ED.D. IN APPLIED LEARNING SCIENCES (ONLINE)

Overview
The 45-credit post-Master’s EDD in Applied Learning Sciences prepares students for careers that require expertise in multiple facets of human learning.

Applying to the Online Programs
In addition to holding the baccalaureate degree from an institution accredited by SACS or another regional accrediting body, the applicant for admission to the Graduate School should have the prerequisite coursework/work experience required by the program to which he/she is applying. In general, those applying for graduate admission should have achieved an overall average grade of “B” or better (3.0 G.P.A. on a 4.0 scale). International students will be required to give evidence of adequate knowledge of English through a TOEFL or IELTS test score.

Admission of a student to the University of Miami for any semester does not imply that such student will be re-enrolled in any succeeding academic semesters.

If students would like to apply to a UOnline program, they will need to create a profile and apply online via our online application portal found here (https://myonline.miami.edu/SignIn/). Here students will be assigned a personal Enrollment Advisor who will help guide them as the student submits all the components and required documents for their application. Students’ Enrollment Advisors will also guide them through the onboarding process and be available to answer any questions. Students will then transition to their UOnline Student Advocate who will work with them through their first year, then transition to their designated Academic Advisor for important Graduation and completion requirements throughout the remainder of their program.

International Students (who attended college/university outside the United States)
All graduate applicants who have attended a college or university outside the United States must submit official transcripts and diplomas (if available) from all colleges and universities attended to one of the three approved evaluation services listed below. Follow the specific instructions of the selected evaluation service to request a course-by-course evaluation with degree equivalency and grade point average (gpa) calculation. We do not issue any student Visa’s for International UOnline students.

All online international students who have been admitted to an online program at the University of Miami are not eligible for an F-1 visa.

The evaluation report and supporting documents are required before the Admissions Committee can review the application. Any documents received by the University will become the property of the University and will not be returned to the applicant or sent to a third party including the evaluation services.

Approved Evaluation Services
- Educational Credential Evaluators, Inc. (ECE) (https://www.ece.org/)
- World Education Services (WES) (http://www.wes.org/students/)

TOEFL (Test of English as a Foreign Language)
If students do not hold a U.S. undergraduate degree, they may be required to take the TOEFL exam. If they are required to submit a TOEFL score, students should visit this web page (http://www.ets.org/toefl/) to arrange to take the test. The TOEFL and IELTS scores are valid for 2 years after the test date. The TOEFL code for the University of Miami is 5815.

The University will consider candidates with these minimum TOEFL scores; however, TOEFL score requirements may vary by program:

TOEFL Internet Minimum Score: 94
TOEFL Computer Minimum Score: 240
TOEFL Paper Minimum Score: 600

**TOEFL Waiver**

The TOEFL requirement may be waived for non-native English speakers provided they meet one of the following criteria:

- Students earned their undergraduate degree in a country where the official language is English (this does not include degrees from just English-speaking institutions or just a country where English is spoken).
- Students studied in the United States at an undergraduate level for at least one year or the equivalent of 30 consecutive credit hours.
- Students have lived and worked in an English-speaking country for the past two or more years.

**Letters of Recommendation**

Students will input their recommender’s information directly into the online application which will generate an email with a unique link sent directly to the recommender. Letters of Recommendations must be submitted directly by the student’s recommender using the unique link provided to them via email. Letters of Recommendation received in a Word document, body of an email, or any other format will not be accepted. The student’s Enrollment Advisor may provide guidance to the recommender if they have technical trouble or questions regarding the process.

**Admissions & Admissions Decisions**

Once the University receives the student’s complete application with all required documents, the admissions review process will start.

**Regular Admit (with Official Transcripts)**

If the application meets the standard admissions requirements and the University has received all official transcripts, from all institutions entered on their online application, the student will receive an offer of full admission in approximately 48 business hours after the University has received the completed application. The student will receive an official email from the Enrollment Advisor and be able to view the admissions decision via their Online Application portal.

**Conditional Admit (with Unofficial Transcripts and/or Test Scores)**

If the application fully meets the standard admissions requirements, the student may be conditionally admitted if the University has received and accepted the unofficial transcripts for all institutions attended, as entered on their online application, and/or the student’s unofficial test scores (if required). Unofficial transcripts may be considered acceptable ONLY IF the document is in a pdf format and ALL of the following items are legible on the transcript document:

- Name of the institution
- Student name
- Cumulative Grade Point Average (preferred)
- Course numbers
- Course names
- Credit hours earned
- Grades earned
- Degree conferred with date (if applicable)
- No other documents will be accepted

Students receive notification typically within 48 business hours after the University has received a complete application (including other required documentation) that the student has been Conditionally Admitted. The notification of Conditional Admission will also address the requirements the student will have to satisfy in order to be officially admitted. The failure to meet any of these conditions will be grounds for the withdrawal of the Conditional Admission and/or the withdrawal from all programs. The student will receive an official email from his/her Enrollment Advisor and be able to view the admissions decision via their Online Application portal.

