

# ReImagine PSU with the Universal Design for Learning

## Universal Design for Learning Workshop and Certificate of Completion Report



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#### **Executive Summary**

The Universal Design Learning Workshop and Certificate Description was designed as a three-week workshop and certificate of completion. The overall aim of the project was to introduce and also apply methods of andragogy as part of its multidisciplinary learning cycle. This includes implications for course design and delivery at the program level. Sharing the Universal Design for Learning (UDL) framework, its principles and guidance were thought to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. UDL provides a set of effective practices to make the curriculum accessible through multiple sensory designs in order to engage learners in ways that reinforce knowledge, skills, and values.

The planning sessions and recruitment to select and organize the instruction team and create the content of the UDL pilot workshop took place during August 2021. There were meetings two times a week that focused on not only addressing course designing matters but also meeting PSU's commitment and responsibility to include participants representing minority communities and integrating concerns and demands related to online learning environments.

#### Brief description for the OAA ReImagine Initiative website

The Universal Design for Learning (UDL) Workshop and Certificate of Completion pilot designed by the Hatfield School of Government instruction team provided an opportunity for applying best practice andragogy, online tools, and technology applications for adult learners. The pilot engaged a group of PSU professors, trainers, and graduate students whose collective expertise lends itself well to collaborative learning. We looked at different methods and applications for utilizing a multi-sensory experience through UDL to improve the effectiveness and outcomes of hybrid learning environments.



#### UDL workshop and successful ReImagine Initiative experience

(Were the goals outlined in the proposal achieved?)

The UDL pilot workshop was a success in terms of PSU community participation; we had 15 people complete the course and 15 more express interest in future iterations in the presurvety assessment. The program was organized in six sessions, two sessions per week, with a duration of ninety minutes each. We developed a <u>UDL workshop content description</u><sup>1</sup> as a guidance document for our sessions. Table 1 below shows a synthesis of the main themes and the content delivered in each of the six sessions of the workshop.

During each session participants were encouraged to engage in the workshop methodology that included ten to fifteen minutes of mini-lecture content followed by an experimentation learning application activity break out into three to four groups. After twenty five minutes of group work and practice, all participants were invited to share their experiential learning within the larger group. Figure 1 illustrates the cycle methodology implemented during the six workshop sessions.

| Session/Date                     | Main Theme                        | Synthesis of Main Content Delivered     |
|----------------------------------|-----------------------------------|---|
|                                  | Introduction to online/digital    | Ground norms for the six workshop       |
| Opening Session (1)<br>Sep. 21st | collaborative tools and resources | sessions and pre-assessment overview    |
| 1                                |                                   |   |
| Session 2:                       | Principles and Competencies of    | Adult Learning Methods (andragogy)      |
| Sep. 23rd                        | Adult Learning (andragogy) and    | And History of UDL                      |
|                                  | introduction to the Universal     |   |
|                                  | Design for Learning               |   |
| Session 3:                       | Principles of Universal Design    | UDL Three Principles and Guidance       |
| Sep. 28 <sup>th</sup>            | for Learning                      |   |
| Session 4:                       | Creating Active Learning          | UDL in Online Learning Environments     |
| Sep. 30 <sup>th</sup>            | Experiences                       |   |
| Session 5:                       | Program Level Learning            | Freewriting from a perspective of the 5 |
| Oct. 5 <sup>th</sup>             | Methods Implications              | senses if one were missing (describe a  |

Table 1 Synthesis of the main themes and content delivered in each workshop session

<sup>&</sup>lt;sup>1</sup> This document is available in our google shared folder at:

https://docs.google.com/document/d/1NQKgK0wsuXS01414FyNquM3JR-ry6hLd/edit#



|  |  | landscape for someone who cannot<br>see, describe a piece of music for<br>someone who cannot hear, etc.)   |
|--|--|--|
|  |  | Workshop Session (Take it the<br>Woodshed):<br>Have participants bring<br>lessons/units/training that can be<br>improved or "reimagined" with the<br>UDL Framework and the Principles of<br>Andragogy. |
| Closing Session (6):<br>Oct. 7 <sup>th</sup> | Recommendations<br>and Next steps identified for<br>developing program-level<br>guidance | Final remarks<br>- Followed by participants Q&A<br>Closing Ceremony<br>- Certificates  |

Our UDL pilot workshop conception was to modulate each session appropriately applying andragogy methods as well as the three UDL principles: multiple means of representation, multiple means of engagement, and multiple means of actions and expressions. Towards that end, we utilized various useful digital collaborative tools and resources in every session. For example, we engaged participants by using google drawings, Jamboard, Mural, and Mentimeter, among others available as freeware mode online. We also created a google classroom<sup>2</sup>. This google classroom worked as the workshop learning management system platform to maintain

<sup>&</sup>lt;sup>2</sup> UDL google classroom link: https://classroom.google.com/u/1/w/Mzc2MjIxMjY2OTI5/t/all



active interaction and communication between instructors and participants and also among them.



