Engaging the Adult Learner: An Action Research Study on Delivering Effective Online Learning Experiences

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Engaging the Adult Learner: An Action Research Study on Delivering Effective Online Learning Experiences

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Abstract

Since the pandemic of 2020, there has been a vast increase of adults learning online. Today, online learning is the most popular learning approach among adult learners. However, many adults have faced obstacles and challenges when learning online, resulting in a poor learning experience. Online learning is a modality that has become the forefront of learning in our society and continues to grow more and more popular, which makes it a critically important research area. This paper discusses adult learners and their most common challenges and obstacles when learning online and suggestions on how to avoid them. A positionality statement of my own experience as an instructional designer is included as well as peer-reviewed literature on relevant methodologies and learning theories. Interviews were conducted using open-ended questioning with adult learners from different backgrounds and levels of computer skills to learn about their positive and negative online learning experiences. Instructional designers were surveyed to capture insight on their experiences on implementing online learning modalities. The paper concludes with a list of recommendations and best practices that instructional designers can utilize to assist them in producing effective online learning experiences for adult learners.

Keywords: adults learning online, online learning experiences, effective online learnings, e-learning platforms, engaging adults, challenges, instructional designers, learning theories
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Introduction

Over the past decade, learning online became more and more widespread thanks to the advancement of online technology. During the COVID-19 global pandemic in 2020, corporations and education training centers had no choice but to transition all in-person trainings to online. Instructional designers (IDs) had to quickly learn how to develop and delivery effective online learnings. The pandemic swiftly changed the training industry to an online learning world forcing adults to learn remotely through digital learning platforms such as Zoom. Three years later, learning online is the main modality for learning. IDs are challenged with learning how to prepare online learning programs that will inspire and engage adult learners in wanting to learn the content that is being delivered. There is the ADDIE framework, an instructional design model that IDs can use as a guide to assist them through developing an online learning modality. When developing online learning courses, writing clear goals and learning objectives is typically a priority. Additionally, incorporating gamification, storytelling, problem-based learning activities and self-directed learning opportunities into online learning is added value in making the adult learning experiences effective and successful. More importantly, when the ID or adult educator is delivering the training, they need to have a positive approach, be unbiased, brave and committed to embracing diversity, accessibility and establish an equity-focused learning environment. However, applying these tactics and strategies is much easier said than done.

Online learning has many benefits such as flexibility to learn at your own pace and freedom to be in the comfort of your own home, but IDs continue to face many challenges when training adults in an online setting. They need to have an understanding of the learner’s current knowledge and computer skills, take into account the learners’ hectic lives, environments, and
find creative ways to keep the adults engaged and focused on the learning. “When teaching a mature audience, it’s crucial to keep in mind their needs and expectations” (Mesh, 2022, para. 1). IDs have the responsibility to design and develop a successful online learning experience as well as providing the virtual technology to be accessible. Ideally, we want well-designed online learning curriculums that will motivate and support the learners through the learning process. However, with the rapid growth of adults learning online and challenged with technical difficulties, IDs are faced with the complexity of designing and implementing successful online learning experiences. Additionally, adult learners may struggle with this new way of learning whether the online learning is a self-paced eLearning or an asynchronous or synchronous online course.

This active research study focuses on three major research questions:

- Why are adult learners faced with challenges and obstacles when learning online?
- What are the methodologies, learning theories and approaches that IDs need to know in order to implement effective online learnings with positive outcomes?
- How can adult learners stay engaged and focused on the learning process?

Definitions

Instructional Designer (ID): There are a variety of definitions to define an ID. According to Gore (2022), an ID is deemed an expert in adult learning theory. According to Purdue University Online (2023), “Instructional designers are paramount in the process of learning. They are tasked with redesigning courses, developing entire courses or curriculums and creating training materials, such as teaching manuals and student guides.”
Online Learning: “Online learning is defined as learning experienced through the internet/online computers in a synchronous classroom where students interact with instructors and other students and are not dependent on their physical location for participating in this online learning experience. Or, online learning is defined as learning experienced through internet in an asynchronous environment where students engage with instructors and fellow students at a time of their convenience and do not need to be co-present online or in a physical space” (Singh & Thurman, 2019, p. 302).

Self-paced eLearnings: “Self-paced eLearning courses give learners control over when and where they learn, making them ideal for companies with geographically dispersed learners or companies looking to expand their training’s reach” (Training Industry, 2023, para. 1).

Asynchronous: “Asynchronous learning refers to forms of learning that do not occur in the same place or at the same time. That means that, under asynchronous learning, learners can engage with their materials anytime, at their own pace. To allow for this flexibility, asynchronous learning is typically delivered in the form of pre-recorded or downloadable digital content. Some common examples include eLearning courses, recorded webinars, videos, podcasts, downloadable PDF resources, and discussion boards” (Bhamidi, 2022, para. 12).

Synchronous: Synchronous learning is when people meet at a certain time and place such as an in-person classroom setting and live training formats, e.g., live webinars, virtual classes, video conferences, and live chat rooms. One benefit of synchronous learning is real-time full engagement and interactions between learners, their peers and instructors allowing for elaborate and valuable discussions to unfold (Bhamidi, 2022).
Positionality

I have been working in the adult training industry for over 25 years working in a range of industries such as education, corporate and health care. My instructional design training skills range from being a software trainer delivering in-person and online trainings to an instructional designer developing training plans and programs, educational guides, training handouts, infographics and online eLearnings. I learned how to create interactive eLearnings using Adobe Captivate and video creations using iMovie in the early 2000s. I have been managing an electronic medical record (EMR) training team at an outpatient health care organization for over 15 years. My first online training experience was in 2008 where I conducted a synchronous training session for a group of clinical staff members on a webinar platform called Webex.