Students MUST pay their tuition bill or have accepted their Financial Aid Award, no later than by the payment due date. Once students are fully admitted and have paid their non-refundable enrollment deposit, and successfully passed the Student Readiness Orientation (SRO), they may be eligible to receive financial aid within the same term, provided the University has granted the student full admission during the same academic year. Students may start their course and continue through the term as long as they have been awarded Financial Aid, and have accepted their Financial Aid award no later than the first day of class. Student’s Financial Aid funds will not be disbursed until the student has participated in their first course and all official admissions documents and all required Financial Aid documents have been received. Students are responsible for checking CaneLink to ensure that their funding is ready for disbursement.

Students will not be registered for the next term until their current balance is paid in full. In the event the student’s financial aid award is delayed, students should work directly with their Student Advocate or Academic Advisor to determine the appropriate next steps and ensure they meet the appropriate payment deadlines. Students should refer to the Academic Calendar (http://www.miami.edu/index.php/registrar/calendar/) for important deadlines regarding Financial Aid Application due dates. Students may submit their FAFSA after the Financial Aid application priority consideration due date, but may have to use an alternative form of payment if their Financial Aid is not processed by the required payment deadlines.
Students should review the Monthly Payment Plan (MPP) (http://bulletin.miami.edu/graduate-student-handbook-online-students/cost-fees-billing-payment/) section for guidance on setting up a monthly payment plan, as well as the Payment Policies section for payment options and consequences for non-payment. Monthly payment plans are available for students at the beginning of each term. Fall and Spring MPP consist of four (4) payments; however, Summer MPP consist of three (3) payment options and is only available to online students at this time. UM Employees are not eligible for Monthly Payment Plans at this time.

Students should review the Transcripts section for official transcripts deadlines and consequences if the University has not received all official transcripts. Students should also review the UOnline (http://www.miami.edu/index.php/registrar/calendar/) Academic Calendar (http://www.miami.edu/index.php/registrar/calendar/) for official transcript deadlines.

Accepting Admission
When a student's admission decision has been made, the student will receive an official Admissions decision email from the Enrollment Advisor which includes next steps (https://myonlinesupport.miami.edu/recently-admitted/) for accepting their offer. Students can also view the admissions decision online application portal found here (https://myonline.miami.edu/).

A student's Enrollment Advisor will guide him/her through the next steps (https://myonlinesupport.miami.edu/recently-admitted/) to accept their offer of admission and pay their non-refundable enrollment deposit. A student's offer of admission has not been accepted until their non-refundable enrollment deposit has been paid.

Students will have fourteen (14) calendar days to accept their offer of admission by paying their non-refundable $300 Enrollment Deposit. If a student fails to accept their offer of admission within the fourteen (14) calendar day timeframe according to the Deposit Date on the official Admission letter, the student's application will be withdrawn. Students who apply late will forfeit the full (14) calendar day acceptance policy and will be required to accept their offer no later than the last official Deposit Deadline as set on the UOnline Academic Calendar (http://www.miami.edu/index.php/registrar/calendar/), which may be less than (14) calendar days. Students should refer to their official Admissions letter for their exact deposit deadline. If a student chooses to reapply, they will need to wait one (1) additional term before reapplying. Deferrals are not permitted unless the student has been approved for a Deferral Exception (https://qafederation.ngwebsolutions.com/sp/startSSO.ping?RequestedDynamicFormTemplate=2688d0b9-6031-4812-8f79-84fe37812020).

Deferral Exception Appeal
In extenuating circumstances, students may choose to apply for a Deferral Exception (https://qafederation.ngwebsolutions.com/sp/startSSO.ping?RequestedDynamicFormTemplate=2688d0b9-6031-4812-8f79-84fe37812020). Students who choose not to accept their offer of admission must apply for a Deferral Exception no later than their Deposit Deadline as specified by the Admissions letter, or will be withdrawn and will need to wait one (1) additional term before reapplying. Deferral Exception Requests are only eligible for the next immediate term. Students who would like to wait to start in future terms will need to reapply and should contact their Enrollment Advisor for additional information regarding documents required for admission. Any student who has already accepted their offer of admissions must apply for a Deferral Exception no later than the official Completed Enrollment Application Deadline for their current term as per the Academic Calendar. (http://www.miami.edu/index.php/registrar/calendar/) Deferral requests submitted after the deadline will not be reviewed. Any student who has already been withdrawn due to missing their deposit deadline, failing their SRO requirement, or by voluntarily submitting a Withdrawal request will not be eligible to defer and must reapply.