Figure 1 UDL Workshop Methodology

#### UDL workshop goals achieved

(How did the completed work support the goals of the ReImagine Initiative?) To guide the next generation of learners in preparation for trends emerging in the information age shaping the future of our classrooms and places of work, our instructional techniques must evolve as well. Our project builds on the Universal Design for Learning (UDL) approach to create cross-cultural spaces online for local and international students to apply effective methods of andragogy as part of their multidisciplinary learning cycle at Portland State University. Andragogy and the role of teachers to serve as facilitators of learning is evolving in both form and function to be more accessible and multidisciplinary. Universal Design for Learning provides a set of effective practices to make the curriculum accessible through multiple sensory designs in order to engage learners in ways that reinforce knowledge, skills, and values.



An early win was working within existing PSU communication channels to recruit a broad reach of PSU faculty, staff, Ph.D., and graduate students. One of the leading ways of gaining visibility was being featured on the CUPA website as an opportunity to pilot a Certificate Course for the Hatfield School of Government as shown in Figure 2. We had



#### Picture 1 PSU CUPA Website Screenshot

Our team has piloted an Adult Learning Methods Certificate Program through USAID to advance UDL applications in the training of trainer (TOT) learning modality approach to improving virtual classroom content which we proposed to apply to programs across CUPA and PSU starting with an online summer pilot.

A TOT goal is building the capacity of instructors or trainers to deliver courses using interactive and innovative teaching methodologies that are tailored to the needs of adult learners. As a result, instructors will be more likely to incorporate adult learning teaching methodologies into course delivery.

In this workshop, participants fully grasped how to use adult learning methodology to engage the learners. They gained a foundation in conducting an interactive online course including conducting a presurvey needs assessment, developing learning objectives, and evaluating the impact of their training initiatives through UDL activities and applications. They learned how to apply effective training techniques for engaging a variety of learning styles and preferences, creating a positive learning environment, leveraging effective facilitation techniques, and managing group dynamics. Participants also developed engaging, learner-centered solutions.



Our report reflects this comprehensive approach to materials aligned with best-practice adult learning methodology and approach to the Training of Trainer sessions. All materials are available in a <u>google shared folder</u> in order to facilitate an ongoing space for our participants as well as a replicable set of materials for future adaptations of the UDL certificate program.

#### Instruction Team and allocation of funds

#### (How were the allocated funds utilized?)

Our program was adapted collaboratively from the adult learning methods course from our USAID Strengthening Provincial Capacity Program. The Reimagine Proposal afforded us the opportunity to hire the same lead instructors to apply the concepts we co-developed with Vietnamese universities to benefit our own PSU community and continue the leadership in capacity development services through the Hatfield School of Government. Thus our funding was allocated to pay for their time redesigning the course for a new audience, recruiting a diverse community of learners, and bringing on student teaching assistants to serve as peer facilitators for warm-up, breakout exercises, and technology applications.

Our lead instructors were Matthew Ruddy who is PSU Adjunct Faculty in the College of Education, who runs his own training and education consultancy focused on Diversity, Equity and Inclusion. Matt has also served a Center for Public Service Fellow since his work in 2020 on the USAID SPC project. Ana Sofia Castellanos is a Ph.D. candidate in her fourth year of the Public Administration and Policy Program, political science and data governance research expert in participatory democracy mechanisms in Latin America. Ana Sofia managed all course material development including the pre-assessment survey, all folders of the google classroom, session presentation. The funding also provided us the opportunity to hire two teaching assistants who are currently in CUPA graduate programs; Laurel Priest in the Masters in Urban and Regional Planning Program and Ty Wilkins in the Masters in Public Administration Program. Julia Babcock served as the Hatfield School of Government Senior Project Manager (and is Co-PI for the USAID SPC project) to support the program from beginning to end from a



facilitating and administrative role (co-developing the proposal, hiring/managing all student and consultant wage agreements, gaining approval for the certificate of completion and procuring space for the end of course celebration ceremony). Table 2

As described in the proposal; the following budget pays directly for 1) teaching assistants for PSU students to provide them an opportunity to co-develop facilitate course sessions as well as 2) teacher salaries for lead Professor Matt Ruddy, instructor Ph.D. Research Associate Ana Sofia Castellanos and program administration and instruction support from Julia Babcock, HSOG Senior Project Manager.