Over the course of the decade, delivering online training through a webinar platform slowly became more frequent. I learned through surveying learners that the majority of the learners preferred to learn new content that was customized to their specific clinical workflows and received real-time training in-person at their sites. Some learners expressed that they prefer to watch short video clips of new functionality. Additionally, my team and I have worked closely with Subject Matter Experts (SMEs) and clinical staff to conduct a needs analysis and developed custom in-person training plans. Post training, surveys were conducted to measure the success of the trainings and look for areas of improvements.

In 2020 at the time of the COVID-19 pandemic, the preferred in-person trainings came to an immediate stop. My place of employment immediately transitioned all in-person trainings to one-on-one online sessions and group online synchronous training classes. I witnessed the organization quickly morph into working remote and learning online for everyone including the
training team was the only option. This is the time when I became immersed in wanting to learn how to produce effective online learnings modalities.

My team and I had to quickly learn a new virtual EMR system in order to create a training on it for the health care providers and support staff members. It was a challenging task for the trainers and I since teaching staff online was fairly new for most of the clinical staff. The health care providers were overwhelmed with the drastic new way of practicing medicine and had little to no experience working and connecting remotely; therefore, they struggled connecting online which immediately set a negative tone for their learning experience. The trainers also faced intense situations with a reorganization of the EMR IT department. There were many challenges trying to learn how to navigate the online platform in addition to learning new content and creating new training materials. As the training manager, I often felt perplexed with the drastic decision making and concerned the development and delivery of the online trainings were ineffective and poor quality. Pressure from the pandemic forced leaders to make quick decisions, and trainers struggled to create trainings in an ordinary manner. Unfortunately, during the rush of going remote, there was little time to follow standard processes and no analysis work with SMEs or time to create effective training plans. The organization was struggling financially and staff were being let go. Team morale was at an all-time low. We were scared, emotional and many of us felt depressed. I felt defeated and unsuccessful most of the time.

Working remote has its challenges, but we were determined to make it work. After many months of trial and error, the trainers and I learned the only way to succeed was to work collaboratively as a team. We met often to talk about our emotions, strengths and lessons learned and once we were able to meet in-person, we got together on a quarterly basis for a team retreat.
We managed to create new online training standard processes. Working closely as a team in making team decisions, we followed the ADDIE framework and delivering online trainings slowly became a bit easier for both the trainers and adult learners. We received positive feedback and negative feedback through surveying and explored areas for improvement. Feedback from adult learners included wanting their trainings to be relatable. Health care providers stressed that they only wanted to know functionality that pertained to their specific daily workflow and the benefits of the new features. Finally, after a couple of painful working years we are starting to feel some normalcy.

**Literature Review**

**Methodologies**

**ADDIE Model**

The ADDIE model is one of the most reliable models for IDs to use to help them produce successful learning outcomes. “The ADDIE model, developed by Florida State University in the 1970s, is the most well-known framework for designing instruction to improve human performance” (Peck, 2023, para. 1). The ADDIE model is known as a framework to assist IDs to organize and build effective learning modalities including online training courses and eLearnings. There are five phases in ADDIE development process: Analysis, Design, Development, Implementation and Evaluation. These 5 phases are completed in the given order but with a focus on reflection and iteration. ADDIE is the most popular model among IDs since it gives IDs “a streamlined, focused approach that provides feedback for continuous improvement” (Quigley, 2019, para. 2).

The first phase is the analysis phase. During this phase, IDs research the background and learn more details about the problem and solution. To conduct an analysis, a strong needs
assessment is performed with the audience to determine if an actual training is needed to solve the problem. IDs conduct interviews with the learners, create a learner analysis and personas to really learn the details of the attended audience. This process allows the ID to design exactly what is needed for the learners. The first phase is an important phase since IDs may learn that designing and developing a training may not always be the solution to the problem. It could be that the problem is caused by an environmental, operational, or perhaps a technical issue that training won’t fix (Peck, 2023).

The second phase is the design phase where IDs take the results from the analysis to make design decisions and develop design instruction. IDs meet with the Subject Matter Experts (SMEs) to obtain raw information and details on the content. IDs take the information and craft a design document that includes the type of modality that is needed to be developed and delivered. For example, IDs can create a storyboard for an eLearning or trainer script that will be used in the development phase (Peck, 2023). It is important for the instructional content, i.e., storyboards and scripts, to be comprehensive with clear written learning objectives and goal(s) of the training before moving on to the development phase.

The development phase is the third phase. This is when the ID takes the instructional content from the design phase and develops the final learning tool or modality that will be delivered to the learners. For example, IDs will take the storyboard that was created for the eLearning during the design phase and develop the actual eLearning tool (Peck, 2023).

The fourth phase is the implementation phase. During this phase, the ID is responsible for delivering the final learning tool or modality to the learners. Depending on the type of modality that is needed to be delivered, the ID communicates to the learners and guides them to the learning. It can include guiding the learners to the course offering with a set of parameters,
posting the training modality to a learning management system (LMS) or conduct a live training, to name a few. IDs can assign a designated person (i.e., supervisor) to keep track of the learners to ensure that they take the training and complete it on time (Peck, 2023).