- If a student's Deferral Exception application is denied, the student's offer of admission will be withdrawn and they must wait one (1) additional term before reapplying.
- If a student's Deferral Exception is approved, the student's start date will be updated to the next immediate term and the student will be sent a new admissions letter indicating the approval and updated start date.
  - If a student has not accepted their offer of admission, and is approved for a deferral exception, the student will have fourteen (14) calendar days to accept their offer from the date of the deferral approval as per their deferral approval letter. If a student does not accept their offer of admission within the fourteen (14) calendar day time frame, the student's application will be withdrawn and the student must sit out (1) one additional term before reapplying.
  - If a student has already accepted their offer of admission, and has been approved for a deferral exception, the student's start date will be updated and a new admissions letter will be sent with the updated term and approval. If a student chooses to withdraw before the census date or is administratively withdrawn for any reason, the student must sit out one (1) additional term before reapplying to the program.

Any student who chooses to reapply for a future term is not guaranteed admission and will be subject to any changes in tuition, scholarships, and/or admissions requirements for that term.

The offer of Admission Expiration
Offers of Admission are valid for one term only unless a Deferral Exception has been granted. To officially accept the offer of admission, a student must log into Canelink (https://myonlinesupport.miami.edu/recently-admitted/) and pay their non-refundable enrollment deposit. If a student has not accepted an offer of admission within the fourteen (14) day time frame/deadline on their official Admissions Letter, he/she must reapply to the University and program after sitting out one additional term. Student should contact the Online Enrollment Office to verify what documents must be submitted for consideration.
Reapplying/Readmission
There are a few situations in which students have to reapply to a program. Students will have to reapply to a program if:

- A student’s original Offer of Admission has expired and he/she never started the online program.
- A student requests to change to a different program.
- A student has been withdrawn from his/her program for more than 1 calendar year (3 consecutive terms).
- A student failed to meet the requirements of a Conditional Admission.
- A student failed or did not complete the Student Readiness Orientation (SRO)
- A student’s Deferral Exception Appeal was denied

To reapply, students can login and start the Online Application (https://myonline.miami.edu/signup/) using their previous log-in credentials. A student should contact the Online Enrollment Office at 1-800-411-2290 if they have questions regarding the application. All students who are readmitted will need to complete the Student Readiness Orientation (SRO) by their deadline, regardless of prior completion, and adhere to all admissions deadlines as set forth in the Academic Calendar.

Not Admitted
If a student’s application does NOT meet the standard admissions requirements, he/she will receive a notification that he/she has not been admitted into the program typically within 48 business hours after the University received the student’s completed application. Students will receive an email from their Enrollment Advisor and be able to view their admissions decision via their Online Application portal (https://myonline.miami.edu/signup/).

If a student is not admitted into a program, he/she will receive an explanatory email from the Enrollment Advisor and will be able to view their admissions decision via their Online Application portal. Students may be eligible to reapply once they have met the admission requirements or choose to apply to a new program. A student’s Enrollment Advisor will contact a student to discuss their options.

Transcripts for Admissions

Official Transcripts
- MUST Arrive in a sealed envelope with the school’s stamp/seal across the back or on the institution’s official envelope
- Be opened only by a member of the University of Miami admission staff
- Have a Registrar’s signature and/or watermark and/or indented seal which appears on the transcript

Mailing Address for submission of transcripts:

University of Miami
Online Enrollment Office
1320 South Dixie Highway
Gables One Tower –Suite 902, Locator Code: 2991
Miami, FL 33146

Please ensure that the locator code is included in the address. Transcripts may not be received if address is missing the locator code or sent to another address on campus. Students are responsible for ensuring that they have their transcripts sent to the address above and are subject to all deadlines as per the Academic Calendar (http://www.miami.edu/index.php/registrar/calendar/).

Electronic Transcripts
Electronic transcripts will be considered official only if they are sent directly from the accredited institution and received directly by the Online Enrollment Office at etranscripts@miami.edu. A transcript sent directly to the student’s Enrollment Advisor will be considered as unofficial and will need to be re-sent to the official etranscripts address.