| Activity Description                                 | Funding Allocation |
|--|--------------------|
| Course Design and Recruitment                        | \$5,000            |
| Course Instruction Week 1                            | \$2,500            |
| Course Instruction Week 2                            | \$2,500            |
| Course Instruction Week 3                            | \$2,500            |
| Course Instruction Week 4                            | \$2,500            |
| Course Certificate Ceremony and<br>Evaluation Report | \$5,000            |
| Student Teaching Assistants                          | \$5,000            |
| Total Requested Budget                               | \$25,000           |

Table 2 The budget was executed as described in the proposal below:

For further detail of personnel and miscellaneous expenses tied to the UDL Workshop and Certificate Program, see our <u>budget allocation spreadsheet</u>.

#### Final Reflections and Recommendations

Picture 2. Facilitated Session on UDL Workshop and Certificate Design





Throughout the course; we adapted sessions to what we heard the session before in order to ensure the activities were practical and applicable to the various roles of our participants (professor, researcher, teaching assistant, or graduate student). In that way, our process of



adaptation helped to mirror the practices of UDL and adult learning methods to show where there are technological tools vs. facilitated sessions for building trust and buy-in to course content.

In the last UDL workshop session, participants contributed to developing a post-assessment exercise by using the collaborative tool Mural. Participants appreciated the interdisciplinary approach and expressed their interest in forming and building a support community or system through which they could discuss and exchange ideas from a UDL approach. To that end, we've planned an end-of-course certificate ceremony celebration at CUPA at the end of October to meet in person and hand out printed certificates of completion.



Our overall recommendation is to continue to offer a Universal Design Learning Certificate of Completion to the PSU Community through the Hatfield School of Government. The ReImagine Initiative award served a critical role in applying lessons learned from international capacity development to benefit our own PSU community. One of the unexpected outcomes was how



much buy-in there would be to the need for a space to experiment together after 18 months of at-home, online teaching. The timing was such that our pilot helped build the confidence of our instruction team and participants around how to improve content accessibility and application as we pivot back into a hybrid classroom environment in Fall 2021.



#### Appendixes

#### UDL Workshop Sessions Slide Deck

The slide deck prepared for each session of the UDL pilot workshop is attached to this report below. The slides could also be found available at the google classroom and in our google drive folder.





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# Welcome!

Opening Remarks

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#### Workshop Objectives

- To introduce principles and competencies of adult learning (andragogy) including implications for course design and delivery at program level.
- To learn the Universal Design for Learning (UDL) framework, its principles and guidelines.
- To practice UDL learning methods and skills in the context of PSU course design.
  - For any accomodations/student needs: <u>PSU DRC</u>
  - Consider sharing <u>Open Dyslexic Chrome Extension</u>, <u>Hackervision</u>, Read Aloud, Speechify, etc.



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### UDL Workshop Methodology



### Opening Session: Digital collaborative tools and resources and Pre-assessment Overview



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- Share from your experience
- Be open to multiple points of view
- Actively participate, engage in virtual functions/platforms
- Other Suggestions? Questions?

#### Workshop Norms



NOTE: In order to receive a Certificate of Completion, participants must attend 5 of the 6 sessions. All sessions will be recorded for use in future UDL Workshops



The Universal Design for Learning Opening Session

**Pre-assessment overview** 

1. The value of pre-assessment information and feedback

2. The course is designed for PSU affiliated staff and graduate students, if neither of these categories, please provide more information below with "other." <sup>33 responses</sup>



The Universal Design for Learning Opening Session

#### **Pre-assessment overview**

4. How many years of teaching and training experience do you have in your current and/or previous positions?
33 responses

 30.3%

 Less than a year
 1 - 3 years
 3 - 5 years
 3 - 5 years
 5 - 10 years
 10+ years



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#### What are your learning preferences? Select up to 3 choices.

32 responses





2. What teaching and learning methods are most relevant to your current position? (choose all that apply)

33 responses







The Universal Design for Learning Opening Session

## Who's at your table?

• Warm-Up on Self Reflection





The Universal Design for Learning Opening Session

# What is UDL and What is not UDL?

What resources have you all had success with?