The fifth and final phase is the evaluation phase. Evaluating learners is a critical part in measuring the effectiveness of the training (Peck, 2023). “The most common framework for training evaluation is Kirkpatrick’s model” (Peck, 2023, para. 34). There are 4 areas that an ID should measure:

1. Learner Reaction - How are employees reacting to the training intervention? Is it a positive experience?

2. Skills and Knowledge - Are the employees becoming more skilled or knowledgeable as a result of the training program?

3. Behavior / Performance - Are the employees performing better on the job as a result of the training?

4. Organization - Is the organization operating more smoothly and / or profitably as a result of the employees' improved performance? (Peck, 2023, para. 35)

Collecting this type of data from an evaluation provides IDs a great overview of the impact that the training and learning experience had on the learning and their organization. There is also an option to “conduct a return on investment (ROI) analysis to determine whether the costs associated with the effort resulted in a net financial gain for the company” (Peck, 2023, para. 36).

**Storytelling**

When an eLearning is necessary, IDs can follow ADDIE and create clear learning objectives as well as develop the learning with a story in mind. Wroten (2021) encourages IDs to
apply storytelling as part of their online learning and eLearning courses. Make it relatable to the learners. Wroten (2021) gives 4 valuable reasons on why IDs should apply storytelling into their online learning.

1. It is a way to emotionally connect with learners. The best way to achieve a human connection is by telling a story with characters. People relate better with stories.

2. Applying a story to the learning is crucial to the learning process. “According to Malcolm Knowles, John Keller and other learning theorists, adult learners must first see the relevance of something before they’ll feel persuaded to learn about it. If you explain eLearning concepts in the context of a story, you will help learners integrate knowledge into their mental models in meaningful ways. That’s because the realistic context of a story makes information easier to remember” (Wroten, 2021, para. 4).

3. When we hear stories, our brains become more active. Listening to a story keeps the learners engaged. “We are engaged when we hear a story because it activates more than just the language processing parts in our brain activity, according to researchers in Spain. Stories activate any part of the brain that we would use when experiencing the events of the stories ourselves” (Wroten, 2021, para. 5).

4. Add a story to an online learning to entertain the learners. It is human nature for humans to enjoy stories and by adding storytelling, the instructional designer is adding entertainment making the learning process a fun learning experience.

Gamification: Scenario-Based eLearning

Learners learn best when they are having fun! Similar to storytelling, a great way to keep learners engaged in the learning process while having fun is to add gamification. Scenario-based eLearning activities is a form of gamification known to improve the learner’s engagement and
understanding of key content (Pappas, 2014). “Scenario-Based eLearning, essentially, immerses the learners in real life or situational simulations or learning experiences that allow them to gather skills or information that they will recall for future use. Information offered within a contextual setting enables learners not only to easily manage it within their working memory, but also to commit it to their long-term memory” (Pappas, 2014, para. 2). Core characteristics of scenario-based eLearning include keeping scenarios realistic, learner-centric, interactive and involve applied learning strategies (Pappas, 2014).

**Learning Theories**

Traditional learning theories such as behaviorism, cognitivism, constructivism, humanism, and several others were developed with traditional classroom instructional approaches in mind. Today, adult educators rarely teach in the classroom since many organizations have transitioned to online learning. Researchers emphasize the need for alternative teaching methods for online learning that differs from traditional teaching methods (Arghode et al., 2017, p. 594). Thus, adult educators should consider applying learning theories and teaching methods geared for online learning. Adult educators will want to include methods that inspire and engage learners such as problem based learning (PBL) and self-directed learning (SDL). “With the advent of multiple online degree programs and emphasis on online instruction, as well as its use in corporate training, it has become imperative to revisit theories to evaluate their role in adult online instruction” (Arghode et al., 2017, p. 593).

A review article performed by Arghode et al. (2017) analyzes four learning theories and their role in online instruction for adults. Learning theories of the study include behaviorism, cognitivism, humanism, and constructivism. The andragogy theory, applicable to adult learning, is included in the study as a model categorized under humanism. The goals of the study are:
• analyze and compare the selected learning theories

• discuss implications of learning theories for enhancing online instruction for adults

(Arghode et al., 2017, p. 594)

The authors provide a theoretical framework that describes the selected learning theories and key assumptions as well as descriptions of each learning theory.

• Behaviorism: Belief in how learning is achieved based on external stimuli and subsequent responses.

• Cognitivists: Mechanisms by which the mind stores, processes, and retrieves information.

• Constructivists: Constructivists believe that knowledge creation involves both mental effort and social interaction.

• Humanism: Similar to andragogy, humanism emphasizes on adults taking ownership of learning. (Arghode et al., 2017, pp. 595-596)

The review article presents a table of the theories and their core beliefs, weaknesses and implications for adult online learning. The following suggestions that Arghode et al. (2017, pp. 600-601) provide are excellent and helpful for adult educators to use in their online learning programs.

• Andragogy:
  o Encourage self-directed learning by creating online discussion forums.
  o Design online instructions to provide unique learning opportunities.
  o Allow flexibility for learners to learn at their own pace.
Design activities to encourage self-directed learning include blogs, online activities, and videos.

- **Behaviorism:**
  - Provide immediate feedback to improve learning.
  - Assessment activities incorporated in online instructions.
  - The content can be designed to promote learning through improved practice.

- **Cognitivism:**
  - The presentation of material should be interesting to grab learners’ attention and videos should be of appropriate length to maintain learners’ attention.
  - Online activities structured logically and systematically to grab learners’ attention.

- **Constructivism:**
  - Online activities can be designed to promote creative thinking encouraging learners to create meaning.
  - Although some guidance is needed to utilize constructivism principles, online educators may focus on problem-solving, creative writing and meaning-making.