Official Transcripts, Scores & Conditional Admission
The University must receive official transcripts for all institutions attended, as entered on their online application, before any student can be considered fully admitted into the University.

Official Transcripts/International Evaluations Due Date
If a student was Conditionally Admitted into a program with unofficial transcripts, the University MUST receive the student’s official transcripts from all institutions attended, as entered on their online application, or International Evaluations from an approved evaluation service, by the date listed on the UOnline Academic Calendar. A student’s Admissions letter will provide the exact due date for the official transcript(s) and he/she may check Caneflink to verify that the University has received the student’s official transcripts. Students should refer to the Academic Calendar (http://www.miami.edu/index.php/registrar/calendar/) for important due dates.
Official Test Scores Due Date

If a student was Conditionally Admitted into a program with unofficial test scores and is required to submit official GRE, GMAT or TOEFL official test scores, the University MUST receive their official test scores by the date listed on the UOnline Academic Calendar. A student’s Admissions letter will provide the exact due date for the student’s official test score(s) and he/she may check Canelink to verify that the University has received the student’s official test scores. Students should refer to the Academic Calendar (http://www.miami.edu/index.php/registrar/calendar/) for important due dates.

UONLINE OFFICIAL TEST SCORE SCHOOL CODES

TOEFL CODES: Institution: 5815
GRE CODES: Institution (All UOnline programs): 4405
GMAT CODES:
- School of Business - UOnline Finance/Accounting Certificate: 7NV-S1-23
- School of Business - UOnline Master of Finance: 7NV-S1-35
- School of Business - UOnline Master of Professional Accounting: 7NV-S1-53
- School of Business - UOnline Professional MBA: 7NV-S1-01
- College of Arts & Sciences - UOnline Master of Public Administration: 7NV-HM-66
- School of Education - UOnline Master & EdD of Applied Learning Sciences: 7NV-HM-66

Financial Aid & Tuition Payment

If students apply for Financial Aid, Financial Aid will be NOT be awarded until the University has received the official transcripts from all institutions attended and/or test scores, if required.

Because Financial Aid will not be awarded until official transcripts from all institutions attended and test scores are received, a student MUST pay the tuition bill by the payment due date. Students should review the Payment policies for payment options and consequences for non-payment.

Official Transcripts and Test Scores Not Received

If Official Transcripts and/or Test Scores (if required) are NOT received by the due date:

- A student will be removed from their current course and next course
- A student will be administratively withdrawn and may be reinstated if the University receives the student’s official transcripts.
- A student may owe a tuition balance from being withdrawn and must have their tuition bill paid in full before being eligible for reinstatement

Enrollment Deposit

Once students have received their offer of admission or conditional admission, they will pay a non-refundable enrollment deposit in order to accept their offer of admission. Once the deposit in full has been received, students will be required to complete and pass their Student Readiness Orientation (SRO) within (4) four weeks or by the deadline provided, in order to be eligible for their first term registration.

What the Enrollment Deposit Is

The enrollment deposit payment is:

- Paid one time per UOnline program
- Non-refundable including if the student’s Offer of Admission has expired, he/she failed the Student Readiness Orientation (SRO), and he/she never started the program or if they were conditionally admitted and did not meet the conditions for full admission.
- Due no later than the date listed on the academic calendar.
- Applied against a student’s 1st tuition bill
- Valid for as long as the Offer of Admission is valid:
  - If a student’s Offer of Admission for their UOnline program has expired and he/she reapplies to any program (campus-based or online), a student will be required to pay the deposit again and any applicable fees.
  - Transferrable to a new UOnline program: if a student applies to a new UOnline program while the existing Offer of Admission is still valid, the student will not have to pay the deposit again.
- Not transferrable to any campus-based program.

Paying the Enrollment Deposit

After a student has received the Offer of Admission, the student will be provided access to Canelink (https://canelink.miami.edu/) to pay the student’s enrollment deposit with the following payment options:

- Online Credit Card payment:
  - MasterCard
  - Visa
• American Express
• Discover
• E-check (drawn on a US bank only)
• Bank-to-Bank, Exchange Bureau or Wire Transfer.
  • Students are responsible for any fees or currency exchange processing charged by their bank or exchange bureau when transferring funds and should account for this when sending tuition payments.
• International Payments with Flywire (http://www.miami.edu/finance/index.php/student_account_services/cashier_services-1/international_student_payments/)

