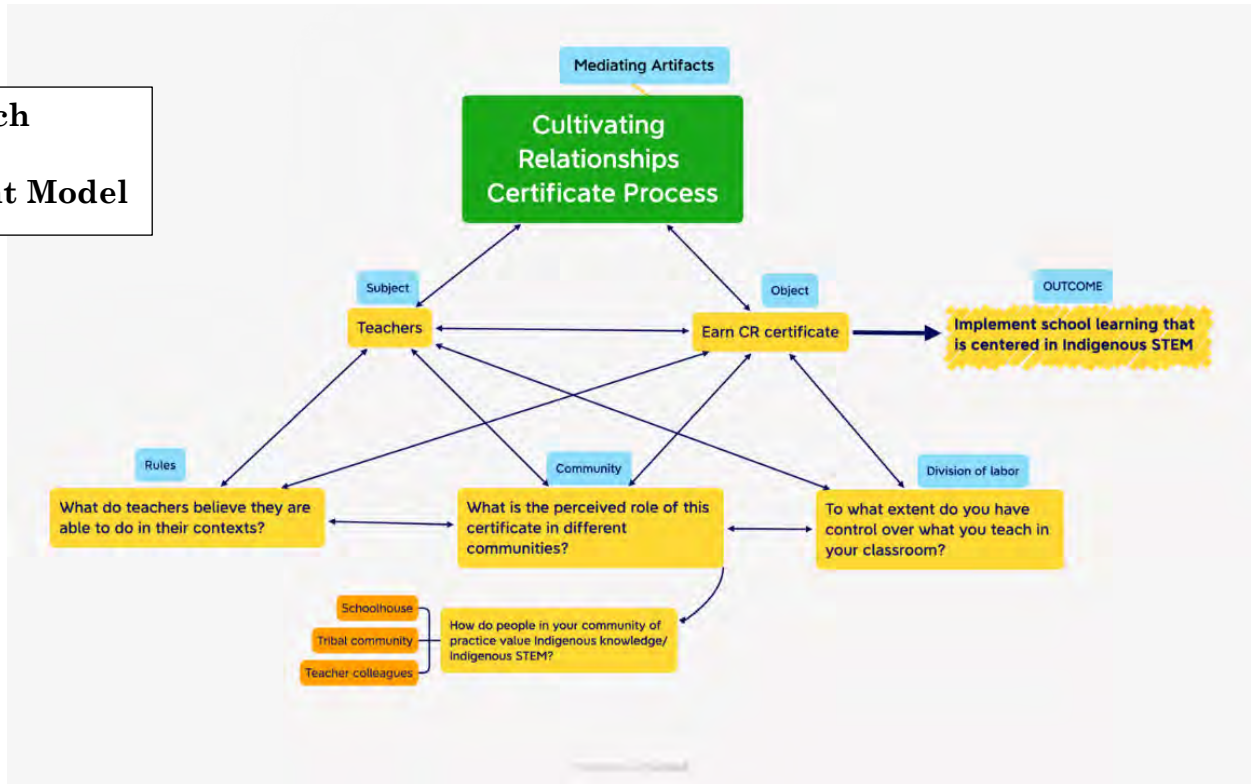
Question 2:

What types of teacher professional development activities support the inclusion of Indigenous epistemologies in STEM school-based practices?

Question 3:

In what ways do teachers apply learning from Indigenous STEM into their curricular and pedagogical choices?

Research Design Thought Model



Frequently Asked Questions

What do I need to do to enroll in this Professional Development course at the University of Idaho?

Once you have been accepted to Cultivating Relationships, please follow these steps:

1. Register for the summer PD course (6 credits) via the University of Idaho Marketplace. You will be provided with a registration link and a promo code, which will cover the cost of your registration. You will repeat this process in Fall and Spring to register for the respective modules in those semesters.
2. Within approximately one week of registering for the summer course, you will receive an email from the University of Idaho with your Vandal ID# and other student ID information. Please activate your University of Idaho Vandalweb account per the instructions in the email.
3. Once your University of Idaho account is activated, please contact Angela Jacobson to set up your direct deposit so that Cultivating Relationships can issue your stipend payments.
4. You will be provided with a link to the summer PD module in Canvas (see Canvas tips on page 13) Please use this link to access the course.