- **Humanism**
  - Online learning content should be made relevant to learners’ interests, feelings and attitudes.
  - In online environment, it may be difficult to decipher learners’ interests, as feedback and interaction are asynchronous. (Arghode et al., 2017, pp. 600-601)
The American educator named Malcolm Knowles (1913 – 1997) created the term Andragogy, which is synonymous to adult education. “According to Knowles, andragogy is the art and science of adult learning, thus andragogy refers to any form of adult learning (Pappas, 2013). In 1984, Knowles proposed the following 4 principles that are applied to adult learning.

1. Adults need to be involved in the planning and evaluation of their instruction.
2. Experience (including mistakes) provides the basis for the learning activities.
3. Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.

In reviewing these learning theories, the most appropriate one to integrate into online adult learning is Knowles’ andragogy learning theory. It has positive components that relate with online learning such as applying self-directed learning activities and allowing learners to learn at their own pace. Furthermore, online learning presents opportunities for experiential, critical and reflective learning. Adult educators conducting the online training can act more as a facilitator and let the adult learners lead discussions by expressing their own experiences. According to research, “critical reflection in an online environment can be an effective way to elicit optimal performance from adult learners and can promote deep, long-lasting learning” (Arghode et al., 2017, p. 601).

Problem based learning (PBL) is a teaching strategy that stems from constructivism. The adult educator acts as a facilitator or coach and the learner or group of learners are the center of instruction working to solve a problem. Learners learn by doing and learning activities can be
performed through online learning platforms. When adult educators apply PBL, it creates a learning community, improves communication and interpersonal skills, creates collaboration and motivates learners (Naslonski, 2016). Moreover, PBL activities enhances long term memory, improve problem solving skills and builds connections to the facts (Naslonski, 2016). More importantly, studies show when learners are a part of a PBL activity, they can be enthusiastic and gain a better understanding of the subject allowing learners to have a successful learning outcome. The famous quote by Benjamin Franklin relates well with this research study and continues to hold true to this day. “Tell me and I forget. Teach me and I remember. Involve me and I will learn” (Naslonski, 2016, 08:14).

**Interviews with Adult Learners**

To gain a genuine insight on adult learners and their online learning experiences, I conducted one-on-one interviews with three adults who have different job roles and levels of computer and education experience (see Appendix A). The following three questions were asked with each adult learner:

1. *Thinking of your recent online training experience, what were the obstacles and challenges (if any) did you encounter?*

2. *What online learning experiences worked well for you and why do you think it worked well?*

3. *If you had a choice in learning online again, what would you recommend?*

I discovered common themes from the interviews that relate with my own positionality and touch upon the methodologies and learning theories mentioned in this paper. A common obstacle that the adult learners experienced was having technical difficulties and poor
accessibility with the online learning platform. One main theme I captured during the interviews is the importance of the content needing to be relatable and easily accessible online.

On question number one, “Thinking of your recent online training experience, what were the obstacles and challenges (if any) did you encounter?” I listed the common challenges and obstacles that occurred with the adult learners learning online resulting in frustration and time wasted:

- Technical difficulties with the online platform
- Not all information accessible online
- Not having access to a computer on day one
- Online content not relevant, boring, repetitive, or hard to understand
- Lack of support from manager
- As an older adult, felt intimidated learning online

For question number two, “What online learning experiences worked well for you and why do you think it worked well?” I discovered the following positives that occurred with the adult learners learning online:

- Trainer was upbeat, fun, calm approach and gave clear direction
- Absorbs information easier when having the opportunity to learn at own pace
- Engaged in learning because content was new, interesting and relatable
- Learned through storytelling

For question number three, “If you had a choice in learning online again, what would you prefer? I discovered the following learning online preferences with the adult learners:

- Start learning on day one
• Fix technical issues in advance of training
• Opportunity to have hands-on practice
• Adult learner with average computer skills prefers old school classroom training
• More concise, to the point and direct learning (eliminate unnecessary content)
• User friendly and accessible

Instructional Designer Survey

To capture common ID challenges and gain insight on the positive and negative experiences IDs have when producing online learning modalities for adult learners, I sent a three-question survey to professional instructional designers using Teams Forms (see Appendix B). Survey results from eight IDs had somewhat similar experiences. Outlined below is a summary of results for each question:

Questions 1: Think of a recent successful online learning outcome you had with adult learners. Describe your learning modality, the delivery of it and indicate the reasons why the online learning was successful.

• Live interactive training giving the learners control of the screen engaged learners and learned by doing
• Screen sharing with a presentation and then offering a live demonstration to view real life scenarios
• Live training session where cameras were required to be on and other personal devices turned off to avoid distractions kept learners focused on the presenter
• Assignments were application based with plenty of resources
• Organized training topics with short videos that were well organized, timely and showed only “needed to know” content
• Prepared months in advanced and factored in lessons learned from past upgrades allowed for smoother delivery of training
• Taking eLearning lessons on own time and rewatch as needed
• Engaging and interactive eLearnings that allowed the learners to fully understand the key changes in the functionality

**Questions 2:** Think of a recent unsuccessful online learning outcome you had with adult learners. Describe your learning modality, the delivery of it and indicate the reasons why the online learning was unsuccessful.

• Received a 2-hour demonstration that contained a lot of information and had no interaction or engaging activities resulted in a poor learning experience
• Presenter dragged out unrelated training topics that should've been taken offline resulting in time wasted
• Staff member kept interrupting the main presenter resulting in distraction
• Presenter had a poor demeanor and cocky attitude that felt as though the presenter was talking "at us" and not with us contributed to an inadequate training environment
• During a live training, some learners were asking questions that were not relevant to the lesson resulting in time wasted

**Questions 3:** Please share your most common challenges you have when training adults online?

• Online learning had technical difficulties with sound, video, etc.
• Learners having their cameras turned off and not being fully present making it
difficult to know if learners are paying attention
• Loss of focus in today's technology world with many distractions (dinging of phone,
email alerts, kids/dogs in background)
• Time. Everyone is busy and they want quick answers immediately
• Determining the learners different levels of experience and learning preferences

Findings

Challenges and Obstacles

Adults learning online can be overwhelming and most adults are often shy to express
their problems. IDs can seek to find out what the learners are thinking and develop eLearning
courses for adult learners to be accessible by identifying and resolving the adult learning
obstacles (Pappas, 2018). Pappas (2018) offers advice on 6 obstacles to overcome when creating
eLearnings for adult learners.