Curriculum Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Cross-Cutting Courses</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td></td>
<td>The following courses can be taken under any area because of their cross-cutting nature but will be completed just once.</td>
<td></td>
</tr>
<tr>
<td>TAL 704</td>
<td>Introduction to the Learning Sciences</td>
<td></td>
</tr>
<tr>
<td>TAL 709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAL 712</td>
<td>Applied Research and Development in the Learning Sciences - Seminar 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Learning</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>TAL 600</td>
<td>Human Learning</td>
<td></td>
</tr>
<tr>
<td>TAL 602</td>
<td>Organizational Learning</td>
<td></td>
</tr>
<tr>
<td>TAL 651</td>
<td>Affective, Relational, and Cultural Factors and Processes in Learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Design</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>TAL 705</td>
<td>Design of online learning environments</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Select 1 course from the following:</strong></td>
<td></td>
</tr>
<tr>
<td>TAL 706</td>
<td>Design of Formal Learning Environments</td>
<td></td>
</tr>
<tr>
<td>TAL 707</td>
<td>Design for workplace related learning</td>
<td></td>
</tr>
<tr>
<td>TAL 708</td>
<td>Design of Out-of-School, Informal Learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Assessment</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>EPS 624</td>
<td>Essentials of Research in Social and Behavioral Sciences</td>
<td></td>
</tr>
<tr>
<td>or TAL 710</td>
<td>Introduction to Research</td>
<td></td>
</tr>
<tr>
<td>EPS 700</td>
<td>Quantitative Methods I</td>
<td></td>
</tr>
<tr>
<td>EPS 714</td>
<td>Qualitative Methods I</td>
<td></td>
</tr>
<tr>
<td>TAL 652</td>
<td>Assessment of Human and Organizational Learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Cognate</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td></td>
<td>6 credits of coursework in a related cognate must be approved by advisor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Electives</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td>3 credits of elective coursework must be approved by advisor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

Sample Plan of Study

This is a sample Plan of Study. Your actual course sequence may vary depending on your previous academic experience as well as current course offerings. Students should meet with their academic advisor each semester to determine the appropriate course selection.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>TAL 600</td>
<td>Human Learning</td>
</tr>
<tr>
<td>TAL 704</td>
<td>Introduction to the Learning Sciences</td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>TAL 652</td>
<td>Assessment of Human and Organizational Learning</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>TAL 705</td>
<td>Design of online learning environments</td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>Summer</td>
<td>TAL 602 Organizational Learning</td>
</tr>
<tr>
<td>TAL 707</td>
<td>Design for workplace related learning</td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>**Year Two</td>
<td>**</td>
</tr>
<tr>
<td>Fall</td>
<td>TAL 706 Design of Formal Learning Environments</td>
</tr>
<tr>
<td>TAL 710</td>
<td>Introduction to Research</td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>EPS 700 Quantitative Methods I</td>
</tr>
<tr>
<td>TAL 709</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>Summer</td>
<td>TAL 651 Affective, Relational, and Cultural Factors and Processes in Learning</td>
</tr>
<tr>
<td>TAL 709</td>
<td>Introduction to Qualitative Methods</td>
</tr>
<tr>
<td>TAL 714</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>**Year Three</td>
<td>**</td>
</tr>
<tr>
<td>Fall</td>
<td>TAL 708 Design of Out-of-School, Informal Learning</td>
</tr>
<tr>
<td>Elective or Credit Transfer</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>TAL 712 Applied Research and Development in the Learning Sciences - Seminar 2</td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td>Summer</td>
<td>TAL 712 Applied Research and Development in the Learning Sciences - Seminar 2</td>
</tr>
<tr>
<td></td>
<td><strong>Credit Hours</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
</tr>
</tbody>
</table>

**Mission**

The EDD program in the Applied Learning Sciences will provide people across a broad array of fields with the intellectual tools to (re)think about how they interact with subordinates, trainees, mentees, and students as learners and to (re)think their own roles as being that of a teacher where teachers design, implement, and evaluate the impacts of learning environments for their students.

**Goals**

The program's three specific foci, which students are expected to integrate in a culminating applied project, are:

- **Learning**: how people, as individuals, groups, or parts of an organization, learn;
- **Design**: the design, implementation, and revision of learning environments that enhance human learning; and
- **Assessment**: the assessment of learning and the evaluation of individual, social, technological, and design factors that advance or impede learning.

**Student Learning Outcomes**

As a result of the doctoral program, graduates will:

- **Learning**: Be able to assess learners' initial knowledge as regards to what said learners are supposed to understand;
- **Design**: Be able to design and implement learning environments that will help learners to learn and to understand their intended outcomes; and,
- **Assessment**: Be able to evaluate and modify learning environments against how well learners achieved their own learning outcomes.