When and to whom should I direct questions about my participation in the program?

1. If you have questions or need assistance regarding the local immersion activities and workshops or other cohort-specific items, please first reach out to your Tribal partner site coordinator.
2. If you have logistical questions about the professional development online modules or need any assistance with Canvas, please contact the University Team members: Shanny Spang Gion and Angela Jacobson.

When and how often will the stipend be disbursed?

The stipend for your participation in the program will be disbursed over the course of your participation in the program (three years) and will be based on a schedule finalized by your respective partner teams. The following table is an example disbursement schedule of payments you will receive from U of I.

*Upon your acceptance into the program, UI Coordinator Angela Jacobson will work with you on setting up your direct deposit with the University.

Additionally, partner teams will fund stipends for travel and per diem for all site-specific workshops. Please work with your team coordinator regarding these payments.

Teacher Stipends	Total Dollar Amount	Details
Year 1	\$3,000	Participation in CR certificate *Stipend to be disbursed at the end of each semester. If a teacher doesn't complete the semester, she/he/they are not eligible for the stipend.
		August 2023: \$1000
		December 2023: \$1000
		May 2024: \$1000
Year 2	\$1,000	Stipend to for participation in research on implementation of CR certificate ideas in the classroom
		May 2025: \$1000
Year 3	\$1,000	Stipend to for participation in research on implementation of CR certificate ideas in the classroom
		May 2026: \$1000

Table 2: Cultivating Relationships (CR) participant stipend disbursements

When and how often will I interact with cohorts from the other Tribal partner sites?

Teachers from across sites will interact through on-line modules during semester 1 and 2. Teachers from across sites will meet each other in-person during the Curriculum Portfolio sharing, the culminating CR certificate event at the end of year 1.

How can I ensure my administrators' support of my participation?

Administrator support is important. We encourage all CR teacher applicants share the goals of CR with their school administrator. Site and/or UI team members are available to support communication of CR requirements and goals as requested.

What will the immersion experiences and workshops entail? Will I have to travel for those?

Immersion experiences are specific to each partner site. Details of immersion expectations will be shared by each site coordinating team. Travel will be arranged in each site.

Does this count towards a bachelor's or master's degree program?

No. The CR certificate is a professional development program primarily for certified K-12 teachers and administrators with current K-12 teaching credentials. The credits earned from the University of Idaho count toward PD credits used by Professional Standards offices to re-certify a teacher.

Will Cultivating Relationships be reflected on my transcript?

Yes, you will receive a University of Idaho transcript that reflects your participation in Cultivating Relationships professional development modules as P/F. The 15-credit professional development certificate will be issued in summer 2024 upon your completion of all PD credit hours.

To ensure consistent access, please make sure you are using your preferred browser's most recent version.

To access the professional development online modules, go to <https://canvas.uidaho.edu/login/canvas> and enter your username and password.

Once you are logged in, you will be in your “Dashboard.” The “Dashboard” is the landing page that helps that you navigate in Canvas. First, on the left is a gray column that lists your “Account,” “Dashboard,” “Courses,” and “Calendar.” Additionally, in the center of the page you will see a clickable icon to access your course, “EDCI 505.” Then, on the right-hand side of the Dashboard, you will see a column that includes your “Calendar,” and “To Do” list, “Upcoming” events, and “Feedback” (feedback is by instructors for submitted assignments.)

EDCI 505 will house all 4 online modules and will house all needed readings, media, and resources. Additionally, Canvas is where you will submit any written assignments, such as reflections on readings or collaborating within your partner site cohort.

For more detailed information about using Canvas, please visit <https://community.canvaslms.com/t5/Canvas-Basics-Guide/tkb-p/basics>

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