1. Since adult learners look at the trainer as a peer (an equal), allow learners to make
decisions by offering self-guided eLearning courses. “Interactive, autonomous
approaches are far more effective than pedantic education” (Pappas, 2018, para. 3).
2. Help adults with physical limitations by making font sizes and types legible and use
short bursts of text and diagrams in eLearning courses. “This ensures that adult
learners absorb the relevant knowledge before their attention span gets compromised”
(Pappas, 2018, para. 4).
3. Offer adult learners demonstrations and a hands-on approach. As adults get older, the
harder it can be to remember infinite details. This is considered one of the biggest
adult learning obstacles when learning online. “The issue of memory can be resolved with some careful structuring of the eLearning course” (Pappas, 2018, para. 5).

4. Apply niche-oriented eLearning courses so that adult learners hold their focus. “When an adult takes a particular eLearning course, they want to acquire a specific skill set and complete a particular task. An adult would be more interested in specifics” (Pappas, 2018, para. 6).

5. Allow adult learners to take eLearning courses on their own in privacy. Adults can work at their own pace without worry of competition with other colleagues (Pappas, 2018).

6. Offer resources and support on accessing and utilizing the learning platform, e.g., Learning Management System (LMS). Extra encouragement and online training tutorials will give the adult learners a comfortable and reassured feeling that they will succeed in the taking the eLearning course (Pappas, 2018).

Adults learning online can be challenging for many that comes with a unique set of obstacles. Sometimes it may feel like the older the adult gets, the more difficult it is to learn. Simple things such as reading small font or remembering facts and figures can be frustrating and very challenging for some adult learners. “We are less theoretical and more task-oriented in our approach to life and ongoing training. Sometimes, we even feel too "old" to engage in eLearning courses” (Pappas, 2018, para. 9).

It is very frustrating when technical difficulties occur while learning online. There is a variety of technical issues that learners can experience such as screen freezes, slow downloads, firewalls, clicking on a button that won’t advance, no sound, etc., which only hurts the learning experience. “Many of the problems with online learning are technical in nature, related to the
delivery of programs to learners in various locations” (Willard, 2022, para. 3). Internet access is critical for adult learners to access the online learning. What if the adult learner is in a rural community with limited bandwidth and speed? Willard (2022) indicates that IDs need to recognize and prepare online learnings to be of proper size specifically for these communities. Another issue that can happen with adult learners is experiencing compatibility issues at the time of beginning the online learning. “Ensure the broadest possible compatibility. This may require surveying employees to determine which devices they’ll use for online learning. Organizations can also choose to issue laptops, tablets, or smartphones to streamline compatibility” (Willard, 2022, para. 7).

When creating curriculum, IDs should always apply relatable content within the learning tool. Adults learn best when they can relate learning content to what they already know. Additionally, when creating interactive eLearning courses, it is important to make the interaction meaningful. Avoid adding a step to click on the screen with no meaning of learning new content. Slade (2018) encourages instructional designers to be careful when working with other team members who may want to help by offering their opinion on the type of training the ID should develop. Frequently, other team members will want to include as much information into the learning tool that an instructional designer is creating because they believe the more information the better they will learn and perform. This is not true. In fact, Slade (2018) indicates that “learners only need the minimal amount of information necessary in order to perform a task. Knowledge and behavior aren’t mutually exclusive” (Slade, 2018, 03:45).

Additionally, IDs sometimes can get caught in getting requests to create training material such as an eLearning; however, the learning tool may not always be the solution. This is where performing a needs analysis is important. The need may not be something that the learner needs
to learn but rather the issue is a performance or environment issue that training won’t solve (Slade, 2018).

**Recommendations and Best Practices**

In reviewing the learning theories, methods and other knowledgeable suggestions offered in the literature review section of the paper, the one method that speaks the loudest is the ADDIE framework. The ADDIE is an acronym for analyze, design, develop, implement and evaluate and recommended to be followed in the given order but with a focus on reflection and iteration (Quigley, 2019). IDs should always perform an analysis and create a strong needs assessment. This is a crucial first step in order to determine if training is actually going to solve the problem. It entails getting to really know who the audience is by interviewing stakeholders, SMEs, and learners themselves as well as creating personas on the learners. Knowing who the audience is will allow IDs to fully prepare the online learning to be accessible and be aware of any learner with physical limitations. It is an important part of the framework in order to move on to the next step of making design decisions.

The term “relatable learning content” is a term frequently mentioned throughout this paper. During the design process, writing out the learning content and making it relatable to exactly what the learner needs to know is most important. Any additional information that is not necessary to learn can be a disadvantage and time wasted. Be careful of other team members offering their opinions on what should be included in the online learning as well as how they think it should be delivered. Ask the appropriate questions and refer back to the needs assessment and goals and learning objectives of the online learning.

Other learning theories and methods are used to inspire and engage adult learners such as andragogy where IDs can add unique learning opportunities. Problem-based learning (PBL) is
another great teaching strategy that falls under the constructivism theory. PBL involves a group of learners to work together to solve a relatable problem. There are many benefits when IDs incorporate PBL activities into their online learning. Not only will PBL activities allow learners to learn the new content but it also creates a learning community and improves communication and interpersonal skills.