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#### Session 2:

Principles and Competencies of Adult Learning (andragogy) and introduction to the Universal Design for Learning





| What do you ki<br>UDL?   | now to be true a  | ■ Mentimeter  |
|--|---|---|
| Flexible, different options for conveying meaning  | Increases access for all students.  | Accessible  |
| what benefits one often benefits all   | Techniques that are inclusive and allow<br>students to feel connected to the<br>material. | Students are co-creators of content/knowledge   |
| Principles of learning for all   | serves a wider student learning base  | I don't know much, but seems that it will<br>increase ability to access, take in,<br>synthesize and retain information. |
| Activating different senses and mediums<br>for engagement.   | learning as a journey for both the<br>instructor and the students, empowering             | multimedia  |
| Teaching and learning is reciprocal  | students to discover the knowledge<br>themselves  | offering content in a variety of formats<br>speaks to learners of all styles  |
| Students advocates for themselves  | Opportunity to succeed  | Appealing to just one or two styles of  |
|  | Social constructivism   |   |
| Vhat is UDL not  |   |   |
| Assuming that because you know<br>something/love something/it's easy for   |   | Fixed mindset   |
| Assuming that because you know<br>something/love something/it's easy for<br>you, that it is (or should be) the same for                | Punitive. Only one style of testing for   | Mentim  |
| Assuming that because you know   | Punitive. Only one style of testing for   | Mentim  |
| Assuming that because you know<br>comething/love something/it's easy for<br>rou, that it is (or should be) the same for<br>earners<br> | Punitive. Only one style of testing for example.  | M Mentir  |
| Assuming that because you know<br>comething/love something/it's easy for<br>rou, that it is (or should be) the same for<br>earners     | Punitive. Only one style of testing for<br>example.<br>monologue teaching                 | M Mentin  |



Session 2

The Universal Design for Learning Adult Learning (andragogy) **Principles and Experiential Learning Cycle: An Overview** 



Knowles (1970) The Modern Practice of Adult Education: From Pedagogy to Andragogy

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#### Adult Learning (Andragogy)

#### **Five Underlying Assumptions**

- Self-Concept 1. As a person matures his/her self concept moves from one of being a dependent personality toward one of being a self-directed human being.
- 2. Adult Learner Experience As a person matures he/she accumulates a growing reservoir of experience that becomes an increasing resource for learning.
- 3. Readiness to Learn As a person matures his/her readiness to learn becomes oriented increasingly to the developmental tasks of his/her social roles.
- 4. Orientation to Learning As a person matures his/her time perspective changes from one of postponed application of knowledge to immediacy of application. As a result his/her orientation toward learning shifts from one of subjectcenteredness to one of problem centeredness.
- 5. Motivation to Learn As a person matures the motivation to learn is internal (Knowles 1984:12).





The Universal Design for Learning

Session 2

|                                     |                            | *  | Moving from Pedagogy to Andragogy   |
|-------------------------------------|----------------------------|--|---|
| Pedagogy<br>Others learning process | Learner's Role             | PEDAGOGY           • Follow Instructions           • Passive Reception           • Receive and Retain Information           • Little responsibility for learning | ANDRAGOGY  Offers ideas based on experience Independent Active participation Responsible for learning process |
|                                     | Motivation for<br>Learning | <ul> <li>External</li> <li>Learner does not see<br/>immediate benefit</li> </ul>   | <ul> <li>From within</li> <li>Learner sees immediate application</li> </ul>                                   |

| Andragogy            | Learning             | <ul> <li>Learner does not see<br/>immediate benefit</li> </ul>  | <ul> <li>Learner sees immediate application</li> </ul>   |
|----------------------|----------------------|---|--|
| Add Learning Process | Choice of<br>Content | <ul> <li>Teacher-controlled</li> <li>Concept-centered</li> <li>Learner has little or no choice</li> </ul> | <ul> <li>Self-directed</li> <li>Centered on real life<br/>examples/application</li> <li>Problems expressed by learner</li> </ul> |
|                      | Method Focus         | Gain facts, information   | Building knowledge and experiences   |
| -                    |                      |   | 19   |

The Universal Design for Learning Session 2

#### The UDL Brief Historical Background

- "<u>Universal Design</u>" and <u>Ronald Mace</u> accessibility and dignity
- Signs & Traffic
- UDL guidelines and framework created and defined by David H. Rose - Harvard Graduate School of Education and

Center for Applied Special Technology (CAST)

• U.S. Department of Education: 504 and IEP regulations



## Signs and Traffic







The Universal Design for Learning Session 2

The Universal Design for Learning (UDL)





The Universal Design for Learning Session 2

## Andragogy and UDL

# Experimentation and Application

 In groups, crosswalk ideas and key principles from adult learning and UDL



#### Session 3: Principles of the Universal Design for Learning





The Universal Design for Learning Session 3

#### What is it?

UDL is a set of principles for curriculum development that give all individuals equal opportunities to learn.