One of the best ways for adult learners to learn new content is through storytelling. Everyone loves a good story. With storytelling, there is an emotional human connection and when we hear stories we are more engaged to listen. Storytelling adds entertainment which makes learning fun. Additionally, IDs should deliver the story (and training in general) always with an upbeat and positive attitude. Approach is important and having a good attitude with a calm, helpful and optimistic approach, the delivery of the online learning will immediately set a positive tone for the adult learners.

Other suggestions in making successful online learnings is to develop self-guided eLearning modalities. This allows learners control to make decisions and can work at their own pace. Another added suggestion is to create a blended online learning that includes storytelling and gamification. This will help make the learning of the content entertaining and fun. Additionally, hands-on practice added at the end of the online learning is a great way for learners to retain and solidify the new content that is being learned. Lastly, adult learners want to feel supported. Let the learners know of the support plan and how to retrieve additional resources, if needed.

**Conclusion**

Adults learning online has become the new normal. Needless to say, learning online advanced swiftly over the recent years fueled by everyone going remote due to the COVID-19
pandemic coupled with the advancement of technology. There are a handful of benefits to learning online such as the convenience of being in the comfort of your own home and not having to travel, having control of learning and learning at your own pace. However, learning online and advanced technology also has some disadvantages. Why are adult learners faced with challenges and obstacles when learning online? Among the most common challenges and obstacles adult learners experience when learning online are technical difficulties, poor accessibility, intimidation of computers, non-relatable content, content bloat, and inadequate delivery of the online learning.

What are the methodologies, learning theories and approaches that IDs need to know in order to implement effective online learnings with positive outcomes? IDs can learn and apply the ADDIE framework to their online learning modalities and take a stand from the beginning to really get to know the audience by creating a detailed needs assessment on the learners. Make the online learning modality assessable. To avoid technical difficulties, test the online learning modality prior to rolling it out to the adult learners.

How can adult learners stay engaged and focused on the learning process? To keep adult learners engaged in the online learning, IDs need to keep the learning content relatable. To get adult learners engaged in wanting to learn, take advantage of storytelling and include a story that relates to the learning content. Make the learning fun by adding gamification and perhaps a PBL activity. Inform the adult learners of how to access support and resources, if needed.

Online learning in today’s world can be daunting but it can also be effective. It takes good preparation, an open mind, positive attitude and being mindful of inclusions and accessibility. Smile when creating and delivering any type of online training and tell the adult
learners that the online learning is their learning opportunity and that they are not alone in the learning process.
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Appendix A

Interview Summaries with Adult Learners

Interview #1 was with Sara, a 54 year old female. The interview took place on January 22, 2023, at 11:00AM in-person with permission to record. Sara has a fun personality and is considered very social with people. She has a bachelor of science undergraduate degree in early childhood education. Sara worked in the child care industry for 37 years up until the beginning of 2023 when she started a new secretarial position at a hospital, a role that is completely outside of childcare. Prior to starting the new secretarial job, Sara had no computer experience except for using an iPhone to take photos and post on social media applications. Sara has experience using a camera and enjoys photography as a hobby. She is a novice computer end-users and considers herself a fast learner.

1. Thinking of your recent online training experience, what were the obstacles and challenges (if any) did you encounter?
   - Day one on the job, Sara immediately had difficulty communicating with her manager. Manager was unprepared to train Sara, had a clumsy approach, always running away and talked over people.
   - Manager was unable to get Sara the needed access to the computer to begin the training.
   - Sara indicated that her manager was completely incompetent because the manager did not complete the appropriate information technology (IT) forms to get Sara’s computer access and left Sara sitting for 5 days doing nothing.
• The environment was also a negative. There were only two computer stations in the front area of an open waiting room, which was noisy adding to the difficulty in communicating with the manager.

• Sara was very anxious to learn, but often felt frustrated and was going back and forth thinking that the job may not work out. She had a horrible experience in the first week and kept thinking “what does this say about the rest of the company.”

• Sara was able to take matters into her own hands and was able to connect with an individual in IT to learn how to gain computer access. Sara was able to begin her training 6 days later.

2. What online learning experiences worked well for you and why do you think it worked well?

• Sara enjoyed learning on her own and ended up received training from a wonderful co-worker.

• Training experience with the co-worker was positive. The co-worker was an older individual with an upbeat fun personality. The co-worker had a calm approach and showed basics of the computer system first.

• What Sara liked the best about the training with the co-worker was that the co-worker had would quickly give direction by using fun quotes such as “stay in the right lane” to navigate to the right side.

• The co-worker gave clear direction and they developed a nice relationship.

• Co-worker was very positive and always had the attitude of “life is simple, not going to worry about it” and added a lot of flavor to the training including “singing” phrases.
3. If you had a choice in learning online again, what would you prefer?

- Sara prefers to have training begin right away on day one. Don’t waste time. She wished she had access to the computer on day one to immediately begin the computer training with her co-worker.

**Interview #2** was with Liz. We met virtually on 3/15/2023 with permission to record. Liz is a practicing physician in adult primary care medicine and the medical director for clinical informatics at an outpatient health care organization. She is also considered a subject matter expert (SME) in EMR clinical workflows. Liz is a very intelligent and caring individual with strong computer skills, advanced knowledge in the EMR system as well as outstanding interpersonal skills. She excelled academically at an early age. Liz spent her first year in college learning basic programming and spent another year traveling throughout Asia. After traveling, Liz returned to the states and completed an undergraduate degree at Columbia University. She went on to medical school and graduated with a medical degree from Cornell. She practiced her residency at a Boston hospital and received a Ph.D. in Nutrition before becoming an adult primary care physician.

1. Thinking of your recent online training experience, what were the obstacles and challenges (if any) did you encounter?

- Early in Liz’s career, she experienced learning online through a new digital online system for pathology images. There was a disconnect between the content and the actual images that caused a lot of frustration. The digital online system was poorly built that made learning challenging.
• Liz completed a compliance online training recently. The screen was small and there was no option to expand the screen. It was difficult not being able to see all the content. This made learning a bit difficult.

• Liz enjoys learning online, however one barrier is that sometimes not all information is accessible. If you want to find information or next step it is hard to find and there is no one to ask.

• Liz took trainings online where it was hard to understand the content. Sometimes when something is presented online and the content is hard to understand, you can tell that the actual person putting together the material did not clearly understand the topic. When you read the content, it didn’t make any sense. This online learning was not effective.

2. What online learning experiences worked well for you and why do you think it worked well?

• Liz enjoys self-directed online learning since it is an opportunity to learn at her own pace. If there is a topic that Liz fully understand well, she can go faster. And if something she doesn’t fully understand, she can slow it down for herself. This is not really an option when you have in-person or live classroom training. Liz recently attended an in-person event and the instructor was very slow at delivering the training and many had wished it went faster.

3. If you had a choice in learning online again, what would you prefer?

• Liz feels that the best way to absorb the learning is to have an opportunity to have hands-on practice. An online learning that incorporates practice scenarios after the training is ideal.
**Interview #3** was with Kim. We met remotely on 3/17/2023 with permission to record. Kim is 55 year old female and has the air of a wise woman. She has been a professional leader in the information technology (IT) finance industry most of her adult life with a great deal of experience in leading and overseeing complex infrastructure, server and portfolio management projects as well as federal regulatory implementations. Kim is well-educated and speaks in a professional manner due to many years of presenting to executive leadership on a weekly basis. She has a bachelor of science degree and a master of science degree both in business management. Kim’s graduate thesis had a focus on ethical behavior to promote better work ethic. Kim is considered an average end-user with a good amount of experience in Microsoft applications.

1. Thinking of your recent online training experience, what were the obstacles and challenges (if any) did you encounter?
   - Kim took an eLearning compliance training online that covered the companies policies and found the training to be repetitive that took up a lot of time. Majority of the content was not related to Kim’s job role. It was a lot of clicking through the screens just to finish it and 9 x out of 10 Kim would pass. The content was the same year after year.
   - The content of information was very boring to read and very lengthy. It was difficult to read through. It was easy to quickly scrolling down the page and “click” where you needed to click to advance to the next part. It was a waste of time.
   - There were some system glitches that was very frustrating. The screen set up was not intuitive and it was easy to exit out of the screen making you take the test over again.
• Kim commented on how corporate America changed dramatically over the past few decades especially in the financial industry since 2008. Technology expended fast and grew bigger and bigger. Kim witnessed corporations using outside resources and fear grew among existing staff. In turn, people changed and were afraid to give credit where credit was due. Kim also witnessed less and less people congratulating or speaking highly of co-workers or personal notes. In the past Kim would be giving a hand-written note by her supervisor or a pat on the back. It rare that Kim sees this today and believes it is a lost art. Kim fears the personal approach may also be true for learning.

• Kim commented on how there is a high percentage of bad behavior in the corporate world because of leadership. If leaders are doing it, their staff will do. This behavior sets the precedents and promotes a culture for poor behavior. For example, leader missing a training or a meeting and leaving at noon on Friday to never returning to work. This is stealing from the company.

2. What online learning experiences worked well for you and why do you think it worked well?

• Kim recently had a positive online learning experience. The topic was unethical behavior. Since Kim has extensive knowledge in ethical behavior, she was very intrigue to take the online learning.

• Kim enjoyed learning new information about unethical behavior. She learned it through online storytelling that went into specifics about “why and what” that drives them to act unethical.
• The delivery of the training and interesting content of information kept Kim engaged and focused.

3. If you had a choice in learning online again, what would you prefer?

• Kim believes she is more of an old school type and prefers to learn in the classroom with an instructor.

• If online was the only choice, she would prefer the online training to be more concise and not just watching a video for 20 minutes when you only need 5 minutes of it.

Eliminate the waste. Online learning for Kim needs to be direct, to the point, more user friendly and accessible.
Appendix B
Instructional Designer Survey Results

Think of a recent successful online learning outcome you had with adult learners. Describe your learning modality, the delivery of it and indicate the reasons why the online learning was successful.

1. *I delivered a virtual training to new hire via teams. I wanted to make it interactive so I gave the users control after my opening. This was successful because the users were able to feel included and participate interactively rather than watching a demo.*

2. *I recently took an online life coach course. It was very engaging because they required cameras to be on, so it immediately gave you no choice but to turn off other distractions and focus on the class. It was also very successful because they had us break off into groups and get personal with the others in our group. So much so, that I became friends with some of them and we still keep in touch over social media.*

3. *I train customers on how to use Klaviyo’s Email Editor. I do this via Zoom, screensharing Google Slides for a portion of the meeting, going over definitions and then giving a live demo within the software. The training is successful with onboarding customers, as they first understand basic definitions (glossary) from the slides and then get to see the tool in action - giving the viewers a full picture to understand definitions that they will see in the future, and then see where/how these ‘definitions’ (parts of the tool) are used in real life.*

4. *The Video Principles course in the UMass ID Program is a recent example of a successful online learning experience. The course was mostly asynchronous, but we did have 3-4 synchronous sessions. The course was delivered through Blackboard. I think the course was successful because the assignments were truly application based. Each major
assignment was to create a different type of video. The resources we were given throughout the course all contributed to helping us complete our video assignments as successfully as possible. I think it was the first course where I didn't feel like any of the assignments or resources were wasting my time.