UDL provides flexibility in the ways students are engaged (engagement), information is presented (recognition), and in the ways students respond or demonstrate knowledge and skills (action and expression) (UDL: Theory and Practice, 2014)





CAST (2018). Universal Design for Learning Guidelines version 2.2. Retrieved from http://udlguidelines.cast.org 27



The Universal Design for Learning Session 3

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UDL - Studies in Executive Function. Examination of Faculty and Student Feedback



Connecting UDL



Reflecting upon previous workshops and conferences consider:

- What types of training presentations and experiences help excel and improve in your teaching practice?
- <sup>2</sup> Where were the different points in sharing information and assessments visual, aural, oral, and kinesthetic (beyond note-taking)?
- 3. What types of training presentations and experiences are not helpful in your teaching practice?



#### Session 4: Creating Active Learning Experiences





## UDL and the Online Learning Environment









The Universal Design for Learning Session 4

 Backwards Design (Bond & Dirkin, 2019) and UDL Design Cycle (Rao & Meo, 2016)
 Additional Design Concepts (Rao, K. (2021)

UDL Design Cycle

#### Design Model and Cycle Examples

 
 Step 1: Consider LEARNER VARIABILITY

 Including updative vitronging updating updat

The Universal Design for Learning Session 4

#### UDL Online Course Design: Example

A Screenshot from an Online Undergraduate Course that shows a section of a Week Overview Page.

(UDL Guideline/Checkpoint 6.3: Facilitate managing information and resources)





The Universal Design for Learning Session 4

## Crystallized versus Fluid Intelligence Conversation











#### Session 5: Program Level Learning Methods Implications



#### Warm-Up

Free write from a perspective of the 5 senses if one were missing (describe a landscape for someone who cannot see, describe a piece of music for someone who cannot hear, etc.) Resource for working with students - <u>Pobble365</u>









| Reading                             | • Utilize digital text features,<br>such as text to speech,<br>annotations, vocabulary and<br>comprehension supports,   | Text to Speech     Literacy support     extensions (e.g.,   |
|-------------------------------------|---|---|
|                                     | translation<br>• Text-to-Speech (TTS) helps with<br>decoding and reading fluency;<br>Dual Highlighting with TTS helps<br>students track the word being<br>read out aloud<br>• Literacy support tools allow<br>teachers and students to annotate<br>and highlight digital text, which<br>can support comprehension | Natural Reader     Voice Dream Reader (app)     Using digital text features of e-   |
| Writing                             | Digital graphic organizers support<br>brainstorming and planning     Speech to text tools support<br>generation of text     Grammar and spell-check tools<br>support revision and editing   | Digital graphic<br>organizers (Lucid<br>Chart, MindMup,<br>Kidspiration Maps)<br>Speech to Text apps<br>Grammarly, Ginger<br>(browser extensions) |
| Demonstration of<br>knowledge       | Multimodal tools that allow<br>students to integrate text, images,<br>audio, and video can provide ways to<br>demonstrate what they know.     Multimodal tools can provide ways<br>for students to develop and express<br>ideas with feedback from the<br>teacher.  | Book Creator, UDL<br>Book Builder     Infographics (e.g.,<br>Canva, Piktochart)     Flipgrid     Padlet   |
| Organization and<br>Self-Regulation | <ul> <li>Checklist apps</li> <li>Calendar and reminder tools</li> <li>Weekly Check-in form</li> </ul>   | <ul> <li>Google Keep</li> <li>Evernote</li> <li>Google Forms</li> </ul>   |

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#### The Universal Design for Learning Session 5

## Take It to the Woodshed

 In groups, examine colleagues lessons/units/training and work together to integrate UDL framework and principles





#### Closing Session: Recommendations and Next steps





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We need to think much less about trust... and much more about being trustworthy, and how you give people adequate, useful and simple evidence that you're trustworthy.

Onora O'Neill, What we don't understand about trust, TEDx



The Universal Design for Learning Session 6



Through the application of different adult learning methods, consider:

- 1. What types of UDL principles might help adult learners excel and improve?
- 2. Where were the different points in sharing information and assessments visual, aural, oral, and kinesthetic (beyond note-taking)?
- 3. Where are points in sharing information and assessments that can be or already are visual, aural, oral, and kinesthetic (beyond note-taking)?
- Participants will discuss and capture content in a shared document based on the outcomes of applying UDL guidelines to a current unit/lesson/concept in their curriculum and practice.



The Universal Design for Learning Session 6

## Celebrate!

Awarding of Certificates





#### UDL Workshop Post Assessment

Figure 3 attached the outcome from our last UDL workshop session developed through the collaborative tool Mural.