5. A successful online learning outcome we created was a system update. Topics for training were organized and then distributed amongst the team. We made short videos about changes and only what the learner needed to know. We made a comprehensive guide to include all changes, and a PowerPoint presentation for review with select staff. This was organized, timely, and cut to the point. We started months in advance for preparation and factored in lessons learned from the past.

6. Learners took 4 interactive e-learning lessons about a new way to schedule appointments in Epic. They were able to take the e-learnings on their own time and rewatch as needed. The e-learnings were interactive to engage the learning and help them understand the key changes in the functionality being taught.

7. A recent successful online learning outcome I've had with an adult learner was during a virtual 1:1 new hire training session via Zoom. This new hire was very engaged and asking thoughtful questions, showing their understanding of the system and created more of a conversation, rather than a trainer just reading a script to a new hire.

Think of a recent unsuccessful online learning outcome you had with adult learners. Describe your learning modality, the delivery of it and indicate the reasons why the online learning was unsuccessful.
1. Same as above although I didn’t not have access to give control so it turned into a demo style training that lasted 2 hours. Learners will not learn from a demo style of training so the outcome was unsuccessful in what they should’ve learned.

2. I had to take a lesson for a road race that my nonprofit participants in. It was unfortunately not very engaging and the race staff dragged on about topics that should’ve been taken offline. One of the other staff members also kept interrupting the main presenter. The demeanor and attitude of a presenter can always be picked up, regardless of it being online or in person. The presenter felt like she was talking "at us" and not really with us. They also didn’t really give the nonprofits (us as students) any thank you or any praise, even though we are the ones doing the good work in the community. Everything was about how much money was raised, which made it feel "transactional." But then again - that is how these the race and these nonprofits make their money! I just think they could have a gentler approach and lose any cocky attitude.

3. I tried to give an internal training on how to troubleshoot certain questions within the email editor to onboarding representatives/customer success managers. The content was accurate, but the reps/CSMs wanted to ask specific questions for their customers, they were not interested in learning a lesson. I now realize a zoom office hours is more effective, as they can give specific examples/screenshare.

4. I have had a couple of other courses in this program that weren’t necessarily unsuccessful (I still learned some valuable things) but weren’t as effective as they could have been. Similar to my first answer, the course was mostly asynchronous with 4-5 synchronous sessions. The course was delivered through Blackboard. I think the course was not as effective as it could have been because the readings/resources were not
immediately applicable and I struggled to see the value in them. For example, the textbook we used was from the early 2000s and therefore missed a lot of the nuance in the topic. Moreover, after a couple reading assignments, I realized I could skip reading and not miss much (if any) valuable information and still earn a high score in the course.

5. An unsuccessful online learning outcome was Secure Chat. There was an instructional video that led to a mandatory quiz. I believe the lack of success surrounded the implementation style of piloting groups at a time, and more work for student and instructor. The outcome may have been successful for those that were taught, but it could have been an easier lesson plan for all. Ultimately, the security was given to all without the need for mandatory quiz taking.

6. Users watched a live PowerPoint presentation and then had a demo of the changes. PowerPoints are not as engaging as e-learning lessons and the information can be too much for the learner to grasp at the time of the session which often requires re-watching a recording.

7. An unsuccessful online learning outcome I had with adult learners was during a virtual session while teaching a group of new hires the ins and outs of their system. The learning was unsuccessful because nobody in the group had their cameras turned on and their mics were muted, so it was difficult to know if they were understanding the material.

Please share your most common challenges you have when training adults online?

1. Challenges mostly tend to be technical difficulties with sound, video etc. also challenges if the video isn’t on are they paying attention. If there is no video it’s hard to see their expressions when delivering. Are they learning? And when you have a lot of users, it is hard to see what they are doing on their desk top when you’re not in Classroom.
2. Just the loss of focus. No one can stay focused anymore. The dinging of the phone, email alerts, kids in the background... if you never thought you had ADD before, it feels like everyone now has it with the pace of our society! Adderall prescriptions are on the rise - healthcare blames imbalances in our system, but the real imbalance is that we are out of harmony with flowing as humans. Our minds are exhausted. Even yoga, meditation and all the things that are supposed to calm your mind become cannibalized by having to post it on social media. But on the flip side, social media shows us that those resources are easily available and accessible. So, our minds in some ways are more free than ever. It’s all about discipline, control and being intentional.

3. Time honestly - everyone is so busy. It would be most helpful to teach them how to troubleshoot an issue, but a lot of the time they don’t have time for that, and instead just need a quick answer now. It can be frustrating because this then causes me to answer 1:1 with the same content over and over, when I’d rather answer many with a training - but if the content is too technical or takes too long, no one is paying attention or attends.

4. I don't train adults online in my job. However, based on my experience and what I've learned thus far in the course, I would say the key challenge is giving them just the right amount and type of information. In other words, content bloat distracts from learning and often means the ID included content that is not immediately relevant/valuable to the learner.

5. Common challenges are having enough time with the student, producing engaging material, and not knowing the standard of work for steps in advance hinders preparation of needs.
6. *The most common challenges we face when training adults online is accounting for different levels of experience and learning preferences.*

7. *The most common challenge I've seen when training adults online is making sure they are fully engaged in the training. Many of the adults we are training are very busy and have a lot on their plate, so they will sometimes attempt to multitask and will not be fully present in the training.*